



**Palm Beach County Water Utilities
Department**

*Wellfield Expansion Project
Construction Report*

December 1997



MONTGOMERY WATSON



SO-00135-W

lots data

= 1D ones w good
hydraul data & well
decide what to register

December 23, 1997

Mr. Paul Feldman, P.E
Palm Beach County Water Utilities Department
2065 Prairie Road
West Palm Beach, Florida 33406

SUBJECT: Wellfield Expansion Project
Well Construction Draft Report
(WUD No. 95-207)

Dear Mr. Feldman:

Montgomery Watson is pleased to submit this final report detailing the Well Construction for Palm Beach County Water Utilities Department Wellfield Expansion at Water Plants 1, 2, 3, 8, and 9. This report presents information collected during the construction and testing of new supply wells at Water Plants 2, 3, 8 and 9. Also included in the report are the results of the rehabilitation of two wells at the Polo Trace golf course and the abandonment of four wells at the former Water Plant 1.

We have enjoyed working with the PBCWUD staff during this project, and look forward to assisting you in future projects.

Very truly yours,
MONTGOMERY WATSON

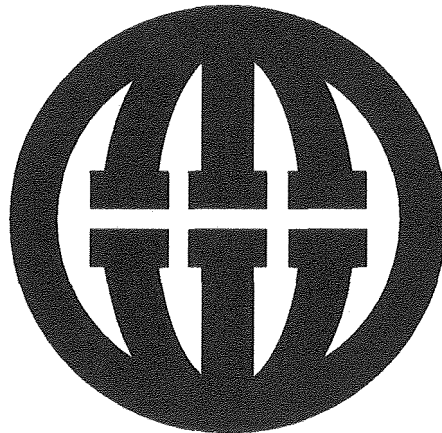
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Wellfield Expansion Project

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December 1997

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The successful completion of this project was the result of the hard work and cooperation between many individuals and organizations involved in the design, permitting, and construction of the supply wells and pipelines. Those who played particularly significant roles in this achievement were:

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Section 1



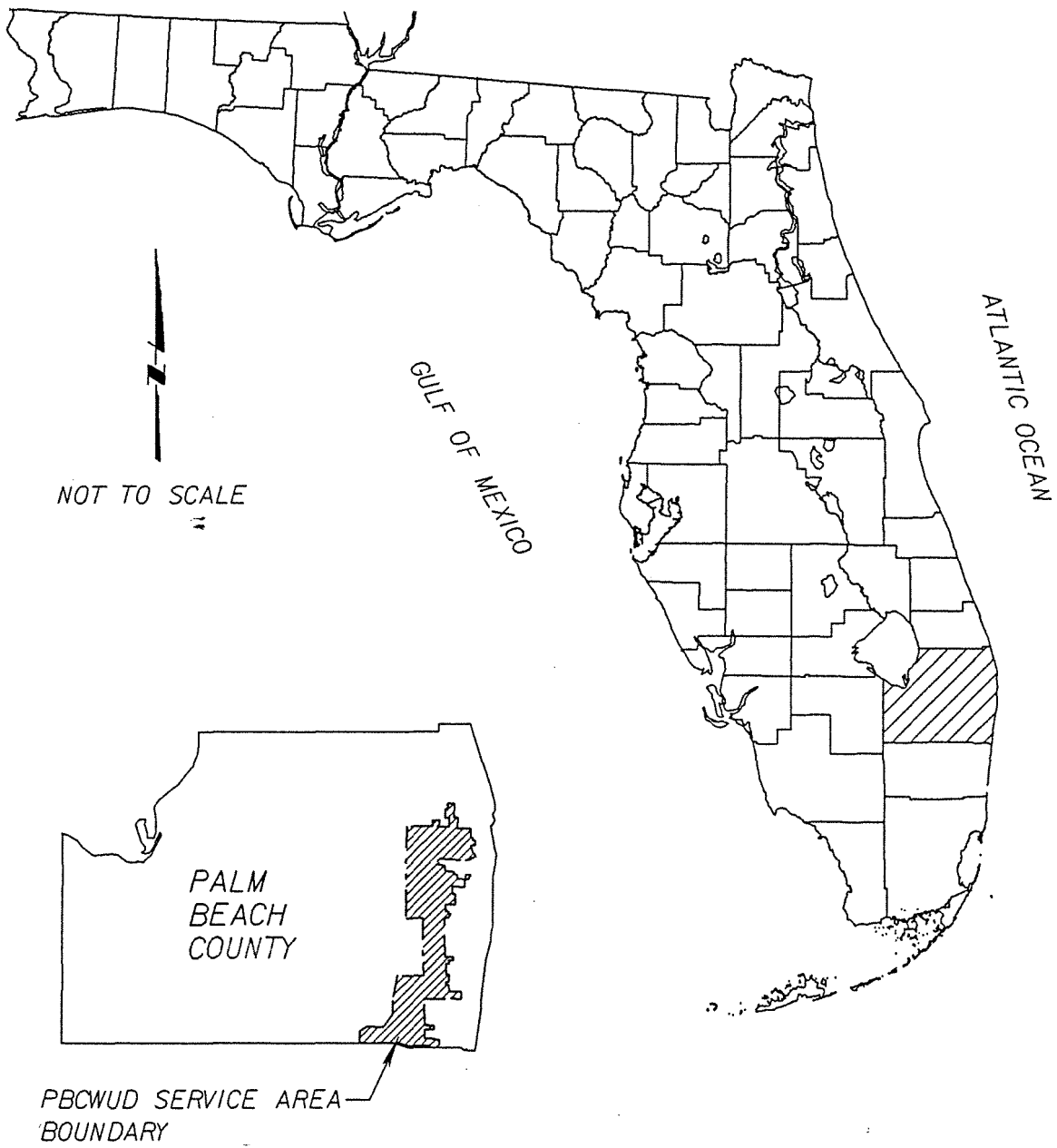
Section 1

Executive Summary

This report details the construction, testing and abandonment of water supply wells and associated pipelines within the Palm Beach County Water Utilities Department (PBCWUD) service area. This project took place from mid-1996 through 1997 and was conducted as part of a system-wide wellfield expansion. The service area is presented on the general location map shown on **Figure 1-1** and the relative positions of each of the water treatment plants is presented on **Figure 1-2**. Also included in the report is data regarding the hydrogeology and groundwater quality of the surficial aquifer system at Water Treatment Plants 2, 3 (at the South Regional Water Reclamation Facility [SRWRF] and Polo Trace Golf Course), 8, and 9. A summary of the construction that took place during this project is presented on **Table 1-1**.

Table 1-1
Summary of Work Performed at Water Plants

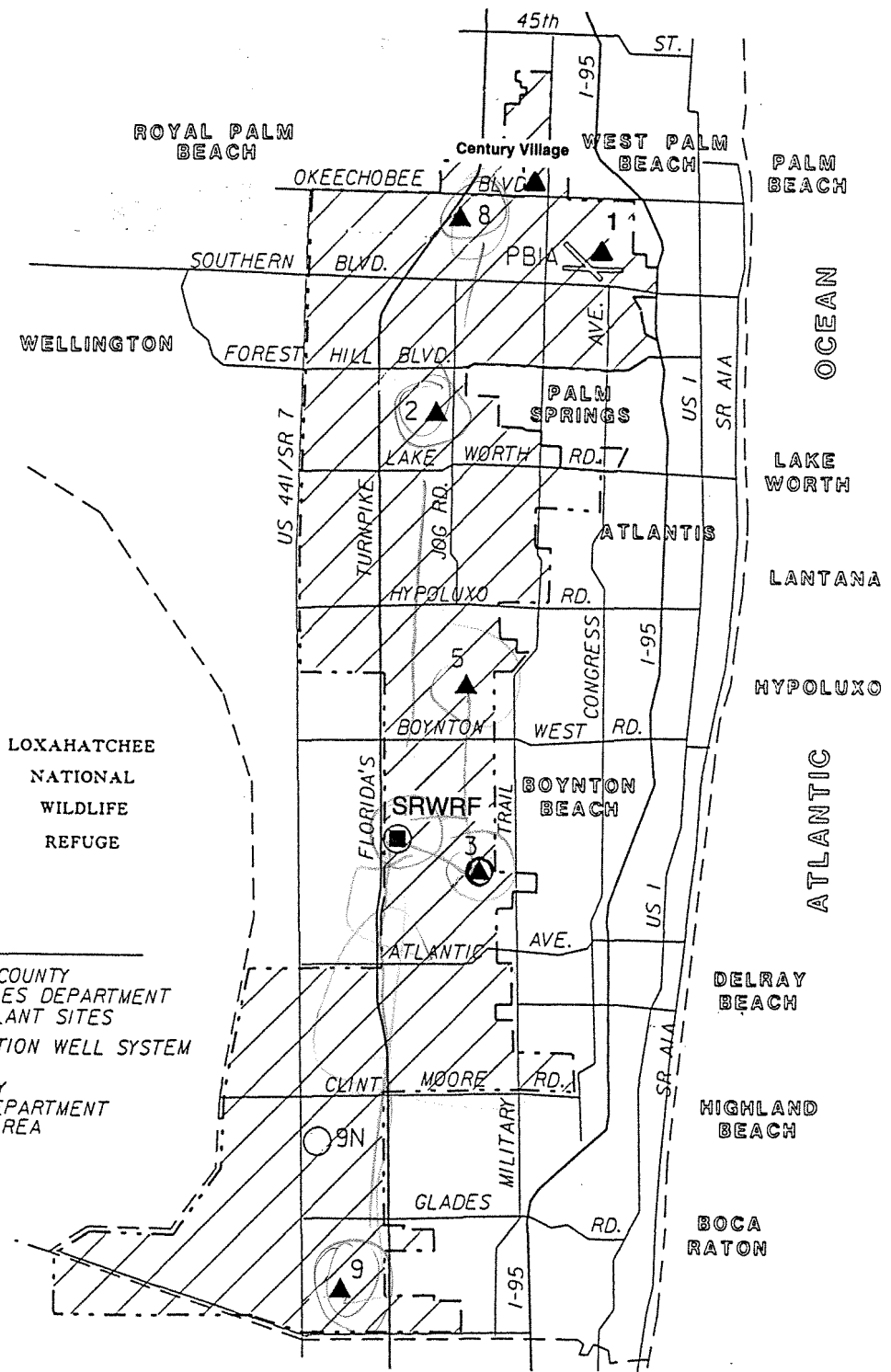
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Plant 3W - Polo Trace Golf Course	Pressure testing existing 12" and 8" raw water pipelines Rehabilitation of 2 existing supply wells Installation of pumps, electrical, instrumentation and controls
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Plant 9W	Construction of 1 new replacement well Construction of a 12" raw water pipeline Installation of pump, pad, instrumentation and controls



GENERAL LOCATION MAP



NOT TO SCALE



LEGEND

- ▲ WATER PALM BEACH COUNTY
■ SEWER WATER UTILITIES DEPARTMENT
TREATMENT PLANT SITES
- LOCATION OF INJECTION WELL SYSTEM
- ▨ PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
EXISTING SERVICE AREA

**PBCWUD
WATER SERVICE AREA**

FIGURE 1-2



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J:\proj\bc\figs\pbcwlc.dgn

Plant 1

As part of the wellfield expansion, supply wells at former Water Plant 1 were abandoned. Four wells, Nos. 1-1, 1-4, 1-5 and 1-6 were filled with gravel, sand and neat cement to land surface. All of the wellhead piping and above ground appurtenances were also removed.

Plant 2

Two new supply wells, No. 2-14 and No. 2-15, were installed at Plant 2. The wells were constructed of 16-inch diameter poly-vinyl chloride (PVC) final casings and gravel-packed stainless steel screens to depths of approximately 120 feet below land surface (bls). These wells are capable of providing sand-free water when pumped at the design rate of 1,000 gallons per minute with drawdown of less than two feet within each well. Pumping rates as high as 3,500 gpm per well were obtained during the testing, however, sand content increased at that rate.

Plant 3

As a part of the Plant 3 expansion, 2 existing wells at Polo Trace Golf Course (Nos. 3-13 and 3-14) were rehabilitated through brushing and high-level chlorination, then fitted with submersible turbine pumps capable of providing 1,000 gpm per well.

Four new supply wells, Nos. 3-15, 3-16, 3-17, and 3-18 were installed at the SRWRF to supply raw water to Plant 3. The wells were constructed of 16-inch diameter PVC final casings and gravel-packed stainless steel screens to depths of approximately 140 feet bls. The new wells exhibited variable water-yielding capacities as a result of heterogeneity within the surficial aquifer underlying the site. Well No. 3-15 is capable of yielding approximately 700 gpm. This well was acidified during construction testing, to increase its specific capacity. Well No. 16 is capable of yielding 1,500 gpm. Well No. 3-17 is currently capable of yielding 700 gpm, however, this well should yield up to 1,500 gpm after long-term pumping. Well No. 3-18 is capable of providing 1,500 gpm.

Two of the new supply wells (Nos. 3-17 and 3-18) at the SRWRF were constructed within 500 feet of the on-site retention ponds, which could be used for emergency disposal of secondarily-treated effluent. In the event of an emergency discharge to the ponds, withdrawals from wells No. 3-17 and 3-18 should be terminated. Re-activation of these wells will occur only upon successful disinfection, clearance and receipt of acceptable results from a groundwater monitoring program which has been proposed to the Palm Beach County Health Department.

Plant 8

Two new supply wells, No. 8-13 and No. 8-14 were constructed at Plant 8. Both of the wells are constructed of 16-inch final casings and screens to depths of approximately 140 feet bls. Both of the wells are capable of providing water at a design rate of 1,000 gpm. Pumping rates as high as 3,300 gpm were achieved during testing of these wells, although sand content increased during pumpage at these rates.

Plant 9

A replacement well, No. 9-1R was constructed at Plant 9. The well is constructed of 16-inch final casing and screen to a depth of 130 feet bls. This well is capable of producing water at a rate of 700 gpm.

Section 2



Section 2

Introduction and Purpose

On September 18, 1995, the Palm Beach County Water Utilities Department (PBCWUD) authorized Montgomery Watson Americas, Inc. (Montgomery Watson) to perform design, bidding and construction observation services related to the expansion of the PBCWUD'S water treatment plant (WTP) wellfields. The work was performed to meet increasing water demand within the service area. These expansions were permitted by the South Florida Water Management District (SFWMD), as contained in the County's consumptive water use permits (number 50-00135-W for the "Central System", including Plants 1, 2, 5, and 8 and number 50-00401-W for the "South System", including Plants 3 and 9). **Table 2-1** presents a summary of the wellfield capacities expanded as a result of this project.

The expansions consisted of the construction of new raw water supply wells connected to each of the water treatment plants by new raw water pipelines included in the work. The new supply wells withdraw water from the surficial aquifer system. In addition to the new supply well constructions, two existing wells at the Polo Trace Golf Course have been rehabilitated and connected to the Plant 3 via a new pipeline. Additionally, four existing water supply wells at Plant 1 were abandoned, as that facility would no longer be utilized by PBCWUD.

Upon completion of the design, the contract documents and technical specifications were advertised for competitive bid. On January 16, 1996, the bids were opened. The low bidder for the project was Southeast Drilling Services, Inc. (SDS), a Tampa-based well contractor. After the bids and the contractor qualifications were reviewed and confirmed, the project contract was awarded to SDS. Notice to Proceed was issued on May 6, 1996 and construction took place between May 1996 and June 1997.

At Plant 2, two (2) new supply wells were constructed to provide approximately 1,000 gallons per minute (gpm) each to the existing lime softening plant at the facility. The addition of these withdrawals will increase the permitted well capacity of that facility from 14.9 million gallons of water per day (mgd) to 17.9 mgd. At Plant 3, four (4) new raw water supply wells have been constructed at the Southern Region Water Reclamation Facility (SRWRF), located approximately 2 miles to the west of the Plant 3 site. These new supply wells have been constructed each to provide approximately 1,500 gpm to a new membrane softening facility built at the Plant 3. These withdrawals increase the capacity of Plant 3 wellfield from 9.9 mgd to 19.2 mgd.

**Table 2-1
Raw Water Summary for Wellfields 2, 3, 8 and 9**

Treatment Plant	Number of New Supply Wells Constructed	Well Design Capacity (gpm)	Existing Wellfield Capacity (mgd)	Expanded Wellfield Capacity (mgd)	Firm Wellfield Capacity (mgd)	Permitted Avg. Day Allocation (mgd)	Permitted Max. Day Allocation (mgd)	Treated Water Capacity (mgd)	Raw Water Demand (mgd)	
No. 3 Lime				<i># of wells</i> 16				6.5	6.84	
No. 3 Membrane								<u>8.0</u>	<u>9.41</u>	
Total System 3	4	1,500	9.2		19.2	17.5	11.43	17.15	14.5	16.25
No. 2 Lime	2	1,000	14.9	14	17.9	16.42	9.32	13.98	14.0	14.73
No. 8 Lime	2	1,000	20.6	13	23.4	23.33	15.94	23.91	16.0	16.84
No. 9 Lime	1 (Replacement)	1,000	21.6	14	21.6	20.16	8.97	13.45	14.0	14.74

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At Plant 8, two (2) new raw water wells have been constructed to each provide approximately 1,000 gpm to the lime softening plant at the facility, resulting in an increase in permitted wellfield capacity from 20.6 mgd to 23.4 mgd. At Plant 9, one (1) new supply well was constructed as a replacement to a well that had recently been abandoned.

This report presents the details of the construction, testing, rehabilitation and abandonment of each of the supply wells at the PBCWUD facilities. This report details subsurface hydrogeologic information collected during the new well construction and testing, including data from lithologic samples, geophysical logs, water quality sampling and pumping tests. The report will first review the new supply well construction and testing procedures, then discuss the hydrogeological setting of the PBCWUD service area. A detailed review of the work performed at the individual plants then will be presented.



Section 3



Section 3

Well Construction and Testing

Prior to the initiation of new supply well drilling, SDS obtained water well construction permits from the SFWMD and the Palm Beach County Public Health Unit (PBCPHU). SDS also obtained well abandonment permits for the wells at Plant 1. Copies of these permits are contained in **Appendix A**. For all of the new supply wells, a similar testing and construction procedure was followed. This procedure is detailed below. Results of the construction and testing program are described in subsequent sections of this report.

PILOT HOLE DRILLING AND TESTING

A nominal 6-inch diameter pilot hole was first drilled at each of the supply well sites by the mud-rotary method to a depth of approximately 200 feet below land surface (bls). During drilling, lithologic samples were collected from the mud circulation system. Lithologic descriptions compiled from the pilot hole samples are contained in **Appendix B**. Upon completion of the pilot hole, each was then geophysically logged by SDS. The geophysical logs consisted of a caliper, natural gamma ray, spontaneous potential, and long/short normal resistivity surveys. Copies of the geophysical logs are presented in **Appendix C**. This information was used in combination with the lithologic information to determine the casing-setting depth for the supply well casings and the length of the screened intervals.

BOREHOLE GEOPHYSICS

The changes in character of the rock and fluids within the drilled boreholes were too subtle for obvious identification of water-bearing zones by field observation. For this reason, geophysical surveys were conducted to augment lithologic information. The logs performed are as follows:

The **caliper log** measures the diameter of the drilled hole, and is an indicator of the hardness, mechanical strength and consolidation of the penetrated formations. This log is also useful in identifying fractures and solution features, which typically enhance the water-bearing properties of subsurface formations.

The **gamma ray log** measures the natural radioactivity of sediments. Typically, clay and phosphate-rich sediments emit higher gamma ray counts than “cleaner” sediments, such as quartz sand and limestone. This log is useful for correlation of formation beds across sites.

The **spontaneous potential log** is a measure of naturally occurring electrical currents (cells) that are created as a result of fluid flow through rocks and along the surface boundaries of geologic formations.

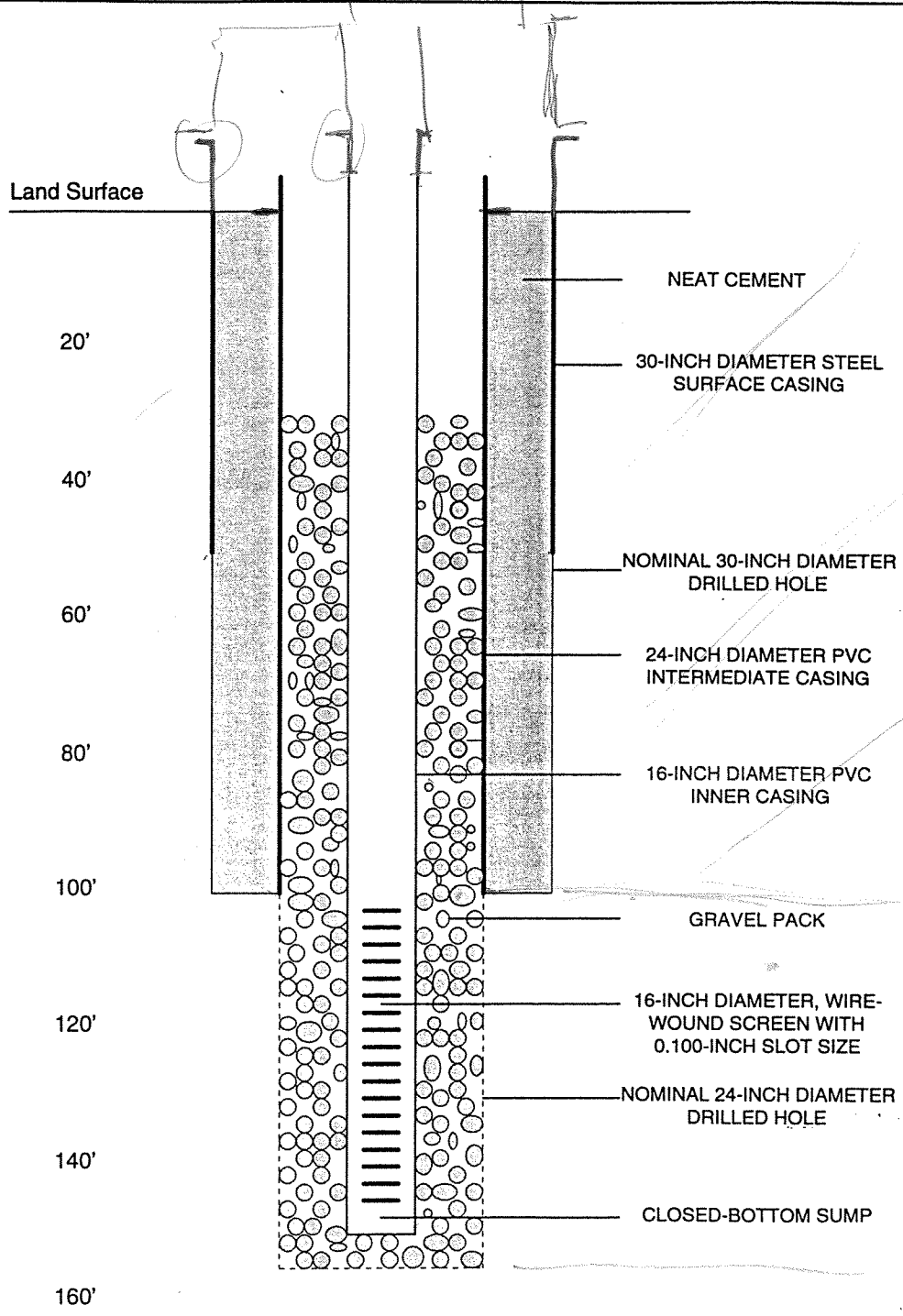
The **long/short normal resistivity log** is a measure of the ability of a geologic formation to transmit (or impede) an induced electric current. The resistivity of a geologic formation is a combination of the matrix material comprising the formation, the amount of porosity within the formation, and the salinity of the water that occupies the pore spaces within the formation. The long/short normal resistivity tool measures the resistivity of the formations at distances of 16 inches and 64 inches away from the borehole.

After completion of the pilot hole drilling, lithologic samples of the production-zone interval were delivered to a geotechnical testing laboratory for sand sieve analysis. Results of the sand sieve analyses are presented in **Appendix D**. This information was used to determine the optimal screen slot and gravel-pack size. Water samples were then collected from the production zone interval through installation of a temporary screen set at the approximate depth of the production zone. The water samples were delivered to an analytical laboratory for analyses for primary and secondary drinking water standards. The laboratory results for the preliminary water samples are presented in **Appendix E**.

SUPPLY WELL CONSTRUCTION

Following the completion of the pilot holes, a 30-inch diameter steel surface casing was vibrated to a depth of approximately 50 feet bls to prevent unconsolidated shallow sediments from caving into subsequently-drilled boreholes. The casing joints were welded. The portion of the surface casing remaining above-ground subsequently served as a support for the pump head assembly installed at each supply well.

A nominal 30-inch diameter borehole was then drilled by the mud rotary method to a depth of approximately 100 feet. A 24-inch outer diameter, Schedule 40 PVC intermediate casing then was cemented into place. After allowing the cement to harden, a nominal 24-inch diameter borehole was drilled by the mud rotary method to a depth of approximately 140 feet. The borehole was then surveyed with a caliper log to assure clearance for the final casing. Copies of the caliper logs are included in Appendix C. A 16-inch diameter Schedule 40 PVC inner casing connected to stainless steel screen were installed and gravel-packed in place. The slot size for each of the well screens was 0.10-inch. The gravel-pack selected for the screened interval was a 1/4 to 1/8-inch diameter quartz sand as provided by Florida Silica Sand, Inc. **Figure 3-1** presents a diagram of the generalized construction details of the supply wells. **Table 3-1** presents the actual construction details for each new supply well.



TYPICAL SUPPLY WELL CONSTRUCTION DETAIL



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FIGURE 2

Table 3-1

**Construction Details of Wells
Palm Beach County Water Utilities Department
Wellfield Expansion Project**

Location	WTP 1				WTP 2	
Well No.	1-1	1-4	1-5	1-6	2-14	2-15
Work Performed	Abandonment	Abandonment	Abandonment	Abandonment	Installed	Installed
Diameter (inches)	10	10	10	10	16	16
Total Depth (Feet BLS)	158	177	180	180	125	130
Cased Depth (Feet BLS)	128	137	140	140	80	85
Screen/Open Hole Interval (Feet)	128-158	137-177	140-180	140-180	80-120	85-125
Pumped/Flowed	NA	NA	NA	NA	P	P
Pump Type/Horsepower	NA	NA	NA	NA	SUB/50	SUB/50
Intake Depth (Feet BLS)	NA	NA	NA	NA	60	60
Pump Capacity (GPM)	NA	NA	NA	NA	1,000	1,000
Recommended Initial Pumping Rate (gpm)	NA	NA	NA	NA	1,000	1,000
Year Drilled	1975	1976	1976	1976	1996	1996

Table 3-1 Continued

Construction Details of Wells
 Palm Beach County Water Utilities Department
 Wellfield Expansion Project

Location Well No.	WTP 3						WTP 8		WTP 9
	Polo Trace		SRWRF				8-13	8-14	9-1R
	3-13	3-14	3-15	3-16	3-17	3-18			
Work Performed	Rehabilitation	Rehabilitation	Installed	Installed	Installed	Installed	Installed	Installed	Installed
Diameter (inches)	12	12	16	16	16	16	16	16	16
Total Depth (Feet BLS)	132	150	145	150	150	150	140	145	135
Cased Depth (Feet BLS)	103	97	100	100	100	100	80	80	90
Screen Interval (Feet)	103-130	97-117 and 132-149	100-140	100-145	100-145	100-145	80-135	20-140	90-130
Pumped/Flowed	P	P	P	P	P	P	P	P	P
Pump Type/Horsepower	SUB/75	SUB/75	SUB/75	SUB/75	SUB/75	SUB/75	NA	NA	SUB/30
Intake Depth (Feet BLS)	60	60	60	60	60	85	60	60	60
Pump Capacity (GPM)	1,000	1,000	1,000	1,500	1,500	1,500	1,000	1,000	1,000
Recommended Initial Pumping Rate (GPM)	NA	NA	700	1,500	700	1,500	1,000	1,000	700
Year Drilled	1982	1982	1996	1996	1996	1996	1996	1996	1996

Note: "BLS signifies "below land surface"
 "GPM" signifies gallons per minute
 "NA" signifies "not applicable"

Following the installation the supply wells were developed by the air-lift method for approximately 40 hours each. During this development, a 2-inch diameter tremie pipe was raised and lowered throughout the screened interval, while blowing air into the pipe at a surface pressure of approximately 100 pounds per square inch (psi). Subsequent to the air development, the wells were developed by turbine pumping and surging for an additional 40 hours. A 4-hour step-rate pumping test and an 8-hour constant-rate pumping test then was performed on each well. During these tests, water levels within the pumped well were measured, along with sand content and silt density index testing of the water produced during the tests.

A final water sample was collected at the end of each constant-rate pumping test and delivered to an analytical laboratory for analysis of primary and secondary drinking water standards. The laboratory results for the final water samples are contained in **Appendix F**. A plumbness and alignment test was also performed on each well, to insure that pumping equipment could be placed to the required depth and operated correctly.

Each well then was disinfected by circulating chlorinated water until a 500 milligram per liter (mg/L) residual existed in the circulated water. This procedure is in accordance with ANSI/AWWA C654. The wells then were fitted with submersible turbine pumps and surface facilities, including well pads, piping, fencing, and control panels. Well completion reports were subsequently filed at the SFWMD by SDS, copies of which are contained in **Appendix G**, which also includes releases by the PBCPHU. As-built diagrams of the wells, pipelines, controls and instrumentation installed at each water plant are contained in **Appendix H**.



Section 4



Section 4

Regional Geology and Hydrogeology

REGIONAL GEOLOGY

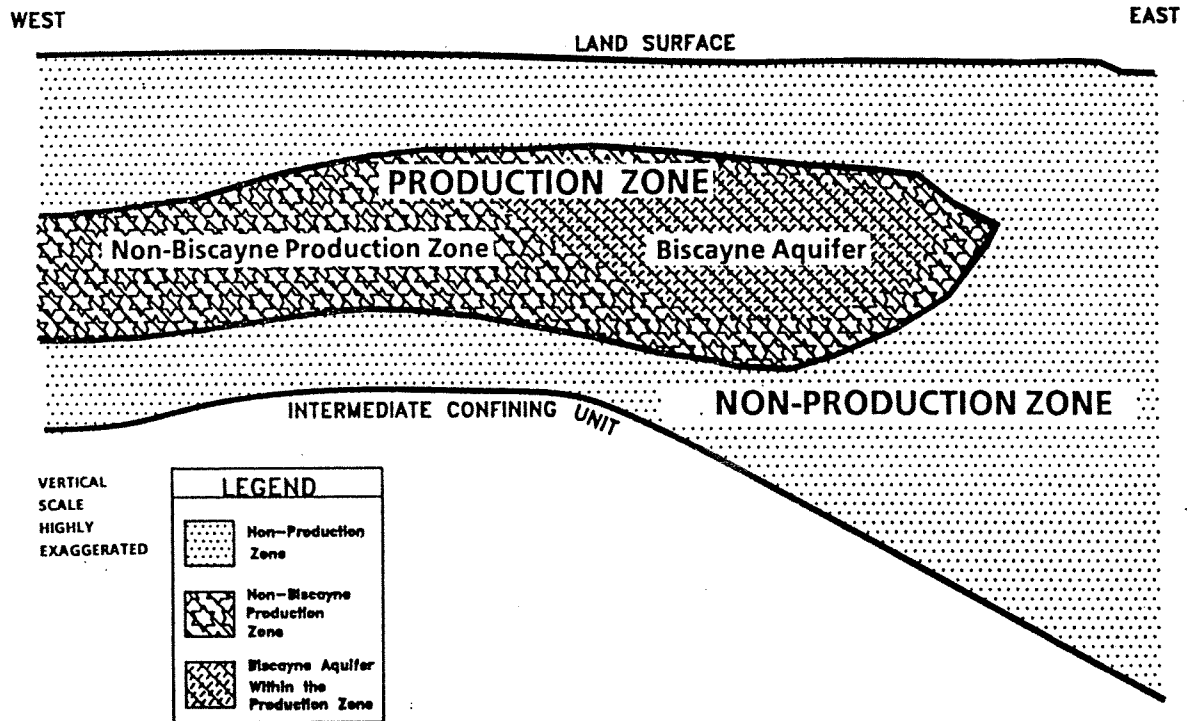
The supply wells constructed during this project were completed in the Surficial Aquifer System of Palm Beach County. The Surficial Aquifer System is the primary source of freshwater for the heavily developed coastal areas of southeastern Florida. **Figure 4-1** presents a generalized hydrogeologic cross section through the Surficial Aquifer System in Palm Beach County.

The sediments comprising the Surficial Aquifer in Palm Beach County are quartz and calcareous sands, sandstone, shells and limestone. These sediments were deposited between one to five million years ago during the Pleistocene and Pliocene epochs. The entire stratigraphic sequence in eastern Palm Beach County is composed (progressing from land surface downward) of the Pamlico Formation, the Anastasia Formation and the Tamiami Formation. These sediments combine to form a thickness of between 150 to 250 feet throughout most of the County.

The Pamlico Formation is typically comprised of fine to medium-grained, unconsolidated quartz sands with occasional shell beds. This formation is occasionally silty, or contains muck, resulting in the formation of wetlands. The Anastasia Formation is typically a coquina to a sandy limestone, with varying amounts of shell and quartz sand. Solution cavities are common in the coquina and limestone intervals. These solution zones form some of the most productive intervals of the Surficial Aquifer System (Shine and others, 1989). Lying below the Anastasia Formation, the Tamiami Formation is typically comprised of a loosely-consolidated sandy, shelly limestone.

HYDROGEOLOGY

The Surficial Aquifer System has been defined as an unconfined, or water-table aquifer. It is recharged by rainfall (about 60 inches per year in south Florida) and from surface water bodies such as canals (typically held at elevations above the local water level) and lakes (Klein, 1978). The water table is typically found a few feet below land surface to a few tens of feet below land surface, depending on land surface elevation and adjacent pumpage.



CONCEPTUAL CROSS SECTION OF THE SURFICIAL AQUIFER SYSTEM IN EASTERN PALM BEACH COUNTY

Source: Shine and Others, 1989



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FIGURE 4-1

Section 5



Section 5

Plant 1 - Well Abandonment

WELL ABANDONMENT

As part of the overall PBCWUD system expansion, Plant 1 is being abandoned. Therefore, water supply from the wells at the plant would no longer be needed. Four of the wells (Well 1-1, 1-4, 1-5 and 1-6) have been abandoned as part of this project. The locations of Plant 1 and the subject wells are presented on the site plan shown on **Figure 5-1**. Well construction details are presented in **Table 5-1**.

Table 5-1
Plant 1 Well Construction Details

Well No.	Casing Depth (feet)	Screened Length (feet)	Total Depth (feet)	Casing Diameter (inches)
1-1	128	30	158	10
1-4	137	40	177	10
1-5	140	40	180	10
1-6	140	40	180	10

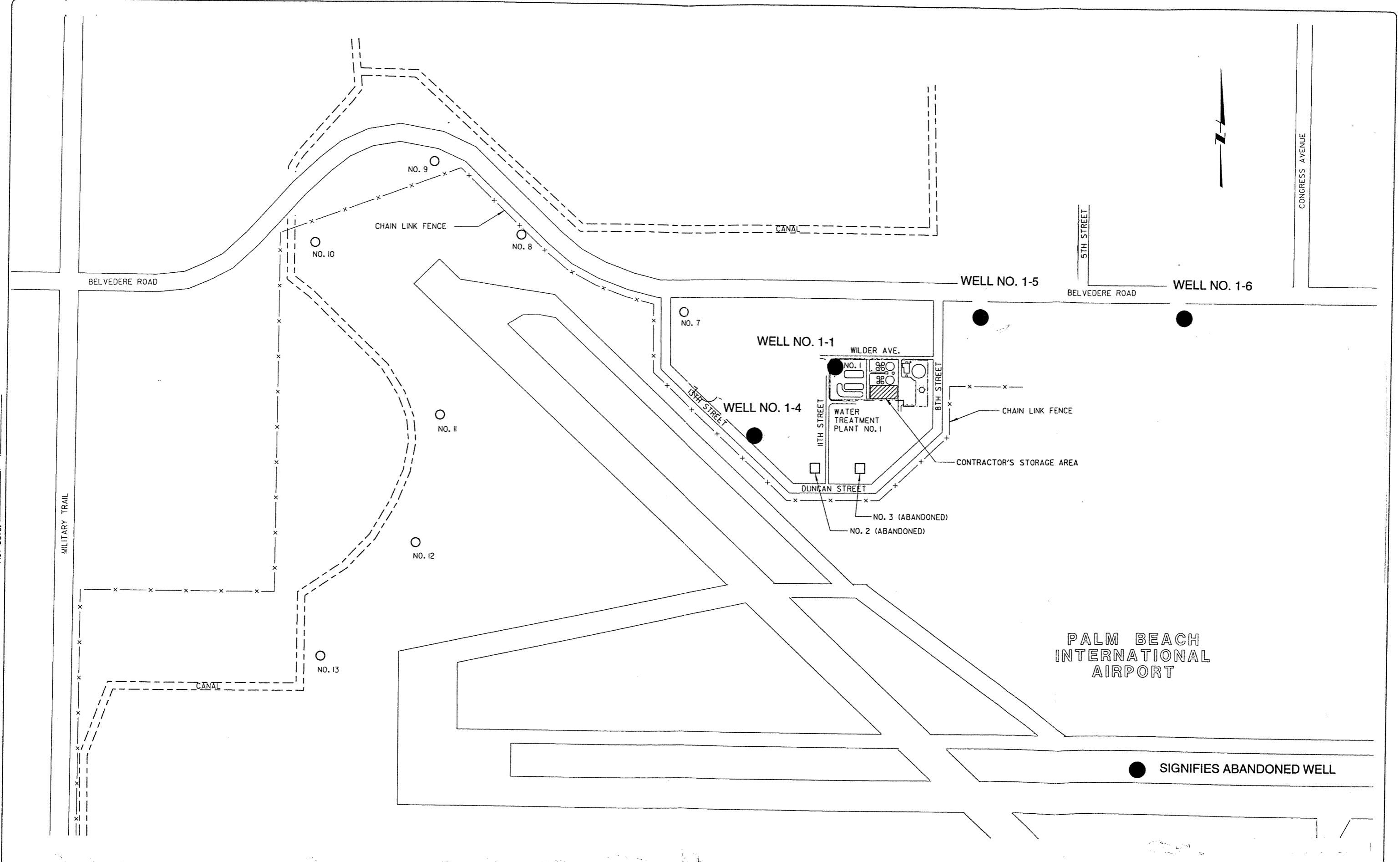
To accomplish the well abandonment at Plant 1, above-ground piping at each of the wells was first removed and disposed of by SDS. The well pumps, column pipe, motors, and control panels were removed and delivered to PBCWUD. Each well was then filled with clean, washed gravel to ten feet above the screens by emplacement through a tremie pipe. A one-foot-thick, fine-grained sand pack then was emplaced on top of the gravel. The depth of the sand and gravel was confirmed by physically tagging the materials with a wire line. Each well was then filled with neat cement, emplaced by the tremie method, in accordance with SFWMD water well construction and abandonment regulations, Chapter 40E-3. The well pads were then broken up and removed. The well casings were cut to 6 feet below existing grade and the area around each of the wells was re-graded, compacted and landscaped. Well completion reports for the Plant 1 well abandonments are contained in **Appendix G**.

07:55

Plot Date: 05-SEP-1997

i.e. No. h:\proj\pbc\vw\well\civ\fig7-2.dgn

JOB No. *



PALM BEACH INTERNATIONAL AIRPORT

● SIGNIFIES ABANDONED WELL

Section 6



Section 6

Plant 2 - Wells No. 2-14 and No. 2-15

The work at Plant 2 consisted of installation and testing of 2 new supply wells, including surface completions. **Figure 6-1** presents a site plan.

LOCAL GEOLOGIC CONDITIONS

From land surface to a depth of approximately 50 feet, sediments at Plant 2 are comprised of fine grained unconsolidated white to tan-colored sand and shell. This sedimentary section represents the Pamlico Sand. Near the depth of about 60 feet, fragments of limestone are present, and the sediments become cemented. At a depth of about 80 feet, a hard, sandy limestone is present, representing the Anastasia Formation. The limestone is characterized as a medium to dark-gray colored bioclastic wackestone with occasional recrystallization and secondary (vuggy) porosity. This limestone was present to a depth of approximately 200 feet, however, at depth of a approximately 130 feet bls, and below, the formation contained a minor amount of sand and shell

GEOPHYSICAL INTERPRETATION

The caliper logs from Wells No. 2-14 and No. 2-15 at Plant 2 indicated relatively narrow-gauge holes penetrated to depths of about 80 feet. Below this depth, the boreholes became "washed out" and more rugose. Between 90 feet and 140 feet bls, particularly large hole diameters were observed, indicative of solution-enhanced and possibly fractured formation.

The resistivity logs indicated that highly resistive formation material between 80 feet and 130 feet bls. Below these depths, resistivities decreased, indicating that harder, tighter formations existed and that water salinity might be higher. This information, together with the lithologic samples, was utilized to set the well screen between 80 feet and 120 feet bls at Well No. 2-14, and between 85 feet and 125 feet bls at Well No. 2-15.

WELL YIELDS

Wells No. 2-14 and No. 2-15 yielded significant quantities of water after just a few days of air-lift and pumping development. The static (non-pumping) water levels within both of the wells was about 3 feet below land surface during September 1996. Upon completion of development, a four-hour step-rate pumping test was conducted on each well. During these tests, each well was pumped at four consecutively higher rates for a one-hour period per rate. After the pumping

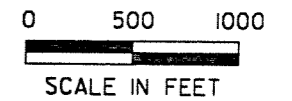
FOREST HILL BLVD.

WASTEWATER TREATMENT PLANT NO. 2S (INACTIVE)

L-9 CANAL

RIVER BRIDGE BLVD.

PURDY LANE



FLORIDA'S TURNPIKE

PINEHURST DRIVE

CRESTHAVEN BLVD

DIRT RD. 06 05 40 30

WATER TREATMENT PLANT NO. 2

JOG ROAD

WELL NO. 2-15

WELL NO. 2-14

NEW CANAL

△ 18 △ 17 △ 16

L-10 CANAL

130 012 011 010 90

OAKMONT DRIVE

GREENACRES COMMUNITY PARK

L-10 CANAL

10TH AVENUE

PALM BEACH NATIONAL GOLF AND COUNTRY CLUB

LEGEND

- EX. PRODUCTION WELL
- △ PROP. PRODUCTION WELL
- SIGNIFIES NEW SUPPLY WELL
- ROADWAY OR STRUCTURE
- - - CANAL
- - - PROPERTY LINE
- ⋯ LAKE OR POND



MONTGOMERY WATSON

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT 2W WELLFIELD SITE MAP

FIGURE 6-1

one-hour period per rate. After the pumping portion of the test, the water level was monitored for a two-hour recovery period. **Table 6-1** summarizes the water level, drawdown, specific capacity, silt density and sand content data collected from Wells No. 2-14 and No. 2-15 during the step-rate pumping tests.

**Table 6-1
Plant 2 Step-Rate Pumping Test Data**

Well No.	Date	Static Water Level (fbtoc)	Pumpin g Rate (gpm)	Pumpin g Water Level (fbtoc)	Draw-down (feet)	Specific Capacity (gpm/ft)	Sand Content (ppm)	Silt Density Index Values
2-14	10-21-96	4.51	1000	5.48	0.97	1030	<1	4.2
			2000	6.98	2.47	810	1.5	4.9
			3000	11.03	6.52	460	2.5	5.5
			3500	11.23	6.72	520	25	5.9
2-15	9-14-96	4.27	570	6.24	1.52	375	<1	5.7
			1000	6.97	2.25	444	1.0	4.4
			2000	10.54	5.82	344	3.5	5.6
			3000	17.22	12.5	240	40	5.6

fbtoc - feet below top of casing
 gpm - gallons per minute
 gpm/ft - gallons per minute per foot of drawdown
 ppm - parts per million

An 8-hour constant-rate pumping test then was performed on Wells No. 2-14 and No. 2-15. The pumping rate for each of the tests was 1,000 gpm, which represented the desired design rate for both of the wells. During the tests, water levels in the pumped well were monitored. The drawdown data was plotted on semi-log paper and the Jacob (1944) method of analysis was performed to estimate aquifer transmissivity at each well. **Table 6-2** presents a summary of the information and results of the transmissivity analysis from the constant-rate pumping tests.

Based on the water level and water quality data collected from the step-rate and constant-rate pumping tests, both wells were fitted with submersible pumps set at depths of 60 feet bls, designed to pump at a rate of 1,000 gpm per well. The high specific capacities exhibited by these wells may afford the PBCWUD with the ability to increase pumpages to up to 1,500 gpm in the future, should additional water be desired at this facility. Additional groundwater modeling may be required to support an increase in withdrawals from these wells.

Table 6-2
Plant 2 Constant-Rate Pumping Test Data

Well	Date	Pumping Rate (gpm)	Maximum Drawdown (feet)	Specific Capacity (gpm/ft)	Sand Content (ppm)	Apparent Transmissivity (gpd/ft)
2-14	10/22/97	1,000	0.98	1,000	<1	2,640,000
2-15	9/14/97	1,000	2.36	423	<1	1,320,000

gpd/ft - gallons per day per foot

WATER QUALITY

Upon completion of the pumping portion of the constant-rate pumping tests, a water sample was collected from each of the wells and analyzed for all primary and secondary drinking water standard constituents. Water from both wells did not exceed any of the federal primary drinking water standards or secondary standard constituents, with the exception of color. Additionally, water collected from the wells did not contain concentrations of pesticides, PCBs, trihalomethanes or unregulated compounds exceeding drinking water standards. The laboratory analyses sheets are contained in **Appendix F** and a summary of the analyses is presented in **Table 6-3**.

Table 6-3
Water Quality Summary at Plant 2

Constituent	Well No. 2-14	Well No. 2-15
Chloride (mg/L)	38	38
Color (units)	60	50
pH (units)	7.7	7.4
Iron (mg/L)	0.146	0.140
Odor (units)	1	1
Sulfate (mg/L)	6.7	5.7
Sodium (mg/L)	21.4	21.2
Total Dissolved Solids (mg/L)	408	407
Total Pesticides/PCBs (ug/L)	bdl	bdl
Total THMs (ug/L)	bdl	bdl
Total Unregulateds (ug/L)	bdl	bdl
Total VOAs (ug/L)	bdl	bdl

"mg/L" signifies milligrams per liter

"ug/L" signifies micrograms per liter



Section 7



Section 7

Plant 3 Well Construction, Testing, and Rehabilitation

The work at the Plant 3 consisted of installation and testing of 4 new supply wells at the SRWRF including surface completions, and connection of the new wells to the Plant 3 WTP via 2 separate 12" and 16" raw water pipelines. The Plant 3 work also included the rehabilitation of 2 exist supply wells at the Polo Trace Golf Course. **Figure 7-1** presents a site plan of the SRWRF.

SRWRF WELL CONSTRUCTION

Local Geologic Conditions

From land surface to approximately 98 feet below land surface, the sediments at the SRWRF are comprised of soft, fine to medium-grained, brown-colored sand. This sedimentary section represents the Pamlico Sand. Near a depth of approximately 98 feet bls, a hard, sandy limestone is present, representing the Anastasia Formation. This limestone is medium to dark-gray colored, and has numerous shell clasts and secondary, solution-filling calcite crystals. This limestone is present to a depth of at least 200 feet bls.

Geophysical Interpretation

The caliper logs from the wells at the SRWRF indicated widely variable hole diameters to depths of about 100 feet bls. This response is probably indicative of thinly bedded, alternating layers of hard and soft sandy strata. Below the depth of 100 feet bls, to a depth of at least 200 feet bls, the caliper logs indicated more uniform, narrow-gauge hole diameters, indicating relatively hard, dense strata.

The resistivity logs indicated low resistivity material to depths of approximately 100 feet bls, indicative of soft formational material. Between the depths of 100 feet bls to 140 feet bls, resistivities increased, indicating harder, water-yielding formation material. Below the depth of 140 feet bls, resistivities again decreased, indicating softer, shelly formational material, containing water with potentially higher salinity.

This geophysical information, in combination with the collected lithologic samples, was utilized to set the well screens between 100 feet to 140 feet bls at Well No. 3-15; 100 feet to 145 feet bls at Well No. 3-16; 100 feet to 145 feet bls at Well No. 3-17; and 100 feet to 145 feet bls at Well No. 3-18.

CENTERLINE FLORIDA TURNPIKE

FLORIDA TURNPIKE (NORTHBOUND)

RIGHT OF WAY LINE

CANAL E-2-E

PROPERTY LINE

CANAL L-29

PROPERTY LINE

SRWW-0002

STORMWATER DETENTION POND

0 50 150 250
SCALE IN FEET

SRWW-0001

WELL NO. 3-18

STORMWATER DETENTION POND

PROPERTY LINE

HAGEN RANCH ROAD

EFFLUENT REUSE SYSTEM

EFFLUENT PUMP STATION

CHLORINE BUILDING

HYDRO. TANK

FINAL CLARIFIERS

SLUDGE PUMP STATION

BLOWER BUILDING

AERATION TANK NO. 1
AERATION TANK NO. 2

PRETREATMENT BUILDING

SITE PUMP STATION

PLANT ACCESS ROAD

WELL NO. 3-17

SLUDGE DEWATERING BUILDING

FUEL STORAGE TANKS

ANAEROBIC DIGESTERS

PLANT ACCESS ROAD

SRWW-0004

STORMWATER DETENTION POND

SRWW-0006

SRWW-0005

WASTE GAS BURNER

ELECTRICAL BUILDING

INJECTION WELL NO. 1

INJECTION WELL NO. 2

WELL NO. 3-16

WELL NO. 3-15

SRWW-0003

PROPERTY LINE

CANAL L-30

- SIGNIFIES NEW SUPPLY WELL
- ⊗ SIGNIFIES MONITORING WELL



MONTGOMERY WATSON

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
SO. REGIONAL WASTEWATER TREATMENT PLANT

FIGURE 7-1

WELL YIELDS

The wells at the SRWRF yielded widely variable amounts of water during development and testing. The static water levels in the wells were approximately 7 feet to 9 feet bls during September through December 1996.

WELL NO. 3-15

Well No. 3-15 produced water at rates between 500 gpm to 2,000 gpm for short periods of time during air-lift development. During pumping development at the desired flow rate of 1,500 gpm, the water level in the well declined to near 90 feet bls, which was considered excessive (the top of the well screen was set at 100 feet bls). The well exhibited a specific capacity of approximately 20 gallons per minute per foot of drawdown (gpm/ft) at a rate of 1,000 gpm.

Acidization

To increase the specific capacity Well No. 3-15, an acidization was performed on November 12, 1996. For the acidization, 990 gallons of 19% muriatic acid were pumped through a perforated pipe installed in the screened interval of the well (from 100 feet bls to 140 feet bls). After the acid was emplaced, approximately 1,000 gallons of fresh water then were pumped into the tremie pipe to force the acid through the gravel pack and into the formation. The wellhead then shut in for a one-hour period. Following the shut-in period, another 1,000 gallons of fresh water were pumped into the well, which was then shut in overnight. The following day, the spent acid was neutralized and pumped out of the well and pumping development resumed. The acidization had the effect of increasing the specific capacity of the well by approximately 25%, from 20 gpm/ft to approximately 25 gpm/ft when the well was pumped at a rate of approximately 1,000 gpm.

A four-hour step-rate pumping test was performed on Well No. 3-15 on November 25, 1996 at rates from 700 gpm to 1,500 gpm. **Table 7-1** presents the water-level and water quality data collected during the step-rate pumping test.

**Table 7-1
Plant 3, Well No. 3-15 Step-Rate Pumping Test Data**

Static Water Level (fbls)	Pumping Rate (gpm)	Pumping Water Level (fbls)	Drawdown (feet)	Specific Capacity (gpm/ft)	Sand Content (ppm)	Silt Density Index Values
9.11	0					
	700	36.64	27.53	25	7	4.21
	1,000	48.23	39.12	25	8	3.90
	1,200	60.98	51.87	23	6	3.56
	1,500	>80.00	>70.89	<21	10	3.67

The water level and sand content data collected during the step-rate pumping test indicated that the desired flow rate of 1,500 gpm would not be attainable in Well No. 3-15, and that concentrations of sand were still above the desired criteria of 5 ppm at lower pumping rates. Additional development then took place over the next two days. Multiple constant-rate pumping tests were performed during this period, to assess the development progress, therefore, a final 8-hour constant-rate pumping test was not performed on the well. During a 3-hour "startup" test on the well at a rate of 700 gpm, water from the well contained a sand concentration of 2 ppm after 3 hours of pumping. During a similar startup test at a rate of 900 gpm, the water from the well contained a sand concentration of 3.5 ppm after 3 hours of pumping.

Based upon the sand content data collected during the development and pump testing, the well was fitted with a submersible turbine pump set at a depth of 60 feet bls. The initial flow rate for Well No. 3-15 was set at 700 gpm, but can be increased to 900 gpm if sand content decreases during well operation.

WELL NO. 3-16

Development of Well No. 3-16 by air-lift and pump surging took place at rate of between 700 gpm to 3,000 gpm. During this time, the well exhibited specific capacities of between 60 gpm/ft to 80 gpm/ft. During pump development at the desired design rate of 1,500 gpm, sand content testing indicated a decline from an initial concentration of 23 ppm to 5 ppm over a 4-day period. A step-rate pumping test was conducted on Well No. 3-16 on August 19, 1996. **Table 7-2** summarizes the water-level and water quality data collected during the step-rate pumping test.

**Table 7-2
Plant 3, Well No. 3-16 Step-Rate Pumping Test Data**

Static Water Level (fbls)	Pumping Rate (gpm)	Pumping Water Level (fbls)	Drawdown (feet)	Specific Capacity (gpm/ft)	Sand Content (ppm)	Silt Density Index Values
6.80	0					
	800	15.75	8.95	89	4	4.01
	1,500	23.35	16.55	90	24	5.67
	2,000	35.74	28.94	69	47	4.89
	2,500	50.50	43.70	57	60	4.42

The water-level information collected during the step-rate pumping test indicated that Well No. 3-16 would yield water at the desired design flow of 1,500 gpm, however, the sand content data indicated that concentrations of sand were in excess of the design criteria. A constant-rate pumping test was conducted on the following day (August 20, 1996) at a rate of 2,000 (in excess of the desired 1,500 flow rate) in an effort to provide further development of the well and removal of sand. Table 7-3 presents the information collected during the constant-rate pumping test.

**Table 7-3
Plant 3, Well No. 3-16 Constant-Rate Pumping Test Data**

Well No.	Date	Pumping Rate (gpm)	Maximum Drawdown (feet)	Specific Capacity (gpm/ft)	Sand Content (ppm)	Apparent Transmissivity (gpd/ft)
3-16	8/20/96	2,000	28.90	69	30	151,400

The sand content testing data collected during the 8-hour constant rate pumping test indicated that further development of the well would be necessary to provide assurances that water from the well would contain acceptable sand concentrations. An additional six days of pump surging at a rate of approximately 2,500 gpm was subsequently conducted on the well during early December 1996. During this period, brief (1 to 6-hour duration) "start-up" tests at the desired flow rate of 1,500 gpm were conducted to assess the progress of development. By the sixth day of development, water from Well No. 3-16 yielded a sand content of less than 3 ppm during pumpage at a rate of 1,500 gpm after stable conditions had been achieved.

Based on the water-level and water quality collected during the pumping development and testing, Well No. 3-16 was fitted with a submersible turbine pump set at a depth of 60 feet bls. The design rate of the pump was 1,500 gpm.

WELL NO. 3-17

Development of Well No. 3-17 by air-lift and pump surging took place at rates of between 500 gpm and 2,500 gpm. During the first day of development with the test pump in the well, water contained a sand concentration of approximately 2 ppm to 7 ppm during pumpage at the desired rate of 1,500 gpm. Pump surging at rates of approximately 2,500 gpm continued until February 15, 1997, when a step-rate pumping test was conducted. **Table 7-4** summarizes the water-level and water quality data collected during the step-rate pumping test.

**Table 7-4
Plant 3, Well No. 3-17 Step-Rate Pumping Test Data**

Static Water Level (fbls)	Pumping Rate (gpm)	Pumping Water Level (fbls)	Drawdown (feet)	Specific Capacity (gpm/ft)	Sand Content (ppm)	Silt Density Index Values
9.53	0					
	500	17.35	7.82	64	10	3.53
	1,000	25.81	16.28	61	33	3.24
	1,500	35.38	25.85	58	7	3.33
	2,500	57.99	48.46	51	7	3.59

During the step-rate pumping test, sand concentrations (particularly at lower pumping-step rates) were relatively high. This was attributed to a "pulse" of sand that may have become dislodged during adjustment of the test pump to successively higher rates. As the test proceeded to higher pumping rates, the sand content decreased, indicating that development was continuing, and that the dislodged sand was being removed from the well. Based on this interpretation, the 8-hour constant-rate pumping test proceeded on the following day (February 16, 1997), at the desired design rate of 1,500 gpm. **Table 7-5** presents a summary of the water-level, water quality and aquifer transmissivity information collected during the constant-rate pumping test.

**Table 7-5
Plant 3, Well No. 3-17 Constant-Rate Pumping Test Data**

Well No.	Date	Pumping Rate (gpm)	Maximum Drawdown (feet)	Specific Capacity (gpm/ft)	Sand Content (ppm)	Apparent Transmissivity (gpd/ft)
3-17	2/16/97	1,500	25.24	59	1	165,000

Based on the water-level and water quality data collected during the development and pumping tests, Well No. 3-17 was fitted with a submersible turbine pump set at a depth of 60 feet bls, designed to pump at a rate of 1,500 gpm. Because the sand content in water from this well was somewhat variable during the step-rate pumping test, the initial pumping rate should initially be set at approximately 700 gpm, until stable conditions are achieved. The pumping rate for this well should increase through time to the design rate of 1,500 gpm.

WELL NO. 3-18

Development of Well No. 3-18 by air-lift and pump surging took place over approximately 8 days at rates of between 500 gpm and 2,000 gpm. During the first few days of development with the test pump, water contained a sand concentration of approximately 31 ppm to 11 ppm during pumpage at the desired rate of 1,500 gpm. The specific capacity of the well during this period was approximately 45 gpm/ft, with a pumping water level of approximately 50 feet below land surface. Pump surging at rates of approximately 2,000 gpm continued until September 4, 1996, when a step-rate pumping test was conducted. **Table 7-6** summarizes the water-level and water quality data collected during the step-rate pumping test.

**Table 7-6
Plant 3, Well No. 3-18 Step-Rate Pumping Test Data**

Static Water Level (fbls)	Pumping Rate (gpm)	Pumping Water Level (fbls)	Drawdown (feet)	Specific Capacity (gpm/ft)	Sand Content (ppm)	Silt Density Index Values
9.64	0					
	500	17.94	8.30	60	4.5	5.6
	1,000	30.30	20.66	48	50	6.3
	1,500	49.05	39.41	38	25	4.8
	2,000	69.68	60.04	33	10	5.8

During the step-rate pumping test, sand concentrations increased as the pumping rate was adjusted to 1,000 gpm, then decreased at successively higher pumping rates. This was also attributed to a "pulse" of sand that could have become dislodged during adjustment of the test pump. As the test proceeded, the sand content decreased, indicating that development was continuing, and that the dislodged sand was being removed from the well. Based on this interpretation, the 8-hour constant-rate pumping test proceeded on September 6, 1996, at the desired design rate of 1,500 gpm. **Table 7-7** presents a summary of the water-level, water quality and aquifer transmissivity information collected during the constant-rate pumping test.

Table 7-7
Plant 3, Well No. 3-18 Constant-Rate Pumping Test Data

Well No.	Date	Pumping Rate (gpm)	Maximum Drawdown (feet)	Specific Capacity (gpm/ft)	Sand Content (ppm)	Apparent Transmissivity (gpd/ft)
3-18	9/6/97	1,500	55.96	27	1.6	100,000

Based on the water-level and water quality data collected during the development and pumping tests, Well No. 3-18 was fitted with a submersible turbine pump set at a depth of 75 feet bls, designed to pump at a rate of 1,500 gpm.

WATER QUALITY

Upon completion of the pumping portion of the final pumping tests, a water sample was collected from each of the new supply wells at the SRWRF and analyzed for all primary and secondary drinking water standard constituents. The analyses sheets are contained in **Appendix F** and a summary of the results is presented in **Table 7-8**. Water from the wells did not contain concentrations of any primary drinking water constituents that were above established maximum allowable concentrations. Water from the wells consistently exceeded the secondary standard for color. Concentrations of all pesticides, PCBs, trihalomethanes, unregulated compounds and volatile organic aromatic compounds were below detection limits in water from all of the wells.

**Table 7-8
Water Quality Summary at Plant 3**

Constituent	Well No. 3-15	Well No. 3-16	Well No. 3-17	Well No. 3-18
Chloride (mg/L)	38.3	50	46.8	0.038
Color (units)	40	50	30	40
Odor (units)	1	2	1	1
pH (units)	7.2	7.7	7.2	7.5
Iron (mg/L)	0.026	0.041	0.060	0.010
Sulfate (mg/L)	2	276	7	2
Sodium (mg/L)	19.7	29	21.2	19.2
Total Dissolved Solids (mg/L)	279	193	355	319
Total Pesticides/PCBs (ug/L0	bdl	bdl	bdl	bdl
Total THMs (ug/L)	bdl	bdl	bdl	bdl
Total Unregulateds (ug/L)	bdl	bdl	bdl	bdl
Total VOAs (ug/L)	bdl	bdl	bdl	bdl

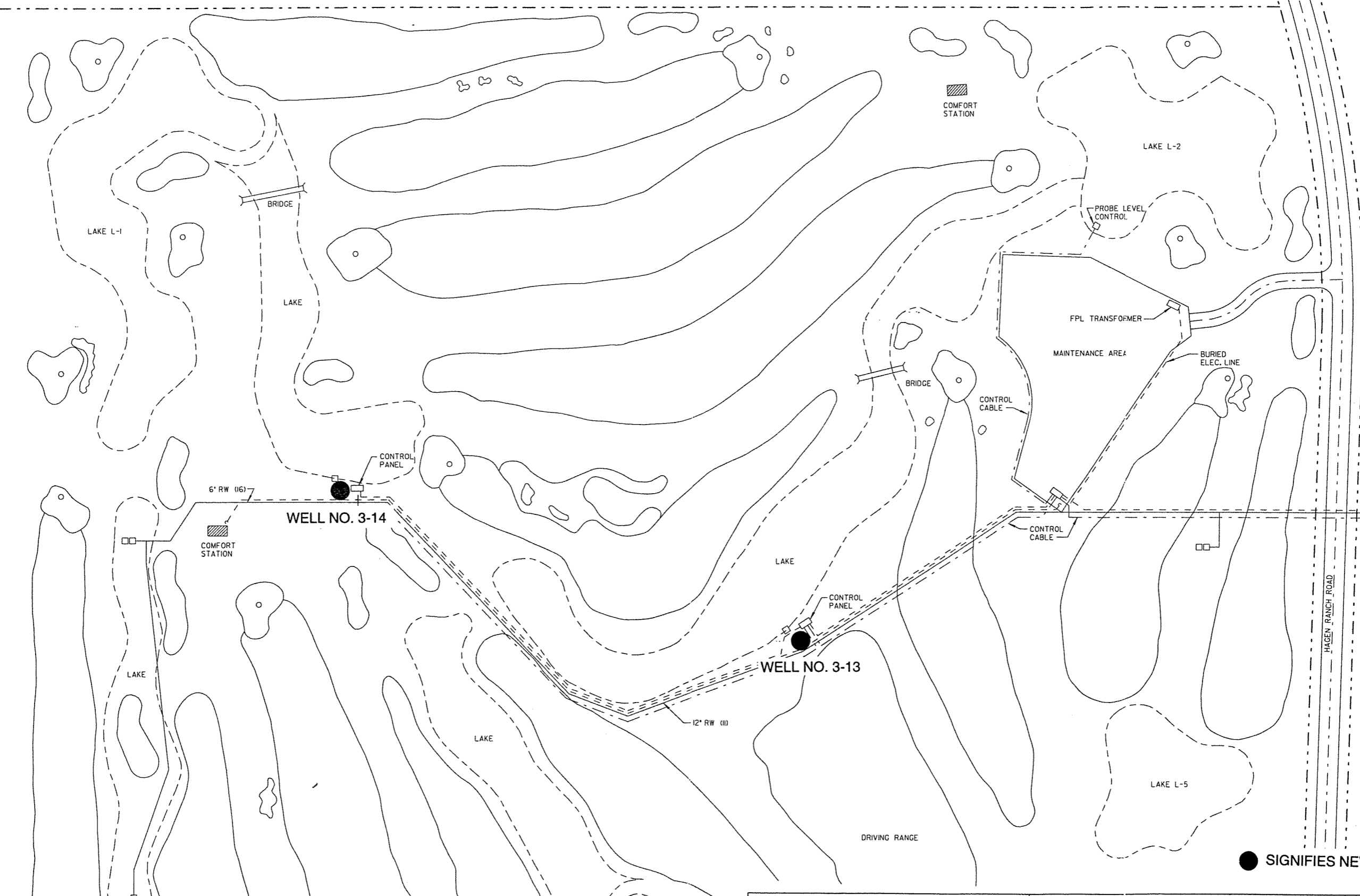
EFFLUENT DISCHARGE MONITORING PLAN

Two of the supply wells constructed at the SRWRF (Nos. 3-17 and 3-18) are located within 500 feet of the on-site retention ponds. The ponds are also used for disposal of secondarily-treated effluent in the event of an unforeseen emergency, or during mechanical integrity testing of the injection wells at the SRWRF which occurs every 5 years. In the event of an emergency discharge to the retention ponds, withdrawals from well No. 3-17 and No. 3-18 should be discontinued. Seven days after the cessation of the emergency discharge, the supply wells should be re-disinfected, then a bacteriological clearance should be performed. Upon return of the supply wells to service, monitor wells SSRW-0001 and SSRW-0004 at the SRWRF (shown on Figure 7-1) should be sampled daily for fecal coliforms for a period of 30 days. Should coliform concentrations exceed the maximum concentration specified in Chapter 62-550.310 of the Florida Administrative Code, then PBCWUD should perform another disinfection of wells No. 3-17 and No. 3-18 and repeat the clearance procedure and the 30-day monitoring period, as necessary.

POLO TRACE WELL REHABILITATIONS

The work at the Polo Trace Golf Course consisted of evaluating and rehabilitating 2 existing wells (Wells No. 3-13 and No. 3-14) and connecting them to the Plant 3 WTP raw water piping. Included in this work was installing new pumps, instrumentation and controls for the wells, and obtaining bacteriological clearance for the wells and pipeline once they were connected. **Figure 7-2** presents a site plan of the Polo Trace Golf Course.

LWDD L-30 CANAL (100 FT. R/W)



Plot Date: 05-SEP-1997 07:55

Plot Date: 05-SEP-1997 07:55

Plot Date: 05-SEP-1997 07:55

JOB No. *

FLORIDA'S TURNPIKE

LWDD E-2-E CANAL (700 FT. R/W)

LAKE L-1

BRIDGE

LAKE

COMFORT STATION

LAKE L-2

PROBE LEVEL CONTROL

FPL TRANSFORMER

MAINTENANCE AREA

BURIED ELEC. LINE

BRIDGE

CONTROL CABLE

CONTROL PANEL

6' RW (16)

WELL NO. 3-14

COMFORT STATION

LAKE

LAKE

CONTROL PANEL

WELL NO. 3-13

CONTROL CABLE

LAKE

12' RW (11)

DRIVING RANGE

LAKE L-5

HAGEN RANCH ROAD

● SIGNIFIES NEW SUPPLY WELL



MONTGOMERY WATSON

Lake Worth, Florida

POLO TRACE SITE PLAN

FIGURE 7-2

VIDEO ASSESSMENT

Video surveys were first performed on each of the supply wells at Polo Trace to determine the appropriate rehabilitation measures. The video survey on Well No. 3W-13 took place on March 6, 1997. The survey indicated that the 12-inch diameter well casing was undamaged, intact and extended to a depth of 103 feet bls. Some organic slime (scale) appeared to have developed along interior of the casing. The well screen extended from 103 feet bls to 130 feet bls, and appeared to be clean and in good condition. A length of electrical wire was found to be lying on the bottom of the well, at a depth of 132 feet bls, within a closed sump below the screen. Some soft sediment was also observed on the bottom of the well.

The video survey on Well No. 3-14 took place on July 14, 1996. The survey indicated that the 12-inch diameter well casing was undamaged, intact and extended to a depth of 97 feet bls. Some organic slime had developed along the interior of the well casing. The well screen extended from 97 feet bls to 117 feet bls and from 132 feet bls to 149 feet bls. Between the depths of 117 feet bls and 132 feet bls was a "blank" section of well casing. The well screen appeared to be clean and in good condition. Some soft sediment appeared to have accumulated on the bottom of the well.

WELL CLEANING AND CHEMICAL TREATMENT

Based on the observations and analysis of the video surveys, it was recommended that the interior of the wells be mechanically brushed with a soft wire brush and subjected to a high-level disinfection treatment. The electrical wire found in Well No. 3W-13 was also removed. After brushing, the wells were air developed, to remove the loose debris. Upon completion of the development, a 500 mg/L solution of sodium hypochlorite was circulated into each well until a 250 mg/L chlorine residual was maintained. After establishing the desired chlorine residual concentration, each well was allowed to remain undisturbed for a minimum 18-hour period. The chlorine solution then was pumped out of each well.

POST-REHABILITATION TESTING

Upon completion of the well cleaning and chemical treatment, new 10-inch diameter pumps were installed in the wells, to depths of sixty feet bls. The pumps would be capable of withdrawing approximately 1,000 gpm from each well. Upon completion of the installation of the pumps and associated electrical control instrumentation, a brief (30-minute) wire-to-water pump efficiency and specific capacity test was performed on each well. **Table 7-9** present summaries of the information collected during the wire-to-water pumping tests.

**Table 7-9
Summary of Wire to Water Pumping tests at Wells No. 3-13 and 3-14**

Well No 3-13

Static Water Level Feet bls	Discharge Rate gpm	Pumping Water Level feet bls	Specific Capacity gpm/ft	Discharge Pressure	Total Dynamic Head	Average AMPS on 3 Legs	Motor Efficiency	Pump Efficiency	Wire to Water Efficiency
3.6	300	5.4	166	89	208	57	82	67	55
	500	7.2	139	79	187	57	82	67	55
	750	10	117	64	155	57.6	85	75	64
	1,000	12.8	108	54	134	60.5	85	80	68

Well No. 3-14

Static Water Level Feet bls	Discharge Rate gpm	Pumping Water Level feet bls	Specific Capacity gpm/ft	Discharge Pressure	Total Dynamic Head	Average AMPS on 3 Legs	Motor Efficiency	Pump Efficiency	Wire to Water Efficiency
5.3	300	14.4	33	86	209	59	87	67	58
	500	21.2	31	72	183	58	86	67	58
	750	30	30	54	150	58	85	75	64
	1,000	38.6	30	44	136	61	85	80	68

WATER QUALITY

Upon completion of the pumping portion of the pumping tests, a water sample was collected from each well and analyzed for all primary and secondary drinking water standard constituents. The analyses sheets are contained in **Appendix G** and a summary of these results is presented in **Table 7-10**. Water from both of the wells did not contain concentrations of any primary drinking water standards above established maximum allowable concentrations. Water collected from each well did not exceed secondary standards, with the exception of color. Concentrations of all pesticides, PCBs, trihalomethanes, unregulated and volatile organic aromatic compounds were all below detection limits in water collected from both wells.

**Table 7-10
Water Quality Summary at Plant 3 - Polo Trace**

Constituent	Well No. 3-13	Well No. 3-14
Chloride (mg/L)	62	60
Color (units)	60	60
Odor (units)	1	2
pH (units)	7.2	7.4
Iron (mg/L)	0.041	0.034
Sulfate (mg/L)	8	5
Sodium (mg/L)	40.5	35.9
Total Dissolved Solids (mg/L)	420	398
Total Pesticides/PCBs (ug/L)	bdl	bdl
Total THMs (ug/L)	bdl	bdl
Total Unregulateds (ug/L)	bdl	bdl
Total VOAs (ug/L)	bdl	bdl



Section 8



Section 8

Plant 8 - Wells No. 8-13 and No. 8-14 Construction And Testing

The work at Plant 8 consisted of installation and testing of 2 new supply wells, including surface completions. A site plan is presented in **Figure 8-1**.

LOCAL GEOLOGIC CONDITIONS

From land surface to a depth of approximately 55 feet bls, sediments are comprised of medium-grained, brown and tan-colored shelly sand. This sedimentary section represents the Pamlico Sand. At a depth of 55 feet bls, fragments of moderately cemented, light gray and tan-colored limestone are present, representing the top of the Anastasia Formation. At a depth of approximately 120 feet bls, the limestone becomes dark gray-colored and well cemented. At a depth of approximately 170 feet bls, the limestone becomes shelly and less well-cemented.

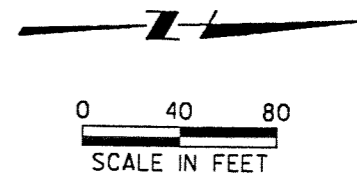
GEOPHYSICAL INTERPRETATION

The caliper logs from Wells 8-13 and 8-14 indicated relatively washed-out (large) borehole diameters to depths of approximately 50 feet bls. This response is probably indicative of the soft, unconsolidated sands comprising this interval. Between the depths of 50 feet bls to 110 feet bls, the caliper log indicated that the boreholes were more narrow-gauged, with occasional wash-out zones. Between the depths of 110 feet bls to 140 feet bls, the boreholes again became larger, probably indicating softer formation material. Below the depth of 140 feet bls, the caliper log indicated more narrow-gauged holes, again indicating harder formation materials.

The resistivity logs from Wells 8-13 and 8-14 indicated relatively low resistivities from land surface to a depth of approximately 70 feet bls, reflecting softer formation materials. Between the depths of 70 feet bls to 140 feet bls, resistivities increased as a result of more consolidated formation materials. Below the depth of 140 feet bls, resistivities again decreased, as a result of softer (shelly) formation materials. Based upon this review, in combination with the lithologic information, the screen for Well 8-13 was set from 80 feet bls to 135 feet bls. The screen for Well 8-14 was set from 80 feet bls to 140 feet bls.

WELL NO. 8-13

STORMWATER DRAINAGE POND



FLORIDA TURNPIKE

PLANT ACCESS ROAD

2.0 MG. GROUND STORAGE TANK

1.25 MG. GROUND STORAGE TANK

ELECTRICAL TRANSFORMERS

OZONE BUILDING

METER VAULT

CHEM. STOR.

CONTROL BUILDING

FUEL TANK

LIME SOFT. UNIT NO. 1

LIME SOFT. UNIT NO. 2

OZONE CONTACT BASIN

FILTER GALLERY

AMMONIA TANKS

LIME SILO

SANI. SWR. LIFT STATION

VACUUM FILTER BUILDING

SLUDGE SUMP

SLUDGE THICKENER

SLUDGE POND

WASHWATER RECOVERY BASIN

CHLORINE BUILDING

WELLFIELD ACCESS ROAD

WELL NO. 12

FUEL TANK

WELLFIELD GENERATOR BUILDING

PLANT ACCESS ROAD

WELL NO. 8-14

● SIGNIFIES NEW SUPPLY WELL



MONTGOMERY WATSON

PALM BEACH COUNTY
WATER UTILITIES DEPARTMENT
WATER TREATMENT PLANT NO. 8

FIGURE 8-1

WELL YIELDS

Development of Wells 8-13 and 8-14 by air-lift and pump surging took approximately 7 days per well. The static water level in Well 8-13 during March 1997 was approximately 9.3 feet bls. The static water level in Well 8-14 during November 1996 was 10.3 feet bls. Upon completion of development, a four-hour step-rate pumping test was conducted on each well. Pumping rates for the step-rate pumping tests ranged from 500 gpm to up to 3,300 gpm. Water-level, drawdown and water quality data collected during the step-rate pumping tests is summarized on **Tables 8-1 and 8-2**. The specific capacity of each well generally declines with increased pumping rate. This is caused by higher frictional losses related to formation, entrance, and borehole velocities of water.

**Table 8-1
Plant 8, Well No. 8-13 Step-Rate Pumping Test Data**

Static Water Level (fbls)	Pumping Rate (gpm)	Pumping Water Level (fbls)	Drawdown (feet)	Specific Capacity (gpm/ft)	Sand Content (ppm)	Silt Density Index Values
9.3	0					
	500	9.78	0.48	1041	0	2.88
	1,000	10.45	1.15	870	0	0.60
	2,000	12.45	3.15	635	0	2.08
	3,000	14.75	5.45	550	45	3.33

**Table 8-2
Plant 8, Well No. 8-14 Step-Rate Pumping Test Data**

Static Water Level (fbls)	Pumping Rate (gpm)	Pumping Water Level (fbls)	Drawdown (feet)	Specific Capacity (gpm/ft)	Sand Content (ppm)	Silt Density Index Values
10.31	0					
	700	10.89	0.58	1,207	0	2.5
	1,000	11.25	0.94	1,063	0	4.8
	2,000	12.75	2.44	820	2	5.5
	3,300	15.21	4.9	673	20	7.9

Upon completion of the step-rate pumping tests, an 8-hour constant-rate pumping test was performed on Wells 8-13 and 8-14. The pumping rate for both of the tests was the design rate of 1,000 gpm. After 8 hours of pumping at 1,000 gpm, the water level in Well 8-13 had declined 1.27 feet from static. After 8 hours of pumping at 1,000 gpm, the water level in Well 8-14 had declined 0.62 feet from static, and the aquifer near the well had an apparent transmissivity of 5,870,000 (gpm/ft). **Table 8-3** presents a summary of the information collected during the constant-rate pumping tests.

Based on the water level and water quality data collected during from the step-rate and constant-rate pumping tests, both of the wells were fitted with submersible turbine pumps set at depths of 60 feet bls, designed to pump at rates of 1,000 gpm per well. The high specific capacities exhibited by these wells may afford the PBCWUD with the ability to increase pumpages to up to 1,500 gpm in the future, should additional water be desired at this facility. Additional groundwater modeling, water quality analyses and a water use permit modification may be required to support an increase in withdrawals from these wells.

**Table 8-3
Plant 8 Constant-Rate Pumping Test Data**

Well No.	Date	Pumping Rate (gpm)	Maximum Drawdown (feet)	Specific Capacity (gpm/ft)	Sand Content (ppm)	Apparent Transmissivity (gpm/ft)
8-13	3/25/97	1,000	1.27	787	<1	2,640,000
8-14	11/4/97	1,000	0.88	1,136	<1	5,870,000

WATER QUALITY

Upon completion of the pumping portion of the constant-rate pumping tests, a water sample was collected from Wells 8-13 and 8-14 and analyzed for all primary and secondary drinking water standard constituents. Water from the wells did not contain concentrations of any primary drinking water standards above established maximum allowable concentrations. Water from the wells did not exceed secondary drinking water standards, with the exception of color. Concentrations of all pesticides, PCBs, trihalomethanes, unregulated and volatile organic aromatic compounds were all below detection limits. The analyses sheets are contained in **Appendix F** and a summary of the results is presented in **Table 8-4**.

Table 8-4
Water Quality Summary at Plant 8

Constituent	Well No. 8-13	Well No. 8-14
Chloride (mg/L)	58	46
Color (units)	80	100
pH (units)	7.0	7.0
Iron (mg/L)	0.008	0.025
Odor (ton)	1	1
Sulfate (mg/L)	14	31
Sodium (mg/L)	30	23
Total Dissolved Solids (mg/L)	407	382
Total Pesticides/PCBs ug/L)	bdl	bdl
Total THMs (ug/L)	bdl	bdl
Total Unregulateds (ug/L)	bdl	bdl
Total VOAs (ug/L)	bdl	bdl



Section 9



Section 9

Plant 9 Well No. 9-1R Construction and Testing

The work at Plant 9 consisted of installation and testing of one new supply well, built as a replacement for a well that has been abandoned. **Figure 9-1** presents a site plan.

LOCAL GEOLOGIC CONDITIONS

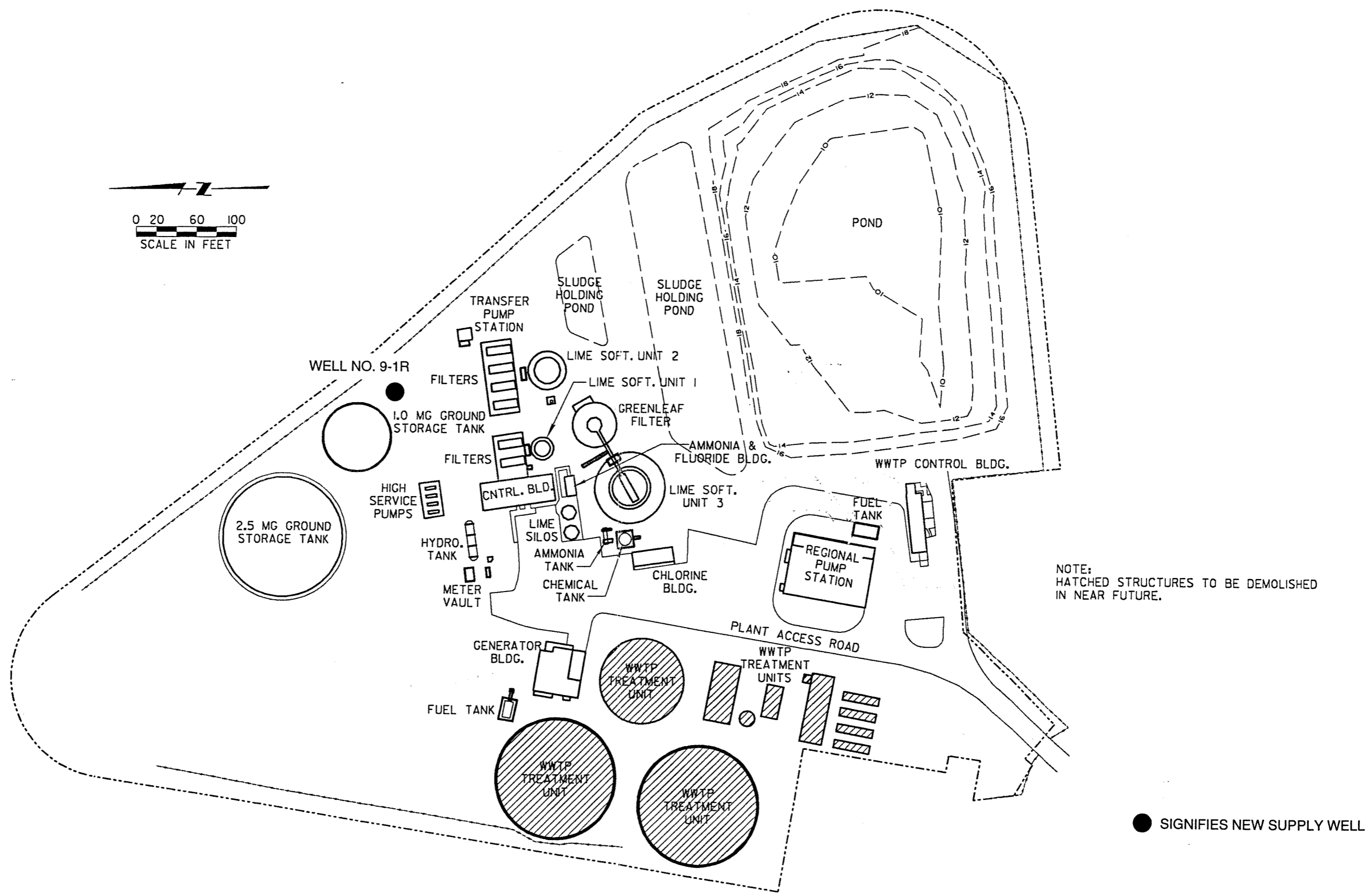
From land surface to a depth of approximately 90 feet bls, sediments are comprised of fine-grained, unconsolidated, tan to brown-colored sand. This sedimentary section represents the Pamlico Sand. At a depth of 90 feet bls, fragments of gray-colored limestone are present, representing the Anastasia Formation. The limestone is characterized as a well-cemented phosphatic wackestone with secondary solution porosity. At a depth of approximately 140 feet bls, the limestone become less cemented, and shells become abundant to a depth of 180 feet bls.

GEOPHYSICAL INTERPRETATION

The caliper log from Well No. 9-1R indicated relatively washed-out (large) hole geometry to a depth of about 90 feet bls. This response is probably indicative of the soft, unconsolidated sands comprising this interval. Below this depth, to 198 feet bls, the caliper log indicated a narrow-gauge borehole, reflecting the harder limestone of the Anastasia Formation. The resistivity log indicated highly resistive formation material between the depths of 90 feet bls to 110 feet bls. Below these depths, resistivities decreased, indicating that the formation might be softer, and less water-yielding. Based upon this review, in concert with the lithologic information, the well screen for Well No. 9-1R was set between 90 feet bls to 130 feet bls.

WELL YIELD

Development of Well No. 9-1R by air-lift and pump surging at rates of between 500 gpm to 2,500 gpm. The static water level in the well during January 1997 was 19.67 below land surface. After several weeks of development, the water from the well contained an excess of 5 ppm of very fine-grained sand during pumpage at rates approaching 1,000 gpm, the desired flow for the well. Multiple constant-rate pumping tests were performed during this period, to assess the development progress, hence a "final" 8-hour constant-rate pumping test was not performed on the well. Upon completion of development, a four-hour step-rate pumping test was conducted on Well No. 1R on February 3, 1997, at rates ranging from 300 gpm to



NOTE: HATCHED STRUCTURES TO BE DEMOLISHED IN NEAR FUTURE.

● SIGNIFIES NEW SUPPLY WELL

Section 9 - Plant 9 Well No. 9-1R Construction And Testing

1000 gpm. **Table 9-1** summarizes the water level, specific capacity, silt density and sand content testing results collected during the step-rate pumping test.

Based upon the sand content data collected during the development and step-rate pumping test, the well was fitted with a submersible turbine pump set at a depth of 60 feet bls. The initial flow rate for Well No. 1R was set at 700 gpm, but can be increased to up to 1,000 gpm, if sand content decreased during well operation.

Table 9-1
Plant 9, Well No. 9-1R Step-Rate Pumping Test Data

Static Water Level (fbls)	Pumping Rate (gpm)	Pumping Water Level (fbls)	Drawdown (feet)	Specific Capacity (gpm/ft)	Sand Content (ppm)	Silt Density Index Values
19.67	0					
	300	21.11	1.44	208	0	3.2
	500	22.91	3.24	158	4	3.9
	700	24.28	4.61	151	5	4.4
	1,000	26.70	7.03	142	70	10.2

WATER QUALITY

Upon completion of the pumping portion of the step-rate pumping test, a water sample was collected from Well No. 1R and analyzed for all primary and secondary drinking water standard constituents. Water from the well did not contain concentrations of any primary drinking water standards above established allowable maximum concentrations. Water from the well did not exceed secondary drinking water standards, with the exception of aluminum and color. Concentrations of all pesticides, PCBs, unregulated and volatile aromatic compounds were all below detection levels. The laboratory analyses sheets are contained in **Appendix F** and a summary of the results is presented in **Table 9-2**.

Table 9-2
Water Quality Summary at Plant 9

Constituent	Well No. 9-1R
Chloride (mg/L)	51
Color (units)	40
pH (units)	7.0
Iron (mg/L)	0.108
Odor (ton)	1
Sulfate (mg/L)	28.7
Sodium (mg/L)	25.8
Total Dissolved Solids (mg/L)	220
Total Pesticides/PCBs (ug/L)	bdl
Total THMs (ug/L)	bdl
Total Unregulateds (ug/L)	bdl
Total VOAs (ug/L)	bdl



Section 10



Section 10

References

REFERENCES

Jacob, C.E. 1944. Notes on Determining Permeability by Pumping Tests Under Water-Table Conditions. United States Geological Survey Mimeographed Report.

Kline, H. and Hull, J.E. 1978. Biscayne Aquifer, Southeast Florida. United States Geological Survey Water-Resources Investigations Report 78-107.

Shine, M.J., Padgett, D.G.J., and Barknecht, W.M. 1989. Ground Water Resource Assessment of Eastern Palm Beach County, Florida. South Florida Water Management District Technical Publication 89-4.

Swayze, L.J. and Miller, W.L. 1984. Hydrogeology of a Zone of Secondary Permeability in the Surficial Aquifer of Eastern Palm Beach County, Florida. United States Geological Survey Water-Resources Investigations Report 83-4249.

Appendices





Appendix A



SFWMD

Well Construction Permits



South Florida Water Management District

3301 Gun Club Road, West Palm Beach, Florida 33406 • (407) 686-8800 • FL WATS 1-800-432-2045

CON 24-06

June 24, 1996

PERMITTEE

PALM BEACH COUNTY WATER UTILITIES
2065 PRAIRIE ROAD
WEST PALM BEACH, FL 33416-6097

CONTRACTOR

ZIEGLER, WILLIAM
P.O. BOX 271723
TAMPA, FL 33688
LICENSE NO:9078

WATER WELL CONSTRUCTION PERMIT # SF060796K
EXPIRATION DATE: December 24, 1996

PROJECT: SYSTEM 2, WELL 14
TYPE OF USE: PUBLIC WATER SUPPLY
COUNTY: PALM BEACH SEC: 16 TWP: 44 RGE: 42

WELL CONSTRUCTION SPECIFICATIONS:

	<u>INNER</u>	<u>OUTER</u>
CASING DIAMETER:	16"	24"
CASING DEPTH:	90.00'	60.00'
SCREENED INTERVAL:	90.00' - 130.00'	
OPEN HOLE INTERVAL:		
TOTAL DEPTH OF WELL:	130.00'	
GROUT REQUIREMENT:		

Outer casing shall be grouted bottom to top.

See additional conditions of permit on attached sheet.

We appreciate your assistance and cooperation in better managing the water resources of the District. If you have any questions on this matter, please call Ann-Marie Superchi at extension 6929.

Sincerely,

Steve D. Anderson, P.G., Supervising Professional
Water Use Division, Regulation Department

Attachment: Additional Conditions of Permit

c: MONTGOMERY WATSON
MR. BOB MITCHELL-HRS
DEP POTABLE WATER SECTION

Governing Board:

Valerie Boyd, Chairman
Frank Williamson, Jr., Vice Chairman
William E. Graham

William Hammond
Betsy Krant
Richard A. Machek

Eugene K. Pettis
Nathaniel P. Reed
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Samuel E. Poole III, Executive Director
Michael Slayton, Deputy Executive Director



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2065 PRAIRIE ROAD
WEST PALM BEACH, FL 33416-6097

CONTRACTOR

ZIEGLER, WILLIAM
P.O. BOX 271723
TAMPA, FL 33688
LICENSE NO:9078

WATER WELL CONSTRUCTION PERMIT # SF060796J
EXPIRATION DATE: December 24, 1996

PROJECT: SYSTEM 2, WELL 15
TYPE OF USE: PUBLIC WATER SUPPLY
COUNTY: PALM BEACH

SEC: 16 TWP: 44 RGE: 42

WELL CONSTRUCTION SPECIFICATIONS:

INNER

OUTER

CASING DIAMETER:	16"	24"
CASING DEPTH:	90.00'	60.00'
SCREENED INTERVAL:	90.00' - 130.00'	
OPEN HOLE INTERVAL:		
TOTAL DEPTH OF WELL:	130.00'	
GROUT REQUIREMENT:		

Outer casing shall be grouted bottom to top.

See additional conditions of permit on attached sheet.

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Steve D. Anderson, P.G., Supervising Professional
Water Use Division, Regulation Department

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WEST PALM BEACH, FL 33416-6097

CONTRACTOR

ZIEGLER, WILLIAM
P.O. BOX 271723
TAMPA, FL 33688
LICENSE NO:9078

WATER WELL CONSTRUCTION PERMIT # SF0607961
EXPIRATION DATE: December 24, 1996

PROJECT: SRWRF (SYSTEM 3) WELL 15
TYPE OF USE: PUBLIC WATER SUPPLY
COUNTY: PALM BEACH SEC: 4 TWP: 46 RGE: 42

WELL CONSTRUCTION SPECIFICATIONS:

	<u>INNER</u>	<u>OUTER</u>
CASING DIAMETER:	16"	24"
CASING DEPTH:	105.00'	60.00'
SCREENED INTERVAL:	105.00' - 165.00'	
OPEN HOLE INTERVAL:		
TOTAL DEPTH OF WELL:	165.00'	
GROUT REQUIREMENT:		

Outer casing shall be grouted bottom to top.

See additional conditions of permit on attached sheet.

We appreciate your assistance and cooperation in better managing the water resources of the District. If you have any questions on this matter, please call Ann-Marie Superchi at extension 6929.

Sincerely,

Steve D. Anderson, P.G., Supervising Professional
Water Use Division, Regulation Department

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PALM BEACH COUNTY WATER UTILITIES
2065 PRAIRIE ROAD
WEST PALM BEACH, FL 33416-6097

CONTRACTOR

ZIEGLER, WILLIAM
P.O. BOX 271723
TAMPA, FL 33688
LICENSE NO:9078

WATER WELL CONSTRUCTION PERMIT # SF060796H
EXPIRATION DATE: December 24, 1996

PROJECT: SRWRF (SYSTEM 3) WELL 16
TYPE OF USE: PUBLIC WATER SUPPLY
COUNTY: PALM BEACH

SEC: 4 TWP: 46 RGE: 42

WELL CONSTRUCTION SPECIFICATIONS:

	<u>INNER</u>	<u>OUTER</u>
CASING DIAMETER:	16"	24"
CASING DEPTH:	105.00'	60.00'
SCREENED INTERVAL:	105.00' - 165.00'	
OPEN HOLE INTERVAL:		
TOTAL DEPTH OF WELL:	165.00'	
GROUT REQUIREMENT:		

Outer casing shall be grouted bottom to top.

See additional conditions of permit on attached sheet.

We appreciate your assistance and cooperation in better managing the water resources of the District. If you have any questions on this matter, please call Ann-Marie Superchi at extension 6929.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve D. Anderson".

Steve D. Anderson, P.G., Supervising Professional
Water Use Division, Regulation Department

Attachment: Additional Conditions of Permit

c: MONTGOMERY WATSON
MR. BOB MITCHELL-HRS
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PALM BEACH COUNTY WATER UTILITIES
2065 PRAIRIE ROAD
WEST PALM BEACH, FL 33416-6097

CONTRACTOR

ZIEGLER, WILLIAM
P.O. BOX 271723
TAMPA, FL 33688
LICENSE NO:9078

WATER WELL CONSTRUCTION PERMIT # SF060796G
EXPIRATION DATE: December 24, 1996

PROJECT: SRWRF (SYSTEM 3) WELL 17
TYPE OF USE: PUBLIC WATER SUPPLY
COUNTY: PALM BEACH SEC: 4 TWP: 46 RGE: 42

WELL CONSTRUCTION SPECIFICATIONS:

	<u>INNER</u>	<u>OUTER</u>
CASING DIAMETER:	16"	24"
CASING DEPTH:	105.00'	60.00'
SCREENED INTERVAL:	105.00' - 165.00'	
OPEN HOLE INTERVAL:		
TOTAL DEPTH OF WELL:	165.00'	
GROUT REQUIREMENT:		

Outer casing shall be grouted bottom to top.

See additional conditions of permit on attached sheet.

We appreciate your assistance and cooperation in better managing the water resources of the District. If you have any questions on this matter, please call Ann-Marie Superchi at extension 6929.

Sincerely,

Steve D. Anderson, P.G., Supervising Professional
Water Use Division, Regulation Department

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South Florida Water Management District

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CON 24-06

June 24, 1996

PERMITTEE

PALM BEACH COUNTY WATER UTILITIES
2065 PRAIRIE ROAD
WEST PALM BEACH, FL 33416-6097

CONTRACTOR

ZIEGLER, WILLIAM
P.O. BOX 271723
TAMPA, FL 33688
LICENSE NO:9078

WATER WELL CONSTRUCTION PERMIT # SF060796F

EXPIRATION DATE: December 24, 1996

PROJECT: SOUTH REGIONAL WATER RECLAMATION FACILITY-SYSTEM 3 WELL18
TYPE OF USE: PUBLIC WATER SUPPLY
COUNTY: PALM BEACH SEC: 4 TWP: 46 RGE: 42

WELL CONSTRUCTION SPECIFICATIONS:

	<u>INNER</u>	<u>OUTER</u>
CASING DIAMETER:	16"	24"
CASING DEPTH:	105.00'	60.00'
SCREENED INTERVAL:	105.00' - 165.00'	
OPEN HOLE INTERVAL:		
TOTAL DEPTH OF WELL:	165.00'	
GROUT REQUIREMENT:		

Outer casing shall be grouted bottom to top.

See additional conditions of permit on attached sheet.

We appreciate your assistance and cooperation in better managing the water resources of the District. If you have any questions on this matter, please call Ann-Marie Superchi at extension 6929.

Sincerely,

Steve D. Anderson, P.G., Supervising Professional
Water Use Division, Regulation Department

Attachment: Additional Conditions of Permit

c: MONTGOMERY WATSON
MR. BOB MITCHELL-HRS
DEP POTABLE WATER SECTION

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Michael Slayton, Deputy Executive Director



South Florida Water Management District

3301 Gun Club Road, West Palm Beach, Florida 33406 • (407) 686-8800 • FL WATS 1-800-432-2045

CON 24-06

July 29, 1996

PERMITTEE

PALM BEACH COUNTY WATER UTILITIES
2065 PRAIRIE ROAD
WEST PALM BEACH, FL 33416-6097

CONTRACTOR

ZIEGLER, WILLIAM
P.O. BOX 271723
TAMPA, FL 33688
LICENSE NO:9078

WATER WELL CONSTRUCTION PERMIT # SF060796M

EXPIRATION DATE: January 29, 1997

PROJECT: SYSTEM 8, WELL 13
TYPE OF USE: PUBLIC WATER SUPPLY
COUNTY: PALM BEACH

SEC: 27 TWP: 43 RGE: 42

WELL CONSTRUCTION SPECIFICATIONS:

INNER

OUTER

CASING DIAMETER:	16"	24"
CASING DEPTH:	82.00'	60.00'
SCREENED INTERVAL:	82.00' - 142.00'	
OPEN HOLE INTERVAL:		
TOTAL DEPTH OF WELL:	142.00'	
GROUT REQUIREMENT:		

Outer casing shall be grouted bottom to top.

See additional conditions of permit on attached sheet.

We appreciate your assistance and cooperation in better managing the water resources of the District. If you have any questions on this matter, please call Ann-Marie Superchi at extension 6929.

Sincerely,

Steve D. Anderson, P.G., Supervising Professional
Water Use Division, Regulation Department

Attachment: Additional Conditions of Permit

c: MR. BOB MITCHELL-HRS
DEP-POTABLE WATER SECTION
MONTGOMERY WATSON

Governing Board:

Valerie Boyd, Chairman
Frank Williamson, Jr., Vice Chairman
William E. Graham

William Hammond
Betsy Krant
Richard A. Machek

Eugene K. Pettis
Nathaniel P. Reed
Miriam Singer

Samuel E. Poole III, Executive Director
Michael Slayton, Deputy Executive Director



South Florida Water Management District

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CON 24-06

July 29, 1996

PERMITTEE

PALM BEACH COUNTY WATER UTILITIES
2065 PRAIRIE ROAD
WEST PALM BEACH, FL 33416-6097

CONTRACTOR

ZIEGLER, WILLIAM
P.O. BOX 271723
TAMPA, FL 33688
LICENSE NO:9078

WATER WELL CONSTRUCTION PERMIT # SF060796L

EXPIRATION DATE: January 29, 1997

PROJECT: SYSTEM 8, WELL 14
TYPE OF USE: PUBLIC WATER SUPPLY
COUNTY: PALM BEACH

SEC: 27 TWP: 43 RGE: 42

WELL CONSTRUCTION SPECIFICATIONS:

INNER

OUTER

CASING DIAMETER:	16"	24"
CASING DEPTH:	82.00'	60.00'
SCREENED INTERVAL:	82.00' - 142.00'	
OPEN HOLE INTERVAL:		
TOTAL DEPTH OF WELL:	142.00'	
GROUT REQUIREMENT:		

Outer casing shall be grouted bottom to top.

See additional conditions of permit on attached sheet.

We appreciate your assistance and cooperation in better managing the water resources of the District. If you have any questions on this matter, please call Ann-Marie Superchi at extension 6929.

Sincerely,

Steve D. Anderson, P.G., Supervising Professional
Water Use Division, Regulation Department

Attachment: Additional Conditions of Permit

c: MR. BOB MITCHELL-HRS
DEP-POTABLE WATER SECTION
MONTGOMERY WATSON

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South Florida Water Management District

3301 Gun Club Road, West Palm Beach, Florida 33406 • (407) 686-8800 • FL WATS 1-800-432-2045

CON 24-06

July 29, 1996

PERMITTEE

PALM BEACH COUNTY WATER UTILITIES
2065 PRAIRIE ROAD
WEST PALM BEACH, FL 33416-6097

CONTRACTOR

ZIEGLER, WILLIAM
P.O. BOX 271723
TAMPA, FL 33688
LICENSE NO:9078

WATER WELL CONSTRUCTION PERMIT # SF060796E

EXPIRATION DATE: January 29, 1997

PROJECT: SYSTEM 9, WELL 1R
TYPE OF USE: PUBLIC WATER SUPPLY
COUNTY: PALM BEACH

SEC: 30 TWP: 47 RGE: 42

WELL CONSTRUCTION SPECIFICATIONS:

INNER

OUTER

CASING DIAMETER:	16"	24"
CASING DEPTH:	122.00'	60.00'
SCREENED INTERVAL:	122.00' - 152.00'	
OPEN HOLE INTERVAL:		
TOTAL DEPTH OF WELL:	152.00'	
GROUT REQUIREMENT:		

Outer casing shall be grouted bottom to top.

See additional conditions of permit on attached sheet.

We appreciate your assistance and cooperation in better managing the water resources of the District. If you have any questions on this matter, please call Ann-Marie Superchi at extension 6929.

Sincerely,

Steve D. Anderson, P.G., Supervising Professional
Water Use Division, Regulation Department

Attachment: Additional Conditions of Permit

c: MR. BOB MITCHELL-HRS
DEP-POTABLE WATER SECTION
MONTGOMERY WATSON

Governing Board:

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Michael Slayton, Deputy Executive Director

System 1W

SFWMD Abandonment Permits



South Florida Water Management District

3301 Gun Club Road, West Palm Beach, Florida 33406 • (407) 686-8800 • FL WATS 1-800-432-2045

CON 24-06

June 17, 1996

PERMITTEE

PALM BEACH COUNTY WATER UTILITIES
2065 PRAIRIE ROAD
WEST PALM BEACH, FL 33416-6097

CONTRACTOR

ZIEGLER, WILLIAM
P.O. BOX 271723
TAMPA, FL 33688
LICENSE NO:9078

WATER WELL ABANDONMENT PERMIT # SFO60796Q

EXPIRATION DATE: December 17, 1996

PROJECT: SYSTEM 1, WELL #6 ABANDONMENT
TYPE OF USE: PUBLIC WATER SUPPLY
COUNTY: PALM BEACH

SEC: 31 TWP: 43 RGE: 43

WELL ABANDONMENT SPECIFICATIONS:

INNER

OUTER

CASING DIAMETER: 10"
CASING DEPTH: 140.00'
SCREENED INTERVAL: -
OPEN HOLE INTERVAL:
TOTAL DEPTH OF WELL: 180.00'
GROUT REQUIREMENT:

Inner casing shall be grouted bottom to top.

See additional conditions of permit on attached sheet.

We appreciate your assistance and cooperation in better managing the water resources of the District. If you have any questions on this matter, please call Ann-Marie Superchi at extension 6929.

Sincerely,

Steve D. Anderson, P.G., Supervising Professional
Water Use Division, Regulation Department

Attachment: Additional Conditions of Permit

c: MR. BOB MITCHELL-HRS
DEP POTABLE WATER SECTION
MONTGOMERY WATSON

Governing Board:

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South Florida Water Management District

3301 Gun Club Road, West Palm Beach, Florida 33406 • (407) 686-8800 • FL WATS 1-800-432-2045

CON 24-06

June 17, 1996

PERMITTEE

PALM BEACH COUNTY WATER UTILITIES
2065 PRAIRIE ROAD
WEST PALM BEACH, FL 33416-6097

CONTRACTOR

ZIEGLER, WILLIAM
P.O. BOX 271723
TAMPA, FL 33688
LICENSE NO:9078

WATER WELL ABANDONMENT PERMIT # SFO60796N

EXPIRATION DATE: December 17, 1996

PROJECT: SYSTEM 1, WELL #1 ABANDONMENT
TYPE OF USE: PUBLIC WATER SUPPLY
COUNTY: PALM BEACH SEC: 31 TWP: 43 RGE: 43

WELL ABANDONMENT SPECIFICATIONS:

INNER

OUTER

CASING DIAMETER: 10"
CASING DEPTH: 107.00'
SCREENED INTERVAL: -
OPEN HOLE INTERVAL:
TOTAL DEPTH OF WELL: 158.00'
GROUT REQUIREMENT:

Inner casing shall be grouted bottom to top.

See additional conditions of permit on attached sheet.

We appreciate your assistance and cooperation in better managing the water resources of the District. If you have any questions on this matter, please call Ann-Marie Superchi at extension 6929.

Sincerely,

Steve D. Anderson, P.G., Supervising Professional
Water Use Division, Regulation Department

Attachment: Additional Conditions of Permit

c: MR. BOB MITCHELL-HRS
DEP POTABLE WATER SECTION
MONTGOMERY WATSON

Governing Board:

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South Florida Water Management District

3301 Gun Club Road, West Palm Beach, Florida 33406 • (407) 686-8800 • FL WATS 1-800-432-2045

CON 24-06

June 17, 1996

PERMITTEE

PALM BEACH COUNTY WATER UTILITIES
2065 PRAIRIE ROAD
WEST PALM BEACH, FL 33416-6097

CONTRACTOR

ZIEGLER, WILLIAM
P.O. BOX 271723
TAMPA, FL 33688
LICENSE NO:9078

WATER WELL ABANDONMENT PERMIT # SF0607960

EXPIRATION DATE: December 17, 1996

PROJECT: SYSTEM 1, WELL #4 ABANDONMENT
TYPE OF USE: PUBLIC WATER SUPPLY
COUNTY: PALM BEACH SEC: 31 TWP: 43 RGE: 43

WELL ABANDONMENT SPECIFICATIONS:

INNER

OUTER

CASING DIAMETER: 10"
CASING DEPTH: 137.00'
SCREENED INTERVAL: -
OPEN HOLE INTERVAL:
TOTAL DEPTH OF WELL: 177.00'
GROUT REQUIREMENT:

Inner casing shall be grouted bottom to top.

See additional conditions of permit on attached sheet.

We appreciate your assistance and cooperation in better managing the water resources of the District. If you have any questions on this matter, please call Ann-Marie Superchi at extension 6929.

Sincerely,

Steve D. Anderson, P.G., Supervising Professional
Water Use Division, Regulation Department

Attachment: Additional Conditions of Permit

c: MR. BOB MITCHELL-HRS
DEP POTABLE WATER SECTION
MONTGOMERY WATSON

Governing Board:

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South Florida Water Management District

3301 Gun Club Road, West Palm Beach, Florida 33406 • (407) 686-8800 • FL WATS 1-800-432-2045

CON 24-06

June 17, 1996

PERMITTEE

PALM BEACH COUNTY WATER UTILITIES
2065 PRAIRIE ROAD
WEST PALM BEACH, FL 33416-6097

CONTRACTOR

ZIEGLER, WILLIAM
P.O. BOX 271723
TAMPA, FL 33688
LICENSE NO:9078

WATER WELL ABANDONMENT PERMIT # SF060796P

EXPIRATION DATE: December 17, 1996

PROJECT: SYSTEM 1, WELL #5 ABANDONMENT
TYPE OF USE: PUBLIC WATER SUPPLY
COUNTY: PALM BEACH SEC: 31 TWP: 43 RGE: 43

WELL ABANDONMENT SPECIFICATIONS:

INNER

OUTER

CASING DIAMETER: 10"
CASING DEPTH: 140.00'
SCREENED INTERVAL: -
OPEN HOLE INTERVAL:
TOTAL DEPTH OF WELL: 180.00'
GROUT REQUIREMENT:

Inner casing shall be grouted bottom to top.

See additional conditions of permit on attached sheet.

We appreciate your assistance and cooperation in better managing the water resources of the District. If you have any questions on this matter, please call Ann-Marie Superchi at extension 6929.

Sincerely,

Steve D. Anderson, P.G., Supervising Professional
Water Use Division, Regulation Department

Attachment: Additional Conditions of Permit

c: MR. BOB MITCHELL-HRS
DEP POTABLE WATER SECTION
MONTGOMERY WATSON

**Palm Beach County Public
Health Unit
Construction Permits**



STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

NOTICE OF PERMIT ISSUANCE

In the Matter of an Application
for Permit by:

C. Lawton McCall,
Director of Engineering
Palm Beach County
Water Utilities Department
2065 Prairie Road
West Palm Beach, FL 33416-6097

FILE NO.: WC50-282172

PROJECT: Palm Beach County Systems 2, 3 &
SRWRF Water Pipeline Modifications

Enclosed is Permit Number WC50-282172, issued to C. Lawton McCall, Director of Engineering, Palm Beach County Water Utilities Department, to construct water pipeline modifications, issued pursuant to Chapter 403.087, Florida Statutes.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within fourteen (14) days of receipt of this permit. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information:

- a. The name, address and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed;
- b. A statement of how and when each petitioner received notice of the Health Unit's action or proposed action;
- c. A statement of how each petitioner's substantial interests are affected by the Health Unit's action or proposed action;
- d. A statement of the material facts disputed by Petitioner, if any;
- e. A statement of facts which petitioner contends warrant reversal or modification of the Health Unit's action or proposed action;

Page Two

- f. A statement of which rules or statutes petitioner contends require reversal or modification of the Health Unit's action or proposed action; and
- g. A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Health Unit to take with respect to the action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Health Unit's final action may be different from the position taken by it in this permit. Persons whose substantial interests will be affected by any decision of the Health Unit with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within fourteen (14) days of receipt of this notice, in the Office of General Counsel at the above address of the Department of Environmental Protection. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S. and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code (F.A.C.).

This permit is final and effective on the date filed with Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within thirty (30) days from the date the Final Order is filed with the Clerk of the Department.

Executed in West Palm Beach, Florida, This 23 Day of February, 1996

STATE OF FLORIDA
PALM BEACH COUNTY PUBLIC HEALTH UNIT



Umesh Asrani, P.E., Assistant Director
Environmental Health & Engineering
901 Evernia Street
West Palm Beach, FL 33401
(407) 355-3070



CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT ISSUANCE was mailed to the applicant by certified mail and to all listed persons before the close of business on February 23, 1996.

Palm Beach County Public Health Unit
Environmental Health and Engineering
Plan Review and Permit Section
APPROVED

Clerk Stamp

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52(II), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Elsie Beaman 2/23/96
(Clerk) (Date)

- cc: Utility: Same as Applicant
- Engineer-of-Record: Mark R. Nelson, P.E.
- Office of General Counsel, DEP/Tallahassee
- Dept. of Environmental Protection, W.P.B.



PERMITTEE:

C. Lawton McCall,
Director of Engineering
Palm Beach County
Water Utilities Department
2065 Prairie Road
West Palm Beach FL 33416-6097

I.D. No.: 450-4393
Permit/Certification: WC50-282172
Date of Issue: 2/23/96
Expiration Date: 2/23/2001
Latitude/Longitude: *(see 1 below)
Section/Township/Range: *(see 2 below)
Project: P.B.C. Systems 2, 3 & SRWRF
Water Pipeline Modifications

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-550, 62-555 & 62-560. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

Construct: System 2W - 40 ft. of twelve inch (12") DIP, 20 ft. of sixteen inch (16") DIP, 460 ft. of eighteen inch (18") DIP and 520 ft. of twenty inch (20") DIP;
System 3W - 40 ft. of sixteen inch (16") DIP, 1,000 ft. of thirty inch (30") DIP and 980 ft. of thirty six inch (36") DIP
SRWRF - 2,280 ft. of twelve inch (12") DIP, 2,180 ft. of sixteen inch (16") DIP, 30 ft. of twenty inch (20") DIP;
System 9W - 80 ft. of twelve inch (12") DIP.

In Accordance With: Application DEP 17-555.910(1) dated December 20, 1995, engineering plans sheet nos. C1-52 C 1 & 2, 3C 1 & 2, 3C-4, 5C-2, 6C 1-4, 6C-7 & GM-1 and specifications received December 27, 1995; plan sheets nos. GC 1 & 2, 3C-3, 6C-5 & 6 received February 12, 1996 and letter dated February 12, 1996.

Subject To: General Conditions 1 - 17 and Specific Conditions 1 - 5

- *1. System 2W - 26° 38'00"N/80° 10'00"W; 2. 21/44/42
- *1. System 3W - 26° 28'55"N/80° 08'42"W; 2. 20/46/42
- *1 System SRWRF - 26° 29'00"/ 80° 09'00"; 2. 4/46/42

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282172

Date of Issue: 2/23/96

Expiration Date: 2/23/2001

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Section 403.161, 403.727, or 403.859 through 403.061, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agent, employees, servants or representatives.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
5. This permit does not relieve the permittee from liability from harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefor caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department Rules.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-9393

Permit/Certification No.: WC50-282171

Date of Issue: 2/23/96

Expiration Date: 2/23/2001

GENERAL CONDITIONS:

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:
 - a. having access to and copying any records that must be kept under the conditions of the permit;
 - b. inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the Department with the following information:
 - a. a description of and cause of noncompliance; and
 - b. the period on noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the Department, may be used by the Department as evidence in any enforcement case arising under the Florida Statutes of department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes.

PERMITTEE:

C. Lawton McCall

I. D. No.: 450-4393

Permit/Certification No.: WC50-282172

Date of Issue: 2/23/96

Expiration Date: 2/23/2001

GENERAL CONDITIONS: (14 Cont'd.)

- c. Records of monitoring information shall include:
- the date, exact place, the time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.
15. When requested by the department, the permittee shall, within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.
16. In the case of an underground injection control permit, the following permit conditions also shall apply:
- a. All reports or information required by the Department shall be certified as being true, accurate and complete.
 - b. Reports of compliance or noncompliance with, or any progress reports on, requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.
 - c. Notification of any noncompliance which may endanger health or the environment shall be reported verbally to the Department within twenty four (24) hours and again within seventy two (72) hours and a final written report provided within two (2) weeks.
 - 1. The verbal reports shall contain any monitoring or other information which indicate that any contaminant may endanger an underground source of drinking water and any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.
 - 2. The written submission shall contain a description of and a discussion of the cause of the noncompliance and if it has not been corrected, the anticipated time the noncompliance is expected to continue, the steps being taken to reduce, eliminate and prevent recurrence of the noncompliance and all information required by Rule 17-28.230(4)(b), F.A.C.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282172

Date of Issue: 2/23/96

Expiration Date: 2/23/2001

GENERAL CONDITIONS:

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 62-4.12 and 62-30.30, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the department.
12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.
13. This permit also constitutes:
 - () Determination of Best Available Control Technology (BACT)
 - () Determination of Prevention of Significant Deterioration (PSD)
 - () Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
 - () Compliance with New Source Performance Standards
14. The permittee shall comply with the following monitoring and record keeping requirements:
 - a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.
 - b. The permittee shall retain at the facility, or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit and records of all data used to complete the application for this permit. The time period of retention shall be at least three (3) years from the date on the sample, measurement, report or application unless otherwise specified by department rule.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282172

Date of Issue: 2/23/96

Expiration Date: 2/23/2001

GENERAL CONDITIONS: (16 CONT'D.).

- d. The Department shall be notified at least one hundred eighty (180) days before conversion or abandonment of an injection well, unless abandonment within a lesser period of time is necessary to protect waters of the state.

17. The following conditions also shall apply to a hazardous waste facility permit.

- a. The following reports shall be submitted to the Department:
 1. Manifest discrepancy report. If a significant discrepancy in a manifest is discovered, the permittee shall attempt to rectify the discrepancy. If not resolved within fifteen (15) days after the waste is received, the permittee shall immediately submit a letter report, including a copy of the manifest, to the Department.
 2. Unmanifested waste report. The permittee shall submit an unmanifested waste report to the Department within fifteen (15) days of receipt of unmanifested waste.
 3. Biennial report. A biennial report covering facility activities during the previous calendar year shall be submitted by March 1 of each even numbered year pursuant to Chapter 17-730, F.A.C.
- b. Notification of any noncompliance which may endanger health or the environment, including the release of any hazardous waste that may endanger public drinking water supplies or the occurrence of a fire or explosion from the facility which could threaten the environment or human health outside the facility, shall be reported verbally to the Department within twenty four (24) hours and a written report shall be provided within five (5) days. The verbal report shall include the name, address, I.D. number and telephone number of the facility, its owner or operator, the name and quantity of materials involved, the extent of any injuries, an assessment of actual or potential hazards and the estimated quantity and disposition of recovered material. The written submission shall contain:
 1. A description and cause of the noncompliance.
 2. If not corrected, the expected time of correction and the steps being taken to reduce, eliminate and prevent recurrence of the noncompliance.
- c. Reports of compliance or noncompliance with, or any progress reports on, requirements in any compliance schedule shall be submitted no later than fourteen (14) days after each schedule date.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282171

Date of Issue: 2/23/96

Expiration Date: 2/23/2001

GENERAL CONDITIONS: (17 Cont'd.)

- d. All reports or information required by the Department by a hazardous waste permittee shall be signed by a person authorized to sign a permit application.

SPECIFIC CONDITIONS:

1. The permittee is responsible for retaining a Florida registered professional engineer as the engineer of record for this project and upon completion, the engineer shall inspect for complete conformity to the plans and specifications as approved.
2. Upon completion of construction, but prior to placing the system into service, a letter of release must be obtained from the Palm Beach County Public Health Unit; documentation listed below must be submitted for the letter of release:
 - a. A certification by the engineer that the project has been completed in substantial conformance with approved plans and bacteriologically cleared. Certification to such inspection on DEP Form 17-555.910(9) shall be provided to the Palm Beach County Public Health Unit.
 - b. One (1) set of record drawings of the completed project. Drawings are to be at the same scale and in the same sequence as those submitted and approved for permit. Deviations from the original permitted drawings are to be highlighted and/or noted for the Unit's review. Sample points are to be indicated on the drawings. All crossings between water lines and sanitary or storm sewers and force mains must be clearly identified with elevations on all record drawings.
 - c. Bacteriological results -
Satisfactory bacteriological results for clearance of a community water supply facility shall be two (2) consecutive daily samples with results indicating an absence of coliform. The detailed procedure for bacteriological clearance and release of systems for use is outlined in Technical Memorandum 91-4 PR, a copy of which can be furnished upon request.
3. This construction permit is issued with the understanding that pipe material and appurtenances used in this installation will be in accordance with the latest applicable AWWA & NSF Standards for public water supplies.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282172

Date of Issue: 2/23/96

Expiration Date: 2/23/2001

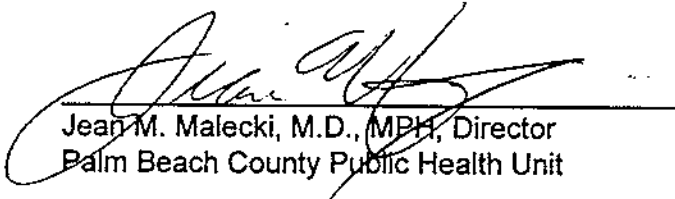
SPECIFIC CONDITIONS:

4. All concrete coatings/admixtures, liners, grouts, protective paints and coatings shall be in conformance with ANSI/NSF Standard 60-1988 and deemed acceptable for contact with potable water.
5. Prior to construction, all required permits or approvals must be obtained for all aspects of the project from the appropriate agencies.

ISSUED THIS 23rd DAY OF February, 1996

PALM BEACH COUNTY PUBLIC HEALTH UNIT

STATE OF FLORIDA



Jean M. Malecki, M.D., MPH, Director
Palm Beach County Public Health Unit



STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

NOTICE OF PERMIT ISSUANCE

In the Matter of an Application for
Permit by:

C. Lawton McCall, Director
of Engineering
Palm Beach County Utilities
2065 Prairie Road
West Palm Beach, FL 33416

FILE NO.: WC50-227920

PROJECT: Palm Beach County Water Treat-
ment Plant #9 Improvements

Enclosed is Permit Number WC50-227920, to construct improvements to Water Treatment Plan #9, issued pursuant to Chapter 403, Florida Statutes (F.S.).

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Regulation, at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within fourteen (14) days of receipt of this permit. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information:

- a. The name, address and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed;
- b. A statement of how and when each petitioner received notice of the Health Unit's action or proposed action;
- c. A statement of how each petitioner's substantial interests are affected by the Health Unit's action or proposed action;
- d. A statement of the material facts disputed by Petitioner, if any;
- e. A statement of facts which petitioner contends warrant reversal or modification of the Health Unit's action or proposed action;

DISTRICT IX

PALM BEACH COUNTY HEALTH UNIT • P.O. BOX 29 • WEST PALM BEACH, FLORIDA 33402

LAWTON CHILES, GOVERNOR

- f. A statement of which rules or statutes petitioner contends require reversal or modification of the Health Unit's action or proposed action; and
- g. A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Health Unit to take with respect to the action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Health Unit's final action may be different from the position taken by it in this permit. Persons whose substantial interests will be affected by any decision of the Health Unit with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within fourteen (14) days of receipt of this notice, in the Office of General Counsel at the above address of the Department of Environmental Regulation. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S. and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code, (F.A.C.).

This permit is final and effective on the date filed with Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Regulation, in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within thirty (30) days from the date the Final Order is filed with the Clerk of the Department.

Executed in West Palm Beach, Florida, THIS 5th DAY OF May, 1993.

STATE OF FLORIDA
PALM BEACH COUNTY PUBLIC HEALTH UNIT



Umesh Asrani, P.E., Assistant Director
Environmental Science & Engineering
901 Evernia Street
West Palm Beach, FL 33401
(407) 355-3070



STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT ISSUANCE was mailed to the applicant by certified mail and to all listed persons before the close of business on May 5, 1993.

PALM BEACH COUNTY PUBLIC HEALTH UNIT
DIVISION OF ENVIRONMENTAL SCIENCE
& ENGINEERING
501 EVERHIA STREET
P.O. BOX 29
WEST PALM BEACH, FLORIDA 33402

Clerk Stamp

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to Section 120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Elaine B... 5/5/93
(Clerk) (Date)

cc: Mr. Lee Killinger, Assistant General Counsel, DER/Tallahassee
Dept. of Environmental Regulation, W.P.B., Pam Smith
Engineer-of-Record, T. Clay Blanton, P.E.



CERTIFICATION

Re: Improvements to a water treatment plant

File No.: WC50-227920

Project Name: Palm Beach County Water Treatment Plant #9 Improvements

Utility: Palm Beach County

THIS IS TO CERTIFY that the sanitary engineering features of the above referenced application provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes and Florida Administrative Code, Title 17. Other aspects of the design, including, but not limited to, the electrical, mechanical, structural, hydrological and geological features, have not been evaluated and are not part of this certification.

Umesh Asrani 4/28/93
Umesh Asrani, P.E., Assistant Director
Environmental Science & Engineering



STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

PERMITTEE:

C. Lawton McCall,
Director of Engineering
Palm Beach County Utilities
2065 Prairie Road
West Palm Beach, FL 33416

I.D. No.: 450-1332
Permit/Certification No.: WC50-227920
Date of Issue: 5/5/93
Expiration Date: 5/5/98
County: Palm Beach
Latitude/Longitude: 26°20'35"/80°11'47"
Section/Township/Range: 30/47/42
Project: Palm Beach County Water Treatment Plant #9 Improvements

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-550, 17-555 & 17-560. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Construct: Six (6) 625 S.F. each dual media filters rated at 3 gpm/S.F. with two (2) air scour blowers, a 350,000 gallon clearwell with two (2) 6,250 gpm backwash pumps and two (2) 6,250 gpm transfer pumps, a 555,000 gallon washwater recovery basin with two (2) 350 gpm sludge pumps and two (2) 1,000 gpm washwater return pumps and a 190,000 gallon sludge thickener basin with two (2) 160 gpm sludge pumps, a vacuum filter and a 66,000 c.f. emergency sludge pond. This project does not increase the rated plant capacity.

In Accordance With: Application DER Form 17-555.910(1) dated March 11, 1993; engineering plans sheets G1 - G7, GC1, GC4, GC5, C1, C6 - 8, A1 - 5, 1A1 - 2, 4A1 - 2, GS1 - 6, IS1 - 13, 2S1 - 2, 3S1 - 2, 4S1 - 5, GM1 - 6, 1M1, 4, 6, 8, 9, 2M12, 3M12, 3M1 - 2, 4M1 - 3, 5M1 - 5, E1 - 15, 1E1 - 7, 3E1, 4E1 - 2, 5E1 - 2, I1 - 12, received March 15, 1993 and sheets GC2 - 3, C2 - 5, IM2, 3, 5, 7, received April 26, 1993, engineering report and specifications received March 15, 1993 and letter received April 26, 1993.

Located At: 22438 South West 7th Street, Boca Raton, Florida.

Subject To: General Conditions 1 - 15 and Specific Conditions 1 - 6.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-1332

Permit/Certification No.: WC50-227920

Date of Issue: 5/5/93

Expiration Date: 5/5/98

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Section 403.161, 403.727, or 403.859 through 403.061, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agent, employees, servants or representatives.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
5. This permit does not relieve the permittee from liability from harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefor caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-1332

Permit/Certification No.: WC50-227920

Date of Issue: 5/5/93

Expiration Date: 5/5/98

GENERAL CONDITIONS:

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:
 - a. Having access to and copying any records that must be kept under the conditions of the permit;
 - b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with, or will be unable to comply with, any condition or limitation specified in this permit, the permittee shall immediately notify and provide the Department with the following information:
 - a. a description of and cause of noncompliance; and
 - b. the period on noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the Department, may be used by the Department as evidence in any enforcement case arising under the Florida Statutes of Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-1332

Permit/Certification No.: WC50-227920

Date of Issue: 5/5/93

Expiration Date: 5/5/98

GENERAL CONDITIONS:

11. This permit is transferable only upon Department approval, in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department.
12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.
13. This permit also constitutes:
 - () Determination of Best Available Control Technology (BACT)
 - () Determination of Prevention of Significant Deterioration (PSD)
 - () Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
 - () Compliance with New Source Performance Standards
14. The permittee shall comply with the following monitoring and record keeping requirements:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.
 - b. The permittee shall retain at the facility, or other location designated by this permit, records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three (3) years from the date on the sample, measurement, report or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - the date, exact place, the time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-1332

Permit/Certification No.: WC50-227920

Date of Issue: 5/5/93

Expiration Date: 5/5/98

GENERAL CONDITIONS:

15. When requested by the Department, the permittee shall, within a reasonable time, furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The permittee is responsible for retaining a Florida registered professional engineer as the engineer of record for this project and upon completion, the engineer shall inspect for complete conformity to the plans and specifications as approved.
2. Upon completion of construction, but prior to placing the system into service, a letter of release must be obtained from the Palm Beach County Public Health Unit; the documentation listed below must be submitted for the letter of release:
 - a. A certification by the engineer that the project has been completed in substantial conformance with approved plans and bacteriologically cleared. Certification to such inspection on DER Form 17-555.910(9) shall be provided to the Palm Beach County Public Health Unit.
 - b. One (1) set of record drawings of the completed project. Drawings are to be at the same scale and in the same sequence as those submitted and approved for permit. Deviations from the original permitted drawings are to be highlighted and/or noted for the Unit's review. Sample points are to be indicated on the drawings.
 - c. Bacteriological results -
Satisfactory bacteriological results for clearance of a community water supply facility shall be two (2) consecutive daily samples with results indicating an absence of coliform. The detailed procedure for bacteriological clearance and release of systems for use is outlined in Technical Memorandum 91-4PR, a copy of which can be furnished upon request.
3. This construction permit is issued with the understanding that pipe material and appurtenances used in this installation will be in accordance with the latest applicable AWWA & NSF Standards for public water supplies.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-1332

Permit/Certification No.: WC50-227920

Date of Issue: 5/5/93

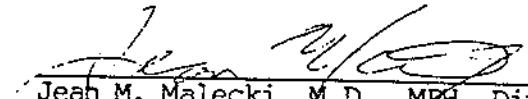
Expiration Date: 5/5/98

SPECIFIC CONDITIONS:

4. All concrete coatings/admixtures, liners, grouts, protective paints and coatings shall be in conformance with ANSI/NSF Standard 60-1988 and deemed acceptable for contact with potable water.
5. All chemicals added to the system shall be in conformance with ANS/NSF Standard 60 - 1988. The maximum dosage shall not exceed those as recommended by N.S.F. in their report.
6. This permit only covers the specific items addressed in the applicant's permit application package. Other existing system components were not reviewed for compliance with current standards, and issuance of this permit does not certify that those components meet current standards.

ISSUED THIS 5th DAY OF May, 1993

PALM BEACH COUNTY PUBLIC HEALTH UNIT
STATE OF FLORIDA


Jean M. Malecki, M.D., MPH, Director
Palm Beach County Public Health Unit



MONTGOMERY WATSON

March 11, 1993

Mr. Bob Mitchell
Palm Beach County Public Health Unit
901 Evernia Street
West Palm Beach, Florida 33401

SUBJECT: Application to Construct a Public Drinking Water System
WUD 91-64

Dear Mr. Mitchell:

Please find attached to this letter four copies of the subject application for Palm Beach County Water Utilities Department's (PBCWUD) Water Treatment Plant No. 9 Improvements. Included with the application are four copies each of the Engineering Report, raw water analysis, well logs for nearby wells, drawings, and specifications. PBCWUD proposes to construct replacement filters, a washwater recovery basin, sludge handling facilities, and an additional raw water well.

Should you have any questions regarding the application and attachments or need additional information, please contact Montgomery Watson, Inc. as soon as possible.

Very truly yours,

T. Clay Blanton, P.E.
Principal Engineer

MPT/jp
Attachments

cc: ~~Lawton~~ Lawton McCall, PBCWUD (without attachments)
Steve McGrew, PBCWUD (with attachments)
Francis Duran, Montgomery Watson (with attachments)
File 1565.1535/3.1.6

VENDOR: PALM0032
DATE PAID: 02-25-93



BOARD OF COUNTY COMMISSIONERS
COUNTY OF PALM BEACH - GENERAL DISBURSEMENT

CHECK NO. 00486134

INVOICE NUMBER	PURCHASE ORDER NUMBER	DESCRIPTION	NET
PROJ91-64WUD	SPSS3300668	PERMIT WTR TRTMT PLANT#9	500.00

(DETACH BEFORE CASHING)



63-1012
632

BOARD OF COUNTY COMMISSIONERS
COUNTY OF PALM BEACH

WEST PALM BEACH, FLORIDA
GENERAL DISBURSEMENT ACCOUNT

486134

FIRST UNION NATIONAL BANK OF FLORIDA
JACKSONVILLE OFFICE
JACKSONVILLE, FL 32231

VOID AFTER 90 DAYS

PAY EXACTLY *****500DOLLARS AND 00CENTS

DATE	CHECK NO.	AMOUNT
02-25-93	00486134	*****500.00

TO THE ORDER OF

PALM BEACH COUNTY HEALTH UNIT
BUSINESS OFFICE
P O BOX 29
WEST PALM BEACH FL 33402

John Wilkin
CLERK OF CIRCUIT COURT

Mary McCarty
CHAIRMAN BOARD OF COUNTY COMMISSIONERS

⑈486134⑈ ⑆063210125⑆ 11060000123⑈



State of Florida
Department of Environmental Regulation

Application to Construct a Public Drinking Water System

INSTRUCTIONS: All of the application forms, including engineering plans and specifications, must be completed and submitted. For construction of facilities consisting solely of pumping and disinfection, Parts A, B, C, D, and E 1 & 2, (d) through (f), as well as engineering plans and specifications, must be completed and submitted. When using this form for distribution systems alone, only Part B and applicable sections of Part A need to be completed. Submission of any false statement of representation in this application is a violation of the law. Attach additional sheets as necessary.

Project Name: Water Treatment Plant No.9 Improvements County: Palm Beach

System Address: Street 22438 S.W. 7th Street City: Boca Raton

Applicant's Name and Title: Palm Beach County Water Utilities Department

Applicant's Address: P.O. Box 16097, West Palm Beach, Florida 33406

Utility Supplying Water: Name Palm Beach County Water Utilities Department

Utility Address: 2065 Prairie Road, West Palm Beach, Florida

Owner/Operator After Construction, if different: same

Owner/Operator Address: same

Type of Proposed Facility: Replacement Filters and Recovery Basin To Serve: Public
(Subdivision, trailer park, school, etc.)

Latitude 26 ° 20 ' 35 "N Longitude 80 ° 11 ' 47 "W Provide latitude/longitude and section/

Section: 30 Township: 47 Range: 42 attach additional sheet, if necessary.

A. Applicant:

I, the owner/authorized representative* of Palm Beach County Water Utilities Department am fully aware that the statements made in this application for a permit to construct a System No.9 Improvements are true, correct and complete to the best of my knowledge and belief. Further, the undersigned agrees to maintain the facility in such a manner as to comply with the provisions of Chapter 403, Florida Statutes, and all the rules of the department, will be non-transferable and will promptly notify the department upon sale or legal transfer of the permit facility. The undersigned also accepts responsibility for retaining the project engineer as indicated on this application to observe that construction of the project is in accordance with engineering plans as submitted.

*Attach letter of authorization

Signed: [Signature]
Owner/Authorized Representative

C. Lawton McCall, Director of Engineering
Name and Title (Please type)

Date: 3/11/93 Telephone No. (407) 641-3429

B. Owner/Authorized Representative of Utility Supplying Water (if applicable):

The undersigned, owner/authorized representative of _____ hereby certifies that the above referenced utility has adequate reserve capacity to supply water to this project and provide the necessary treatment as required by Chapter 403, Florida Statutes, and all rules of the department. Further the undersigned verifies that his treatment plant was constructed under a valid permit, Number _____ dated _____ issued by the department, and the connection of the proposed project will not be in violation of any condition of said permit.

*Attach letter of authorization

Signed: N/A

Name and Title (Please type)

Date: _____ Telephone No. _____

C. Owner/Operator* After Construction (if different from applicant):

I, the undersigned, do certify that I will become the owner/operator of the proposed facility after construction. Further I certify that I am fully aware that the statements made in this application are true, correct and complete to the best of my knowledge. Also, I agree to operate and maintain the facilities in such a manner as to comply with the provisions of Chapter 403, Florida Statutes, and all rules of the department. I understand the permit is non-transferable and will promptly notify the department upon sale or legal transfers of the permitted establishment.

*Attach letter of authorization

Signed: N/A

Name and Title (Please Type)

Date: _____ Telephone No.: _____

D. Professional Engineer Registered in Florida:

This is to certify that the engineering features of this public drinking water system have been designed/examined and found to be in conformity with modern engineering principles, applicable to the treatment and distribution of drinking water characterized in this application. There is reasonable assurance in my professional judgment that this facility, when constructed as planned and properly maintained and operated, will comply with all applicable statutes of the State of Florida and the rules of the department.

Signed: T. Clay Blanton

T. Clay Blanton
Name (Please Type)

James M. Montgomery, Consulting Engineers, Inc.
Company Name (Please Type)

2328 Tenth Avenue North, 5th Floor, Lake Worth
Mailing Address (Please Type)


(Affix Seal)

Florida Registration No. 32124

Date: 3/12/93 Telephone No. (407) 586-8830

PART A - GENERAL *See attached engineering report.

1. Estimated total cost of project 6,000,000 Describe all water treatment Lime Softening, Dual Media Filters, Chloramination Disinfection
2. Existing plant capacity (MGD) 14 Plant capacity increase (MGD) none
3. Previous DER permit number(s), if any WD50-00511-W
4. Present population of area served N/A For capita consumption N/A
5. Design population (additional served by this project) none
6. Total connections served N/A Total connections approved N/A Additional connections none
7. Give any industrial users of abnormal demands none
8. Current system water demand, in MGD (from plant operation report)
Average day 11.0 Maximum day 12.1 Maximum hour (GPM) 12,400
Additional water demand, MGD: Avg. day none Max. day none Max. Hr. GPM) none
9. Is plant designed for 24-hour operation of what portion? 24 hr. operation
10. Give characteristics of raw water (attach primary and secondary chemical analysis pursuant to Chapter 17-550. F See attached raw water analyses.
11. Give source proposed water (deep well, shallow well, spring, surface) shallow well
12. Sewage disposal Palm Beach County Water Utilities Department
(Name and Address of sewerage utility)
13. Finished water storage: Elevated (gals) N/A Ground (gals) 3,500,000
Hydropneumatic (gals) 15,000 Existing Capacity (gals) N/A Capacity Increase (gals) none
14. Existing service pump capacity (MGD) 21.6 Additional service pump capacity (MGD) none
15. Static head in relation to pumping plant N/A
16. Well permit from water management district? Yes Permit No. SF06177-A,B,C,
No Explain _____

PART B - DISTRIBUTION SYSTEM - N/A

1. Interconnection with other system _____
2. Min. size pipe _____ Max. size pipe _____ Min. system pressure _____ Max. system pressure _____
3. Is fire control provided in design? _____
4. Describe dead-end conditions and necessity for flushing including number of such conditions and flushing sche _____
5. Describe cross-connection control program _____
6. Describe corrosion control program as necessary _____
7. Water demand for additional connections (MGD) _____
8. Number of each type of additional connections (residential, commercial, agricultural, industrial) to be served _____

PART C - WELL SUPPLY

Existing Wells								
Well Identification	9W-2	9W-3	9W-4	9W-5	9W-6	9W-7	9W-8	9W-9
Size of Casing (in.)	12	12	12	12	12	12	12	12
Depth of Casing (ft.)	105	120	109	111	111	114	108	117
Depth of Well (ft.)	113	129	115	116	117	126	118	125
Pump (type)	vertical turbine	vertical turbine	vertical turbine	vertical turbine	vertical turbine	vertical turbine	vertical turbine	vertical turbine
Pump Capacity (GPM)	1000	1000	1000	1000	1000	1000	1000	1000

*see continuation sheet.

Proposed Wells								
Well Identification	9W-1							
Size of Casing (in.)	12							
Depth of Casing (ft.)	100							
Depth of Well (ft.)	120							
Pump (type)	vertical turbine							
Pump Capacity (GPM)	1000							

Type of well construction screened.

Casing material steel Aquifer surficial

Give all geological data, including log of test wells or wells in vicinity. See attached well completion reports.

Describe possible sources of contamination (particularly those within 100' of well). None

PART D - SURFACE SUPPLIES - N/A

1. Name of stream, lake, or pond _____
2. Show by attached map watershed, towns or communities above intake, industrial plants, and in immediate vicinity, house, picnic ground, abattoirs and other sources of pollution, with distance from intake. Locate intake on map.
3. Size of watershed in square miles _____
 Est. Min. dry-weather flow intake _____
4. Basis of min. dry-weather flow estimate _____

5.	Existing Raw Water Pumps	Proposed Raw Water Pumps
Type		
Capacity		
Section		
Discharge Head		

PART C - WELL SUPPLY - continued

Existing Wells							
Well Identification	9W-10	9W-11	9W-12	9W-13	9W-14	9W-15	
Size of Casing	12	12	12	12	12	12	
Depth of Casing	102	100	110	112	107	106	
Depth of Well	120	120	121	116	121	120	
Pump (type)	vertical turbine	vertical turbine	vertical turbine	vertical turbine	vertical turbine	vertical turbine	
Pump Capacity (GPM)	1000	1000	1000	1000	1000	1000	

Proposed Wells							
Well Identification							
Size of Casing							
Depth of Casing							
Depth of Well							
Pump (type)							
Pump Capacity (GPM)							

Type of well construction _____

Casing material _____ Aquifer _____

Give all geological data, including log of test wells or wells in vicinity.

Describe possible sources of contamination (particularly those within 100' of well).

PART D - SURFACE SUPPLIES

1. Name of stream, lake, or pond _____

2. Show by attached map watershed, towns or communities above intake, industrial plants, and in immediate vicinity, farm house, picnic ground, abattoirs and other sources of pollution, with distance from intake. Locate intake on map.

3. Size of watershed in square miles _____

Est. Min. dry-weather flow intake _____

4. Basis of min. dry-weather flow estimate _____

5.	Existing Raw Water Pumps	Proposed Raw Water Pumps
Type		
Capacity		
Section		
Discharge Head		

PART E - TREATMENT PLANT

1. Type of treatment:

- a) Pumping and disinfection X b) Conventional floc and settling _____ c) Upflow _____
 d) Demineralization (type) _____ e) Other Lime softening, filtration, chloramination

2. Design details:

- a) Emergency intake N/A bypass of raw water N/A
 b) Aeration: type N/A max. design rate _____ detention _____
 orifices _____ number of trays _____ tray area _____ loss of head _____
 c) Service pumps: existing (no. & cap.) N/A
 proposed (no. & cap.) _____
 d) Disinfection: type disinfectant N/A
 type, make, capacity and number of feeders _____
 e) Auxiliary power N/A
 f) Metering device and location N/A
 g) Mixing chamber (conventional): type N/A
 dimensions _____ capacity _____ Detention _____
 velocity (at maximum design rate) _____ Allowable head: total _____
 per baffle _____ mechanical agitator: size blade _____
 motor _____ peripheral speed _____ bypass _____
 drainage _____
 h) Coagulating basins (conventional): N/A
 capacity _____ Detention time at maximum plant capacity _____
 velocity _____ capacity of each compartment _____
 Distribution flow: inlet devices _____ outlet devices _____
 i) Suspended solids contact units (upflow) N/A

Process	Diameter	Capacity	Upflow Rate	Detention Period	Overflow Rate
Softening					
Clarification					

- j) Chemical dosing devices (other type disinfecting): N/A
 Number of machines and type feeding: Alum _____ Lime _____
 coagulant aid (Name _____ Activated Carbon _____
 recarbonation _____
 number and size of solution tanks _____
 points of application _____
 size and kind of piping _____

K) Filter units:

type, material, number units Dual media, reinforced concrete construction, 6 units
areas, dimensions, capacity of each unit for total plant 625 sq.ft. each (two sections at 12.5' x 15'),
2.7 mgd each unit, 16.2 mgd total capacity
wash troughs, number and shape 6 per filter (2 per section), oval, u-shaped
dimensions and distance above sand (top trough and top sand) 4.27 ft. top sand to top trough
spacing (center to center) 8'-0"
max. travel suspended particles 5.94 feet
filtering material: gravel (depth & size) 2" of 3/4" to 1/2"; 2" of 1/2" to 1/4"; 2" of 1/4" to 1/8"; 2" of
1/16"; 2" of 1/4" to 1/8"; 2" of 3/4" to 1/2"
sand or other media (specify) 10" sand (0.45 < es < 0.55); 20" anthracite (0.45 < es < 1.05)
depth of bed 42" mean effective size (in mm.) 0.5 sand / 1.0 anthracite
uniformity coefficient <1.4 for sand, <1.3 for anthracite
filter bottom: type plastic lateral underdrain
ratio total area of perforation to sand area 1.5% of sand area
materials: size and spacing on manifold 23 orifices per s.f. of underdrain
perforations: size and spacing on laterals 1/4" diameter on manifold N/A
ratio: total area perforations to total cross-sectional area of laterals 20%
manifold size and cross-sectional area approx. 1 s.f.
backwash pump(s): type and design rate vertical turbine, 6,250 gpm @ 35', 2 pumps
depth water on sand: maximum 6.00' minimum N/A average N/A
wash tank capacity 550,000 gallons
Appurtenances: loss of head gauges level measurement rate of flow gauges N/A
rate controllers influent wires
Clear well: location Filter Bldg. capacity 350,000 gal. dimensions 95.7' x 73.3'
25.8 x 18.7 x 6.5 dec
l) Laboratory: room and bench space (areas) N/A
scope of tests provided for _____
m) Bypass to plant N/A emergency intake _____
n) List type and capacities of emergency well and service pumping units N/A
o) Attach schematic diagram, plans and specifications showing pump(s), pipe sizes, valves, etc.
See attached engineering report, plans, and specifications.

PERMIT APPLICATION ATTACHMENT

ENGINEERING REPORT

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT

WATER TREATMENT PLANT NO. 9 IMPROVEMENTS ADDITION OF REPLACEMENT FILTERS, WASHWATER RECOVERY, AND SLUDGE HANDLING FACILITIES

MARCH 11, 1993

PURPOSE

The purpose of this report is to support the permit application to the Palm Beach County Public Health Unit (PBCPHU) for the construction of filter improvements, washwater recovery facilities, sludge handling facilities, and raw water well 9W-1 at Palm Beach County Water Utilities Department's Water Treatment Plant No. 9 (project number WUD 91-64).

INTRODUCTION

Water Treatment Plant No. 9 (System 9) is a conventional 14 million gallons per day (mgd) lime softening water treatment plant located in the southern region of Palm Beach County in western Boca Raton. System 9 currently consists of three treatment trains of 10 mgd, 3 mgd and 1 mgd capacities supplied by 14 existing 1,000 gpm raw water wells located on and around the plant site. The proposed filter improvements are designed to increase the filtering capacity of System 9 and to prepare for future plant expansion when system demand warrants. An overall plant capacity increase is not requested with this permit application. The washwater recovery basin and sludge handling facilities are to provide for recovery of as much raw water as possible and for more efficient sludge handling. The original raw water well 9W-1 was abandoned when a casing joint failed. Therefore, a new well is proposed to make up for the lost well. A description of each proposed system is presented below followed by a table summarizing the design parameters for the major proposed equipment.

FILTERS

Six new dual media filters are proposed for this project. The initial filter rate for the proposed filters is 3 gallons per minute per square foot (gpm/sf) resulting in a total capacity of 16.2 mgd or a hard capacity with one unit out of service of 13.5 mgd. The County will initiate a program to uprate the filters to 4 gpm/sf immediately upon construction and certification for service of the proposed facilities. This will give the new filters a total capacity of 21.6 mgd with a capacity of 18.0 mgd with one filter out of service. Therefore, PBCWUD is requesting a 4 gpm/sf filter loading rate approval from PBCPHU under this permit with a specific condition for successful uprate testing. The uprate testing will follow the criteria outlined in the October 9, 1981 memorandum from William L. Buzick of the Florida Department of Environmental Regulation concerning uprating of water treatment plants. The proposed facilities are designed to replace all

the existing filter capacity; however, should the cost of equipping all of the filter units become excessive, PBCWUD may elect to only replace the filter capacity of the 10 mgd treatment train.

The total 42-inch media depth in the filters comprises 12 inches of gravel, 10 inches of sand, and 20 inches of anthracite. Also included in the filter structure are two air scour blowers for use during the backwash cycle, a 350,000 gallon clearwell containing two backwash pumps and two transfer pumps. The transfer and backwash pumps are the same size and arranged to provide backup capacity. Therefore, backwash pump 1-P-3301 is a backup pump to the transfer pumps and transfer pump 1-P-3701 acts as a backup to the backwash pumps.

WASHWATER RECOVERY

A new washwater recovery system is to be constructed. The proposed washwater recovery system consists of a 550,000 gallons washwater basin, two washwater recovery sludge pumps, and two washwater recovery return pumps. Solids from the backwash from the filters will settle in the washwater recovery basins. Sludge pumps located on the bottom of the basin will pump the settled solids to the sludge thickener. Washwater return pumps will return the supernate to the head of the treatment plant. A portion of the existing storm water retention pond will be converted to an emergency washwater pond as backup to the proposed washwater recovery system.

SLUDGE HANDLING FACILITIES

The proposed sludge handling facilities consists of sludge blowdown pumps, a sludge thickener, a vacuum filter, and associate equipment. Five new pumps will be installed in three existing sludge pits to transfer the sludge blowdown to the proposed thickener. The existing sludge pits are to be modified to prevent the current sludge overflow conditions and accommodate the new pumps. Two thickened sludge pumps will transport the thickened sludge from the thickener to the vacuum filter. The thickened sludge will be dewatered using a vacuum-assisted belt filter. Dried sludge will be carried to a waiting transport via conveyors. An emergency sludge lagoon will be constructed as backup for the proposed sludge handling facilities. The supernatant from the sludge thickener and the filtrate from the vacuum filter unit will be returned to the washwater recovery basin.

WELL 9W-1

During a well rehabilitation project in 1991, raw water well number 1 experienced a joint failure in its inner casing. Because the failure could not be repaired, the well was sealed and abandoned. The proposed new well will replace the lost well. The new well will be constructed near the abandoned well and is expected to provide a capacity of approximately 1,000 gpm.

SUMMARY

Palm Beach County Water Utilities Department is proposing to replace the existing filters at Water Treatment Plant No. 9 with six filters rated at 2.7 mgd each initially, and 3.6 mgd after the uprating testing program. In addition, a wash water recovery system and sludge management facility are being added in an effort to conserve water and to provide a more aesthetic environment. Finally, PBCWUD proposes to construct a new raw water well to replace original well 9W-1, which failed and had to be abandoned. The proposed construction will replace and enhance existing facilities.

DESIGN OF MAJOR EQUIPMENT

Equipment	Size	Rate	No. Units	Total Capacity	Total Capacity With Largest Out of Service
Filters (each) ^a	625 sf	3 gpm/sf	6	16.2 mgd	13.5 mgd
After Uprating	625 sf	4 gpm/sf	6	21.6 mgd	18.0 mgd
Air Scour Blowers ^b	120 hp	2,500 scfm	2	5,000 scfm	2,500 scfm
Max Scour Rate	---	4 scfm/sf	---	---	---
Backwash Pumps	100 hp	6,250 gpm	2	12,500 gpm	12,500 gpm ^c
Max Backwash Rate	---	20 gpm/sf	---	---	---
Normal Backwash Volume	235,000 gal	--	---	---	---
Transfer Pumps	100 hp	6,250 gpm	2	12,500 gpm	12,500 gpm ^d (18 mgd)
Washwater Recovery Basin ^e	---	555,000 gal	1	550,000 gal	---
Washwater Recovery Sludge Pumps ^h	15 hp	350 gpm	2	700 gpm	350 gpm
Washwater Recovery Return Pumps	25 hp	1,000 gpm ^f	2	2,000 gpm	1,000 gpm
Sludge Blowdown Pumps ^{g, h}	15 hp	175 gpm	5	875 gpm	700 gpm
Sludge Thickener Basin	50 ft diam.	190,000 gal 35 ppd/sf	1	190,000 gal 35 ppd/sf	---
Thickened Sludge Pumps ^h	10 hp	160 gpm	2	320 gpm	160 ppm
Vacuum Filter	10 ft diam.	45 lbs/sf/hr	1	45 lbs/sf/hr	---
Hrs Operation/Day	6 hrs	---	---	---	---
Emergency Sludge Pond ⁱ	66,000 cf	---	---	---	---
Well No. 9W-1	12 in diam.	1,000 gpm	1	1,000 gpm	---

a Specified filter bottoms include Leopold and General Filter.

b Positive displacement type.

c Arranged such that transfer pump may be used as backup to backwash pumps.

d Arranged such that backwash pump may be used as backup to transfer pumps.

e Circular, with center sludge drop and dual slope bottom. Sized for two complete filter backwashes.

f Matches capacity of one well.

g Two each in softener units 2 and 3 sludge pits, one in unit 1 sludge pit. Unit 1 sludge pit connected to unit 2 sludge pit via gravity line.

h All sludge lines have flushing connections.

i Pond sized to hold 6 days of average sludge production.

9-raw
1991

PUBLIC DRINKING WATER ANALYSIS REPORTING FORMAT

PUBLIC WATER SYSTEM INFORMATION

Public Water System I.D. Number: _____
Public Water System Name: PALM BEACH COUNTY UTILITIES
Public Water System Type (check one):
 Community Non-community Special Non-community

LABORATORY CERTIFICATION INFORMATION

Lab Certification Number: 86111
Parameter Group(s) Analyzed: 17-550.310 & 320
Subcontracted Lab Certification Number(if any): 82315, 84147

SAMPLE INFORMATION

Sample Date (MMDDYY): 12/11
Laboratory Sample Number: 91-3388
Sample Location (be specific): PALM BCH COUNTY
Sample Type (check all applicable):
 Check Regular Distribution Composite
 Clearance Maximum Residence Time Plant Tap
 Raw Well Resample
 Special

Sampler Name, Title, Phone: PALM BEACH COUNTY UTILITIES
REBECCA L. COCO
(407) 683-0803

ANALYSIS INFORMATION

Extraction Date (MMDDYY): / /
Laboratory Contact: KERRY PRESCOTT
Resample Request? (check one): Yes No

ANALYSES SUBMITTED: Turbidity~~X~~; Inorganic~~X~~; Trihalomethane~~X~~; Volatile
Organic~~X~~; Organic Chemical~~X~~; Secondary Chemical~~X~~; Radiological; Unregulated
Organic Purgeable; Unregulated Organic Pesticide; Unregulated Base Neutral
Extractable; Unregulated Acid Extractable;
(Check all analyses which apply.)

I do HEREBY CERTIFY that all data submitted are correct.

Signature: *Kerry Prescott*

Mail Results to the
Appropriate DER OR ACPHC Office

Name: KERRY PRESCOTT

Title: DIRECTOR OF OPERATIONS, FLORIDA

Laboratory: IEA, FLORIDA

Date: 01/03/92

DER/ACPHC Reviewing Official:

Sample Interpretation (check one)
 Satisfactory Unsatisfactory

TRIHALOMETHANE ANALYSIS

17-550.310(2)(c)
(PWS027)

Sys:9

Parameter ID	NAME	Sample Number	Location Code	Analysis Result(mg/l)	Analytical Method	Det. Lt. Used	Analysis Date
Potential THM							
2950	TTHM	91-3388	9S - RAW	<0.001	501.2	0.001	12/20/91

Comments:

VOLATILE ORGANIC ANALYSIS

17-550.31(2)(d)
(PWS028)

Sys:9

Parameter ID	NAME	Sample Number	Location Code	Analysis Result(mg/l)	Analytical Method	Det. Lt. Used	Analysis Date
2969	Ethylene dibromide	91-3388	RAW	<0.00002	EPA 504	0.00002	12/18/91
2969	Para-dichloro-benzene	91-3388	RAW	<0.0005	EPA 502.2	0.0005	12/16/91
2976	Vinyl chloride	91-3388	RAW	<0.0005	EPA 502.2	0.0005	12/16/91
2977	1,1,-dichloro-ethene	91-3388	RAW	<0.0005	EPA 502.2	0.0005	12/16/91
2980	1,2-dichloro-ethane	91-3388	RAW	<0.0005	EPA 502.2	0.0005	12/16/91
2981	1,1,1-trichloro-ethane	91-3388	RAW	<0.0005	EPA 502.2	0.0005	12/16/91
2982	Carbon tetrachloride	91-3388	RAW	<0.0005	EPA 502.2	0.0005	12/16/91
2984	Trichloroethene	91-3388	RAW	<0.0005	EPA 502.2	0.0005	12/16/91
2987	Tetrachlorethene	91-3388	RAW	<0.0005	EPA 502.2	0.0005	12/16/91
2990	Benzene	91-3388	RAW	<0.0005	EPA 502.2	0.0005	12/16/91

Comments:

TURBIDITY ANALYSIS

17-550.310(3)

(PWS026)

Parameter ID	NAME	Sample Number	Location Code	Analysis Result (NTU)	Analytical Method	Analysis Date
0100	Turbidity	91-3388	RAW	0.37	214.A	12/30/91

sys-9

Comments:

INORGANIC ANALYSIS

17-550.310(1)

(PWS030)

Parameter ID	NAME	Sample Number	Location Code	Analysis Result(mg/l)	Analytical Method	Det. Lt. Used	Analysis Date
1005	Arsenic	91-3388	RAW	< 0.01	206.2	0.01	01/02/92
1010	Barium	91-3388	RAW	< 0.1	208.1	0.1	01/02/92
1015	Cadmium	91-3388	RAW	< 0.005	213.2	0.005	01/02/92
1020	Chromium	91-3388	RAW	0.0089	218.2	0.005	12/19/91
1025	Fluoride	91-3388	RAW	0.35	413.B	0.05	12/19/91
1030	Lead	91-3388	RAW	< 0.005	239.2	0.005	12/20/91
1035	Mercury	91-3388	RAW	< 0.002	245.1	0.002	12/19/91
1040	Nitrate (as N)	91-3388	RAW	< 0.02	418.F	0.02	12/26/91
1045	Selenium	91-3388	RAW	< 0.01	270.2	0.01	01/02/92
1050	Silver	91-3388	RAW	< 0.01	272.1	0.01	12/19/91
1052	Sodium	91-3388	RAW	26	273.1	1.0	12/23/91

Comments:

SECONDARY CHEMICAL ANALYSIS

17-550.320

(PWS031)

Parameter ID NAME	Sample Number	Location Code	Analysis Result (mg/l)	Analytical Method	Det. Lt. Used	Analysis Date
016*Calcium	91-3388	RAW	124	311.A	1.0	12/30/91
017 Chloride	91-3388	RAW	42	407.A	1.0	12/18/91
019*Carbonate CaCO3	91-3388	RAW	< 1.0	203	1.0	01/03/92
021*Hydroxide CaCO3	91-3388	RAW	< 1.0	203	1.0	01/03/92
022 Copper	91-3388	RAW	< 0.005	220.1	0.005	12/19/91
023*Bicarbonate CaCO3	91-3388	RAW	270	203	1.0	01/03/92
025 Fluoride--Please enter as primary on screen	PWS030					
026 Bicarbonate HCO3	91-3388	RAW	329	203	1.0	01/03/92
027*Hydrogen Sulfide	91-3388	RAW	< 0.01	427.D	0.01	12/27/91
028 Iron	91-3388	RAW	0.098	236.1	0.05	12/19/91
031*Magnesium	91-3388	RAW	2.6	242.1	1.0	12/20/91
032 Manganese	91-3388	RAW	< 0.005	243.2	0.005	01/02/92
035 Sulfate	91-3388	RAW	24	426.0	1.0	12/23/91
035 Zinc	91-3388	RAW	0.14	289.1	0.05	12/27/91
0901 Carbon Dioxide	91-3388	RAW	21	406.A	1.0	01/03/92
0905 Color (color units)	91-3388	RAW	30	204.B	1.0	01/03/92
0915*Total Hardness	91-3388	RAW	280	130.2	1.0	12/17/91
0919 NCH as CaCO3	91-3388	RAW	10	203	1.0	01/03/92
0920 Odor (total odor number)	91-3388	RAW	< 1	207	1	12/17/91

Comments:

SECONDARY CHEMICAL ANALYSIS
17-550.320
(PWS031)

Parameter ID	NAME	Sample Number	Location Code	Analysis Result (mg/l)	Analytical Method	Det. Lt. Used	Analysis Date
1924	Field pH (units)						
1925*	Lab pH (units)	91-3388	RAW	7.42	423	---	12/17/91
1926	Field Conductivity						
1927*	Total Alkalinity	91-3388	RAW	270	403	1.0	12/19/91
1930	TDS	91-3388	RAW	830	209_B	1.0	12/20/91
1931	Phenolphthalein Alk.						
1931	Field Temp (C)						
1997	Langelier Index pHs	91-3388	RAW	6.8	203	---	01/03/92
1998*	Saturation Index	91-3388	RAW	+ 0.62	203	---	01/03/92
1999*	Stability Index	91-3388	RAW	6.18	203	---	01/03/92
9909	Foaming Agents	91-3388	RAW	< 0.05	512.A	0.05	01/02/92
9996	Field DO						
9997*	Field Chlorine						

Comments:

*OPTIONAL--NOT REQUIRED BY RULE

ORGANIC CHEMICAL ANALYSIS
17-550.310(2)(A)(B)
(PWS029)

Sys: 9

Parameter ID	NAME	Sample Number	Location Code	Analysis Result(mg/l)	Analytical Method	Det.Lt. Used	Analysis Date
2005	Endrin	91-3388	RAW	<0.00002	608	0.00002	01/03/92
2010	Lindane	91-3388	RAW	<0.0002	608	0.0002	01/03/92
2015	Methoxychlor	91-3388	RAW	<0.0001	608	0.0001	01/03/92
2020	Toxaphene	91-3388	RAW	<0.005	608	0.005	01/03/92
2105	2,4-D	91-3388	RAW	<0.1	509.B	0.1	12/29/91
2110	2,4,5-TP (Silvex)	91-3388	RAW	<0.01	509.B	0.01	12/29/91

Comments:

MAXSON WELL DRILLING, INC.

PHONE: 564-3419
FT. LAUDERDALE

WELL DRILLING
WATER PUMPS, TANKS
PIPE AND FITTINGS
3328 N.E. 11th AVENUE
OAKLAND PARK, FLA. 33334

P.O. BOX 23244
OAKLAND PARK 33307

MAXSON, Jr. - Pres.

K. TYSKA - Sec'y. - Treas.

Ref-1152
Maxson well Drlg.

Cable tool well (Spoke w/ Garyland Maxson 9167-9133 (17/91))

The following is the only information I found on the two previous wells:

#1 Well-10" Well done for United Utilities Corp. of Fla, Margate, Fla. in June of 1970.

Cased to 160' Total Depth 170'
Pump tested 2½ Hrs. (580 GPM with 4'11" DD
(975 GPM with 6'5" DD

Well Log

0'	to 18'	Sand and rock
18'	to 40'	Sand
40'	to 50'	Sand
50'	to 90'	Sand
90'	to 102'	Rock
102'	to 115'	Rock and sand
115'	to 155'	Sand and rock
155'	to 170'	Rock

#2 Well-12" Well done for Sandalfoot Utilities Corp., Boca Raton, Fla. in May, 1972.

Cased to 105' Total Depth 113'
Pump tested 8 Hrs. 1050 GPM with 10'1" DD
(water table 5'1")

Well Log

0'	to 20'	Sand and rock
20'	to 85'	Sand
85'	to 100'	Rock and sand
100'	to 113'	Rock

See other pages for information on #3,4,5,6,7

RECEIVED MAR 20 1981

HANSON WELL DRILLING, INC.

Water Treatment Plant
Expansion Phase III
South Palm Beach Utilities Corp.

Date-January 22, 1974

Well 3-12"
Static Level 8' from top of casing

<u>Time</u>	<u>GPM</u>	<u>Drawdown</u>
7:45 PM	1200	5'2"
8:15 PM	1200	6'2"
8:45 PM	1140	6'2"
9:15 PM	1150	6'2"
9:45 PM	1150	6'5"
10:15 PM	1150	6'5"
10:45 PM	1140	6'5"
11:15 PM	1140	6'5"
11:45 PM	1140	6'5"
12:15 AM	1150	6'0"
12:45 AM	1150	5'7"

Well Log

0 - 20' Sand and rock; 20' - 45' Sand; 45' - 70' Sand;
70' - 90' Sand; 90' - 120' Rock and Sand; 120' - 129' Rock.

Cased to 120' Total Depth 129'

February 6, 1974

Water Treatment Plant
Expansion Phase III
South Lake Beach Utilities Corp.

Date-February 6, 1974

Well 4-12"
Static Level 6'8" from top of casing

<u>Time</u>	<u>Gage</u>	<u>Reading</u>
6:50 AM	1025	6'8"
9:00 AM	1025	6'8"
9:30 AM	960	6'5"
10:00 AM	960	6'7"
10:30 AM	960	6'9"
11:00 AM	970	7'4"
11:30 AM	1040	7'10"
12:00 PM	1040	7'10"
12:30 PM	1040	7'10"
1:00 PM	1040	7'10"
1:30 PM	1040	7'9"
2:00 PM	1040	7'9"
2:30 PM	104	7'9"
3:00 PM	1040	7'8"
3:15 PM	1040	7'8"

Well Log

0 - 15' Sand and rock; 15' - 40' Sand; 40' - 75' Sand;
75' - 80' Sand; 80' - 105' Rock and sand; 105' - 115' Rock
Depth to 109' Total Depth 115'

February 14, 1974

Water Treatment Plant
Expansion Phase III
South Palm Beach Utilities Corp.

Date-February 14, 1974

Well #5-12"

Static level 7'10" from top of casing

<u>Time</u>	<u>GPM</u>	<u>Pressure</u>
9:45 AM	1010	9'7"
10:15 AM	1010	10'1"
10:45 AM	1000	10'4"
11:15 AM	1000	10'4"
11:45 AM	1000	10'4"
12:15 PM	950	10'6"
12:45 PM	1000	10'11"
1:15 PM	1000	10'12"
1:45 PM	1000	11'0"
2:15 PM	1000	11'0"
2:45 PM	1000	10'9"
3:15 PM	1000	10'8"
3:45 PM	1000	10'8"

3:50 PM Recovery of water table 7'10" from top of casing.

Well Log

0 - 15' Sand and rock; 15' - 35' Sand; 35' - 60' Sand;
60' - 85' Sand; 85' - 110' Rock and sand; 110' - 116' Rock.
Cased to 111' Total Depth 116'

PHONE: LO 4-3419
FT. LAUDERDALE
C. B. MAXSON, JR. - PRES.

MAXSON WELL DRILLING, INC.

WELL DRILLING
WATER PUMPS, TANKS
PIPE AND FITTINGS
3328 N. E. 11TH AVENUE
OAKLAND PARK, FLA.

P. O. BOX 23244
OAKLAND PARK 33307
K. TYSKA - SECY. - TREAS.

March 6, 1974

Water Treatment Plant
Expansion Phase III
South Inland Beach Utilities Corp.

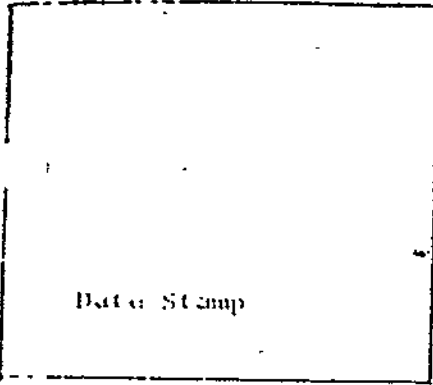
Date-March 6, 1974

Well #6-12"
Static level 7'1" from top of casing

<u>TIME</u>	<u>GPM</u>	<u>3/4" DOWN</u>
9:45 AM	1100	7'8"
10:15 AM	1150	9'
10:45 AM	1150	9'3"
11:15 AM	1150	9'4"
11:45 AM	1200	9'4 1/2"
12:15 PM	1150	9'9"
12:45 PM	1100	9'9"
1:15 PM	1150	9'10"
1:45 PM	1100	9'9"
2:15 PM	1150	9'10"
2:45 PM	1150	9'9"
3:15 PM	1100	9'9"
3:45 PM	1200	9'9"

Well Log

0' - 20' Sand and rock; 20' - 45' Sand; 45' - 65' Sand;
65' - 90' Sand; 90' - 110' Rock and sand; 110' - 117' Rock.
Cased to 111' Total Depth 117'



County Palm Beach

Well Permit No. 9244

STATE OF FLORIDA
Department of Health and Rehabilitative Services
DIVISION OF HEALTH
BUREAU OF SANITARY ENGINEERING
TALLAHASSEE, FLORIDA 32304

#6

WATER SUPPLY WELL LOG

1. Well to serve: Sandalfoot Cove - Boca Raton
City - Town - Division - Etc.

2. Well location: Sandalfoot Cove, Boca Raton

Nearest Post Office: _____ Section: 30 Twp: 47 S Range: 42 E

Direction from Post Office: _____ Distance from Post Office: _____

3. Owner: South Palm Beach Utilities Corp., 499 E. Palmetto Pk. Rd., Boca Raton

4. Driller: Maxxon Well Drilling, Inc., 3328 NE 11th Ave., Oakland Park

5. Can site be flooded? (Yes) (No) Elevation: _____ feet

6. Date well started: 2-26-74 Date completed: 3-6-74
(Reference Mean Sea Level)

Size and lengths of casings	<u>1 - 22</u>	feet of	<u>12</u>	in
	<u>4 - 20</u>		<u>12</u>	
	<u>1 - 9</u>	feet of	<u>12</u>	in

Total depth cased: 111' Depth of well: 117'

Bottom of casing seated at 110' foot depth.

7. Does water flow at surface without pumping? NO Natural yield, if flowing _____

If not flowing, how far below surface does it stand? 7'11"

Yield by pumping: 1150 GPM. How many feet is water lowered by pumping? 9'10"

8. Water quality fresh. For what purpose is water to be used? water plant

9. Below on this sheet give Driller's log, record of casing, analysis of water and other facts not provided for above. Continue on back, if necessary. Note each material found:

Sand & rock 0 - 20'; Sand 20 - 45'; Sand 45 - 65'; Sand 65 - 90';

Rock and sand 90 - 110'; Rock 110 - 117'.

10. Person filling out blank: Johnnie Nyska

11. Date: June 24, 1974 Address: 10 Box 25244, Oakland Park, Fla. 33307

MAXSON WELL DRILLING, INC.

PHONE: LO 4-3419
 FT LAUDERDALE
 C. B. MAXSON JR., PRES.

WELL DRILLING
 WATER PUMPS, TANKS
 PIPE AND FITTINGS
 3328 N. E. 11TH AVENUE
 OAKLAND PARK, FLA.

P. O. BOX 23244
 OAKLAND PARK 33307
 K. TYSKA, SECY. - TREAS.

April 25, 1974

Water Treatment Plant
 Expansion Phase III
 South Palm Beach Utilities Corp.

Date-April 25, 1974

Well # 7-12"
 Static level u'11" from top of casing

<u>TIME</u>	<u>GPI</u>	<u>DEPTH</u>
8:00 AM	1040	8' 0"
8:30 AM	1030	8' 10"
9:00 AM	1030	9' 5"
9:30 AM	1030	9' 10"
10:00 AM	1030	10' 1"
10:30 AM	1020	10' 4"
11:00 AM	1020	10' 3"
11:30 AM	1020	10' 3"
12:00 PM	1010	10' 2"
12:50 PM	1010	10' 5"
1:00 PM	1020	10' 2"
1:30 PM	1010	10' 2"
2:00 PM	1010	10' 2"

Final static level at 9' 11" after 20 minutes.

Well Log

0' - 20' Sand and rock; 20' - 45' Sand; 45' - 60' Sand;
 60' - 85' Sand; 85' - 113' Rock and sand; 113' - 126' Rock.
 Cased to 114' Total Depth 126'

County Palm Beach

Well Permit No. 9245

STATE OF FLORIDA
 Department of Health and Rehabilitative Services
 DIVISION OF HEALTH
 BUREAU OF SANITARY ENGINEERING
 1000 W. WASHINGTON AVE.
 TALLAHASSEE, FLORIDA 32304

#7

WATER SUPPLY WELL LOG

Well to serve: Wendell Foot Cove - Boca Raton
City - Town - Subdivision - Etc.

Well location: Wendell Foot Cove, Boca Raton

Nearest Post Office: _____ Section: 30 Twp: 47 S Range: 42 E

Direction from Post Office: _____ Distance from Post Office: _____

Owner: Palm Beach Utilities Corporation Address: 499 E. Palmetto Pk. Rd., Boca Raton

Drillers: Wendell Drilling, Inc. Address: 3328 NE 13th Ave., Oakland Park

Can site be flooded? (Yes) (No) Elevation: _____ feet
(Reference Mean Sea Level)

Date well started: 4-12-74 Date completed: 4-25-74

Size and lengths of casings	2 - 32'	feet of	12	inch
	3 - 20'	feet of	12	inch
	1 - 12'	feet of	12	inch

Total depth cased: 114' Depth of well: 126'

Bottom of casing seated at 114' test depth.

Does water flow at surface without pumpin no Natural yield, if flowing _____ C

If not flowing, how far below surface does sand? 7' 2 1/2"

Yield by pumping: 107 GPM How many feet is water lowered by pumping? 10' 5"

Water quality fresh For what purpose is water to be used? Water Plant

Below on this sheet give driller's log, record of cavities, analysis of water and other facts not provided for above. Continue on _____ if necessary. Note each material found:

Sand & rock 0 - 20'; sand 20 - 45'; sand 45 - 60'; sand 60 - 85';

Rock & sand 85 - 114'; sand 115 - 126'.

Name of person filling out blank: PROPERTY

Date: June 24, 1974 Address: 20 1/2 S.W. 14th St., Oakland Park, Fla. 33307

(Over)

DEPARTMENT OF ENVIRONMENTAL REGULATION
WELL COMPLETION REPORT

OWNER: SOUTH VISTA BEACH UNIT
 Unit Name First Name Initial
3000 S STATE RD
 Street
SOUTH VISTA
 City State
75000 TX
 Zip Code Phone Number Zip Code

WELL LOCATION:
 Township 7N Range 42E Section 10
 Latitude 33 00 N
 Longitude 101 00 W
 Section Number 10
 Lot No. 10 Subdivision SOUTH VISTA
 City SOUTH VISTA County PALM BEACH

OWNER WELL NUMBER OR NAME: 10

DRILL METHOD: Rotary Cable Tool Jet Auger
 Other

SURFACE CASING, CASING, AND LINER MATERIAL:

Start Dia. (In.)	Start Depth (ft.)	From (ft.)	To (ft.)	Schedule No.	Joints*
12	49.20 (AS)	0	10	10	10
12	47.29 (AS)	0	10	10	10

* Describe Material:
 TC = Threaded and Coupled, TCW = Threaded, Coupled, and Welded.
 W = Welded, S = Bonded (PVC), O = Other

GROUT: None Neat Cement Other
 Type and Percent of Additives and Grout Volume or Number of 24 in. Sacks
6 SACKS NEAT PORTLAND CEMENT
6 SACKS NEAT PORTLAND CEMENT

FINISH: Open Hole Perforated or Slotted Casing Gravel Pack
 Sandpoint or Screen Attached to Well Casing Sandpoint or Screen
 Telescopes with Packer Inside Casing (Packer Material: _____)

Sandpoint/Screen Material	Dia. (In.)	Slot Size (In.)	From (ft.)	To (ft.)

Other Finish: _____

QUALITY TEST: None Bacteria Chemical
 By: TO BE DONE BY OTHERS
 Health Dept. USGS Other

Clear Colored Sulphur Slaty Iron Other
 Conductance (Microhm/cm) _____ Chloride _____ ppm

Hardness _____ pH _____ Temp _____ °F
 ppm. calcium carbonate

Well Disinfected: No Yes (Date) _____

WELL TEST: Manual Pump GPM Airlift
 Dailer Perforated Pump Jet Pump None
 Test Pump Manufacturer: _____ Test Pump _____
 Perforated Slotted Gravel Screen
 Gravel Sandpoint Telescopes Other

Measured Static Water Level: 117.10 ft.
 Measured Pumping Water Level: 117.10 ft.
 After 117.10 minutes at 117.10 ft.
 Rate of Change: 117.10 ft./min.

Measuring by: Hand
 Measured at: 117.10 ft. Bottom End of Screen

Elevation of Measuring Pt.: _____ ft. Above Below MSL
 Elevation of Well Casing: _____ ft.

WELL EQUIPMENT: Other Cement Gravel
 Perforation Pump Temporary Pump
 Test Pump: Centrifugal Jet Other

Pressure: Gauge Electric Hand Other
 Manufacturer: _____ Capacity: _____ G.P.M.
 Installation Date: _____

REG. FORM 12-1-122 (78)

WELL NUMBER: _____

TYPE OF WELL: Water Well Test Well Recharge Drainage
 Waste Disposal Observation Other

USE: Domestic Irrigation Industrial Livestock Public Supply
 Other

SKETCH LOCATION OF WELL in relation to local landmarks, ground distance and direction from nearest town, road, or other reference point.
 North

GEOPHYSICAL LOGS: Type: _____ By: _____

WELL LOG

Bore Hole (In.)	Casing Size (In.)	Depth (ft.)		Examine cuttings at 20 ft. or smaller intervals and as changes. Give color, grain size and type of material. Note any cavities. Indicate producing zones. Attach additional sheets if necessary.
		From	To	
12	0	0	10	BROWN SAND, SHELL & ROCK
12	10	10	28	MED COARSE SANDY SHELL
12	28	28	45	FINE LIGHT BROWN SAND
12	45	45	55	LIGHT TAN SAND
12	55	55	70	WHITE SAND
12	70	70	93	LIGHT GRAY SAND
12	93	93	98	MED COARSE GRAY SAND
				& ROCK
12	98	98	120	GOOD GRAY SAND/ROCK

Total Depth: 120 ft. Producing Zone Material: Sand Shell
 Broken Shell Limestone Other: SEAWATER

Top of Producing Zone: 98 ft., Bottom of Producing Zone: 120 ft.
 No Cuttings Sent to Bureau of Geology

Well Contractor's Signature: [Signature]
 Date: 11/17/83
 Well Completion Date: _____

DEPARTMENT OF ENVIRONMENTAL REGULATION
WELL COMPLETION REPORT

OWNER: SOUTHA PALM BEACHA LTD
Last Name First Name Initial

10015 S STATE RD 7
Number Street

BONIA BEACH FLA
City State

33401 0000 0000
Area Code Phone Number Zip Code

WELL LOCATION:
 1/4 Section 1/2 Section 3/4 Section
 IN SI SE WI
 Township Range
 Latitude N
 Deg. Min. Sec.
 Longitude W
 Deg. Min. Sec.

10015 SOUTHA STATE RD 7
Number Street/Road

0 100 SE 1/4 SW 30
Lot No. Subdivision

BONIA BEACH PALM BEACHA
City County

OWNER WELL NUMBER OR NAME: 00000000000000000000

DRILL METHOD: Rotary Core Tool Jet Auger
 Other:

SURFACE CASING, CASING, AND LINER MATERIAL:

Steel Dia. (In.)	Steel	Weight (lb/ft)	From (Ft.)	To (Ft.)	Schedule	Units*
<u>18</u>	<u>49.50 (A53)</u>	<u>6.00 (STD W)</u>	<u>0</u>	<u>37</u>	<u>10</u>	
	<u>47.25 (A53)</u>	<u>5.75 (STD W)</u>	<u>0</u>	<u>37</u>	<u>10</u>	

* Describe Material:
 * TC = Threaded and Coupled, TCW = Threaded, Coupled, and Welded.
 W = Welded, R = Rusted (WCI), O = Other:

GROUT: None Neat Cement Other:

Type and Percent of Additives and Grout Volume or Number of 94 lb. Sacks

	From (Ft.)	To (Ft.)
<u>15 SACKS NEAT PORTLAND</u>	<u>0</u>	<u>37</u>
<u>6 SACKS NEAT PORTLAND</u>	<u>93</u>	<u>98</u>

FINISH: Open Hole Perforated or Slotted Casing Gravel Pack
 Sandpoint or Screen Attached to Well Casing Sandpoint or Screen
 Telescoped with Packer Inside Casing (Packer Material):

Sandpoint/Screen Material	Dia (In.)	Slot Size (In.)	From (Ft.)	To (Ft.)

Other Finish:

QUALITY TEST: None Bacteria Chemical
 By TO BE DONE BY OTHERS

Clear Colored Sulphur Salty Iron Other:

Corrosion (Microhmol) Chloride
 Hardness pH Temp OF

Well Drilled by Yes No (Date)

WELL TEST: Natural Flow G.P.M. Air Lift

Darcy Pressure Pump Test Pump Hydro
 Discharge Measured By: Meter Estimated Current Meter
 Orifice Tripartite Venturi Volumetric Other:

Measured Static Water Level: 110.00'
 Measured Pumping Water Level: 113.00'

After 24 hours At 110.00' Pressure
 Specific Gravity: 1.016 (1.016) of Brine/Seawater

Measuring by: TOP OF CASING
 Vertical: Above Below Level Surface

Elevation of Measuring Pt.: 111.11' Above Below MSL

WELL EQUIPMENT: Open Cased Matted
 Displacement Pump Temporary Casing
 Casing Pump: Centrifugal Cylinder Jet Submersible
 Turbine Other:

Power: Diesel Electric Gasoline Other:
 Horsepower Capacity G.P.M.

Installation Depth: Ft.

V. No. 44-50-40740
 Deepening Plugging
 Other: _____
 WELL NUMBER

TYPE OF WELL: Water Well Test Well Recharge Drainage
 Water Treatment Observation Other:

USE: Domestic Irrigation Industrial Livestock Public Supply
 Other:

SKETCH LOCATION OF WELL in relation to local landmarks, giving distance and direction from nearest town, road or railway reference point.
 North

GEOPHYSICAL LOGS: Type: B'

Bore Hole (In.)	Casing Size (In.)		Depth (Ft.)	Examine cuttings at 20 ft. or smaller intervals and at changes. Give color, grain-size and type of material. Note any cavities. Indicate producing zones. Attach additional sheets if necessary.
	From	To		
	<u>12</u>	<u>0</u>	<u>12</u>	<u>MED. COARSE SAND</u>
	<u>12</u>	<u>12</u>	<u>37</u>	<u>MED. COARSE WHITE SANDY</u>
				<u>SAME SHELL</u>
	<u>12</u>	<u>37</u>	<u>19</u>	<u>MED. COARSE LIGHT</u>
				<u>BROWN SAND</u>
	<u>12</u>	<u>19</u>	<u>18</u>	<u>MED. COARSE TAN SAND</u>
	<u>12</u>	<u>18</u>	<u>93</u>	<u>WHITE FINE SAND</u>
	<u>12</u>	<u>93</u>	<u>96</u>	<u>MED. COARSE GRAY SAND</u>
	<u>12</u>	<u>96</u>	<u>103</u>	<u>COARSE GRAY SANDROCK</u>
	<u>12</u>	<u>103</u>	<u>120</u>	<u>GRAY SANDROCK</u>

Total Depth: 120 Ft. Producing Zone Material: Sand Shell
 Broken Shell Limestone Other: SANDROCK

Top of Producing Zone: 96 Ft., Bottom of Producing Zone: 120 Ft.
 Shell Cuttings Sent to Bureau of Geology

W. J. ...
 Name No. _____
 Well Contractor's Signature Position

 Completion Date

DEPARTMENT OF ENVIRONMENTAL REGULATION
WELL COMPLETION REPORT

OWNER: SOUTH BEACH BEACH HOTEL

Address: 3300 S. BEACH ROAD

City: MIAMI BEACH State: FL

Area Code: 305 Phone Number: 531-1111 Zip Code: 33139

WELL LOCATION:

Section: 12 of Section 12

Latitude: 25 56 10 N

Longitude: 80 13 10 W

Street/Road: 3300 S. BEACH ROAD

Lot No.: 103 Subdivision: 103/108

City: MIAMI BEACH County: DADE

OWNER WELL NUMBER OR NAME: 112

DRILL METHOD: Rotary Cable Tool Jet Auger

SURFACE CASING, CASING, AND LINER MATERIAL:

Steel Dia. (In.)	Depth (In. Ft.)	From (Ft.)	To (Ft.)	Schedule No.	Joint
12	0-9	0	9	STD 10	
12	9-27	9	27	10	

Describe Material: TC = Threaded and Coupled, TCW = Threaded, Coupled, and Welded, W = Welded, B = Bonded (FVC), O = Other

GROUT: None Neat Cement Other:

Type and Percent of Address and Grout Volume or Number of 94 lb. Sacks

Address	From (Ft.)	To (Ft.)
3300 S. BEACH ROAD	0	27
103/108	103	108

FINISH: Open Hole Perforated or Slotted Casing Gravel Pack Sandpoint or Screen Attached to Well Casing Sandpoint or Screen Attached to Well Casing with Packer (Inside Casing) (Packer Material)

Sandpoint/Screen Material

Material	Dia. (In.)	Slot Size (In.)	From (Ft.)	To (Ft.)

Other Finish:

QUALITY TEST: None Bacteria Chemical

By: TO BE DONE BY OTHERS Date:

Clear Colored Sulphur Salty Iron Other

Conductance (Microhmol) Chloride (ppm)

Hardness (ppm) pH Temp (°F)

Well Disinfecting: Yes No (Date)

WELL TEST, In. Manual Pump G.P.M. Auhlt

Discharge Measured by: Tank Estimated Current Meter

Measured Static Water Level: 103'

Measured Pumping Water Level: 123'

After 10 hours at 100 G.P.M.

Specific Capacity: 1.0 G.P.M. per foot of drawdown

Drawdown of Measuring Pt. 10 ft. at 100 G.P.M.

WELL EQUIPMENT: Permanent Pump Temporary Pump

Power: Diesel Electric Gasoline Other

Installation Depth: 108 ft.

DE-11 (FORM 1-1-197) (24)

WELL NUMBER: W-112-43910

TYPE OF WELL: Water Well Test Well Discharge Drainage

USE: Domestic Irrigation Industrial Livestock Public Supply

SKETCH LOCATION OF WELL: See relation to local landmarks, zoning ordinance and district map (attach to report, for other reference points)

GEOPHYSICAL LOGS: Type: By:

WELL LOG

Rota Hole (In.)	Casing Size (In.)	Depth (Ft.)		Examine cuttings at 20 ft. or smaller intervals and at changes. Give color, grain-size and type of material. Note any cavities. Indicate producing zones. Attach additional sheets if necessary.
		From	To	
12	0	0	9	TAN MED SAND
12	9	9	27	MED-COARSE WHITE SAND w/ SOME SHELL
12	27	27	64	MED-COARSE LIGHT BROWN SAND & SOME GRAVEL
12	64	64	87	LIGHT TAN MED-FINE SAND
12	87	87	93	LIGHT GRAY FINE SAND
12	93	93	104	MED-COARSE GRAY SAND w/ SOME SHELL
12	104	104	108	GRAY SAND/ROCK

Total Depth: 108 Ft. Producing Zone Material: Sand Shell

Limestone Other: SAND/ROCK

True Producing Zone: 103 Ft., Bottom of Producing Zone: 108 Ft.

MADE BY: John P. ... Date: 10/10/71

DEPARTMENT OF ENVIRONMENTAL REGULATION
WELL COMPLETION REPORT

OWNER: SLOWIA PALMA BEACH FLA
 Last Name First Name Initial
3203 S STATE RD 7
 Street
SEALED SEALED
 City State Zip
 Phone Number Zip Code

WELL LOCATION:
 Township Range Section
 Latitude Min. Sec. N
 Longitude Deg. Min. Sec. W
SEALED SLOWIA PALMA BEACH FLA
 Number Street/Road
SECTION 10 B/D
 List No. Subdivision
SEALED PALMA BEACH
 City County

OWNER WELL NUMBER OR NAME: 125

DRILL METHOD: Rotary Cable Tool Jet Auger
 Other:

SURFACE CASING, CASING, AND LINER MATERIAL:

Start Dia. (In.)	Start Depth (In.)	End Depth (In.)	From (Ft.)	To (Ft.)	Schedule No.	Joint*
16	40.56	45.3	1	10.1	SD	W
12	47.2	55	1	21	1C	

* Describe Material:
 * TC = Threaded and Coupled, TCW = Threaded, Coupled, and Welded.
 W = Welded, B = Bolted (PV2), O = Other:

GROUT: None Neat Cement Other:
 Type and Percent of Additives and Grout Volume or Number of 94 lb. Sacks

From (Ft.)	To (Ft.)
0	31
105.1	110

FINISH: Open Hole Perforated or Slotted Casing Gravel Pack
 Sandpoint or Screen Attached to Well Casing Sandpoint or Screen
 Telescoped with Packer Inside Casing (Packer Material):

Sandpoint/Screen Material	Dia (In.)	Slot Size (In.)	From (Ft.)	To (Ft.)

QUALITY TEST: Mine Bacteria Chemical
 By: TO BE DONE BY OTHERS
 Clear Colored Sulphur Salty Iron Other

Conductance (Microhm) _____ Chloride _____
 Hardness _____ pH _____ Temp _____ °F

Well Disinfected Yes No (Date)

WELL TEST: General G.P.M. Anilin
 Specific Gravity Total Solids Nitrogen
 Discharge Measured By: _____
 Coriolis Weighing Volumetric Other

Measured Static Water Level: _____
 Measured Pumping Water Level: _____

After _____
 Specific Capacity _____
 Measuring Pt. (Depth) _____
 Elevation of Measuring Pt. _____

WELL EQUIPMENT: Gear Hydraulic Variable
 Permanent Drive Temporary Drive
 Fresh Pump: Centrifugal Lubricator Jet Submersible
 Turbine Other

Power: Diesel Electric Gasoline Other
 Horsepower: _____ Capacity: _____ G.P.M.
 Intake/Injection Depth: _____

DATE/INJECTION DEPTH: _____

WELL NUMBER _____
 TYPE OF WELL: Water Well Test Well Recharge Drainage
 Water Distribution Observation Other
 USE: Domestic Irrigation Industrial Livestock Public Supply
 Other

SKETCH LOCATION OF WELL in relation to local landmarks, giving distance and direction from nearest town, road, or other reference point.

GEOPHYSICAL LOGS: Type: _____ By: _____

Bore Hole (In.)	Casing Size (In.)	Depth (Ft.)		Examine cuttings at 20 ft. or smaller intervals and at changes. Give color, grain size and type of material. Note any cavities, indicate producing zones. Attach additional sheets if necessary.
		From	To	
12	2	7		DARK SAND
12	7	28		WHITE SANDY GRAVEL
12	28	37		LIGHT BROWN MED SAND + SOME GRAVEL
12	57	90		LIGHT TAN MED-COARSE SAND
12	90	102		FINE GRAY SAND
12	102	116		GRAY SANDSTONE

Total Depth	Producing Zone Material	Bottom of Producing Zone
116	SANDSTONE	116

Producing Zone Material: Sand Shell
 Broken Shell Limestone Other: SANDSTONE
 Interval of Producing Zone: _____
 Well Casing Seal: Grout

DEPARTMENT OF ENVIRONMENTAL REGULATION
WELL COMPLETION REPORT

OWNER: SOUTH DAVEN BRANCH WATER
Last Name First Name Initial
3200 S. STATE ROAD 111
Number Street
DAVEN BRANCH
City State
27000 30000
Area Code Phone Number Zip Code

WELL LOCATION:
% of Section
 IN-SH IE WI
Latitude N S
Longitude W E
Locate in Section
3200 S. STATE ROAD 111
Number Street/Road
27000
City State
DAVEN BRANCH
City County

OWNER WELL NUMBER OR NAME: 17

DRILL METHOD: Rotary Cable Tool Jet Auger
 Other:

SURFACE CASING, CASING, AND LINER MATERIAL:

Steel Dia. (in.)	Steel S. Steel (in. (ft.))	From (ft.)	To (ft.)	Schedule No.	Joints*
12	47.56 (253)	0	173	STD W.	
12	47.39 (252)	0	31		

* Describe Material:
* TC = Threaded and Coupled, TCW = Threaded, Coupled, and Welded,
W = Welded, B = Bonded (N/C), O = Other:

GROUT: None Neat Cement Other:

Type and Percent of Additives and Grout Volume or Number of 50 lb. Sacs
2 BAGS NEAT PORTLAND CEMENT
1 BAG NEAT PORTLAND CEMENT

FINISH: Open Hole Perforated or Slotted Casing Gravel Pack
 Sandpoint or Screen Attached to Well Casing Sandpoint or Screen Telescoped with Packer Inside Casing (Packer Material):

Sandpoint/Screen Material	Dia (in.)	Slot Size (in.)	From (ft.)	To (ft.)

Other Finish:

QUALITY TEST: None Bacteria Chemical
By: TO BE DONE BY OTHERS

Clear Colored Sulphur Salty Iron Other:

Conductance (Microhmohm) Chloride

Hardness ppm as calcium carbonate
Well Disinfected: No Yes (Date)

WELL TEST, by: Natural Flow G.P.M. Airlift

Bailor Permittance Pump Test Pump None

Discharge Measured by: Bailor Estimated Current Meter
 Orifice Transducer Venturi Volumetric Other:

Measured Static Water Level: 27.1 ft.

Measured Pumping Water Level: 27.1 ft.

After 30 hours at 1000 G.P.M.

Specific Capacity: 100 G.P.M./ft. of drawdown

Measuring Pt. (Type): TOP OF CASING
Which is 27.1 ft. Above Below Level Surface

Elevation of Measuring Pt.: Above Below M.S.L.

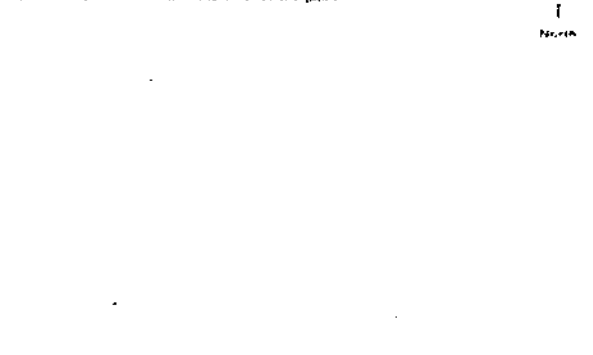
WELL EQUIPMENT: Open Cased Valved
 Permanent Pump Temporary Pump

Type Pump: Centrifugal Cylinder Jet Turbine
 Turbine Other:

Power: Direct Electric Gasoline Other:
Horsepower: Capacity: G.P.M.
Install/Injection Depth: ft.

DER FORM 17-1, 122 (38)

WELL NUMBER: 17
TYPE OF WELL: Water Supply Other
USE: Domestic Industrial Public Supply
SKETCH LOCATION OF WELL: SEE PLAN



GEOPHYSICAL LOGS: Type: By

Bore Hole (in.)	Casing Size (in.)	Depth (ft.)		Examine cuttings at 20 ft. or smaller intervals and at changes. Give color, grain size and type of material. Note any cavities, indicate producing zones. Attach additional sheets if necessary.
		From	To	
12	9	9	9	LIGHT BROWN SAND
12	9	9	27	WHITE SAND SHELL & SOME GRAVEL
12	27	27	55	BROWN MED. SAND
12	55	55	80	LIGHT TAN FINE SAND
12	80	80	89	FINE GRAY SAND
12	89	89	97	MED-COARSE GRAY SAND
12	97	97	103	MED-COARSE GRAY SAND & ROCK
12	103	103	121	GRAY SAND & ROCK

Total Depth: 121 ft. Producing Zone Material: Sand Shell

Broken Shell Limestone Other: SAND & ROCK

Top of Producing Zone: 103 ft., Bottom of Producing Zone: 121 ft.

Drill Cuttings Sent to Bureau of Geology

License No. 13 02 Water Well Contractor's Signature: [Signature] Position: Contractor

Completion Date: 11/23/82 Dr. J. Signature: [Signature]

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
WELL COMPLETION REPORT

OWNER: VERDI BROWN COMPANY
Last Name First Name Initial
1000 S. GARDNER ST. #101
Number Street
WESLEY FLA
City State
33402
Area Code Phone Number Zip Code

WELL LOCATION:
% of Section
Township 5 (N-S) Range 42 (E-W)
Latitude 32 17 45 N
D.M. Min. Sec.
Longitude 82 17 31 W
Deg. Min. Sec.
33406 S. GARDNER RD #101
Number Street/Road
10 101 SEVEN LOW BLD
Lot No. Subdivision
WESLEY FLA
City County

OWNER WELL NUMBER OR NAME (15)

DRILL METHOD: Rotary Cable Foot Jet Auger
 Other:

SURFACE CASING, CASING, AND LINER MATERIAL:

Steel Dia. (In.)	Steel	From (Ft.)	To (Ft.)	Schedule No.	Joints*
12	49.56 (A53)	0	106.7	SP-10	

* Describe Material:
* TC = Threaded and Coupled, TCW = Threaded, Coupled, and Welded,
W = Welded, B = Bonded (PVC), O = Other

GROUT: None Neat Cement Other:

Type and Percent of Additives and Grout Volume or Number of 94 lb Sacks

From (Ft.)	To (Ft.)
0	106.7

FINISH: Open Hole Perforated or Slotted Casing Gravel Pack
 Sandpoint or Screen Attached to Well Casing Sandpoint or Screen
Telescoped with Packer Inside Casing (Packer Material):

Sandpoint/Screen Material

Di. (In.)	Slot Size (In.)	From (Ft.)	To (Ft.)
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Other Finish:

QUALITY TEST: None Bacteria Chemical

By: Health Dept. HSGS Other
 Clear Colored Sulphur Salty Iron Other
Conductance (Microhm) Chloride
Hardness pH Temp OF
Well Disinfecting: No Yes **TO BE DONE BY OTHERS**

WELL TEST, by: Normal Flow GPM Anhyd
 Baker Permeation Pump Test Pump N/A
Discharge Measured by: Meter Estimated Current Meter
 Orifice Triangulation Volumetric Other

Measured Static Water Level 101.8 ft.
Measured Pumping Water Level 102.1 ft.
After 1st hours At 10:00 P.M.
Specific Capacity 1.50 GPM per ft. of drawdown
Measuring Pt. (Description) TOP OF CASING
Which is 1st 2nd 3rd 4th 5th
Elevation of Measuring Pt. 1st 2nd 3rd 4th 5th

WELL EQUIPMENT: Open Cased Mined
 Permanent Packer Temporary Packer
Type Pump: Centrifugal Electric Jet Intermediate
 Turbine Other
Power: Diesel Electric Gas Other
Horsepower 1/2 1 2 3 4 5 6 7 8 9 10 15 20 25 30 35 40 45 50 60 70 80 90 100
Installation Depth 106.7

TYPE OF WORK: New Construction Repair
 Draining Plugging
 Other

PERMIT NUMBER: WUW 50-58353

WELL NUMBER: 15

TYPE OF WELL: Water Well Test Well Recovery Drainage
 Waste Disposal Rehabilitation Other
USE: Domestic Irrigation Industrial Livestock Public Supply
 Other

SKETCH LOCATION (IF WELL) on station in box of landmarks, giving distance and direction from known points, shall be either referenced print

GEOPHYSICAL LOGS: Type: By:

WELL LOG

Bore Hole (In.)	Casing Size (In.)	Depth (Ft.)		Examine cuttings at 20 ft. or smaller intervals and at changes. Give color, grain-size and type of material. Note any cavities. Indicate producing zones. Attach additional sheets if necessary.
		From	To	
14	12	0	7	LIGHT BROWN SAND
14	12	7	12	BROWN ROCK SHELL SAND
14	12	12	16	SHELL SAND
14	12	16	24	TAN COARSE SAND
14	12	24	31	DOCK BROWN SAND
14	12	31	64	TPU SAND
14	12	64	90	TAN SANDY TRACES OF ROCK
14	12	90	104	GRAY SANDY ROCK
14	12	104	106.7	GRAY SANDY ROCK
				CEMENTED 106.7" OF 12" BLACK STEEL CASING
11	12	120	120	GRAY SANDY ROCK

Total Depth 120 Ft. Producing Zone Material: Sand Shell
 Limestone Other SANDY ROCK
 Iron Steel Limestone Other
Last Producing Zone 104 Ft. Bottom of Producing Zone 106.7 Ft.
Vertical Casing Test to Depth of 106.7 Ft.
Verdi Brown Company
Signature of Well Contractor's Representative
Verdi Brown
Signature of Inspector

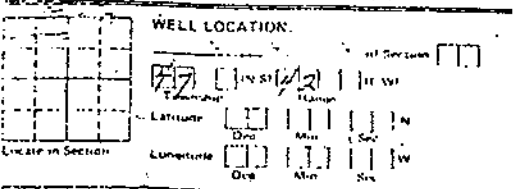
DEPARTMENT OF ENVIRONMENTAL REGULATION
WELL COMPLETION REPORT

OWNER: SOLIMA WARM BEACH, VT
Last Name: SOLIMA First Name: WARM BEACH State: VT

Address: 3300 STATE RD 71
City: WATERBURY State: VT

Phone Number: 802 244 1100 Zip Code: 05671

WELL LOCATION: 77 (Section) 12 (Town) 11 (W)



Lot No. 12 Subdivision SEATTLE BLDG

City WATERBURY State VT

OWNER WELL NUMBER OR NAME: 10

DRILL METHOD: Rotary Cable Tool Jet Auger

SURFACE CASING, CASING, AND LINER MATERIAL:

Steel Dia. (in.)	Steel Wt. (lb/ft)	From (ft)	To (ft)	Schedule No.	Notes
12	49.56	0	10	10	STEEL
12	47.39	0	10	10	STEEL

Describe Material:
 * TC = Threaded and Coupled, TCW = Threaded, Coupled and Weighted,
 W = Welded, B = Banded (PVC), O = Other

GROUT: None Neat Cement Other

Type and Percent of Additives and Grout Volume, or Number of 94 lb. Sacks

From (ft)	To (ft)	Notes
0	28	12 SACKS NEAT CEMENT
0	10	6 SACKS NEAT PORTLAND

FINISH: Open Hole Perforated or Slotted Casing Gravel Pack
 Sandpoint or Screen Attached to Well Casing Sandpoint or Screen
 Telescoped with Packer Inside Casing (Packer Material: _____)

Sandpoint/Screen Material	Dia. (in.)	Slot Size (in.)	From (ft)	To (ft)

Other Finish: _____

QUALITY TEST: None Radiology Chemical
 By: TO BE DONE BY OTHERS Date: _____

By: Health Dept. HSGS Other

Clear Colored Sulphur Salty Iron Other

Conductance (Microhm) _____ Chloride _____

Hardness _____ pH _____ Temp _____

W. Production No Yes (Date) _____

WELL TEST: Natural Flow GPM Art. It.

Ball Permanent Plug Test Pump Nitro
 Test Pump Measured By: Ball Volumetric Current Meter

Orifice Test Pump Orifice Volumetric Other

Measured Static Water Level: 148.5

Measured Pumping Water Level: 148.5

After 10 Minutes At 100 GPM

Specific Capacity: 1.0 (GPM/ft)

Recovery by 100 GPM 100 ft of Casing

W. by 100 GPM 100 ft of Casing

Production of Measuring Pt. Above Below MSL

WELL EQUIPMENT: Open Cased Valved

Appurtenant Pumping Temporary Pumping

Valve Type: Control Valve Check Valve Ball Submersible

Pressure: Orifice Electric Gasoline Other

Flowmeter: Orifice Coriolis GPM

DATE of Installation Depth: _____

REG FORM 12-1 (92) (30)

Date: 06-20-82

WELL NUMBER: _____

TYPE OF WELL: Water Well Test Well Recharge Drainage
 Waste Disposal Observation Other

USE: Domestic Irrigation Industrial Livestock Public Utility
 Other

SKETCH LOCATION OF WELL in relation to local landmarks, giving distance and direction from nearest town, road or other reference point

North



GEOPHYSICAL LOGS: Type: _____

WELL LOG

Rise Hole (in.)	Casing Size (in.)	Depth (ft.)		Examine cuttings at 25 ft or smaller intervals and at changes. Give color, grain size and type of material. Note any cavities, indicate producing zones. Attach additional sheets if necessary.
		From	To	
12	0	8		LIGHT TAN SAND
12	8	25		WHITE FINE SAND w/ SOME SHELL
12	25	40		LIGHT BROWN FINE SAND
12	40	64		LIGHT TAN FINE SAND
12	64	88		" " " "
12	88	96		LIGHT GRAY FINE SAND
12	96	102		GRAY SAND + ROCK
12	102	118		GRAY SAND/ROCK

Total Depth: 118 ft. Producing Zone Material: Sand Shell
 Rippled Shell Limestone Other: SAND/ROCK

Top of Producing Zone: 102 ft., Bottom of Producing Zone: 118 ft.

Initial Cuttings Sent to Bureau of Geology

Signature: [Signature] Date: 06-20-82

Completion Date: _____



CERTIFIED MAIL
RETURN RECEIPT REQUESTED

NOTICE OF PERMIT ISSUANCE

In the Matter of an Application
for Permit by:

C. Lawton McCall,
Director of Engineering FILE NO.: WC50-282171
Palm Beach County
Water Utilities Department PROJECT: P.B.Co. S.R.W.R.C. Drinking Water
2065 Prairie Road Wells Nos. 3W-15, 16, 17 & 18
West Palm Beach, FL 33416-6097

Enclosed is Permit Number WC50-282171 issued to C. Lawton McCall, Director of Engineering, Palm Beach County Water Utilities Department, to construct 4 drinking water wellheads issued pursuant to Section 403, Florida Statutes (F.S.).

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within fourteen (14) days of receipt of this permit. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information:

- a. The name, address and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed;
- b. A statement of how and when each petitioner received notice of the Health Unit's action or proposed action;
- c. A statement of how each petitioner's substantial interests are affected by the Health Unit's action or proposed action;
- d. A statement of the material facts disputed by Petitioner, if any;
- e. A statement of facts which petitioner contends warrant reversal or modification of the Health Unit's action or proposed action;

Page Two

- f. A statement of which rules or statutes petitioner contends require reversal or modification of the Health Unit's action or proposed action; and
- g. A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Health Unit to take with respect to the action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Health Unit's final action may be different from the position taken by it in this permit. Persons whose substantial interests will be affected by any decision of the Health Unit with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within fourteen (14) days of receipt of this notice, in the Office of General Counsel at the above address of the Department of Environmental Protection. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S. and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code (F.A.C.).

This permit is final and effective on the date filed with Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within thirty (30) days from the date the Final Order is filed with the Clerk of the Department.

Executed in West Palm Beach, Florida, This 23 Day of February, 1996.

STATE OF FLORIDA
PALM BEACH COUNTY PUBLIC HEALTH UNIT



Umesh Asrani, P.E., Assistant Director
Environmental Health & Engineering
901 Evernia Street
West Palm Beach, FL 33401
(407) 355-3070



CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT ISSUANCE was mailed to the applicant by certified mail and to all listed persons before the close of business on February 23, 1996.

Clerk Stamp

Palm Beach County Public Health Unit
Environmental Health and Engineering
Plan Review and Permit Section
APPROVED

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52(II), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Elaine B... 2/23/96
(Clerk) (Date)

cc: Utility: Same as Applicant
Engineer-of-Record: Mark R. Nelson, P.E.
Office of General Counsel, DEP/Tallahassee
Dept. of Environmental Protection, W.P.B.



PERMITTEE:

C. Lawton McCall,
Director of Engineering
Palm Beach County
Water Utilities Department
2065 Prairie Road
Palm Beach FL 33416-6097

I.D. No.: 450-4393
Permit/Certification: WC50-282171
Date of Issue: 2/23/96
Expiration Date: 2/23/2001
Latitude/Longitude: *(see below)
Section/Township/Range: 4/46/42
Project: P.B.C. S.R.W.R.C. Drinking Water
Wells Nos. 3W-15, 16, 17 & 18

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-550, 62-555 & 62-560. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

Construct: Four (4) wellheads consisting of 1,500 gpm @ 120 TDH submersible turbine pumps, with all required appurtenances, as shown on the approved plans.

In Accordance With: Application DEP 17-555.910(1) dated December 20, 1995, engineering plans sheet nos. G1-5, 6C-1, GM-1, M-1 and specifications received December 27, 1995 and plan sheets GC-1 and 2 and M-2 received February 12, 1996 and letters dated January 29, 1996 and January 9, 1996.

Located: East of Florida's Turnpike and west of Hagen Ranch Road and Canal L-30, west of Delray Beach, Florida.

Subject To: General Conditions 1 - 17 and Specific Conditions 1 - 8.

*3W-15 - 26° 29' 04"N/80° 10' 03"W

*3W-16 - 26° 29' 04"N/80° 10' 14"W

*3W -17 - 26° 29'06"N/80°09'57"W

*3W -18 - 26°29'18"N/80°10'10"W

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282171

Date of Issue: 2/23/96

Expiration Date: 2/23/2001

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Section 403.161, 403.727, or 403.859 through 403.061, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agent, employees, servants or representatives.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
5. This permit does not relieve the permittee from liability from harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefor caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department Rules.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-9393

Permit/Certification No.: WC50-282171

Date of Issue: 2/23/96

Expiration Date: 2/23/2001

GENERAL CONDITIONS:

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:
 - a. having access to and copying any records that must be kept under the conditions of the permit;
 - b. inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the Department with the following information:
 - a. a description of and cause of noncompliance; and
 - b. the period on noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the Department, may be used by the Department as evidence in any enforcement case arising under the Florida Statutes of department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282171

Date of Issue: 2/23/96

Expiration Date: 2/23/2001

GENERAL CONDITIONS:

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 62-4.12 and 62-30.30, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the department.
12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.
13. This permit also constitutes:
 - () Determination of Best Available Control Technology (BACT)
 - () Determination of Prevention of Significant Deterioration (PSD)
 - () Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
 - () Compliance with New Source Performance Standards
14. The permittee shall comply with the following monitoring and record keeping requirements:
 - a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.
 - b. The permittee shall retain at the facility, or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit and records of all data used to complete the application for this permit. The time period of retention shall be at least three (3) years from the date on the sample, measurement, report or application unless otherwise specified by department rule.

PERMITTEE:

I. D. No.: 450-4393

C. Lawton McCall

Permit/Certification No.: WC50-282171

Date of Issue: 2/23/96

Expiration Date: 2/23/2001

GENERAL CONDITIONS: (14 Cont'd.)

- c. Records of monitoring information shall include:
- the date, exact place, the time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.
15. When requested by the department, the permittee shall, within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.
16. In the case of an underground injection control permit, the following permit conditions also shall apply:
- a. All reports or information required by the Department shall be certified as being true, accurate and complete.
 - b. Reports of compliance or noncompliance with, or any progress reports on, requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.
 - c. Notification of any noncompliance which may endanger health or the environment shall be reported verbally to the Department within twenty four (24) hours and again within seventy two (72) hours and a final written report provided within two (2) weeks.
 - 1. The verbal reports shall contain any monitoring or other information which indicate that any contaminant may endanger an underground source of drinking water and any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.
 - 2. The written submission shall contain a description of and a discussion of the cause of the noncompliance and if it has not been corrected, the anticipated time the noncompliance is expected to continue, the steps being taken to reduce, eliminate and prevent recurrence of the noncompliance and all information required by Rule 17-28.230(4)(b), F.A.C.

PERMITTEE:

I.D. No.: 450-4393

C. Lawton McCall

Permit/Certification No.: WC50-282171

Date of Issue: 2/23/96

Expiration Date: 2/23/2001

GENERAL CONDITIONS: (16 CONT'D.).

- d. The Department shall be notified at least one hundred eighty (180) days before conversion or abandonment of an injection well, unless abandonment within a lesser period of time is necessary to protect waters of the state.
17. The following conditions also shall apply to a hazardous waste facility permit.
- a. The following reports shall be submitted to the Department:
 1. Manifest discrepancy report. If a significant discrepancy in a manifest is discovered, the permittee shall attempt to rectify the discrepancy. If not resolved within fifteen (15) days after the waste is received, the permittee shall immediately submit a letter report, including a copy of the manifest, to the Department.
 2. Unmanifested waste report. The permittee shall submit an unmanifested waste report to the Department within fifteen (15) days of receipt of unmanifested waste.
 3. Biennial report. A biennial report covering facility activities during the previous calendar year shall be submitted by March 1 of each even numbered year pursuant to Chapter 17-730, F.A.C.
 - b. Notification of any noncompliance which may endanger health or the environment, including the release of any hazardous waste that may endanger public drinking water supplies or the occurrence of a fire or explosion from the facility which could threaten the environment or human health outside the facility, shall be reported verbally to the Department within twenty four (24) hours and a written report shall be provided within five (5) days. The verbal report shall include the name, address, I.D. number and telephone number of the facility, its owner or operator, the name and quantity of materials involved, the extent of any injuries, an assessment of actual or potential hazards and the estimated quantity and disposition of recovered material. The written submission shall contain:
 1. A description and cause of the noncompliance.
 2. If not corrected, the expected time of correction and the steps being taken to reduce, eliminate and prevent recurrence of the noncompliance.
 - c. Reports of compliance or noncompliance with, or any progress reports on, requirements in any compliance schedule shall be submitted no later than fourteen (14) days after each schedule date.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282171

Date of Issue: 2/23/96

Expiration Date: 2/23/2001

GENERAL CONDITIONS: (17 Cont'd.)

- d. All reports or information required by the Department by a hazardous waste permittee shall be signed by a person authorized to sign a permit application.

SPECIFIC CONDITIONS:

1. The permittee shall retain a Florida registered professional engineer as the engineer of record for this project. Upon completion of construction, the engineer of record or the system's professional engineer who was responsible for overseeing construction, shall submit certification of complete conformity to the plans and specifications as approved. Certification to such inspection on DEP Form 17-555.910(9) along with one (1) set of record drawings shall be provided to the Palm Beach County Public Health Unit (PBCPHU) prior to release for use. Drawings are to be at the same scale and in the same sequence as those submitted and approved for permit. Deviations from original permitted drawings are to be highlighted and/or noted for Unit's review. A written release for use shall be obtained from the PBCPHU prior to placing the newly constructed facilities in service.
2. Prior to construction of any well, the permittee shall obtain the services of a certified well driller who shall make application for and obtain a well drilling permit from the South Florida Water Management District in accordance with Department rules and regulations.
3. All wells shall be cleaned, disinfected and bacteriologically cleared in accordance with Chapter 62-555.315(3), F.A.C. The bacteriological clearance data, copies of the well construction permits, the well driller's completion reports and a detailed drawing of the well construction shall be submitted to the PBCPHU, with the engineer's certification and a release for use shall be obtained therefrom prior to placing any wells in service.
4. Bacteriological samples for all wells shall be taken daily for twenty (20) or more consecutive workdays. Each sample shall be collected after pumping the well for twenty (20) to thirty (30) minutes at the rated capacity of the permanent pump each consecutive day. The daily samples shall be handled in accordance with acceptable methods as stated in "Standard Methods for the Examination of Water and Wastewater", 16th Edition, 1985.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282171

Date of Issue: 2/23/96

Expiration Date: 2/23/2001

SPECIFIC CONDITIONS:

5. As a community public water system, chemical analysis of the raw water for nitrate, nitrite, inorganics, volatile organics, pesticides and PCBs, turbidity, radionuclides, group I and II unregulated organics and secondary contaminants of Chapter 62-550, F.A.C. shall be submitted to the Department prior to release for use.

Only those parameters for which maximum contaminant levels were exceeded in the raw water need to be analyzed for in the finished water. In the event that the levels found are greater than the maximum contaminant levels set by Chapter 62-550, F.A.C., corrective measures must be taken to bring it into compliance prior to release for use.

Contact Palm Beach County Environmental Resources Management for information regarding their required chemical analysis, also required prior to release.

6. Provide the actual documented well yield in gallons per minute prior to relapse of any wells for use. If actual yield is less than the expected yield described in the permit application package, the rated capacity of the treatment system may be decreased accordingly.
7. Coatings and the chemicals that are contained in coatings which are applied to a surface in contact with drinking water, or are otherwise on equipment surfaces that come into contact with the water and additives and chemicals used to treat water shall be certified as being in conformance with American National Standards Institute (ANSI) and NSF International Standard 60-1988 by an entity certified by ANSI. Water system components which come into contact with drinking water shall be certified as being in conformance with ANSI/NSF Standard 61-1991, Drinking Water System Components, by an entity certified by ANSI.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282171

Date of Issue: 2/23/96

Expiration Date: 2/23/2001

SPECIFIC CONDITIONS:

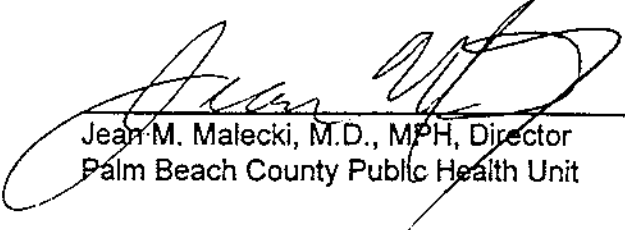
8. Emergency Discharge Monitoring Plan

In the event of an emergency discharge to the retention ponds at the SRWRF, PBCWUD will immediately discontinue the use of wells 17 and 18 and notify the PBCPHU. Seven (7) days after the cessation of the emergency discharge, PBCWUD will perform a disinfection of wells 17 and 18 and perform a clearance of the well (two consecutive coliform free samples). Upon approval from the PBCPHU to return wells 17 and 18 to service, monitor wells SSRW-0001 and SSRW-0004 (permit designation MW-INW and MW-4SW) that have been installed as part of the ground water monitoring system at the SRWRF will be monitored on a daily basis for a period of thirty (30) days. Coliform data collected over this period will be compared to background levels. Should coliforms levels exceed those specified in 62-550.310(3), (more than 5 percent of the samples collected show coliform positive) PBCWUD will perform another disinfection of wells 17 and 18 and repeat the clearance procedure specified above. This program will continue for a period of thirty (30) days from the cessation of the emergency discharge to the retention ponds. Following this period, PBCWUD will return to quarterly sampling of the monitor wells.

ISSUED THIS 23rd DAY OF February, 1996

PALM BEACH COUNTY PUBLIC HEALTH UNIT

STATE OF FLORIDA



Jean M. Malecki, M.D., MPH, Director
Palm Beach County Public Health Unit

1565.1920/3.1.6



STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

NOTICE OF PERMIT

In the Matter of an Application
for Permit by:

C. Lawton McCall,
Director of Engineering
Palm Beach County
Water Utilities Department
2065 Prairie Road
West Palm Beach, FL 33416-6097

PERMIT NO.: WC50-282170

PROJECT: PBC System #2, Wellheads nos. 2W-14 and 2W-15

Enclosed is Permit Number WC50-282170, to construct Palm Beach County System #2 Wellheads 2W-14 and 2W-15, issued pursuant to Chapter 403.087, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within thirty (30) days from the date this Notice is filed with the Clerk of the Department.

If you have any questions, please contact **Robert J. Mitchell**, of this office, phone (407) 355-4045.

Executed in West Palm Beach, Florida, this 8th Day of May, 1996.

STATE OF FLORIDA

Umesh Asrani, P.E., Assistant Director
Environmental Health & Engineering

DISTRICT IX



CERTIFICATE OF SERVICE

The undersigned, duly designated deputy clerk, hereby certifies that this NOTICE OF PERMIT and all copies were mailed to the listed persons before the close of business on May 8, 1996.

CLERK STAMP

Palm Beach County Public Health Unit
Environmental Health and Engineering
Plan Review and Permit Section
APPROVED

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(9), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 5/8/96
Clerk Date

cc: Office of General Counsel, DEP, Tallahassee
DEP, West Palm Beach
Engineer-of-Record, Mark R. Nelson, P. E.



STATE OF FLORIDA
DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

PERMITTEE:

C. Lawton McCall,
Director of Engineering
Palm Beach County
Water Utilities Department
2065 Prairie Road
West Palm Beach,
Florida 33416-6097

I.D. No.: 450-4393
Permit/Certification No.: WC50-282170
Date of Issue: 5/8/96
Expiration Date: 5/8/2001
County: Palm Beach
Latitude/Longitude: 26°28'00"N/80°01'00"W
Section/Township/Range: 21/44/42
Project: PBC System #2, Wellheads Nos.
2W-14 & 2W-15

This permit is issued under the provisions of Chapter 403, Florida Statutes and Florida Administrative Code Rule 62-550, 62-555 & 62-560. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

Construct: Two (2) raw water wellheads with 1,000 gpm @ 92 ft. TDH submersible turbine pumps and all required appurtenances as shown on the approved engineering plans.

In Accordance With: Application DEP Form 62-555.910(1), dated December 20, 1995, engineering plans sheet nos. G1-5, 2C 1 & 2, GM-1, M-1 and specifications received December 27, 1995; revised plan sheets G1 & 2 and M-2 received February 12, 1996 and letter dated January 29, 1996.

Located: West of Pinehurst Drive, just north of Canal L-10, west of Greenacres, Florida.

Subject To: General Conditions 1 - 17 and Specific Conditions 1 - 8.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282170

Date of Issue: 5/8/96

Expiration Date: 5/8/2001

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Section 403.161, 403.727, or 403.859 through 403.061, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agent, employees, servants or representatives.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.
5. This permit does not relieve the permittee from liability from harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefor caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution or contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282170

Date of Issue: 5/8/96

Expiration Date: 5/8/2001

GENERAL CONDITIONS:

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:
 - a. Having access to and copying any records that must be kept under the conditions of the permit;
 - b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the Department with the following information:
 - a. a description of and cause of noncompliance; and
 - b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue and steps being taken to reduce, eliminate and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the Department, may be used by the Department as evidence in any enforcement case arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282170

Date of Issue: 5/8/96

Expiration Date: 5/8/2001

GENERAL CONDITIONS:

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.12 and 62-30.30, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department.
12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.
13. This permit also constitutes:
 - () Determination of Best Available Control Technology (BACT)
 - () Determination of Prevention of Significant Deterioration (PSD)
 - () Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
 - () Compliance with New Source Performance Standards
14. The permittee shall comply with the following monitoring and record keeping requirements:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department,
 - b. The permittee shall retain at the facility, or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit and records of all data used to complete the application for this permit. The time period of retention shall be at least three (3) years from the date on the sample, measurement, report or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - the date, exact place, the time of sampling measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282170

Date of Issue: 5/8/96

Expiration Date: 5/8/2001

GENERAL CONDITIONS:

15. When requested by the Department, the permittee shall, within a reasonable time, furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be submitted or corrected promptly.
16. In the case of an underground injection control permit, the following permit conditions also shall apply:
 - a. All reports or information required by the Department shall be certified as being true, accurate and complete.
 - b. Reports of compliance or noncompliance with, or any progress reports on, requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.
 - c. Notification of any noncompliance which may endanger health or the environment shall be reported verbally to the Department within twenty four (24) hours and again within seventy two (72) hours and a final written report provided within two (2) weeks.
 1. The verbal reports shall contain any monitoring or other information which indicate that any contaminant may endanger an underground source of drinking water and any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.
 2. The written submission shall contain a description of and a discussion of the cause of the noncompliance and if it has not been corrected, the anticipated time the noncompliance is expected to continue, the steps being taken to reduce, eliminate and prevent recurrence of the noncompliance and all information required by Rule 17-28.230(4)(b), F.A.C.
 - d. The Department shall be notified at least one hundred eighty (180) days before conversion or abandonment of an injection well, unless abandonment within a lesser period of time is necessary to protect waters of the state.
17. The following conditions also shall apply to a hazardous waste facility permit.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282170

Date of Issue: 5/8/96

Expiration Date: 5/8/2001

GENERAL CONDITIONS: (17. Cont'd.)

- a. The following reports shall be submitted to the Department:
 1. Manifest discrepancy report. If a significant discrepancy in a manifest is discovered, the permittee shall attempt to rectify the discrepancy. If not resolved within fifteen (15) days after the waste is received, the permittee shall immediately submit a letter report, including a copy of the manifest, to the Department.
 2. Unmanifested waste report. The permittee shall submit an unmanifested waste report to the Department within fifteen (15) days of receipt of unmanifested waste.
 3. Biennial report. A Biennial report covering facility activities during the previous calendar year shall be submitted by March 1 of each even numbered year pursuant to Chapter 17-730, F.A.C.
- b. Notification of any noncompliance which may endanger health or the environment, including the release of any hazardous waste that may endanger public drinking water supplies or the occurrence of a fire or explosion from the facility which could threaten the environment or human health outside the facility, shall be reported verbally to the Department within twenty four (24) hours and a written report shall be provided within five (5) days. The verbal report shall include the name, address, I.D. number and telephone number of the facility, its owner or operator, the name and quantity of materials involved, the extent of any injuries, an assessment of actual or potential hazards and the estimated quantity and disposition of recovered material. The written submission shall contain:
 1. A description and cause of the noncompliance.
 2. If not corrected, the expected time of correction and the steps being taken to reduce, eliminate and prevent recurrence of the noncompliance.
- c. Reports of compliance or noncompliance with, or any progress reports on, requirements in any compliance schedule shall be submitted no later than fourteen (14) days after each schedule date.
- d. All reports or information required by the Department by a hazardous waste permittee shall be signed by a person authorized to sign a permit application.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282170

Date of Issue: 5/8/96

Expiration Date: 5/8/2001

SPECIFIC CONDITIONS:

1. The permittee shall retain a Florida registered engineer as the engineer of record for this project. Upon completion of construction, the engineer of record or the system's professional engineer who was responsible for overseeing construction, shall submit certification of complete conformity to the plans and specifications as approved. Certification to such inspection on DEP Form 17-555.910(9) along with one (1) set of record drawings shall be provided to the Palm Beach County Public Health Unit (PBCPHU) prior to release for use. Drawings are to be at the same scale and in the same sequence as those submitted and approved for permit. Deviations from the original permitted drawings are to be highlighted and/or noted for Unit's review. A written release for use shall be obtained from the PBCPHU prior to placing the newly constructed facilities in service.
2. Prior to construction of any well, the permittee shall obtain the services of a certified well driller who shall make application for and obtain a well drilling permit from the South Florida Water Management District in accordance with Department rules and regulations.
3. All wells shall be cleaned, disinfected and bacteriologically cleared in accordance with Chapter 62-555.315(3), F.A.C. The bacteriological clearance data, copies of the well construction permits, the well driller's completion reports and a detailed drawing of the well construction shall be submitted to the PBCPHU, with the engineer's certification and a release for use shall be obtained therefrom prior to placing any wells in service.
4. Bacteriological samples for all wells shall be taken daily for twenty (20) or more consecutive workdays. Each sample shall be collected after pumping the well for twenty (20) to thirty (30) minutes at the rated capacity of the permanent pump each consecutive day. The daily samples shall be handled in accordance with acceptable methods as stated in "Standard Methods for the Examination of Water and Wastewater", 16th Edition, 1985.
5. As a community public water system, chemical analysis of the raw water for nitrate, nitrite, inorganics, volatile organics, pesticides and PCBs, turbidity, radionuclides, group I and II unregulated organics and secondary contaminants of Chapter 62-550, F.A.C. shall be submitted to the Department prior to release for use.

Only those parameters for which maximum contaminant levels were exceeded in the raw water need to be analyzed for in the finished water. In the event that the levels found are greater than the maximum contaminant levels set by Chapter 62-550, F.A.C., corrective measures must be taken to bring it into compliance prior to release for use.

PERMITTEE:

C. Lawton McCall

I.D. No.: 450-4393

Permit/Certification No.: WC50-282170

Date of Issue: 5/8/96

Expiration Date: 5/8/2001*

SPECIFIC CONDITIONS (5. Cont'd.)

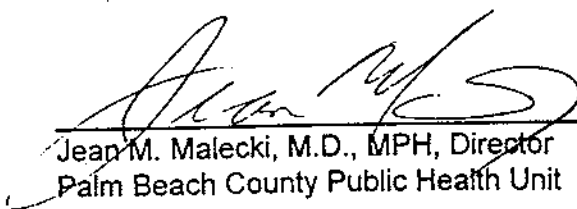
Contact Palm Beach County Environmental Resources Management for information regarding their required chemical analysis, also required prior to release.

6. Provide the actual documented well yield in gallons per minute prior to release of any wells for use. If actual yield is less than the expected yield described in the permit application package, the rated capacity of the treatment system may be decreased accordingly.
7. Coatings and the chemicals that are contained in coatings which are applied to surfaces in contact with drinking water, or are otherwise on equipment surfaces that come into contact with the water and additives and chemicals used to treat water shall be certified as being in conformance with American National Standards Institute (ANSI) and NSF International Standards 60-1988 by an entity certified by ANSI. Water system components which come into contact with drinking water shall be certified as being in conformance with ANSI/NSF Standard 61-1991, Drinking Water System Components, by an entity certified by ANSI.
8. For new wells placed in areas of existing sanitary sewers, the sewers in Zone One and Two must be pressure tested at each point, grouted and sealed with proof of testing provided to the PBCPHU prior to release of the well for service.

ISSUED THIS 8th DAY OF MAY, 1996

PALM BEACH COUNTY PUBLIC HEALTH UNIT

STATE OF FLORIDA



Jean M. Malecki, M.D., MPH, Director
Palm Beach County Public Health Unit



Appendix B



Lithologic Descriptions

Lithologic Logs

System 2W

LITHOLOGIC DESCRIPTION

Date :
Contractor : Southeast drilling services Inc.
Location : System # 2
Well : # 14

0'-5' Sand 100%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

5'-50' Shell 95%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary) but large pieces and whole individuals are present. Fossils include gastropods and plecy pods. All individuals are recrystallized.

Sand 5%, white to light tan, fine grained, well rounded and moderately sorted, medium to coarse sand, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

50'-60' Limestone 80%, medium to dark gray, wackestone - packstone, contains carbonate sand-quarts sand, recrystallized (clear tan rhombs), poorly cemented, intergranular porosity is present, rock appears to have undergone weathering (caliche pseudomorph).

Sand 5%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Shell 15%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary) hash like in zones. Fossils include gastropods and plecy pods. All individuals are recrystallized.

60'-100' Limestone 95%, light to medium gray, wackestone, recrystallized, contains carbonate sand- bioclasts- and trace quarts and lithics, recrystallized (clear tan rhombs), cemented with abundant pore filling calcite spar cement (white), poor to moderately cemented, intergranular and moldic porosity is present.

Sand 5%, white to light tan, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Shell 5%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), including gastropods and plecy pods.

100'-200' Limestone 95%, medium to dark gray, fine grained wackestone, contains carbonate sand- abundant bioclast fragments- and trace quarts and lithics, poorly to moderately cemented, porosity is present.

Observer _____

Page _____ of _____

Shell 5%, tan opaque, some are etched, breakage is common (possibly secondary), including gastropods and plecypods.

LITHOLOGIC DESCRIPTION

Date :
Contractor : Southeast drilling services Inc.
Location : System # 2
Well : # 15

0'-50' Sand 100%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

50'-70' Sand 80%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Limestone 10%, medium to dark gray, wackestone - packstone, contains carbonate sand-quarts sand, recrystallized (clear tan rhombs), poorly cemented, intergranular porosity is present, rock appears to have undergone weathering (caliche pseudomorph).

Shell 10%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), but large pieces are present suggesting closeness to source. Fossils including gastropods and plecyopods.

70'-80' Sand 30%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Limestone 50%, medium to dark gray, wackestone - packstone, contains carbonate sand-quarts sand, recrystallized (clear tan rhombs), poorly cemented, intergranular porosity is present, rock appears to have undergone weathering (caliche pseudomorph).

Shell 20%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), hash like in zones. Fossils including gastropods and plecyopods.

80'-145' Limestone 90%, medium to dark gray, wackestone - packstone, contains carbonate sand-quarts sand, recrystallized (clear tan rhombs), moderate to well cemented, intergranular porosity is present, rock appears to have undergone weathering, and is recrystallized.

Sand 5%, white to light tan, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Shell 5%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), hash like in zones. Fossils including gastropods and plecyopods.

145'-180' Limestone 65%, medium to dark gray, wackestone - packstone, contains carbonate sand-quartz sand, recrystallized (clear tan rhombs), moderate to well cemented, intergranular porosity is present. Rock is recrystallized calcite. Contains fragments of plecyopoda, and gastropoda.

Limestone 25%, medium to dark gray, packstone- grainstone, contains minor to trace carbonate sand and quartz sand, recrystallized (clear tan rhombs), moderately cemented, intergranular and interparticle porosity is present. Rock is recrystallized calcite. Contains abundant fragments of plecyopoda, and gastropoda.

Sand 5%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quartz based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Shell 5%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), hash like in zones. Fossils including gastropods and plecyopods.

180'-200' Limestone 65%, medium to dark gray, fine grained wackestone - packstone, contains carbonate sand- abundant bioclast fragments- and trace quartz and lithics, poorly cemented, porosity is present.

Sand 5%, white to light tan, fine grained, well rounded and well sorted, unimodal, quartz based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Shell 30%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), hash like in zones. Fossils including gastropods and plecyopods.

System 3W

LITHOLOGIC DESCRIPTION

Date :
Contractor : Southeast drilling services Inc.
Location : System SRWRF
Well : # 15

0'-5' Sand 70%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Soil 30%, brown to black, organic rich.

5'-100' Sand 100%, white to light tan, fine grained, well rounded and moderately sorted, medium to coarse sand, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

100'-165' Limestone 85%, light to medium tan/gray, wackestone to recrystallized packstone, contains carbonate sand- fine grained bioclasts- and trace quarts and lithics, recrystallized (clear tan rhombs), cemented with pore filling calcite spar cement (white), moderately cemented, intergranular porosity is present.

Sand 5%, white to light tan, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Shell 10%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), including gastropods and plecyopods.

165'-200' Limestone 80%, medium tan/orange, very fine grained packstone to coquina, contains carbonate sand- abundant bioclast fragments- and trace quarts and lithics, poorly cemented, porosity is present.

Limestone 15%, light to medium gray, wackestone to recrystallized packstone, contains carbonate sand- bioclasts- and trace quarts and lithics, recrystallized (clear tan rhombs), cemented with abundant pore filling calcite spar cement (white), moderately cemented, intergranular and moldic porosity is present.

LITHOLOGIC DESCRIPTION

Date :
Contractor : Southeast drilling services Inc.
Location : System SRWRF
Well : # 16

0'-5' Sand 70%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Soil 30%, brown to black, organic rich.

5'-100' Sand 100%, white to light tan, fine grained, well rounded and moderately sorted, medium to coarse sand, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

100'-158' Limestone 80%, light to medium gray, wackestone to recrystallized packstone, contains carbonate sand- bioclasts- and trace quarts and lithics, recrystallized (clear tan rhombs), cemented with abundant pore filling calcite spar cement (white), moderately cemented, intergranular and moldic porosity is present.

Sand 5%, white to light tan, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud. Z

Shell 15%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), including gastropods and plecypods.

158'-200' Limestone 70%, medium to dark gray, fine grained wackestone - packstone, contains carbonate sand- abundant bioclast fragments- and trace quarts and lithics, poorly cemented, porosity is present.

Limestone 25%, light to medium gray, wackestone to recrystallized packstone, contains carbonate sand- bioclasts- and trace quarts and lithics, recrystallized (clear tan rhombs), cemented with abundant pore filling calcite spar cement (white), moderately cemented, intergranular and moldic porosity is present.

Shell 5%, tan opaque, some are etched, breakage is common (possibly secondary), including gastropods and plecypods.

LITHOLOGIC DESCRIPTION

Date :
Contractor : Southeast drilling services Inc.
Location : System SRWRF
Well : # 17

0'-5' Sand 70%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Soil 30%, brown to black, organic rich.

5'-85' Sand 100%, white to light tan, fine grained, well rounded and moderately sorted, medium to coarse sand, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

85'-100' Limestone 80%, medium to dark gray, wackestone - packstone, contains carbonate sand-quarts sand, recrystallized (clear tan rhombs), poorly cemented, intergranular porosity is present, rock appears to have undergone weathering (caliche pseudomorph).

Sand 20%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

100'-160' Limestone 80%, light to medium gray, wackestone to recrystallized packstone, contains carbonate sand- bioclasts- and trace quarts and lithics, recrystallized (clear tan rhombs), cemented with abundant pore filling calcite spar cement (white), moderately cemented, intergranular and moldic porosity is present.

Sand 5%, white to light tan, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Shell 15%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), including gastropods and plecyopods.

160'-200' Limestone 95%, medium to dark gray, fine grained wackestone - packstone, contains carbonate sand- abundant bioclast fragments- and trace quarts and lithics, poorly cemented, porosity is present.

Shell 5%, tan opaque, some are etched, breakage is common (possibly secondary), including gastropods and plecyopods.

LITHOLOGIC DESCRIPTION

Date :
Contractor : Southeast drilling services Inc.
Location : System SRWRF
Well : # 18

0'-5' Sand 70%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Soil 30%, brown to black, organic rich.

5'-80' Sand 100%, white to light tan, fine grained, well rounded and moderately sorted, medium to coarse sand, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

80'-100' Limestone 80%, medium to dark gray, wackestone - packstone, contains carbonate sand-quarts sand, recrystallized (clear tan rhombs), poorly cemented, intergranular porosity is present, rock appears to have undergone weathering (caliche pseudomorph).

Sand 20%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

100'-163 Limestone 80%, light to medium gray, wackestone to recrystallized packstone, contains carbonate sand- bioclasts- and trace quarts and lithics, recrystallized (clear tan rhombs), cemented with abundant pore filling calcite spar cement (white), moderately cemented, intergranular and moldic porosity is present.

Sand 5%, white to light tan, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Shell 15%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), including gastropods and plecypods.

163'-200' Limestone 95%, medium to dark gray, fine grained wackestone - packstone, contains carbonate sand- abundant bioclast fragments- and trace quarts and lithics, poorly cemented, porosity is present.

Shell 5%, tan opaque, some are etched, breakage is common (possibly secondary), including gastropods and plecypods.

System 8W

LITHOLOGIC DESCRIPTION

Date :
Contractor : Southeast drilling services Inc.
Location : System # 8
Well : # 13

0'-5' Sand 90%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Surface debris 10%

5'-55' Surface debris 90%

Shell 10%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), but large pieces are present suggesting closeness to source. Fossils including gastropods and plecypods.

55'-85' Limestone 85%, medium to dark gray, wackestone - packstone, contains carbonate sand-quarts sand, recrystallized (clear tan rhombs), moderate to well cemented, intergranular porosity is present, rock appears to have undergone weathering, and is recrystallized.

Sand 5%, white to light tan, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Shell 10%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), but large pieces are present suggesting closeness to source. Fossils including gastropods and plecypods.

85'-170' Limestone 65%, medium to dark gray, wackestone - packstone, contains carbonate sand-quarts sand, recrystallized (clear tan rhombs), moderate to well cemented, intergranular porosity is present. Rock is recrystallized calcite spar. Contains fragments of plecypoda, and gastropoda.

Limestone 25%, medium to dark gray, packstone- grainstone (cocina hash), contains minor carbonate sand and quarts sand, recrystallized (clear tan rhombs), moderately cemented, intergranular and interparticle/cement reduced porosity is present. Rock is recrystallized calcite. Contains abundant fragments of plecypoda, and gastropoda.

Sand 5%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Shell 5%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), hash like in zones. Fossils including gastropods and plecytops.

170'-200' Limestone 75%, medium to dark gray, wackestone - packstone, contains carbonate sand-quartz sand, recrystallized (clear tan rhombs), moderate to well cemented, intergranular porosity is present. Rock is recrystallized calcite spar. Contains fragments of plecytopoda, and gastropoda.

Limestone 5%, medium to dark gray, packstone- grainstone (cocina hash), contains minor carbonate sand and quartz sand, recrystallized (clear tan rhombs), moderately cemented, intergranular and interparticle/cement reduced porosity is present. Rock is recrystallized calcite. Contains abundant fragments of plecytopoda, and gastropoda.

Shell 20%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), hash like in zones. Fossils including gastropods and plecytops. Increases towards base of section.

LITHOLOGIC DESCRIPTION

Date :
Contractor : Southeast drilling services Inc.
Location : System # 8
Well : # 14

0'-5' Sand 90%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Surface debris 10%

5'-10' Sand 95%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Shell 5%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), but large pieces are present suggesting closeness to source. Fossils including gastropods and plecypods.

10'-20' Shell 100%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), hash like in zones. Fossils including gastropods and plecypods.

20'-40' Sand 5%, white to light tan, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Shell 5%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), hash like in zones. Fossils including gastropods and plecypods.

40'-45' Limestone 90%, medium to dark gray, wackestone - packstone, contains carbonate sand-quarts sand, recrystallized (clear tan rhombs), moderate to well cemented, intergranular porosity is present, rock appears to have undergone weathering, and is recrystallized.

Sand 10%, white to light tan, fine grained, well rounded and well sorted, unimodal, quarts based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

45'-160' Limestone 65%, medium to dark gray, wackestone - packstone, contains carbonate sand-quarts sand, recrystallized (clear tan rhombs), moderate to well cemented, intergranular porosity is present. Rock is recrystallized calcite spar. Contains fragments of plecypoda, and gastropoda.

Observer _____

Page _____ of _____

Limestone 25%, medium to dark gray, packstone- grainstone (cocina hash), contains minor carbonate sand and quartz sand, recrystallized (clear tan rhombs), moderately cemented, intergranular and interparticle/cement reduced porosity is present. Rock is recrystallized calcite. Contains abundant fragments of plecyopoda, and gastropoda.

Sand 5%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quartz based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Shell 5%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), hash like in zones. Fossils including gastropods and plecyopods.

160'-200' Limestone 15%, medium to dark gray, wackestone - packstone, contains carbonate sand-quartz sand, recrystallized (clear tan rhombs), moderate to well cemented, intergranular porosity is present. Rock is recrystallized calcite spar. Contains fragments of plecyopoda, and gastropoda.

Limestone 10%, medium to dark gray, packstone- grainstone (cocina hash), contains minor carbonate sand and quartz sand, recrystallized (clear tan rhombs), moderately cemented, intergranular and interparticle/cement reduced porosity is present. Rock is recrystallized calcite. Contains abundant fragments of plecyopoda, and gastropoda.

Shell 75%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), hash like in zones. Fossils including gastropods and plecyopods. Increases towards base of section.

System 9W

LITHOLOGIC DESCRIPTION

Date :
Contractor : Southeast drilling services Inc.
Location : System # 9
Well : # I-R

0'-5' Clay 100%, tan to very pale brown, plastic, trace amount of carbonae cement, no fossils.

5'-10' Clay 40%, tan to very pale brown, plastic, trace amount of carbonae cement, no fossils.

Limestone 60%, medium to dark gray, wackestone - packstone, contains carbonate sand-quartz sand, recrystallized (clear tan rhombs), poorly cemented, intergranular porosity is present, rock appears to have undergone weathering (caliche pseudomorph).

10'-15' Limestone 60%, medium to dark gray, wackestone - packstone, contains carbonate sand-quartz sand, recrystallized (clear tan rhombs), poorly cemented, intergranular porosity is present, rock appears to have undergone weathering (caliche pseudomorph).

Sand 70%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quartz based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

15'-90' Sand 100%, white to light tan, fine grained, well rounded and moderately sorted, medium to coarse sand, quartz based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

90'-135' Limestone 95%, medium to dark gray, wackestone - packstone, contains carbonate sand-quartz sand, recrystallized (clear tan rhombs), poorly cemented, intergranular porosity is present. Rock is recrystallized calcite. Contains fragments of pleycopoda, and gastropoda.

Sand 5%, white to light tan and brown, fine grained, well rounded and well sorted, unimodal, quartz based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

135'-180' Limestone 65%, medium to dark gray, fine grained wackestone - packstone, contains carbonate sand- abundant bioclast fragments- and trace quartz and lithics, poorly cemented, porosity is present.

35

Sand 5%, white to light tan, fine grained, well rounded and well sorted, unimodal, quartz based with trace lithics-heavies-and feldspar. Sand is mostly clean but has been mixed with drilling mud.

Observer _____

Page _____ of _____

Shell 30%, tan opaque, recrystallized and low Mg calcite constituents, some are etched, breakage is common (possibly secondary), hash like in zones. Fossils including gastropods and plecyods.

Appendix C



Geophysical Logs

Geophysical Logs

System 2W





GAMMA, SP LSN ELECTRIC SINGLE POINT ELECTRIC

SYS2W WELL 14

13

MADE IN U.S.A. COMPANY : SOUTHEAST DRILLING SERV., INC. OTHER SERVICES: CALIPER

WELL : SYS2W WELL 14

LOCATION/FIELD : SYSTEM 2W/PINEHURST ROAD

COUNTY : PALM BEACH

STATE : FL

SECTION : TOWNSHIP : RANGE :

DATE : 05/23/96 PERMANENT DATUM : GL ELEVATIONS

DEPTH DRILLER : 200 ELEV. PERM. DATUM: N/A KB : N/A

LOG BOTTOM : 198.00 LOG MEASURED FROM: GL DF : N/A

LOG TOP : 0.60 DRL MEASURED FROM: N/A GL : N/A

CHART NO. NO CASING DRILLER : 20 LOGGING UNIT : 1

CASING TYPE : PUC FIELD OFFICE : DFB

CASING THICKNESS: RECORDED BY : M. SCHILLING

BIT SIZE : 5.875 BOREHOLE FLUID : MUD FILE : ORIGINAL

MAGNETIC DECL. : RM TEMPERATURE : TYPE : 9041A

MATRIX DENSITY : MATRIX DELTA T : LOG : 7

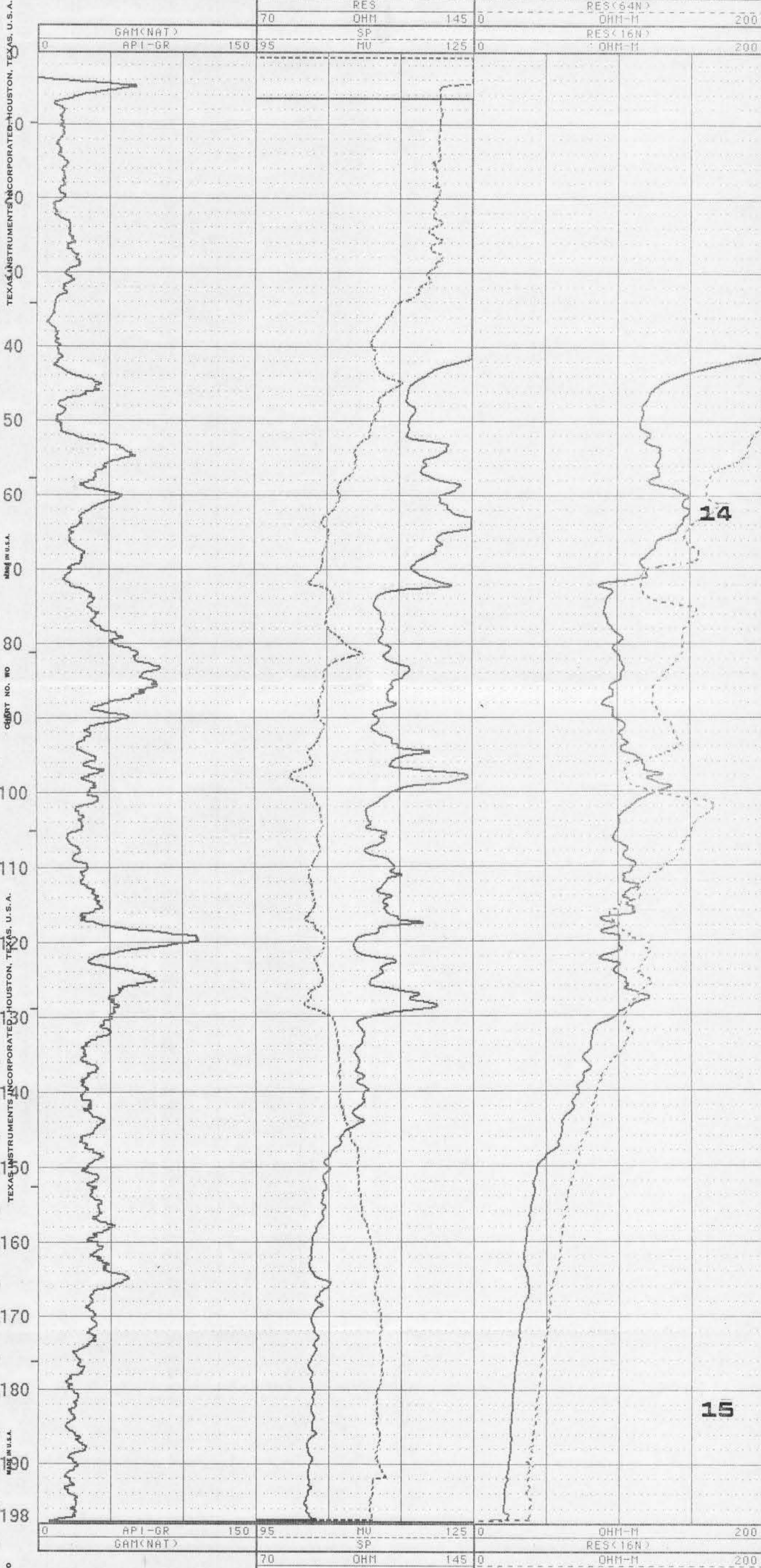
FLUID DENSITY : FLUID DELTA T : PLOT : MARK 27

NEUTRON MATRIX : THRESH: 10000

REMARKS : OBSERVER: RANDY SKINNER - MONTGOMERY WATSON

LOGGED UNDER STATIC CONDITIONS ON PILOT HOLE

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS



REPEAT SECTION





SYS2W WELL 14

COMPANY : SOUTHEAST DRILLING SERV, INC.
WELL : SYS2W WELL 14
LOCATION/FIELD : SYSTEM 2W/PINEHURST ROAD
COUNTY : PALM BEACH
STATE : FLORIDA
SECTION :

OTHER SERVICES:
 NONE

TOWNSHIP : **RANGE** :

DATE : 09/08/96
DEPTH DRILLER : 134
LOG BOTTOM : 137.80
LOG TOP : 68.10

PERMANENT DATUM : N/A
ELEV. PERM. DATUM : N/A
LOG MEASURED FROM : GL
DRL MEASURED FROM : N/A

ELEVATIONS
KB : N/A
DF : N/A
GL : N/A

CASING DRILLER : 80
CASING TYPE : PUC
CASING THICKNESS : .5

LOGGING UNIT : 1
FIELD OFFICE : DFB
RECORDED BY : M. SCHILLING

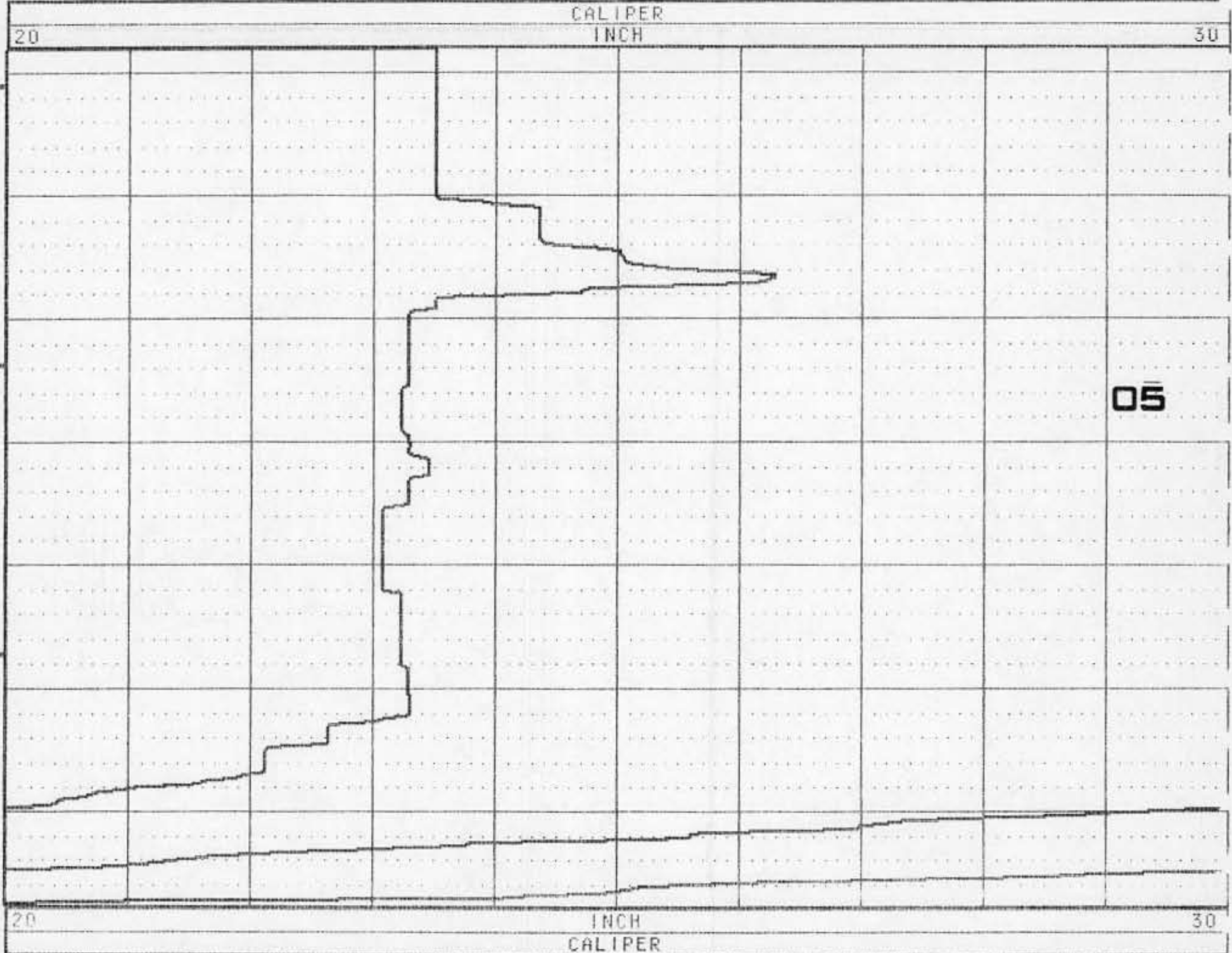
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MAGNETIC DECL. :
MATRIX DENSITY :
FLUID DENSITY :
NEUTRON MATRIX :
REMARKS :

BOREHOLE FLUID : MUD
RM :
RM TEMPERATURE :
MATRIX DELTA T :
FLUID DELTA T :

FILE : ORIGINAL
TYPE : 9065A2
LOG : 2
PLOT : MARK 2
THRESH :

OBSERVER: CHRIS SPANGLER - SOUTHEAST DRILLING
LOGGED UNDER STATIC CONDITIONS ON REAMED BOREHOLE

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS





SYS2W WELL 14

COMPANY : SOUTHEAST DRILLING SERV, INC.
 WELL : SYS2W WELL 14
 LOCATION/FIELD : SYSTEM 2W/PINEHURST ROAD
 COUNTY : PALM BEACH
 STATE : FL
 SECTION :

OTHER SERVICES:
 GAMMA, SP
 LSN ELEC
 SINGLEPT

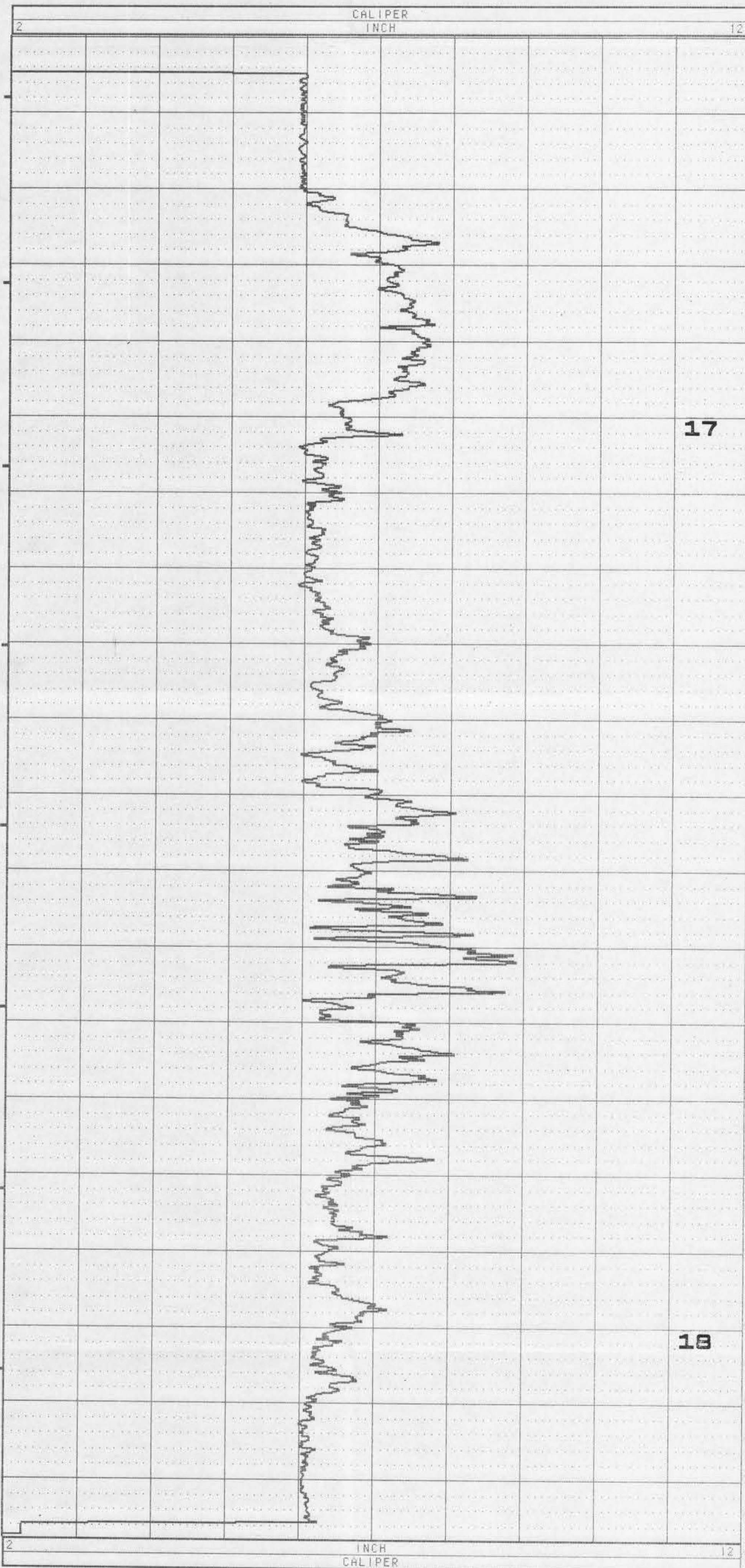
TOWNSHIP : RANGE :
 DATE : 05/23/96 PERMANENT DATUM : GL ELEVATIONS
 DEPTH DRILLER : 200 ELEV. PERM. DATUM: N/A KB : N/A
 LOG BOTTOM : 197.90 LOG MEASURED FROM: GL DF : N/A
 LOG TOP : -0.10 DRL MEASURED FROM: N/A GL : N/A

CASING DRILLER : 20 LOGGING UNIT : 1
 CASING TYPE : PVC FIELD OFFICE : DFB
 CASING THICKNESS: RECORDED BY : M. SCHILLING

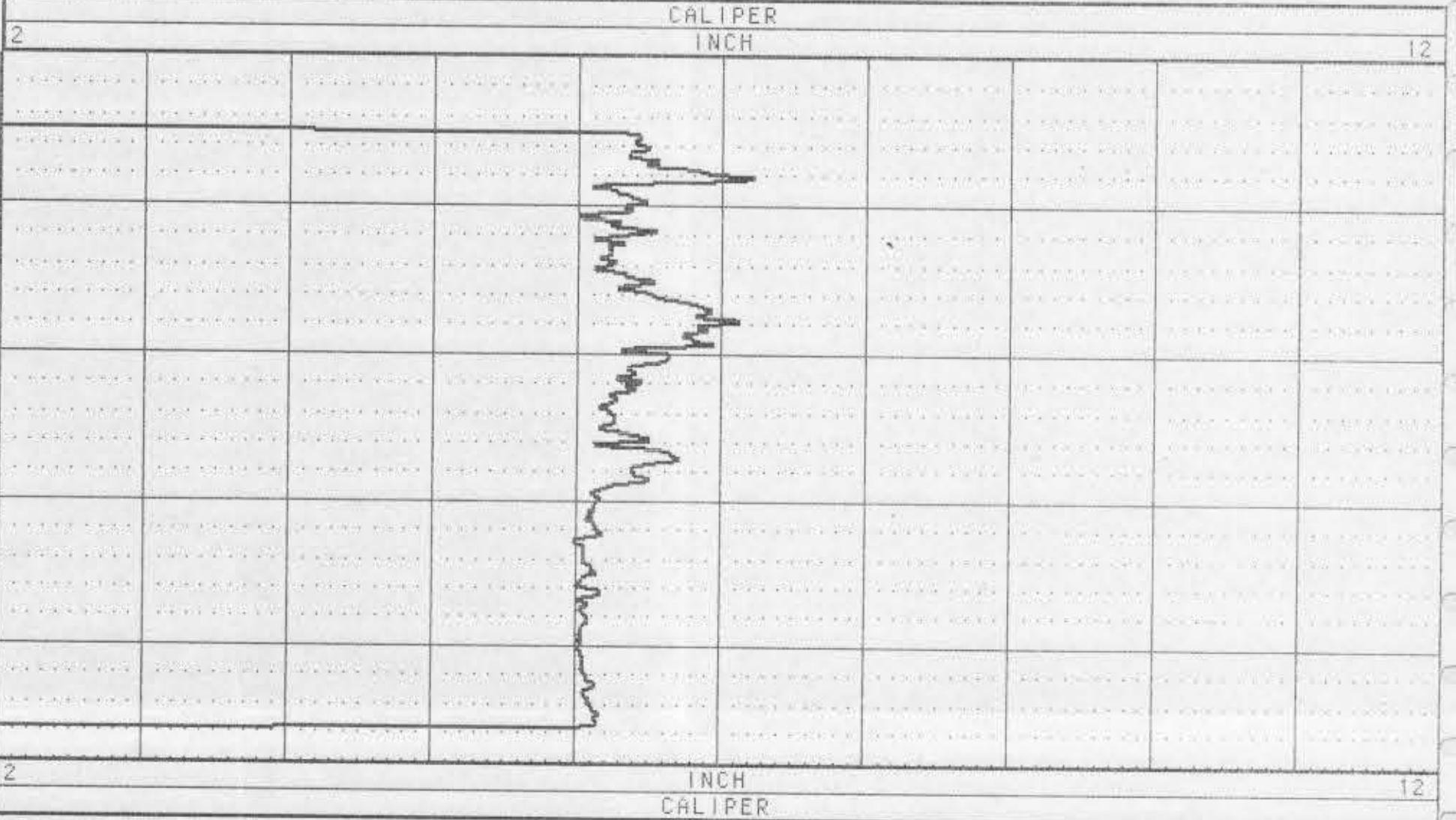
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 MAGNETIC DECL. : RM TYPE : CCALI
 MATRIX DENSITY : RM TEMPERATURE : LOG : 5
 FLUID DENSITY : MATRIX DELTA T : PLOT : MARK 2
 NEUTRON MATRIX : FLUID DELTA T : THRESH: 10000

REMARKS :
 OBSERVER: RANDY SKINNER - MONTGOMERY WATSON
 LOGGED UNDER STATIC CONDITIONS ON PILOT HOLE
 ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

CHART NO. 10
 CHART NO. 11
 CHART NO. 12
 CHART NO. 13
 CHART NO. 14
 CHART NO. 15
 CHART NO. 16
 CHART NO. 17
 CHART NO. 18
 CHART NO. 19
 CHART NO. 20



REPEAT SECTION

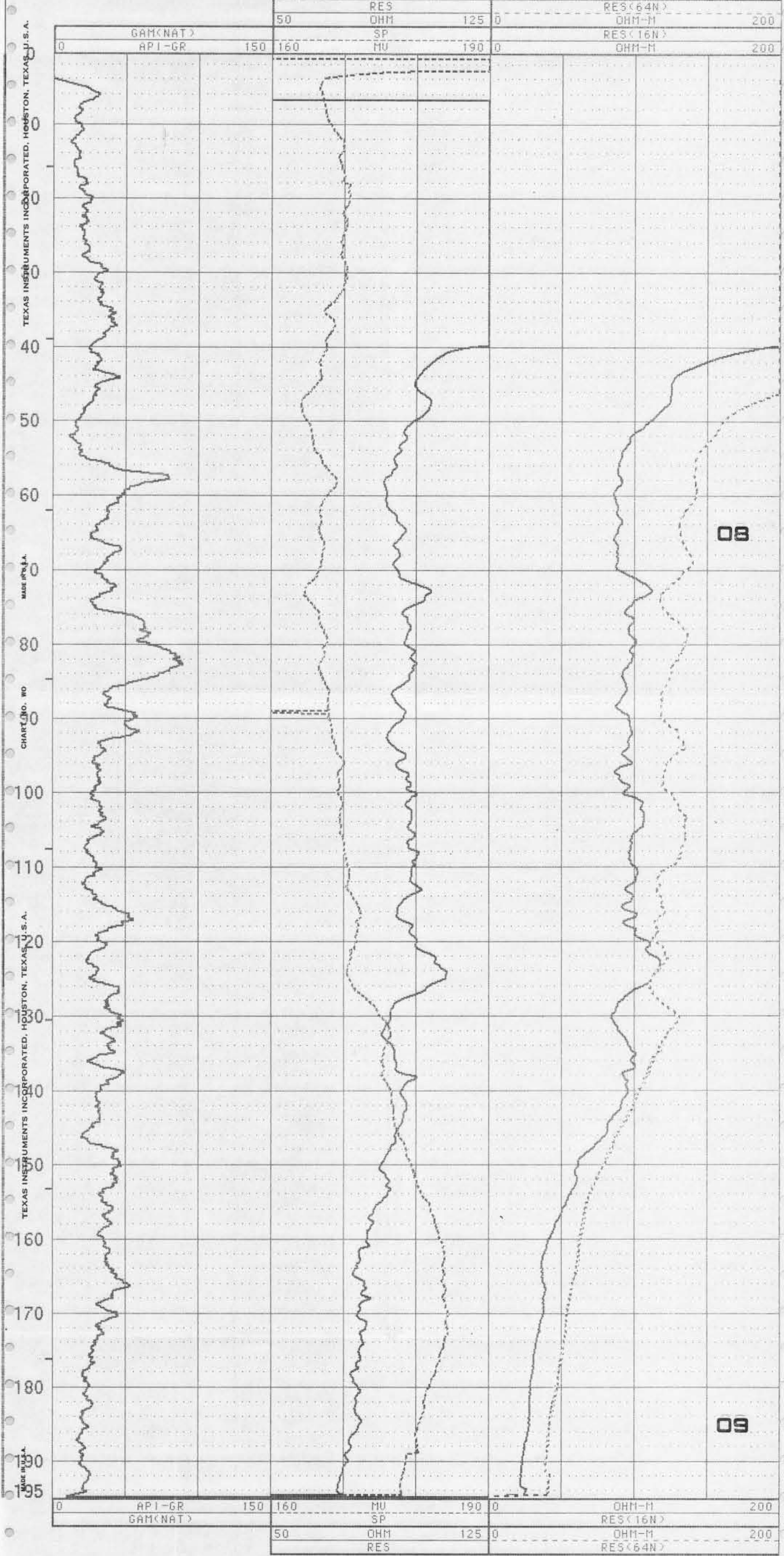




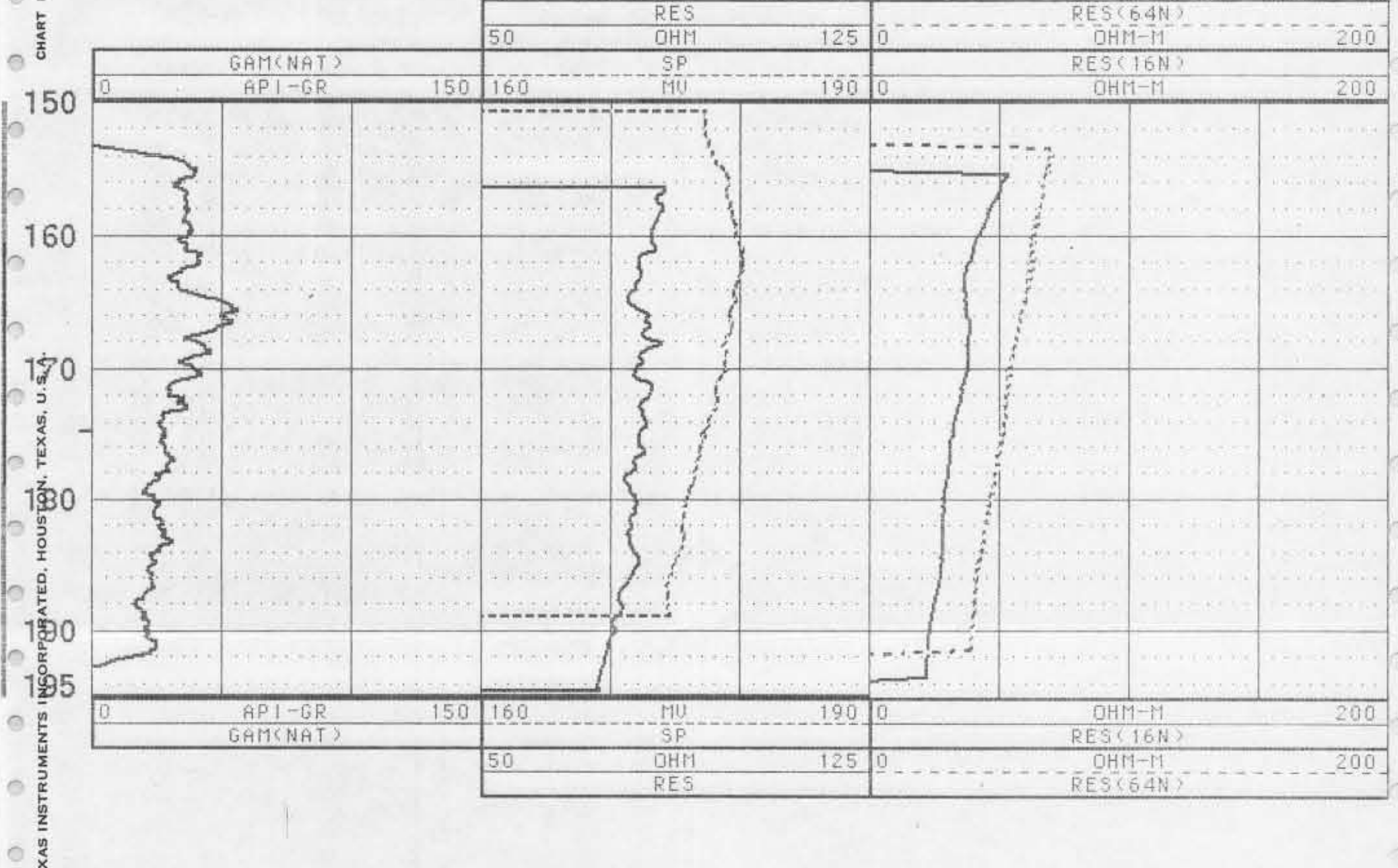
**GAMMA,SP
LSN ELECTRIC
SINGLE POINT ELECTRIC**

SYS2W WELL 15

COMPANY : SOUTHEAST DRILLING SERU, INC. OTHER SERVICES: CALIPER 07
 WELL : SYS2W WELL 15
 LOCATION/FIELD : SYSTEM 2W/PINEHURST ROAD
 COUNTY : PALM BEACH
 STATE : FL
 SECTION : TOWNSHIP : RANGE :
 DATE : 05/23/96 PERMANENT DATUM : GL ELEVATIONS
 DEPTH DRILLER : 200 ELEV. PERM. DATUM: N/A KB : N/A
 LOG BOTTOM : 195.10 LOG MEASURED FROM: GL DF : N/A
 LOG TOP : 0.80 DRL MEASURED FROM: N/A GL : N/A
 CHART NO. 00 CASING DRILLER : 20 LOGGING UNIT : 1
 CASING TYPE : PVC FIELD OFFICE : DFB
 CASING THICKNESS: RECORDED BY : M. SCHILLING
 BIT SIZE : 5.875 BOREHOLE FLUID : MUD FILE : ORIGINAL
 MAGNETIC DECL. : RM : TYPE : 9041A
 MATRIX DENSITY : RM TEMPERATURE : LOG : 3
 FLUID DENSITY : MATRIX DELTA T : PLOT : MARK 27
 NEUTRON MATRIX : FLUID DELTA T : THRESH: 10000
 REMARKS :
 OBSERVER: RANDY SKINNER - MONTGOMERY WATSON
 LOGGED UNDER STATIC CONDITIONS ON PILOT HOLE
 ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS



REPEAT SECTION





SYS2W WELL 15

MADE IN U.S.A.

COMPANY : SOUTHEAST DRILLING SERV, INC. OTHER SERVICES: GAMMA, SP LSN ELEC

WELL : SYS2W WELL 15

LOCATION/FIELD : SYSTEM 2W/PINEHURST ROAD

COUNTY : PALM BEACH

STATE : FL

SECTION : TOWNSHIP : RANGE :

DATE : 05/23/96 PERMANENT DATUM : GL ELEVATIONS

DEPTH DRILLER : 200 ELEV. PERM. DATUM: N/A KB : N/A

LOG BOTTOM : 195.10 LOG MEASURED FROM: GL DF : N/A

LOG TOP : 0.10 DRL MEASURED FROM: N/A GL : N/A

CASING DRILLER : 20 LOGGING UNIT : 1

CASING TYPE : PVC FIELD OFFICE : DFB

CASING THICKNESS: RECORDED BY : M. SCHILLING

BIT SIZE : 5.875 BOREHOLE FLUID : MUD FILE : ORIGINAL

MAGNETIC DECL. : RM TYPE : CCAL1

MATRIX DENSITY : RM TEMPERATURE : LOG : 1

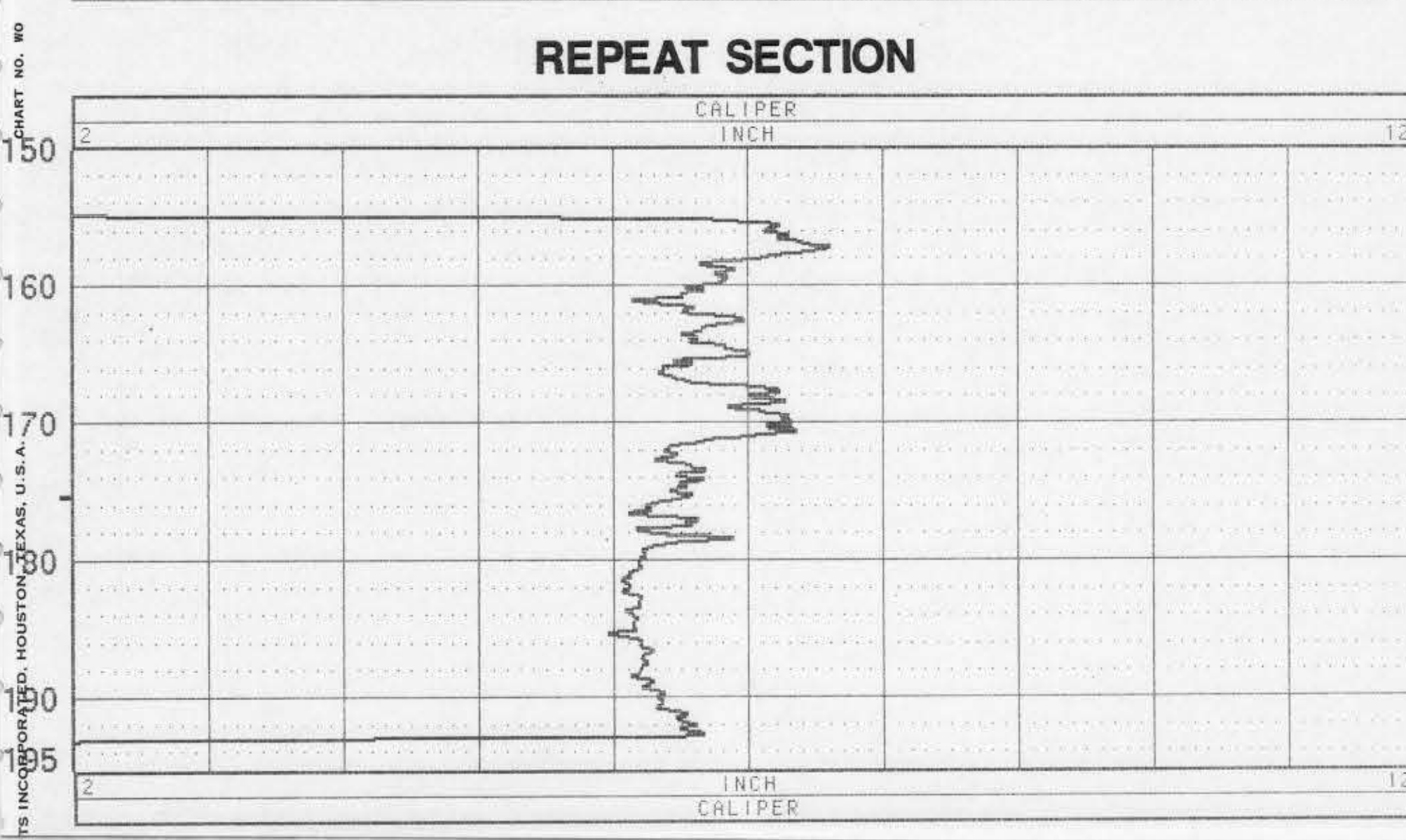
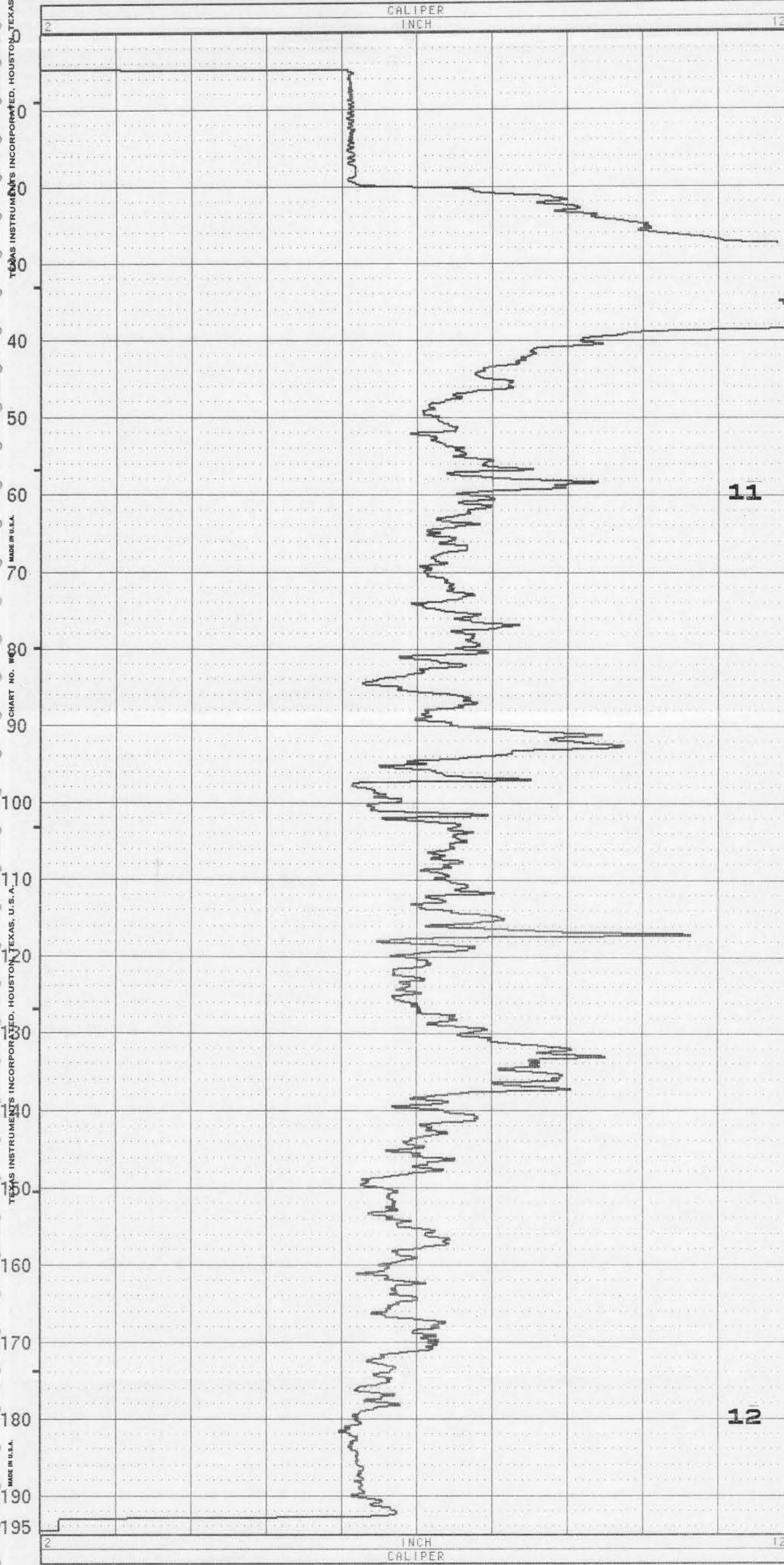
NEUTRON MATRIX : MATRIX DELTA T : PLOT : MARK 2

REMARKS : FLUID DELTA T : THRESH: 10000

OBSERVER: RANDY SKINNER - MONTGOMERY WATSON

LOGGED UNDER STATIC CONDITIONS ON PILOT HOLE

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS





SYS2W WELL 15

COMPANY : SOUTHEAST DRILLING SERV, INC.
 WELL : SYS2W WELL 15
 LOCATION/FIELD : SYSTEM 2W/PINEHURST ROAD
 COUNTY : PALM BEACH
 STATE : FLORIDA
 SECTION :

OTHER SERVICES:
 NONE

TOWNSHIP : RANGE :

DATE : 08/24/96 PERMANENT DATUM : GL ELEVATIONS
 DEPTH DRILLER : 135 ELEV. PERM. DATUM: N/A KB : N/A
 LOG BOTTOM : 135.40 LOG MEASURED FROM: GL DF : N/A
 LOG TOP : 70.40 DRL MEASURED FROM: GL GL : N/A

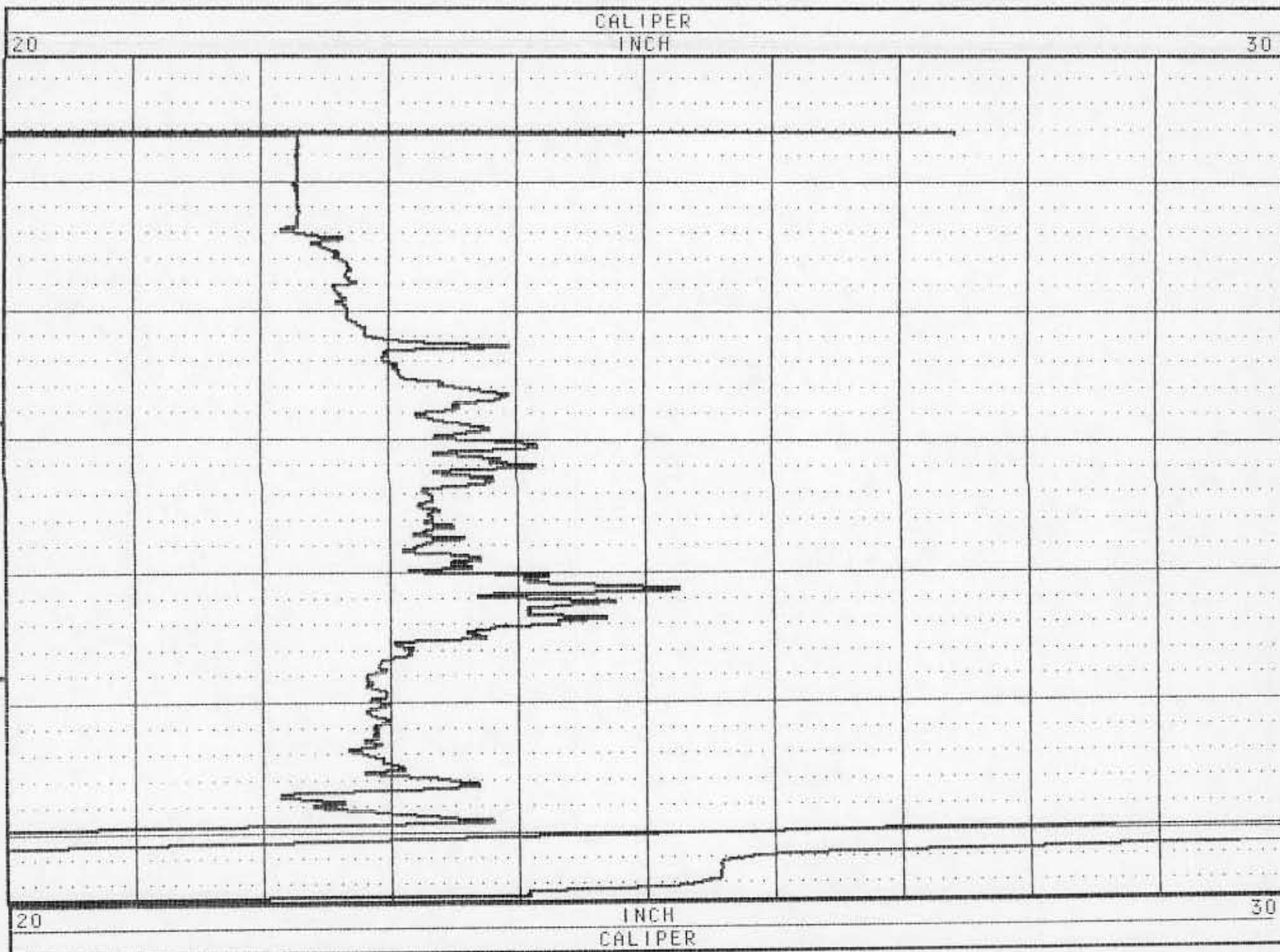
CASING DRILLER : 85 LOGGING UNIT : 1
 CASING TYPE : PUC FIELD OFFICE : DFB
 CASING THICKNESS: .5 RECORDED BY : M. SCHILLING

BIT SIZE : 22.25 BOREHOLE FLUID : MUD FILE : ORIGINAL
 MAGNETIC DECL. : RM TYPE : CCAL2 06
 MATRIX DENSITY : RM TEMPERATURE : LOG : 1
 FLUID DENSITY : MATRIX DELTA T : PLOT : MARK 2
 NEUTRON MATRIX : FLUID DELTA T : THRESH:
 REMARKS :

OBSERVER: RANDY SKINNER - MONTGOMERY WATSON
 LOGGED UNDER STATIC CONDITIONS ON REAMED BOREHOLE

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

TEXAS INSTRUMENTS INCORPORATED, HOUSTON, TEXAS, U.S.A.



System 3W

System 8W



SYS8W WELL 13

COMPANY : SOUTHEAST DRILLING SERV, INC.
 WELL : SYS8W WELL 13
 LOCATION/FIELD : SYSTEM 8W/JOG & TURNPIKE
 COUNTY : PALM BEACH
 STATE : FL
 SECTION : TOWNSHIP : RANGE :

OTHER SERVICES:
 GAMMA, SP
 LSN ELEC
 SINGLEPT

DATE : 05/21/96
 DEPTH DRILLER : 200
 LOG BOTTOM : 201.90
 LOG TOP : 10.60

PERMANENT DATUM : GL
 ELEV. PERM. DATUM : N/A
 LOG MEASURED FROM: GL
 DRL MEASURED FROM: N/A

ELEVATIONS
 KB : N/A
 DF : N/A
 GL : N/A

CASING DRILLER : 20
 CASING TYPE : PUC
 CASING THICKNESS:

LOGGING UNIT : 1
 FIELD OFFICE : DFB
 RECORDED BY : M. SCHILLING

BIT SIZE : 5.875
 MAGNETIC DECL. :
 MATRIX DENSITY :
 NEUTRON MATRIX :
 REMARKS :

BOREHOLE FLUID : MUD
 RM :
 RM TEMPERATURE :
 MATRIX DELTA T :
 FLUID DELTA T :

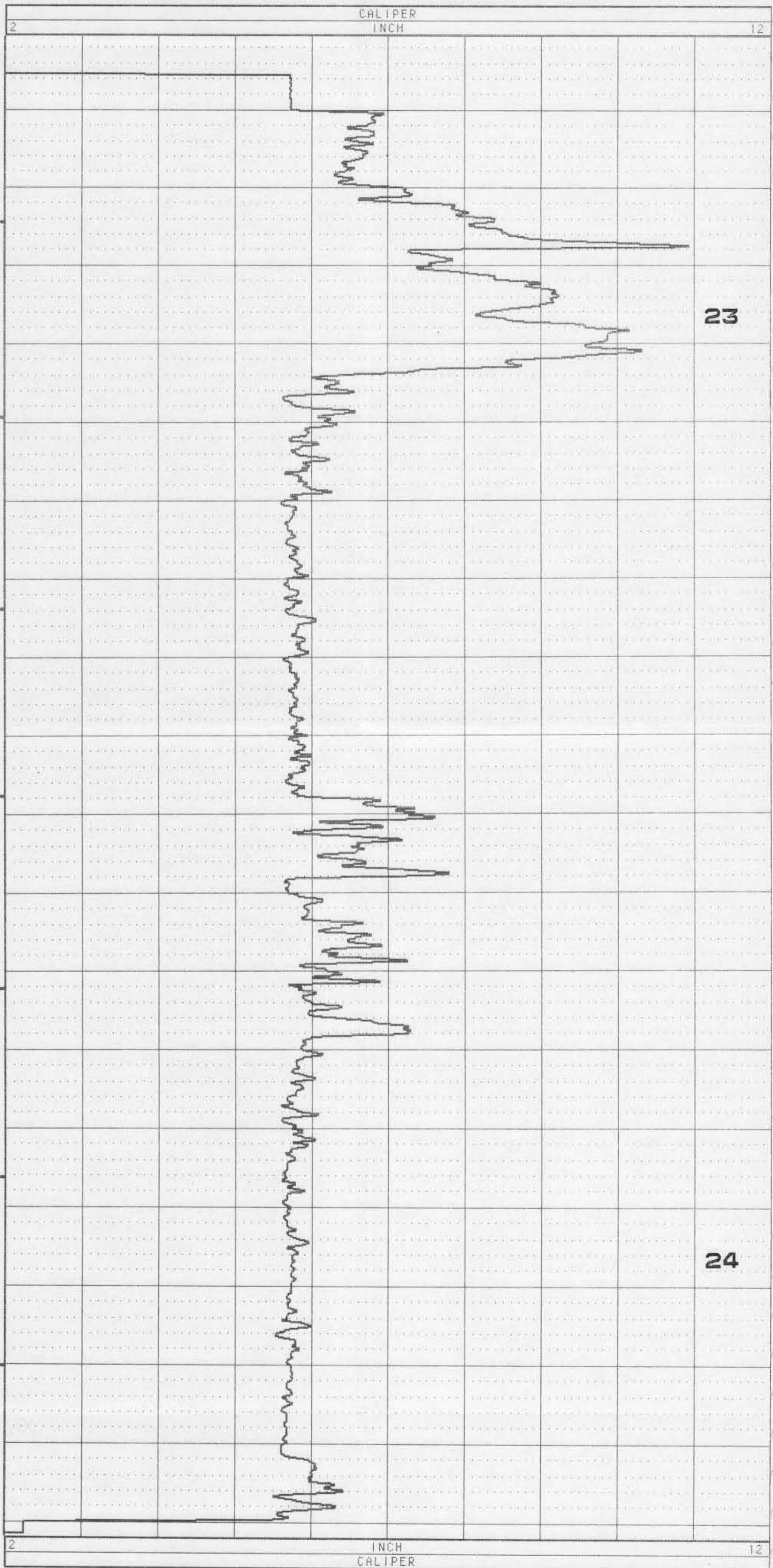
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 TYPE : CCALI
 LOG : 1
 PLOT : MARK 2
 THRESH: 10000

OBSERVER: RANDY SKINNER - MONTGOMERY WATSON
 LOGGED UNDER STATIC CONDITIONS ON PILOT HOLE
 ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

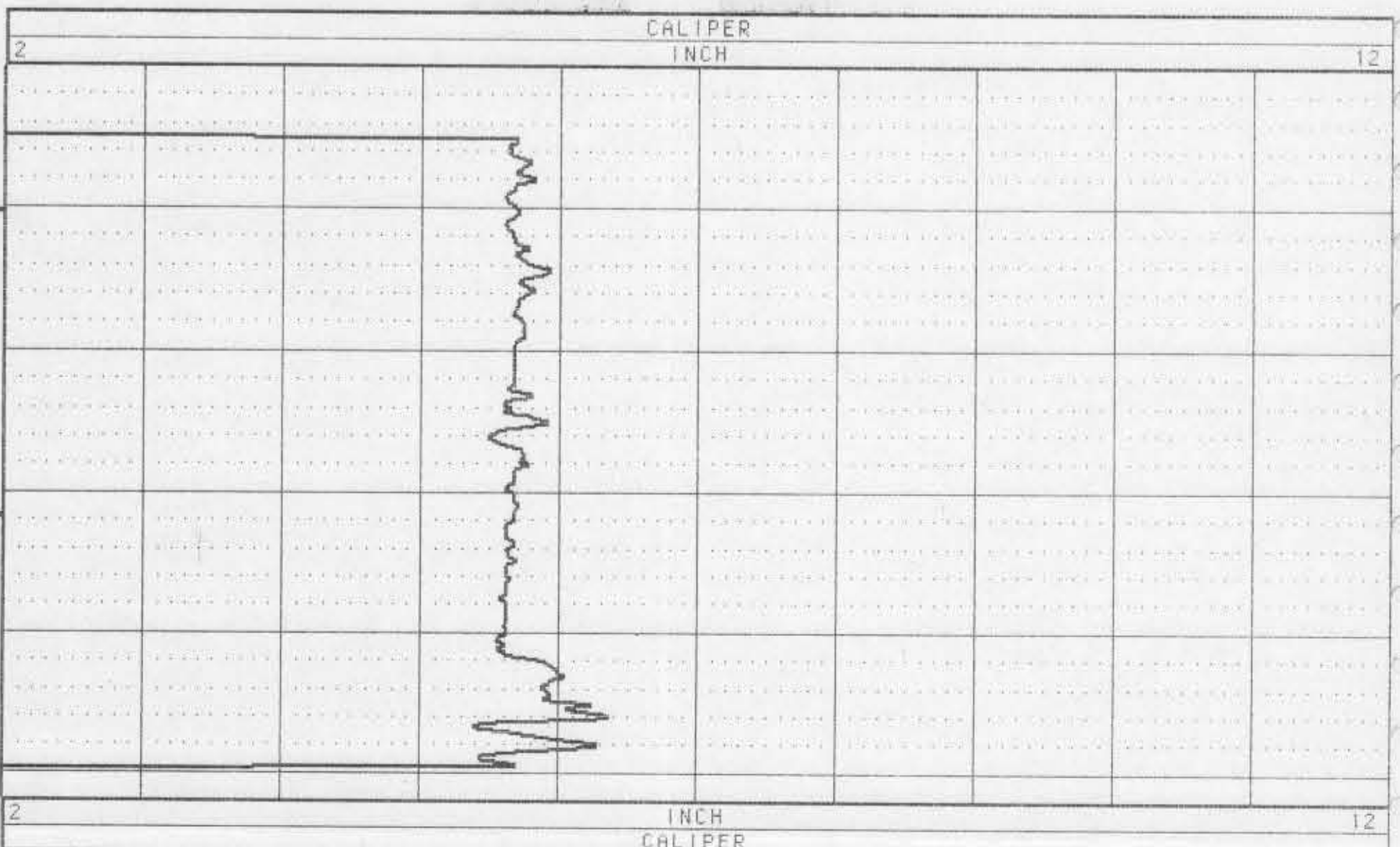
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 TEXAS INSTRUMENTS INCORPORATED, HOUSTON, TEXAS, U.S.A.

CHART NO. 00
 TEXAS INSTRUMENTS INCORPORATED, HOUSTON, TEXAS, U.S.A.

CHART NO. 00
 TEXAS INSTRUMENTS INCORPORATED, HOUSTON, TEXAS, U.S.A.



REPEAT SECTION



MADE IN U.S.A.
CHART NO. WO

CALIPER



SYS 8W WELL 13

COMPANY : SOUTHEAST DRILLING SERV, INC
 WELL : SYS 8W WELL 13
 LOCATION/FIELD : SYSTEM 8W/JOG & THURNPIKE
 COUNTY : PALM BEACH
 STATE : FLORIDA
 SECTION :

OTHER SERVICES:
 NONE

TOWNSHIP : RANGE :

DATE : 11/13/96
 DEPTH DRILLER : 148
 LOG BOTTOM : 148.10
 LOG TOP : 73.20

PERMANENT DATUM : GL
 ELEU. PERM. DATUM: N/A
 LOG MEASURED FROM: GL
 DRL MEASURED FROM: GL

ELEVATIONS
 KB : N/A
 DF : N/A
 GL : N/A

CASING DRILLER : 95
 CASING TYPE : PVC
 CASING THICKNESS: .5

LOGGING UNIT : 1
 FIELD OFFICE : DFB
 RECORDED BY : M. SCHILLING

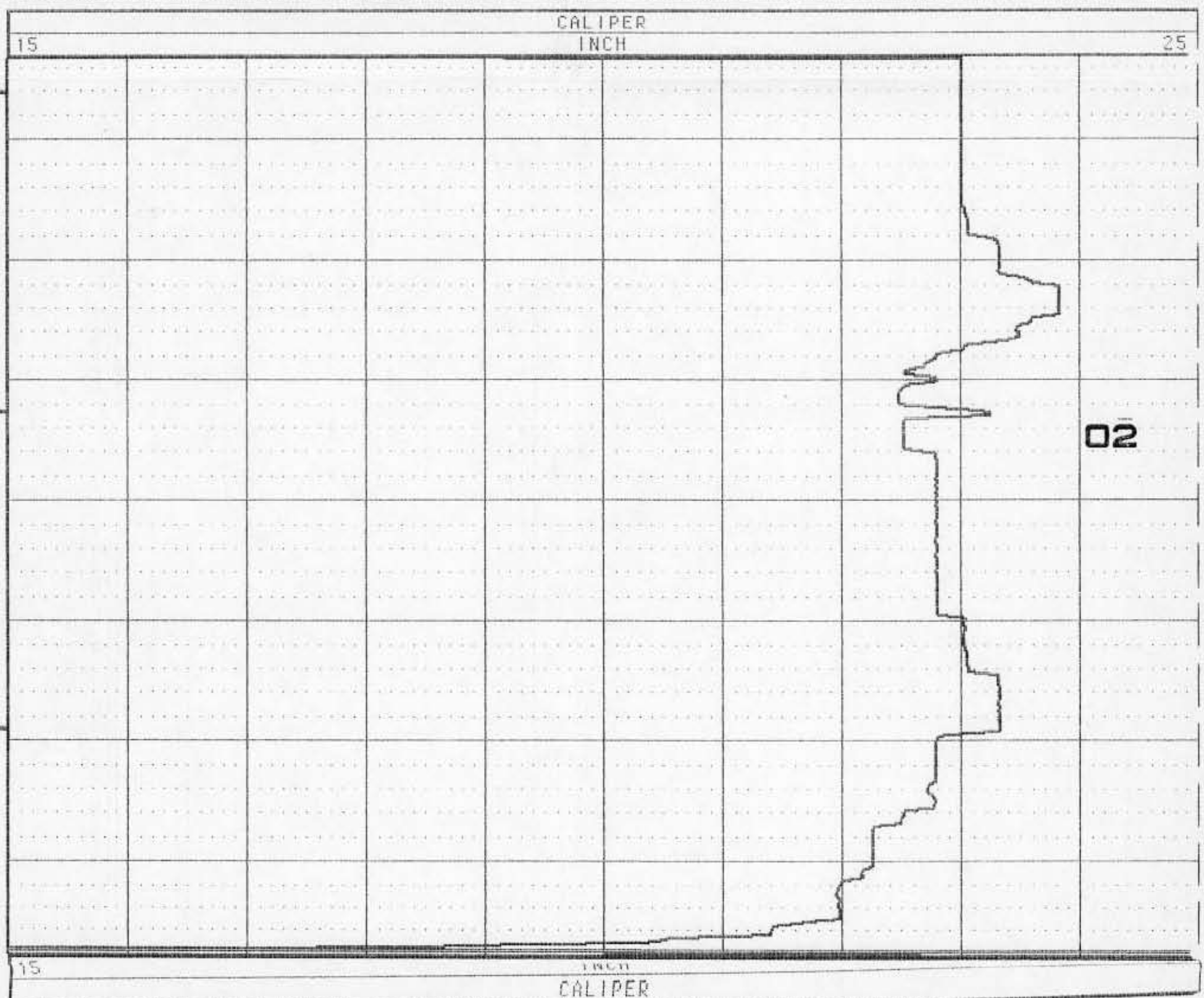
BIT SIZE : 22.25
 MAGNETIC DECL. :
 MATRIX DENSITY :
 FLUID DENSITY :
 NEUTRON MATRIX :
 REMARKS :

BOREHOLE FLUID : MID
 RM :
 RM TEMPERATURE :
 MATRIX DELTA T :
 FLUID DELTA T :

FILE : ORIGINAL
 TYPE : 9065A2
 LOG : 4
 PLOT : MARK 2
 THRESH:

OBSERVER: CHRIS SPANGLER - SOUTHEAST DRILLING
 LOGGED UNDER STATIC CONDITIONS ON REAMED BOREHOLE
 ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

TEXAS INSTRUMENTS INCORPORATED, HOUSTON, TEXAS, U.S.A.
 MADE IN U.S.A.



MADE IN U.S.A.



**GAMMA, SP
LSN ELECTRIC
SINGLE POINT ELECTRIC 19**

SYS8W WELL 13

COMPANY : SOUTHEAST DRILLING SERV. INC. OTHER SERVICES: CALIPER
WELL : SYS8W WELL 13
LOCATION/FIELD : SYSTEM 8W/JOG & TURNPIKE
COUNTY : PALM BEACH
STATE : FL
SECTION : TOWNSHIP : RANGE :
DATE : 05/21/96 PERMANENT DATUM : GL ELEVATIONS
DEPTH DRILLER : 200 ELEV. PERM. DATUM: N/A KB : N/A
LOG BOTTOM : 202.00 LOG MEASURED FROM: GL DF : N/A
LOG TOP : 11.00 DRL MEASURED FROM: N/A GL : N/A
CASING DRILLER : 20 LOGGING UNIT : 1
CASING TYPE : PVC FIELD OFFICE : DFB
CASING THICKNESS: RECORDED BY : M. SCHILLING
BIT SIZE : 5.875 BOREHOLE FLUID : MUD FILE : ORIGINAL
MAGNETIC DECL. : RM : TYPE : 9041A
MATRIX DENSITY : RM TEMPERATURE : LOG : 3
FLUID DENSITY : MATRIX DELTA T : PLOT : MARK 27
NEUTRON MATRIX : FLUID DELTA T : THRESH: 10000
REMARKS :
OBSERVER: RANDY SKINNER - MONTGOMERY WATSON
LOGGED UNDER STATIC CONDITIONS ON PILOT HOLE
ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

CHART NO. 00
TEXAS INSTRUMENTS INCORPORATED, HOUSTON, TEXAS, U.S.A.

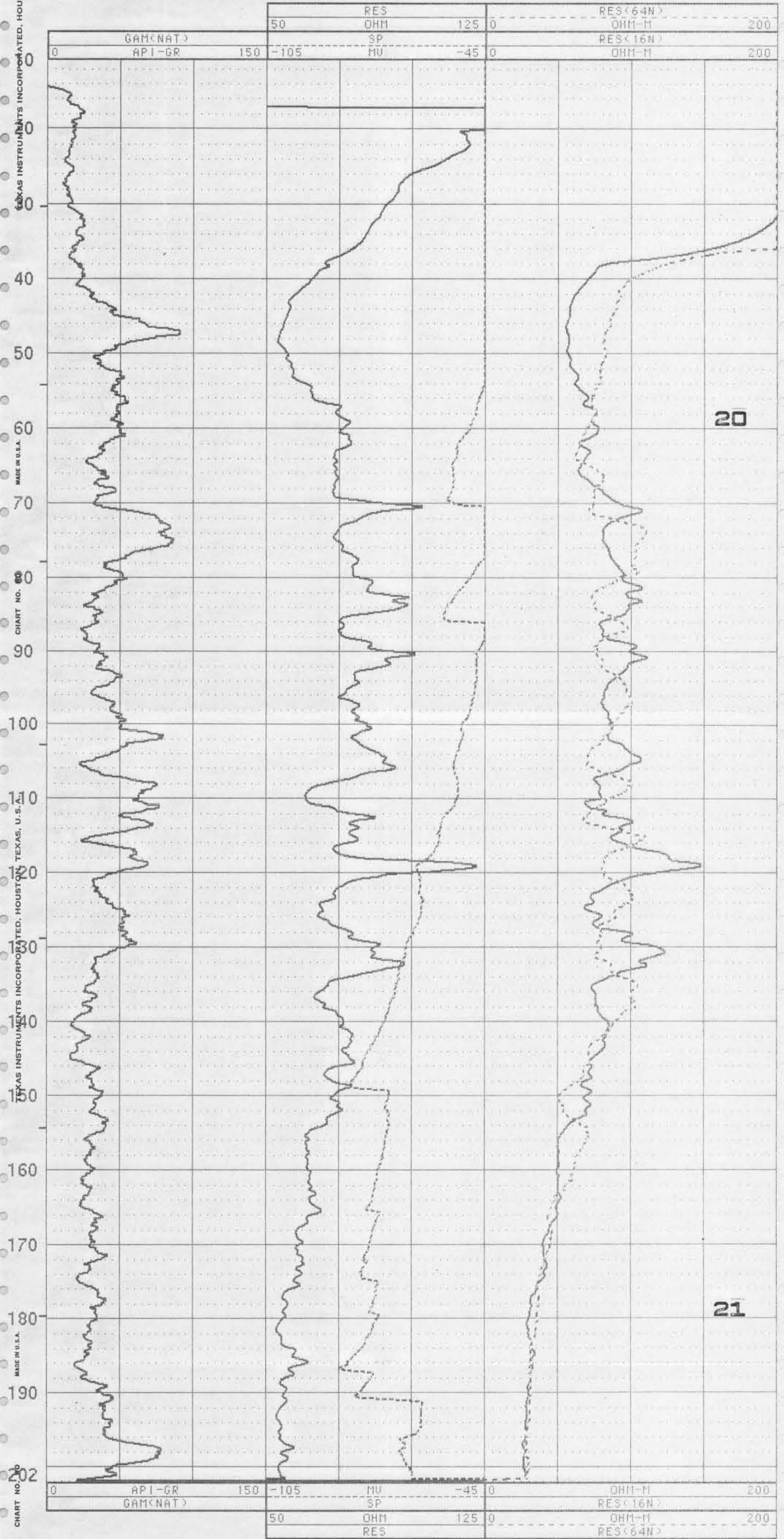
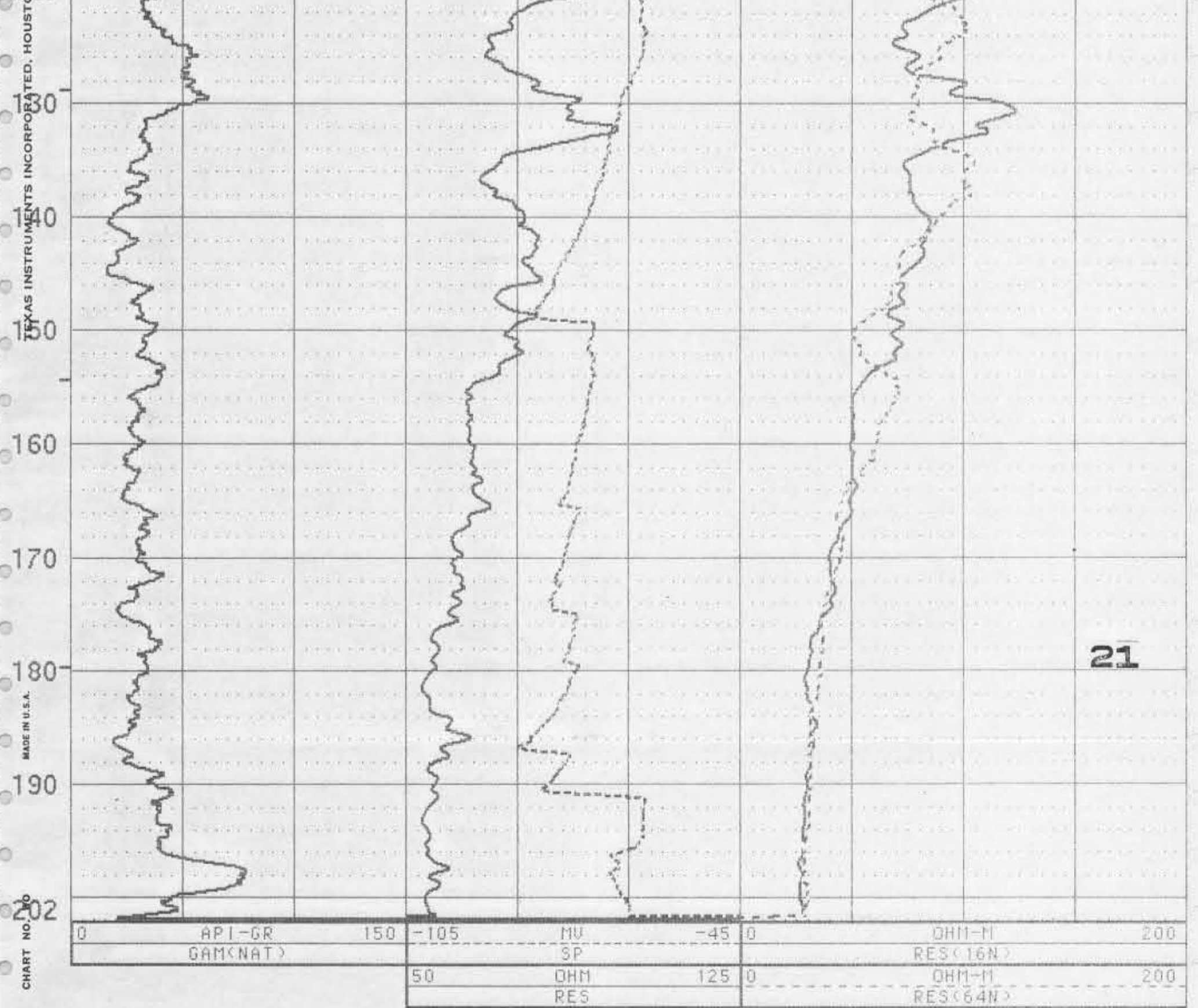


CHART NO. 00
TEXAS INSTRUMENTS INCORPORATED, HOUSTON, TEXAS, U.S.A.



REPEAT SECTION

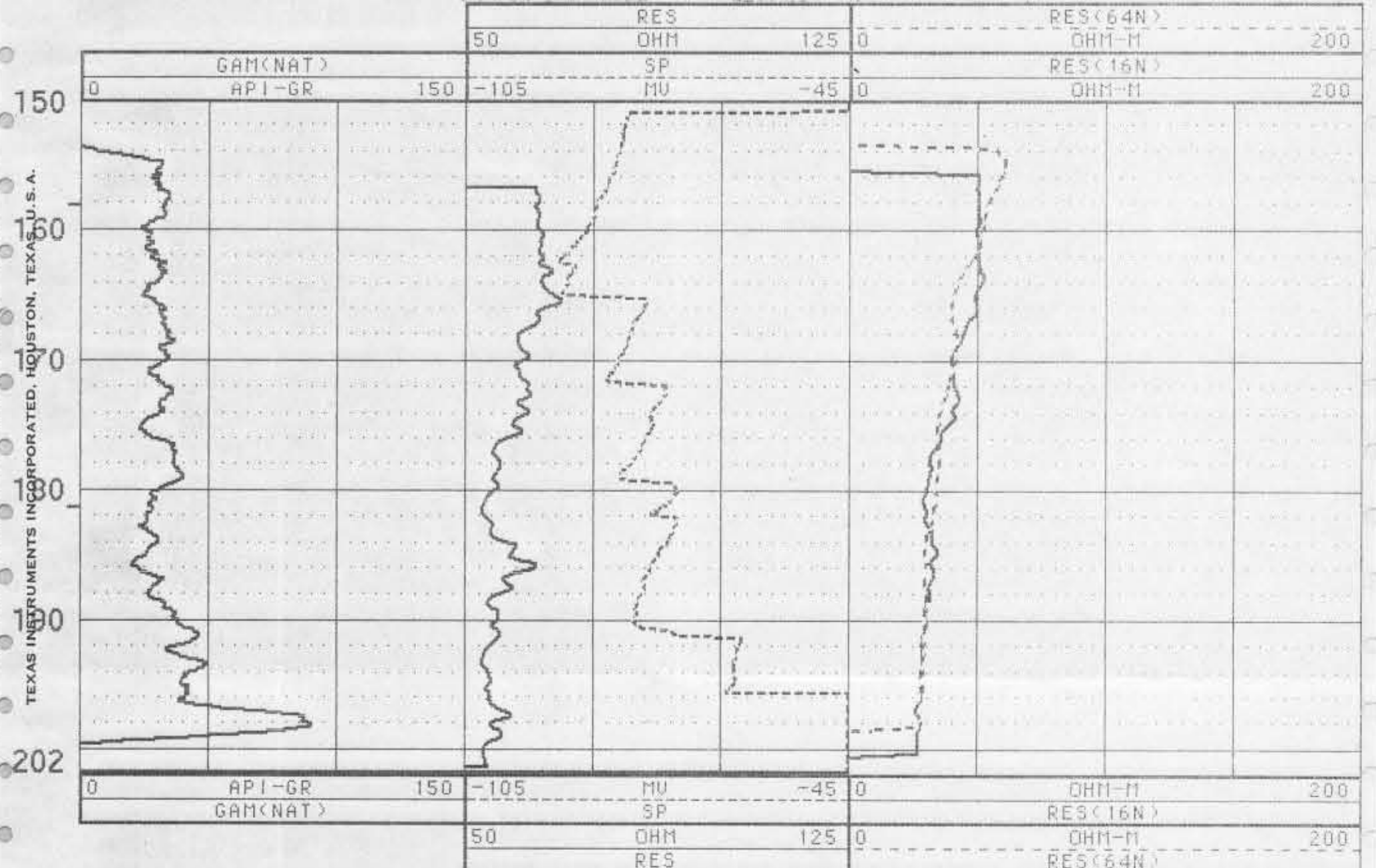


CHART NO. 00
TEXAS INSTRUMENTS INCORPORATED, HOUSTON, TEXAS, U.S.A.

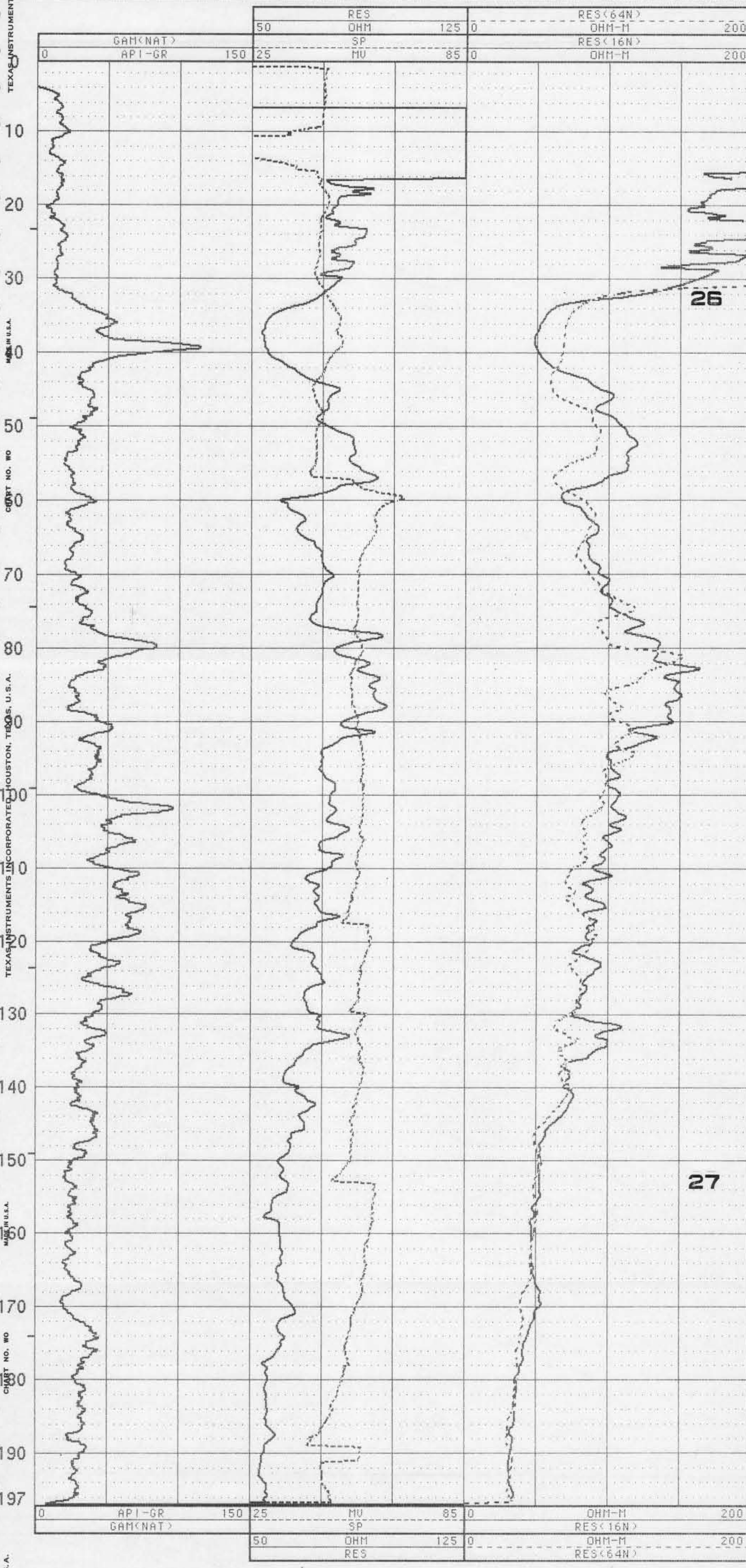


**GAMMA, SP
LSN ELECTRIC
SINGLE POINT ELECTRIC**

SYS8W WELL 14

CHART NO. WO
TEXAS INSTRUMENTS INCORPORATED, HOUSTON, TEXAS, U.S.A.

COMPANY : SOUTHEAST DRILLING SERV, INC. OTHER SERVICES: CALIPER
 WELL : SYS8W WELL 14
 LOCATION/FIELD : SYSTEM 8W/JOG & TURNPIKE
 COUNTY : PALM BEACH
 STATE : FL
 SECTION : TOWNSHIP : RANGE :
 DATE : 05/20/96 PERMANENT DATUM : GL ELEVATIONS
 DEPTH DRILLER : 200 ELEV. PERM. DATUM: N/A KB : N/A
 LOG BOTTOM : 197.20 LOG MEASURED FROM: GL DF : N/A
 LOG TOP : 0.70 DRL MEASURED FROM: N/A GL : N/A
 CASING DRILLER : 16.5 LOGGING UNIT : 1
 CASING TYPE : PVC FIELD OFFICE : DFB
 CASING THICKNESS: RECORDED BY : M. SCHILLING
 BIT SIZE : 5.875 BOREHOLE FLUID : MUD FILE : ORIGINAL
 MAGNETIC DECL. : RM : TYPE : 9041A
 MATRIX DENSITY : RM TEMPERATURE : LOG : 8
 FLUID DENSITY : MATRIX DELTA T : PLOT : MARK 27
 NEUTRON MATRIX : FLUID DELTA T : THRESH: 10000
 REMARKS :
 OBSERVER: RANDY SKINNER - MONTGOMERY WATSON
 LOGGED UNDER STATIC CONDITIONS ON PILOT HOLE
 ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS



REPEAT SECTION

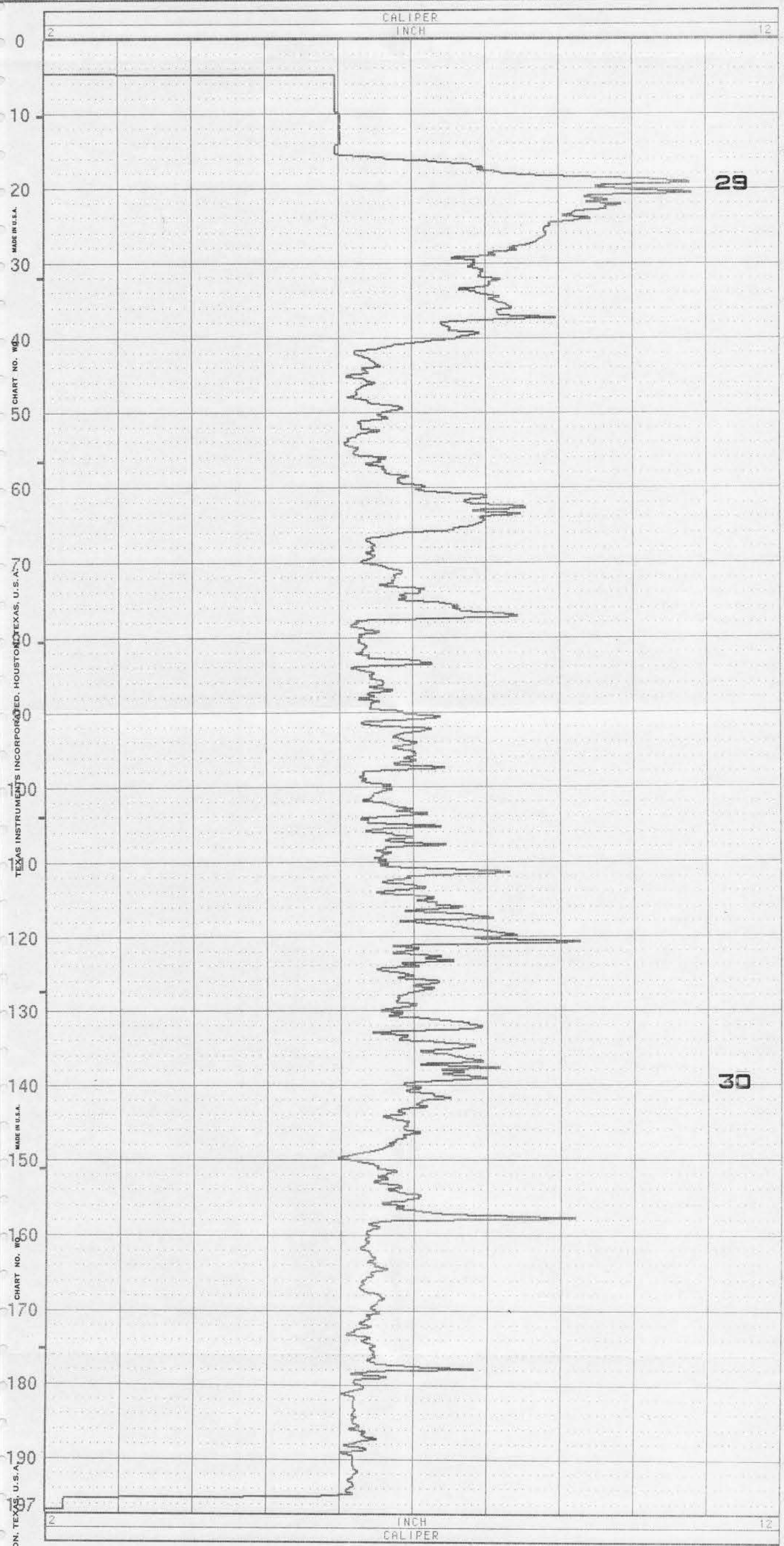


MADE IN U.S.A.

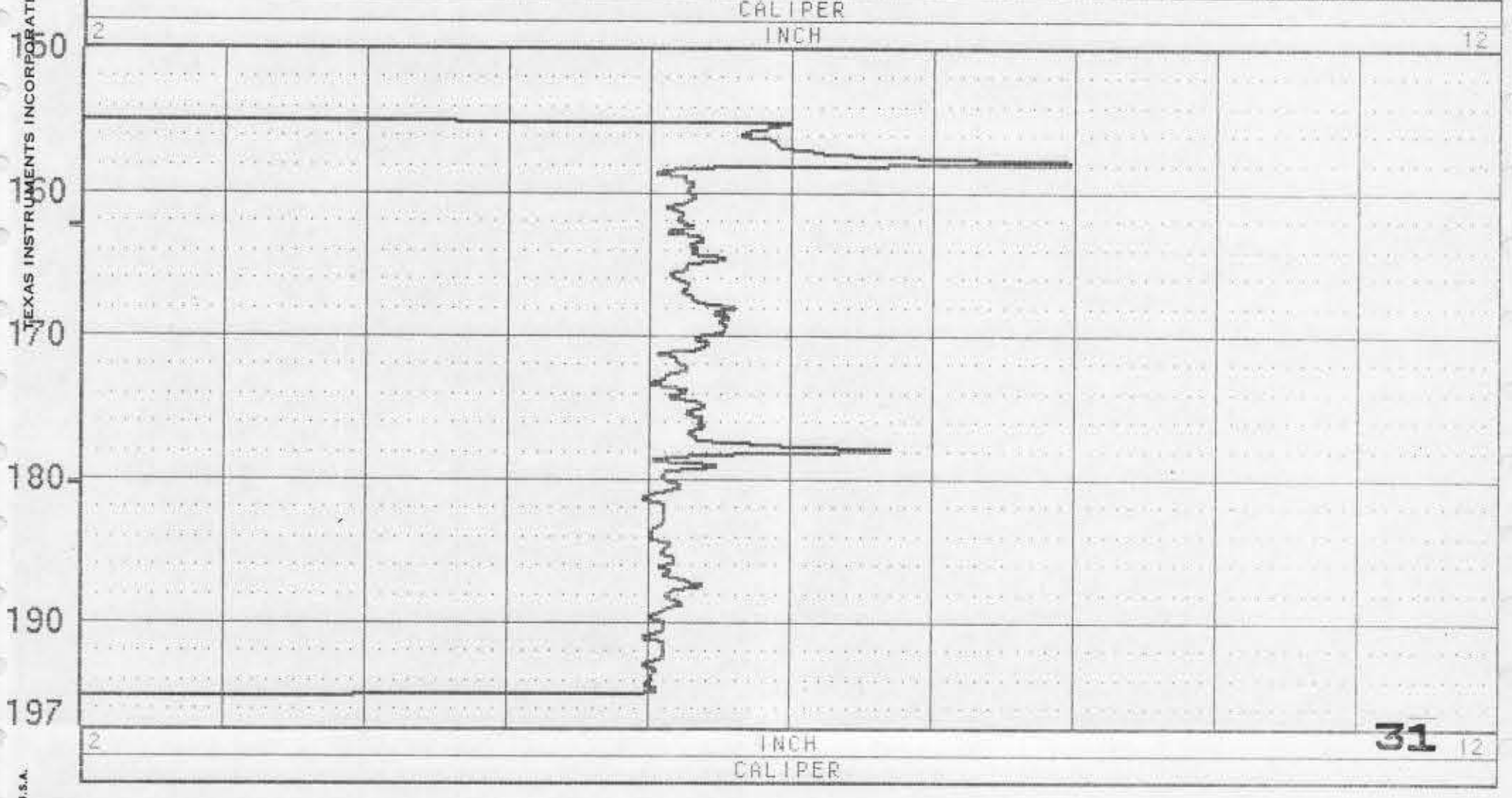


SYS8W WELL 14

COMPANY	: SOUTHEAST DRILLING SERV. INC.	OTHER SERVICES:	
WELL	: SYS8W WELL 14	GAMMA, SP	
LOCATION/FIELD	: SYSTEM 8W/JOG & TURNPIKE	LSN ELEC	
COUNTY	: PALM BEACH	SINGLEPT	
STATE	: FL		
SECTION	:	TOWNSHIP	: RANGE :
DATE	: 05/20/96	PERMANENT DATUM	: GL ELEVATIONS
DEPTH DRILLER	: 200	ELEV. PERM. DATUM	: N/A KB : N/A
LOG BOTTOM	: 197.30	LOG MEASURED FROM	: GL DF : N/A
LOG TOP	: 0.10	DRL MEASURED FROM	: N/A GL : N/A
CASING DRILLER	: 16.5	LOGGING UNIT	: 1
CASING TYPE	: PVC	FIELD OFFICE	: DFB
CASING THICKNESS	:	RECORDED BY	: M. SCHILLING
BIT SIZE	: 5.875	BOREHOLE FLUID	: MUD FILE : ORIGINAL
MAGNETIC DECL.	:	RM	: RM TEMPERATURE :
MATRIX DENSITY	:	MATRIX DELTA T	: FLUID DELTA T :
FLUID DENSITY	:		
NEUTRON MATRIX	:		
REMARKS	:		
OBSERVER: RANDY SKINNER - MONTGOMERY WATSON			
LOGGED UNDER STATIC CONDITIONS ON PILOT HOLE			
ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS			



REPEAT SECTION





SYS8W WELL 14

COMPANY : SOUTHEAST DRILLING SERV, INC.
 WELL : SYS8W WELL 14
 LOCATION/FIELD : SYSTEM 8W/JOG & TURNPIKE
 COUNTY : PALM BEACH
 STATE : FLORIDA
 SECTION :

OTHER SERVICES:
 NONE

TOWNSHIP : RANGE :

DATE : 10/04/96
 DEPTH DRILLER : 151
 LOG BOTTOM : 158.10
 LOG TOP : 68.10

PERMANENT DATUM : N/A
 ELEV. PERM. DATUM: N/A
 LOG MEASURED FROM: GL
 DRL MEASURED FROM: N/A

ELEVATIONS
 KB : N/A
 DF : N/A
 GL : N/A

CASING DRILLER : 80
 CASING TYPE : PVC
 CASING THICKNESS: .5

LOGGING UNIT : 1
 FIELD OFFICE : DFB
 RECORDED BY : M. SCHILLING

BIT SIZE : 22.25
 MAGNETIC DECL. :
 MATRIX DENSITY :
 FLUID DENSITY :
 NEUTRON MATRIX :
 REMARKS :

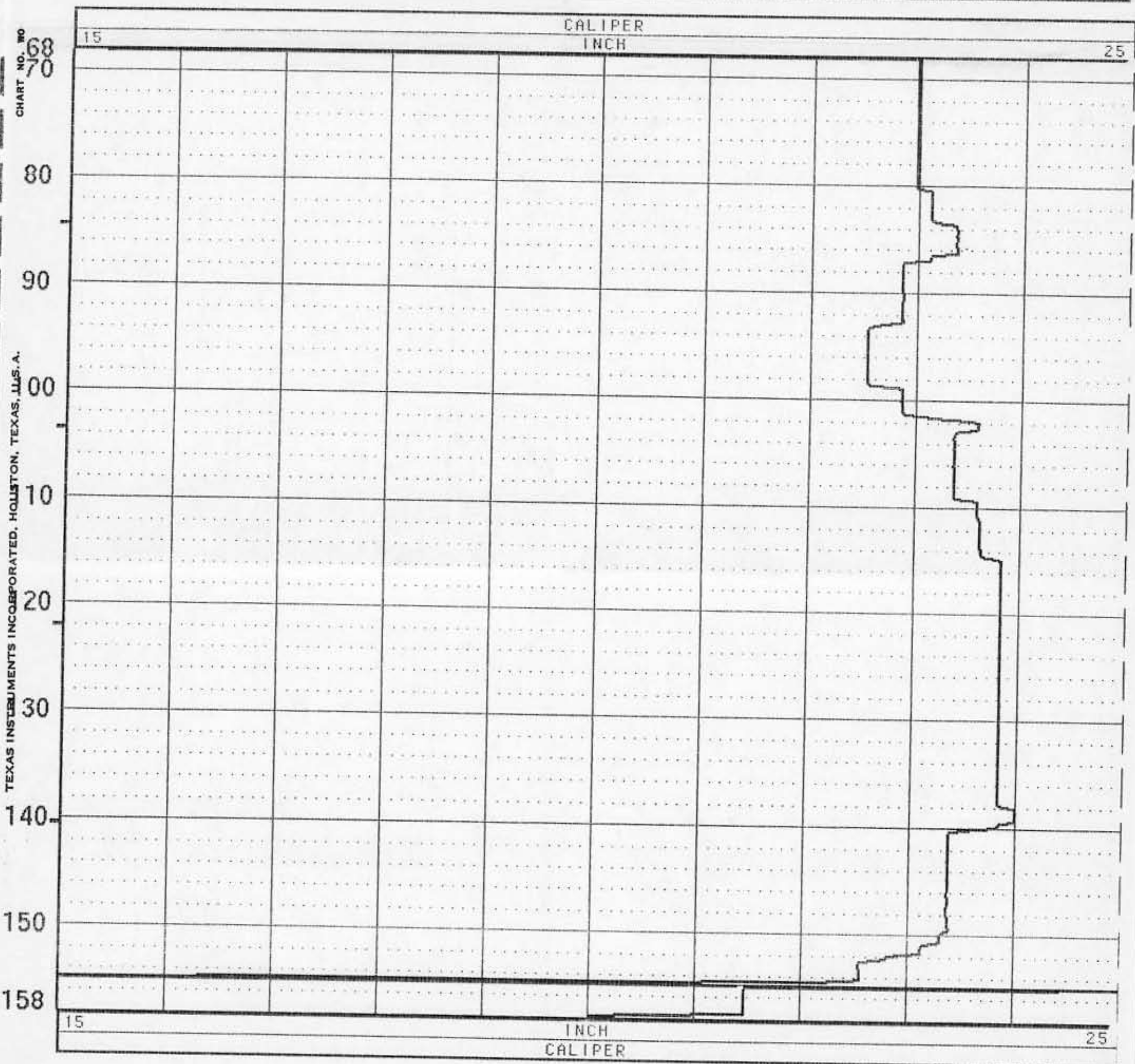
BOREHOLE FLUID : MUD
 RM :
 RM TEMPERATURE :
 MATRIX DELTA T :
 FLUID DELTA T :

FILE : ORIGINAL **03**
 TYPE : 9065A2
 LOG : 3
 PLOT : MARK 2
 THRESH:

OBSERVER: GERALD - SOUTHEAST DRILLING

LOGGED UNDER STATIC CONDITIONS ON REAMED BOREHOLE

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS



TEXAS INSTRUMENTS INCORPORATED, HOUSTON, TEXAS, U.S.A.

System 9W



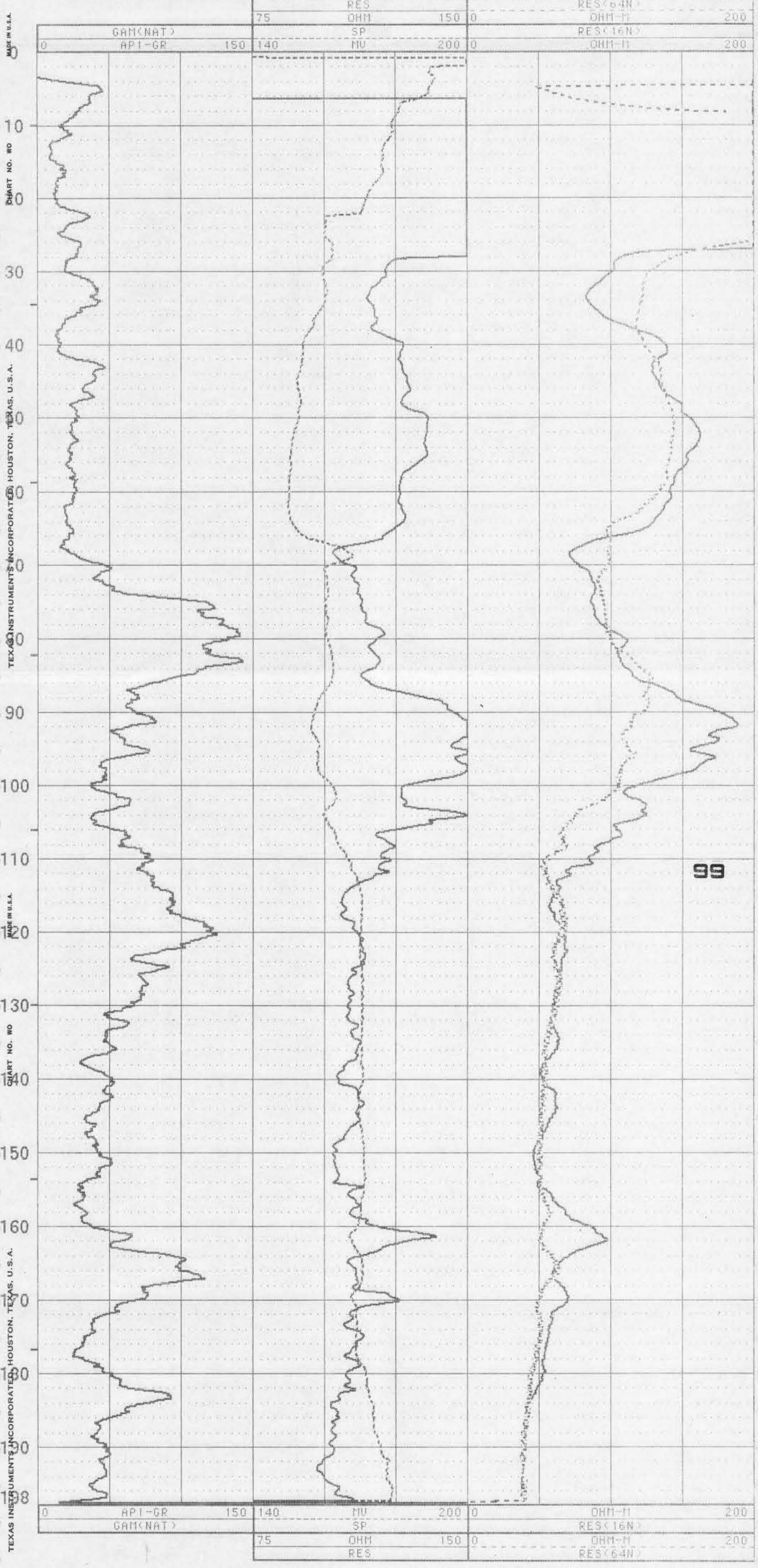
**GAMMA, SP
LSN ELECTRIC
SINGLE POINT ELECTRIC**

SYS9W WELL 1R

TEXAS INSTRUMENTS INCORPORATED, HOUSTON, TEXAS, U.S.A.

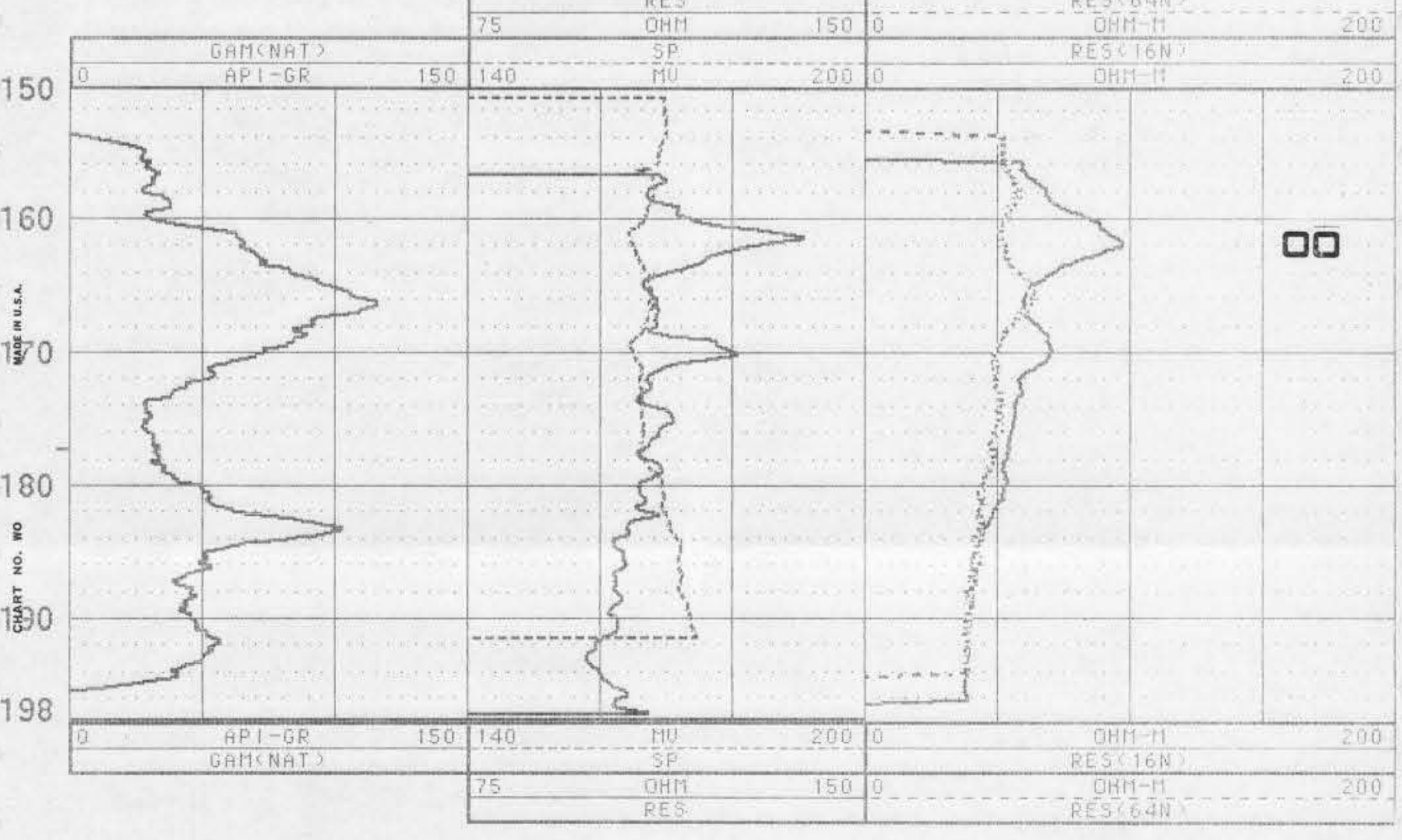
COMPANY	: SOUTHEAST DRILLING SERU, INC.	OTHER SERVICES:	GAMMA, SP LSN ELEC
WELL	: SYS9W WELL 1R		
LOCATION/FIELD	: SYSTEM 9S/BOCA RATON		
COUNTY	: PALM BEACH		
STATE	: FL		
SECTION	:	TOWNSHIP	:
		RANGE	:
DATE	: 05/25/96	PERMANENT DATUM	: GL
DEPTH DRILLER	: 200	ELEU. PERM. DATUM:	N/A
LOG BOTTOM	: 197.80	LOG MEASURED FROM:	GL
LOG TOP	: 0.30	DRL MEASURED FROM:	N/A
		ELEVATIONS	
		KB	: N/A
		DF	: N/A
		GL	: N/A
CASING DRILLER	: 0	LOGGING UNIT	: 1
CASING TYPE	: NONE	FIELD OFFICE	: DFB
CASING THICKNESS:		RECORDED BY	: M. SCHILLING
BIT SIZE	: 5.875	BOREHOLE FLUID	: MUD
MAGNETIC DECL.	:	RM	:
MATRIX DENSITY	:	RM TEMPERATURE	:
FLUID DENSITY	:	MATRIX DELTA T	:
NEUTRON MATRIX	:	FLUID DELTA T	:
REMARKS	:	FILE	: ORIGINAL
		TYPE	: 9041A
		LOG	: 7
		PLOT	: MARK 27
		THRESH	: 10000
OBSERVER: TOM URUM - MONTGOMERY WATSON			
LOGGED UNDER STATIC CONDITIONS ON PILOT HOLE			
ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS			

98



99

REPEAT SECTION



00

TEXAS INSTRUMENTS INCORPORATED, HOUSTON, TEXAS, U.S.A.



CH2MHILL

CHART NO. WO

SYS9S WELL 1R

COMPANY : SOUTHEAST DRILLING SERV, INC. OTHER SERVICES: NONE
 WELL : SYS9S WELL 1R
 LOCATION/FIELD : SYSTEM 9S/BOCA RATON
 COUNTY : PALM BEACH
 STATE : FLORIDA
 SECTION : TOWNSHIP : RANGE :

DATE : 12/04/96 PERMANENT DATUM : GL ELEVATIONS
 DEPTH DRILLER : 140 ELEV. PERM. DATUM: N/A KB : N/A
 LOG BOTTOM : 145.40 LOG MEASURED FROM: GL DF : N/A
 LOG TOP : 81.60 DRL MEASURED FROM: N/A GL : N/A

CASING DRILLER : 90 LOGGING UNIT : I
 CASING TYPE : PUC FIELD OFFICE : DFB
 CASING THICKNESS: .5 RECORDED BY : M. SCHILLING

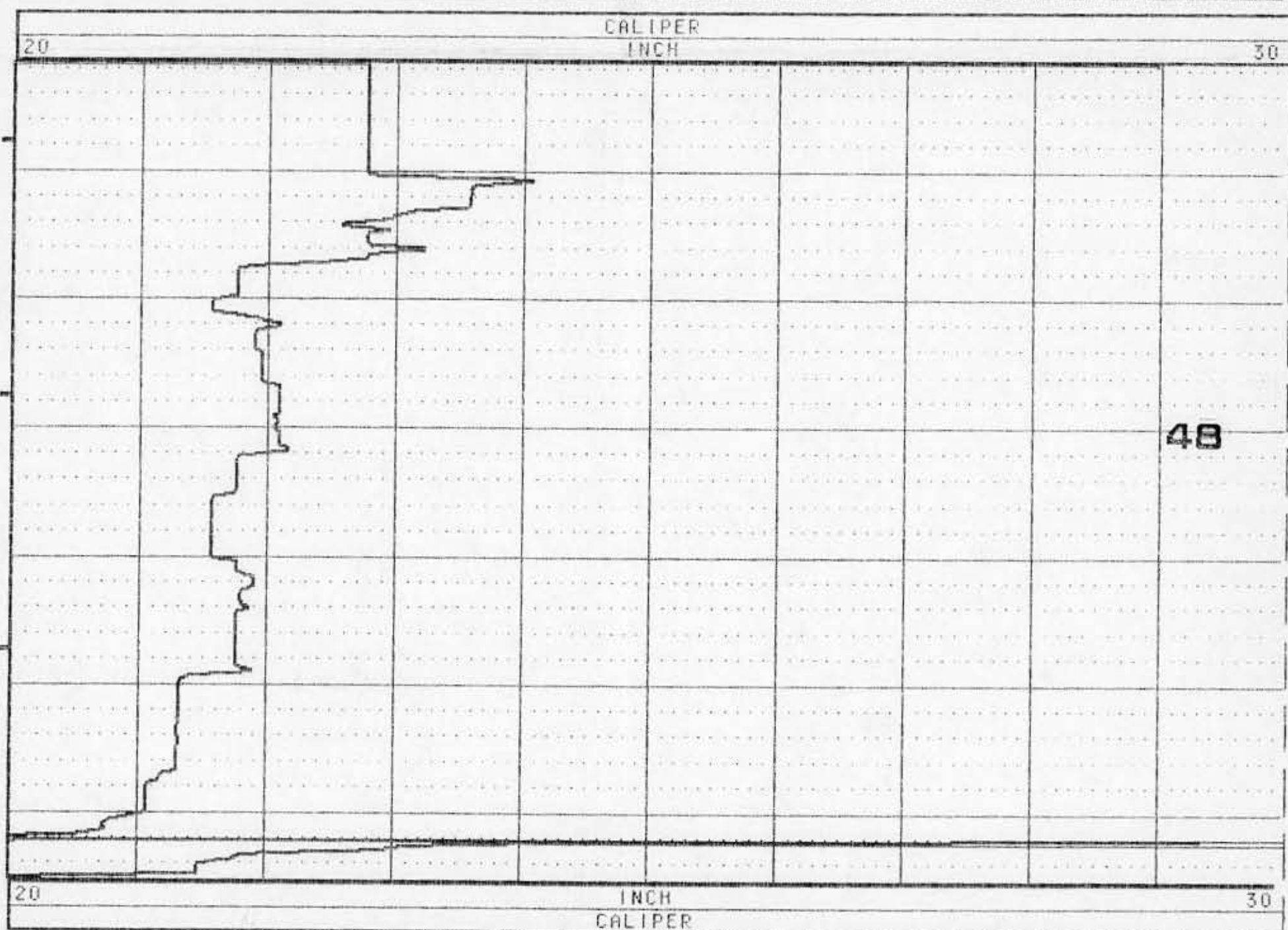
BIT SIZE : 22.25 BOREHOLE FLUID : MUD FILE : ORIGINAL
 MAGNETIC DECL. : RM TYPE : 906501
 MATRIX DENSITY : RM TEMPERATURE : LOG : I
 FLUID DENSITY : MATRIX DELTA T : PLOT : MARK 2
 NEUTRON MATRIX : FLUID DELTA T : THRESH:

REMARKS :
 OBSERVER: CHRIS SPANGLER - SOUTHEAST DRILLING
 LOGGED UNDER STATIC CONDITIONS ON BEAMED BOREHOLE

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

TEXAS INSTRUMENTS INCORPORATED, HOUSTON, TEXAS, U.S.A.

CHART NO. WO





SYS9S WELL 1R

COMPANY : SOUTHEAST DRILLING SERV. INC.
 WELL : SYS9S WELL 1R
 LOCATION/FIELD : SYSTEM 9S/BOCA RATON
 COUNTY : PALM BEACH
 STATE : FL
 SECTION :

OTHER SERVICES:
 GAMMA, SP
 LSN ELEC

04

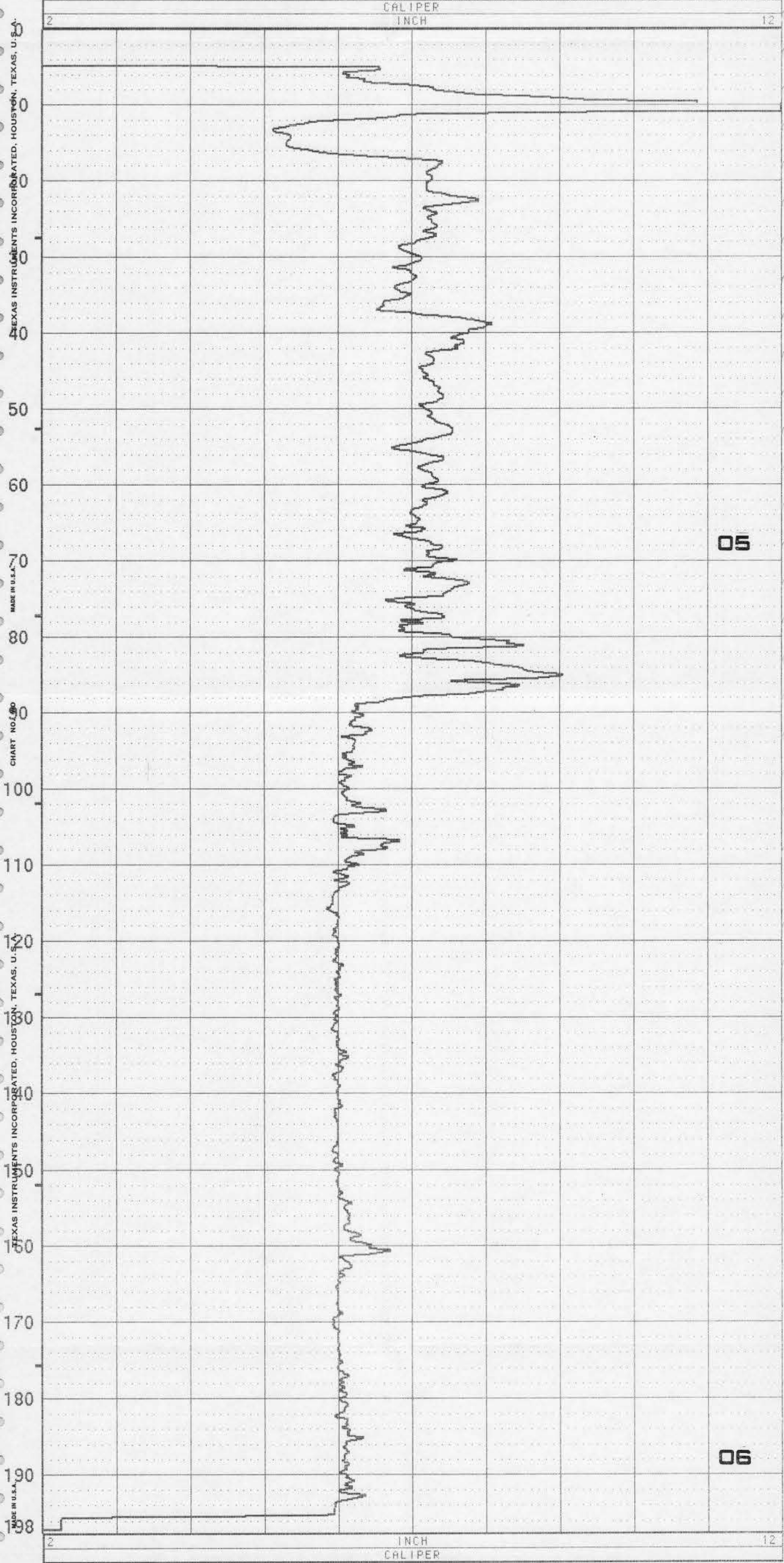
TOWNSHIP : RANGE :

DATE : 05/25/96 PERMANENT DATUM : GL ELEVATIONS
 DEPTH DRILLER : 200 ELEU. PERM. DATUM: N/A KB : N/A
 LOG BOTTOM : 197.60 LOG MEASURED FROM: GL DF : N/A
 LOG TOP : 0.10 DRL MEASURED FROM: N/A GL : N/A

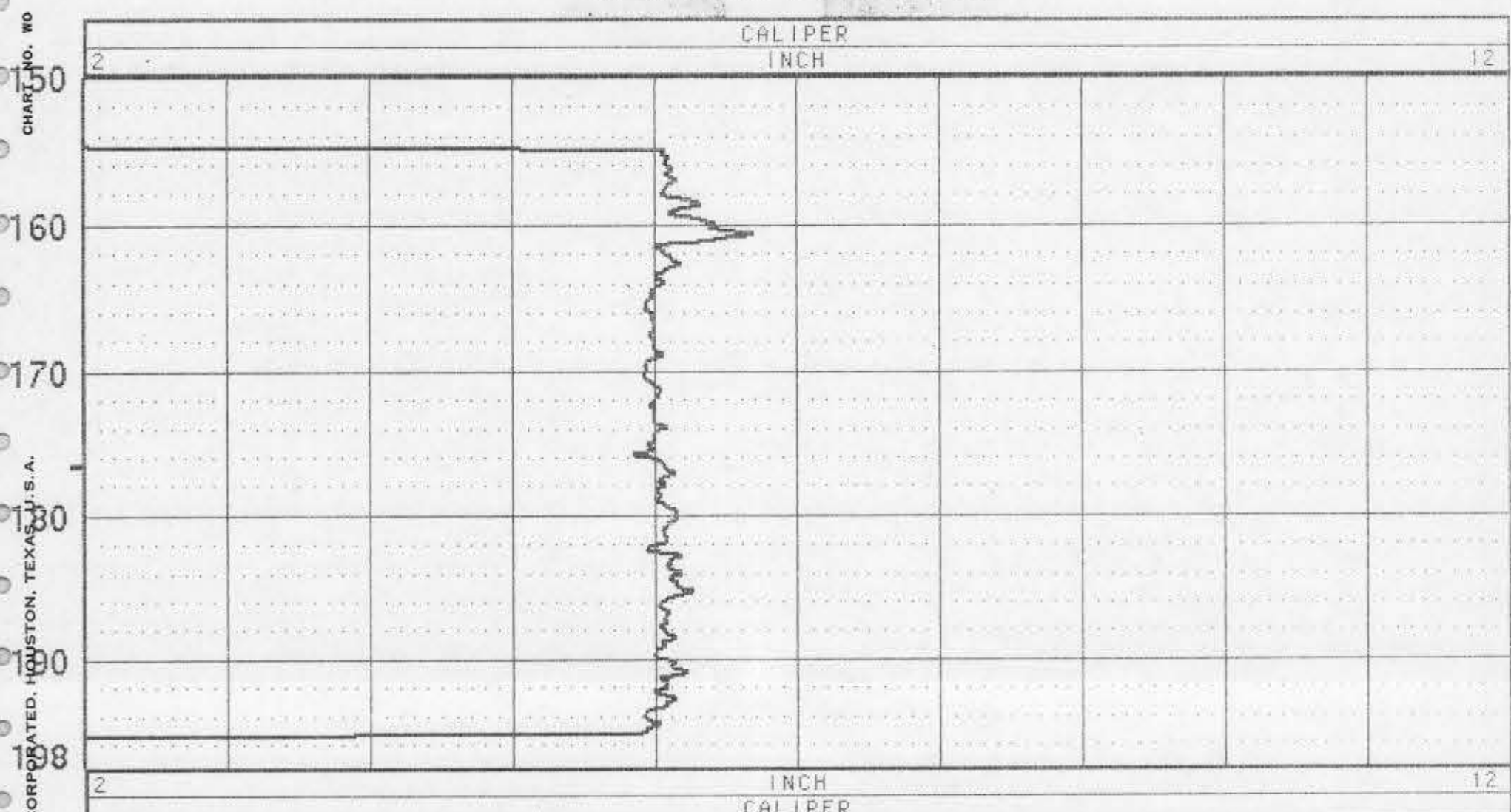
CASING DRILLER : 0 LOGGING UNIT : 1
 CASING TYPE : NONE FIELD OFFICE : DFB
 CASING THICKNESS: RECORDED BY : M. SCHILLING

BIT SIZE : 5.875 BOREHOLE FLUID : MUD FILE : ORIGINAL
 MAGNETIC DECL. : RM TYPE : CCALI
 MATRIX DENSITY : RM TEMPERATURE : LOG : 5
 FLUID DENSITY : MATRIX DELTA T : PLOT : MARK 2
 NEUTRON MATRIX : FLUID DELTA T : THRESH: 10000
 REMARKS :

OBSERVER: TOM HRUM - MONTGOMERY WATSON
 LOGGED UNDER STATIC CONDITIONS ON PILOT HOLE
 ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS



REPEAT SECTION





Appendix D



Sand Sieve Analyses

Sand Sieve Analysis

System 2W

6-26-1996 9:38AM

FROM HOUSTON WELL SCREEN 1 713 442 0503

P.7

SYSTEM 2, Well #14

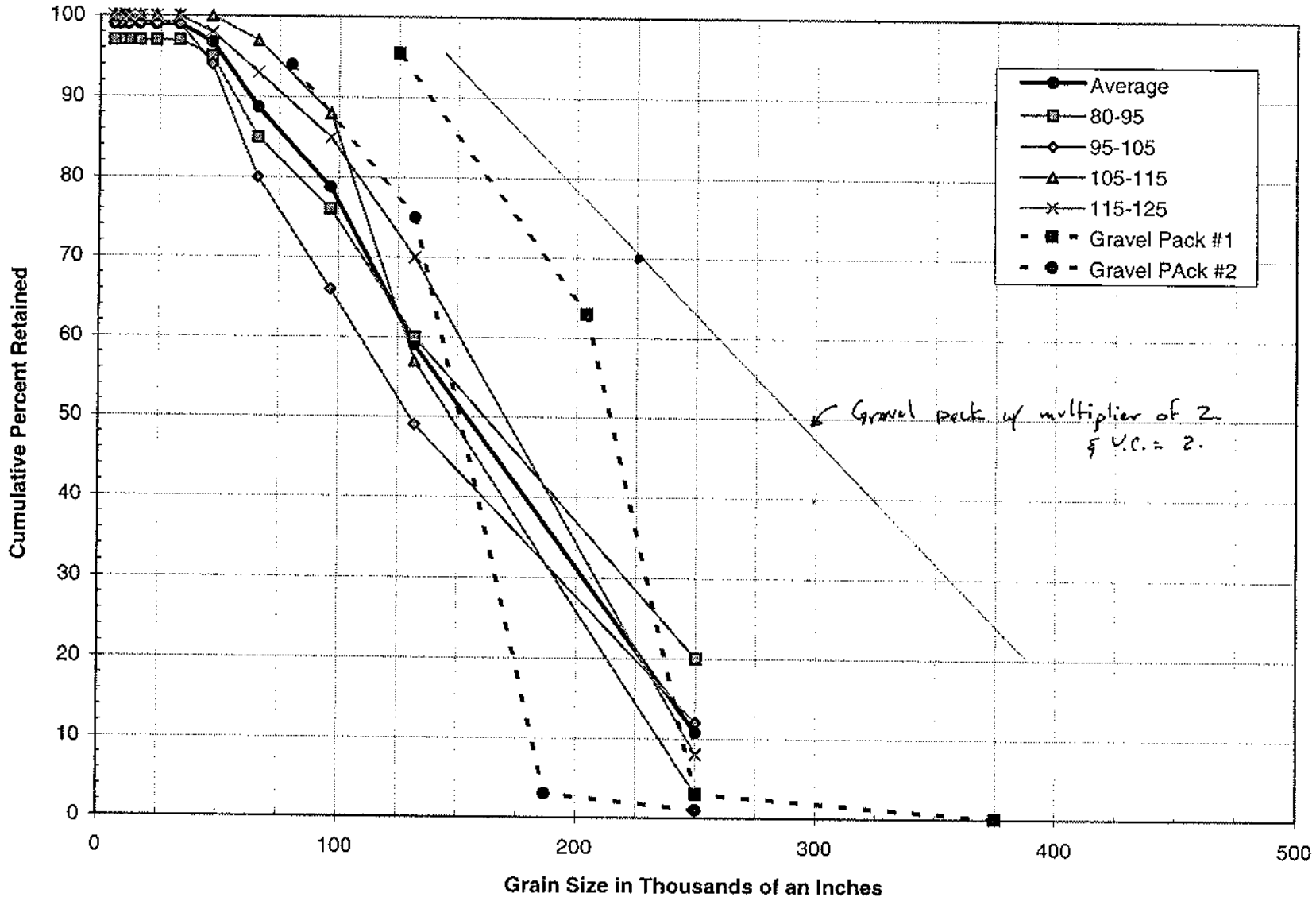
SAND ANALYSIS I

June 25, 1996

S 2 #14

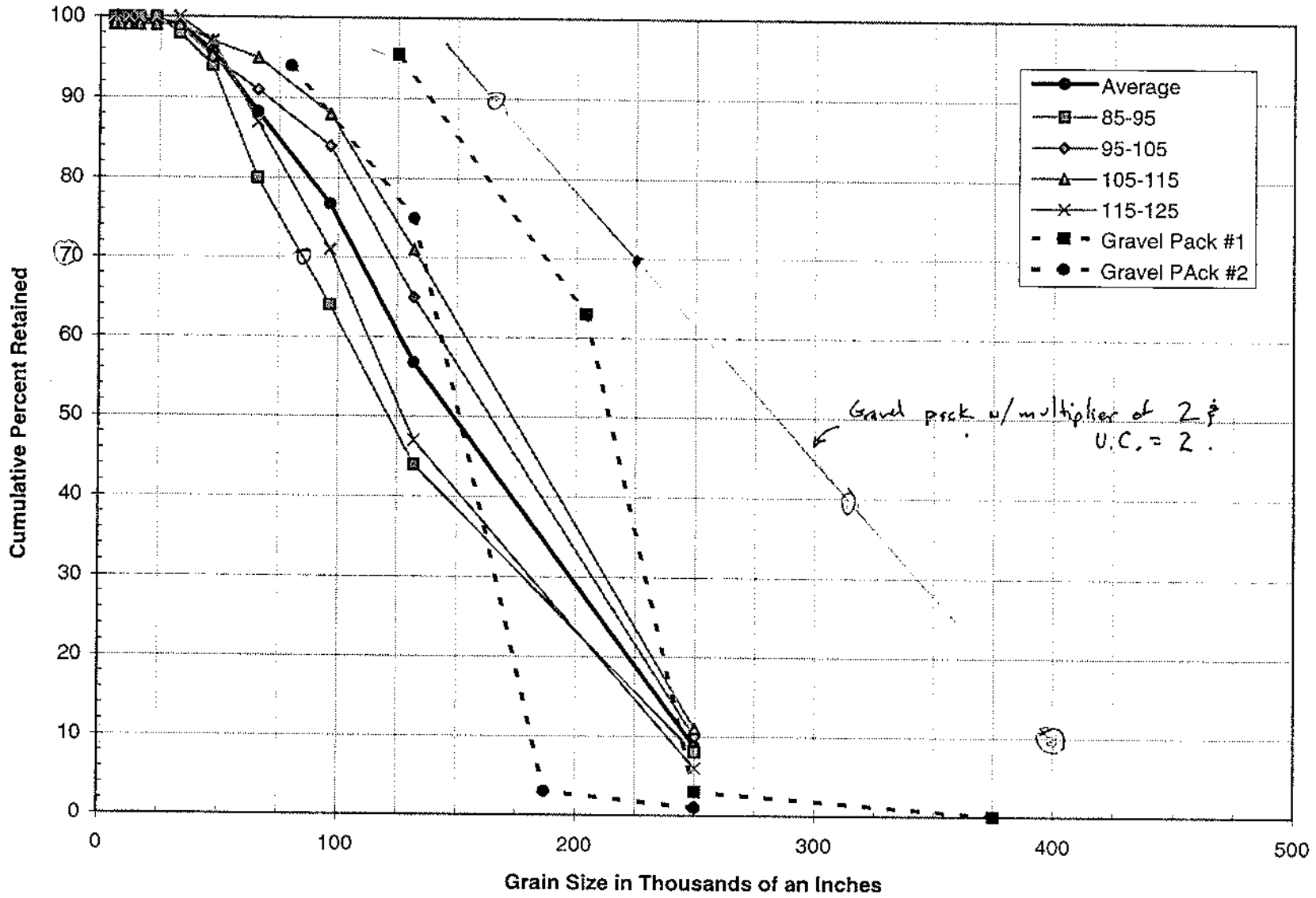
DEPTH	80-95	95-105	105-115	115-125					
GAGE .250"	20	12	3	8					
.132"	60	49	57	70					
.0967"	76	66	88	85					
.0661"	85	80	97	93					
.0469"	95	94	100	98					
.0331"	97	99	100	100					
.0234"	97	99	100	100					
.0165"	97	99	100	100					
.0117"	97	99	100	100					
.0083"	97	99	100	100					
.0059"	97	99	100	100					
PAN	97	99	100	100					

S2 #14



System 2, Well #14

S2 #15



SYSTEM 2, Well #15

6-26-1996 9:38AM

FROM HOUSTON WELL SCREEN 1 713 442 0503

P.8

SYSTEM 2, Well #15

SAND ANALYSIS I

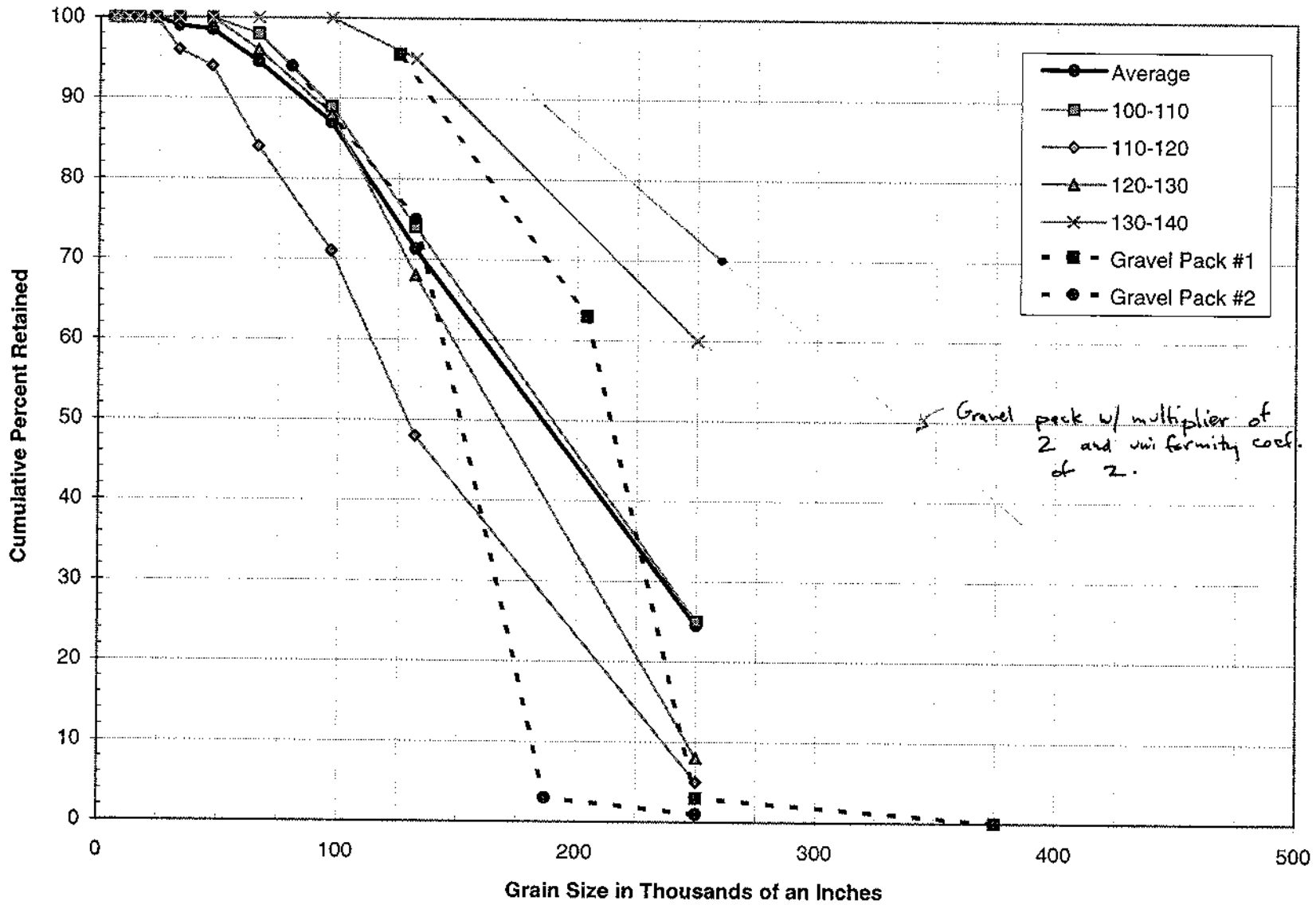
June 25, 1996

S 2 #15

DEPTH	85-95	95-105	105-115	115-125				
GAGE .250"	8	10	11	6				
.132"	44	65	71	47				
.0967"	64	84	88	71				
.0661"	80	91	95	87				
.0469"	94	95	97	97				
.0331"	98	96	99	100				
.0234"	100	99	99	100				
.0165"	100	99	99	100				
.0117"	100	99	99	100				
.0083"	100	99	99	100				
.0059"	100	99	99	100				
PAN	100	99	99	100				

System 3W

SR #15



6-26-1996 9:35AM

FROM HOUSTON WELL SCREEN 1 713 442 0503

P. 1

SAND ANALYSIS I

SR #15

US Std.
Sieve

6

~~8~~ 8

12

16

20

30

40

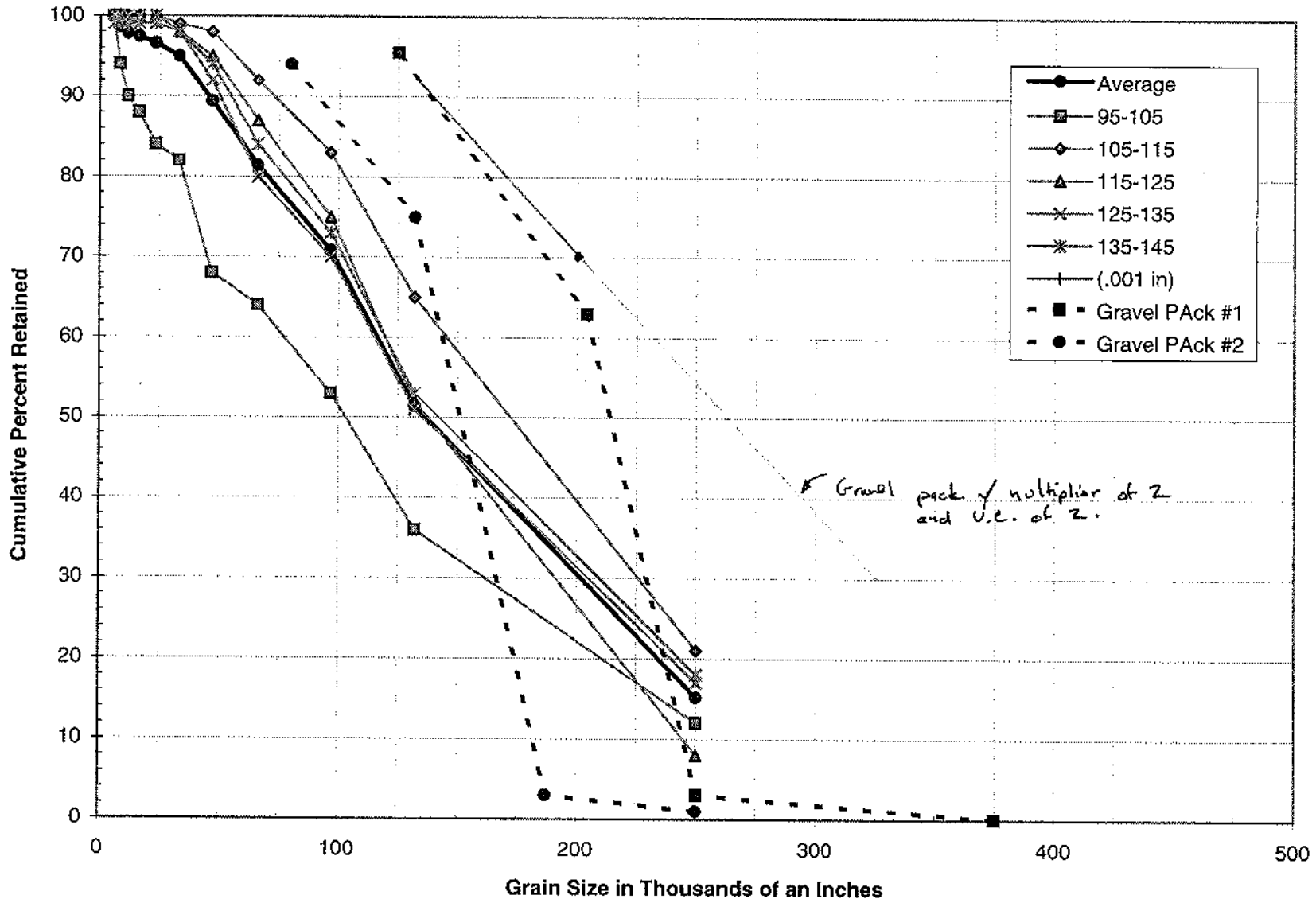
50

70

100

DEPTH	100-110	110-120	120-130	130-140					
GAGE .250"	25	5	8	60					
.132"	74	48	68	95					
.0967"	89	71	88	100					
.0661"	98	84	96	100					
.0469"	105	94	100	100					
.0331"	110	96	101	100					
.0234"	110	100	101	100					
.0165"	110	100	101	100					
.0117"	110	100	101	100					
.0083"	110	100	101	100					
.0059"	110	100	101	100					
PAN	110	100	101	100					

SR #16



6-26-1996 9:36AM

FROM HOUSTON WELL SCREEN 1 713 442 0503

P. 2

SQWEE Well # 16

SAND ANALYSIS I

SR #16

DEPTH	95-105	105-115	115-125	125-135	135-145				
GAGE .250"	12	21	8	17	18				
6 .132"	36	65	52	51	53				
8 .0967"	52	83	75	70	73				
12 .0661"	64	92	87	80	84				
16 .0469"	68	98	95	92	94				
20 .0331"	82	99	98	98	98				
30 .0234"	84	100	100	100	99				
40 .0165"	88	100	100	100	99				
50 .0117"	90	100	100	100	99				
70 .0083"	94	100	100	100	99				
100 .0059"	100	100	100	100	99				
PAN	100	100	100	100	99				

6-26-1996 9:36AM

FROM HOUSTON WELL SCREEN 1 713 442 0503

P.3

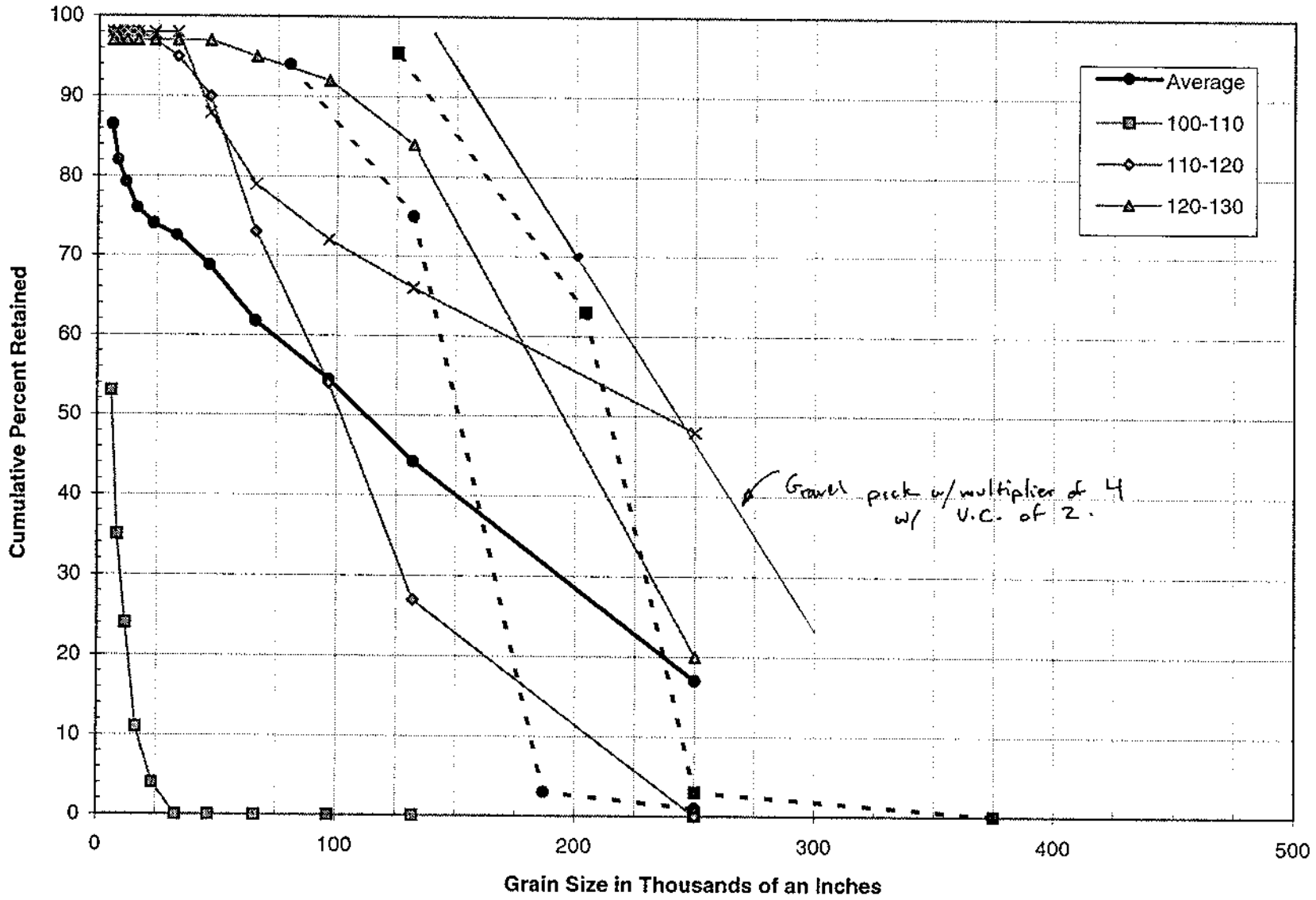
SYSTEM 3, Well #17
SRWF

SAND ANALYSIS I

SR #17

DEPTH	100-110	110-120	120-130	130-140					
GAGE .250"	0	0	20	48					
.132"	0	27	84	66					
.0967"	0	54	92	72					
.0661"	0	73	95	79					
.0469"	0	90	97	88					
.0331"	0	95	97	98					
.0234"	4	97	97	98					
.0165"	11	98	97	98					
.0117"	24	98	97	98					
.0083"	35	98	97	98					
.0059"	53	98	97	98					
PAN	100	98	97	98					

SR #17



SYSTEM 3
SCALE
W/ → 17

6-26-1996 9:37AM

FROM HOUSTON WELL SCREEN 1 713 442 0503

P. 4

SYSTEM 3, Well #18
SRWCF

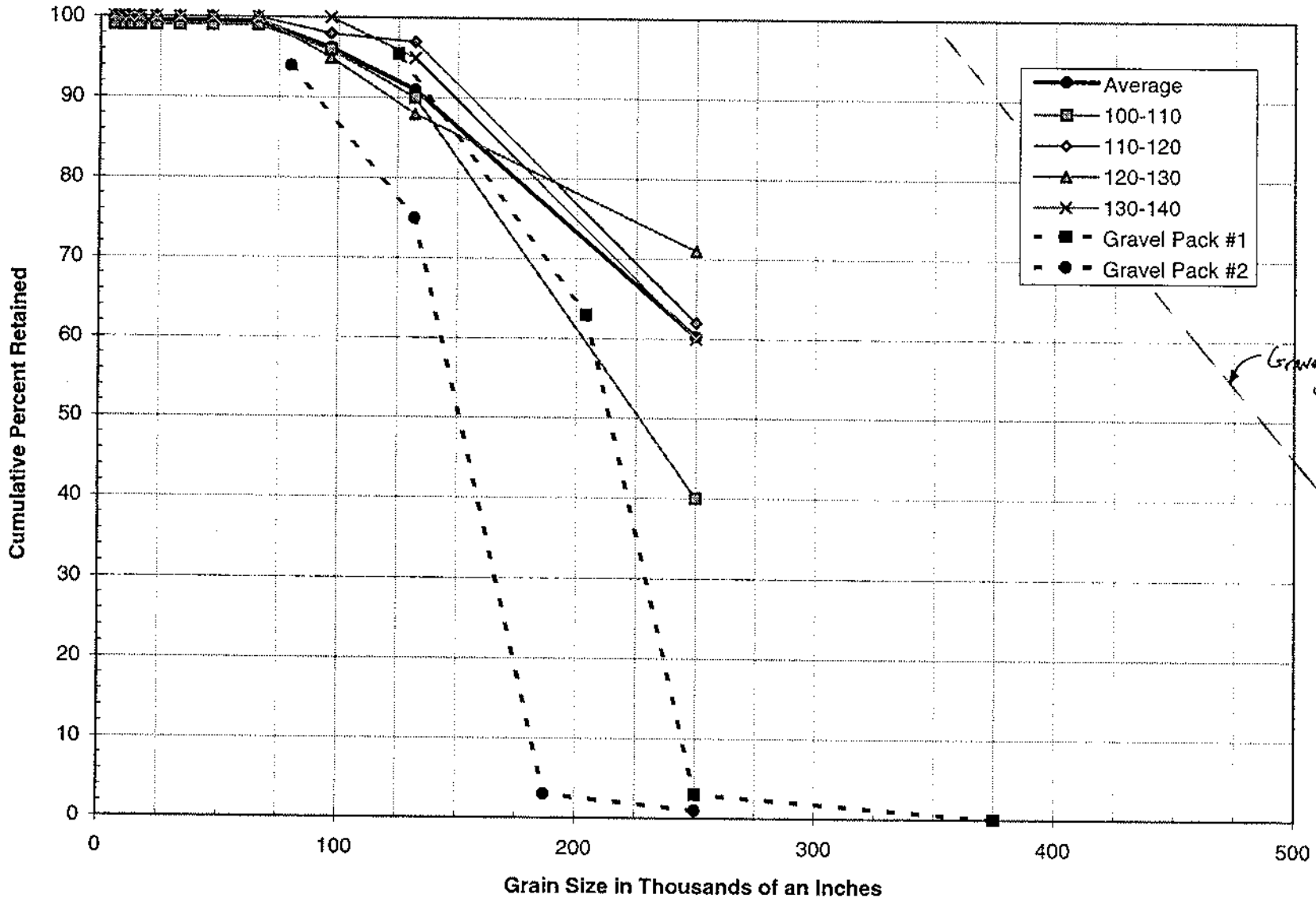
SAND ANALYSIS I

SR #18

Southeast Eng

DEPTH	100-110	110-120	120-130	130-140					
GAGE .250"	40	62	71	68					
.132"	90	97	88	89					
.0967"	96	98	95	96					
.0661"	99	100	100	99					
.0469"	99	100	100	99					
.0331"	99	100	100	99					
.0234"	99	100	100	99					
.0165"	99	100	100	99					
.0117"	99	100	100	99					
.0083"	99	100	100	99					
.0059"	99	100	100	99					
PAN	99	100	100	99					

SR #18



SYSTEM 3, NOV 18
SERVIC

System 8W

6-26-1996 9:37AM

FROM HOUSTON WELL SCREEN 1 713 442 0503

P.5

System 8W, #13

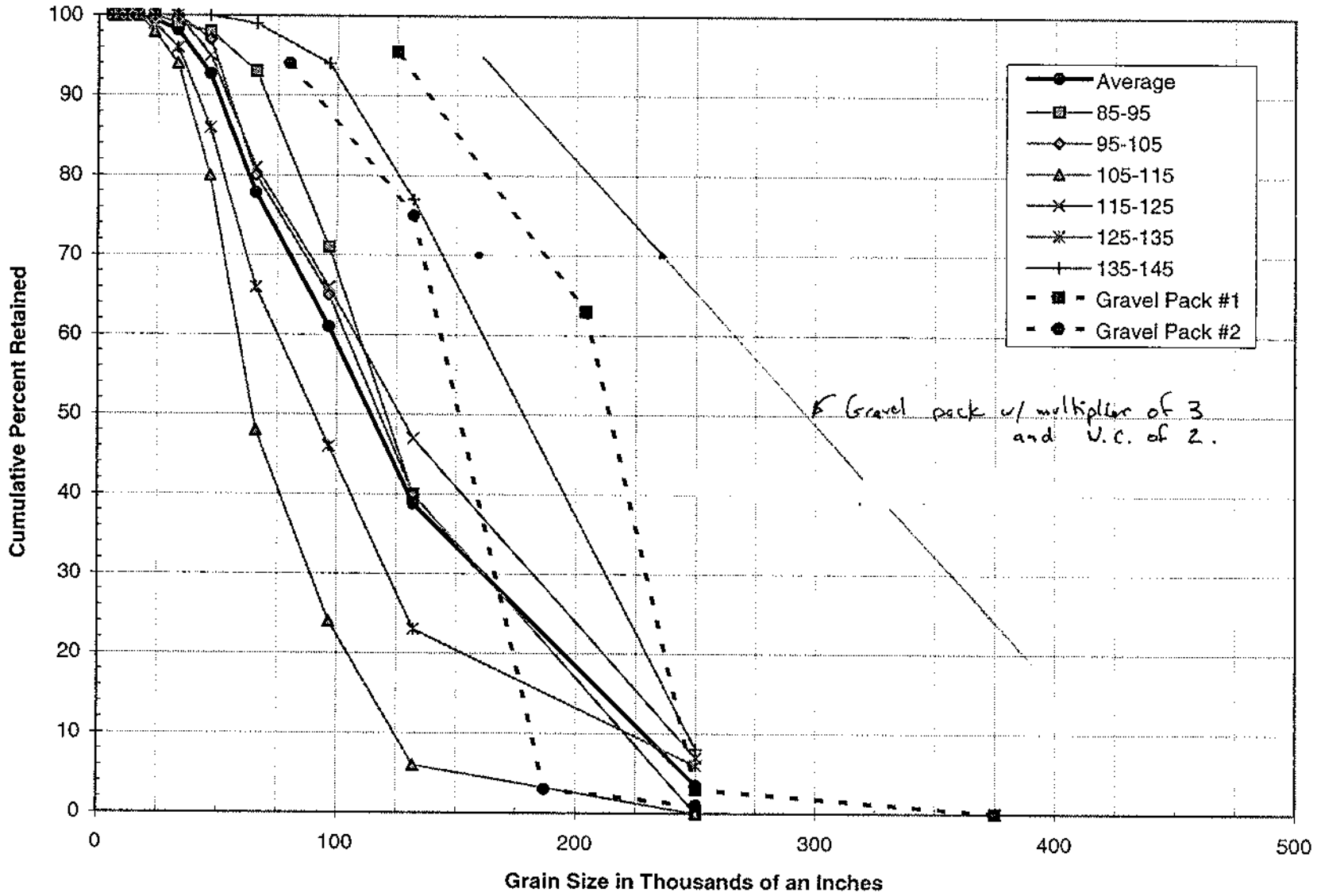
SAND ANALYSIS I

June 20, 1996

S 8 #13

DEPTH	85-95	95-105	105-115	115-125	125-135	135-140			
GAGE .250"	0	0	0	7	6	8			
.132"	40	40	6	47	23	77			
.0967"	71	65	24	66	46	94			
.0661"	93	80	48	81	66	99			
.0469"	112	97	80	95	86	101			
.0331"	119	100	94	100	96	101			
.0234"	120	100	98	100	99	101			
.0165"	120	100	100	100	100	101			
.0117"	120	100	100	100	100	101			
.0083"	120	100	100	100	100	101			
.0059"	120	100	100	100	100	101			
PAN	120	100	100	100	100	101			

S8 #13



System BW, # 13

6-26-1996 9:37AM

FROM HOUSTON WELL SCREEN 1 713 442 0503

P.6

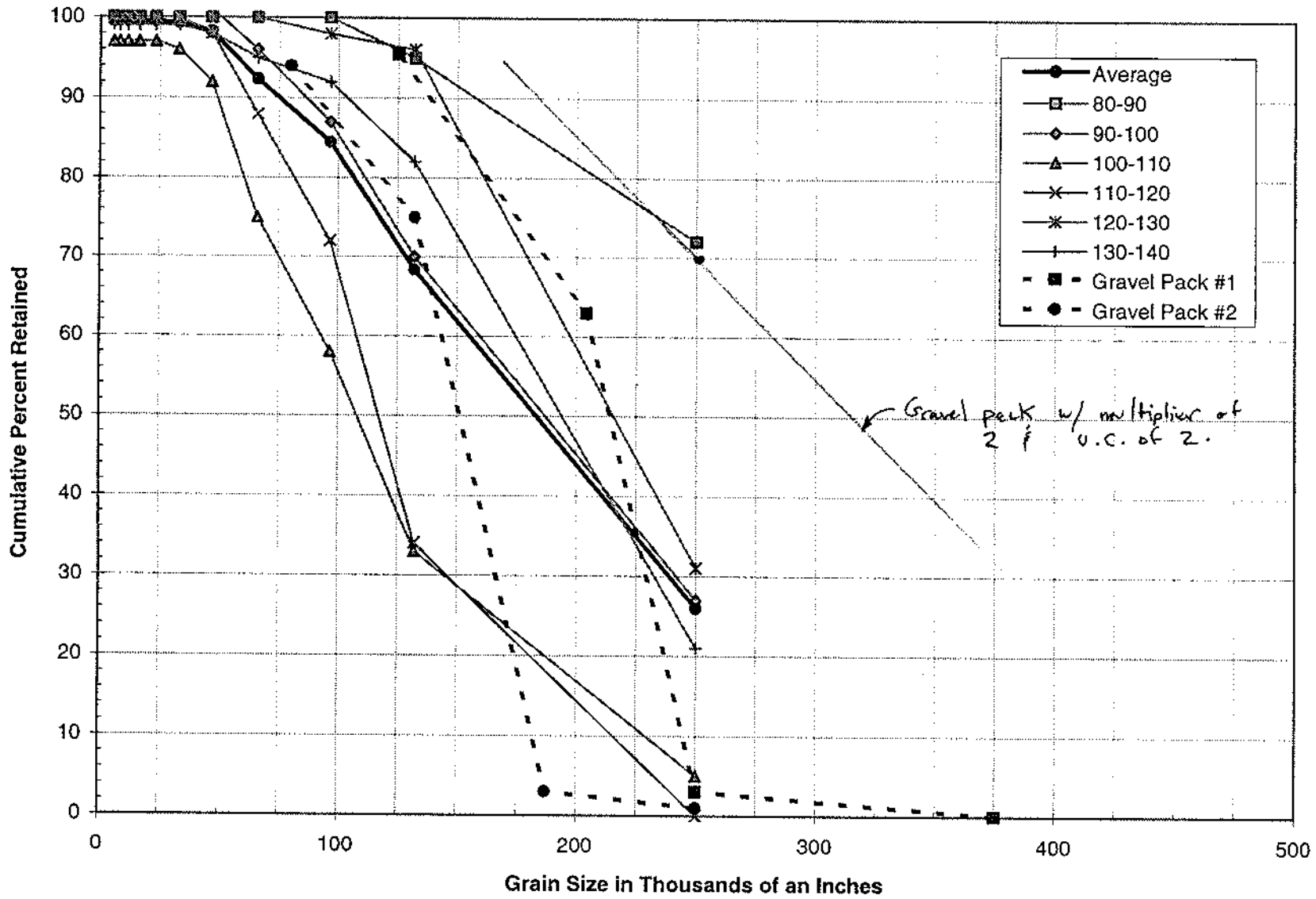
System 8W, * 14

SAND ANALYSIS I

S 8 #14

DEPTH	80-90	90-100	100-110	110-120	120-130	130-140			
GAGE .250"	72	27	5	0	31	21			
.132"	95	70	33	34	96	82			
.0967"	100	87	58	72	98	92			
.0661"	100	96	75	88	100	95			
.0469"	100	101	92	98	100	98			
.0331"	100	101	96	100	100	99			
.0234"	100	101	97	100	100	99			
.0165"	100	101	97	100	100	99			
.0117"	100	101	97	100	100	99			
.0083"	100	101	97	100	100	99			
.0059"	100	101	97	100	100	99			
PAN	100	101	97	100	100	99			

S8 #14



System 8W, # 14

System 9W

6-26-1996 9:38AM

FROM HOUSTON WELL SCREEN 1 713 442 0503

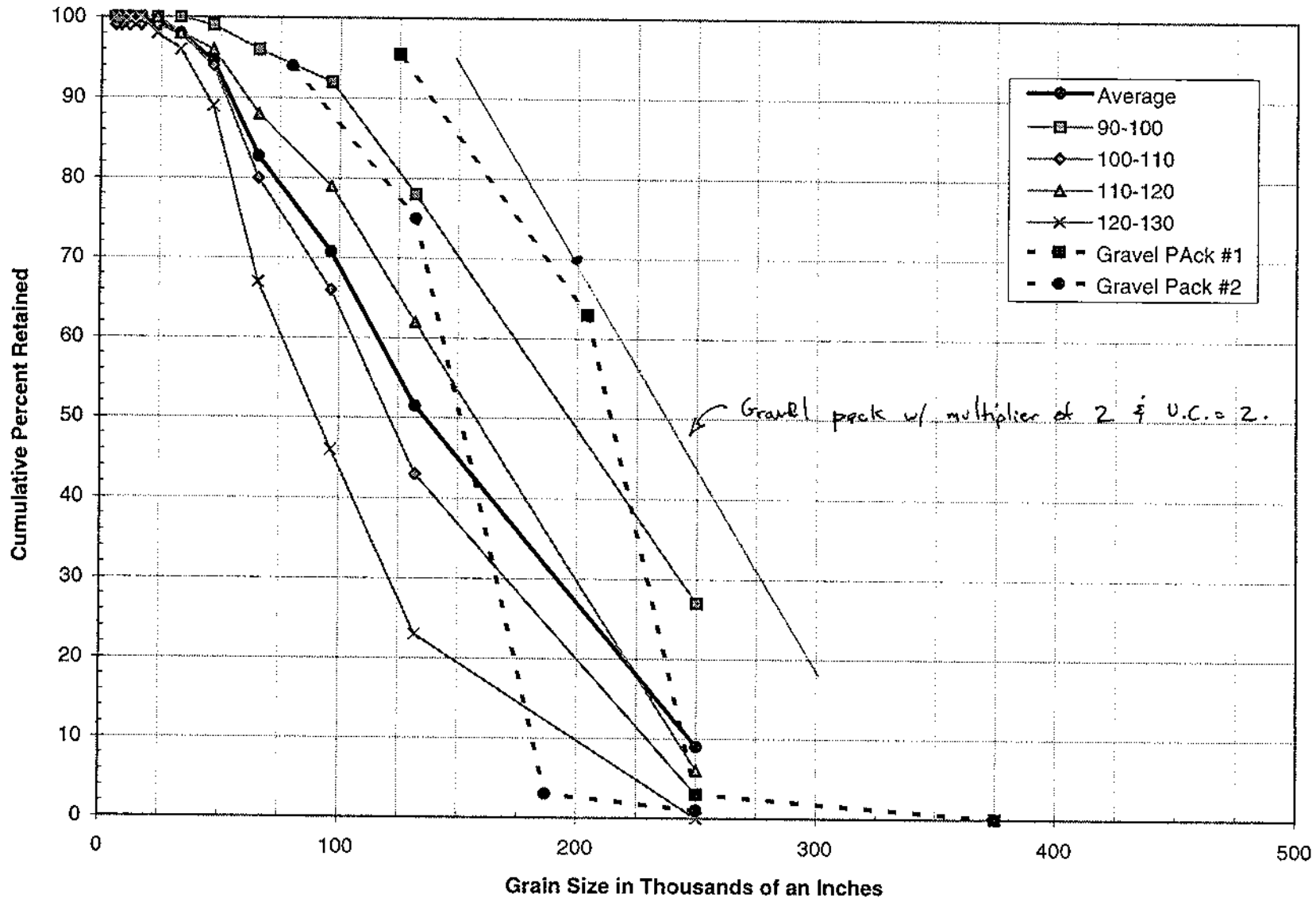
P.9

SYSTEM 9W
Well * 1R

SAND ANALYSIS I
S 9 #1

DEPTH	90-100	100-110	110-120	120-130					
GAGE .250"	27	3	06	0					
.132"	78	43	62	23					
.0967"	92	66	79	46					
.0661"	96	80	88	67					
.0469"	99	94	96	89					
.0331"	100	98	98	96					
.0234"	100	99	100	98					
.0165"	100	99	100	100					
.0117"	100	99	100	100					
.0083"	100	99	100	100					
.0059"	100	99	100	100					
PAN	100	99	100	100					

S9 #1



SYSTEM QM, Well # 1R

Gravel Pack Sand Sieve Analysis



FLORIDA SILICA SAND CO., INC.

PRODUCERS AND DISTRIBUTORS OF AGGREGATES AND ABRASIVES FOR EVERY PURPOSE

8500 NORTHWEST 36TH AVENUE
MIAMI, FLORIDA 33147

TELEPHONE (305) 691-5801
FAX (305) 696-9414

July 9, 1996

Mr. Bart Siegler
Southeast Drilling

SIEVE ANALYSIS - 1/4" - 1/8" FILTER GRAVEL

SIEVE SIZE SIEVE ANALYSIS
PERCENT PASSING

SA 1, 2, 1

3/8"	375	100.0	0
1/4"	282	97.0	3
#4	204	37.0	63
1/8"	126	4.5	75.5

Selected.

3/16 - #10

Sample #2

1/4"	.256	99.0	1
3/16"	.187	97.0	3
#6	.132	25.0	75
#10	.080	6.0	94

Selected: 1/4" - 1/8" Florida Silica Sand Co.

6-26-1996 2:39PM

FROM HOUSTON WELL SCREEN 1 713 442 0503

P. 1



11939 Aldine-Westfield Road
Houston, Texas 77093

Telephone: 713/449-7261
WATS: 800/237-7593
Telefax: 713/449-6010

June 26, 1996

Southeast Drilling Services, Inc
P O Box 271723
Tampa, FL 33688

Attn: Bart Ziegler

We have received and analyzed the sand samples from the PBC Wellfield Expansion.

We have determined that .100 slot screen and a 1/8 x 1/4 River Gravel from Florida Silica would be a good recommendation. We also project that 16" .100 slot screen will produce 79.57 GPP per foot at an entrance velocity of .1 ft. per second.

Please be advised that we assume no responsibility for the samples used in the above analysis as being truly representative of the section to be screened.

Thank you for the opportunity to submit our recommendations and if you have any additional questions or comments, please do not hesitate to call.

Sincerely,

HOUSTON WELL SCREEN COMPANY

Daniel M. Parris
National Sales Manager

DMP/skm



Appendix E



Preliminary Water Sample Analyses

System 2

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (to be completed by system or lab)

System Name: _____ I.D. #: _____

Address: _____ Phone #: (____) _____

Type (check one): () Community () Nontransient Noncommunity () Noncommunity

SAMPLE INFORMATION (to be completed by sampler)

Sample Date (MMDDYY): ____/____/____ Sample Time: _____

Sample Location (be specific): _____

Sampler Name and Phone: _____ (____) _____

Sampler's Signature: _____ Title: _____

Check Type(s): () Distribution () Recheck of MCL () Resample of Lab Invalidated Sample
() Clearance () Thm Max Res Time () Plant Tap
() Distrib entry pt () Raw () Composite of Multiple Sites--Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab) - ATTACH HRS ANALYTE SHEET*

Lab Name: PPB Environmental Laboratories, Inc. HRS #: 82282 Expiration Date: _____

Address: 6821 SW Archer Road, Gainesville, FL 32608 Phone #: (352) 377-2349

Subcontracted Lab HRS #: 83170, 82135, 84269 - ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (to be completed by lab) - SAMPLE NUMBER: 131662 System #2 Well #14

Date Sample(s) Received: 5/28/96 Group(s) Analyzed & Results attached for compliance with 62-550, F.A.C.:

() Nitrate Only	() Nitrite Only	() Asbestos Only	(x) Trihalomethanes
Inorganics--	Volatile Organics--	Secondaries--	Pesticide/PCBs--
() All 17 (x) Partial	(x) All 21 () Partial	(x) All 14 () Partial	() All 30 (x) Partial
Group I Unregulateds--	Group II Unregulateds--	Group III Unregulateds--	Radiochemicals--
() All 13 (x) Partial	(x) All 23 () Partial	(x) All 11 () Partial	(x) Single Sample () Qtrly Composite**

**Provide radiochemical sample dates & locations for each quarter

I, Paul Berman, do HEREBY CERTIFY that all attached analytical data are correct.

Signature Paul Berman

Title QA Officer Date 6/14/96

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: _____ Sample Analysis Satisfactory: _____

Resample Requested for: _____ Reason: _____

Person notified to resample: _____ Date Notified: _____

DEP/HRS Reviewing Official: _____

*All HRS lab #s and their HRS Analyte Sheet for labs performing the attached water analyses must be provided. Failure to do so will result in rejection of the analyses and possible enforcement against the public water system for failure to sample.

Effective January 1995

INORGANIC ANALYSIS
62-550.310(1)
(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	131662	0.001 U	SM 3113B	06/08/96	0.001	82282
1010	BARIUM	(2)	131662	0.048	EPA 200.7	06/10/96	0.001	82282
1015	CADMIUM	(.005)	131662	0.0001	SM 3113B	06/01/96	0.0001	82282
1020	CHROMIUM	(0.1)	131662	0.024	EPA 200.7	06/10/96	0.005	82282
1024	CYANIDE	(0.2)	131662	0.004 U	SM 4500CNE	06/04/96	0.004	82282
1025	FLUORIDE	(4)	131662	0.52	SM 4500FC	06/14/96	0.02	82282
1030	LEAD	(0.015)	131662	0.002 K	SM 3113B	06/11/96	0.001	82282
1035	MERCURY	(0.002)	131662	0.0001 K	EPA 245.1	06/10/96	0.00005	82282
1036	NICKEL	(0.1)	131662	0.030 U	EPA 200.7	06/10/96	0.030	82282
1040	NITRATE	(10)	131662	0.160	EPA 353.2	06/06/96	0.004	82282
1041	NITRITE	(1)	131662	0.066	EPA 353.2	05/29/96	0.003	82282
1045	SELENIUM	(0.05)	131662	0.005 K	SM 3113B	06/08/96	0.001	82282
1052	SODIUM	(160)	131662	96.2	EPA 200.7	06/10/96	0.05	82282
1074	ANTIMONY	(0.006)	131662	0.003 U	SM 3113B	06/12/96	0.003	82282
1075	BERYLLIUM	(0.004)	131662	0.003 U	EPA 200.7	06/10/96	0.003	82282
1085	THALLIUM	(0.002)	131662	0.002 U	EPA 200.9	06/12/96	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS
62-550.320
(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1002	ALUMINUM	(0.2)	131662	8.69	EPA 200.7	06/10/96	0.01	82282
1017	CHLORIDE	(250)	131662	79.7	EPA 325.2	05/30/96	0.3	82282
1022	COPPER	(1)	131662	0.02 K	EPA 200.7	06/10/96	0.01	82282
1020	FLUORIDE	(2.0)	131662	0.52	SM 4500FC	06/14/96	0.02	82282
1028	IRON	(0.3)	131662	4.35	EPA 200.7	06/10/96	0.005	82282
1032	MANGANESE	(0.05)	131662	0.044	EPA 200.7	06/10/96	0.005	82282
1050	SILVER	(0.1)	131662	0.0004	SM 3113B	06/04/96	0.0001	82282
1055	SULFATE	(250)	131662	68.4	EPA 375.4	06/11/96	1	82282
1095	ZINC	(5)	131662	0.032	EPA 200.7	06/10/96	0.004	82282
1905	COLOR	(15 color units)	131662	80	SM 2120B	05/28/96	5	82282
1920	ODOR	(3 threshold odor number)	131662	1 U	SM 2150B	05/28/96	1	82282
1925	PH	(6.5-8.5)	131662	7.4	EPA 150.1	05/28/96	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		131662	576	SM 2540C	06/03/96	3	82282
2905	FOAMING AGENTS	(0.5)	131662	0.1 K	SM 5540C	05/28/96	0.025	82135

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).
K indicates analyte is less than value indicated, with value being greater than method detection limit.
U - Analyte was not detected; indicated concentration is method detection limit.

PPB Environmental Laboratories, Inc. • 6821 SW Archer Road • Gainesville, FL 32608 • (352) 377-2349

TRICHALOMETHANE ANALYSIS
62-550.310(2)(A)
(PWS027)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2950	TOTAL THMS	(0.10)	09248-03	0.0017	EPA 502.2	05/31/96	0.0015	84269

RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

Parameter ID	Name	(MCL pCi/l)	Sample Number	Analysis Result (pCi/l)	Analysis Method	Analysis Date	Error	Lab ID
4000	GROSS ALPHA		131662	20.4 ± 4.5	EPA 900.0	06/04/96	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		131662	2.4 ± 0.2	EPA 903.1	06/06/96	1	83170
4030	RADIUM-228		NA		BROOKS/BLANC		1	83170
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)
NA = NOT ANALYZED

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(B)
(PWS028)

Parameter ID	Name	(MCL ug/l)	Sample Number	Analysis Result (ug/l)	Analysis Method	Analysis Date	MDL	Lab ID
2378	1,2,4-TRICHLOROBENZENE	(70)	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2380	CIS-1,2-DICHLOROETHYLENE	(70)	09248-03	0.2 U	EPA 502.2	05/31/96	0.2	84269
2955	XYLENES (TOTAL)	(10,000)	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2964	DICHLOROMETHANE	(5)	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2968	O-DICHLOROBENZENE	(600)	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2969	PARA-DICHLOROETHYLENE	(75)	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2976	VINYL CHLORIDE	(1)	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2977	1,1-DICHLOROETHYLENE	(7)	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2979	TRANS-1,2-DICHLOROETHYLENE	(100)	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2980	1,2-DICHLOROETHANE	(3)	09248-03	0.2 U	EPA 502.2	05/31/96	0.2	84269
2981	1,1,1-TRICHLOROETHANE	(200)	09248-03	0.3 U	EPA 502.2	05/31/96	0.3	84269
2982	CARBON TETRACHLORIDE	(3)	09248-03	0.3 U	EPA 502.2	05/31/96	0.3	84269
2983	1,2-DICHLOROPROPANE	(5)	09248-03	0.3 U	EPA 502.2	05/31/96	0.3	84269
2984	TRICHLOROETHYLENE	(3)	09248-03	0.2 U	EPA 502.2	05/31/96	0.2	84269
2985	1,1,2-TRICHLOROETHANE	(5)	09248-03	0.3 U	EPA 502.2	05/31/96	0.3	84269
2987	TETRACHLOROETHYLENE	(3)	09248-03	0.2 U	EPA 502.2	05/31/96	0.2	84269
2989	MONOCHLOROBENZENE	(100)	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2990	BENZENE	(1)	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2991	TOLUENE	(1,000)	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2992	ETHYLBENZENE	(700)	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2996	STYRENE	(100)	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(c)
(PWS029)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2005	ENDRIN	(2)	09248-03	0.01 U	EPA 508	06/03/96	0.01	84269
2010	LINDANE	(.2)	09248-03	0.01 U	EPA 508	06/03/96	0.01	84269
2015	METHOXYCHLOR	(40)	09248-03	0.02 U	EPA 508	06/03/96	0.02	84269
2020	TOXAPHENE	(3)	09248-03	0.2 U	EPA 508	06/03/96	0.2	84269
2031	DALAPON	(200)	09248-03	1 U	EPA 515.1	06/04/96	1	84269
2032	DIQUAT	(20)	09248-03	8 K ¹	EPA 549.1	05/30/96	4	84269
2033	ENDOTHALL	(100)	09248-03	10 U	EPA 548	05/29/96	10	84269
2034	GLYPHOSATE	(700)	09248-03	10 U	EPA 547	06/03/96	10	84269
2035	DI(2-ETHYLHEXYL)ADIPATE	(400)	09248-03	1 U	EPA 506	06/03/96	1	84269
2036	OXAMYL (VYDATE)	(200)	09248-03	0.5 U	EPA 531.1	05/30/96	0.5	84269
2037	SIMAZINE	(4)	09248-03	0.1 U	EPA 507	06/03/96	0.1	84269
2039	DI(2-ETHYLHEXYL)PHTHALATE	(6)	09248-03	1.1	EPA 506	06/03/96	1	84269
2040	PICLORAM	(500)	09248-03	0.2 U	EPA 515.1	06/04/96	0.2	84269
2041	DINOSEB	(7)	09248-03	0.2 U	EPA 515.1	06/04/96	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	09248-03	0.1 U	EPA 505	06/03/96	0.1	84269
2046	CARBOFURAN	(40)	09248-03	0.5 U	EPA 531.1	05/30/96	0.5	84269
2050	ATRAZINE	(3)	09248-03	0.1 U	EPA 507	06/03/96	0.1	84269
2051	ALACHLOR	(2)	09248-03	0.3 U	EPA 507	06/03/96	0.3	84269
2063	2,3,7,8-TCDD (DIOXIN)	(.00003)	09248-03		EPA	--	--	84269
2065	HEPTACHLOR	(.4)	09248-03	0.01 U	EPA 508	06/03/96	0.01	84269
2067	HEPTACHLOR EPOXIDE	(.2)	09248-03	0.01 U	EPA 508	06/03/96	0.01	84269
2105	2,4-D	(70)	09248-03	0.5 U	EPA 515.1	06/04/96	0.5	84269
2110	2,4,5-TP (SILVEX)	(50)	09248-03	0.05 U	EPA 515.1	06/04/96	0.05	84269
2274	HEXACHLOROBENZENE	(1)	09248-03	0.01 U	EPA 508	06/03/96	0.01	84269
2306	BENZO(A)PYRENE	(.2)	09248-03	0.01 U	EPA 550	06/03/96	0.01	84269
2326	PENTACHLOROPHENOL	(1)	09248-03	0.05 U	EPA 515.1	06/04/96	0.05	84269
2383	PCB	(.5)	09248-03	0.05 U	EPA 508	06/03/96	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	09248-03	0.005 U	EPA 504	06/04/96	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	09248-03	0.005 U	EPA 504	06/04/96	0.005	84269
2959	CHLORDANE	(2)	09248-03	0.05 U	EPA 508	06/03/96	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2021	CARBARYL		09248-03	0.5 U	EPA 531.1	05/30/96	0.5	84269
2022	METHOMYL		09248-03	0.5 U	EPA 531.1	05/30/96	0.5	84269
2043	ALDICARB SULFOXIDE		09248-03	0.5 U	EPA 531.1	05/30/96	0.5	84269
2044	ALDICARB SULFONE		09248-03	0.5 U	EPA 531.1	05/30/96	0.5	84269
2045	METOLACHLOR		09248-03	0.3 U	EPA 507	06/03/96	0.3	84269
2047	ALDICARB		09248-03	0.5 U	EPA 531.1	05/30/96	0.5	84269
2066	3-HYDROXYCARBOFURAN		09248-03	0.5 U	EPA 531.1	05/30/96	0.5	84269
2077	PROPACHLOR		09248-03	0.05 U	EPA 508	06/03/96	0.05	84269
2356	ALDRIN		09248-03	0.01 U	EPA 508	06/03/96	0.01	84269
2364	DIELDRIN		09248-03	0.01 U	EPA 508	06/03/96	0.01	84269
2440	DICAMBA		09248-03	0.05 U	EPA 515.1	06/04/96	0.05	84269
2595	METRIBUZIN		09248-03	0.2 U	EPA 507	06/03/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

K - Analyte was less than indicated concentration; indicated concentration is MDL x Sample Dilution Factor.

¹ - Reduced sample volume used for analysis due to interference from sediment.

UNREGULATED GROUP II ANALYSIS

62-550.410
(PWS034)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2210	CHLOROMETHANE	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2212	DICHLORODIFLUOROMETHANE	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2214	BROMOMETHANE	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2216	CHLOROETHANE	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2218	TRICHLOROFLUOROMETHANE	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2408	DIBROMOMETHANE	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2410	1,1-DICHLOROPROPYLENE	09248-03	0.3 U	EPA 502.2	05/31/96	0.3	84269
2412	1,3-DICHLOROPROPANE	09248-03	0.3 U	EPA 502.2	05/31/96	0.3	84269
2413	1,3-DICHLOROPROPENE	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	09248-03	0.3 U	EPA 502.2	05/31/96	0.3	84269
2416	2,2-DICHLOROPROPANE	09248-03	0.3 U	EPA 502.2	05/31/96	0.3	84269
2941	CHLOROFORM	09248-03	1.7	EPA 502.2	05/31/96	0.2	84269
2942	BROMOFORM	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2943	BROMODICHLOROMETHANE	09248-03	0.3 U	EPA 502.2	05/31/96	0.3	84269
2944	DIBROMOCHLOROMETHANE	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2965	O-CHLOROTOLUENE	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2966	P-CHLOROTOLUENE	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2967	M-DICHLOROETHENE	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269
2978	1,1-DICHLOROETHANE	09248-03	0.3 U	EPA 502.2	05/31/96	0.3	84269
2986	1,1,1,2-TETRACHLOROETHANE	09248-03	0.3 U	EPA 502.2	05/31/96	0.3	84269
2988	1,1,2,2-TETRACHLOROETHANE	09248-03	0.3 U	EPA 502.2	05/31/96	0.3	84269
2993	BROMOBENZENE	09248-03	0.5 U	EPA 502.2	05/31/96	0.5	84269

UNREGULATED GROUP III ANALYSIS

62-550.415
(PWS036 & 037*)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2262	ISOPHORONE	09248-03	1 U	EPA 609	06/03/96	1	84269
2270	2,4-DINITROTOLUENE	09248-03	1 U	EPA 609	06/03/96	1	84269
2282	DIMETHYLPHTHALATE	09248-03	1 U	EPA 506	06/03/96	1	84269
2284	DIETHYLPHTHALATE	09248-03	1 U	EPA 506	06/03/96	1	84269
2290	DI-N-BUTYLPHTHALATE	09248-03	1 U	EPA 506	06/03/96	1	84269
2294	BUTYL BENZYL PHTHALATE	09248-03	1 U	EPA 506	06/03/96	1	84269
9089	DIOCTYLPHTHALATE	09248-03	1 U	EPA 506	06/03/96	1	84269
9108*	2-CHLOROPHENOL	09248-03	5 U	EPA 604	06/03/96	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	09248-03	20 U	EPA 604	06/03/96	20	84269
9115*	PHENOL	09248-03	5 U	EPA 604	06/03/96	5	84269
9116*	2,4,6-TRICHLOROPHENOL	09248-03	10 U	EPA 604	06/03/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

COLIFORM ANALYSIS

<u>Parameter</u> <u>ID</u>	<u>Name</u> <u>(MCL μg/l)</u>	<u>Sample</u> <u>Number</u>	<u>Analysis</u> <u>Result (μg/l)</u>	<u>Analysis</u> <u>Method</u>	<u>Analysis</u> <u>Date</u>	<u>MDL</u>	<u>Lab</u> <u>ID</u>
	TOTAL COLIFORMS (MPN)	131662	21		05/28/96	1	82135
	FECAL COLIFORMS (MPN)	131662	2 U		05/28/96	1	82135

U - Analyte was not detected; indicated concentration is method detection limit.



ABC Research

3437 s.w. 24th avenue

gainesville, florida 32607

904-372-0436

fax 904-378-6483

Report No. 78731

Date JUN 03 1996

Subject: WATER REC'D 02:10PM BY D. ROBERTS ANALYSIS BEGUN 02:25PM

Received: MAY 28 1996

PAUL BERMAN
FPB ENVIRONMENTAL LAB
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608

Client # 2643
Phone: (352) 377-2349
Fax: (352) 395-6639

RESULTS OF ANALYSIS

SYSTEM #8

Sample 1 WELL 14 5/27/96 11:30 ID #131660

TOTAL COLIFORMS (MPN)

>1,600 / 100ML

FECAL COLIFORMS (MPN)

17 / 100ML

Sample 2 SYSTEM 9 5/27/96 12:45 ID #131661

TOTAL COLIFORMS (MPN)

>1,600 / 100ML

FECAL COLIFORMS (MPN)

>1,600 / 100ML

Sample 3 SYSTEM 2 5/27/96 13:30 ID #131662

#14

TOTAL COLIFORMS (MPN)

21 / 100ML

FECAL COLIFORMS (MPN)

<2 / 100ML

Sample 4 SYSTEM ~~15~~ 5/27/96 14:30 ID #131663

#2 well #15

TOTAL COLIFORMS (MPN)

21 / 100ML

FECAL COLIFORMS (MPN)

<2 / 100ML

Additional Notes & Comments for Sample Report 78731

ALL SAMPLES WERE RECEIVED OUT OF HOLDING TIME FOR COMPLIANCE PURPOSES.

System # 2
Well # 14

Southern Analytical
Project No. 09248
June 12, 1996

Lab No. 131662

TRIHALOMETHANE ANALYSIS
62-550.310(2)(a)

(PWS027)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2950	Total THMs (0.10)	09248-03	0.0017	EPA 502.2	5/31/96	0.0015	84269

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(b)
(PWS028)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2378	1,2,4-Trichlorobenzene (70)	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2380	cis-1,2-Dichloroethene (70)	09248-03	0.2 U	EPA 502.2	5/31/96	0.2	84269
2385	Xylenes (Total) (10,000)	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2464	Dichloromethane (5)	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2568	o-Dichlorobenzene (600)	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2969	p-Dichlorobenzene (75)	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2976	Vinyl chloride (1)	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2977	1,1-Dichloroethene (7)	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2979	trans-1,2-Dichloroethene (100)	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2980	1,2-Dichloroethane (3)	09248-03	0.2 U	EPA 502.2	5/31/96	0.2	84269
2981	1,1,1-Trichloroethane (200)	09248-03	0.3 U	EPA 502.2	5/31/96	0.3	84269
2982	Carbon tetrachloride (3)	09248-03	0.3 U	EPA 502.2	5/31/96	0.3	84269
2983	1,2-Dichloropropane (5)	09248-03	0.3 U	EPA 502.2	5/31/96	0.3	84269
2984	Trichloroethene (3)	09248-03	0.2 U	EPA 502.2	5/31/96	0.2	84269
2985	1,1,2-Trichloroethane (5)	09248-03	0.3 U	EPA 502.2	5/31/96	0.3	84269
2987	Tetrachloroethene (3)	09248-03	0.2 U	EPA 502.2	5/31/96	0.2	84269
2989	Monochlorobenzene (100)	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2990	Benzene (1)	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2991	Toluene (1,000)	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2992	Ethylbenzene (700)	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2996	Styrene (100)	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
 Project No. 09248
 June 12, 1996

DWB No. 131662

PESTICIDE & PCB CHEMICAL ANALYSIS
 62-550.310(2)(c)
 (PWS029)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result (ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2005	Endrin (2)	09248-03	0.01 U	EPA 508	6/3/96	0.01	84269
2010	Lindane (.2)	09248-03	0.01 U	EPA 508	6/3/96	0.01	84269
2015	Methoxychlor (40)	09248-03	0.02 U	EPA 508	6/3/96	0.02	84269
2020	Toxaphene (3)	09248-03	0.2 U	EPA 508	6/3/96	0.2	84269
2031	Dalapon (200)	09248-03	1 U	EPA 515.1	6/4/96	1	84269
2032	Diquat (20)	09248-03	8 K ¹	EPA 549.1	5/30/96	4	84269
2033	Endothall (100)	09248-03	10 U	EPA 548	5/29/96	10	84269
2034	Glyphosate (700)	09248-03	10 U	EPA 547	6/3/96	10	84269
2035	Di(2-ethylhexyl)adipate (400)	09248-03	1 U	EPA 506	6/3/96	1	84269
2036	Oxamyl (Vydate) (200)	09248-03	0.5 U	EPA 531.1	5/30/96	0.5	84269
2037	Simazine (4)	09248-03	0.1 U	EPA 507	6/3/96	0.1	84269
	) Di(2-ethylhexyl)phthalate (6)	09248-03	1.1	EPA 506	6/3/96	1	84269
40	Picloram (500)	09248-03	0.2 U	EPA 515.1	6/4/96	0.2	84269
2041	Dinoseb (7)	09248-03	0.2 U	EPA 515.1	6/4/96	0.2	84269
2042	Hexachlorocyclopentadiene (50)	09248-03	0.1 U	EPA 505	6/3/96	0.1	84269
2046	Carbofuran (40)	09248-03	0.5 U	EPA 531.1	5/30/96	0.5	84269
2050	Atrazine (3)	09248-03	0.1 U	EPA 507	6/3/96	0.1	84269
2051	Alachlor (2)	09248-03	0.3 U	EPA 507	6/3/96	0.3	84269
2065	Heptachlor (.4)	09248-03	0.01 U	EPA 508	6/3/96	0.01	84269
2067	Heptachlor epoxide (.2)	09248-03	0.01 U	EPA 508	6/3/96	0.01	84269
2105	2,4-D (70)	09248-03	0.5 U	EPA 515.1	6/4/96	0.5	84269
2110	2,4,5-TP (Silvex) (50)	09248-03	0.05 U	EPA 515.1	6/4/96	0.05	84269
2274	Hexachlorobenzene (1)	09248-03	0.01 U	EPA 508	6/3/96	0.01	84269
2306	Benzo(a)pyrene (.2)	09248-03	0.01 U	EPA 550	6/3/96	0.01	84269
2326	Pentachlorophenol (1)	09248-03	0.05 U	EPA 515.1	6/4/96	0.05	84269
2383	PCBs (.5)	09248-03	0.05 U	EPA 508	6/3/96	0.05	84269
2931	Dibromochloropropane (.2)	09248-03	0.005 U	EPA 504	6/4/96	0.005	84269
2946	Ethylene dibromide (.02)	09248-03	0.005 U	EPA 504	6/4/96	0.005	84269
	) Chlordane (2)	09248-03	0.05 U	EPA 508	6/3/96	0.05	84269

^U Analyte was not detected; indicated concentration is method detection limit.

^K - Analyte was less than indicated concentration; indicated concentration is method detection limit multiplied by sample dilution factor.

¹ Reduced sample volume used for analysis due to interference from sediment.

Southern Analytical
Project No. 09248
June 12, 1996

Field No. 131662

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

<u>Parameter</u> <u>ID</u> <u>NAME</u> <u>(MCL ug/l)</u>	<u>Sample</u> <u>Number</u>	<u>Analysis</u> <u>Result (ug/l)</u>	<u>Analyt.</u> <u>Method</u>	<u>Analysis</u> <u>Date</u>	<u>MDL</u>	<u>Lab</u> <u>ID</u>
2021 Carbaryl	09248-03	0.5 U	EPA 531.1	5/30/96	0.5	84269
2022 Methomyl	09248-03	0.5 U	EPA 531.1	5/30/96	0.5	84269
2043 Aldicarb sulfoxide	09248-03	0.5 U	EPA 531.1	5/30/96	0.5	84269
2044 Aldicarb sulfone	09248-03	0.5 U	EPA 531.1	5/30/96	0.5	84269
2045 Metolachlor	09248-03	0.3 U	EPA 507	6/3/96	0.3	84269
2047 Aldicarb	09248-03	0.5 U	EPA 531.1	5/30/96	0.5	84269
2066 3-Hydroxycarbofuran	09248-03	0.5 U	EPA 531.1	5/30/96	0.5	84269
2077 Propachlor	09248-03	0.05 U	EPA 508	6/3/96	0.05	84269
2356 Aldrin	09248-03	0.01 U	EPA 508	6/3/96	0.01	84269
, Dieldrin	09248-03	0.01 U	EPA 508	6/3/96	0.01	84269
40 Dicamba	09248-03	0.05 U	EPA 515.1	6/4/96	0.05	84269
2595 Metribuzin	09248-03	0.2 U	EPA 507	6/3/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 09248
June 12, 1996

Lab No. 131662

UNREGULATED GROUP II ANALYSIS
62-550.410
(PWS034)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2210	Chloromethane	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2212	Dichlorodifluoromethane	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2214	Bromomethane	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2216	Chloroethane	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2218	Trichlorofluoromethane	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2251	Methyl-tert-butyl-ether	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2408	Dibromomethane	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2410	1,1-Dichloropropene	09248-03	0.3 U	EPA 502.2	5/31/96	0.3	84269
2412	1,3-Dichloropropane	09248-03	0.3 U	EPA 502.2	5/31/96	0.3	84269
2413	1,3-Dichloropropene	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2414	1,2,3-Trichloropropane	09248-03	0.3 U	EPA 502.2	5/31/96	0.3	84269
2416	2,2-Dichloropropane	09248-03	0.3 U	EPA 502.2	5/31/96	0.3	84269
2941	Chloroform	09248-03	1.7	EPA 502.2	5/31/96	0.2	84269
2942	Bromoform	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2943	Bromodichloromethane	09248-03	0.3 U	EPA 502.2	5/31/96	0.3	84269
2944	Dibromochloromethane	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2965	o-Chlorotoluene	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2966	p-Chlorotoluene	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2967	m-Dichlorobenzene	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269
2978	1,1-Dichloroethane	09248-03	0.3 U	EPA 502.2	5/31/96	0.3	84269
2986	1,1,1,2-Tetrachloroethane	09248-03	0.3 U	EPA 502.2	5/31/96	0.3	84269
2988	1,1,2,2-Tetrachloroethane	09248-03	0.3 U	EPA 502.2	5/31/96	0.3	84269
2993	Bromobenzene	09248-03	0.5 U	EPA 502.2	5/31/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 09248
June 12, 1996

F S No. 131662

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2262	Isophorone	09248-03	1 U	EPA 609	6/3/96	1	84269
2270	2,4-Dinitrotoluene	09248-03	1 U	EPA 609	6/3/96	1	84269
2282	Dimethylphthalate	09248-03	1 U	EPA 506	6/3/96	1	84269
2284	Diethylphthalate	09248-03	1 U	EPA 506	6/3/96	1	84269
2290	Di-n-butylphthalate	09248-03	1 U	EPA 506	6/3/96	1	84269
2294	Butyl benzyl phthalate	09248-03	1 U	EPA 506	6/3/96	1	84269
9089	Di-n-octylphthalate	09248-03	1 U	EPA 506	6/3/96	1	84269
9108*	2-Chlorophenol	09248-03	5 U	EPA 604	6/3/96	5	84269
9112*	2-Methyl-4,6-dinitrophenol	09248-03	20 U	EPA 604	6/3/96	20	84269
	* Phenol	09248-03	5 U	EPA 604	6/3/96	5	84269
16*	2,4,6-Trichlorophenol	09248-03	10 U	EPA 604	6/3/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.



ABC Research

3437 s.w. 24th avenue

gainesville, florida 32607

352-372-0436

fax 352-378-6483

Report No. 78728
Subject: SOUTHEAST DRILLING
Received: MAY 28 1996

Date JUN 03 1996

DHRS/DEP # B2135/880111

TOM PARK
FFB ENVIRONMENTAL LAB
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608

RESULTS OF ANALYSIS	ANALYSIS METHOD	RESULT	ANALYST	ANALYSIS DATE/TIME
<i>← SYS # 8</i> Sample 1 WELL 14 05/27/96 11:30AM FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< .100 MG/L	JP	05/29/96 10:30AM
Sample 2 SYSTEM 9 05/27/96 05:45PM FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< .100 MG/L	JP	05/29/96 10:30AM
<i>#</i> Sample 3 SYS 2 <i>← #14</i> 05/27/96 01:30PM FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< .100 MG/L	JP	05/29/96 10:30AM
Sample 4 SYS 2 15 05/27/96 02:30PM FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< .100 MG/L	JP	05/29/96 10:30AM

Respectfully Submitted for ABC Research

Victor Kowalski

Victor Kowalski, PhD
Director, Quality Control

Envirodyne Inc.

Post #	Fax Note	7671	Date	# of pages
To	TAMMY WATSON			
Co./Dept.	Co.			
Phone #	4 pgs			
Fax #	Phone #			
	Fax #			

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

Attention: Bart Ziegler

Project: PBCWF Expansion - System 2
2956 Pinchurst Drive West Palm Beach, FL.

Collected by: Bart Ziegler

Collected on: 06/06/97

Received on: 06/06/97

SAMPLE ID: Prod. Well #14

Date of Analysis: 06/08/97

System #2, Well #14
Resample.

601 PURGEABLE HALOCARBONS

PARAMETER	RESULT	DL UNITS	ANALYST
Bromodichloromethane	BDL	0.5 µg/L	TAV
Bromoform	BDL	0.5 µg/L	TAV
Bromomethane	BDL	0.5 µg/L	TAV
Carbon tetrachloride	BDL	0.5 µg/L	TAV
Chlorobenzene	BDL	0.5 µg/L	TAV
Chloroethane	BDL	0.5 µg/L	TAV
2-Chloroethylvinyl ether	BDL	0.5 µg/L	TAV
Chloroform	BDL	0.5 µg/L	TAV
Chloromethane	BDL	0.5 µg/L	TAV
Dibromochloromethane	BDL	0.5 µg/L	TAV
1,2-Dichlorobenzene	BDL	0.5 µg/L	TAV
1,3-Dichlorobenzene	BDL	0.5 µg/L	TAV
1,4-Dichlorobenzene	BDL	0.5 µg/L	TAV
Dichlorodifluoromethane	BDL	0.5 µg/L	TAV
1,1-Dichloroethane	BDL	0.5 µg/L	TAV
1,2-Dichloroethane	BDL	0.5 µg/L	TAV
1,1-Dichloroethylene	BDL	0.5 µg/L	TAV
trans-1,2-Dichloroethene	BDL	0.5 µg/L	TAV
1,2-Dichloropropane	BDL	0.5 µg/L	TAV
cis-1,3-Dichloropropene	BDL	0.5 µg/L	TAV
trans-1,3-Dichloropropene	BDL	0.5 µg/L	TAV
Methylene chloride	BDL	0.5 µg/L	TAV
1,1,2,2-Tetrachloroethane	BDL	0.5 µg/L	TAV
Tetrachloroethylene	BDL	0.5 µg/L	TAV
1,1,1-Trichloroethane	BDL	0.5 µg/L	TAV
1,1,2-Trichloroethane	BDL	0.5 µg/L	TAV
Trichloroethylene	BDL	0.5 µg/L	TAV
Trichlorofluoromethane	BDL	0.5 µg/L	TAV
Vinyl chloride	BDL	0.5 µg/L	TAV

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

June 11, 1997
Report: 9706000063
Sample No: 9706000063 1

Attention: Bart Ziegler

Project: PBCWF Expansion - System 2
2956 Pinehurst Drive West Palm Beach, FL

SAMPLE ID: Prod. Well #14

Collected by: Bart Ziegler

Collected on: 06/06/97

Received on: 06/06/97

Date of Analysis: 06/08/97

System *2, Well *14
Resample

602 VOLATILE ORGANIC COMPOUNDS

PARAMETER	RESULT	DL UNITS	ANALYST
Benzene	BDL	0.5 µg/L	TAV
Chlorobenzene	BDL	0.5 µg/L	TAV
1,2-Dichlorobenzene	BDL	0.5 µg/L	TAV
1,3-Dichlorobenzene	BDL	0.5 µg/L	TAV
1,4-Dichlorobenzene	BDL	0.5 µg/L	TAV
Ethylbenzene	BDL	0.5 µg/L	TAV
Methyl-tert-butyl ether	BDL	0.5 µg/L	TAV
Toluene	BDL	0.5 µg/L	TAV
Xylenes, Total	BDL	0.5 µg/L	TAV
Total BTEX	BDL	µg/L	TAV

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (to be completed by system or lab)

System Name: _____ I.D. #: _____

Address: _____ Phone #: () _____

Type (check one): () Community () Nontransient Noncommunity () Noncommunity

SAMPLE INFORMATION (to be completed by sampler)

Sample Date (MMDDYY): ____/____/____ Sample Time: _____

Sample Location (be specific): _____

Sampler Name and Phone: _____ () _____

Sampler's Signature: _____ Title: _____

Check Type(s): () Distribution () Recheck of MCL () Resample of Lab Invalidated Sample
() Clearance () Thm Max Res Time () Plant Tap
() Distrib entry pt () Raw () Composite of Multiple Sites—Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab) – ATTACH HRS ANALYTE SHEET*

Lab Name: PPB Environmental Laboratories, Inc. HRS #: 82282 Expiration Date: _____

Address: 6821 SW Archer Road, Gainesville, FL 32608 Phone #: (352) 377-2349

Subcontracted Lab HRS #: 83170, 82135, 84269 – ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (to be completed by lab) – SAMPLE NUMBER: 131663 SYSTEM #2 WELL #15

Date Sample(s) Received: 5/28/96 Group(s) Analyzed & Results attached for compliance with 62-550, F.A.C.:

() Nitrate Only	() Nitrite Only	() Asbestos Only	(x) Trihalomethanes
Inorganics– () All 17 (x) Partial	Volatile Organics– (x) All 21 () Partial	Secondaries– (x) All 14 () Partial	Pesticide/PCBs– () All 30 (x) Partial
Group I Unregulateds– () All 13 (x) Partial	Group II Unregulateds– (x) All 23 () Partial	Group III Unregulateds– (x) All 11 () Partial	Radiochemicals– (x) Single Sample () Qtrly Composite**

**Provide radiochemical sample dates & locations for each quarter

I, Paul Berman, do HEREBY CERTIFY that all attached analytical data are correct.

Signature Paul Berman

Title QA Officer Date 6/14/96

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: _____ Sample Analysis Satisfactory: _____

Resample Requested for: _____ Reason: _____

Person notified to resample: _____ Date Notified: _____

DEP/HRS Reviewing Official: _____

*All HRS lab #s and their HRS Analyte Sheet for labs performing the attached water analyses must be provided. Failure to do so will result in rejection of the analyses and possible enforcement against the public water system for failure to sample.

Effective January 1995

INORGANIC ANALYSIS

62-550.310(1)

(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	131663	0.010	SM 3113B	06/08/96	0.001	82282
1010	BARIUM	(2)	131663	0.112	EPA 200.7	06/10/96	0.001	82282
1015	CADMIUM	(.005)	131663	0.0006	SM 3113B	05/30/96	0.0001	82282
1020	CHROMIUM	(0.1)	131663	0.062	EPA 200.7	06/10/96	0.005	82282
1024	CYANIDE	(0.2)	131663	0.004 U	SM 4500CNE	06/04/96	0.004	82282
1025	FLUORIDE	(4)	131663	1.09	SM 4500FC	06/14/96	0.02	82282
1030	LEAD	(0.015)	131663	0.010	SM 3113B	06/11/96	0.001	82282
1035	MERCURY	(0.002)	131663	0.0001 K	EPA 245.1	06/10/96	0.00005	82282
1036	NICKEL	(0.1)	131663	0.030 U	EPA 200.7	06/10/96	0.030	82282
1040	NITRATE	(10)	131663	0.263	EPA 353.2	06/06/96	0.004	82282
1041	NITRITE	(1)	131663	0.227	EPA 353.2	05/29/96	0.003	82282
1045	SELENIUM	(0.05)	131663	0.005 K	SM 3113B	06/08/96	0.001	82282
1052	SODIUM	(160)	131663	149	EPA 200.7	06/10/96	0.05	82282
1074	ANTIMONY	(0.006)	131663	0.003 U	SM 3113B	06/12/96	0.003	82282
1075	BERYLLIUM	(0.004)	131663	0.003 U	EPA 200.7	06/10/96	0.003	82282
1085	THALLIUM	(0.002)	131663	0.002 U	EPA 200.9	06/12/96	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS

62-550.320

(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1002	ALUMINUM	(0.2)	131663	24.1	EPA 200.7	06/10/96	0.01	82282
1017	CHLORIDE	(250)	131663	1.02	EPA 325.2	05/30/96	0.3	82282
1022	COPPER	(1)	131663	0.02 K	EPA 200.7	06/10/96	0.01	82282
1020	FLUORIDE	(2.0)	131663	1.09	SM 4500FC	06/14/96	0.02	82282
1028	IRON	(0.3)	131663	10.6	EPA 200.7	06/10/96	0.005	82282
1032	MANGANESE	(0.05)	131663	0.084	EPA 200.7	06/10/96	0.005	82282
1050	SILVER	(0.1)	131663	0.0001 U	SM 3113B	06/04/96	0.0001	82282
1055	SULFATE	(250)	131663	111	EPA 375.4	06/11/96	1	82282
1095	ZINC	(5)	131663	0.026	EPA 200.7	06/10/96	0.004	82282
1905	COLOR	(15 color units)	131663	700	SM 2120B	05/28/96	5	82282
1920	ODOR (3 threshold odor number)		131663	1 U	SM 2150B	05/28/96	1	82282
1925	PH	(6.5-8.5)	131663	8.0	EPA 150.1	05/28/96	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		131663	846	SM 2540C	06/03/96	3	82282
2905	FOAMING AGENTS	(0.5)	131663	0.1 K	SM 5540C	05/29/96	0.025	82135

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).
 K indicates analyte is less than value indicated, with value being greater than method detection limit.

U - Analyte was not detected; indicated concentration is method detection limit.

PPB Environmental Laboratories, Inc. • 6821 SW Archer Road • Gainesville, FL 32608 • (352) 377-2349

TRihalOMETHANE ANALYSIS
62-550.310(2)(A)
(PWS027)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2950	TOTAL THMs	(0.10)	09248-04	0.0033	EPA 502.2	05/31/96	0.0015	84269

RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

Parameter ID	Name	(MCL pCi/l)	Sample Number	Analysis Result (pCi/l)	Analysis Method	Analysis Date	Error	Lab ID
4000	GROSS ALPHA		131663	67.7 ± 9.2	EPA 900.0	06/04/96	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		131663	4.6 ± 0.3	EPA 903.1	06/06/96	1	83170
4030	RADIUM-228		131663	2.0 ± 0.6	BROOKS/BLANC	06/10/96	1	83170
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)
NA = NOT ANALYZED

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(B)
(PWS028)

Parameter ID	Name	(MCL µg/l)	Sample Number	Analysis Result (µg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2378	1,2,4-TRICHLOROENZENE	(70)	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2380	CIS-1,2-DICHLOROETHYLENE	(70)	09248-04	0.2 U	EPA 502.2	05/31/96	0.2	84269
2955	XYLENES (TOTAL)	(10,000)	09248-04	6.4	EPA 502.2	05/31/96	0.5	84269
2964	DICHLOROMETHANE	(5)	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2968	O-DICHLOROENZENE	(600)	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2969	PARA-DICHLOROENZENE	(75)	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2976	VINYL CHLORIDE	(1)	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2977	1,1-DICHLOROETHYLENE	(7)	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2979	TRANS-1,2-DICHLOROETHYLENE	(100)	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2980	1,2-DICHLOROETHANE	(3)	09248-04	0.2 U	EPA 502.2	05/31/96	0.2	84269
2981	1,1,1-TRICHLOROETHANE	(200)	09248-04	0.3 U	EPA 502.2	05/31/96	0.3	84269
2982	CARBON TETRACHLORIDE	(3)	09248-04	0.3 U	EPA 502.2	05/31/96	0.3	84269
2983	1,2-DICHLOROPROPANE	(5)	09248-04	0.3 U	EPA 502.2	05/31/96	0.3	84269
2984	TRICHLOROETHYLENE	(3)	09248-04	0.2 U	EPA 502.2	05/31/96	0.2	84269
2985	1,1,2-TRICHLOROETHANE	(5)	09248-04	0.3 U	EPA 502.2	05/31/96	0.3	84269
2987	TETRACHLOROETHYLENE	(3)	09248-04	0.2 U	EPA 502.2	05/31/96	0.2	84269
2989	MONOCHLOROENZENE	(100)	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2990	BENZENE	(1)	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2991	TOLUENE	(1,000)	09248-04	4.3	EPA 502.2	05/31/96	0.5	84269
2992	ETHYLBENZENE	(700)	09248-04	0.99	EPA 502.2	05/31/96	0.5	84269
2996	STYRENE	(100)	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(c)
(PWS029)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2005	ENDRIN	(2)	09248-04	0.01 U	EPA 508	06/03/96	0.01	84269
2010	LINDANE	(.2)	09248-04	0.01 U	EPA 508	06/03/96	0.01	84269
2015	METHOXYCHLOR	(40)	09248-04	0.02 U	EPA 508	06/03/96	0.02	84269
2020	TOXAPHENE	(3)	09248-04	0.2 U	EPA 508	06/03/96	0.2	84269
2031	DALAPON	(200)	09248-04	1 U	EPA 515.1	06/04/96	1	84269
2032	DIQUAT	(20)	09248-04	8 K ¹	EPA 549.1	05/31/96	4	84269
2033	ENDOTHALL	(100)	09248-04	10 U	EPA 548	05/29/96	10	84269
2034	GLYPHOSATE	(700)	09248-04	10 U	EPA 547	06/03/96	10	84269
2035	DI(2-ETHYLHEXYL)ADIPATE	(400)	09248-04	1 U	EPA 506	06/03/96	1	84269
2036	OXAMYL (VYDATE)	(200)	09248-04	0.5 U	EPA 531.1	05/30/96	0.5	84269
2037	SIMAZINE	(4)	09248-04	0.1 U	EPA 507	06/03/96	0.1	84269
2039	DI(2-ETHYLHEXYL)PHTHALATE	(6)	09248-04	1 U	EPA 506	06/03/96	1	84269
2040	PICLORAM	(500)	09248-04	0.2 U	EPA 515.1	06/04/96	0.2	84269
2041	DINOSEB	(7)	09248-04	0.2 U	EPA 515.1	06/04/96	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	09248-04	0.1 U	EPA 505	06/03/96	0.1	84269
2046	CARBOFURAN	(40)	09248-04	0.5 U	EPA 531.1	05/30/96	0.5	84269
2050	ATRAZINE	(3)	09248-04	0.1 U	EPA 507	06/03/96	0.1	84269
2051	ALACHLOR	(2)	09248-04	0.3 U	EPA 507	06/03/96	0.3	84269
2063	2,3,7,8-TCDD (DIOXIN)	(.00003)	09248-04		EPA	--	--	84269
2065	HEPTACHLOR	(.4)	09248-04	0.01 U	EPA 508	06/03/96	0.01	84269
2067	HEPTACHLOR EPOXIDE	(.2)	09248-04	0.01 U	EPA 508	06/03/96	0.01	84269
2105	2,4-D	(70)	09248-04	0.5 U	EPA 515.1	06/04/96	0.5	84269
2110	2,4,5-TP (SILVEX)	(50)	09248-04	0.05 U	EPA 515.1	06/04/96	0.05	84269
2274	HEXACHLOROBENZENE	(1)	09248-04	0.01 U	EPA 508	06/03/96	0.01	84269
2306	BENZO(A)PYRENE	(.2)	09248-04	0.01 U	EPA 550	06/03/96	0.01	84269
2326	PENTACHLOROPHENOL	(1)	09248-04	0.05 U	EPA 515.1	06/04/96	0.05	84269
2383	PCB	(.5)	09248-04	0.05 U	EPA 508	06/03/96	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	09248-04	0.005 U	EPA 504	06/04/96	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	09248-04	0.005 U	EPA 504	06/04/96	0.005	84269
2959	CHLORDANE	(2)	09248-04	0.05 U	EPA 508	06/03/96	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2021	CARBARYL		09248-04	0.5 U	EPA 531.1	05/30/96	0.5	84269
2022	METHOMYL		09248-04	0.5 U	EPA 531.1	05/30/96	0.5	84269
2043	ALDICARB SULFOXIDE		09248-04	0.5 U	EPA 531.1	05/30/96	0.5	84269
2044	ALDICARB SULFONE		09248-04	0.5 U	EPA 531.1	05/30/96	0.5	84269
2045	METOLACHLOR		09248-04	0.3 U	EPA 507	06/03/96	0.3	84269
2047	ALDICARB		09248-04	0.5 U	EPA 531.1	05/30/96	0.5	84269
2066	3-HYDROXYCARBOFURAN		09248-04	0.5 U	EPA 531.1	05/30/96	0.5	84269
2077	PROPACHLOR		09248-04	0.05 U	EPA 508	06/03/96	0.05	84269
2356	ALDRIN		09248-04	0.01 U	EPA 508	06/03/96	0.01	84269
2364	DIELDRIN		09248-04	0.01 U	EPA 508	06/03/96	0.01	84269
2440	DICAMBA		09248-04	0.05 U	EPA 515.1	06/04/96	0.05	84269
2595	METRIBUZIN		09248-04	0.2 U	EPA 507	06/03/96	0.2	84269

J - Analyte was not detected; indicated concentration is method detection limit.

K - Analyte was less than indicated concentration; indicated concentration is MDL x Sample Dilution Factor.

- Reduced sample volume used for analysis due to interference from sediment.

UNREGULATED GROUP II ANALYSIS
62-550.410
(PWS034)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2210	CHLOROMETHANE	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2212	DICHLORODIFLUOROMETHANE	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2214	BROMOMETHANE	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2216	CHLOROETHANE	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2218	TRICHLOROFLUOROMETHANE	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2408	DIBROMOMETHANE	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2410	1,1-DICHLOROPROPYLENE	09248-04	0.3 U	EPA 502.2	05/31/96	0.3	84269
2412	1,3-DICHLOROPROPANE	09248-04	0.3 U	EPA 502.2	05/31/96	0.3	84269
2413	1,3-DICHLOROPROPENE	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	09248-04	0.3 U	EPA 502.2	05/31/96	0.3	84269
2416	2,2-DICHLOROPROPANE	09248-04	0.3 U	EPA 502.2	05/31/96	0.3	84269
2941	CHLOROFORM	09248-04	3.3	EPA 502.2	05/31/96	0.2	84269
2942	BROMOFORM	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2943	BROMODICHLOROMETHANE	09248-04	0.3 U	EPA 502.2	05/31/96	0.3	84269
2944	DIBROMOCHLOROMETHANE	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2965	O-CHLOROTOLUENE	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2966	P-CHLOROTOLUENE	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2967	M-DICHLOROBENZENE	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269
2978	1,1-DICHLOROETHANE	09248-04	0.3 U	EPA 502.2	05/31/96	0.3	84269
2986	1,1,1,2-TETRACHLOROETHANE	09248-04	0.3 U	EPA 502.2	05/31/96	0.3	84269
2988	1,1,2,2-TETRACHLOROETHANE	09248-04	0.3 U	EPA 502.2	05/31/96	0.3	84269
2993	BROMOBENZENE	09248-04	0.5 U	EPA 502.2	05/31/96	0.5	84269

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2262	ISOPHORONE	09248-04	1 U	EPA 609	06/03/96	1	84269
2270	2,4-DINITROTOLUENE	09248-04	1 U	EPA 609	06/03/96	1	84269
2282	DIMETHYLPHthalATE	09248-04	1 U	EPA 506	06/03/96	1	84269
2284	DIETHYLPHthalATE	09248-04	1 U	EPA 506	06/03/96	1	84269
2290	DI-N-BUTYLPHthalATE	09248-04	1 U	EPA 506	06/03/96	1	84269
2294	BUTYL BENZYL PHthalATE	09248-04	1 U	EPA 506	06/03/96	1	84269
9089	DIOCTYLPHthalATE	09248-04	1 U	EPA 506	06/03/96	1	84269
9108*	2-CHLOROPHENOL	09248-04	5 U	EPA 604	06/03/96	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	09248-04	20 U	EPA 604	06/03/96	20	84269
9115*	PHENOL	09248-04	5 U	EPA 604	06/03/96	5	84269
9116*	2,4,6-TRICHLOROPHENOL	09248-04	10 U	EPA 604	06/03/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

COLIFORM ANALYSIS

<u>Parameter ID</u>	<u>Name</u>	<u>(MCL μg/l)</u>	<u>Sample Number</u>	<u>Analysis Result (μg/l)</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
	TOTAL COLIFORMS (MPN)		131663	21		05/28/96	1	82135
	FECAL COLIFORMS (MPN)		131663	2 U		05/28/96	1	82135

U - Analyte was not detected; indicated concentration is method detection limit.



ABC Research

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gainesville, florida 32607

904-372-0436

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Report No. 78731

Date JUN 03 1996

Subject: WATER REC'D 02:10PM BY D. ROBERTS ANALYSIS BEGUN 02:25PM

Received: MAY 28 1996

PAUL BERMAN
PPB ENVIRONMENTAL LAB
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608

Client # 2643
Phone: (352) 377-2349
Fax: (352) 395-6639

RESULTS OF ANALYSIS

System #8

Sample 1 WELL 14 5/27/96 11:30 ID #131660

TOTAL COLIFORMS (MPN) >1,600 / 100ML
FECAL COLIFORMS (MPN) 17 / 100ML

Sample 2 SYSTEM 9 5/27/96 12:45 ID #131661

TOTAL COLIFORMS (MPN) >1,600 / 100ML
FECAL COLIFORMS (MPN) >1,600 / 100ML

Sample 3 SYSTEM 2 5/27/96 13:30 ID #131662

#14
TOTAL COLIFORMS (MPN) 21 / 100ML
FECAL COLIFORMS (MPN) <2 / 100ML

Sample 4 SYSTEM ~~#8~~ 5/27/96 14:30 ID #131663

#2 well #15
TOTAL COLIFORMS (MPN) 21 / 100ML
FECAL COLIFORMS (MPN) <2 / 100ML

Additional Notes & Comments for Sample Report 78731

ALL SAMPLES WERE RECEIVED OUT OF HOLDING TIME FOR COMPLIANCE PURPOSES.

SYSTEM # 2
WELL # 15

Southern Analytical
Project No. 09248
June 12, 1996

No. 131663

TRICHALOMETHANE ANALYSIS
62-550.310(2)(a)

(PWS027)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2950	Total THMs (0.10)	09248-04	0.0033	EPA 502.2	5/31/96	0.0015	84269

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(b)
(PWS028)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2378	1,2,4-Trichlorobenzene (70)	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2380	cis-1,2-Dichloroethene (70)	09248-04	0.2 U	EPA 502.2	5/31/96	0.2	84269
2385	Xylenes (Total) (10,000)	09248-04	6.4	EPA 502.2	5/31/96	0.5	84269
2964	Dichloromethane (5)	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2968	o-Dichlorobenzene (600)	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2969	p-Dichlorobenzene (75)	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2976	Vinyl chloride (1)	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2977	1,1-Dichloroethene (7)	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2979	trans-1,2-Dichloroethene (100)	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2980	1,2-Dichloroethane (3)	09248-04	0.2 U	EPA 502.2	5/31/96	0.2	84269
2981	1,1,1-Trichloroethane (200)	09248-04	0.3 U	EPA 502.2	5/31/96	0.3	84269
2982	Carbon tetrachloride (3)	09248-04	0.3 U	EPA 502.2	5/31/96	0.3	84269
2983	1,2-Dichloropropane (5)	09248-04	0.3 U	EPA 502.2	5/31/96	0.3	84269
2984	Trichloroethene (3)	09248-04	0.2 U	EPA 502.2	5/31/96	0.2	84269
2985	1,1,2-Trichloroethane (5)	09248-04	0.3 U	EPA 502.2	5/31/96	0.3	84269
2987	Tetrachloroethene (3)	09248-04	0.2 U	EPA 502.2	5/31/96	0.2	84269
2989	Monochlorobenzene (100)	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2990	Benzene (1)	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2991	Toluene (1,000)	09248-04	4.3	EPA 502.2	5/31/96	0.5	84269
2992	Ethylbenzene (700)	09248-04	0.99	EPA 502.2	5/31/96	0.5	84269
2996	Styrene (100)	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
 Project No. 09248
 June 12, 1996

Form No. 131663

PESTICIDE & PCB CHEMICAL ANALYSIS
 62-550.310(2)(c)
 (PWS029)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2005	Endrin (2)	09248-04	0.01 U	EPA 508	6/3/96	0.01	84269
2010	Lindane (.2)	09248-04	0.01 U	EPA 508	6/3/96	0.01	84269
2015	Methoxychlor (40)	09248-04	0.02 U	EPA 508	6/3/96	0.02	84269
2020	Toxaphene (3)	09248-04	0.2 U	EPA 508	6/3/96	0.2	84269
2031	Dalapon (200)	09248-04	1 U	EPA 515.1	6/4/96	1	84269
2032	Diquat (20)	09248-04	8 K ¹	EPA 549.1	5/31/96	4	84269
2033	Endothal (100)	09248-04	10 U	EPA 548	5/29/96	10	84269
2034	Glyphosate (700)	09248-04	10 U	EPA 547	6/3/96	10	84269
2035	Di(2-ethylhexyl)adipate (400)	09248-04	1 U	EPA 506	6/3/96	1	84269
2036	Oxamyl (Vydate) (200)	09248-04	0.5 U	EPA 531.1	5/30/96	0.5	84269
2037	Simazine (4)	09248-04	0.1 U	EPA 507	6/3/96	0.1	84269
2040	Di(2-ethylhexyl)phthalate (6)	09248-04	1 U	EPA 506	6/3/96	1	84269
2041	Picloram (500)	09248-04	0.2 U	EPA 515.1	6/4/96	0.2	84269
2042	Dinoseb (7)	09248-04	0.2 U	EPA 515.1	6/4/96	0.2	84269
2046	Hexachlorocyclopentadiene (50)	09248-04	0.1 U	EPA 505	6/3/96	0.1	84269
2050	Carbofuran (40)	09248-04	0.5 U	EPA 531.1	5/30/96	0.5	84269
2051	Atrazine (3)	09248-04	0.1 U	EPA 507	6/3/96	0.1	84269
2065	Alachlor (2)	09248-04	0.3 U	EPA 507	6/3/96	0.3	84269
2067	Heptachlor (.4)	09248-04	0.01 U	EPA 508	6/3/96	0.01	84269
2105	Heptachlor epoxide (.2)	09248-04	0.01 U	EPA 508	6/3/96	0.01	84269
2110	2,4-D (70)	09248-04	0.5 U	EPA 515.1	6/4/96	0.5	84269
2274	2,4,5-TP (Silvex) (50)	09248-04	0.05 U	EPA 515.1	6/4/96	0.05	84269
2306	Hexachlorobenzene (1)	09248-04	0.01 U	EPA 508	6/3/96	0.01	84269
2326	Benzo(a)pyrene (.2)	09248-04	0.01 U	EPA 550	6/3/96	0.01	84269
2383	Pentachlorophenol (1)	09248-04	0.05 U	EPA 515.1	6/4/96	0.05	84269
2931	PCBs (.5)	09248-04	0.05 U	EPA 508	6/3/96	0.05	84269
2946	Dibromochloropropane (.2)	09248-04	0.005 U	EPA 504	6/4/96	0.005	84269
	Ethylene dibromide (.02)	09248-04	0.005 U	EPA 504	6/4/96	0.005	84269
	Chlordane (2)	09248-04	0.05 U	EPA 508	6/3/96	0.05	84269

U - Analyte was not detected; indicated concentration is method detection limit.

K - Analyte was less than indicated concentration; indicated concentration is method detection limit multiplied by sample dilution factor.

¹ Reduced sample volume used for analysis due to interference from sediment.

Southern Analytical
Project No. 09248
June 12, 1996

No. 131663

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2021	Carbaryl	09248-04	0.5 U	EPA 531.1	5/30/96	0.5	84269
2022	Methomyl	09248-04	0.5 U	EPA 531.1	5/30/96	0.5	84269
2043	Aldicarb sulfoxide	09248-04	0.5 U	EPA 531.1	5/30/96	0.5	84269
2044	Aldicarb sulfone	09248-04	0.5 U	EPA 531.1	5/30/96	0.5	84269
2045	Metolachlor	09248-04	0.3 U	EPA 507	6/3/96	0.3	84269
2047	Aldicarb	09248-04	0.5 U	EPA 531.1	5/30/96	0.5	84269
2066	3-Hydroxycarbofuran	09248-04	0.5 U	EPA 531.1	5/30/96	0.5	84269
2077	Propachlor	09248-04	0.05 U	EPA 508	6/3/96	0.05	84269
2356	Aldrin	09248-04	0.01 U	EPA 508	6/3/96	0.01	84269
	Dieldrin	09248-04	0.01 U	EPA 508	6/3/96	0.01	84269
2590	Dicamba	09248-04	0.05 U	EPA 515.1	6/4/96	0.05	84269
2595	Metribuzin	09248-04	0.2 U	EPA 507	6/3/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Report No. 131663

UNREGULATED GROUP II ANALYSIS
 62-550.410
 (PWS034)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2210	Chloromethane	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2212	Dichlorodifluoromethane	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2214	Bromomethane	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2216	Chloroethane	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2218	Trichlorofluoromethane	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2251	Methyl-tert-butyl-ether	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2408	Dibromomethane	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2410	1,1-Dichloropropene	09248-04	0.3 U	EPA 502.2	5/31/96	0.3	84269
2412	1,3-Dichloropropane	09248-04	0.3 U	EPA 502.2	5/31/96	0.3	84269
3	1,3-Dichloropropene	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
14	1,2,3-Trichloropropane	09248-04	0.3 U	EPA 502.2	5/31/96	0.3	84269
2416	2,2-Dichloropropane	09248-04	0.3 U	EPA 502.2	5/31/96	0.3	84269
2941	Chloroform	09248-04	3.3	EPA 502.2	5/31/96	0.2	84269
2942	Bromoform	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2943	Bromodichloromethane	09248-04	0.3 U	EPA 502.2	5/31/96	0.3	84269
2944	Dibromochloromethane	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2965	o-Chlorotoluene	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2966	p-Chlorotoluene	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2967	m-Dichlorobenzene	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269
2978	1,1-Dichloroethane	09248-04	0.3 U	EPA 502.2	5/31/96	0.3	84269
2986	1,1,1,2-Tetrachloroethane	09248-04	0.3 U	EPA 502.2	5/31/96	0.3	84269
2988	1,1,2,2-Tetrachloroethane	09248-04	0.3 U	EPA 502.2	5/31/96	0.3	84269
2993	Bromobenzene	09248-04	0.5 U	EPA 502.2	5/31/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 09248
June 12, 1996

No. 131663

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2262	Isophorone	09248-04	1 U	EPA 609	6/3/96	1	84269
2270	2,4-Dinitrotoluene	09248-04	1 U	EPA 609	6/3/96	1	84269
2282	Dimethylphthalate	09248-04	1 U	EPA 506	6/3/96	1	84269
2284	Diethylphthalate	09248-04	1 U	EPA 506	6/3/96	1	84269
2290	Di-n-butylphthalate	09248-04	1 U	EPA 506	6/3/96	1	84269
2294	Butyl benzy l phthalate	09248-04	1 U	EPA 506	6/3/96	1	84269
9089	Di-n-octylphthalate	09248-04	1 U	EPA 506	6/3/96	1	84269
9108*	2-Chlorophenol	09248-04	5 U	EPA 604	6/3/96	5	84269
9112*	2-Methyl-4,6-dinitrophenol	09248-04	20 U	EPA 604	6/3/96	20	84269
	)* Phenol	09248-04	5 U	EPA 604	6/3/96	5	84269
16*	2,4,6-Trichlorophenol	09248-04	10 U	EPA 604	6/3/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.



ABC Research

3437 s.w. 24th avenue

gainesville, florida 32607

352-372-0436

fax 352-378-6483

Report No. 78728
Subject: SOUTHEAST DRILLING
Received: MAY 28 1996

Date JUN 03 1996

DHRS/D-PR # 82135/8801 11

TOM PARK
PFB ENVIRONMENTAL LAB
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608

RESULTS OF ANALYSIS	ANALYSIS METHOD	RESULT	ANALYST	ANALYSIS DATE/TIME
<i>← Sys # 8</i> Sample 1 WELL 14 05/27/96 11:30AM				
FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< .100 MB/L	JP	05/27/96 11:30AM
Sample 2 SYSTEM 9 05/27/96 05:45PM				
FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< .100 MB/L	JP	05/27/96 10:30AM
<i>← #14</i> Sample 3 SYS 2 05/27/96 01:30PM				
FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< .100 MB/L	JP	05/27/96 10:30AM
Sample 4 SYS 2 15 05/27/96 02:30PM				
FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< .100 MB/L	JP	05/27/96 10:30AM

Respectfully Submitted for ABC Research

Victor Kowalski

Victor Kowalski, PhD
Director, Quality Control

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

June 11, 1997
Report: 9706000063
Sample No: 9706000063 2

Attention: Bart Ziegler

Project: PBCWF Expansion - System 2
2956 Pinehurst Drive West Palm Beach, FL

SAMPLE ID: Prod. Well #15

Collected by: Bart Ziegler

Collected on: 06/06/97

Received on: 06/06/97

Date of Analysis: 06/08/97

System #2, Well #15
Resample.

601 PURGEABLE HALOCARBONS

PARAMETER	RESULT	DL UNITS	ANALYST
Bromodichloromethane	BDL	0.5 µg/L	TAV
Bromoform	BDL	0.5 µg/L	TAV
Bromomethane	BDL	0.5 µg/L	TAV
Carbon tetrachloride	BDL	0.5 µg/L	TAV
Chlorobenzene	BDL	0.5 µg/L	TAV
Chloroethane	BDL	0.5 µg/L	TAV
2-Chloroethylvinyl ether	BDL	0.5 µg/L	TAV
Chloroform	BDL	0.5 µg/L	TAV
Chloromethane	BDL	0.5 µg/L	TAV
Dibromochloromethane	BDL	0.5 µg/L	TAV
1,2-Dichlorobenzene	BDL	0.5 µg/L	TAV
1,3-Dichlorobenzene	BDL	0.5 µg/L	TAV
1,4-Dichlorobenzene	BDL	0.5 µg/L	TAV
Dichlorodifluoromethane	BDL	0.5 µg/L	TAV
1,1-Dichloroethane	BDL	0.5 µg/L	TAV
1,2-Dichloroethane	BDL	0.5 µg/L	TAV
1,1-Dichloroethylene	BDL	0.5 µg/L	TAV
trans-1,2-Dichloroethene	BDL	0.5 µg/L	TAV
1,2-Dichloropropane	BDL	0.5 µg/L	TAV
cis-1,3-Dichloropropene	BDL	0.5 µg/L	TAV
trans-1,3-Dichloropropene	BDL	0.5 µg/L	TAV
Methylene chloride	BDL	0.5 µg/L	TAV
1,1,2,2-Tetrachloroethane	BDL	0.5 µg/L	TAV
Tetrachloroethylene	BDL	0.5 µg/L	TAV
1,1,1-Trichloroethane	BDL	0.5 µg/L	TAV
1,1,2-Trichloroethane	BDL	0.5 µg/L	TAV
Trichloroethylene	BDL	0.5 µg/L	TAV
Trichlorofluoromethane	BDL	0.5 µg/L	TAV
Vinyl chloride	BDL	0.5 µg/L	TAV

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

June 11, 1997
Report: 9706000063
Sample No: 9706000063 2

Attention: Bart Ziegler

Project: PBCWF Expansion - System 2
2956 Pinehurst Drive West Palm Beach, FL

SAMPLE ID: Prod. Well #15

Collected by: Bart Ziegler

Collected on: 06/06/97
Received on: 06/06/97

Date of Analysis: 06/08/97

602 VOLATILE ORGANIC COMPOUNDS

PARAMETER	RESULT	DL UNITS	ANALYST
Benzene	BDL	0.5 µg/L	TAV
Chlorobenzene	BDL	0.5 µg/L	TAV
1,2-Dichlorobenzene	BDL	0.5 µg/L	TAV
1,3-Dichlorobenzene	BDL	0.5 µg/L	TAV
1,4-Dichlorobenzene	BDL	0.5 µg/L	TAV
Ethylbenzene	BDL	0.5 µg/L	TAV
Methyl-tert-butyl ether	BDL	0.5 µg/L	TAV
Toluene	BDL	0.5 µg/L	TAV
Xylenes, Total	BDL	0.5 µg/L	TAV
Total BTEX	BDL	µg/L	TAV

Analysis contained herein conform to EPA and DEP approved methods per Envirodyne Comprehensive Quality Assurance Plan No. 890041G. Additional Laboratory Certification numbers: E86008, 86408, E83079, E86240, South Carolina 96022. All relevant quality assurance samples were within specified control limits unless otherwise stated.



Michael Rentoumis
President, Envirodyne, Inc.



Oleg I. Minko, Ph.D.
Quality Assurance Director

System 3 (SRWRF)

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (to be completed by system or lab)

System Name: _____ I.D. #: _____

Address: _____ Phone #: () _____

Type (check one): () Community () Nontransient Noncommunity () Noncommunity

SAMPLE INFORMATION (to be completed by sampler)

Sample Date (MMDDYY): ____/____/____ Sample Time: _____

Sample Location (be specific): _____

Sampler Name and Phone: _____ () _____

Sampler's Signature: _____ Title: _____

Check Type(s): () Distribution () Recheck of MCL () Resample of Lab Invalidated Sample
() Clearance () Thm Max Res Time () Plant Tap
() Distrib entry pt () Raw () Composite of Multiple Sites—Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab) – ATTACH HRS ANALYTE SHEET*

Lab Name: PPB Environmental Laboratories, Inc. HRS #: 82282 Expiration Date: _____

Address: 6821 SW Archer Road, Gainesville, FL 32608 Phone #: (352) 377-2349

Subcontracted Lab HRS #: 83170, 82135, 84269 – ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (to be completed by lab) – SAMPLE NUMBER: 131482 *SRWRP # 15*

Date Sample(s) Received: 5/16/96 Group(s) Analyzed & Results attached for compliance with 62-550, F.A.C.:

() Nitrate Only	() Nitrite Only	() Asbestos Only	(x) Trihalomethanes
Inorganics--	Volatile Organics--	Secondaries--	Pesticide/PCBs--
() All 17 (x) Partial	(x) All 21 () Partial	(x) All 14 () Partial	() All 30 (x) Partial
Group I Unregulateds--	Group II Unregulateds--	Group III Unregulateds--	Radiochemicals--
() All 13 (x) Partial	(x) All 23 () Partial	(x) All 11 () Partial	(x) Single Sample
			() Qtrly Composite**

**Provide radiochemical sample dates & locations for each quarter

I, Paul Berman, do HEREBY CERTIFY that all attached analytical data are correct.

Signature Paul Berman

Title QA Officer Date 6/11/96

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: _____ Sample Analysis Satisfactory: _____

Resample Requested for: _____ Reason: _____

Person notified to resample: _____ Date Notified: _____

DEP/HRS Reviewing Official: _____

*All HRS lab #s and their HRS Analyte Sheet for labs performing the attached water analyses must be provided. Failure to do so will result in rejection of the analyses and possible enforcement against the public water system for failure to sample.

Effective January 1995

INORGANIC ANALYSIS

62-550.310(1)

(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	131482	0.001 U	EPA 200.7	06/08/96	0.001	82282
1010	BARIUM	(2)	131482	0.033	EPA 200.7	05/30/96	0.001	82282
1015	CADMIUM	(.005)	131482	0.0001 U	SM 3113B	06/01/96	0.0001	82282
1020	CHROMIUM	(0.1)	131482	0.010	EPA 200.7	05/30/96	0.005	82282
1024	CYANIDE	(0.2)	131482	0.004 U	SM 4500CNE	05/20/96	0.004	82282
1025	FLUORIDE	(4)	131482	0.44	SM 4500FC	05/28/96	0.02	82282
1030	LEAD	(0.015)	131482	0.001 U	SM 3113B	05/29/96	0.001	82282
1035	MERCURY	(0.002)	131482	0.00005 U	EPA 245.1	05/21/96	0.00005	82282
1036	NICKEL	(0.1)	131482	0.030 U	EPA 200.7	05/30/96	0.030	82282
1040	NITRATE	(10)	131482	0.01 K	EPA 353.2	05/16/96	0.004	82282
1041	NITRITE	(1)	131482	0.01 K	EPA 353.2	05/16/96	0.003	82282
1045	SELENIUM	(0.05)	131482	0.005 K	SM 3113B	06/08/96	0.001	82282
1052	SODIUM	(160)	131482	33.2	EPA 200.7	05/30/96	0.05	82282
1074	ANTIMONY	(0.006)	131482	0.003 U	SM 3113B	06/12/96	0.003	82282
1075	BERYLLIUM	(0.004)	131482	0.004 K	EPA 200.7	05/30/96	0.003	82282
1085	THALLIUM	(0.002)	131482	0.001 K	EPA 200.9	05/30/96	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS

62-550.320

(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1002	ALUMINUM	(0.2)	131482	0.643	EPA 200.7	05/30/96	0.01	82282
1017	CHLORIDE	(250)	131482	45.0	EPA 325.2	05/30/96	0.3	82282
1022	COPPER	(1)	131482	0.01 U	EPA 200.7	05/30/96	0.01	82282
1020	FLUORIDE	(2.0)	131482	0.44	SM 4500FC	05/28/96	0.02	82282
1028	IRON	(0.3)	131482	2.48	EPA 200.7	05/30/96	0.005	82282
1032	MANGANESE	(0.05)	131482	0.021	EPA 200.7	05/30/96	0.005	82282
1050	SILVER	(0.1)	131482	0.0001 U	SM 3113B	06/04/96	0.0001	82282
1055	SULFATE	(250)	131482	15.0	EPA 375.4	05/20/96	1	82282
1095	ZINC	(5)	131482	0.012	EPA 200.7	05/30/96	0.004	82282
1905	COLOR	(15 color units)	131482	120	SM 2120B	05/16/96	5	82282
1920	ODOR	(3 threshold odor number)	131482	1 U	SM 2150B	05/16/96	1	82282
1925	PH	(6.5-8.5)	131482	7.3	EPA 150.1	05/14/96	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		131482	369	SM 2540C	05/20/96	3	82282
2905	FOAMING AGENTS	(0.5)	131482	0.025 U	SM 5540C	05/17/96	0.025	82135

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).
K indicates analyte is less than value indicated, with value being greater than method detection limit.

U - Analyte was not detected; indicated concentration is method detection limit.

PPB Environmental Laboratories, Inc. • 6821 SW Archer Road • Gainesville, FL 32608 • (352) 377-2349

TRIHALOMETHANE ANALYSIS
62-550.310(2)(A)
(PWS027)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2950	TOTAL THMs	(0.10)	09209-02	0.0018	EPA 502.2	05/23/96	0.0015	84269

RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

Parameter ID	Name	(MCL pCi/l)	Sample Number	Analysis Result (pCi/l)	Analysis Method	Analysis Date	Error	Lab ID
4000	GROSS ALPHA		131482	11.4 ± 2.7	EPA 900.0	05/31/96	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		131482	0.9 ± 0.1	EPA 903.1	05/31/96	1	83170
4030	RADIUM-228		131482		BROOKS/BLANC		1	83170
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)
NA = NOT ANALYZED

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(B)
(PWS028)

Parameter ID	Name	(MCL ug/l)	Sample Number	Analysis Result (ug/l)	Analysis Method	Analysis Date	MDL	Lab ID
2378	1,2,4-TRICHLOROBENZENE	(70)	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2380	CIS-1,2-DICHLOROETHYLENE	(70)	09209-02	0.2 U	EPA 502.2	05/23/96	0.2	84269
2955	XYLENES (TOTAL)	(10,000)	09209-02	3.7	EPA 502.2	05/23/96	0.5	84269
2964	DICHLOROMETHANE	(5)	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2968	O-DICHLOROETHYLENE	(600)	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2969	PARA-DICHLOROETHYLENE	(75)	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2976	VINYL CHLORIDE	(1)	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2977	1,1-DICHLOROETHYLENE	(7)	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2979	TRANS-1,2-DICHLOROETHYLENE (100)		09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2980	1,2-DICHLOROETHANE	(3)	09209-02	0.2 U	EPA 502.2	05/23/96	0.2	84269
2981	1,1,1-TRICHLOROETHANE	(200)	09209-02	0.3 U	EPA 502.2	05/23/96	0.3	84269
2982	CARBON TETRACHLORIDE	(3)	09209-02	0.3 U	EPA 502.2	05/23/96	0.3	84269
2983	1,2-DICHLOROPROPANE	(5)	09209-02	0.3 U	EPA 502.2	05/23/96	0.3	84269
2984	TRICHLOROETHYLENE	(3)	09209-02	0.2 U	EPA 502.2	05/23/96	0.2	84269
2985	1,1,2-TRICHLOROETHANE	(5)	09209-02	0.3 U	EPA 502.2	05/23/96	0.3	84269
2987	TETRACHLOROETHYLENE	(3)	09209-02	0.2 U	EPA 502.2	05/23/96	0.2	84269
2989	MONOCHLOROETHYLENE	(100)	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2990	BENZENE	(1)	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2991	TOLUENE	(1,000)	09209-02	1.6	EPA 502.2	05/23/96	0.5	84269
2992	ETHYLBENZENE	(700)	09209-02	0.55	EPA 502.2	05/23/96	0.5	84269
2996	STYRENE	(100)	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(c)
(PWS029)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2005	ENDRIN	(2)	09209-02	0.01 U	EPA 508	05/21/96	0.01	84269
2010	LINDANE	(.2)	09209-02	0.01 U	EPA 508	05/21/96	0.01	84269
2015	METHOXYCHLOR	(40)	09209-02	0.02 U	EPA 508	05/21/96	0.02	84269
2020	TOXAPHENE	(3)	09209-02	0.2 U	EPA 508	05/21/96	0.2	84269
2031	DALAPON	(200)	09209-02	1 U	EPA 515.1	05/22/96	1	84269
2032	DIQUAT	(20)	09209-02	4 U	EPA 549.1	05/21/96	4	84269
2033	ENDOTHALL	(100)	09209-02	10 U	EPA 548	05/21/96	10	84269
2034	GLYPHOSATE	(700)	09209-02	10 U	EPA 547	05/23/96	10	84269
2035	DI(2-ETHYLHEXYL)ADIPATE	(400)	09209-02	1 U	EPA 506	05/21/96	1	84269
2036	OXAMYL (VYDATE)	(200)	09209-02	0.5 U	EPA 531.1	05/30/96	0.5	84269
2037	SIMAZIN	(4)	09209-02	0.1 U	EPA 507	05/21/96	0.1	84269
2039	DI(2-ETHYLHEXYL)PHTHALATE	(6)	09209-02	1 U	EPA 506	05/21/96	1	84269
2040	PICLORAM	(500)	09209-02	0.2 U	EPA 515.1	05/22/96	0.2	84269
2041	DINoseb	(7)	09209-02	0.2 U	EPA 515.1	05/22/96	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	09209-02	0.1 U	EPA 505	05/20/96	0.1	84269
2046	CARBOFURAN	(40)	09209-02	0.5 U	EPA 531.1	05/30/96	0.5	84269
2050	ATRAZINE	(3)	09209-02	0.1 U	EPA 507	05/21/96	0.1	84269
2051	ALACHLOR	(2)	09209-02	0.3 U	EPA 507	05/21/96	0.3	84269
2063	2,3,7,8-TCDD (DIOXIN)	(.00003)	09209-02		EPA	--	--	84269
2065	HEPTACHLOR	(.4)	09209-02	0.01 U	EPA 508	05/21/96	0.01	84269
2067	HEPTACHLOR EPOXIDE	(.2)	09209-02	0.01 U	EPA 508	05/21/96	0.01	84269
2105	2,4-D	(70)	09209-02	0.5 U	EPA 515.1	05/22/96	0.5	84269
2110	2,4,5-TP (SILVEX)	(50)	09209-02	0.05 U	EPA 515.1	05/22/96	0.05	84269
2274	HEXACHLOROBENZENE	(1)	09209-02	0.01 U	EPA 508	05/21/96	0.01	84269
2306	BENZO(A)PYRENE	(.2)	09209-02	0.01 U	EPA 550	05/21/96	0.01	84269
2326	PENTACHLOROPHENOL	(1)	09209-02	0.05 U	EPA 515.1	05/22/96	0.05	84269
2383	PCB	(.5)	09209-02	0.05 U	EPA 508	05/21/96	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	09209-02	0.005 U	EPA 504	05/22/96	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	09209-02	0.005 U	EPA 504	05/22/96	0.005	84269
2959	CHLORDANE	(2)	09209-02	0.05 U	EPA 508	05/21/96	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2021	CARBARYL		09209-02	0.5 U	EPA 531.1	05/30/96	0.5	84269
2022	METHOMYL		09209-02	0.5 U	EPA 531.1	05/30/96	0.5	84269
2043	ALDICARB SULFOXIDE		09209-02	0.5 U	EPA 531.1	05/30/96	0.5	84269
2044	ALDICARB SULFONE		09209-02	0.5 U	EPA 531.1	05/30/96	0.5	84269
2045	METOLACHLOR		09209-02	0.3 U	EPA 507	05/21/96	0.3	84269
2047	ALDICARB		09209-02	0.5 U	EPA 531.1	05/30/96	0.5	84269
2066	3-HYDROXYCARBOFURAN		09209-02	0.5 U	EPA 531.1	05/30/96	0.5	84269
2077	PROPACHLOR		09209-02	0.05 U	EPA 508	05/21/96	0.05	84269
2356	ALDRIN		09209-02	0.01 U	EPA 508	05/21/96	0.01	84269
2364	DIELDRIN		09209-02	0.01 U	EPA 508	05/21/96	0.01	84269
2440	DICAMBA		09209-02	0.05 U	EPA 515.1	05/22/96	0.05	84269
2595	METRIBUZIN		09209-02	0.2 U	EPA 507	05/21/96	0.2	84269

J - Analyte was not detected; indicated concentration is method detection limit.

K - Analyte was less than indicated concentration; indicated concentration is method detection limit multiplied by sample dilution factor.

L - Reduced sample volume used for analysis due to interference from sediment.

UNREGULATED GROUP II ANALYSIS

62-550.410

(PWS034)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2210	CHLOROMETHANE	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2212	DICHLORODIFLUOROMETHANE	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2214	BROMOMETHANE	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2216	CHLOROETHANE	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2218	TRICHLOROFLUOROMETHANE	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2408	DIBROMOMETHANE	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2410	1,1-DICHLOROPROPYLENE	09209-02	0.3 U	EPA 502.2	05/23/96	0.3	84269
2412	1,3-DICHLOROPROPANE	09209-02	0.3 U	EPA 502.2	05/23/96	0.3	84269
2413	1,3-DICHLOROPROPENE	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	09209-02	0.3 U	EPA 502.2	05/23/96	0.3	84269
2416	2,2-DICHLOROPROPANE	09209-02	0.3 U	EPA 502.2	05/23/96	0.3	84269
2941	CHLOROFORM	09209-02	1.8	EPA 502.2	05/23/96	0.2	84269
2942	BROMOFORM	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2943	BROMODICHLOROMETHANE	09209-02	0.3 U	EPA 502.2	05/23/96	0.3	84269
2944	DIBROMOCHLOROMETHANE	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2965	O-CHLOROTOLUENE	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2966	P-CHLOROTOLUENE	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2967	M-DICHLOROBENZENE	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269
2978	1,1-DICHLOROETHANE	09209-02	0.3 U	EPA 502.2	05/23/96	0.3	84269
2986	1,1,1,2-TETRACHLOROETHANE	09209-02	0.3 U	EPA 502.2	05/23/96	0.3	84269
2988	1,1,2,2-TETRACHLOROETHANE	09209-02	0.3 U	EPA 502.2	05/23/96	0.3	84269
2993	BROMOBENZENE	09209-02	0.5 U	EPA 502.2	05/23/96	0.5	84269

UNREGULATED GROUP III ANALYSIS

62-550.415

(PWS036 & 037*)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2262	ISOPHORONE	09209-02	1 U	EPA 609	05/21/96	1	84269
2270	2,4-DINITROTOLUENE	09209-02	1 U	EPA 609	05/21/96	1	84269
2282	DIMETHYLPHTHALATE	09209-02	1 U	EPA 506	05/16/96	1	84269
2284	DIETHYLPHTHALATE	09209-02	1 U	EPA 506	05/16/96	1	84269
2290	DI-N-BUTYLPHTHALATE	09209-02	1 U	EPA 506	05/16/96	1	84269
2294	BUTYL BENZYL PHTHALATE	09209-02	1 U	EPA 506	05/16/96	1	84269
9089	DIOCTYLPHTHALATE	09209-02	1 U	EPA 506	05/16/96	1	84269
9108*	2-CHLOROPHENOL	09209-02	5 U	EPA 604	05/16/96	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	09209-02	20 U	EPA 604	05/16/96	20	84269
9115*	PHENOL	09209-02	5 U	EPA 604	05/16/96	5	84269
9116*	2,4,6-TRICHLOROPHENOL	09209-02	10 U	EPA 604	05/16/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

COLIFORM ANALYSIS

<u>Parameter</u> <u>ID</u>	<u>Name</u> <u>(MCL μg/l)</u>	<u>Sample</u> <u>Number</u>	<u>Analysis</u> <u>Result (μg/l)</u>	<u>Analysis</u> <u>Method</u>	<u>Analysis</u> <u>Date</u>	<u>MDL</u>	<u>Lab</u> <u>ID</u>
	TOTAL COLIFORMS (MPN)	131482	240		05/20/96	1	82135
	FECAL COLIFORMS (MPN)	131482	80		05/20/96	1	82135

U - Analyte was not detected; indicated concentration is method detection limit.



ABC Research

3437 s.w. 24th avenue

gainesville, florida 32607

904-372-0436

fax 904-378-6483

Report No. 78234

Date MAY 20 1996

Subject: WATER REC'D 09:35AM BY C. TIEDEMANN

ANALYSIS BEGUN 10:15AM

Received: MAY 16 1996

PAUL BERMAN
FPB ENVIRONMENTAL LAB
6021 SW ARCHER ROAD
GAINESVILLE, FL 32606

Client # 2643
Phone: (352) 377-2349
Fax: (352) 375-6439

RESULTS OF ANALYSIS

Sample 1 SRWRF 5/15/96 1500

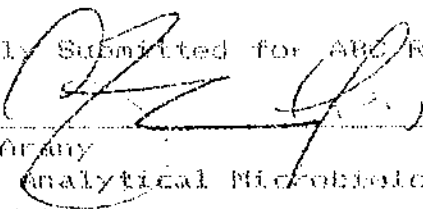
TOTAL COLIFORMS (MPN)
FECAL COLIFORMS (MPN)

240 / 100ML
80 / 100ML

Additional Notes & Comments for Sample Report 78234

PROJECT NAME- SOUTHEAST DRILLING

Respectfully Submitted for ABC Research


Catherine Army
Manager of Analytical Microbiology

Southern Analytical
 Project No. 09209
 June 10, 1996

SWRF #15, #8181

PESTICIDE & PCB CHEMICAL ANALYSIS
 62-550.310(2)(c)
 (PWS029)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2005	Endrin (2)	09209-02	0.01 U	EPA 508	5/21/96	0.01	84269
2010	Lindane (.2)	09209-02	0.01 U	EPA 508	5/21/96	0.01	84269
2015	Methoxychlor (40)	09209-02	0.02 U	EPA 508	5/21/96	0.02	84269
2020	Toxaphene (3)	09209-02	0.2 U	EPA 508	5/21/96	0.2	84269
2031	Dalapon (200)	09209-02	1 U	EPA 515.1	5/22/96	1	84269
2032	Diquat (20)	09209-02	4 U	EPA 549.1	5/21/96	4	84269
2033	Endothall (100)	09209-02	10 U	EPA 548	5/21/96	10	84269
2034	Glyphosate (700)	09209-02	10 U	EPA 547	5/23/96	10	84269
2035	Di(2-ethylhexyl)adipate (400)	09209-02	1 U	EPA 506	5/21/96	1	84269
2036	Oxamyl (Vydate) (200)	09209-02	0.5 U	EPA 531.1	5/30/96	0.5	84269
2037	Simazine (4)	09209-02	0.1 U	EPA 507	5/21/96	0.1	84269
2039	Di(2-ethylhexyl)phthalate (6)	09209-02	1 U	EPA 506	5/21/96	1	84269
2040	Picloram (500)	09209-02	0.2 U	EPA 515.1	5/22/96	0.2	84269
2041	Dinoseb (7)	09209-02	0.2 U	EPA 515.1	5/22/96	0.2	84269
2042	Hexachlorocyclopentadiene (50)	09209-02	0.1 U	EPA 505	5/20/96	0.1	84269
2046	Carbofuran (40)	09209-02	0.5 U	EPA 531.1	5/30/96	0.5	84269
2050	Atrazine (3)	09209-02	0.1 U	EPA 507	5/21/96	0.1	84269
2051	Alachlor (2)	09209-02	0.3 U	EPA 507	5/21/96	0.3	84269
2065	Heptachlor (.4)	09209-02	0.01 U	EPA 508	5/21/96	0.01	84269
2067	Heptachlor epoxide (.2)	09209-02	0.01 U	EPA 508	5/21/96	0.01	84269
2105	2,4-D (70)	09209-02	0.5 U	EPA 515.1	5/22/96	0.5	84269
2110	2,4,5-TP (Silvex) (50)	09209-02	0.05 U	EPA 515.1	5/22/96	0.05	84269
2274	Hexachlorobenzene (1)	09209-02	0.01 U	EPA 508	5/21/96	0.01	84269
2306	Benzo(a)pyrene (.2)	09209-02	0.01 U	EPA 550	5/21/96	0.01	84269
2326	Pentachlorophenol (1)	09209-02	0.05 U	EPA 515.1	5/22/96	0.05	84269
2383	PCBs (.5)	09209-02	0.05 U	EPA 508	5/21/96	0.05	84269
2931	Dibromochloropropane (.2)	09209-02	0.005 U	EPA 504	5/22/96	0.005	84269
2946	Ethylene dibromide (.02)	09209-02	0.005 U	EPA 504	5/22/96	0.005	84269
2949	Chlordane (2)	09209-02	0.05 U	EPA 508	5/21/96	0.05	84269

U Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
 Project No. 09209
 June 10, 1996

CONF #15, #8181

TRIHALOMETHANE ANALYSIS
 62-550.310(2)(a)

(PWS027)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2950	Total THMs (0.10)	09209-02	0.0018	EPA 502.2	5/23/96	0.0015	84269

VOLATILE ORGANIC ANALYSIS
 62-550.310(2)(b)
 (PWS028)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2378	1,2,4-Trichlorobenzene (70)	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2380	cis-1,2-Dichloroethene (70)	09209-02	0.2 U	EPA 502.2	5/23/96	0.2	84269
	Xylenes (Total) (10,000)	09209-02	3.7	EPA 502.2	5/23/96	0.5	84269
2384	Dichloromethane (5)	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2968	o-Dichlorobenzene (600)	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2969	p-Dichlorobenzene (75)	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2976	Vinyl chloride (1)	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2977	1,1-Dichloroethene (7)	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2979	trans-1,2-Dichloroethene (100)	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2980	1,2-Dichloroethane (3)	09209-02	0.2 U	EPA 502.2	5/23/96	0.2	84269
2981	1,1,1-Trichloroethane (200)	09209-02	0.3 U	EPA 502.2	5/23/96	0.3	84269
2982	Carbon tetrachloride (3)	09209-02	0.3 U	EPA 502.2	5/23/96	0.3	84269
2983	1,2-Dichloropropane (5)	09209-02	0.3 U	EPA 502.2	5/23/96	0.3	84269
2984	Trichloroethene (3)	09209-02	0.2 U	EPA 502.2	5/23/96	0.2	84269
2985	1,1,2-Trichloroethane (5)	09209-02	0.3 U	EPA 502.2	5/23/96	0.3	84269
2987	Tetrachloroethene (3)	09209-02	0.2 U	EPA 502.2	5/23/96	0.2	84269
2989	Monochlorobenzene (100)	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2990	Benzene (1)	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2991	Toluene (1,000)	09209-02	1.6	EPA 502.2	5/23/96	0.5	84269
	Ethylbenzene (700)	09209-02	0.56	EPA 502.2	5/23/96	0.5	84269
2992	Styrene (100)	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 09209
June 10, 1996

SPWRF #15, #8181

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2021	Carbaryl	09209-02	0.5 U	EPA 531.1	5/30/96	0.5	84269
2022	Methomyl	09209-02	0.5 U	EPA 531.1	5/30/96	0.5	84269
2043	Aldicarb sulfoxide	09209-02	0.5 U	EPA 531.1	5/30/96	0.5	84269
2044	Aldicarb sulfone	09209-02	0.5 U	EPA 531.1	5/30/96	0.5	84269
2045	Metolachlor	09209-02	0.3 U	EPA 507	5/21/96	0.3	84269
2047	Aldicarb	09209-02	0.5 U	EPA 531.1	5/30/96	0.5	84269
2066	3-Hydroxycarbofuran	09209-02	0.5 U	EPA 531.1	5/30/96	0.5	84269
2077	Propachlor	09209-02	0.05 U	EPA 508	5/21/96	0.05	84269
2356	Aldrin	09209-02	0.01 U	EPA 508	5/21/96	0.01	84269
2357	Dieldrin	09209-02	0.01 U	EPA 508	5/21/96	0.01	84269
2510	Dicamba	09209-02	0.05 U	EPA 515.1	5/22/96	0.05	84269
2595	Metribuzin	09209-02	0.2 U	EPA 507	5/21/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
 Project No. 09209
 June 10, 1996

CSWRF #15, #8181

UNREGULATED GROUP II ANALYSIS
 62-550.410
 (PWS034)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2210	Chloromethane	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2212	Dichlorodifluoromethane	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2214	Bromomethane	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2216	Chloroethane	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2218	Trichlorofluoromethane	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2251	Methyl-tert-butyl-ether	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2408	Dibromomethane	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2410	1,1-Dichloropropene	09209-02	0.3 U	EPA 502.2	5/23/96	0.3	84269
2412	1,3-Dichloropropane	09209-02	0.3 U	EPA 502.2	5/23/96	0.3	84269
2413	1,3-Dichloropropene	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2414	1,2,3-Trichloropropane	09209-02	0.3 U	EPA 502.2	5/23/96	0.3	84269
2416	2,2-Dichloropropane	09209-02	0.3 U	EPA 502.2	5/23/96	0.3	84269
2941	Chloroform	09209-02	1.8	EPA 502.2	5/23/96	0.2	84269
2942	Bromoform	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2943	Bromodichloromethane	09209-02	0.3 U	EPA 502.2	5/23/96	0.3	84269
2944	Dibromochloromethane	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2965	o-Chlorotoluene	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2966	p-Chlorotoluene	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2967	m-Dichlorobenzene	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269
2978	1,1-Dichloroethane	09209-02	0.3 U	EPA 502.2	5/23/96	0.3	84269
2986	1,1,1,2-Tetrachloroethane	09209-02	0.3 U	EPA 502.2	5/23/96	0.3	84269
2988	1,1,2,2-Tetrachloroethane	09209-02	0.3 U	EPA 502.2	5/23/96	0.3	84269
2993	Bromobenzene	09209-02	0.5 U	EPA 502.2	5/23/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 09209
June 10, 1996

SWRF #15, #8181

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

<u>Parameter</u> <u>ID</u> <u>NAME</u> (<u>MCL ug/l</u>)	<u>Sample</u> <u>Number</u>	<u>Analysis</u> <u>Result (ug/l)</u>	<u>Analyt.</u> <u>Method</u>	<u>Analysis</u> <u>Date</u>	<u>MDL</u>	<u>Lab</u> <u>ID</u>
2262 Isophorone	09209-02	1 U	EPA 609	5/21/96	1	84269
2270 2,4-Dinitrotoluene	09209-02	1 U	EPA 609	5/21/96	1	84269
2282 Dimethylphthalate	09209-02	1 U	EPA 506	5/16/96	1	84269
2284 Diethylphthalate	09209-02	1 U	EPA 506	5/16/96	1	84269
2290 Di-n-butylphthalate	09209-02	1 U	EPA 506	5/16/96	1	84269
2294 Butyl benzyl phthalate	09209-02	1 U	EPA 506	5/16/96	1	84269
9089 Di-n-octylphthalate	09209-02	1 U	EPA 506	5/16/96	1	84269
9108* 2-Chlorophenol	09209-02	5 U	EPA 604	5/16/96	5	84269
9112* 2-Methyl-4,6-dinitrophenol	09209-02	20 U	EPA 604	5/16/96	20	84269
9113* Phenol	09209-02	5 U	EPA 604	5/16/96	5	84269
9116* 2,4,6-Trichlorophenol	09209-02	10 U	EPA 604	5/16/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

CERTIFICATE OF ANALYSIS

RESULTS BY SAMPLE

SENT *PPB ENVIRONMENTAL*
 TO: *LABORATORIES, INC.*
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608
PAUL BERMAN
352/377-2349 FAX 395-6639

ANALYZED BY: *PBS&J Environmental Laboratories*
6635 East Colonial Drive
Orlando, FL 32807
 Phone: (407) 277-4443
 Fax: (407) 382-8794

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

Sample ID: SRWRF PILOT

Lab ID: **9605277-01**

Collected: 05/14/96 17:00:00

TEST	RESULT	UNITS	METHOD	EXTRACTED	ANALYZED	BY
ALPHA, TOTAL	13.8	pCi/L	EPA 900.0		05/22/96	cd
ALPHA-counting error	3.2	pCi/L	EPA 900.0		05/22/96	cd
RADIUM 226 IN WATER	0.4	pCi/L	EPA 903.1		05/29/96	cd
RADIUM 226-counting error	0.1	pCi/L	EPA 903.1		05/29/96	cd

Sample ID: SRWRF #15

Lab ID: **9605277-02**

Collected: 05/15/96 15:00:00

TEST	RESULT	UNITS	METHOD	EXTRACTED	ANALYZED	BY
ALPHA, TOTAL	11.4	pCi/L	EPA 900.0		05/22/96	cd
ALPHA-counting error	2.7	pCi/L	EPA 900.0		05/22/96	cd
RADIUM 226 IN WATER	0.9	pCi/L	EPA 903.1		05/29/96	cd
RADIUM 226-counting error	0.1	pCi/L	EPA 903.1		05/29/96	cd



ABC Research

3437 s.w. 24th avenue • gainesville, florida 32607 • 352-372-0436 • fax 352-378-6483

Report No. 78230
Subject: SRWRF 115 LAB ID 131482
Received: MAY 16 1996

Date MAY 18 1996

DHRS/DEP # 82135/E8203

TOM PARK
PPB ENVIRONMENTAL LAB
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608

RESULTS OF ANALYSIS	<u>ANALYSIS METHOD</u>	<u>RESULT</u>	<u>ANALYST</u>	<u>ANALYSIS DATE/TIME</u>
<u>Sample 1 SRWRF 115 LAB ID 131482 05/15/96 03:00PM</u> FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< .025 MG/L	JP	05/16/96 01:00

Respectfully Submitted for ABC Research

Victor Kowalski

Victor Kowalski, PhD

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (to be completed by system or lab)

System Name: _____ I.D. #: _____

Address: _____ Phone #: () _____

Type (check one): () Community () Nontransient Noncommunity () Noncommunity

SAMPLE INFORMATION (to be completed by sampler)

Sample Date (MMDDYY): ____ / ____ / ____ Sample Time: _____

Sample Location (be specific): _____

Sampler Name and Phone: _____ () _____

Sampler's Signature: _____ Title: _____

Check Type(s): () Distribution () Recheck of MCL () Resample of Lab Invalidated Sample
() Clearance () Thm Max Res Time () Plant Tap
() Distrib entry pt () Raw () Composite of Multiple Sites--Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab) - ATTACH HRS ANALYTE SHEET*

Lab Name: PPB Environmental Laboratories, Inc. HRS #: 82282 Expiration Date: _____

Address: 6821 SW Archer Road, Gainesville, FL 32608 Phone #: (352) 377-2349

Subcontracted Lab HRS #: 83170, 82135, 84269 - ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (to be completed by lab) - SAMPLE NUMBER: 131509 SRWRP #16

Date Sample(s) Received: 5/17/96 Group(s) Analyzed & Results attached for compliance with 62-550, F.A.C.:

() Nitrate Only	() Nitrite Only	() Asbestos Only	(x) Trihalomethanes
Inorganics--	Volatile Organics--	Secondaries--	Pesticide/PCBs--
() All 17 (x) Partial	(x) All 21 () Partial	(x) All 14 () Partial	() All 30 (x) Partial
Group I Unregulateds--	Group II Unregulateds--	Group III Unregulateds--	Radiochemicals--
() All 13 (x) Partial	(x) All 23 () Partial	(x) All 11 () Partial	(x) Single Sample
			() Qtrly Composite**

**Provide radiochemical sample dates & locations for each quarter

I, Paul Berman, do HEREBY CERTIFY that all attached analytical data are correct.

Signature Paul Berman

Title QA Officer Date 6/11/96

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: _____ Sample Analysis Satisfactory: _____

Resample Requested for: _____ Reason: _____

Person notified to resample: _____ Date Notified: _____

DEP/HRS Reviewing Official: _____

*All HRS lab #s and their HRS Analyte Sheet for labs performing the attached water analyses must be provided. Failure to do so will result in rejection of the analyses and possible enforcement against the public water system for failure to sample.

Effective January 1995

INORGANIC ANALYSIS
62-550.310(1)
(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	131509	0.001 U	SM 3113B	06/08/96	0.001	82282
1010	BARIUM	(2)	131509	0.029	EPA 200.7	05/30/96	0.001	82282
1015	CADMIUM	(.005)	131509	0.0001 U	SM 3113B	06/01/96	0.0001	82282
1020	CHROMIUM	(0.1)	131509	0.009	EPA 200.7	05/30/96	0.005	82282
1024	CYANIDE	(0.2)	131509	0.004 U	SM 4500CNE	05/20/96	0.004	82282
1025	FLUORIDE	(4)	131509	0.54	SM 4500FC	05/28/96	0.02	82282
1030	LEAD	(0.015)	131509	0.001 U	SM 3113B	05/29/96	0.001	82282
1035	MERCURY	(0.002)	131509	0.00005 U	EPA 245.1	05/21/96	0.00005	82282
1036	NICKEL	(0.1)	131509	0.030 U	EPA 200.7	05/30/96	0.030	82282
1040	NITRATE	(10)	131509	0.616	EPA 353.2	05/23/96	0.004	82282
1041	NITRITE	(1)	131509	0.308	EPA 353.2	05/17/96	0.003	82282
1045	SELENIUM	(0.05)	131509	0.005 K	SM 3113B	06/08/96	0.001	82282
1052	SODIUM	(160)	131509	125	EPA 200.7	05/30/96	0.05	82282
1074	ANTIMONY	(0.006)	131509	0.003 U	SM 3113B	06/12/96	0.003	82282
1075	BERYLLIUM	(0.004)	131509	0.004 K	EPA 200.7	05/30/96	0.003	82282
1085	THALLIUM	(0.002)	131509	0.002 U	EPA 200.9	05/30/96	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS
62-550.320
(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1002	ALUMINUM	(0.2)	131509	1.38	EPA 200.7	05/30/96	0.01	82282
1017	CHLORIDE	(250)	131509	73.5	EPA 325.2	06/01/96	0.3	82282
1022	COPPER	(1)	131509	0.01 U	EPA 200.7	05/30/96	0.01	82282
1020	FLUORIDE	(2.0)	131509	0.54	SM 4500FC	05/28/96	0.02	82282
1028	IRON	(0.3)	131509	14.5	EPA 200.7	05/30/96	0.005	82282
1032	MANGANESE	(0.05)	131509	0.349	EPA 200.7	05/30/96	0.005	82282
1050	SILVER	(0.1)	131509	0.0001 U	SM 3113B	06/04/96	0.0001	82282
1055	SULFATE	(250)	131509	72.5	EPA 375.4	05/20/96	1	82282
1095	ZINC	(5)	131509	0.015	EPA 200.7	05/30/96	0.004	82282
1905	COLOR	(15 color units)	131509	250	SM 2120B	05/17/96	5	82282
1920	ODOR	(3 threshold odor number)	131509	1 U	SM 2150B	05/17/96	1	82282
1925	PH	(6.5-8.5)	131509	7.5	EPA 150.1	05/17/96	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		131509	468	SM 2540C	05/20/96	3	82282
2905	FOAMING AGENTS	(0.5)	131509	0.025 U	SM 5540C	05/16/96	0.025	82135

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).
K indicates analyte is less than value indicated, with value being greater than method detection limit.
U - Analyte was not detected; indicated concentration is method detection limit.

PPB Environmental Laboratories, Inc. • 6821 SW Archer Road • Gainesville, FL 32608 • (352) 377-2349

TRIHALOMETHANE ANALYSIS
62-550.310(2)(A)
(PWS027)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2950	TOTAL THMS	(0.10)	09220-01	0.0072	EPA 502.2	05/23/96	0.0015	84269

RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

Parameter ID	Name	(MCL pCi/l)	Sample Number	Analysis Result (pCi/l)	Analysis Method	Analysis Date	Error	Lab ID
4000	GROSS ALPHA		131509	5.9 ± 3.2	EPA 900.0	05/24/96	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		131509	2.0 ± 0.2	EPA 903.1	05/29/96	1	83170
4030	RADIUM-228		131509		BROOKS/BLANC		1	83170
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)
NA = NOT ANALYZED

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(B)
(PWS028)

Parameter ID	Name	(MCL µg/l)	Sample Number	Analysis Result (µg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2378	1,2,4-TRICHLOROENZENE	(70)	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2380	CIS-1,2-DICHLOROETHYLENE	(70)	09220-01	0.2 U	EPA 502.2	05/23/96	0.2	84269
2955	XYLENES (TOTAL)	(10,000)	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2964	DICHLOROMETHANE	(5)	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2968	O-DICHLOROENZENE	(600)	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2969	PARA-DICHLOROENZENE	(75)	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2976	VINYL CHLORIDE	(1)	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2977	1,1-DICHLOROETHYLENE	(7)	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2979	TRANS-1,2-DICHLOROETHYLENE	(100)	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2980	1,2-DICHLOROETHANE	(3)	09220-01	0.2 U	EPA 502.2	05/23/96	0.2	84269
2981	1,1,1-TRICHLOROETHANE	(200)	09220-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2982	CARBON TETRACHLORIDE	(3)	09220-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2983	1,2-DICHLOROPROPANE	(5)	09220-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2984	TRICHLOROETHYLENE	(3)	09220-01	0.2 U	EPA 502.2	05/23/96	0.2	84269
2985	1,1,2-TRICHLOROETHANE	(5)	09220-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2987	TETRACHLOROETHYLENE	(3)	09220-01	0.2 U	EPA 502.2	05/23/96	0.2	84269
2989	MONOCHLOROENZENE	(100)	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2990	BENZENE	(1)	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2991	TOLUENE	(1,000)	09220-01	5.0	EPA 502.2	05/23/96	0.5	84269
2992	ETHYLBENZENE	(700)	09220-01	0.97	EPA 502.2	05/23/96	0.5	84269
2996	STYRENE	(100)	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(c)
(PWS029)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2005	ENDRIN	(2)	09220-01	0.01 U	EPA 508	05/22/96	0.01	84269
2010	LINDANE	(.2)	09220-01	0.01 U	EPA 508	05/22/96	0.01	84269
2015	METHOXYCHLOR	(40)	09220-01	0.02 U	EPA 508	05/22/96	0.02	84269
2020	TOXAPHENE	(3)	09220-01	0.2 U	EPA 508	05/22/96	0.2	84269
2031	DALAPON	(200)	09220-01	1 U	EPA 515.1	05/22/96	1	84269
2032	DIQUAT	(20)	09220-01	8 K ¹	EPA 549.1	05/23/96	4	84269
2033	ENDOTHALL	(100)	09220-01	10 U	EPA 548	05/23/96	10	84269
2034	GLYPHOSATE	(700)	09220-01	10 U	EPA 547	05/24/96	10	84269
2035	DI(2-ETHYLHEXYL)ADIPATE	(400)	09220-01	1 U	EPA 506	05/22/96	1	84269
2036	OXAMYL (VYDATE)	(200)	09220-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2037	SIMAZINE	(4)	09220-01	0.1 U	EPA 507	05/22/96	0.1	84269
2039	DI(2-ETHYLHEXYL)PHTHALATE	(6)	09220-01	1.2	EPA 506	05/22/96	1	84269
2040	PICLORAM	(500)	09220-01	0.2 U	EPA 515.1	05/22/96	0.2	84269
2041	DINOSEB	(7)	09220-01	0.2 U	EPA 515.1	05/22/96	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	09220-01	0.1 U	EPA 505	05/21/96	0.1	84269
2046	CARBOFURAN	(40)	09220-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2050	ATRAZINE	(3)	09220-01	0.1 U	EPA 507	05/22/96	0.1	84269
2051	ALACHLOR	(2)	09220-01	0.3 U	EPA 507	05/22/96	0.3	84269
2063	2,3,7,8-TCDD (DIOXIN)	(.00003)	09220-01		EPA	--	--	84269
2065	HEPTACHLOR	(.4)	09220-01	0.01 U	EPA 508	05/22/96	0.01	84269
2067	HEPTACHLOR EPOXIDE	(.2)	09220-01	0.01 U	EPA 508	05/22/96	0.01	84269
2105	2,4-D	(70)	09220-01	0.5 U	EPA 515.1	05/22/96	0.5	84269
2110	2,4,5-TP (SILVEX)	(50)	09220-01	0.05 U	EPA 515.1	05/22/96	0.05	84269
2274	HEXACHLOROBENZENE	(1)	09220-01	0.01 U	EPA 508	05/22/96	0.01	84269
2306	BENZO(A)PYRENE	(.2)	09220-01	0.01 U	EPA 550	05/22/96	0.01	84269
2326	PENTACHLOROPHENOL	(1)	09220-01	0.05 U	EPA 515.1	05/22/96	0.05	84269
2383	PCB	(.5)	09220-01	0.05 U	EPA 508	05/22/96	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	09220-01	0.005 U	EPA 504	05/22/96	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	09220-01	0.005 U	EPA 504	05/22/96	0.005	84269
2959	CHLORDANE	(2)	09220-01	0.05 U	EPA 508	05/22/96	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2021	CARBARYL		09220-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2022	METHOMYL		09220-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2043	ALDICARB SULFOXIDE		09220-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2044	ALDICARB SULFONE		09220-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2045	METOLACHLOR		09220-01	0.3 U	EPA 507	05/22/96	0.3	84269
2047	ALDICARB		09220-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2066	3-HYDROXYCARBOFURAN		09220-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2077	PROPACHLOR		09220-01	0.05 U	EPA 508	05/22/96	0.05	84269
2356	ALDRIN		09220-01	0.01 U	EPA 508	05/22/96	0.01	84269
2364	DIELDRIN		09220-01	0.01 U	EPA 508	05/22/96	0.01	84269
2440	DICAMBA		09220-01	0.05 U	EPA 515.1	05/22/96	0.05	84269
2595	METRIBUZIN		09220-01	0.2 U	EPA 507	05/22/96	0.2	84269

J - Analyte was not detected; indicated concentration is method detection limit.
 K - Analyte was less than indicated concentration; indicated concentration is method detection limit multiplied by sample dilution factor.
¹ - Reduced sample volume used for analysis due to interference from sediment.

UNREGULATED GROUP II ANALYSIS
62-550.410
(PWS034)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2210	CHLOROMETHANE	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2212	DICHLORODIFLUOROMETHANE	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2214	BROMOMETHANE	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2216	CHLOROETHANE	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2218	TRICHLOROFLUOROMETHANE	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2408	DIBROMOMETHANE	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2410	1,1-DICHLOROPROPYLENE	09220-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2412	1,3-DICHLOROPROPANE	09220-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2413	1,3-DICHLOROPROPENE	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	09220-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2416	2,2-DICHLOROPROPANE	09220-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2941	CHLOROFORM	09220-01	6.6	EPA 502.2	05/23/96	0.2	84269
2942	BROMOFORM	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2943	BROMODICHLOROMETHANE	09220-01	0.56	EPA 502.2	05/23/96	0.3	84269
2944	DIBROMOCHLOROMETHANE	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2965	O-CHLOROTOLUENE	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2966	P-CHLOROTOLUENE	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2967	M-DICHLOROBENZENE	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2978	1,1-DICHLOROETHANE	09220-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2986	1,1,1,2-TETRACHLOROETHANE	09220-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2988	1,1,2,2-TETRACHLOROETHANE	09220-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2993	BROMOBENZENE	09220-01	0.5 U	EPA 502.2	05/23/96	0.5	84269

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2262	ISOPHORONE	09220-01	1 U	EPA 609	05/22/96	1	84269
2270	2,4-DINITROTOLUENE	09220-01	1 U	EPA 609	05/22/96	1	84269
2282	DIMETHYLPHthalate	09220-01	1 U	EPA 506	05/22/96	1	84269
2284	DIETHYLPHthalate	09220-01	1 U	EPA 506	05/22/96	1	84269
2290	DI-N-BUTYLPHthalate	09220-01	1 U	EPA 506	05/22/96	1	84269
2294	BUTYL BENZYL PHthalate	09220-01	1 U	EPA 506	05/22/96	1	84269
9089	DIOCTYLPHthalate	09220-01	1 U	EPA 506	05/22/96	1	84269
9108*	2-CHLOROPHENOL	09220-01	5 U	EPA 604	05/23/96	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	09220-01	20 U	EPA 604	05/23/96	20	84269
9115*	PHENOL	09220-01	5 U	EPA 604	05/23/96	5	84269
9116*	2,4,6-TRICHLOROPHENOL	09220-01	10 U	EPA 604	05/23/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

COLIFORM ANALYSIS

<u>Parameter ID</u>	<u>Name (MCL μg/l)</u>	<u>Sample Number</u>	<u>Analysis Result (μg/l)</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
	TOTAL COLIFORMS (MPN)	131509	1,600 M		05/20/96	1	82135
	FECAL COLIFORMS (MPN)	131509	8		05/20/96	1	82135

M - Off-scale high. Actual value is known to be greater than value given.



ABC Research

3437 s.w. 24th avenue

gainesville, florida 32607

904-372-0436

fax 904-378-6483

Report No. 78312

Date MAY 20 1996

Subject: WATER REC'D 10:45AM BY C. TIEDEMANN ANALYSIS BEGUN 10:45AM

Received: MAY 17 1996

TOM PARK
EPB ENVIRONMENTAL LAB
6821 SW ARCHER ROAD
GAINESVILLE, FL 32609

Client # 2643
Phone: (352) 377-2349
Fax: (352) 395-6639

RESULTS OF ANALYSIS

Sample 1 SRURF16 5/16/96 11:30 131509

TOTAL COLIFORMS (MPN)

>1,600 / 100ML

FECAL COLIFORMS (MPN)

8 / 100ML

Additional Notes & Comments for Sample Report 78312

SAMPLE WAS RECEIVED OUT OF HOLDING TIME FOR COMPLIANCE PURPOSES.

Respectfully submitted for ABC Research

Catherine Arany

Manager of Analytical Microbiology

SKWRF 16

TRihalOMETHANE ANALYSIS
 62-550.310(2)(a)

(PWS027)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2950	Total THMs (0.10)	09220-01	0.0072	EPA 502.2	5/23/96	0.0015	84269

VolATILE ORGANIC ANALYSIS
 62-550.310(2)(b)
 (PWS028)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2378	1,2,4-Trichlorobenzene (70)	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2380	cis-1,2-Dichloroethene (70)	09220-01	0.2 U	EPA 502.2	5/23/96	0.2	84269
5	Xylenes (Total) (10,000)	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2964	Dichloromethane (5)	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2968	o-Dichlorobenzene (600)	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2969	p-Dichlorobenzene (75)	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2976	Vinyl chloride (1)	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2977	1,1-Dichloroethene (7)	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2979	trans-1,2-Dichloroethene (100)	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2980	1,2-Dichloroethane (3)	09220-01	0.2 U	EPA 502.2	5/23/96	0.2	84269
2981	1,1,1-Trichloroethane (200)	09220-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2982	Carbon tetrachloride (3)	09220-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2983	1,2-Dichloropropane (5)	09220-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2984	Trichloroethene (3)	09220-01	0.2 U	EPA 502.2	5/23/96	0.2	84269
2985	1,1,2-Trichloroethane (5)	09220-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2987	Tetrachloroethene (3)	09220-01	0.2 U	EPA 502.2	5/23/96	0.2	84269
2989	Monochlorobenzene (100)	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2990	Benzene (1)	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2991	Toluene (1,000)	09220-01	5.0	EPA 502.2	5/23/96	0.5	84269
2	Ethylbenzene (700)	09220-01	0.97	EPA 502.2	5/23/96	0.5	84269
2996	Styrene (100)	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269

(U Analyte was not detected; indicated concentration is method detection limit.

SRWRF 16

PESTICIDE & PCB CHEMICAL ANALYSIS
 62-550.310(2)(c)
 (PWS029)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2005	Endrin (2)	09220-01	0.01 U	EPA 508	5/22/96	0.01	84269
2010	Lindane (.2)	09220-01	0.01 U	EPA 508	5/22/96	0.01	84269
2015	Methoxychlor (40)	09220-01	0.02 U	EPA 508	5/22/96	0.02	84269
2020	Toxaphene (3)	09220-01	0.2 U	EPA 508	5/22/96	0.2	84269
2031	Dalapon (200)	09220-01	1 U	EPA 515.1	5/22/96	1	84269
2032	Diquat (20)	09220-01	8 K ¹	EPA 549.1	5/23/96	4	84269
2033	Endothall (100)	09220-01	10 U	EPA 548	5/23/96	10	84269
2034	Glyphosate (700)	09220-01	10 U	EPA 547	5/24/96	10	84269
2035	Di(2-ethylhexyl)adipate (400)	09220-01	1 U	EPA 506	5/22/96	1	84269
2036	Oxamyl (Vydate) (200)	09220-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2037	Simazine (4)	09220-01	0.1 U	EPA 507	5/22/96	0.1	84269
	Di(2-ethylhexyl)phthalate (6)	09220-01	1.2	EPA 506	5/22/96	1	84269
2040	Picloram (500)	09220-01	0.2 U	EPA 515.1	5/22/96	0.2	84269
2041	Dinoseb (7)	09220-01	0.2 U	EPA 515.1	5/22/96	0.2	84269
2042	Hexachlorocyclopentadiene (50)	09220-01	0.1 U	EPA 505	5/21/96	0.1	84269
2046	Carbofuran (40)	09220-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2050	Atrazine (3)	09220-01	0.1 U	EPA 507	5/22/96	0.1	84269
2051	Alachlor (2)	09220-01	0.3 U	EPA 507	5/22/96	0.3	84269
2065	Heptachlor (.4)	09220-01	0.01 U	EPA 508	5/22/96	0.01	84269
2067	Heptachlor epoxide (.2)	09220-01	0.01 U	EPA 508	5/22/96	0.01	84269
2105	2,4-D (70)	09220-01	0.5 U	EPA 515.1	5/22/96	0.5	84269
2110	2,4,5-TP (Silvex) (50)	09220-01	0.05 U	EPA 515.1	5/22/96	0.05	84269
2274	Hexachlorobenzene (1)	09220-01	0.01 U	EPA 508	5/22/96	0.01	84269
2306	Benzo(a)pyrene (.2)	09220-01	0.01 U	EPA 550	5/22/96	0.01	84269
2326	Pentachlorophenol (1)	09220-01	0.05 U	EPA 515.1	5/22/96	0.05	84269
2383	PCBs (.5)	09220-01	0.05 U	EPA 508	5/22/96	0.05	84269
2931	Dibromochloropropane (.2)	09220-01	0.005 U	EPA 504	5/22/96	0.005	84269
2946	Ethylene dibromide (.02)	09220-01	0.005 U	EPA 504	5/22/96	0.005	84269
	Chlordane (2)	09220-01	0.05 U	EPA 508	5/22/96	0.05	84269

U - Analyte was not detected; indicated concentration is method detection limit.

K Analyte was less than indicated concentration; indicated concentration is method detection limit multiplied by sample dilution factor.

¹ Reduced sample volume used for analysis due to interference from sediment.

SnwRF 16

UNREGULATED GROUP I ANALYSIS
 62-550.405
 (PWS035)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2021	Carbaryl	09220-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2022	Methomyl	09220-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2043	Aldicarb sulfoxide	09220-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2044	Aldicarb sulfone	09220-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2045	Metolachlor	09220-01	0.3 U	EPA 507	5/22/96	0.3	84269
2047	Aldicarb	09220-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2066	3-Hydroxycarbofuran	09220-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2077	Propachlor	09220-01	0.05 U	EPA 508	5/22/96	0.05	84269
2356	Aldrin	09220-01	0.01 U	EPA 508	5/22/96	0.01	84269
	Dieldrin	09220-01	0.01 U	EPA 508	5/22/96	0.01	84269
2440	Dicamba	09220-01	0.05 U	EPA 515.1	5/22/96	0.05	84269
2075	Metribuzin	09220-01	0.2 U	EPA 507	5/22/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

SNWR 16

UNREGULATED GROUP II ANALYSIS
 62-550.410
 (PWS034)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2210	Chloromethane	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2212	Dichlorodifluoromethane	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2214	Bromomethane	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2216	Chloroethane	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2218	Trichlorofluoromethane	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2251	Methyl-tert-butyl-ether	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2408	Dibromomethane	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2410	1,1-Dichloropropene	09220-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2412	1,3-Dichloropropane	09220-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
	1,3-Dichloropropene	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2414	1,2,3-Trichloropropane	09220-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2416	2,2-Dichloropropane	09220-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2941	Chloroform	09220-01	6.6	EPA 502.2	5/23/96	0.2	84269
2942	Bromoform	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2943	Bromodichloromethane	09220-01	0.56	EPA 502.2	5/23/96	0.3	84269
2944	Dibromochloromethane	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2965	o-Chlorotoluene	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2966	p-Chlorotoluene	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2967	m-Dichlorobenzene	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2978	1,1-Dichloroethane	09220-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2986	1,1,1,2-Tetrachloroethane	09220-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2988	1,1,2,2-Tetrachloroethane	09220-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2993	Bromobenzene	09220-01	0.5 U	EPA 502.2	5/23/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

SRWRF 16

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2262	Isophorone	09220-01	1 U	EPA 609	5/22/96	1	84269
2270	2,4-Dinitrotoluene	09220-01	1 U	EPA 609	5/22/96	1	84269
2282	Dimethylphthalate	09220-01	1 U	EPA 506	5/22/96	1	84269
2284	Diethylphthalate	09220-01	1 U	EPA 506	5/22/96	1	84269
2290	Di-n-butylphthalate	09220-01	1 U	EPA 506	5/22/96	1	84269
2294	Butyl benzyl phthalate	09220-01	1 U	EPA 506	5/22/96	1	84269
9089	Di-n-octylphthalate	09220-01	1 U	EPA 506	5/22/96	1	84269
9108*	2-Chlorophenol	09220-01	5 U	EPA 604	5/23/96	5	84269
9112*	2-Methyl-4,6-dinitrophenol	09220-01	20 U	EPA 604	5/23/96	20	84269
	,* Phenol	09220-01	5 U	EPA 604	5/23/96	5	84269
9116*	2,4,6-Trichlorophenol	09220-01	10 U	EPA 604	5/23/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

CERTIFICATE OF ANALYSIS

RESULTS BY SAMPLE

SENT **PPB ENVIRONMENTAL**
TO: **LABORATORIES, INC.**
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608
PAUL BERMAN
352/377-2349 FAX 395-6639

ANALYZED **PBS&J Environmental Laboratories**
BY: **6635 East Colonial Drive**
Orlando, FL 32807

Phone: (407) 277-4443
Fax: (407) 382-8794

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

Sample ID: SRWRF 16 - 131509

Lab ID: **9605310-01**

Collected: 05/16/96 15:00:00

TEST	RESULT	UNITS	METHOD	EXTRACTED	ANALYZED	BY
ALPHA, TOTAL	5.9	pCi/L	EPA 900.0		05/24/96	cd
ALPHA-counting error	3.2	pCi/L	EPA 900.0		05/24/96	cd
RADIUM 226 IN WATER	2.0	pCi/L	EPA 903.1		05/29/96	cd
RADIUM 226-counting error	0.2	pCi/L	EPA 903.1		05/29/96	cd



ABC Research

3437 s.w. 24th avenue • gainesville, florida 32607 • 352-372-0436 • fax 352-378-6483

Report No. 78310
Subject: SEWRF16 131509
Received: MAY 17 1996

Date MAY 18 1996

DHRS/DEP # 82135/E8203

TOM PARK
PPB ENVIRONMENTAL LAB
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608

RESULTS OF ANALYSIS	<u>ANALYSIS METHOD</u>	<u>RESULT</u>	<u>ANALYST</u>	<u>ANALYSIS DATE/TIME</u>
<u>Sample 1 SEWRF16 131509</u> FOAMING AGENTS (SURFACTANTS)	<u>05/16/96 11:30AM</u> EPA 425.1	< .025 MG/L	JP	05/17/96 01:00

Respectfully Submitted for ABC Research

Victor Kowalski

Victor Kowalski, PhD
Director, Quality Control

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (to be completed by system or lab)

System Name: _____ I.D. #: _____
Address: _____ Phone #: () _____
Type (check one): () Community () Nontransient Noncommunity () Noncommunity

SAMPLE INFORMATION (to be completed by sampler)

Sample Date (MMDDYY): ____/____/____ Sample Time: _____
Sample Location (be specific): _____
Sampler Name and Phone: _____ () _____
Sampler's Signature: _____ Title: _____
Check Type(s): () Distribution () Recheck of MCL () Resample of Lab Invalidated Sample
() Clearance () 3m Max Res Time () Plant Tap
() Distrib entry pt () Raw () Composite of Multiple Sites-Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab) - ATTACH HRS ANALYTE SHEET*

Lab Name: PPB Environmental Laboratories, Inc. HRS #: 82282 Expiration Date: _____
Address: 6821 SW Archer Road, Gainesville, FL 32608 Phone #: (352) 377-2349
Subcontracted Lab HRS #: 83170, 82135, 84269 - ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (to be completed by lab) - SAMPLE NUMBER: 131322 SRWF # 17

Date Sample(s) Received: 5/10/96 Group(s) Analyzed & Results attached for compliance with 62-550, F.A.C.:

() Nitrate Only	() Nitrite Only	() Asbestos Only	(x) Trihalomethanes
Inorganics-	Volatile Organics-	Secondaries-	Pesticide/PCBs-
() All 17 (x) Partial	(x) All 21 () Partial	() All 14 () Partial	() All 30 (x) Partial
Group I Unregulateds-	Group II Unregulateds-	Group III Unregulateds-	Radiochemicals-
() All 13 (x) Partial	(x) All 23 () Partial	(x) All 11 () Partial	(x) Single Sample () Qtrly Composite**

**Provide radiochemical sample dates & locations for each quarter

I, Paul Berman, do HEREBY CERTIFY that all attached analytical data are correct.
Signature Paul Berman
Title QA Officer Date 6/10/96

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: _____ Sample Analysis Satisfactory: _____
Resample Requested for: _____ Reason: _____
Person notified to resample: _____ Date Notified: _____
DEP/HRS Reviewing Official: _____

*All HRS lab #s and their HRS Analyte Sheet for labs performing the attached water analyses must be provided. Failure to do so will result in rejection of the analyses and possible enforcement against the public water system for failure to sample.

INORGANIC ANALYSIS
62-550.310(1)
(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	131322	0.005	SM 3113B	06/09/96	0.001	82282
1010	BARIUM	(2)	131322	0.090	EPA 200.7	05/14/96	0.001	82282
1015	CADMIUM	(.005)	131322	0.0006	SM 3113B	05/15/96	0.0001	82282
1020	CHROMIUM	(0.1)	131322	0.038	EPA 200.7	05/14/96	0.005	82282
1024	CYANIDE	(0.2)	131322	0.004 U	SM 4500CNE	05/20/96	0.004	82282
1025	FLUORIDE	(4)	131322	1.28	SM 4500FC	05/28/96	0.02	82282
1030	LEAD	(0.015)	131322	0.007	SM 3113B	05/12/96	0.001	82282
1035	MERCURY	(0.002)	131322	0.0001 K	EPA 245.1	05/15/96	0.00005	82282
1036	NICKEL	(0.1)	131322	0.030 U	EPA 200.7	05/14/96	0.030	82282
1040	NITRATE	(10)	131322	1.14	EPA 353.2	05/16/96	0.004	82282
1041	NITRITE	(1)	131322	0.368	EPA 353.2	05/11/96	0.003	82282
1045	SELENIUM	(0.05)	131322	0.005 U	SM 3113B	06/08/96	0.001	82282
1052	SODIUM	(160)	131322	130	EPA 200.7	05/14/96	0.05	82282
1074	ANTIMONY	(0.006)	131322	0.005	SM 3113B	05/21/96	0.003	82282
1075	BERYLLIUM	(0.004)	131322	0.003 U	EPA 200.7	05/14/96	0.003	82282
1085	THALLIUM	(0.002)	131322	0.002 U	EPA 200.9	05/17/96	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS
62-550.320
(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ALUMINUM	(0.2)	131322	10.6	EPA 200.7	05/14/96	0.01	82282
1017	CHLORIDE	(250)	131322	63.4	EPA 325.2	05/14/96	0.3	82282
1022	COPPER	(1)	131322	0.01 U	EPA 200.7	05/14/96	0.01	82282
1020	FLUORIDE	(2.0)	131322	1.28	SM 4500FC	05/28/96	0.02	82282
1028	IRON	(0.3)	131322	3.14	EPA 200.7	05/14/96	0.005	82282
1032	MANGANESE	(0.05)	131322	0.071	EPA 200.7	05/14/96	0.005	82282
1050	SILVER	(0.1)	131322	0.0001 U	SM 3113B	05/20/96	0.0001	82282
1055	SULFATE	(250)	131322	103	EPA 375.4	05/13/96	1	82282
1095	ZINC	(5)	131322	0.009	EPA 200.7	05/14/96	0.004	82282
1905	COLOR	(15 color units)	131322	400	SM 2120B	05/10/96	5	82282
1920	ODOR	(3 threshold odor number)	131322	2.5	SM 2150B	05/10/96	1	82282
1925	PH	(6.5-8.5)	131322	7.6	EPA 150.1	05/10/96	--	82282
1930	TOTAL DISSOLVED SOLIDS	(500)	131322	630	SM 2540C	05/10/96	3	82282
2905	FOAMING AGENTS	(0.5)	131322	0.1 K	SM 5540C	05/10/96	0.025	82282

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).
K indicates analyte is less than value indicated, with value being greater than method detection limit.
U - Analyte was not detected; indicated concentration is method detection limit.

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TRIHALOMETHANE ANALYSIS
62-550.310(2)(A)
(PWS027)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2950	TOTAL THMS	(0.10)	09180-01	0.021	EPA 502.2	5/19/96	0.0015	84269

RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

Parameter ID	Name	(MCL pCi/l)	Sample Number	Analysis Result (pCi/l)	Analysis Method	Analysis Date	Error	Lab ID
4000	GROSS ALPHA		09180-01	32.7 ± 5.8	EPA 900.0	05/18/96	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		09180-01	3.5 ± 0.2	EPA 903.1	05/23/96	1	83170
4030	RADIUM-228		09180-01	0.3 ± 0.4	BROOKS/BLANC	05/30/96	1	83170
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)
NA = NOT ANALYZED

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(8)
(PWS028)

Parameter ID	Name	(MCL µg/l)	Sample Number	Analysis Result (µg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2378	1,2,4-TRICHLOROBENZENE	(70)	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2380	CIS-1,2-DICHLOROETHYLENE	(70)	09180-01	0.2 U	EPA 502.2	05/19/96	0.2	84269
2955	XYLENES (TOTAL)	(10,000)	09180-01	14	EPA 502.2	05/19/96	0.5	84269
2964	DICHLOROMETHANE	(5)	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2968	O-DICHLOROBENZENE	(600)	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2969	PARA-DICHLOROBENZENE	(75)	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2976	VINYL CHLORIDE	(1)	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2977	1,1-DICHLOROETHYLENE	(7)	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2979	TRANS-1,2-DICHLOROETHYLENE	(100)	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2980	1,2-DICHLOROETHANE	(3)	09180-01	0.2 U	EPA 502.2	05/19/96	0.2	84269
2981	1,1,1-TRICHLOROETHANE	(200)	09180-01	0.3 U	EPA 502.2	05/19/96	0.3	84269
2982	CARBON TETRACHLORIDE	(3)	09180-01	0.3 U	EPA 502.2	05/19/96	0.3	84269
2983	1,2-DICHLOROPROPANE	(5)	09180-01	0.3 U	EPA 502.2	05/19/96	0.3	84269
2984	TRICHLOROETHYLENE	(3)	09180-01	0.2 U	EPA 502.2	05/19/96	0.2	84269
2985	1,1,2-TRICHLOROETHANE	(5)	09180-01	0.3 U	EPA 502.2	05/19/96	0.3	84269
2987	TETRACHLOROETHYLENE	(3)	09180-01	0.2 U	EPA 502.2	05/19/96	0.2	84269
2989	MONOCHLOROBENZENE	(100)	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2990	BENZENE	(1)	09180-01	0.94	EPA 502.2	05/19/96	0.5	84269
2991	TOLUENE	(1,000)	09180-01	14	EPA 502.2	05/19/96	0.5	84269
2992	ETHYLBENZENE	(700)	09180-01	2.6	EPA 502.2	05/19/96	0.5	84269
2996	STYRENE	(100)	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(c)
(PWS029)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2005	ENDRIN	(2)	09180-01	0.01 U	EPA 508	05/15/96	0.01	84269
2010	LINDANE	(.2)	09180-01	0.01 U	EPA 508	05/15/96	0.01	84269
2015	METHOXYCHLOR	(40)	09180-01	0.02 U	EPA 508	05/15/96	0.02	84269
2020	TOXAPHENE	(3)	09180-01	0.2 U	EPA 508	05/15/96	0.2	84269
2031	DALAPON	(200)	09180-01	1 U	EPA 515.1	05/21/96	1	84269
2032	DIQUAT	(20)	09180-01	8 K ¹	EPA 549.1	05/15/96	4	84269
2033	ENDOTHALL	(100)	09180-01	10 U	EPA 548	05/14/96	10	84269
2034	GLYPHOSATE	(700)	09180-01	10 U	EPA 547	05/23/96	10	84269
2035	Di(2-ETHYLHEXYL)ADIPATE	(400)	09180-01	1 U	EPA 506	05/15/96	1	84269
2036	OXAMYL (VYDATE)	(200)	09180-01	0.5 U	EPA 531.1	05/15/96	0.5	84269
2037	SIMAZINE	(4)	09180-01	0.1 U	EPA 507	05/15/96	0.1	84269
2039	Di(2-ETHYLHEXYL)PHTHALATE	(6)	09180-01	1 U	EPA 506	05/15/96	1	84269
2040	PICLORAM	(500)	09180-01	0.2 U	EPA 515.1	05/21/96	0.2	84269
2041	DINOSEB	(7)	09180-01	0.2 U	EPA 515.1	05/21/96	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	09180-01	0.1 U	EPA 505	05/20/96	0.1	84269
2046	CARBOFURAN	(40)	09180-01	0.5 U	EPA 531.1	05/15/96	0.5	84269
2050	ATRAZINE	(3)	09180-01	0.1 U	EPA 507	05/15/96	0.1	84269
2051	ALACHLOR	(2)	09180-01	0.3 U	EPA 507	05/15/96	0.3	84269
2063	2,3,7,8-TCDD (DIOXIN)	(.00003)	09180-01		EPA	--	--	84269
2065	HEPTACHLOR	(.4)	09180-01	0.01 U	EPA 508	05/15/96	0.01	84269
2067	HEPTACHLOR EPOXIDE	(.2)	09180-01	0.01 U	EPA 508	05/15/96	0.01	84269
2105	2,4-D	(70)	09180-01	0.5 U	EPA 515.1	05/21/96	0.5	84269
2110	2,4,5-TP (SILVEX)	(50)	09180-01	0.05 U	EPA 515.1	05/21/96	0.05	84269
2274	HEXACHLOROBENZENE	(1)	09180-01	0.01 U	EPA 508	05/15/96	0.01	84269
2306	BENZO(A)PYRENE	(.2)	09180-01	0.01 U	EPA 550	05/15/96	0.01	84269
2326	PENTACHLOROPHENOL	(1)	09180-01	0.05 U	EPA 515.1	05/21/96	0.05	84269
2383	PCB	(.5)	09180-01	0.05 U	EPA 508	05/15/96	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	09180-01	0.005 U	EPA 504	05/16/96	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	09180-01	0.005 U	EPA 504	05/16/96	0.005	84269
2959	CHLORDANE	(2)	09180-01	0.05 U	EPA 508	05/15/96	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2021	CARBARYL		09180-01	0.5 U	EPA 531.1	05/15/96	0.5	84269
2022	METHOMYL		09180-01	0.5 U	EPA 531.1	05/15/96	0.5	84269
2043	ALDICARB SULFOXIDE		09180-01	0.5 U	EPA 531.1	05/15/96	0.5	84269
2044	ALDICARB SULFONE		09180-01	0.5 U	EPA 531.1	05/15/96	0.5	84269
2045	METOLACHLOR		09180-01	0.3 U	EPA 507	05/15/96	0.3	84269
2047	ALDICARB		09180-01	0.5 U	EPA 531.1	05/15/96	0.5	84269
2066	3-HYDROXYCARBOFURAN		09180-01	0.5 U	EPA 531.1	05/15/96	0.5	84269
2077	PROPACHLOR		09180-01	0.05 U	EPA 508	05/15/96	0.05	84269
2356	ALDRIN		09180-01	0.01 U	EPA 508	05/15/96	0.01	84269
2364	DIELDRIN		09180-01	0.01 U	EPA 508	05/15/96	0.01	84269
2440	DICAMBA		09180-01	0.05 U	EPA 515.1	05/21/96	0.05	84269
2595	METRIBUZIN		09180-01	0.2 U	EPA 507	05/15/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

K - Analyte was less than indicated concentration; indicated concentration is method detection limit multiplied by sample dilution factor.

¹ - Reduced sample volume used for analysis due to interference from sediment.

UNREGULATED GROUP II ANALYSIS

62-550.410

(PWS034)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2210	CHLOROMETHANE	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2212	DICHLORODIFLUOROMETHANE	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2214	BROMOMETHANE	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2216	CHLOROETHANE	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2218	TRICHLOROFLUOROMETHANE	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2408	DIBROMOMETHANE	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2410	1,1-DICHLOROPROPYLENE	09180-01	0.3 U	EPA 502.2	05/19/96	0.3	84269
2412	1,3-DICHLOROPROPANE	09180-01	0.3 U	EPA 502.2	05/19/96	0.3	84269
2413	1,3-DICHLOROPROPENE	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	09180-01	0.3 U	EPA 502.2	05/19/96	0.3	84269
2416	2,2-DICHLOROPROPANE	09180-01	0.3 U	EPA 502.2	05/19/96	0.3	84269
2941	CHLOROFORM	09180-01	19	EPA 502.2	05/19/96	0.2	84269
2942	BROMOFORM	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2943	BROMODICHLOROMETHANE	09180-01	1.7	EPA 502.2	05/19/96	0.3	84269
2944	DIBROMOCHLOROMETHANE	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2965	O-CHLOROTOLUENE	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2966	P-CHLOROTOLUENE	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2967	M-DICHLOROBENZENE	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269
2978	1,1-DICHLOROETHANE	09180-01	0.3 U	EPA 502.2	05/19/96	0.3	84269
2986	1,1,1,2-TETRACHLOROETHANE	09180-01	0.3 U	EPA 502.2	05/19/96	0.3	84269
2988	1,1,2,2-TETRACHLOROETHANE	09180-01	0.3 U	EPA 502.2	05/19/96	0.3	84269
2993	BROMOBENZENE	09180-01	0.5 U	EPA 502.2	05/19/96	0.5	84269

UNREGULATED GROUP III ANALYSIS

62-550.415

(PWS036 & 037*)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2262	ISOPHORONE	09180-01	1 U	EPA 609	05/15/96	1	84269
2270	2,4-DINITROTOLUENE	09180-01	1 U	EPA 609	05/15/96	1	84269
2282	DIMETHYLPHthalate	09180-01	1 U	EPA 506	05/15/96	1	84269
2284	DIETHYLPHthalate	09180-01	1 U	EPA 506	05/15/96	1	84269
2290	DI-N-BUTYLPHthalate	09180-01	1 U	EPA 506	05/15/96	1	84269
2294	BUTYL BENZYL PHthalate	09180-01	1 U	EPA 506	05/15/96	1	84269
9089	DIOCTYLPHthalate	09180-01	1 U	EPA 506	05/15/96	1	84269
9108*	2-CHLOROPHENOL	09180-01	5 U	EPA 604	05/16/96	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	09180-01	20 U	EPA 604	05/16/96	20	84269
9115*	PHENOL	09180-01	5 U	EPA 604	05/16/96	5	84269
9116*	2,4,6-TRICHLOROPHENOL	09180-01	10 U	EPA 604	05/16/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

COLIFORM ANALYSIS

<u>Parameter ID</u>	<u>Name</u>	<u>(MCL $\mu\text{g/l}$)</u>	<u>Sample Number</u>	<u>Analysis Result ($\mu\text{g/l}$)</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
	TOTAL COLIFORMS			1 U			1	82135
	FECAL COLIFORMS			1 U			1	82135

U - Analyte was not detected; indicated concentration is method detection limit.

COLIFORM ANALYSIS

<u>Parameter</u> <u>ID</u>	<u>Name</u> <u>(MCL μg/l)</u>	<u>Sample</u> <u>Number</u>	<u>Analysis</u> <u>Result (μg/l)</u>	<u>Analysis</u> <u>Method</u>	<u>Analysis</u> <u>Date</u>	<u>MDL</u>	<u>Lab</u> <u>ID</u>
	TOTAL COLIFORMS (MPN)	131322	140		5/3/96	1	82135
	FECAL COLIFORMS (MPN)	131322	7		5/3/96	1	82135

U - Analyte was not detected; indicated concentration is method detection limit.

CPWRF 17

TRIHALOMETHANE ANALYSIS
 62-550.310(2)(a)

(PWS027)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2950	Total THMs (0.10)	09180-01	0.021	EPA 502.2	5/19/96	0.0015	84269

VOLATILE ORGANIC ANALYSIS
 62-550.310(2)(b)
 (PWS028)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2378	1,2,4-Trichlorobenzene (70)	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2380	cis-1,2-Dichloroethene (70)	09180-01	0.2 U	EPA 502.2	5/19/96	0.2	84269
5	Xylenes (Total) (10,000)	09180-01	14	EPA 502.2	5/19/96	0.5	84269
2264	Dichloromethane (5)	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2968	o-Dichlorobenzene (600)	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2969	p-Dichlorobenzene (75)	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2976	Vinyl chloride (1)	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2977	1,1-Dichloroethene (7)	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2979	trans-1,2-Dichloroethene (100)	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2980	1,2-Dichloroethane (3)	09180-01	0.2 U	EPA 502.2	5/19/96	0.2	84269
2981	1,1,1-Trichloroethane (200)	09180-01	0.3 U	EPA 502.2	5/19/96	0.3	84269
2982	Carbon tetrachloride (3)	09180-01	0.3 U	EPA 502.2	5/19/96	0.3	84269
2983	1,2-Dichloropropane (5)	09180-01	0.3 U	EPA 502.2	5/19/96	0.3	84269
2984	Trichloroethene (3)	09180-01	0.2 U	EPA 502.2	5/19/96	0.2	84269
2985	1,1,2-Trichloroethane (5)	09180-01	0.3 U	EPA 502.2	5/19/96	0.3	84269
2987	Tetrachloroethene (3)	09180-01	0.2 U	EPA 502.2	5/19/96	0.2	84269
2989	Monochlorobenzene (100)	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2990	Benzene (1)	09180-01	0.94	EPA 502.2	5/19/96	0.5	84269
2991	Toluene (1,000)	09180-01	14	EPA 502.2	5/19/96	0.5	84269
2	Ethylbenzene (700)	09180-01	2.6	EPA 502.2	5/19/96	0.5	84269
2226	Styrene (100)	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

SrWRF 17

PESTICIDE & PCB CHEMICAL ANALYSIS
 62-550.310(2)(c)
 (PWS029)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2005	Endrin (2)	09180-01	0.01 U	EPA 508	5/15/96	0.01	84269
2010	Lindane (.2)	09180-01	0.01 U	EPA 508	5/15/96	0.01	84269
2015	Methoxychlor (40)	09180-01	0.02 U	EPA 508	5/15/96	0.02	84269
2020	Toxaphene (3)	09180-01	0.2 U	EPA 508	5/15/96	0.2	84269
2031	Dalapon (200)	09180-01	1 U	EPA 515.1	5/21/96	1	84269
2032	Diquat (20)	09180-01	8 K ¹	EPA 549.1	5/15/96	4	84269
2033	Endothall (100)	09180-01	10 U	EPA 548	5/14/96	10	84269
2034	Glyphosate (700)	09180-01	10 U	EPA 547	5/23/96	10	84269
2035	Di(2-ethylhexyl)adipate (400)	09180-01	1 U	EPA 506	5/15/96	1	84269
2036	Oxamyl (Vydate) (200)	09180-01	0.5 U	EPA 531.1	5/15/96	0.5	84269
2037	Simazine (4)	09180-01	0.1 U	EPA 507	5/15/96	0.1	84269
2039	Di(2-ethylhexyl)phthalate (6)	09180-01	1 U	EPA 506	5/15/96	1	84269
2040	Picloram (500)	09180-01	0.2 U	EPA 515.1	5/21/96	0.2	84269
2041	Dinoseb (7)	09180-01	0.2 U	EPA 515.1	5/21/96	0.2	84269
2042	Hexachlorocyclopentadiene (50)	09180-01	0.1 U	EPA 505	5/20/96	0.1	84269
2046	Carbofuran (40)	09180-01	0.5 U	EPA 531.1	5/15/96	0.5	84269
2050	Atrazine (3)	09180-01	0.1 U	EPA 507	5/15/96	0.1	84269
2051	Alachlor (2)	09180-01	0.3 U	EPA 507	5/15/96	0.3	84269
2065	Heptachlor (.4)	09180-01	0.01 U	EPA 508	5/15/96	0.01	84269
2067	Heptachlor epoxide (.2)	09180-01	0.01 U	EPA 508	5/15/96	0.01	84269
2105	2,4-D (70)	09180-01	0.5 U	EPA 515.1	5/21/96	0.5	84269
2110	2,4,5-TP (Silvex) (50)	09180-01	0.05 U	EPA 515.1	5/21/96	0.05	84269
2274	Hexachlorobenzene (1)	09180-01	0.01 U	EPA 508	5/15/96	0.01	84269
2306	Benzo(a)pyrene (.2)	09180-01	0.01 U	EPA 550	5/15/96	0.01	84269
2326	Pentachlorophenol (1)	09180-01	0.05 U	EPA 515.1	5/21/96	0.05	84269
2383	PCBs (.5)	09180-01	0.05 U	EPA 508	5/15/96	0.05	84269
2931	Dibromochloropropane (.2)	09180-01	0.005 U	EPA 504	5/16/96	0.005	84269
2946	Ethylene dibromide (.02)	09180-01	0.005 U	EPA 504	5/16/96	0.005	84269
2949	Chlordane (2)	09180-01	0.05 U	EPA 508	5/15/96	0.05	84269

U - Analyte was not detected; indicated concentration is method detection limit.

K - Analyte was less than indicated concentration; indicated concentration is method detection limit multiplied by sample dilution factor.

¹ Reduced sample volume used for analysis due to interference from sediment.

SRWRF 17

UNREGULATED GROUP I ANALYSIS
 62-550.405
 (PWS035)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2021	Carbaryl	09180-01	0.5 U	EPA 531.1	5/15/96	0.5	84269
2022	Methomyl	09180-01	0.5 U	EPA 531.1	5/15/96	0.5	84269
2043	Aldicarb sulfoxide	09180-01	0.5 U	EPA 531.1	5/15/96	0.5	84269
2044	Aldicarb sulfone	09180-01	0.5 U	EPA 531.1	5/15/96	0.5	84269
2045	Metolachlor	09180-01	0.3 U	EPA 507	5/15/96	0.3	84269
2047	Aldicarb	09180-01	0.5 U	EPA 531.1	5/15/96	0.5	84269
2066	3-Hydroxycarbofuran	09180-01	0.5 U	EPA 531.1	5/15/96	0.5	84269
2077	Propachlor	09180-01	0.05 U	EPA 508	5/15/96	0.05	84269
2256	Aldrin	09180-01	0.01 U	EPA 508	5/15/96	0.01	84269
2254	Dieldrin	09180-01	0.01 U	EPA 508	5/15/96	0.01	84269
2250	Dicamba	09180-01	0.05 U	EPA 515.1	5/21/96	0.05	84269
2595	Metribuzin	09180-01	0.2 U	EPA 507	5/15/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

UNREGULATED GROUP II ANALYSIS
62-550.410
(PWS034)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result (ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2210	Chloromethane	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2212	Dichlorodifluoromethane	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2214	Bromomethane	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2216	Chloroethane	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2218	Trichlorofluoromethane	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2251	Methyl-tert-butyl-ether	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2408	Dibromomethane	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2410	1,1-Dichloropropene	09180-01	0.3 U	EPA 502.2	5/19/96	0.3	84269
2412	1,3-Dichloropropane	09180-01	0.3 U	EPA 502.2	5/19/96	0.3	84269
3	1,3-Dichloropropene	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2414	1,2,3-Trichloropropane	09180-01	0.3 U	EPA 502.2	5/19/96	0.3	84269
2416	2,2-Dichloropropane	09180-01	0.3 U	EPA 502.2	5/19/96	0.3	84269
2941	Chloroform	09180-01	19	EPA 502.2	5/19/96	0.2	84269
2942	Bromoform	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2943	Bromodichloromethane	09180-01	1.7	EPA 502.2	5/19/96	0.3	84269
2944	Dibromochloromethane	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2965	o-Chlorotoluene	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2966	p-Chlorotoluene	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2967	m-Dichlorobenzene	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269
2978	1,1-Dichloroethane	09180-01	0.3 U	EPA 502.2	5/19/96	0.3	84269
2986	1,1,1,2-Tetrachloroethane	09180-01	0.3 U	EPA 502.2	5/19/96	0.3	84269
2988	1,1,2,2-Tetrachloroethane	09180-01	0.3 U	EPA 502.2	5/19/96	0.3	84269
2993	Bromobenzene	09180-01	0.5 U	EPA 502.2	5/19/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 09180
May 24, 1996

SWRF 17

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2262	Isophorone	09180-01	1 U	EPA 609	5/15/96	1	84269
2270	2,4-Dinitrotoluene	09180-01	1 U	EPA 609	5/15/96	1	84269
2282	Dimethylphthalate	09180-01	1 U	EPA 506	5/15/96	1	84269
2284	Diethylphthalate	09180-01	1 U	EPA 506	5/15/96	1	84269
2290	Di-n-butylphthalate	09180-01	1 U	EPA 506	5/15/96	1	84269
2294	Butyl benzyl phthalate	09180-01	1 U	EPA 506	5/15/96	1	84269
9089	Di-n-octylphthalate	09180-01	1 U	EPA 506	5/15/96	1	84269
9108*	2-Chlorophenol	09180-01	5 U	EPA 604	5/16/96	5	84269
9112*	2-Methyl-4,6-dinitrophenol	09180-01	20 U	EPA 604	5/16/96	20	84269
	)* Phenol	09180-01	5 U	EPA 604	5/16/96	5	84269
9116*	2,4,6-Trichlorophenol	09180-01	10 U	EPA 604	5/16/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.



ABC Research

3437 s.w. 24th avenue

gainesville, florida 32607

904-372-0436

fax 904-378-6483

Report No. 77996

Date MAY 15 1996

Subject: WATER REC'D 02:35PM BY C. TIEDEMANN ANALYSIS BEGUN 02:40PM

Received: MAY 10 1996

PAUL BERMAN
FPB ENVIRONMENTAL LAB
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608

Client # 2643
Phone: (352) 377-2349
Fax: (352) 395-6639

RESULTS OF ANALYSIS

Sample 1 HSRWRF 17 5/9/96 1700 GW

TOTAL COLIFORMS (MPN)

140 / 100ML

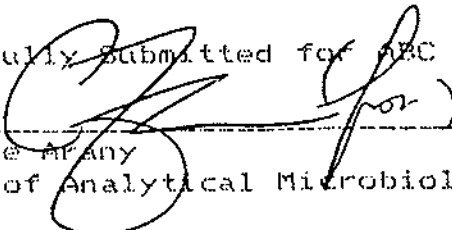
FECAL COLIFORMS (MPN)

7 / 100ML

Additional Notes & Comments for Sample Report 77996

PROJECT NAME- SOUTHEAST DRILLING

Respectfully Submitted for ABC Research



Catherine Arany
Manager of Analytical Microbiology

May 31, 1996

09:12

CERTIFICATE OF ANALYSIS RESULTS BY SAMPLE

Page 1

SENT **PPB ENVIRONMENTAL**
TO: **LABORATORIES, INC.**
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608

352/377-2349 FAX 395-6639

ANALYZED BY: **PBS&J Environmental Laboratories**
6635 East Colonial Drive
Orlando, FL 32807

Phone: (407) 277-4443
Fax: (407) 382-8794

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

Sample ID: SRWRF 17 / 131322

Lab ID: **9605201-01**

Collected: 05/09/96 17:00:00

TEST	RESULT	UNITS	METHOD	EXTRACTED	ANALYZED	BY
RADIUM 228 IN WATER	0.3	pCi/l	BROOKS/BLANC		05/30/96	cd
RADIUM 228-counting error	0.4	pCi/l	BROOKS/BLANC		05/30/96	cd
ALPHA, TOTAL	32.7	pCi/l	EPA 900.0		05/16/96	cd
ALPHA-counting error	5.8	pCi/l	EPA 900.0		05/16/96	cd
RADIUM 226 IN WATER	3.5	pCi/l	EPA 903.1		05/23/96	cd
RADIUM 226-counting error	0.2	pCi/l	EPA 903.1		05/23/96	cd

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (to be completed by system or lab)

System Name: _____ I.D. #: _____
Address: _____ Phone #: () _____
Type (check one): () Community () Nontransient Noncommunity () Noncommunity

SAMPLE INFORMATION (to be completed by sampler)

Sample Date (MMDDYY): ____ / ____ / ____ Sample Time: _____
Sample Location (be specific): _____
Sampler Name and Phone: _____ () _____
Sampler's Signature: _____ Title: _____
Check Type(s): () Distribution () Recheck of MCL () Resample of Lab Invalidated Sample
() Clearance () Thm Max Res Time () Plant Tap
() Distrib entry pt () Raw () Composite of Multiple Sites--Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab) - ATTACH HRS ANALYTE SHEET*

Lab Name: PPB Environmental Laboratories, Inc. HRS #: 82282 Expiration Date: _____
Address: 6821 SW Archer Road, Gainesville, FL 32608 Phone #: (352) 377-2349

Subcontracted Lab HRS #: 83170, 82135, 84269 - ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (to be completed by lab) - SAMPLE NUMBER: 131416 SEWER # 18

Date Sample(s) Received: 5/15/96 Group(s) Analyzed & Results attached for compliance with 62-550, F.A.C.:

() Nitrate Only	() Nitrite Only	() Asbestos Only	(x) Trihalomethanes
Inorganics--	Volatile Organics--	Secondaries--	Pesticide/PCBs--
() All 17 (x) Partial	(x) All 21 () Partial	(x) All 14 () Partial	() All 30 (x) Partial
Group I Unregulateds--	Group II Unregulateds--	Group III Unregulateds--	Radiochemicals--
() All 13 (x) Partial	(x) All 23 () Partial	(x) All 11 () Partial	(x) Single Sample () Qtrly Composite**

**Provide radiochemical sample dates & locations for each quarter

I, Paul Berman, do HEREBY CERTIFY that all attached analytical data are correct.

Signature Paul Berman
Title QA Officer Date 6/11/96

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: _____ Sample Analysis Satisfactory: _____
Resample Requested for: _____ Reason: _____
Person notified to resample: _____ Date Notified: _____
DEP/HRS Reviewing Official: _____

*All HRS lab #s and their HRS Analyte Sheet for labs performing the attached water analyses must be provided. Failure to do so will result in rejection of the analyses and possible enforcement against the public water system for failure to sample.

Effective January 1995

INORGANIC ANALYSIS
62-550.310(1)
(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	131416	0.005	SM 3113B	06/08/96	0.001	82282
1010	BARIUM	(2)	131416	0.045	EPA 200.7	05/30/96	0.001	82282
1015	CADMIUM	(.005)	131416	0.0001 U	SM 3113B	06/01/96	0.0001	82282
1020	CHROMIUM	(0.1)	131416	0.009	EPA 200.7	05/30/96	0.005	82282
1024	CYANIDE	(0.2)	131416	0.004 U	SM 4500CNE	05/20/96	0.004	82282
1025	FLUORIDE	(4)	131416	0.39	SM 4500FC	05/28/96	0.02	82282
1030	LEAD	(0.015)	131416	0.001 U	SM 3113B	05/29/96	0.001	82282
1035	MERCURY	(0.002)	131416	0.00005 U	EPA 245.1	05/21/96	0.00005	82282
1036	NICKEL	(0.1)	131416	0.030 U	EPA 200.7	05/30/96	0.030	82282
1040	NITRATE	(10)	131416	0.01 K	EPA 353.2	05/16/96	0.004	82282
1041	NITRITE	(1)	131416	0.01 K	EPA 353.2	05/15/96	0.003	82282
1045	SELENIUM	(0.05)	131416	0.005 K	SM 3113B	06/08/96	0.001	82282
1052	SODIUM	(160)	131416	64.4	EPA 200.7	05/30/96	0.05	82282
1074	ANTIMONY	(0.006)	131416	0.003 U	SM 3113B	06/12/96	0.003	82282
1075	BERYLLIUM	(0.004)	131416	0.004 K	EPA 200.7	05/30/96	0.003	82282
1085	THALLIUM	(0.002)	131416	0.002 U	EPA 200.9	05/30/96	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS
62-550.320
(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1002	ALUMINUM	(0.2)	131416	0.690	EPA 200.7	05/30/96	0.01	82282
1017	CHLORIDE	(250)	131416	44.8	EPA 325.2	05/30/96	0.3	82282
1022	COPPER	(1)	131416	0.01 U	EPA 200.7	05/30/96	0.01	82282
1020	FLUORIDE	(2.0)	131416	0.39	SM 4500FC	05/28/96	0.02	82282
1028	IRON	(0.3)	131416	1.82	EPA 200.7	05/30/96	0.005	82282
1032	MANGANESE	(0.05)	131416	0.055	EPA 200.7	05/30/96	0.005	82282
1050	SILVER	(0.1)	131416	0.0001 U	SM 3113B	06/04/96	0.0001	82282
1055	SULFATE	(250)	131416	19.8	EPA 375.4	05/20/96	1	82282
1095	ZINC	(5)	131416	0.011	EPA 200.7	05/30/96	0.004	82282
1905	COLOR	(15 color units)	131416	180	SM 2120B	05/15/96	5	82282
1920	ODOR	(3 threshold odor number)	131416	2.8	SM 2150B	05/15/96	1	82282
1925	PH	(6.5-8.5)	131416	7.4	EPA 150.1	05/15/96	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		131416	410	SM 2540C	05/20/96	3	82282
2905	FOAMING AGENTS	(0.5)	131416	0.025 U	SM 5540C	05/16/96	0.025	82135

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).
K indicates analyte is less than value indicated, with value being greater than method detection limit.
U - Analyte was not detected; indicated concentration is method detection limit.

PPB Environmental Laboratories, Inc. • 6821 SW Archer Road • Gainesville, FL 32608 • (352) 377-2349

TRIHALOMETHANE ANALYSIS
62-550.310(2)(A)
(PWS027)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2950	TOTAL THMS	(0.10)	09180-01	0.0053	EPA 502.2	05/23/96	0.0015	84269

RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

Parameter ID	Name	(MCL pCi/l)	Sample Number	Analysis Result (pCi/l)	Analysis Method	Analysis Date	Error	Lab ID
4000	GROSS ALPHA		131416	13.8 ± 3.2	EPA 900.0	05/22/96	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		131416	0.4 ± 0.1	EPA 903.1	05/29/96	1	83170
4030	RADIUM-228		131416	-----	BROOKS/BLANC	-----	1	83170
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)
NA = NOT ANALYZED

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(B)
(PWS028)

Parameter ID	Name	(MCL µg/l)	Sample Number	Analysis Result (µg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2378	1,2,4-TRICHLOROENZENE	(70)	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2380	CIS-1,2-DICHLOROETHYLENE	(70)	09209-01	0.2 U	EPA 502.2	05/23/96	0.2	84269
2955	XYLENES (TOTAL)	(10,000)	09209-01	6.1	EPA 502.2	05/23/96	0.5	84269
2964	DICHLOROMETHANE	(5)	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2968	O-DICHLOROENZENE	(600)	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2969	PARA-DICHLOROENZENE	(75)	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2976	VINYL CHLORIDE	(1)	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2977	1,1-DICHLOROETHYLENE	(7)	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2979	TRANS-1,2-DICHLOROETHYLENE	(100)	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2980	1,2-DICHLOROETHANE	(3)	09209-01	0.2 U	EPA 502.2	05/23/96	0.2	84269
2981	1,1,1-TRICHLOROETHANE	(200)	09209-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2982	CARBON TETRACHLORIDE	(3)	09209-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2983	1,2-DICHLOROPROPANE	(5)	09209-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2984	TRICHLOROETHYLENE	(3)	09209-01	0.2 U	EPA 502.2	05/23/96	0.2	84269
2985	1,1,2-TRICHLOROETHANE	(5)	09209-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2987	TETRACHLOROETHYLENE	(3)	09209-01	0.2 U	EPA 502.2	05/23/96	0.2	84269
2989	MONOCHLOROENZENE	(100)	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2990	BENZENE	(1)	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2991	TOLUENE	(1,000)	09209-01	3.3	EPA 502.2	05/23/96	0.5	84269
2992	ETHYLBENZENE	(700)	09209-01	0.93	EPA 502.2	05/23/96	0.5	84269
2996	STYRENE	(100)	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

MAY-29-'97 THU 08:17 ID:PSWUD - ENGINEERING TEL NO:407 641-3447

HS25 P02

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
SRWWTP
VOLATILE ORGANIC ANALYSIS
62-551.310(2) (b)
(FVWS028)

SRWRF
Well #18
Re-sample.

Parameter ID	NAME	Sample Number ABO	Location Code	Analysis Result(ug/L)	Analytical Method	Detection Limit (ug/L)	Analysis Date
2378	1,2,4-trichlorobenzene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2380	Cis-1,2-dichloroethylene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2955	Xylenes (total)	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2964	Dichloromethane	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2968	O-dichlorobenzene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2969	Para-dichlorobenzene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2976	Vinyl chloride	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2977	1,1-dichloroethylene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2979	Trans-1,2-dichloroethane	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2980	1,2-dichloroethane	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2981	1,1,1-trichloroethane	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2982	Carbon tetrachloride	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2983	1,2-dichloropropane	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2984	Trichloroethylene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2985	1,1,2-trichloroethane	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2987	Tetrachloroethylene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2989	Monochlorobenzene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2990	Benzene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2991	Toluene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2992	Ethylbenzene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2996	Styrene	5477	Well #18	< 0.5	502.2	0.5	05/24/97

COMMENTS:

PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(c)
(PWS029)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2005	ENDRIN	(2)	09209-01	0.01 U	EPA 508	05/21/96	0.01	84269
2010	LINDANE	(.2)	09209-01	0.01 U	EPA 508	05/21/96	0.01	84269
2015	METHOXYCHLOR	(40)	09209-01	0.02 U	EPA 508	05/21/96	0.02	84269
2020	TOXAPHENE	(3)	09209-01	0.2 U	EPA 508	05/21/96	0.2	84269
2031	DALAPON	(200)	09209-01	1 U	EPA 515.1	05/22/96	1	84269
2032	DIQUAT	(20)	09209-01	4 U	EPA 549.1	05/21/96	4	84269
2033	ENDOTHALL	(100)	09209-01	10 U	EPA 548	05/21/96	10	84269
2034	GLYPHOSATE	(700)	09209-01	10 U	EPA 547	05/23/96	10	84269
2035	DI(2-ETHYLHEXYL)ADIPATE	(400)	09209-01	1 U	EPA 506	05/21/96	1	84269
2036	OXAMYL (VYDATE)	(200)	09209-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2037	SIMAZINE	(4)	09209-01	0.1 U	EPA 507	05/21/96	0.1	84269
2039	DI(2-ETHYLHEXYL)PHTHALATE	(6)	09209-01	1 U	EPA 506	05/21/96	1	84269
2040	PICLORAM	(500)	09209-01	0.2 U	EPA 515.1	05/22/96	0.2	84269
2041	DINOSEB	(7)	09209-01	0.2 U	EPA 515.1	05/22/96	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	09209-01	0.1 U	EPA 505	05/20/96	0.1	84269
2046	CARBOFURAN	(40)	09209-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2050	ATRAZINE	(3)	09209-01	0.1 U	EPA 507	05/21/96	0.1	84269
2051	ALACHLOR	(2)	09209-01	0.3 U	EPA 507	05/21/96	0.3	84269
2063	2,3,7,8-TCDD (DIOXIN)	(.00003)	09209-01		EPA	--	--	84269
2065	HEPTACHLOR	(.4)	09209-01	0.01 U	EPA 508	05/21/96	0.01	84269
2067	HEPTACHLOR EPOXIDE	(.2)	09209-01	0.01 U	EPA 508	05/21/96	0.01	84269
2105	2,4-D	(70)	09209-01	0.5 U	EPA 515.1	05/22/96	0.5	84269
2110	2,4,5-TP (SILVEX)	(50)	09209-01	0.05 U	EPA 515.1	05/22/96	0.05	84269
2274	HEXACHLOROBENZENE	(1)	09209-01	0.01 U	EPA 508	05/21/96	0.01	84269
2306	BENZO(A)PYRENE	(.2)	09209-01	0.01 U	EPA 550	05/21/96	0.01	84269
2326	PENTACHLOROPHENOL	(1)	09209-01	0.05 U	EPA 515.1	05/22/96	0.05	84269
2383	PCB	(.5)	09209-01	0.05 U	EPA 508	05/21/96	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	09209-01	0.005 U	EPA 504	05/22/96	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	09209-01	0.005 U	EPA 504	05/22/96	0.005	84269
2959	CHLORDANE	(2)	09209-01	0.05 U	EPA 508	05/21/96	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2021	CARBARYL		09209-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2022	METHOMYL		09209-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2043	ALDICARB SULFOXIDE		09209-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2044	ALDICARB SULFONE		09209-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2045	METOLACHLOR		09209-01	0.3 U	EPA 507	05/21/96	0.3	84269
2047	ALDICARB		09209-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2066	3-HYDROXYCARBOFURAN		09209-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2077	PROPACHLOR		09209-01	0.05 U	EPA 508	05/21/96	0.05	84269
2356	ALDRIN		09209-01	0.01 U	EPA 508	05/21/96	0.01	84269
2364	DIELDRIN		09209-01	0.01 U	EPA 508	05/21/96	0.01	84269
2440	DICAMBA		09209-01	0.05 U	EPA 515.1	05/22/96	0.05	84269
2595	METRIBUZIN		09209-01	0.2 U	EPA 507	05/21/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

K - Analyte was less than indicated concentration; indicated concentration is method detection limit multiplied by sample dilution factor.

¹ - Reduced sample volume used for analysis due to interference from sediment.

UNREGULATED GROUP II ANALYSIS

62-550.410

(PWS034)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2210	CHLOROMETHANE	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2212	DICHLORODIFLUOROMETHANE	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2214	BROMOMETHANE	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2216	CHLOROETHANE	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2218	TRICHLOROFLUOROMETHANE	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2408	DIBROMOMETHANE	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2410	1,1-DICHLOROPROPYLENE	09209-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2412	1,3-DICHLOROPROPANE	09209-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2413	1,3-DICHLOROPROPENE	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	09209-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2416	2,2-DICHLOROPROPANE	09209-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2941	CHLOROFORM	09209-01	5.3	EPA 502.2	05/23/96	0.2	84269
2942	BROMOFORM	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2943	BROMODICHLOROMETHANE	09209-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2944	DIBROMOCHLOROMETHANE	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2965	O-CHLOROTOLUENE	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2966	P-CHLOROTOLUENE	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2967	M-DICHLOROBENZENE	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269
2978	1,1-DICHLOROETHANE	09209-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2986	1,1,1,2-TETRACHLOROETHANE	09209-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2988	1,1,2,2-TETRACHLOROETHANE	09209-01	0.3 U	EPA 502.2	05/23/96	0.3	84269
2993	BROMOBENZENE	09209-01	0.5 U	EPA 502.2	05/23/96	0.5	84269

UNREGULATED GROUP III ANALYSIS

62-550.415

(PWS036 & 037*)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2262	ISOPHORONE	09209-01	1 U	EPA 609	05/21/96	1	84269
2270	2,4-DINITROTOLUENE	09209-01	1 U	EPA 609	05/21/96	1	84269
2282	DIMETHYLPHthalate	09209-01	1 U	EPA 506	05/16/96	1	84269
2284	DIETHYLPHthalate	09209-01	1 U	EPA 506	05/16/96	1	84269
2290	Di-N-BUTYLPHthalate	09209-01	1 U	EPA 506	05/16/96	1	84269
2294	BUTYL BENZYL PHthalate	09209-01	1 U	EPA 506	05/16/96	1	84269
9089	DIOCTYLPHthalate	09209-01	1 U	EPA 506	05/16/96	1	84269
9108*	2-CHLOROPHENOL	09209-01	5 U	EPA 604	05/16/96	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	09209-01	20 U	EPA 604	05/16/96	20	84269
9115*	PHENOL	09209-01	5 U	EPA 604	05/16/96	5	84269
9116*	2,4,6-TRICHLOROPHENOL	09209-01	10 U	EPA 604	05/16/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

COLIFORM ANALYSIS

<u>Parameter ID</u>	<u>Name</u>	<u>(MCL μg/l)</u>	<u>Sample Number</u>	<u>Analysis Result (μg/l)</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
	TOTAL COLIFORMS (MPN)		131416	1,600		05/28/96	1	82135
	FECAL COLIFORMS (MPN)		131416	13		05/28/96	1	82135

U - Analyte was not detected; indicated concentration is method detection limit.



ABC Research

3437 s.w. 24th avenue

gainesville, florida 32607

904-372-0436

fax 904-378-6483

Report No. 70191

Date MAY 20 1996

Subject: WATER REC'D 12:05PM BY C. TIEDEMANN ANALYSIS BEGUN 12:50PM

Received: MAY 15 1996

KELLY DERDOLL
PPB ENVIRONMENTAL LAB
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608

Client # 2643
Phone: (352) 377-2349
Fax: (352) 395-6639

RESULTS OF ANALYSIS

Sample 1 #1 ALACHUA FINAL 5/15/96 0850 131414

FECAL COLIFORMS (MPN)

<2 / 100ML

Sample 2 #2 TURKEY CREEK FINAL 5/15/96 0850 131415

FECAL COLIFORMS (MPN)

<1 / 100 ml

Sample 3 #3 SRWRF 5/14/96 1700 131416

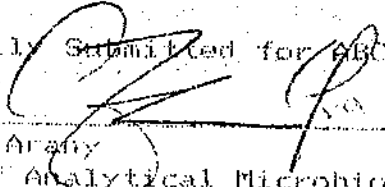
TOTAL COLIFORMS (MPN)

1,600 / 100ML

FECAL COLIFORMS (MPN)

13 / 100ML

Respectfully Submitted for ABC Research


Catherine Arany
Manager of Analytical Microbiology

Southern Analytical
 Project No. 09209
 June 10, 1996

SURF Pilot, #8175 Well #18

PESTICIDE & PCB CHEMICAL ANALYSIS
 62-550.310(2)(c)
 (PWS029)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2005	Endrin (2)	09209-01	0.01 U	EPA 508	5/21/96	0.01	84269
2010	Lindane (.2)	09209-01	0.01 U	EPA 508	5/21/96	0.01	84269
2015	Methoxychlor (40)	09209-01	0.02 U	EPA 508	5/21/96	0.02	84269
2020	Toxaphene (3)	09209-01	0.2 U	EPA 508	5/21/96	0.2	84269
2031	Dalapon (200)	09209-01	1 U	EPA 515.1	5/22/96	1	84269
2032	Diquat (20)	09209-01	4 U	EPA 549.1	5/21/96	4	84269
2033	Endothall (100)	09209-01	10 U	EPA 548	5/21/96	10	84269
2034	Glyphosate (700)	09209-01	10 U	EPA 547	5/23/96	10	84269
2035	Di(2-ethylhexyl)adipate (400)	09209-01	1 U	EPA 506	5/21/96	1	84269
2036	Oxamyl (Vydate) (200)	09209-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2037	Simazine (4)	09209-01	0.1 U	EPA 507	5/21/96	0.1	84269
2040	Di(2-ethylhexyl)phthalate (6)	09209-01	1 U	EPA 506	5/21/96	1	84269
2041	Picloram (500)	09209-01	0.2 U	EPA 515.1	5/22/96	0.2	84269
2042	Dinoseb (7)	09209-01	0.2 U	EPA 515.1	5/22/96	0.2	84269
2046	Hexachlorocyclopentadiene (50)	09209-01	0.1 U	EPA 505	5/20/96	0.1	84269
2050	Carbofuran (40)	09209-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2051	Atrazine (3)	09209-01	0.1 U	EPA 507	5/21/96	0.1	84269
2065	Alachlor (2)	09209-01	0.3 U	EPA 507	5/21/96	0.3	84269
2067	Heptachlor (.4)	09209-01	0.01 U	EPA 508	5/21/96	0.01	84269
2105	Heptachlor epoxide (.2)	09209-01	0.01 U	EPA 508	5/21/96	0.01	84269
2110	2,4-D (70)	09209-01	0.5 U	EPA 515.1	5/22/96	0.5	84269
2274	2,4,5-TP (Silvex) (50)	09209-01	0.05 U	EPA 515.1	5/22/96	0.05	84269
2306	Hexachlorobenzene (1)	09209-01	0.01 U	EPA 508	5/21/96	0.01	84269
2326	Benzo(a)pyrene (.2)	09209-01	0.01 U	EPA 550	5/21/96	0.01	84269
2383	Pentachlorophenol (1)	09209-01	0.05 U	EPA 515.1	5/22/96	0.05	84269
2931	PCBs (.5)	09209-01	0.05 U	EPA 508	5/21/96	0.05	84269
2946	Dibromochloropropane (.2)	09209-01	0.005 U	EPA 504	5/22/96	0.005	84269
2946	Ethylene dibromide (.02)	09209-01	0.005 U	EPA 504	5/22/96	0.005	84269
2946	Chlordane (2)	09209-01	0.05 U	EPA 508	5/21/96	0.05	84269

U Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
 Project No. 09209
 June 10, 1996

SNRF Pilot, #8175 Well #18

TRIHALOMETHANE ANALYSIS
 62-550.310(2)(a)

(PWS027)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2950	Total THMs (0.10)	09209-01	0.0053	EPA 502.2	5/23/96	0.0015	84269

VOLATILE ORGANIC ANALYSIS
 62-550.310(2)(b)
 (PWS028)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2378	1,2,4-Trichlorobenzene (70)	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2380	cis-1,2-Dichloroethene (70)	09209-01	0.2 U	EPA 502.2	5/23/96	0.2	84269
	Xylenes (Total) (10,000)	09209-01	6.1	EPA 502.2	5/23/96	0.5	84269
2964	Dichloromethane (5)	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2968	o-Dichlorobenzene (600)	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2969	p-Dichlorobenzene (75)	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2976	Vinyl chloride (1)	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2977	1,1-Dichloroethene (7)	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2979	trans-1,2-Dichloroethene (100)	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2980	1,2-Dichloroethane (3)	09209-01	0.2 U	EPA 502.2	5/23/96	0.2	84269
2981	1,1,1-Trichloroethane (200)	09209-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2982	Carbon tetrachloride (3)	09209-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2983	1,2-Dichloropropane (5)	09209-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2984	Trichloroethene (3)	09209-01	0.2 U	EPA 502.2	5/23/96	0.2	84269
2985	1,1,2-Trichloroethane (5)	09209-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2987	Tetrachloroethene (3)	09209-01	0.2 U	EPA 502.2	5/23/96	0.2	84269
2989	Monochlorobenzene (100)	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2990	Benzene (1)	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2991	Toluene (1,000)	09209-01	3.3	EPA 502.2	5/23/96	0.5	84269
	Ethylbenzene (700)	09209-01	0.93	EPA 502.2	5/23/96	0.5	84269
2996	Styrene (100)	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

SWRF Pilot, #8175 Well #18

Southern Analytical
Project No. 09209
June 10, 1996

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2021	Carbaryl	09209-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2022	Methomyl	09209-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2043	Aldicarb sulfoxide	09209-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2044	Aldicarb sulfone	09209-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2045	Metolachlor	09209-01	0.3 U	EPA 507	5/21/96	0.3	84269
2047	Aldicarb	09209-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2066	3-Hydroxycarbofuran	09209-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2077	Propachlor	09209-01	0.05 U	EPA 508	5/21/96	0.05	84269
2356	Aldrin	09209-01	0.01 U	EPA 508	5/21/96	0.01	84269
40	Dieldrin	09209-01	0.01 U	EPA 508	5/21/96	0.01	84269
40	Dicamba	09209-01	0.05 U	EPA 515.1	5/22/96	0.05	84269
2595	Metribuzin	09209-01	0.2 U	EPA 507	5/21/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

WRF Pilot, #8175 Well #18

Southern Analytical
Project No. 09209
June 10, 1996

UNREGULATED GROUP II ANALYSIS
62-550.410
(PWS034)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2210	Chloromethane	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2212	Dichlorodifluoromethane	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2214	Bromomethane	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2216	Chloroethane	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2218	Trichlorofluoromethane	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2251	Methyl-tert-butyl-ether	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2408	Dibromomethane	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2410	1,1-Dichloropropene	09209-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2412	1,3-Dichloropropane	09209-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
3	1,3-Dichloropropene	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
14	1,2,3-Trichloropropane	09209-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2416	2,2-Dichloropropane	09209-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2941	Chloroform	09209-01	5.3	EPA 502.2	5/23/96	0.2	84269
2942	Bromoform	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2943	Bromodichloromethane	09209-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2944	Dibromochloromethane	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2965	o-Chlorotoluene	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2966	p-Chlorotoluene	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2967	m-Dichlorobenzene	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269
2978	1,1-Dichloroethane	09209-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2986	1,1,1,2-Tetrachloroethane	09209-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2988	1,1,2,2-Tetrachloroethane	09209-01	0.3 U	EPA 502.2	5/23/96	0.3	84269
2993	Bromobenzene	09209-01	0.5 U	EPA 502.2	5/23/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

SRRF Pilot, #8175 Well #18

Southern Analytical
Project No. 09209
June 10, 1996

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2262	Isophorone	09209-01	1 U	EPA 609	5/21/96	1	84269
2270	2,4-Dinitrotoluene	09209-01	1 U	EPA 609	5/21/96	1	84269
2282	Dimethylphthalate	09209-01	1 U	EPA 506	5/16/96	1	84269
2284	Diethylphthalate	09209-01	1 U	EPA 506	5/16/96	1	84269
2290	Di-n-butylphthalate	09209-01	1 U	EPA 506	5/16/96	1	84269
2294	Butyl benzyl phthalate	09209-01	1 U	EPA 506	5/16/96	1	84269
9089	Di-n-octylphthalate	09209-01	1 U	EPA 506	5/16/96	1	84269
9108*	2-Chlorophenol	09209-01	5 U	EPA 604	5/16/96	5	84269
9112*	2-Methyl-4,6-dinitrophenol	09209-01	20 U	EPA 604	5/16/96	20	84269
6*	Phenol	09209-01	5 U	EPA 604	5/16/96	5	84269
6*	2,4,6-Trichlorophenol	09209-01	10 U	EPA 604	5/16/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.



ABC Research

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Report No. 78189
Subject: SRWRF
Received: MAY 15 1996

Date MAY 21 1996

DHRS/DEP # 82135/E8203

TOM PARK
PPB ENVIRONMENTAL LAB
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608

RESULTS OF ANALYSIS	ANALYSIS METHOD	RESULT	ANALYST	ANALYSIS DATE/TIME
Sample 1 SRWRF [?] 13146 FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< .025 MG/L	JP	05/16/96 01:00

Respectfully Submitted for ABC Research

Victor Kowalski
Victor Kowalski, PhD

System 8

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (to be completed by system or lab)

System Name: _____ I.D. #: _____

Address: _____ Phone #: (____) _____

Type (check one): () Community () Nontransient Noncommunity () Noncommunity

SAMPLE INFORMATION (to be completed by sampler)

Sample Date (MMDDYY): ____/____/____ Sample Time: _____

Sample Location (be specific): _____

Sampler Name and Phone: _____ (____) _____

Sampler's Signature: _____ Title: _____

Check Type(s): () Distribution () Recheck of MCL () Resample of Lab Invalidated Sample
() Clearance () Thm Max Res Time () Plant Tap
() Distrib entry pt () Raw () Composite of Multiple Sites—Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab) – ATTACH HRS ANALYTE SHEET*

Lab Name: PPB Environmental Laboratories, Inc. HRS #: 82282 Expiration Date: _____

Address: 6821 SW Archer Road, Gainesville, FL 32608 Phone #: (352) 377-2349

Subcontracted Lab HRS #: 83170, 82135, 84269 – ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (to be completed by lab) – SAMPLE NUMBER: 131615 System 8 well 13

Date Sample(s) Received: 5/22/96 Group(s) Analyzed & Results attached for compliance with 62-550, F.A.C.:

() Nitrate Only () Nitrite Only () Asbestos Only (x) Trihalomethanes

Inorganics– Volatile Organics– Secondaries– Pesticide/PCBs–
() All 17 (x) Partial (x) All 21 () Partial (x) All 14 () Partial () All 30 (x) Partial

Group I Unregulateds– Group II Unregulateds– Group III Unregulateds– Radiochemicals–
() All 13 (x) Partial (x) All 23 () Partial (x) All 11 () Partial (x) Single Sample
() Qtrly Composite**

**Provide radiochemical sample dates & locations for each quarter

I, Paul Berman, do HEREBY CERTIFY that all attached analytical data are correct.

Signature Paul Berman

Title QA Officer Date 6/14/96

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: _____ Sample Analysis Satisfactory: _____

Resample Requested for: _____ Reason: _____

Person notified to resample: _____ Date Notified: _____

DEP/HRS Reviewing Official: _____

*All HRS lab #s and their HRS Analyte Sheet for labs performing the attached water analyses must be provided. Failure to do so will result in rejection of the analyses and possible enforcement against the public water system for failure to sample.

Effective January 1995

INORGANIC ANALYSIS

62-550.310(1)

(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	131615	0.002	SM 3113B	06/08/96	0.001	82282
1010	BARIUM	(2)	131615	0.076	EPA 200.7	05/30/96	0.001	82282
1015	CADMIUM	(.005)	131615	0.0002	SM 3113B	06/01/96	0.0001	82282
1020	CHROMIUM	(0.1)	131615	0.054	EPA 200.7	05/30/96	0.005	82282
1024	CYANIDE	(0.2)	131615	0.004 U	SM 4500CNE	06/04/96	0.004	82282
1025	FLUORIDE	(4)	131615	0.77	SM 4500FC	05/28/96	0.02	82282
1030	LEAD	(0.015)	131615	0.009	SM 3113B	05/29/96	0.001	82282
1035	MERCURY	(0.002)	131615	0.0001 K	EPA 245.1	05/28/96	0.00005	82282
1036	NICKEL	(0.1)	131615	0.030	EPA 200.7	05/30/96	0.030	82282
1040	NITRATE	(10)	131615	0.103	EPA 353.2	05/23/96	0.004	82282
1041	NITRITE	(1)	131615	0.074	EPA 353.2	05/22/96	0.003	82282
1045	SELENIUM	(0.05)	131615	0.005 K	SM 3113B	06/08/96	0.001	82282
1052	SODIUM	(160)	131615	86.6	EPA 200.7	05/30/96	0.05	82282
1074	ANTIMONY	(0.006)	131615	0.003 U	SM 3113B	06/12/96	0.003	82282
1075	BERYLLIUM	(0.004)	131615	0.004 K	EPA 200.7	05/30/96	0.003	82282
1085	THALLIUM	(0.002)	131615	0.002 U	EPA 200.9	05/30/96	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS

62-550.320

(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1002	ALUMINUM	(0.2)	131615	16.1	EPA 200.7	05/30/96	0.01	82282
1017	CHLORIDE	(250)	131615	88.4	EPA 325.2	05/30/96	0.3	82282
1022	COPPER	(1)	131615	0.54	EPA 200.7	05/30/96	0.01	82282
1020	FLUORIDE	(2.0)	131615	0.77	SM 4500FC	05/28/96	0.02	82282
1028	IRON	(0.3)	131615	10.4	EPA 200.7	05/30/96	0.005	82282
1032	MANGANESE	(0.05)	131615	0.137	EPA 200.7	05/30/96	0.005	82282
1050	SILVER	(0.1)	131615	0.0001 U	SM 3113B	06/04/96	0.0001	82282
1055	SULFATE	(250)	131615	43.2	EPA 375.4	06/11/96	1	82282
1095	ZINC	(5)	131615	0.024	EPA 200.7	05/30/96	0.004	82282
1905	COLOR	(15 color units)	131615	180	SM 2120B	05/22/96	5	82282
1920	ODOR	(3 threshold odor number)	131615	1 U	SM 2150B	05/22/96	1	82282
1925	PH	(6.5-8.5)	131615	7.2	EPA 150.1	05/22/96	--	82282
1930	TOTAL DISSOLVED SOLIDS	(500)	131615	682	SM 2540C	05/28/96	3	82282
2905	FOAMING AGENTS	(0.5)	131615	0.5 K	SM 5540C	05/22/96	0.025	82135

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).
 K indicates analyte is less than value indicated, with value being greater than method detection limit.
 U - Analyte was not detected; indicated concentration is method detection limit.

PPB Environmental Laboratories, Inc. • 6821 SW Archer Road • Gainesville, FL 32608 • (352) 377-2349

TRIHALOMETHANE ANALYSIS
62-550.310(2)(A)
(PWS027)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2950	TOTAL THMs	(0.10)	09235-01	0.0027	EPA 502.2	05/30/96	0.0015	84269

RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

Parameter ID	Name	(MCL pCi/l)	Sample Number	Analysis Result (pCi/l)	Analysis Method	Analysis Date	Error	Lab ID
4000	GROSS ALPHA		131615	24.9 ± 3.1	EPA 900.0	06/04/96	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		131615	3.0 ± 0.2	EPA 903.1	06/06/96	1	83170
4030	RADIUM-228		131615	0.8 ± 0.4	BROOKS/BLANC	06/10/96	1	83170
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)
NA = NOT ANALYZED

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(B)
(PWS028)

Parameter ID	Name	(MCL µg/l)	Sample Number	Analysis Result (µg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2378	1,2,4-TRICHLOROETHYLENE	(70)	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2380	CIS-1,2-DICHLOROETHYLENE	(70)	09235-01	0.2 U	EPA 502.2	05/30/96	0.2	84269
2955	XYLENES (TOTAL)	(10,000)	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2964	DICHLOROMETHANE	(5)	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2968	O-DICHLOROETHYLENE	(600)	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2969	PARA-DICHLOROETHYLENE	(75)	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2976	VINYL CHLORIDE	(1)	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2977	1,1-DICHLOROETHYLENE	(7)	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2979	TRANS-1,2-DICHLOROETHYLENE (100)		09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2980	1,2-DICHLOROETHANE	(3)	09235-01	0.2 U	EPA 502.2	05/30/96	0.2	84269
2981	1,1,1-TRICHLOROETHANE	(200)	09235-01	0.3 U	EPA 502.2	05/30/96	0.3	84269
2982	CARBON TETRACHLORIDE	(3)	09235-01	0.3 U	EPA 502.2	05/30/96	0.3	84269
2983	1,2-DICHLOROPROPANE	(5)	09235-01	0.3 U	EPA 502.2	05/30/96	0.3	84269
2984	TRICHLOROETHYLENE	(3)	09235-01	0.2 U	EPA 502.2	05/30/96	0.2	84269
2985	1,1,2-TRICHLOROETHANE	(5)	09235-01	0.3 U	EPA 502.2	05/30/96	0.3	84269
2987	TETRACHLOROETHYLENE	(3)	09235-01	0.2 U	EPA 502.2	05/30/96	0.2	84269
2989	MONOCHLOROETHYLENE	(100)	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2990	BENZENE	(1)	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2991	TOLUENE	(1,000)	09235-01	2.6	EPA 502.2	05/30/96	0.5	84269
2992	ETHYLBENZENE	(700)	09235-01	0.84	EPA 502.2	05/30/96	0.5	84269
2996	STYRENE	(100)	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(c)
(PWS029)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2005	ENDRIN	(2)	09235-01	0.01 U	EPA 508	05/28/96	0.01	84269
2010	LINDANE	(.2)	09235-01	0.01 U	EPA 508	05/28/96	0.01	84269
2015	METHOXYCHLOR	(40)	09235-01	0.02 U	EPA 508	05/28/96	0.02	84269
2020	TOXAPHENE	(3)	09235-01	0.2 U	EPA 508	05/28/96	0.2	84269
2031	DALAPON	(200)	09235-01	1 U	EPA 515.1	06/04/96	1	84269
2032	DIQUAT	(20)	09235-01	8 K ¹	EPA 549.1	05/28/96	4	84269
2033	ENDOTHALL	(100)	09235-01	10 U	EPA 548	05/23/96	10	84269
2034	GLYPHOSATE	(700)	09235-01	10 U	EPA 547	06/03/96	10	84269
2035	DI(2-ETHYLHEXYL)ADIPATE	(400)	09235-01	1 U	EPA 506	05/28/96	1	84269
2036	OXAMYL (VYDATE)	(200)	09235-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2037	SIMAZINE	(4)	09235-01	0.1 U	EPA 507	05/28/96	0.1	84269
2039	DI(2-ETHYLHEXYL)PHTHALATE	(6)	09235-01	1 U	EPA 506	05/28/96	1	84269
2040	PICLORAM	(500)	09235-01	0.2 U	EPA 515.1	06/04/96	0.2	84269
2041	DINOSEB	(7)	09235-01	0.2 U	EPA 515.1	06/04/96	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	09235-01	0.1 U	EPA 505	06/03/96	0.1	84269
2046	CARBOFURAN	(40)	09235-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2050	ATRAZINE	(3)	09235-01	0.1 U	EPA 507	05/28/96	0.1	84269
2051	ALACHLOR	(2)	09235-01	0.3 U	EPA 507	05/28/96	0.3	84269
2063	2,3,7,8-TCDD (DIOXIN)	(.00003)	09235-01		EPA	--	--	84269
2065	HEPTACHLOR	(4)	09235-01	0.01 U	EPA 508	05/28/96	0.01	84269
2067	HEPTACHLOR EPOXIDE	(2)	09235-01	0.01 U	EPA 508	05/28/96	0.01	84269
2105	2,4-D	(70)	09235-01	0.5 U	EPA 515.1	06/04/96	0.5	84269
2110	2,4,5-TP (SILVEX)	(50)	09235-01	0.05 U	EPA 515.1	06/04/96	0.05	84269
2274	HEXACHLOROBENZENE	(1)	09235-01	0.01 U	EPA 508	05/28/96	0.01	84269
2306	BENZO(A)PYRENE	(.2)	09235-01	0.01 U	EPA 550	05/28/96	0.01	84269
2326	PENTACHLOROPHENOL	(1)	09235-01	0.05 U	EPA 515.1	06/04/96	0.05	84269
2383	PCB	(.5)	09235-01	0.05 U	EPA 508	05/28/96	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	09235-01	0.005 U	EPA 504	06/04/96	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	09235-01	0.005 U	EPA 504	06/04/96	0.005	84269
2959	CHLORDANE	(2)	09235-01	0.05 U	EPA 508	05/28/96	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2021	CARBARYL		09235-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2022	METHOMYL		09235-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2043	ALDICARB SULFOXIDE		09235-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2044	ALDICARB SULFONE		09235-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2045	METOLACHLOR		09235-01	0.3 U	EPA 507	05/28/96	0.3	84269
2047	ALDICARB		09235-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2066	3-HYDROXYCARBOFURAN		09235-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2077	PROPACHLOR		09235-01	0.05 U	EPA 508	05/28/96	0.05	84269
2356	ALDRIN		09235-01	0.01 U	EPA 508	05/28/96	0.01	84269
2364	DIELDRIN		09235-01	0.01 U	EPA 508	05/28/96	0.01	84269
2440	DICAMBA		09235-01	0.05 U	EPA 515.1	06/04/96	0.05	84269
2595	METRIBUZIN		09235-01	0.2 U	EPA 507	05/28/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

K - Analyte was less than indicated concentration; indicated concentration is MDL x Sample Dilution Factor.

r - Reduced sample volume used for analysis due to interference from sediment.

UNREGULATED GROUP II ANALYSIS
62-550.410
(PWS034)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2210	CHLOROMETHANE	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2212	DICHLORODIFLUOROMETHANE	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2214	BROMOMETHANE	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2216	CHLOROETHANE	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2218	TRICHLOROFLUOROMETHANE	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2408	DIBROMOMETHANE	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2410	1,1-DICHLOROPROPYLENE	09235-01	0.3 U	EPA 502.2	05/30/96	0.3	84269
2412	1,3-DICHLOROPROPANE	09235-01	0.3 U	EPA 502.2	05/30/96	0.3	84269
2413	1,3-DICHLOROPROPENE	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	09235-01	0.3 U	EPA 502.2	05/30/96	0.3	84269
2416	2,2-DICHLOROPROPANE	09235-01	0.3 U	EPA 502.2	05/30/96	0.3	84269
2941	CHLOROFORM	09235-01	2.3	EPA 502.2	05/30/96	0.2	84269
2942	BROMOFORM	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2943	BROMODICHLOROMETHANE	09235-01	0.43	EPA 502.2	05/30/96	0.3	84269
2944	DIBROMOCHLOROMETHANE	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2965	O-CHLOROTOLUENE	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2966	P-CHLOROTOLUENE	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2967	M-DICHLOROENZENE	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269
2978	1,1-DICHLOROETHANE	09235-01	0.3 U	EPA 502.2	05/30/96	0.3	84269
2986	1,1,1,2-TETRACHLOROETHANE	09235-01	0.3 U	EPA 502.2	05/30/96	0.3	84269
2988	1,1,2,2-TETRACHLOROETHANE	09235-01	0.3 U	EPA 502.2	05/30/96	0.3	84269
2993	BROMOBENZENE	09235-01	0.5 U	EPA 502.2	05/30/96	0.5	84269

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2262	ISOPHORONE	09235-01	1 U	EPA 609	05/28/96	1	84269
2270	2,4-DINITROTOLUENE	09235-01	1 U	EPA 609	05/28/96	1	84269
2282	DIMETHYLPHthalate	09235-01	1 U	EPA 506	05/28/96	1	84269
2284	DIETHYLPHthalate	09235-01	1 U	EPA 506	05/28/96	1	84269
2290	DI-N-BUTYLPHthalate	09235-01	1 U	EPA 506	05/28/96	1	84269
2294	BUTYL BENZYL PHthalate	09235-01	1 U	EPA 506	05/28/96	1	84269
9089	DIOCTYLPHthalate	09235-01	1 U	EPA 506	05/28/96	1	84269
9108*	2-CHLOROPHENOL	09235-01	5 U	EPA 604	05/28/96	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	09235-01	20 U	EPA 604	05/28/96	20	84269
9115*	PHENOL	09235-01	5 U	EPA 604	05/28/96	5	84269
9116*	2,4,6-TRICHLOROPHENOL	09235-01	10 U	EPA 604	05/28/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

COLIFORM ANALYSIS

<u>Parameter</u> <u>ID</u>	<u>Name</u> <u>(MCL μg/l)</u>	<u>Sample</u> <u>Number</u>	<u>Analysis</u> <u>Result (μg/l)</u>	<u>Analysis</u> <u>Method</u>	<u>Analysis</u> <u>Date</u>	<u>MDL</u>	<u>Lab</u> <u>ID</u>
	TOTAL COLIFORMS (MPN)	131615	1,600		05/22/96	1	82135
	FECAL COLIFORMS (MPN)	131615	13		05/22/96	1	82135



ABC Research

3437 s.w. 24th avenue

gainesville, florida 32607

904-372-0436

fax 904-378-6483

Report No. 78542

Date MAY 27 1996

Subject: WATER REC'D 01:17PM BY C. TIEDEMANN ANALYSIS BEGUN 01:35PM

Received: MAY 22 1996

PAUL BERMAN
PPB ENVIRONMENTAL LAB
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608

Client # 2643
Phone: (352) 377-2349
Fax: (352) 395-6639

RESULTS OF ANALYSIS

8#13

Sample 1 SYSTEM ~~2#14~~ 5/21/96 1530 131615

TOTAL COLIFORMS (MPN)

1,600 / 100ML

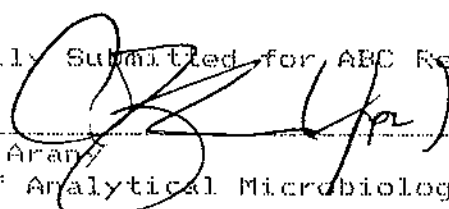
FECAL COLIFORMS (MPN)

13 / 100ML

Additional Notes & Comments for Sample Report 78542

SAMPLE #1 WAS RECEIVED OUT OF HOLDING TIME FOR COMPLIANCE PURPOSES.
PROJECT NAME- SOUTHEAST DRILLING

Respectfully Submitted for ABC Research



Catherine Aran
Manager of Analytical Microbiology

System 8
Well 13

Southern Analytical
Project No. 09235
June 12, 1996

Lab No. 131615

TRICHALOMETHANE ANALYSIS
62-550.310(2)(a)

(PWS027)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2950	Total THMs (0.10)	09235-01	0.0027	EPA 502.2	5/30/96	0.0015	84269

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(b)
(PWS028)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2378	1,2,4-Trichlorobenzene (70)	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2380	cis-1,2-Dichloroethene (70)	09235-01	0.2 U	EPA 502.2	5/30/96	0.2	84269
5	Xylenes (Total) (10,000)	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2464	Dichloromethane (5)	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2468	o-Dichlorobenzene (600)	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2969	p-Dichlorobenzene (75)	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2976	Vinyl chloride (1)	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2977	1,1-Dichloroethene (7)	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2979	trans-1,2-Dichloroethene (100)	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2980	1,2-Dichloroethane (3)	09235-01	0.2 U	EPA 502.2	5/30/96	0.2	84269
2981	1,1,1-Trichloroethane (200)	09235-01	0.3 U	EPA 502.2	5/30/96	0.3	84269
2982	Carbon tetrachloride (3)	09235-01	0.3 U	EPA 502.2	5/30/96	0.3	84269
2983	1,2-Dichloropropane (5)	09235-01	0.3 U	EPA 502.2	5/30/96	0.3	84269
2984	Trichloroethene (3)	09235-01	0.2 U	EPA 502.2	5/30/96	0.2	84269
2985	1,1,2-Trichloroethane (5)	09235-01	0.3 U	EPA 502.2	5/30/96	0.3	84269
2987	Tetrachloroethene (3)	09235-01	0.2 U	EPA 502.2	5/30/96	0.2	84269
2989	Monochlorobenzene (100)	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2990	Benzene (1)	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2991	Toluene (1,000)	09235-01	2.6	EPA 502.2	5/30/96	0.5	84269
2	Ethylbenzene (700)	09235-01	0.84	EPA 502.2	5/30/96	0.5	84269
2996	Styrene (100)	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
 Project No. 09235
 June 12, 1996

FRD No. 131615

PESTICIDE & PCB CHEMICAL ANALYSIS
 62-550.310(2)(c)
 (PWS029)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2005	Endrin (2)	09235-01	0.01 U	EPA 508	5/28/96	0.01	84269
2010	Lindane (.2)	09235-01	0.01 U	EPA 508	5/28/96	0.01	84269
2015	Methoxychlor (40)	09235-01	0.02 U	EPA 508	5/28/96	0.02	84269
2020	Toxaphene (3)	09235-01	0.2 U	EPA 508	5/28/96	0.2	84269
2031	Dalapon (200)	09235-01	1 U	EPA 515.1	6/4/96	1	84269
2032	Diquat (20)	09235-01	8 K ¹	EPA 549.1	5/28/96	4	84269
2033	Endothal (100)	09235-01	10 U	EPA 548	5/23/96	10	84269
2034	Glyphosate (700)	09235-01	10 U	EPA 547	6/3/96	10	84269
2035	Di(2-ethylhexyl)adipate (400)	09235-01	1 U	EPA 506	5/28/96	1	84269
2036	Oxamyl (Vydate) (200)	09235-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2037	Simazine (4)	09235-01	0.1 U	EPA 507	5/28/96	0.1	84269
2040	Di(2-ethylhexyl)phthalate (6)	09235-01	1 U	EPA 506	5/28/96	1	84269
2041	Picloram (500)	09235-01	0.2 U	EPA 515.1	6/4/96	0.2	84269
2042	Dinoseb (7)	09235-01	0.2 U	EPA 515.1	6/4/96	0.2	84269
2046	Hexachlorocyclopentadiene (50)	09235-01	0.1 U	EPA 505	6/3/96	0.1	84269
2050	Carbofuran (40)	09235-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2051	Atrazine (3)	09235-01	0.1 U	EPA 507	5/28/96	0.1	84269
2065	Alachlor (2)	09235-01	0.3 U	EPA 507	5/28/96	0.3	84269
2067	Heptachlor (.4)	09235-01	0.01 U	EPA 508	5/28/96	0.01	84269
2105	Heptachlor epoxide (.2)	09235-01	0.01 U	EPA 508	5/28/96	0.01	84269
2110	2,4-D (70)	09235-01	0.5 U	EPA 515.1	6/4/96	0.5	84269
2274	2,4,5-TP (Silvex) (50)	09235-01	0.05 U	EPA 515.1	6/4/96	0.05	84269
2306	Hexachlorobenzene (1)	09235-01	0.01 U	EPA 508	5/28/96	0.01	84269
2326	Benzo(a)pyrene (.2)	09235-01	0.01 U	EPA 550	5/28/96	0.01	84269
2383	Pentachlorophenol (1)	09235-01	0.05 U	EPA 515.1	6/4/96	0.05	84269
2931	PCBs (.5)	09235-01	0.05 U	EPA 508	5/28/96	0.05	84269
2946	Dibromochloropropane (.2)	09235-01	0.005 U	EPA 504	6/4/96	0.005	84269
	Ethylene dibromide (.02)	09235-01	0.005 U	EPA 504	6/4/96	0.005	84269
	Chlordane (2)	09235-01	0.05 U	EPA 508	5/28/96	0.05	84269

U Analyte was not detected; indicated concentration is method detection limit.

K - Analyte was less than indicated concentration; indicated concentration is method detection limit multiplied by sample dilution factor.

¹ Reduced sample volume used for analysis due to interference from sediment.

Southern Analytical
Project No. 09235
June 12, 1996

F.S. No. 131615

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2021	Carbaryl	09235-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2022	Methomyl	09235-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2043	Aldicarb sulfoxide	09235-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2044	Aldicarb sulfone	09235-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2045	Metolachlor	09235-01	0.3 U	EPA 507	5/28/96	0.3	84269
2047	Aldicarb	09235-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2066	3-Hydroxycarbofuran	09235-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2077	Propachlor	09235-01	0.05 U	EPA 508	5/28/96	0.05	84269
2356	Aldrin	09235-01	0.01 U	EPA 508	5/28/96	0.01	84269
	Dieldrin	09235-01	0.01 U	EPA 508	5/28/96	0.01	84269
2440	Dicamba	09235-01	0.05 U	EPA 515.1	6/4/96	0.05	84269
2595	Metribuzin	09235-01	0.2 U	EPA 507	5/28/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
 Project No. 09235
 June 12, 1996

P. No. 131615

UNREGULATED GROUP II ANALYSIS
 62-550.410
 (PWS034)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2210	Chloromethane	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2212	Dichlorodifluoromethane	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2214	Bromomethane	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2216	Chloroethane	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2218	Trichlorofluoromethane	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2251	Methyl-tert-butyl-ether	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2408	Dibromomethane	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2410	1,1-Dichloropropene	09235-01	0.3 U	EPA 502.2	5/30/96	0.3	84269
2412	1,3-Dichloropropane	09235-01	0.3 U	EPA 502.2	5/30/96	0.3	84269
	1,3-Dichloropropene	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2414	1,2,3-Trichloropropane	09235-01	0.3 U	EPA 502.2	5/30/96	0.3	84269
2416	2,2-Dichloropropane	09235-01	0.3 U	EPA 502.2	5/30/96	0.3	84269
2941	Chloroform	09235-01	2.3	EPA 502.2	5/30/96	0.2	84269
2942	Bromoform	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2943	Bromodichloromethane	09235-01	0.43	EPA 502.2	5/30/96	0.3	84269
2944	Dibromochloromethane	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2965	o-Chlorotoluene	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2966	p-Chlorotoluene	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2967	m-Dichlorobenzene	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269
2978	1,1-Dichloroethane	09235-01	0.3 U	EPA 502.2	5/30/96	0.3	84269
2986	1,1,1,2-Tetrachloroethane	09235-01	0.3 U	EPA 502.2	5/30/96	0.3	84269
2988	1,1,2,2-Tetrachloroethane	09235-01	0.3 U	EPA 502.2	5/30/96	0.3	84269
2993	Bromobenzene	09235-01	0.5 U	EPA 502.2	5/30/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 09235
June 12, 1996

PRD No. 131615

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

<u>Parameter</u> <u>ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample</u> <u>Number</u>	<u>Analysis</u> <u>Result(ug/l)</u>	<u>Analyt.</u> <u>Method</u>	<u>Analysis</u> <u>Date</u>	<u>MDL</u>	<u>Lab</u> <u>ID</u>
2262	Isophorone	09235-01	1 U	EPA 609	5/28/96	1	84269
2270	2,4-Dinitrotoluene	09235-01	1 U	EPA 609	5/28/96	1	84269
2282	Dimethylphthalate	09235-01	1 U	EPA 506	5/28/96	1	84269
2284	Diethylphthalate	09235-01	1 U	EPA 506	5/28/96	1	84269
2290	Di-n-butylphthalate	09235-01	1 U	EPA 506	5/28/96	1	84269
2294	Butyl benzyl phthalate	09235-01	1 U	EPA 506	5/28/96	1	84269
9089	Di-n-octylphthalate	09235-01	1 U	EPA 506	5/28/96	1	84269
9108*	2-Chlorophenol	09235-01	5 U	EPA 604	5/28/96	5	84269
9112*	2-Methyl-4,6-dinitrophenol	09235-01	20 U	EPA 604	5/28/96	20	84269
1116*	Phenol	09235-01	5 U	EPA 604	5/28/96	5	84269
1116*	2,4,6-Trichlorophenol	09235-01	10 U	EPA 604	5/28/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.



ABC Research

3437 s.w. 24th avenue

gainesville, florida 32607

352-372-0436

fax 352-378-6483

Report No. 79541
Subject: SYSTEM 2 #14
Received: MAY 22 1996

Date MAY 31 1996

0488/088 # 50135/85/11

TOM PARK
FPB ENVIRONMENTAL LAB
6821 SW ARCHER ROAD
GAINESVILLE, FL 32606

RESULTS OF ANALYSIS	ANALYSIS METHOD	RESULT	ANALYST	ANALYSIS DATE/TIME
Sample 1 SYSTEM ^{8 13} #14	LAB I.D.# 131615	05/21/96 03:03PM		
FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< .500 mg/L		05/23/96 19:00

Respectfully Submitted for ABC Research

Victor Kowalski, PhD
Director, Quality Control

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (to be completed by system or lab)

System Name: _____ I.D. #: _____

Address: _____ Phone #: (____) _____

Type (check one): () Community () Nontransient Noncommunity () Noncommunity

SAMPLE INFORMATION (to be completed by sampler)

Sample Date (MMDDYY): ____/____/____ Sample Time: _____

Sample Location (be specific): _____

Sampler Name and Phone: _____ (____) _____

Sampler's Signature: _____ Title: _____

Check Type(s): () Distribution () Recheck of MCL () Resample of Lab Invalidated Sample
() Clearance () Thm Max Res Time () Plant Tap
() Distrib entry pt () Raw () Composite of Multiple Sites-Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab) - ATTACH HRS ANALYTE SHEET*

Lab Name: PPB Environmental Laboratories, Inc. HRS #: 82282 Expiration Date: _____

Address: 6821 SW Archer Road, Gainesville, FL 32608 Phone #: (352) 377-2349

Subcontracted Lab HRS #: 83170, 82135, 84269 - ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (to be completed by lab) - SAMPLE NUMBER: 131660 System #8, Well #14

Date Sample(s) Received: 5/28/96 Group(s) Analyzed & Results attached for compliance with 62-550, F.A.C.:

() Nitrate Only	() Nitrite Only	() Asbestos Only	(x) Trihalomethanes
Inorganics-	Volatile Organics-	Secondaries-	Pesticide/PCBs-
() All 17 (x) Partial	(x) All 21 () Partial	(x) All 14 () Partial	() All 30 (x) Partial
Group I Unregulateds-	Group II Unregulateds-	Group III Unregulateds-	Radiochemicals-
() All 13 (x) Partial	(x) All 23 () Partial	(x) All 11 () Partial	(x) Single Sample () Qtrly Composite**

**Provide radiochemical sample dates & locations for each quarter

I, Paul Berman, do HEREBY CERTIFY that all attached analytical data are correct.

Signature Paul Berman

Title QA Officer Date 6/14/96

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: _____ Sample Analysis Satisfactory: _____

Resample Requested for: _____ Reason: _____

Person notified to resample: _____ Date Notified: _____

DEP/HRS Reviewing Official: _____

*All HRS lab #s and their HRS Analyte Sheet for labs performing the attached water analyses must be provided. Failure to do so will result in rejection of the analyses and possible enforcement against the public water system for failure to sample.

Effective January 1995

INORGANIC ANALYSIS
62-550.310(1)
(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	131660	0.001	SM 3113B	06/08/96	0.001	82282
1010	BARIUM	(2)	131660	0.043	EPA 200.7	06/10/96	0.001	82282
1015	CADMIUM	(.005)	131660	0.0001	SM 3113B	06/01/96	0.0001	82282
1020	CHROMIUM	(0.1)	131660	0.037	EPA 200.7	06/10/96	0.005	82282
1024	CYANIDE	(0.2)	131660	0.004 U	SM 4500CNE	06/04/96	0.004	82282
1025	FLUORIDE	(4)	131660	0.82	SM 4500FC	06/14/96	0.02	82282
1030	LEAD	(0.015)	131660	0.002	SM 3113B	06/12/96	0.001	82282
1035	MERCURY	(0.002)	131660	0.0001 K	EPA 245.1	06/10/96	0.00005	82282
1036	NICKEL	(0.1)	131660	0.030 U	EPA 200.7	06/10/96	0.030	82282
1040	NITRATE	(10)	131660	0.014	EPA 353.2	06/06/96	0.004	82282
1041	NITRITE	(1)	131660	0.004 K	EPA 353.2	05/29/96	0.003	82282
1045	SELENIUM	(0.05)	131660	0.005 K	SM 3113B	06/08/96	0.001	82282
1052	SODIUM	(160)	131660	88.3	EPA 200.7	06/10/96	0.05	82282
1074	ANTIMONY	(0.006)	131660	0.003 U	SM 3113B	06/12/96	0.003	82282
1075	BERYLLIUM	(0.004)	131660	0.003 U	EPA 200.7	06/10/96	0.003	82282
1085	THALLIUM	(0.002)	131660	0.002 U	EPA 200.9	06/12/96	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS
62-550.320
(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1002	ALUMINUM	(0.2)	131660	9.11	EPA 200.7	06/10/96	0.001	82282
1017	CHLORIDE	(250)	131660	82.1	EPA 325.2	05/30/96	0.3	82282
1022	COPPER	(1)	131660	0.02 K	EPA 200.7	06/10/96	0.01	82282
1020	FLUORIDE	(2.0)	131660	0.82	SM 4500FC	06/14/96	0.02	82282
1028	IRON	(0.3)	131660	7.36	EPA 200.7	06/10/96	0.005	82282
1032	MANGANESE	(0.05)	131660	0.096	EPA 200.7	06/10/96	0.005	82282
1050	SILVER	(0.1)	131660	0.0001 U	SM 3113B	06/04/96	0.0001	82282
1055	SULFATE	(250)	131660	46.7	EPA 375.4	06/11/96	1	82282
1095	ZINC	(5)	131660	0.076	EPA 200.7	06/10/96	0.004	82282
1905	COLOR	(15 color units)	131660	200	SM 2120B	05/29/96	5	82282
1920	ODOR (3 threshold odor number)		131660	1	SM 2150B	05/29/96	1	82282
1925	PH	(6.5-8.5)	131660	7.2	EPA 150.1	05/29/96	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		131660	566	SM 2540C	06/03/96	3	82282
2905	FOAMING AGENTS	(0.5)	131660	0.1 K	SM 5540C	05/29/96	0.025	82135

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).
K indicates analyte is less than value indicated, with value being greater than method detection limit.
U - Analyte was not detected; indicated concentration is method detection limit.

PPB Environmental Laboratories, Inc. • 6821 SW Archer Road • Gainesville, FL 32608 • (352) 377-2349

TRIHALOMETHANE ANALYSIS
62-550.310(2)(A)
(PWS027)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2950	TOTAL THMS	(0.10)	09248-01	0.0008	EPA 502.2	05/31/96	0.0015	84269

RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

Parameter ID	Name	(MCL pCi/l)	Sample Number	Analysis Result (pCi/l)	Analysis Method	Analysis Date	Error	Lab ID
4000	GROSS ALPHA		131660	16.4 ± 2.0	EPA 900.0	06/04/96	1	83170
4012	Photon Emitters		NA					
4020	Radium-226		131660	2.4 ± 0.2	EPA 903.1	06/06/96	1	83170
4030	Radium-228		NA		Brooks/Blanc		1	83170
4101	Man-made beta		NA					

*(Gross alpha generally only requirement, see 62-550.519, FAC)
NA = Not Analyzed

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(b)
(PWS028)

Parameter ID	Name	(MCL µg/l)	Sample Number	Analysis Result (µg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2378	1,2,4-trichlorobenzene	(70)	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2380	Cis-1,2-dichloroethylene	(70)	09248-01	0.2 U	EPA 502.2	05/31/96	0.2	84269
2955	Xylenes (total)	(10,000)	09248-01	3.5	EPA 502.2	05/31/96	0.5	84269
2984	Dichloromethane	(5)	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2968	O-dichlorobenzene	(600)	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2969	Para-dichlorobenzene	(75)	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2978	Vinyl Chloride	(1)	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2977	1,1-dichloroethylene	(7)	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2979	Trans-1,2-dichloroethylene	(100)	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2980	1,2-dichloroethane	(3)	09248-01	0.2 U	EPA 502.2	05/31/96	0.2	84269
2981	1,1,1-trichloroethane	(200)	09248-01	0.3 U	EPA 502.2	05/31/96	0.3	84269
2982	Carbon tetrachloride	(3)	09248-01	0.3 U	EPA 502.2	05/31/96	0.3	84269
2983	1,2-dichloropropane	(5)	09248-01	0.3 U	EPA 502.2	05/31/96	0.3	84269
2984	Trichloroethylene	(3)	09248-01	0.2 U	EPA 502.2	05/31/96	0.2	84269
2985	1,1,2-trichloroethane	(5)	09248-01	0.3 U	EPA 502.2	05/31/96	0.3	84269
2987	Tetrachloroethylene	(3)	09248-01	0.2 U	EPA 502.2	05/31/96	0.2	84269
2989	Monochlorobenzene	(100)	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2990	Benzene	(1)	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2991	Toluene	(1,000)	09248-01	2.2	EPA 502.2	05/31/96	0.5	84269
2992	Ethylbenzene	(700)	09248-01	0.60	EPA 502.2	05/31/96	0.5	84269
2996	Styrene	(100)	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(c)
(PWS029)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2005	ENDRIN	(2)	09248-01	0.01 U	EPA 508	06/03/96	0.01	84269
2010	LINDANE	(.2)	09248-01	0.01 U	EPA 508	06/03/96	0.01	84269
2015	METHOXYCHLOR	(40)	09248-01	0.02 U	EPA 508	06/03/96	0.02	84269
2020	TOXAPHENE	(3)	09248-01	0.2 U	EPA 508	06/03/96	0.2	84269
2031	DALAPON	(200)	09248-01	1 U	EPA 515.1	06/04/96	1	84269
2032	DIQUAT	(20)	09248-01	8 K ¹	EPA 549.1	05/30/96	4	84269
2033	ENDOTHAL	(100)	09248-01	10 U	EPA 548	05/29/96	10	84269
2034	GLYPHOSATE	(700)	09248-01	10 U	EPA 547	06/03/96	10	84269
2035	DI(2-ETHYLHEXYL)ADIPATE	(400)	09248-01	1 U	EPA 506	06/03/96	1	84269
2036	OXAMYL (VYDATE)	(200)	09248-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2037	SIMAZINE	(4)	09248-01	0.1 U	EPA 507	06/03/96	0.1	84269
2039	DI(2-ETHYLHEXYL)PHTHALATE	(6)	09248-01	14	EPA 506	06/03/96	1	84269
2040	PICLORAM	(500)	09248-01	0.2 U	EPA 515.1	06/04/96	0.2	84269
2041	DINOSEB	(7)	09248-01	0.2 U	EPA 515.1	06/04/96	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	09248-01	0.1 U	EPA 505	06/03/96	0.1	84269
2046	CARBOFURAN	(40)	09248-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2050	ATRAZINE	(3)	09248-01	0.1 U	EPA 507	06/03/96	0.1	84269
2051	ALACHLOR	(2)	09248-01	0.3 U	EPA 507	06/03/96	0.3	84269
2063	2,3,7,8-TCDD (DIOXIN)	(.00003)	09248-01		EPA	--	--	84269
2065	HEPTACHLOR	(.4)	09248-01	0.01 U	EPA 508	06/03/96	0.01	84269
2067	HEPTACHLOR EPOXIDE	(.2)	09248-01	0.01 U	EPA 508	06/03/96	0.01	84269
2105	2,4-D	(70)	09248-01	0.5 U	EPA 515.1	06/04/96	0.5	84269
?110	2,4,5-TP (SILVEX)	(50)	09248-01	0.05 U	EPA 515.1	06/04/96	0.05	84269
2274	HEXACHLOROBENZENE	(1)	09248-01	0.01 U	EPA 508	06/03/96	0.01	84269
2306	BENZO(A)PYRENE	(.2)	09248-01	0.01 U	EPA 550	06/03/96	0.01	84269
2326	PENTACHLOROPHENOL	(1)	09248-01	0.05 U	EPA 515.1	06/04/96	0.05	84269
2383	PCB	(.5)	09248-01	0.05 U	EPA 508	06/03/96	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	09248-01	0.005 U	EPA 504	06/04/96	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	09248-01	0.005 U	EPA 504	06/04/96	0.005	84269
2959	CHLORDANE	(2)	09248-01	0.05 U	EPA 508	06/03/96	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2021	CARBARYL		09248-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2022	METHOMYL		09248-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2043	ALDICARB SULFOXIDE		09248-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2044	ALDICARB SULFONE		09248-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2045	METOLACHLOR		09248-01	0.3 U	EPA 507	06/03/96	0.3	84269
2047	ALDICARB		09248-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2066	3-HYDROXYCARBOFURAN		09248-01	0.5 U	EPA 531.1	05/30/96	0.5	84269
2077	PROPACHLOR		09248-01	0.05 U	EPA 508	06/03/96	0.05	84269
2356	ALDRIN		09248-01	0.01 U	EPA 508	06/03/96	0.01	84269
2364	DIELDRIN		09248-01	0.01 U	EPA 508	06/03/96	0.01	84269
2440	DICAMBA		09248-01	0.05 U	EPA 515.1	06/04/96	0.05	84269
2595	METRIBUZIN		09248-01	0.2 U	EPA 507	06/03/96	0.2	84269

J - Analyte was not detected; indicated concentration is method detection limit.

K - Analyte was less than indicated concentration; indicated concentration is MDL x Sample Dilution Factor.

¹ - Reduced sample volume used for analysis due to interference from sediment.

UNREGULATED GROUP II ANALYSIS
62-550.410
(PWS034)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2210	CHLOROMETHANE	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2212	DICHLORODIFLUOROMETHANE	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2214	BROMOMETHANE	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2216	CHLOROETHANE	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2218	TRICHLOROFUOROMETHANE	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2408	DIBROMOMETHANE	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2410	1,1-DICHLOROPROPYLENE	09248-01	0.3 U	EPA 502.2	05/31/96	0.3	84269
2412	1,3-DICHLOROPROPANE	09248-01	0.3 U	EPA 502.2	05/31/96	0.3	84269
2413	1,3-DICHLOROPROPENE	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	09248-01	0.3 U	EPA 502.2	05/31/96	0.3	84269
2416	2,2-DICHLOROPROPANE	09248-01	0.3 U	EPA 502.2	05/31/96	0.3	84269
2941	CHLOROFORM	09248-01	0.84	EPA 502.2	05/31/96	0.2	84269
2942	BROMOFORM	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2943	BROMODICHLOROMETHANE	09248-01	0.3 U	EPA 502.2	05/31/96	0.3	84269
2944	DIBROMOCHLOROMETHANE	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2965	O-CHLOROTOLUENE	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2966	P-CHLOROTOLUENE	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2967	M-DICHLOROENZENE	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269
2978	1,1-DICHLOROETHANE	09248-01	0.3 U	EPA 502.2	05/31/96	0.3	84269
2986	1,1,1,2-TETRACHLOROETHANE	09248-01	0.3 U	EPA 502.2	05/31/96	0.3	84269
2988	1,1,2,2-TETRACHLOROETHANE	09248-01	0.3 U	EPA 502.2	05/31/96	0.3	84269
2993	BROMOBENZENE	09248-01	0.5 U	EPA 502.2	05/31/96	0.5	84269

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2262	ISOPHORONE	09248-01	1 U	EPA 609	06/03/96	1	84269
2270	2,4-DINITROTOLUENE	09248-01	1 U	EPA 609	06/03/96	1	84269
2282	DIMETHYLPHTHALATE	09248-01	1 U	EPA 506	06/03/96	1	84269
2284	DIETHYLPHTHALATE	09248-01	1 U	EPA 506	06/03/96	1	84269
2290	DI-N-BUTYLPHTHALATE	09248-01	1 U	EPA 506	06/03/96	1	84269
2294	BUTYL BENZYL PHTHALATE	09248-01	1 U	EPA 506	06/03/96	1	84269
9089	DIOCTYLPHTHALATE	09248-01	1 U	EPA 506	06/03/96	1	84269
9108*	2-CHLOROPHENOL	09248-01	5 U	EPA 604	06/03/96	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	09248-01	20 U	EPA 604	06/03/96	20	84269
9115*	PHENOL	09248-01	5 U	EPA 604	06/03/96	5	84269
9116*	2,4,6-TRICHLOROPHENOL	09248-01	10 U	EPA 604	06/03/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

COLIFORM ANALYSIS

<u>Parameter ID</u>	<u>Name</u> (<u>MCL μg/l</u>)	<u>Sample Number</u>	<u>Analysis Result (μg/l)</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
	TOTAL COLIFORMS (MPN)	131660	1,600 M		05/28/96	1	82135
	FECAL COLIFORMS (MPN)	131660	17		05/28/96	1	82135

M -- Off-scale high. Actual value is known to be greater than value given.



ABC Research

3437 s.w. 24th avenue

gainesville, florida 32607

904-372-0436

fax 904-378-6483

Report No. 78731

Date JUN 03 1996

Subject: WATER REC'D 02:10PM BY D. ROBERTS ANALYSIS BEGUN 02:25PM

Received: MAY 28 1996

PAUL BERMAN
PPB ENVIRONMENTAL LAB
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608

Client # 2643
Phone: (352) 377-2349
Fax: (352) 395-6639

RESULTS OF ANALYSIS

SYSTEM #8

Sample 1 WELL 14 5/27/96 11:30 ID #131660

TOTAL COLIFORMS (MPN) >1,600 / 100ML
FECAL COLIFORMS (MPN) 17 / 100ML

Sample 2 SYSTEM 9 5/27/96 12:45 ID #131661

TOTAL COLIFORMS (MPN) >1,600 / 100ML
FECAL COLIFORMS (MPN) >1,600 / 100ML

Sample 3 SYSTEM 2 5/27/96 13:30 ID #131662

#14
TOTAL COLIFORMS (MPN) 21 / 100ML
FECAL COLIFORMS (MPN) <2 / 100ML

Sample 4 SYSTEM ~~#5~~ 5/27/96 14:30 ID #131663

#2 well #15
TOTAL COLIFORMS (MPN) 21 / 100ML
FECAL COLIFORMS (MPN) <2 / 100ML

Additional Notes & Comments for Sample Report 78731

ALL SAMPLES WERE RECEIVED OUT OF HOLDING TIME FOR COMPLIANCE PURPOSES.

SYSTEM # 8
WELL # 14

Southern Analytical
Project No. 09248
June 12, 1996

PWS No. 131660

TRIHALOMETHANE ANALYSIS
62-550.310(2)(a)

(PWS027)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2950	Total THMs (0.10)	09248-01	0.0008	EPA 502.2	5/31/96	0.0015	84269

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(b)
(PWS028)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2378	1,2,4-Trichlorobenzene (70)	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2380	cis-1,2-Dichloroethene (70)	09248-01	0.2 U	EPA 502.2	5/31/96	0.2	84269
2383	Xylenes (Total) (10,000)	09248-01	3.5	EPA 502.2	5/31/96	0.5	84269
2364	Dichloromethane (5)	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2368	o-Dichlorobenzene (600)	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2969	p-Dichlorobenzene (75)	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2976	Vinyl chloride (1)	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2977	1,1-Dichloroethene (7)	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2979	trans-1,2-Dichloroethene (100)	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2980	1,2-Dichloroethane (3)	09248-01	0.2 U	EPA 502.2	5/31/96	0.2	84269
2981	1,1,1-Trichloroethane (200)	09248-01	0.3 U	EPA 502.2	5/31/96	0.3	84269
2982	Carbon tetrachloride (3)	09248-01	0.3 U	EPA 502.2	5/31/96	0.3	84269
2983	1,2-Dichloropropane (5)	09248-01	0.3 U	EPA 502.2	5/31/96	0.3	84269
2984	Trichloroethene (3)	09248-01	0.2 U	EPA 502.2	5/31/96	0.2	84269
2985	1,1,2-Trichloroethane (5)	09248-01	0.3 U	EPA 502.2	5/31/96	0.3	84269
2987	Tetrachloroethene (3)	09248-01	0.2 U	EPA 502.2	5/31/96	0.2	84269
2989	Monochlorobenzene (100)	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2990	Benzene (1)	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2991	Toluene (1,000)	09248-01	2.2	EPA 502.2	5/31/96	0.5	84269
2992	Ethylbenzene (700)	09248-01	0.60	EPA 502.2	5/31/96	0.5	84269
2996	Styrene (100)	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

F O No. 131660

PESTICIDE & PCB CHEMICAL ANALYSIS
 62-550.310(2) (c)
 (PWS029)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2005	Endrin (2)	09248-01	0.01 U	EPA 508	6/3/96	0.01	84269
2010	Lindane (.2)	09248-01	0.01 U	EPA 508	6/3/96	0.01	84269
2015	Methoxychlor (40)	09248-01	0.02 U	EPA 508	6/3/96	0.02	84269
2020	Toxaphene (3)	09248-01	0.2 U	EPA 508	6/3/96	0.2	84269
2031	Dalapon (200)	09248-01	1 U	EPA 515.1	6/4/96	1	84269
2032	Diquat (20)	09248-01	8 K ¹	EPA 549.1	5/30/96	4	84269
2033	Endothall (100)	09248-01	10 U	EPA 548	5/29/96	10	84269
2034	Glyphosate (700)	09248-01	10 U	EPA 547	6/3/96	10	84269
2035	Di(2-ethylhexyl)adipate (400)	09248-01	1 U	EPA 506	6/3/96	1	84269
2036	Oxamyl (Vydate) (200)	09248-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2037	Simazine (4)	09248-01	0.1 U	EPA 507	6/3/96	0.1	84269
	) Di(2-ethylhexyl)phthalate (6)	09248-01	14	EPA 506	6/3/96	1	84269
10	Picloram (500)	09248-01	0.2 U	EPA 515.1	6/4/96	0.2	84269
2041	Dinoseb (7)	09248-01	0.2 U	EPA 515.1	6/4/96	0.2	84269
2042	Hexachlorocyclopentadiene (50)	09248-01	0.1 U	EPA 505	6/3/96	0.1	84269
2046	Carbofuran (40)	09248-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2050	Atrazine (3)	09248-01	0.1 U	EPA 507	6/3/96	0.1	84269
2051	Alachlor (2)	09248-01	0.3 U	EPA 507	6/3/96	0.3	84269
2065	Heptachlor (.4)	09248-01	0.01 U	EPA 508	6/3/96	0.01	84269
2067	Heptachlor epoxide (.2)	09248-01	0.01 U	EPA 508	6/3/96	0.01	84269
2105	2,4-D (70)	09248-01	0.5 U	EPA 515.1	6/4/96	0.5	84269
2110	2,4,5-TP (Silvex) (50)	09248-01	0.05 U	EPA 515.1	6/4/96	0.05	84269
2274	Hexachlorobenzene (1)	09248-01	0.01 U	EPA 508	6/3/96	0.01	84269
2306	Benzo(a)pyrene (.2)	09248-01	0.01 U	EPA 550	6/3/96	0.01	84269
2326	Pentachlorophenol (1)	09248-01	0.05 U	EPA 515.1	6/4/96	0.05	84269
2383	PCBs (.5)	09248-01	0.05 U	EPA 508	6/3/96	0.05	84269
2931	Dibromochloropropane (.2)	09248-01	0.005 U	EPA 504	6/4/96	0.005	84269
2946	Ethylene dibromide (.02)	09248-01	0.005 U	EPA 504	6/4/96	0.005	84269
	) Chlordane (2)	09248-01	0.05 U	EPA 508	6/3/96	0.05	84269

¹ Analyte was not detected; indicated concentration is method detection limit.

K - Analyte was less than indicated concentration; indicated concentration is method detection limit multiplied by sample dilution factor.

¹ Reduced sample volume used for analysis due to interference from sediment.

Project No. 131660

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2021	Carbaryl	09248-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2022	Methomyl	09248-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2043	Aldicarb sulfoxide	09248-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2044	Aldicarb sulfone	09248-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2045	Metolachlor	09248-01	0.3 U	EPA 507	6/3/96	0.3	84269
2047	Aldicarb	09248-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2066	3-Hydroxycarbofuran	09248-01	0.5 U	EPA 531.1	5/30/96	0.5	84269
2077	Propachlor	09248-01	0.05 U	EPA 508	6/3/96	0.05	84269
2356	Aldrin	09248-01	0.01 U	EPA 508	6/3/96	0.01	84269
1	Dieldrin	09248-01	0.01 U	EPA 508	6/3/96	0.01	84269
10	Dicamba	09248-01	0.05 U	EPA 515.1	6/4/96	0.05	84269
2595	Metribuzin	09248-01	0.2 U	EPA 507	6/3/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

P , No. 131660

UNREGULATED GROUP II ANALYSIS
 62-550.410
 (PWS034)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2210	Chloromethane	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2212	Dichlorodifluoromethane	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2214	Bromomethane	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2216	Chloroethane	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2218	Trichlorofluoromethane	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2251	Methyl-tert-butyl-ether	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2408	Dibromomethane	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2410	1,1-Dichloropropene	09248-01	0.3 U	EPA 502.2	5/31/96	0.3	84269
2412	1,3-Dichloropropane	09248-01	0.3 U	EPA 502.2	5/31/96	0.3	84269
	1,3-Dichloropropene	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
4	1,2,3-Trichloropropane	09248-01	0.3 U	EPA 502.2	5/31/96	0.3	84269
2416	2,2-Dichloropropane	09248-01	0.3 U	EPA 502.2	5/31/96	0.3	84269
2941	Chloroform	09248-01	0.84	EPA 502.2	5/31/96	0.2	84269
2942	Bromoform	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2943	Bromodichloromethane	09248-01	0.3 U	EPA 502.2	5/31/96	0.3	84269
2944	Dibromochloromethane	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2965	o-Chlorotoluene	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2966	p-Chlorotoluene	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2967	m-Dichlorobenzene	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269
2978	1,1-Dichloroethane	09248-01	0.3 U	EPA 502.2	5/31/96	0.3	84269
2986	1,1,1,2-Tetrachloroethane	09248-01	0.3 U	EPA 502.2	5/31/96	0.3	84269
2988	1,1,2,2-Tetrachloroethane	09248-01	0.3 U	EPA 502.2	5/31/96	0.3	84269
2993	Bromobenzene	09248-01	0.5 U	EPA 502.2	5/31/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 09248
June 12, 1996

P 3 No. 131660

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2262	Isophorone	09248-01	1 U	EPA 609	6/3/96	1	84269
2270	2,4-Dinitrotoluene	09248-01	1 U	EPA 609	6/3/96	1	84269
2282	Dimethylphthalate	09248-01	1 U	EPA 506	6/3/96	1	84269
2284	Diethylphthalate	09248-01	1 U	EPA 506	6/3/96	1	84269
2290	Di-n-butylphthalate	09248-01	1 U	EPA 506	6/3/96	1	84269
2294	Butyl benzyl phthalate	09248-01	1 U	EPA 506	6/3/96	1	84269
9089	Di-n-octylphthalate	09248-01	1 U	EPA 506	6/3/96	1	84269
9108*	2-Chlorophenol	09248-01	5 U	EPA 604	6/3/96	5	84269
9112*	2-Methyl-4,6-dinitrophenol	09248-01	20 U	EPA 604	6/3/96	20	84269
	;* Phenol	09248-01	5 U	EPA 604	6/3/96	5	84269
	16* 2,4,6-Trichlorophenol	09248-01	10 U	EPA 604	6/3/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.



ABC Research

3437 s.w. 24th avenue

gainesville, florida 32607

352-372-0436

fax 352-378-6483

Report No. 78728
Subject: SOUTHEAST DRILLING
Received: MAY 28 1996

Date JUN 01 1996

ORS/DHR # 2017578511

TOM PARK
PFB ENVIRONMENTAL LAB
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608

RESULTS OF ANALYSIS	ANALYSIS METHOD	RESULT	ANALYST	EXPIRES DATE TIME
<i>← SYS # 8</i> Sample 1 WELL 14 05/27/96 11:30AM				
FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< 1.00 MG/L	JP	05/29/96 11:30AM
Sample 2 SYSTEM 9 05/27/96 05:45PM				
FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< 1.00 MG/L	JP	05/29/96 11:30AM
<i>← #14</i> Sample 3 SYS 2 05/27/96 01:30PM				
FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< 1.00 MG/L	JP	05/29/96 11:30AM
Sample 4 SYS 2 15 05/27/96 02:30PM				
FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< 1.00 MG/L	JP	05/29/96 11:30AM

Respectfully Submitted for ABC Research

Victor Kowalski

Victor Kowalski, PhD
Director, Quality Control

System 9

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (to be completed by system or lab)

System Name: _____ I.D. #: _____

Address: _____ Phone #: (____) _____

Type (check one): () Community () Nontransient Noncommunity () Noncommunity

SAMPLE INFORMATION (to be completed by sampler)

Sample Date (MMDDYY): ____/____/____ Sample Time: _____

Sample Location (be specific): _____

Sampler Name and Phone: _____ (____) _____

Sampler's Signature: _____ Title: _____

Check Type(s): () Distribution () Recheck of MCL () Resample of Lab Invalidated Sample
() Clearance () Thm Max Res Time () Plant Tap
() Distrib entry pt () Raw () Composite of Multiple Sites—Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab) – ATTACH HRS ANALYTE SHEET*

Lab Name: PPB Environmental Laboratories, Inc. HRS #: 82282 Expiration Date: _____

Address: 6821 SW Archer Road, Gainesville, FL 32608 Phone #: (352) 377-2349

Subcontracted Lab HRS #: 83170, 82135, 84269 – ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (to be completed by lab) – SAMPLE NUMBER: 131661 System # 9 Wen R1

Date Sample(s) Received: 5/28/96 Group(s) Analyzed & Results attached for compliance with 62-550, F.A.C.:

() Nitrate Only	() Nitrite Only	() Asbestos Only	(x) Trihalomethanes
Inorganics– () All 17 (x) Partial	Volatile Organics– (x) All 21 () Partial	Secondaries– (x) All 14 () Partial	Pesticide/PCBs– () All 30 (x) Partial
Group I Unregulateds– () All 13 (x) Partial	Group II Unregulateds– (x) All 23 () Partial	Group III Unregulateds– (x) All 11 () Partial	Radiochemicals– (x) Single Sample () Qtrly Composite**

**Provide radiochemical sample dates & locations for each quarter

I, Paul Berman, do HEREBY CERTIFY that all attached analytical data are correct.

Signature Paul Berman

Title QA Officer

Date 6/14/96

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: _____ Sample Analysis Satisfactory: _____

Resample Requested for: _____ Reason: _____

Person notified to resample: _____ Date Notified: _____

DEP/HRS Reviewing Official: _____

*All HRS lab #s and their HRS Analyte Sheet for labs performing the attached water analyses must be provided. Failure to do so will result in rejection of the analyses and possible enforcement against the public water system for failure to sample.

Effective January 1995

INORGANIC ANALYSIS
62-550.310(1)
(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	131661	0.001 U	SM 3113B	06/08/96	0.001	82282
1010	BARIUM	(2)	131661	0.025	EPA 200.7	06/10/96	0.001	82282
1015	CADMIUM	(.005)	131661	0.0002	SM 3113B	06/01/96	0.0001	82282
1020	CHROMIUM	(0.1)	131661	0.043	EPA 200.7	06/10/96	0.005	82282
1024	CYANIDE	(0.2)	131661	0.004 U	SM 4500CNE	06/04/96	0.004	82282
1025	FLUORIDE	(4)	131661	0.29	SM 4500FC	06/14/96	0.02	82282
1030	LEAD	(0.015)	131661	0.002 K	SM 3113B	06/11/96	0.001	82282
1035	MERCURY	(0.002)	131661	0.0001 K	EPA 245.1	06/10/96	0.00005	82282
1036	NICKEL	(0.1)	131661	0.030 U	EPA 200.7	06/10/96	0.030	82282
1040	NITRATE	(10)	131661	0.200	EPA 353.2	06/06/96	0.004	82282
1041	NITRITE	(1)	131661	0.061	EPA 353.2	05/29/96	0.003	82282
1045	SELENIUM	(0.05)	131661	0.005 K	SM 3113B	06/08/96	0.001	82282
1052	SODIUM	(160)	131661	30.4	EPA 200.7	06/10/96	0.05	82282
1074	ANTIMONY	(0.006)	131661	0.003 U	SM 3113B	06/12/96	0.003	82282
1075	BERYLLIUM	(0.004)	131661	0.003 U	EPA 200.7	06/10/96	0.003	82282
1085	THALLIUM	(0.002)	131661	0.002 U	EPA 200.9	06/12/96	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS
62-550.320
(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1002	ALUMINUM	(0.2)	131661	3.10	EPA 200.7	06/10/96	0.01	82282
1017	CHLORIDE	(250)	131661	67.6	EPA 325.2	06/01/96	0.3	82282
1022	COPPER	(1)	131661	0.02 K	EPA 200.7	06/10/96	0.01	82282
1020	FLUORIDE	(2.0)	131661	0.29	SM 4500FC	06/14/96	0.02	82282
1028	IRON	(0.3)	131661	1.42	EPA 200.7	06/10/96	0.005	82282
1032	MANGANESE	(0.05)	131661	0.025	EPA 200.7	06/10/96	0.005	82282
1050	SILVER	(0.1)	131661	0.0001 U	SM 3113B	06/04/96	0.0001	82282
1055	SULFATE	(250)	131661	25.7	EPA 375.4	06/11/96	1	82282
1095	ZINC	(5)	131661	0.059	EPA 200.7	06/10/96	0.004	82282
1905	COLOR	(15 color units)	131661	15	SM 2120B	05/28/96	5	82282
1920	ODOR	(3 threshold odor number)	131661	1 U	SM 2150B	05/28/96	1	82282
1925	PH	(6.5-8.5)	131661	8.2	EPA 150.1	05/28/96	--	82282
1930	TOTAL DISSOLVED SOLIDS	(500)	131661	1000	SM 2540C	06/03/96	3	82282
2905	FOAMING AGENTS	(0.5)	131661	0.1 K	SM 5540C	05/28/96	0.025	82135

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).
K indicates analyte is less than value indicated, with value being greater than method detection limit.
U - Analyte was not detected; indicated concentration is method detection limit.

PPB Environmental Laboratories, Inc. • 6821 SW Archer Road • Gainesville, FL 32608 • (352) 377-2349

TRIHALOMETHANE ANALYSIS
62-550.310(2)(A)
(PWS027)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2950	TOTAL THMS	(0.10)	09248-02	0.015	EPA 502.2	05/31/96	0.0015	84269

RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

Parameter ID	Name	(MCL pCi/l)	Sample Number	Analysis Result (pCi/l)	Analysis Method	Analysis Date	Error	Lab ID
4000	GROSS ALPHA		131661	2.4 ± 0.5	EPA 900.0	06/04/96	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		NA		EPA 903.1		1	83170
4030	RADIUM-228		NA		BROOKS/BLANC		1	83170
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)
NA = NOT ANALYZED

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(B)
(PWS028)

Parameter ID	Name	(MCL µg/l)	Sample Number	Analysis Result (µg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2378	1,2,4-TRICHLOROETHANE	(70)	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2380	CIS-1,2-DICHLOROETHYLENE	(70)	09248-02	0.2 U	EPA 502.2	05/31/96	0.2	84269
2955	XYLENES (TOTAL)	(10,000)	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2964	DICHLOROMETHANE	(5)	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2968	O-DICHLOROETHYLENE	(600)	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2969	PARA-DICHLOROETHYLENE	(75)	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2976	VINYL CHLORIDE	(1)	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2977	1,1-DICHLOROETHYLENE	(7)	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2979	TRANS-1,2-DICHLOROETHYLENE	(100)	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2980	1,2-DICHLOROETHANE	(3)	09248-02	0.2 U	EPA 502.2	05/31/96	0.2	84269
2981	1,1,1-TRICHLOROETHANE	(200)	09248-02	0.3 U	EPA 502.2	05/31/96	0.3	84269
2982	CARBON TETRACHLORIDE	(3)	09248-02	0.3 U	EPA 502.2	05/31/96	0.3	84269
2983	1,2-DICHLOROPROPANE	(5)	09248-02	0.3 U	EPA 502.2	05/31/96	0.3	84269
2984	TRICHLOROETHYLENE	(3)	09248-02	0.2 U	EPA 502.2	05/31/96	0.2	84269
2985	1,1,2-TRICHLOROETHANE	(5)	09248-02	0.3 U	EPA 502.2	05/31/96	0.3	84269
2987	TETRACHLOROETHYLENE	(3)	09248-02	0.2 U	EPA 502.2	05/31/96	0.2	84269
2989	MONOCHLOROETHYLENE	(100)	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2990	BENZENE	(1)	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2991	TOLUENE	(1,000)	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2992	ETHYLBENZENE	(700)	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2996	STYRENE	(100)	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(c)
(PWS029)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2005	ENDRIN	(2)	09248-02	0.01 U	EPA 508	06/03/96	0.01	84269
2010	LINDANE	(.2)	09248-02	0.01 U	EPA 508	06/03/96	0.01	84269
2015	METHOXYCHLOR	(40)	09248-02	0.02 U	EPA 508	06/03/96	0.02	84269
2020	TOXAPHENE	(3)	09248-02	0.2 U	EPA 508	06/03/96	0.2	84269
2031	DALAPON	(200)	09248-02	1 U	EPA 515.1	06/04/96	1	84269
2032	DIQUAT	(20)	09248-02	4 U	EPA 549.1	05/30/96	4	84269
2033	ENDOTHALL	(100)	09248-02	10 U	EPA 548	05/29/96	10	84269
2034	GLYPHOSATE	(700)	09248-02	10 U	EPA 547	06/03/96	10	84269
2035	DI(2-ETHYLHEXYL)ADIPATE	(400)	09248-02	1 U	EPA 506	06/03/96	1	84269
2036	OXAMYL (VYDATE)	(200)	09248-02	0.5 U	EPA 531.1	05/30/96	0.5	84269
2037	SIMAZINE	(4)	09248-02	0.1 U	EPA 507	06/03/96	0.1	84269
2039	DI(2-ETHYLHEXYL)PHTHALATE	(6)	09248-02	3.6	EPA 506	06/03/96	1	84269
2040	PICLORAM	(500)	09248-02	0.2 U	EPA 515.1	06/04/96	0.2	84269
2041	DINOSEB	(7)	09248-02	0.2 U	EPA 515.1	06/04/96	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	09248-02	0.1 U	EPA 505	06/03/96	0.1	84269
2046	CARBOFURAN	(40)	09248-02	0.5 U	EPA 531.1	05/30/96	0.5	84269
2050	ATRAZINE	(3)	09248-02	0.1 U	EPA 507	06/03/96	0.1	84269
2051	ALACHLOR	(2)	09248-02	0.3 U	EPA 507	06/03/96	0.3	84269
2063	2,3,7,8-TCDD (DIOXIN)	(.00003)	09248-02		EPA	--	--	84269
2065	HEPTACHLOR	(.4)	09248-02	0.01 U	EPA 508	06/03/96	0.01	84269
2067	HEPTACHLOR EPOXIDE	(.2)	09248-02	0.01 U	EPA 508	06/03/96	0.01	84269
2105	2,4-D	(70)	09248-02	0.5 U	EPA 515.1	06/04/96	0.5	84269
?110	2,4,5-TP (SILVEX)	(50)	09248-02	0.05 U	EPA 515.1	06/04/96	0.05	84269
2274	HEXACHLOROBENZENE	(1)	09248-02	0.01 U	EPA 508	06/03/96	0.01	84269
2306	BENZO(A)PYRENE	(.2)	09248-02	0.01 U	EPA 550	06/03/96	0.01	84269
2326	PENTACHLOROPHENOL	(1)	09248-02	0.05 U	EPA 515.1	06/04/96	0.05	84269
2383	PCB	(.5)	09248-02	0.05 U	EPA 508	06/03/96	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	09248-02	0.005 U	EPA 504	06/04/96	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	09248-02	0.005 U	EPA 504	06/04/96	0.005	84269
2959	CHLORDANE	(2)	09248-02	0.05 U	EPA 508	06/03/96	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2021	CARBARYL		09248-02	0.5 U	EPA 531.1	05/30/96	0.5	84269
2022	METHOMYL		09248-02	0.5 U	EPA 531.1	05/30/96	0.5	84269
2043	ALDICARB SULFOXIDE		09248-02	0.5 U	EPA 531.1	05/30/96	0.5	84269
2044	ALDICARB SULFONE		09248-02	0.5 U	EPA 531.1	05/30/96	0.5	84269
2045	METOLACHLOR		09248-02	0.3 U	EPA 507	06/03/96	0.3	84269
2047	ALDICARB		09248-02	0.5 U	EPA 531.1	05/30/96	0.5	84269
2066	3-HYDROXYCARBOFURAN		09248-02	0.5 U	EPA 531.1	05/30/96	0.5	84269
2077	PROPACHLOR		09248-02	0.05 U	EPA 508	06/03/96	0.05	84269
2356	ALDRIN		09248-02	0.01 U	EPA 508	06/03/96	0.01	84269
2364	DIELDRIN		09248-02	0.01 U	EPA 508	06/03/96	0.01	84269
2440	DICAMBA		09248-02	0.05 U	EPA 515.1	06/04/96	0.05	84269
2595	METRIBUZIN		09248-02	0.2 U	EPA 507	06/03/96	0.2	84269

J - Analyte was not detected; indicated concentration is method detection limit.

X - Analyte was less than indicated concentration; indicated concentration is MDL x Sample Dilution Factor.

- Reduced sample volume used for analysis due to interference from sediment.

INORGANIC ANALYSIS
62-550.310(1)
(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	131661	0.001 U	SM 3113B	06/08/96	0.001	82282
1010	BARIUM	(2)	131661	0.025	EPA 200.7	06/10/96	0.001	82282
1015	CADMIUM	(.005)	131661	0.0002	SM 3113B	06/01/96	0.0001	82282
1020	CHROMIUM	(0.1)	131661	0.043	EPA 200.7	06/10/96	0.005	82282
1024	CYANIDE	(0.2)	131661	0.004 U	SM 4500CNE	06/04/96	0.004	82282
1025	FLUORIDE	(4)	131661	0.29	SM 4500FC	06/14/96	0.02	82282
1030	LEAD	(0.015)	131661	0.002 K	SM 3113B	06/11/96	0.001	82282
1035	MERCURY	(0.002)	131661	0.0001 K	EPA 245.1	06/10/96	0.00005	82282
1036	NICKEL	(0.1)	131661	0.030 U	EPA 200.7	06/10/96	0.030	82282
1040	NITRATE	(10)	131661	0.200	EPA 353.2	06/06/96	0.004	82282
1041	NITRITE	(1)	131661	0.061	EPA 353.2	05/29/96	0.003	82282
1045	SELENIUM	(0.05)	131661	0.005 K	SM 3113B	06/08/96	0.001	82282
1052	SODIUM	(160)	131661	30.4	EPA 200.7	06/10/96	0.05	82282
1074	ANTIMONY	(0.006)	131661	0.003 U	SM 3113B	06/12/96	0.003	82282
1075	BERYLLIUM	(0.004)	131661	0.003 U	EPA 200.7	06/10/96	0.003	82282
1085	THALLIUM	(0.002)	131661	0.002 U	EPA 200.9	06/12/96	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS
62-550.320
(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1002	ALUMINUM	(0.2)	131661	3.10	EPA 200.7	06/10/96	0.01	82282
1017	CHLORIDE	(250)	131661	67.6	EPA 325.2	06/01/96	0.3	82282
1022	COPPER	(1)	131661	0.02 K	EPA 200.7	06/10/96	0.01	82282
1020	FLUORIDE	(2.0)	131661	0.29	SM 4500FC	06/14/96	0.02	82282
1028	IRON	(0.3)	131661	1.42	EPA 200.7	06/10/96	0.005	82282
1032	MANGANESE	(0.05)	131661	0.025	EPA 200.7	06/10/96	0.005	82282
1050	SILVER	(0.1)	131661	0.0001 U	SM 3113B	06/04/96	0.0001	82282
1055	SULFATE	(250)	131661	25.7	EPA 375.4	06/11/96	1	82282
1095	ZINC	(5)	131661	0.059	EPA 200.7	06/10/96	0.004	82282
1905	COLOR	(15 color units)	131661	15	SM 2120B	05/28/96	5	82282
1920	ODOR	(3 threshold odor number)	131661	1 U	SM 2150B	05/28/96	1	82282
1925	PH	(6.5--8.5)	131661	8.2	EPA 150.1	05/28/96	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		131661	1000	SM 2540C	06/03/96	3	82282
2905	FOAMING AGENTS	(0.5)	131661	0.1 K	SM 5540C	05/28/96	0.025	82135

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).
K indicates analyte is less than value indicated, with value being greater than method detection limit.
U - Analyte was not detected; indicated concentration is method detection limit.

UNREGULATED GROUP II ANALYSIS
62-550.410
(PWS034)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2210	CHLOROMETHANE	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2212	DICHLORODIFLUOROMETHANE	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2214	BROMOMETHANE	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2216	CHLOROETHANE	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2218	TRICHLOROFLUOROMETHANE	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2408	DIBROMOMETHANE	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2410	1,1-DICHLOROPROPYLENE	09248-02	0.3 U	EPA 502.2	05/31/96	0.3	84269
2412	1,3-DICHLOROPROPANE	09248-02	0.3 U	EPA 502.2	05/31/96	0.3	84269
2413	1,3-DICHLOROPROPENE	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	09248-02	0.3 U	EPA 502.2	05/31/96	0.3	84269
2416	2,2-DICHLOROPROPANE	09248-02	0.3 U	EPA 502.2	05/31/96	0.3	84269
2941	CHLOROFORM	09248-02	12	EPA 502.2	05/31/96	0.2	84269
2942	BROMOFORM	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2943	BROMODICHLOROMETHANE	09248-02	3.2	EPA 502.2	05/31/96	0.3	84269
2944	DIBROMOCHLOROMETHANE	09248-02	1.3	EPA 502.2	05/31/96	0.5	84269
2965	O-CHLOROTOLUENE	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2966	P-CHLOROTOLUENE	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2967	M-DICHLOROENZENE	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269
2978	1,1-DICHLOROETHANE	09248-02	0.3 U	EPA 502.2	05/31/96	0.3	84269
2986	1,1,1,2-TETRACHLOROETHANE	09248-02	0.3 U	EPA 502.2	05/31/96	0.3	84269
2988	1,1,2,2-TETRACHLOROETHANE	09248-02	0.3 U	EPA 502.2	05/31/96	0.3	84269
2993	BROMOBENZENE	09248-02	0.5 U	EPA 502.2	05/31/96	0.5	84269

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2262	ISOPHORONE	09248-02	1 U	EPA 609	06/03/96	1	84269
2270	2,4-DINITROTOLUENE	09248-02	1 U	EPA 609	06/03/96	1	84269
2282	DIMETHYLPHTHALATE	09248-02	1 U	EPA 506	06/03/96	1	84269
2284	DIETHYLPHTHALATE	09248-02	1 U	EPA 506	06/03/96	1	84269
2290	DI-N-BUTYLPHTHALATE	09248-02	1 U	EPA 506	06/03/96	1	84269
2294	BUTYL BENZYL PHTHALATE	09248-02	1 U	EPA 506	06/03/96	1	84269
9089	DIOCTYLPHTHALATE	09248-02	1 U	EPA 506	06/03/96	1	84269
9108*	2-CHLOROPHENOL	09248-02	5 U	EPA 604	06/03/96	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	09248-02	20 U	EPA 604	06/03/96	20	84269
9115*	PHENOL	09248-02	5 U	EPA 604	06/03/96	5	84269
9116*	2,4,6-TRICHLOROPHENOL	09248-02	10 U	EPA 604	06/03/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

COLIFORM ANALYSIS

<u>Parameter</u> <u>ID</u>	<u>Name</u> <u>(MCL μg/l)</u>	<u>Sample</u> <u>Number</u>	<u>Analysis</u> <u>Result (μg/l)</u>	<u>Analysis</u> <u>Method</u>	<u>Analysis</u> <u>Date</u>	<u>MDL</u>	<u>Lab</u> <u>ID</u>
	TOTAL COLIFORMS (MPN)	131661	1,600 M		05/28/96	1	82135
	FECAL COLIFORMS (MPN)	131661	1,600 M		05/28/96	1	82135

M -- Off-scale high. Actual value is known to be greater than value given.



ABC Research

3437 s.w. 24th avenue

gainesville, florida 32607

904-372-0436

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Report No. 78731

Date JUN 03 1996

Subject: WATER REC'D 02:10PM BY D. ROBERTS ANALYSIS BEGUN 02:25PM

Received: MAY 28 1996

PAUL BERMAN
PPB ENVIRONMENTAL LAB
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608

Client # 2643
Phone: (352) 377-2349
Fax: (352) 395-6639

RESULTS OF ANALYSIS

SYSTEM #8

Sample 1 WELL 14 5/27/96 11:30 ID #131660

TOTAL COLIFORMS (MPN)
FECAL COLIFORMS (MPN)

>1,600 / 100ML
17 / 100ML

Sample 2 SYSTEM 9 5/27/96 12:45 ID #131661

TOTAL COLIFORMS (MPN)
FECAL COLIFORMS (MPN)

>1,600 / 100ML
>1,600 / 100ML

Sample 3 SYSTEM 2 5/27/96 13:30 ID #131662

#14
TOTAL COLIFORMS (MPN)
FECAL COLIFORMS (MPN)

21 / 100ML
<2 / 100ML

Sample 4 SYSTEM ~~#8~~ 5/27/96 14:30 ID #131663

#2 well #15
TOTAL COLIFORMS (MPN)
FECAL COLIFORMS (MPN)

21 / 100ML
<2 / 100ML

Additional Notes & Comments for Sample Report 78731

ALL SAMPLES WERE RECEIVED OUT OF HOLDING TIME FOR COMPLIANCE PURPOSES.

SYSTEM # 9
IR

TRICHALOMETHANE ANALYSIS
62-550.310(2)(a)

(PWS027)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2950	Total THMs (0.10)	09248-02	0.015	EPA 502.2	5/31/96	0.0015	84269

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(b)
(PWS028)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2378	1,2,4-Trichlorobenzene (70)	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2380	cis-1,2-Dichloroethene (70)	09248-02	0.2 U	EPA 502.2	5/31/96	0.2	84269
	o Xylenes (Total) (10,000)	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2964	Dichloromethane (5)	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2968	o-Dichlorobenzene (600)	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2969	p-Dichlorobenzene (75)	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2976	Vinyl chloride (1)	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2977	1,1-Dichloroethene (7)	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2979	trans-1,2-Dichloroethene (100)	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2980	1,2-Dichloroethane (3)	09248-02	0.2 U	EPA 502.2	5/31/96	0.2	84269
2981	1,1,1-Trichloroethane (200)	09248-02	0.3 U	EPA 502.2	5/31/96	0.3	84269
2982	Carbon tetrachloride (3)	09248-02	0.3 U	EPA 502.2	5/31/96	0.3	84269
2983	1,2-Dichloropropane (5)	09248-02	0.3 U	EPA 502.2	5/31/96	0.3	84269
2984	Trichloroethene (3)	09248-02	0.2 U	EPA 502.2	5/31/96	0.2	84269
2985	1,1,2-Trichloroethane (5)	09248-02	0.3 U	EPA 502.2	5/31/96	0.3	84269
2987	Tetrachloroethene (3)	09248-02	0.2 U	EPA 502.2	5/31/96	0.2	84269
2989	Monochlorobenzene (100)	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2990	Benzene (1)	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2991	Toluene (1,000)	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
	o Ethylbenzene (700)	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2996	Styrene (100)	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
 Project No. 09248
 June 12, 1996

File No. 131661

PESTICIDE & PCB CHEMICAL ANALYSIS
 62-550.310(2)(c)
 (PWS029)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result(ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2005	Endrin (2)	09248-02	0.01 U	EPA 508	6/3/96	0.01	84269
2010	Lindane (.2)	09248-02	0.01 U	EPA 508	6/3/96	0.01	84269
2015	Methoxychlor (40)	09248-02	0.02 U	EPA 508	6/3/96	0.02	84269
2020	Toxaphene (3)	09248-02	0.2 U	EPA 508	6/3/96	0.2	84269
2031	Dalapon (200)	09248-02	1 U	EPA 515.1	6/4/96	1	84269
2032	Diquat (20)	09248-02	4 U	EPA 549.1	5/30/96	4	84269
2033	Endothal (100)	09248-02	10 U	EPA 548	5/29/96	10	84269
2034	Glyphosate (700)	09248-02	10 U	EPA 547	6/3/96	10	84269
2035	Di(2-ethylhexyl)adipate (400)	09248-02	1 U	EPA 506	6/3/96	1	84269
2036	Oxamyl (Vydate) (200)	09248-02	0.5 U	EPA 531.1	5/30/96	0.5	84269
2037	Simazine (4)	09248-02	0.1 U	EPA 507	6/3/96	0.1	84269
2040	Di(2-ethylhexyl)phthalate (6)	09248-02	3.6	EPA 506	6/3/96	1	84269
2041	Picloram (500)	09248-02	0.2 U	EPA 515.1	6/4/96	0.2	84269
2042	Dinoseb (7)	09248-02	0.2 U	EPA 515.1	6/4/96	0.2	84269
2046	Hexachlorocyclopentadiene (50)	09248-02	0.1 U	EPA 505	6/3/96	0.1	84269
2050	Carbofuran (40)	09248-02	0.5 U	EPA 531.1	5/30/96	0.5	84269
2051	Atrazine (3)	09248-02	0.1 U	EPA 507	6/3/96	0.1	84269
2065	Alachlor (2)	09248-02	0.3 U	EPA 507	6/3/96	0.3	84269
2067	Heptachlor (.4)	09248-02	0.01 U	EPA 508	6/3/96	0.01	84269
2105	Heptachlor epoxide (.2)	09248-02	0.01 U	EPA 508	6/3/96	0.01	84269
2110	2,4-D (70)	09248-02	0.5 U	EPA 515.1	6/4/96	0.5	84269
2274	2,4,5-TP (Silvex) (50)	09248-02	0.05 U	EPA 515.1	6/4/96	0.05	84269
2306	Hexachlorobenzene (1)	09248-02	0.01 U	EPA 508	6/3/96	0.01	84269
2326	Benzo(a)pyrene (.2)	09248-02	0.01 U	EPA 550	6/3/96	0.01	84269
2383	Pentachlorophenol (1)	09248-02	0.05 U	EPA 515.1	6/4/96	0.05	84269
2931	PCBs (.5)	09248-02	0.05 U	EPA 508	6/3/96	0.05	84269
2946	Dibromochloropropane (.2)	09248-02	0.005 U	EPA 504	6/4/96	0.005	84269
	Ethylene dibromide (.02)	09248-02	0.005 U	EPA 504	6/4/96	0.005	84269
	Chlordane (2)	09248-02	0.05 U	EPA 508	6/3/96	0.05	84269

U Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 09248
June 12, 1996

Lab No. 131661

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2021	Carbaryl	09248-02	0.5 U	EPA 531.1	5/30/96	0.5	84269
2022	Methomyl	09248-02	0.5 U	EPA 531.1	5/30/96	0.5	84269
2043	Aldicarb sulfoxide	09248-02	0.5 U	EPA 531.1	5/30/96	0.5	84269
2044	Aldicarb sulfone	09248-02	0.5 U	EPA 531.1	5/30/96	0.5	84269
2045	Metolachlor	09248-02	0.3 U	EPA 507	6/3/96	0.3	84269
2047	Aldicarb	09248-02	0.5 U	EPA 531.1	5/30/96	0.5	84269
2066	3-Hydroxycarbofuran	09248-02	0.5 U	EPA 531.1	5/30/96	0.5	84269
2077	Propachlor	09248-02	0.05 U	EPA 508	6/3/96	0.05	84269
2356	Aldrin	09248-02	0.01 U	EPA 508	6/3/96	0.01	84269
2400	Dieldrin	09248-02	0.01 U	EPA 508	6/3/96	0.01	84269
2440	Dicamba	09248-02	0.05 U	EPA 515.1	6/4/96	0.05	84269
2695	Metribuzin	09248-02	0.2 U	EPA 507	6/3/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

File No. 131661

UNREGULATED GROUP II ANALYSIS
 62-550.410
 (PWS034)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2210	Chloromethane	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2212	Dichlorodifluoromethane	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2214	Bromomethane	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2216	Chloroethane	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2218	Trichlorofluoromethane	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2251	Methyl-tert-butyl-ether	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2408	Dibromomethane	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2410	1,1-Dichloropropene	09248-02	0.3 U	EPA 502.2	5/31/96	0.3	84269
2412	1,3-Dichloropropane	09248-02	0.3 U	EPA 502.2	5/31/96	0.3	84269
2414	1,3-Dichloropropene	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2416	1,2,3-Trichloropropane	09248-02	0.3 U	EPA 502.2	5/31/96	0.3	84269
2416	2,2-Dichloropropane	09248-02	0.3 U	EPA 502.2	5/31/96	0.3	84269
2941	Chloroform	09248-02	12	EPA 502.2	5/31/96	0.2	84269
2942	Bromoform	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2943	Bromodichloromethane	09248-02	3.2	EPA 502.2	5/31/96	0.3	84269
2944	Dibromochloromethane	09248-02	1.3	EPA 502.2	5/31/96	0.5	84269
2965	o-Chlorotoluene	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2966	p-Chlorotoluene	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2967	m-Dichlorobenzene	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269
2978	1,1-Dichloroethane	09248-02	0.3 U	EPA 502.2	5/31/96	0.3	84269
2986	1,1,1,2-Tetrachloroethane	09248-02	0.3 U	EPA 502.2	5/31/96	0.3	84269
2988	1,1,2,2-Tetrachloroethane	09248-02	0.3 U	EPA 502.2	5/31/96	0.3	84269
2993	Bromobenzene	09248-02	0.5 U	EPA 502.2	5/31/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 09248
June 12, 1996

P.S. No. 131661

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result(ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2262	Isophorone	09248-02	1 U	EPA 609	6/3/96	1	84269
2270	2,4-Dinitrotoluene	09248-02	1 U	EPA 609	6/3/96	1	84269
2282	Dimethylphthalate	09248-02	1 U	EPA 506	6/3/96	1	84269
2284	Diethylphthalate	09248-02	1 U	EPA 506	6/3/96	1	84269
2290	Di-n-butylphthalate	09248-02	1 U	EPA 506	6/3/96	1	84269
2294	Butyl benzyl phthalate	09248-02	1 U	EPA 506	6/3/96	1	84269
9089	Di-n-octylphthalate	09248-02	1 U	EPA 506	6/3/96	1	84269
9108*	2-Chlorophenol	09248-02	5 U	EPA 604	6/3/96	5	84269
9112*	2-Methyl-4,6-dinitrophenol	09248-02	20 U	EPA 604	6/3/96	20	84269
3*	Phenol	09248-02	5 U	EPA 604	6/3/96	5	84269
116*	2,4,6-Trichlorophenol	09248-02	10 U	EPA 604	6/3/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.



ABC Research

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Report No. 78728

Subject: SOUTHEAST DRILLING

Received: MAY 28 1996

Date JUN 03 1996

DHRS/DWP # B21357881111

TOM PARK
PFA ENVIRONMENTAL LAB
6821 SW ARCHER ROAD
GAINESVILLE, FL 32608

RESULTS OF ANALYSIS	ANALYSIS METHOD	RESULT	ANALYST	ANALYSIS DATE/TIME
<i>sys # 8</i> Sample 1 WELL 14 05/27/96 11:30AM				
FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< .100 MB/L	JP	05/29/96 10:00AM
Sample 2 SYSTEM 9 05/27/96 05:45PM				
FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< .100 MB/L	JP	05/29/96 10:00AM
<i>#14</i> Sample 3 SYS 2 05/27/96 01:30PM				
FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< .100 MB/L	JP	05/29/96 10:00AM
Sample 4 SYS 2 15 05/27/96 02:30PM				
FOAMING AGENTS (SURFACTANTS)	EPA 425.1	< .100 MB/L	JP	05/29/96 10:00AM

Respectfully Submitted for ABC Research

Victor Kowalski

Victor Kowalski, PhD
Director, Quality Control

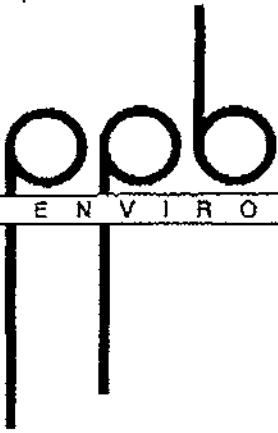


Appendix F



Final Water Quality Analyses

System 2



ENVIRONMENTAL LABORATORIES, INC.

May 19, 1997

Mr. Bart Ziegler
Southeast Drilling
P.O. Box 271723
Tampa, FL 33688

Dear Mr. Ziegler:

Attached are the data reports for the following samples:

PPB Sample Number	Southern Analytical Number	PBS&J* Number	Site Name	Your Sample ID	Sample Date	Sample Time
145420	10774-01	9704327-01	Palm Beach Well Field	Sys 2 Well 14	04/22/97	1200
145421	10774-02	9704327-02	Palm Beach Well Field	Sys 2 Well 15	04/22/97	1200

*PBS&J = Post Buckley Schuh and Jernigan

If you have any questions concerning these reports, please contact me.

Sincerely,

Paul Berman
Project Manager

PLB:cms

Enclosures

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (to be completed by system or lab)

System Name: _____ I.D. #: _____
 Address: _____ Phone #: (____) _____
 Type (check one): () Community () Nontransient Noncommunity () Noncommunity

SAMPLE INFORMATION (to be completed by sampler)

Sample Date (MMDDYY): ____/____/____ Sample Time: _____
 Sample Location (be specific): _____
 Sampler Name and Phone: _____ (____) _____
 Sampler's Signature: _____ Title: _____
 Check Type(s): () Distribution () Recheck of MCL () Resample of Lab Invalidated Sample
 () Clearance () 1hm Max Res Time () Plant Tap
 () Distrib entry pl () Raw () Composite of Multiple Sites—Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab) – ATTACH HRS ANALYTE SHEET*

Lab Name: PPB Environmental Laboratories, Inc. HRS #: 82282 Expiration Date: _____
 Address: 6821 SW Archer Road, Gainesville, FL 32608 Phone #: (352) 377-2349

Subcontracted Lab HRS #: 83170, 82135, 84269, 82138 – ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (to be completed by lab) – SAMPLE NUMBER: 145420

Date Sample(s) Received: 04/23/97 Group(s) Analyzed & Results attached for compliance with 82-550, F.A.C.:

() Nitrate Only	() Nitrite Only	() Asbestos Only	(x) Trihalomethanes
Inorganics— () All 17 (x) Partial	Volatile Organics— (x) All 21 () Partial	Secondaries— (x) All 14 () Partial	Pesticide/PCBs— () All 30 (x) Partial
Group I Unregulateds— () All 13 (x) Partial	Group II Unregulateds— (x) All 23 () Partial	Group III Unregulateds— (x) All 11 () Partial	Radiochemicals— (x) Single Sample () Dirty Composite**

**Provide radiochemical sample dates & locations for each quarter

I, Paul Berman, do HEREBY CERTIFY that all attached analytical data are correct.

Signature _____
 Title QA Officer Date 5/19/97

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: _____ Sample Analysis Satisfactory: _____
 Resample Requested for: _____ Reason: _____
 Person notified to resample: _____ Date Notified: _____
 DEP/HRS Reviewing Official: _____

*All HRS lab #s and their HRS Analyte Sheet for labs performing the attached water analyses must be provided. Failure to do so will result in rejection of the analyses and possible enforcement against the public water system for failure to sample.

Effective January 1995

PPB Environmental Laboratories, Inc. • 6821 SW Archer Road • Gainesville, FL 32608 • (352) 377-2349

INORGANIC ANALYSIS

62-550.310(1)

(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	145420	0.002 K	SM 3113B	05/14/97	0.001	82282
1010	BARIUM	(2)	145420	0.019	EPA 200.7	05/12/97	0.001	82282
1015	CADMIUM	(.005)	145420	0.0001 U	SM 3113B	05/09/97	0.0001	82282
1020	CHROMIUM	(0.1)	145420	0.011	EPA 200.7	05/12/97	0.005	82282
1024	CYANIDE	(0.2)	145420	0.004 U	SM 4500CNE	05/05/97	0.004	82282
1025	FLUORIDE	(4)	145420	0.23	SM 4500FC	05/08/97	0.02	82282
1030	LEAD	(0.015)	145420	0.002 K	SM 3113B	05/08/97	0.001	82282
1035	MERCURY	(0.002)	145420	0.0001 K	EPA 245.1	04/30/97	0.00005	82282
1036	NICKEL	(0.1)	145420	0.030 U	EPA 200.7	05/12/97	0.030	82282
1040	NITRATE	(10)	145420	0.004 U	EPA 353.2	05/03/97	0.004	82282
1041	NITRITE	(1)	145420	0.004 K	EPA 353.2	04/23/97	0.003	82282
1045	SELENIUM	(0.05)	145420	0.001 U	SM 3113B	05/09/97	0.001	82282
1052	SODIUM	(160)	145420	21.4	EPA 200.7	05/12/97	0.05	82282
1074	ANTIMONY	(0.006)	145420	0.004 K	SM 3113B	05/09/97	0.003	82282
1075	BERYLLIUM	(0.004)	145420	0.003 U	EPA 200.7	05/12/97	0.003	82282
1085	THALLIUM	(0.002)	145420	0.002 U	EPA 200.9	05/12/97	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS

62-550.320

(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1002	ALUMINUM	(0.2)	145420	0.011	EPA 200.7	05/12/97	0.01	82282
1017	CHLORIDE	(250)	145420	38	EPA 325.2	05/12/97	0.3	82282
1022	COPPER	(1)	145420	0.01 U	EPA 200.7	05/12/97	0.01	82282
1020	FLUORIDE	(2.0)	145420	0.23	SM 4500FC	05/08/97	0.02	82282
1028	IRON	(0.3)	145420	0.148	EPA 200.7	05/12/97	0.005	82282
1032	MANGANESE	(0.05)	145420	0.011	EPA 200.7	05/12/97	0.005	82282
1050	SILVER	(0.1)	145420	0.0002 K	SM 3113B	05/14/97	0.0001	82282
1055	SULFATE	(250)	145420	6.7	EPA 375.4	05/14/97	1	82282
1095	ZINC	(5)	145420	0.012	EPA 200.7	05/12/97	0.004	82282
1905	COLOR	(15 color units)	145420	60	SM 2120B	04/23/97	5	82282
1920	ODOR	(3 threshold odor number)	145420	1	SM 2150B	04/23/97	1	82282
1925	PH	(6.5-8.5)	145420	7.7	EPA 150.1	04/23/97	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		145420	408	SM 2540C	04/29/97	3	82282
2905	FOAMING AGENTS	(0.5)	145420	0.1 K	SM 5540C	04/24/97	0.025	82138

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).
 K indicates analyte is less than value indicated, with value being greater than method detection limit.
 U - Analyte was not detected; indicated concentration is method detection limit.

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TRIHALOMETHANE ANALYSIS
62-550.310(2)(A)
(PWS027)

Parameter ID	Name	(MCL mg/L)	Sample Number	Analysis Result (ug/l)	Analysis Method	Analysis Date	MDL (ug/L)	Lab ID
2950	TOTAL THMs	(0.10)	10774-01	0.0015 U	EPA 502.2	05/01/97	0.0015	84269

RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

Parameter ID	Name	(MCL pCi/l)	Sample Number	Analysis Result (pCi/l)	Analysis Method	Analysis Date	Error	Lab ID
4000	GROSS ALPHA		9704327-01	3.6 ± 2.6	EPA 900.0	04/25/97	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		9704327-01	0.6 ± 0.1		04/29/97		
4030	RADIUM-228		NA					
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)

NA = NOT ANALYZED

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(B)
(PWS028)

PARAMETER ID	NAME	(MCL UG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (UG/L)	LAB ID
2378	1,2,4-TRICHLOROBENZENE	(70)	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2380	CIS-1,2-DICHLOROETHYLENE	(70)	10774-01	0.2 U	EPA 502.2	05/01/97	0.2	84269
2955	XYLENES (TOTAL)	(10,000)	10774-01	0.59	EPA 502.2	05/01/97	0.5	84269
2964	DICHLOROMETHANE	(5)	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2968	O-DICHLOROETHYLENE	(600)	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2969	PARA-DICHLOROETHYLENE	(75)	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2976	VINYL CHLORIDE	(1)	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2977	1,1-DICHLOROETHYLENE	(7)	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2979	TRANS-1,2-DICHLOROETHYLENE	(100)	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2980	1,2-DICHLOROETHANE	(3)	10774-01	0.2 U	EPA 502.2	05/01/97	0.2	84269
2981	1,1,1-TRICHLOROETHANE	(200)	10774-01	0.3 U	EPA 502.2	05/01/97	0.3	84269
2982	CARBON TETRACHLORIDE	(3)	10774-01	0.3 U	EPA 502.2	05/01/97	0.3	84269
2983	1,2-DICHLOROPROPANE	(5)	10774-01	0.3 U	EPA 502.2	05/01/97	0.3	84269
2984	TRICHLOROETHYLENE	(3)	10774-01	0.2 U	EPA 502.2	05/01/97	0.2	84269
2985	1,1,2-TRICHLOROETHANE	(6)	10774-01	0.3 U	EPA 502.2	05/01/97	0.3	84269
2987	TETRACHLOROETHYLENE	(3)	10774-01	0.2 U	EPA 502.2	05/01/97	0.2	84269
2989	MONOCHLOROETHYLENE	(100)	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2990	BENZENE	(1)	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2991	TOLUENE	(1,000)	10774-01	0.57	EPA 502.2	05/01/97	0.5	84269
2992	ETHYLBENZENE	(700)	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2996	STYRENE	(100)	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269

U - ANALYTE WAS NOT DETECTED; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT.

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PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(c)
(PWS029)

<u>PARAMETER ID</u>	<u>NAME</u>	<u>(MCL MG/L)</u>	<u>SAMPLE NUMBER</u>	<u>ANALYSIS RESULT (UG/L)</u>	<u>ANALYSIS METHOD</u>	<u>ANALYSIS DATE</u>	<u>MDL</u>	<u>LAB ID</u>
2005	ENDRIN	(2)	10774-01	0.01 U	EPA 508	04/24/97	0.01	84269
2010	LINDANE	(.2)	10774-01	0.01 U	EPA 508	04/24/97	0.01	84269
2015	METHOXYCHLOR	(40)	10774-01	0.02 U	EPA 508	04/24/97	0.02	84269
2020	TOXAPHENE	(3)	10774-01	0.2 U	EPA 508	04/24/97	0.2	84269
2031	DALAPON	(200)	10774-01	1 U	EPA 515.1	04/28/97	1	84269
2032	DIQUAT	(20)	10774-01	1 U	EPA 549.1	04/27/97	4	84269
2033	ENDOTHALL	(100)	10774-01	10 U	EPA 548.1	04/28/97	10	84269
2034	GLYPHOSATE	(700)	10774-01	10 U	EPA 547	05/08/97	10	84269
2035	DI(2-ETHYLHEXYL)ADIPATE	(400)	10774-01	1 U	EPA 506	04/24/97	1	84269
2036	OXAMYL (VYDATE)	(200)	10774-01	0.5 U	EPA 531.1	05/01/97	0.5	84269
2037	SIMAZINE	(4)	10774-01	0.1 U	EPA 507	04/24/97	0.1	84269
2039	DI(2-ETHYLHEXYL)PHTHALATE	(6)	10774-01	1 U	EPA 506	04/24/97	1	84269
2040	PICLORAM	(500)	10774-01	0.2 U	EPA 515.1	04/28/97	0.2	84269
2041	DINOSEB	(7)	10774-01	0.2 U	EPA 515.1	04/28/97	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	10774-01	0.1 U	EPA 505	04/28/97	0.1	84269
2046	CARBOFURAN	(40)	10774-01	0.5 U	EPA 531.1	05/01/97	0.5	84269
2050	ATRAZINE	(3)	10774-01	0.1 U	EPA 507	04/24/97	0.1	84269
2051	ALACHLOR	(2)	10774-01	0.3 U	EPA 507	04/24/97	0.3	84269
2065	HEPTACHLOR	(.4)	10774-01	0.01 U	EPA 508	04/24/97	0.01	84269
2067	HEPTACHLOR EPOXIDE	(.2)	10774-01	0.01 U	EPA 508	04/24/97	0.01	84269
2105	2,4-D	(70)	10774-01	0.5 U	EPA 515.1	04/28/97	0.5	84269
2110	2,4,5-TP (SILVEX)	(50)	10774-01	0.05 U	EPA 515.1	04/28/97	0.05	84269
2274	HEXACHLOROBENZENE	(1)	10774-01	0.01 U	EPA 508	04/24/97	0.01	84269
2306	BENZO(A)PYRENE	(.2)	10774-01	0.01 U	EPA 550	04/24/97	0.01	84269
2326	PENTACHLOROPHENOL	(1)	10774-01	0.05 U	EPA 515.1	04/28/97	0.05	84269
2383	PCB	(.5)	10774-01	0.05 U	EPA 508	04/24/97	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	10774-01	0.005 U	EPA 504	04/25/97	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	10774-01	0.005 U	EPA 504	04/25/97	0.005	84269
2959	CHLORDANE	(2)	10774-01	0.05 U	EPA 508	04/24/97	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

<u>PARAMETER ID</u>	<u>NAME</u>	<u>(MCL MG/L)</u>	<u>SAMPLE NUMBER</u>	<u>ANALYSIS RESULT (UG/L)</u>	<u>ANALYSIS METHOD</u>	<u>ANALYSIS DATE</u>	<u>MDL</u>	<u>LAB ID</u>
2021	CARBARYL		10774-01	0.5 U	EPA 531.1	05/01/97	0.5	84269
2022	METHOMYL		10774-01	0.5 U	EPA 531.1	05/01/97	0.5	84269
2043	ALDICARB SULFOXIDE		10774-01	0.5 U	EPA 531.1	05/01/97	0.5	84269
2044	ALDICARB SULFONE		10774-01	0.5 U	EPA 531.1	05/01/97	0.5	84269
2045	METOLACHLOR		10774-01	0.3 U	EPA 507	04/24/97	0.3	84269
2047	ALDICARB		10774-01	0.5 U	EPA 531.1	05/01/97	0.5	84269
2066	3-HYDROXYCARBOFURAN		10774-01	0.5 U	EPA 531.1	05/01/97	0.5	84269
2077	PROPACHLOR		10774-01	0.05 U	EPA 508	04/24/97	0.05	84269
2356	ALDRIN		10774-01	0.01 U	EPA 508	04/24/97	0.01	84269
2364	DIELDRIN		10774-01	0.01 U	EPA 508	04/24/97	0.01	84269
2440	DICAMBA		10774-01	0.05 U	EPA 515.1	04/28/97	0.05	84269
2595	METRIBUZIN		10774-01	0.2 U	EPA 507	04/24/97	0.2	84269

U - ANALYTE WAS NOT DETECTED; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT.

K - ANALYTE WAS LESS THAN INDICATED CONCENTRATION; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT MULTIPLIED BY SAMPLE DILUTION FACTOR.

1 - REDUCED SAMPLE VOLUME USED FOR ANALYSIS DUE TO INTERFERENCE FROM SEDIMENT.

PPB Environmental Laboratories, Inc. • 6821 SW Archer Road • Gainesville, FL 32608 • (352) 377-2349

UNREGULATED GROUP II ANALYSIS
62-550.410
(PWS034)

<u>PARAMETER ID</u>	<u>NAME (MCL MG/L)</u>	<u>SAMPLE NUMBER</u>	<u>ANALYSIS RESULT (UG/L)</u>	<u>ANALYSIS METHOD</u>	<u>ANALYSIS DATE</u>	<u>MDL (UG/L)</u>	<u>LAB ID</u>
2210	CHLOROMETHANE	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2212	DICHLORODIFLUOROMETHANE	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2214	BROMOMETHANE	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2216	CHLOROETHANE	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2218	TRICHLOROFLUOROMETHANE	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2408	DIBROMOMETHANE	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2410	1,1-DICHLOROPROPYLENE	10774-01	0.3 U	EPA 502.2	05/01/97	0.3	84269
2412	1,3-DICHLOROPROPANE	10774-01	0.3 U	EPA 502.2	05/01/97	0.3	84269
2413	1,3-DICHLOROPROPENE	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	10774-01	0.3 U	EPA 502.2	05/01/97	0.3	84269
2416	2,2-DICHLOROPROPANE	10774-01	0.3 U	EPA 502.2	05/01/97	0.3	84269
2941	CHLOROFORM	10774-01	0.2 U	EPA 502.2	05/01/97	0.2	84269
2942	BROMOFORM	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2943	BROMODICHLOROMETHANE	10774-01	0.3 U	EPA 502.2	05/01/97	0.3	84269
2944	DIBROMOCHLOROMETHANE	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2965	O-CHLOROTOLUENE	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2966	P-CHLOROTOLUENE	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2967	M-DICHLOROBENZENE	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269
2978	1,1-DICHLOROETHANE	10774-01	0.3 U	EPA 502.2	05/01/97	0.3	84269
2986	1,1,1,2-TETRACHLOROETHANE	10774-01	0.3 U	EPA 502.2	05/01/97	0.3	84269
2988	1,1,2,2-TETRACHLOROETHANE	10774-01	0.3 U	EPA 502.2	05/01/97	0.3	84269
2993	BROMOBENZENE	10774-01	0.5 U	EPA 502.2	05/01/97	0.5	84269

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

<u>PARAMETER ID</u>	<u>NAME (MCL MG/L)</u>	<u>SAMPLE NUMBER</u>	<u>ANALYSIS RESULT (UG/L)</u>	<u>ANALYSIS METHOD</u>	<u>ANALYSIS DATE</u>	<u>MDL (UG/L)</u>	<u>LAB ID</u>
2262	ISOPHORONE	10774-01	1 U	EPA 609	04/24/97	1	84269
2270	2,4-DINITROTOLUENE	10774-01	1 U	EPA 609	04/24/97	1	84269
2282	DIMETHYLPHTHALATE	10774-01	1 U	EPA 506	04/24/97	1	84269
2284	DIETHYLPHTHALATE	10774-01	1 U	EPA 506	04/24/97	1	84269
2290	DI-N-BUTYLPHTHALATE	10774-01	1 U	EPA 506	04/24/97	1	84269
2294	BUTYL BENZYL PHTHALATE	10774-01	1 U	EPA 508	04/24/97	1	84269
9089	DIOCTYLPHTHALATE	10774-01	1 U	EPA 506	04/24/97	1	84269
9108*	2-CHLOROPHENOL	10774-01	5 U	EPA 604	04/24/97	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	10774-01	20 U	EPA 604	04/24/97	20	84269
9115*	PHENOL	10774-01	5 U	EPA 604	04/24/97	5	84269
9116*	2,4,6-TRICHLOROPHENOL	10774-01	10 U	EPA 604	04/24/97	10	84269

U - ANALYTE WAS NOT DETECTED; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT.

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LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (TO BE COMPLETED BY SYSTEM OR LAB)

SYSTEM NAME: I.D. #: ADDRESS: PHONE #: TYPE (CHECK ONE): () COMMUNITY () NONTRANSIENT NONCOMMUNITY () NONCOMMUNITY

SAMPLE INFORMATION (TO BE COMPLETED BY SAMPLER)

SAMPLE DATE (MMDDYY): SAMPLE TIME: SAMPLE LOCATION (BE SPECIFIC): SAMPLER NAME AND PHONE: SAMPLER'S SIGNATURE: TITLE: CHECK TYPE(S): () DISTRIBUTION () RECHECK OF MCL () RESAMPLE OF LAB INVALIDATED SAMPLE () CLEARANCE () THM MAX RES TIME () PLANT TAP () DISTRIB ENTRY PT () RAW () COMPOSITE OF MULTIPLE SITES-ATTACH A FORMAT FOR EACH SITE

LABORATORY CERTIFICATION INFORMATION (TO BE COMPLETED BY LAB) - ATTACH HRS ANALYTE SHEET*

LAB NAME: PPB ENVIRONMENTAL LABORATORIES, INC. HRS #: 82282 EXPIRATION DATE: ADDRESS: 6821 SW ARCHER ROAD, GAINESVILLE, FL 32608 PHONE #: (352) 377-2349

SUBCONTRACTED LAB HRS #: 83170, 82135, 84269, 82138 - ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (TO BE COMPLETED BY LAB) - SAMPLE NUMBER: 145421

DATE SAMPLE(S) RECEIVED: 04/23/97 GROUP(S) ANALYZED & RESULTS ATTACHED FOR COMPLIANCE WITH 82-550, F.A.C.: () NITRATE ONLY () NITRITE ONLY () ASBESTOS ONLY (x) TRIHALOMETHANES INORGANICS- () ALL 17 (x) PARTIAL VOLATILE ORGANICS- (x) ALL 21 () PARTIAL SECONDARIES- (x) ALL 14 () PARTIAL PESTICIDE/PCBs- () ALL 30 (x) PARTIAL GROUP I UNREGULATEDS- () ALL 13 (x) PARTIAL GROUP II UNREGULATEDS- (x) ALL 23 () PARTIAL GROUP III UNREGULATEDS- (x) ALL 11 () PARTIAL RADIOCHEMICALS- (x) SINGLE SAMPLE () QTRLY COMPOSITE**

**PROVIDE RADIOCHEMICAL SAMPLE DATES & LOCATIONS FOR EACH QUARTER

I, PAUL BERMAN, DO HEREBY CERTIFY THAT ALL ATTACHED ANALYTICAL DATA ARE CORRECT.

SIGNATURE: TITLE: QA OFFICER DATE: 5/19/97

COMPLIANCE INFORMATION (TO BE COMPLETED BY STATE)

SAMPLE COLLECTION SATISFACTORY: SAMPLE ANALYSIS SATISFACTORY: RESAMPLE REQUESTED FOR: REASON: PERSON NOTIFIED TO RESAMPLE: DATE NOTIFIED: DEP/HRS REVIEWING OFFICIAL:

*ALL HRS LAB #S AND THEIR HRS ANALYTE SHEET FOR LABS PERFORMING THE ATTACHED WATER ANALYSES MUST BE PROVIDED. FAILURE TO DO SO WILL RESULT IN REJECTION OF THE ANALYSES AND POSSIBLE ENFORCEMENT AGAINST THE PUBLIC WATER SYSTEM FOR FAILURE TO SAMPLE. EFFECTIVE JANUARY 1995

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INORGANIC ANALYSIS
62-550.310(1)
(PWS030)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (MG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (MG/L)	LAB ID
1005	ARSENIC	(.05)	145421	0.002 K	SM 3113B	05/14/97	0.001	82282
1010	BARIIUM	(2)	145421	0.018	EPA 200.7	05/12/97	0.001	82282
1015	CADMIUM	(.005)	145421	0.0001 U	SM 3113B	05/09/97	0.0001	82282
1020	CHROMIUM	(0.1)	145421	0.013	EPA 200.7	05/12/97	0.005	82282
1024	CYANIDE	(0.2)	145421	0.004 U	SM 4500CNE	05/05/97	0.004	82282
1025	FLUORIDE	(4)	145421	0.22	SM 4500FC	05/08/97	0.02	82282
1030	LEAD	(0.015)	145421	0.002 K	SM 3113B	05/08/97	0.001	82282
1035	MERCURY	(0.002)	145421	0.0001 K	EPA 245.1	04/30/97	0.00005	82282
1036	NICKEL	(0.1)	145421	0.030 U	EPA 200.7	05/12/97	0.030	82282
1040	NITRATE	(10)	145421	0.047	EPA 353.2	05/03/97	0.004	82282
1041	NITRITE	(1)	145421	0.004 K	EPA 353.2	04/23/97	0.003	82282
1045	SELENIUM	(0.05)	145421	0.002	SM 3113B	05/09/97	0.001	82282
1052	SODIUM	(180)	145421	21.2	EPA 200.7	05/12/97	0.05	82282
1074	ANTIMONY	(0.006)	145421	0.004 K	SM 3113B	05/09/97	0.003	82282
1075	BERYLLIUM	(0.004)	145421	0.003 U	EPA 200.7	05/12/97	0.003	82282
1085	THALLIUM	(0.002)	145421	0.002 U	EPA 200.9	05/12/97	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS
62-550.320
(PWS031)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS* RESULT (MG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (MG/L)	LAB ID
1002	ALUMINUM	(0.2)	145421	0.026	EPA 200.7	05/12/97	0.01	82282
1017	CHLORIDE	(250)	145421	38	EPA 325.2	05/12/97	0.3	82282
1022	COPPER	(1)	145421	0.01 U	EPA 200.7	05/12/97	0.01	82282
1020	FLUORIDE	(2.0)	145421	0.22	SM 4500FC	05/08/97	0.02	82282
1028	IRON	(0.3)	145421	0.140	EPA 200.7	05/12/97	0.005	82282
1032	MANGANESE	(0.05)	145421	0.011	EPA 200.7	05/12/97	0.005	82282
1050	SILVER	(0.1)	145421	0.0002 K	SM 3113B	05/14/97	0.0001	82282
1055	SULFATE	(250)	145421	5.7	EPA 375.4	05/14/97	1	82282
1095	ZINC	(5)	145421	0.008	EPA 200.7	05/12/97	0.004	82282
1905	COLOR	(15-COLOR UNITS)	145421	50	SM 2120B	04/23/97	5	82282
1920	ODOR (3 THRESHOLD ODOR NUMBER)		145421	1 U	SM 2150B	04/23/97	1	82282
1925	pH	(6.5-8.5)	145421	7.4	EPA 150.1	04/23/97	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		145421	407	SM 2540C	04/29/97	3	82282
2905	FOAMING AGENTS	(0.5)	145421	0.1 K	SM 5540C	04/24/97	0.025	82138

*ALL RESULTS AND METHOD DETECTION LIMITS IN MG/L EXCEPT COLOR (PCU), ODOR (THRESHOLD ODOR NUMBER), AND PH (STANDARD UNITS).

K INDICATES ANALYTE IS LESS THAN VALUE INDICATED, WITH VALUE BEING GREATER THAN METHOD DETECTION LIMIT.

U - ANALYTE WAS NOT DETECTED; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT.

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TRIHALOMETHANE ANALYSIS

62-550.310(2)(A)

(PWS027)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (UG/L)	LAB ID
2950	TOTAL THMS	(0.10)	10774-02	0.0015 U	EPA 502.2	05/02/97	0.0015	84269

RADIOCHEMICAL ANALYSIS*

82-550.310(5)

(PWS033)

PARAMETER ID	NAME	(MCL PCI/L)	SAMPLE NUMBER	ANALYSIS RESULT (PCI/L)	ANALYSIS METHOD	ANALYSIS DATE	ERROR	LAB ID
4000	GROSS ALPHA		9704327-02	0.9 ± 2.0	EPA 900.0	04/25/97	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		NA					
4030	RADIUM-228		NA					
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)

NA = NOT ANALYZED

VOLATILE ORGANIC ANALYSIS

62-550.310(2)(B)

(PWS028)

PARAMETER ID	NAME	(MCL UG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (UG/L)	LAB ID
2378	1,2,4-TRICHLOROETHANE	(70)	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2380	CIS-1,2-DICHLOROETHYLENE	(70)	10774-02	0.2 U	EPA 502.2	05/02/97	0.2	84269
2955	XYLENES (TOTAL)	(10,000)	10774-02	0.63	EPA 502.2	05/02/97	0.5	84269
2964	DICHLOROMETHANE	(5)	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2968	O-DICHLOROETHYLENE	(800)	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2969	PARA-DICHLOROETHYLENE	(75)	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2976	VINYL CHLORIDE	(1)	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2977	1,1-DICHLOROETHYLENE	(7)	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2979	TRANS-1,2-DICHLOROETHYLENE	(100)	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2980	1,2-DICHLOROETHANE	(3)	10774-02	0.2 U	EPA 502.2	05/02/97	0.2	84269
2981	1,1,1-TRICHLOROETHANE	(200)	10774-02	0.3 U	EPA 502.2	05/02/97	0.3	84269
2982	CARBON TETRACHLORIDE	(3)	10774-02	0.3 U	EPA 502.2	05/02/97	0.3	84269
2983	1,2-DICHLOROPROPANE	(5)	10774-02	0.3 U	EPA 502.2	05/02/97	0.3	84269
2984	TRICHLOROETHYLENE	(3)	10774-02	0.2 U	EPA 502.2	05/02/97	0.2	84269
2985	1,1,2-TRICHLOROETHANE	(5)	10774-02	0.3 U	EPA 502.2	05/02/97	0.3	84269
2987	TETRACHLOROETHYLENE	(3)	10774-02	0.2 U	EPA 502.2	05/02/97	0.2	84269
2989	MONOCHLOROETHYLENE	(100)	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2990	BENZENE	(1)	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2991	TOLUENE	(1,000)	10774-02	0.62	EPA 502.2	05/02/97	0.5	84269
2992	ETHYLBENZENE	(700)	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2996	STYRENE	(100)	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269

U - ANALYTE WAS NOT DETECTED; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT.

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PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(C)
(PWS029)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL	LAB ID
2005	ENDRIN	(2)	10774-02	0.01 U	EPA 508	04/24/97	0.01	84269
2010	LINDANE	(.2)	10774-02	0.01 U	EPA 508	04/24/97	0.01	84269
2015	METHOXYCHLOR	(40)	10774-02	0.02 U	EPA 508	04/24/97	0.02	84269
2020	TOXAPHENE	(3)	10774-02	0.2 U	EPA 508	04/24/97	0.2	84269
2031	DALAPON	(200)	10774-02	1 U	EPA 515.1	04/28/97	1	84269
2032	DIQUAT	(20)	10774-02	1 U	EPA 549.1	04/27/97	4	84269
2033	ENDOTHALL	(100)	10774-02	10 U	EPA 548.1	04/28/97	10	84269
2034	GLYPHOSATE	(700)	10774-02	10 U	EPA 547	05/06/97	10	84269
2035	DI(2-ETHYLHEXYL)ADIPATE	(400)	10774-02	1 U	EPA 508	04/24/97	1	84269
2036	OXAMYL (VYDATE)	(200)	10774-02	0.5 U	EPA 531.1	05/01/97	0.5	84269
2037	SIMAZINE	(4)	10774-02	0.1 U	EPA 507	04/24/97	0.1	84269
2039	DI(2-ETHYLHEXYL)PHTHALATE	(6)	10774-02	1 U	EPA 506	04/24/97	1	84269
2040	PICLORAM	(500)	10774-02	0.2 U	EPA 515.1	04/28/97	0.2	84269
2041	DINoseb	(7)	10774-02	0.2 U	EPA 515.1	04/28/97	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	10774-02	0.1 U	EPA 505	04/28/97	0.1	84269
2046	CARBOFURAN	(40)	10774-02	0.5 U	EPA 631.1	05/01/97	0.5	84269
2050	ATRAZINE	(3)	10774-02	0.1 U	EPA 507	04/24/97	0.1	84269
2051	ALACHLOR	(2)	10774-02	0.3 U	EPA 507	04/24/97	0.3	84269
2065	HEPTACHLOR	(.4)	10774-02	0.01 U	EPA 508	04/24/97	0.01	84269
2067	HEPTACHLOR EPOXIDE	(.2)	10774-02	0.01 U	EPA 508	04/24/97	0.01	84269
2105	2,4-D	(70)	10774-02	0.5 U	EPA 515.1	04/28/97	0.5	84269
2110	2,4,5-TP (SILVEX)	(50)	10774-02	0.05 U	EPA 515.1	04/28/97	0.05	84269
2274	HEXACHLOROBENZENE	(1)	10774-02	0.01 U	EPA 508	04/24/97	0.01	84269
2306	BENZO(A)PYRENE	(.2)	10774-02	0.01 U	EPA 550	04/24/97	0.01	84269
2326	PENTACHLOROPHENOL	(1)	10774-02	0.05 U	EPA 515.1	04/28/97	0.05	84269
2383	PCB	(.5)	10774-02	0.05 U	EPA 508	04/24/97	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	10774-02	0.005 U	EPA 504	04/25/97	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	10774-02	0.005 U	EPA 504	04/25/97	0.005	84269
2958	CHLORDANE	(2)	10774-02	0.05 U	EPA 508	04/24/97	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL	LAB ID
2021	CARBARYL		10774-02	0.5 U	EPA 531.1	05/01/97	0.5	84269
2022	METHOMYL		10774-02	0.5 U	EPA 531.1	05/01/97	0.5	84269
2043	ALDICARB SULFOXIDE		10774-02	0.5 U	EPA 631.1	05/01/97	0.5	84269
2044	ALDICARB SULFONE		10774-02	0.5 U	EPA 531.1	05/01/97	0.5	84269
2045	METOLACHLOR		10774-02	0.3 U	EPA 507	04/24/97	0.3	84269
2047	ALDICARB		10774-02	0.5 U	EPA 531.1	05/01/97	0.5	84269
2066	3-HYDROXYCARBOFURAN		10774-02	0.5 U	EPA 531.1	05/01/97	0.5	84269
2077	PROPACHLOR		10774-02	0.05 U	EPA 508	04/24/97	0.05	84269
2356	ALDRIN		10774-02	0.01 U	EPA 508	04/24/97	0.01	84269
2364	DIELDRIN		10774-02	0.01 U	EPA 508	04/24/97	0.01	84269
2440	DICAMBA		10774-02	0.05 U	EPA 515.1	04/28/97	0.05	84269
2595	METRIBUZIN		10774-02	0.2 U	EPA 507	04/24/97	0.2	84269

U - ANALYTE WAS NOT DETECTED; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT.

K - ANALYTE WAS LESS THAN INDICATED CONCENTRATION; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT MULTIPLIED BY SAMPLE DILUTION FACTOR.

1 - REDUCED SAMPLE VOLUME USED FOR ANALYSIS DUE TO INTERFERENCE FROM SEDIMENT.

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UNREGULATED GROUP II ANALYSIS
62-550.410
(PWS034)

PARAMETER ID	NAME (MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (UG/L)	LAB ID
2210	CHLOROMETHANE	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2212	DICHLORODIFLUOROMETHANE	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2214	BROMOMETHANE	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2216	CHLOROETHANE	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2218	TRICHLOROFUOROMETHANE	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2408	DIBROMOMETHANE	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2410	1,1-DICHLOROPROPYLENE	10774-02	0.3 U	EPA 502.2	05/02/97	0.3	84269
2412	1,3-DICHLOROPROPANE	10774-02	0.3 U	EPA 502.2	05/02/97	0.3	84269
2413	1,3-DICHLOROPROPENE	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	10774-02	0.3 U	EPA 502.2	05/02/97	0.3	84269
2416	2,2-DICHLOROPROPANE	10774-02	0.3 U	EPA 502.2	05/02/97	0.3	84269
2941	CHLOROFORM	10774-02	0.2 U	EPA 502.2	05/02/97	0.2	84269
2942	BROMOFORM	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2943	BROMODICHLOROMETHANE	10774-02	0.3 U	EPA 502.2	05/02/97	0.3	84269
2944	DIBROMOCHLOROMETHANE	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2965	O-CHLOROTOLUENE	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2966	P-CHLOROTOLUENE	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2967	M-DICHLOROBENZENE	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269
2978	1,1-DICHLOROETHANE	10774-02	0.3 U	EPA 502.2	05/02/97	0.3	84269
2988	1,1,1,2-TETRACHLOROETHANE	10774-02	0.3 U	EPA 502.2	05/02/97	0.3	84269
2988	1,1,2,2-TETRACHLOROETHANE	10774-02	0.3 U	EPA 502.2	05/02/97	0.3	84269
2983	BROMOBENZENE	10774-02	0.5 U	EPA 502.2	05/02/97	0.5	84269

UNREGULATED GROUP III ANALYSIS
82-550.415
(PWS036 & 037*)

PARAMETER ID	NAME (MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (UG/L)	LAB ID
2262	ISOPHORONE	10774-02	1 U	EPA 609	04/24/97	1	84269
2270	2,4-DINITROTOLUENE	10774-02	1 U	EPA 609	04/24/97	1	84269
2282	DIMETHYLPHthalate	10774-02	1 U	EPA 506	04/24/97	1	84269
2284	DIETHYLPHthalate	10774-02	1 U	EPA 506	04/24/97	1	84269
2290	Di-N-BUTYLPHthalate	10774-02	1 U	EPA 506	04/24/97	1	84269
2294	BUTYL BENZYL PHthalate	10774-02	1 U	EPA 506	04/24/97	1	84269
9089	DIOCTYLPHthalate	10774-02	1 U	EPA 506	04/24/97	1	84269
9108*	2-CHLOROPHENOL	10774-02	5 U	EPA 604	04/24/97	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	10774-02	20 U	EPA 604	04/24/97	20	84269
9115*	PHENOL	10774-02	5 U	EPA 604	04/24/97	5	84269
9116*	2,4,6-TRICHLOROPHENOL	10774-02	10 U	EPA 604	04/24/97	10	84269

U - ANALYTE WAS NOT DETECTED; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT.

Envirodyne Inc.

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

Attention: Bart Ziegler

Post #	Fax Note	7671	Date	# of pages
To	Ammy WATSON			
Co./Dept.	Co.			
Phone #	4 pgs		Phone #	
Fax #			Fax #	

Project: PBCWF Expansion - System 2
2956 Pinehurst Drive West Palm Beach, FL

SAMPLE ID: Prod. Well #14

Collected by: Bart Ziegler

Collected on: 06/06/97

Received on: 06/06/97

Date of Analysis: 06/08/97

601 PURGEABLE HALOCARBONS

PARAMETER	RESULT	DL UNITS	ANALYST
Bromodichloromethane	BDL	0.5 µg/L	TAV
Bromoform	BDL	0.5 µg/L	TAV
Bromomethane	BDL	0.5 µg/L	TAV
Carbon tetrachloride	BDL	0.5 µg/L	TAV
Chlorobenzene	BDL	0.5 µg/L	TAV
Chloroethane	BDL	0.5 µg/L	TAV
2-Chloroethylvinyl ether	BDL	0.5 µg/L	TAV
Chloroform	BDL	0.5 µg/L	TAV
Chloromethane	BDL	0.5 µg/L	TAV
Dibromochloromethane	BDL	0.5 µg/L	TAV
1,2-Dichlorobenzene	BDL	0.5 µg/L	TAV
1,3-Dichlorobenzene	BDL	0.5 µg/L	TAV
1,4-Dichlorobenzene	BDL	0.5 µg/L	TAV
Dichlorodifluoromethane	BDL	0.5 µg/L	TAV
1,1-Dichloroethane	BDL	0.5 µg/L	TAV
1,2-Dichloroethane	BDL	0.5 µg/L	TAV
1,1-Dichloroethylane	BDL	0.5 µg/L	TAV
trans-1,2-Dichloroethene	BDL	0.5 µg/L	TAV
1,2-Dichloropropane	BDL	0.5 µg/L	TAV
cis-1,3-Dichloropropene	BDL	0.5 µg/L	TAV
trans-1,3-Dichloropropene	BDL	0.5 µg/L	TAV
Methylene chloride	BDL	0.5 µg/L	TAV
1,1,2,2-Tetrachloroethane	BDL	0.5 µg/L	TAV
Tetrachloroethylene	BDL	0.5 µg/L	TAV
1,1,1-Trichloroethane	BDL	0.5 µg/L	TAV
1,1,2-Trichloroethane	BDL	0.5 µg/L	TAV
Trichloroethylene	BDL	0.5 µg/L	TAV
Trichlorofluoromethane	BDL	0.5 µg/L	TAV
Vinyl chloride	BDL	0.5 µg/L	TAV

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

June 11, 1997
Report: 9706000063
Sample No: 9706000063 1

Attention: Bart Ziegler

Project: PBCWF Expansion - System 2
2956 Pinehurst Drive West Palm Beach, FL

SAMPLE ID: Prod. Well #14

Collected by: Bart Ziegler

Collected on: 06/06/97

Received on: 06/06/97

Date of Analysis: 06/08/97

602 VOLATILE ORGANIC COMPOUNDS

PARAMETER	RESULT	DL UNITS	ANALYST
Benzene	BDL	0.5 µg/L	TAV
Chlorobenzene	BDL	0.5 µg/L	TAV
1,2-Dichlorobenzene	BDL	0.5 µg/L	TAV
1,3-Dichlorobenzene	BDL	0.5 µg/L	TAV
1,4-Dichlorobenzene	BDL	0.5 µg/L	TAV
Ethylbenzene	BDL	0.5 µg/L	TAV
Methyl-tert-butyl ether	BDL	0.5 µg/L	TAV
Toluene	BDL	0.5 µg/L	TAV
Xylenes, Total	BDL	0.5 µg/L	TAV
Total BTEX	BDL	µg/L	TAV

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

June 11, 1997
Report: 9706000063
Sample No: 9706000063 2

Attention: Bart Ziegler

Project: PBCWF Expansion - System 2
2956 Pinehurst Drive West Palm Beach, FL

SAMPLE ID: Prod. Well #15

Collected by: Bart Ziegler

Collected on: 06/06/97

Received on: 06/06/97

Date of Analysis: 06/08/97

601 PURGEABLE HALOCARBONS

PARAMETER	RESULT	DL UNITS	ANALYST
Bromodichloromethane	BDL	0.5 µg/L	TAV
Bromoform	BDL	0.5 µg/L	TAV
Bromomethane	BDL	0.5 µg/L	TAV
Carbon tetrachloride	BDL	0.5 µg/L	TAV
Chlorobenzene	BDL	0.5 µg/L	TAV
Chloroethane	BDL	0.5 µg/L	TAV
2-Chloroethylvinyl ether	BDL	0.5 µg/L	TAV
Chloroform	BDL	0.5 µg/L	TAV
Chloromethane	BDL	0.5 µg/L	TAV
Dibromochloromethane	BDL	0.5 µg/L	TAV
1,2-Dichlorobenzene	BDL	0.5 µg/L	TAV
1,3-Dichlorobenzene	BDL	0.5 µg/L	TAV
1,4-Dichlorobenzene	BDL	0.5 µg/L	TAV
Dichlorodifluoromethane	BDL	0.5 µg/L	TAV
1,1-Dichloroethane	BDL	0.5 µg/L	TAV
1,2-Dichloroethane	BDL	0.5 µg/L	TAV
1,1-Dichloroethylene	BDL	0.5 µg/L	TAV
trans-1,2-Dichloroethene	BDL	0.5 µg/L	TAV
1,2-Dichloropropane	BDL	0.5 µg/L	TAV
cis-1,3-Dichloropropene	BDL	0.5 µg/L	TAV
trans-1,3-Dichloropropene	BDL	0.5 µg/L	TAV
Methylene chloride	BDL	0.5 µg/L	TAV
1,1,2,2-Tetrachloroethane	BDL	0.5 µg/L	TAV
Tetrachloroethylene	BDL	0.5 µg/L	TAV
1,1,1-Trichloroethane	BDL	0.5 µg/L	TAV
1,1,2-Trichloroethane	BDL	0.5 µg/L	TAV
Trichloroethylene	BDL	0.5 µg/L	TAV
Trichlorofluoromethane	BDL	0.5 µg/L	TAV
Vinyl chloride	BDL	0.5 µg/L	TAV

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

June 11, 1997
Report: 9706000063
Sample No: 9706000063 2

Attention: Bart Ziegler

Project: PBCWF Expansion - System 2
2956 Pinehurst Drive West Palm Beach, FL

SAMPLE ID: Prod. Well #15

Collected by: Bart Ziegler

Collected on: 06/06/97

Received on: 06/06/97

Date of Analysis: 06/08/97

602 VOLATILE ORGANIC COMPOUNDS

PARAMETER	RESULT	DL UNITS	ANALYST
Benzene	BDL	0.5 µg/L	TAV
Chlorobenzene	BDL	0.5 µg/L	TAV
1,2-Dichlorobenzene	BDL	0.5 µg/L	TAV
1,3-Dichlorobenzene	BDL	0.5 µg/L	TAV
1,4-Dichlorobenzene	BDL	0.5 µg/L	TAV
Ethylbenzene	BDL	0.5 µg/L	TAV
Methyl-tert-butyl ether	BDL	0.5 µg/L	TAV
Toluene	BDL	0.5 µg/L	TAV
Xylenes, Total	BDL	0.5 µg/L	TAV
Total BTEX	BDL	µg/L	TAV

Analysis contained herein conform to EPA and DEP approved methods per Envirodyne Comprehensive Quality Assurance Plan No. 890041G. Additional Laboratory Certification numbers: E86008, 86408, E83079, E86240, South Carolina 96022. All relevant quality assurance samples were within specified control limits unless otherwise stated.



Michael Rentoumis
President, Envirodyne, Inc.



Oleg I. Minko, Ph.D.
Quality Assurance Director

Envirodyne Inc.

4305 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

May 8, 1997
Report: 970400259
Sample No: 970400259 1

Attention: Bart Ziegler


Project: PBCWF Expansion - System 2
2956 Pinehurst Drive West Palm Beach, FL

Collected by: Bart Ziegler

REPORT OF ANALYSIS FOR: SM9222B TOTAL COLIFORM BACTERIA

SAMPLE ID	RESULT	DL	UNITS	DATE SAMPLED	DATE ANALYZED	ANALYST
Sys 2 #14 P.W.(Day 1)(AM)	Absent	1	cfu/100 ml	04/22/97	04/24/97	AMB
Sys 2 #14 P.W.(Day 1)(PM)	Absent	1	cfu/100 ml	04/22/97	04/24/97	AMB
Sys 2 #15 P.W.(Day 1)(AM)	Absent	1	cfu/100 ml	04/22/97	04/24/97	AMB
Sys 2 #15 P.W.(Day 1)(PM)	Absent	1	cfu/100 ml	04/22/97	04/24/97	AMB
Sys 2 #14 P.W.(Day 2)(AM)	Absent	1	cfu/100 ml	04/23/97	04/25/97	AMB
Sys 2 #14 P.W.(Day 2)(PM)	Absent	1	cfu/100 ml	04/23/97	04/25/97	AMB
Sys 2 #15 P.W.(Day 2)(AM)	Absent	1	cfu/100 ml	04/23/97	04/25/97	AMB
Sys 2 #15 P.W.(Day 2)(PM)	Absent	1	cfu/100 ml	04/23/97	04/25/97	AMB
Sys 2 #14 P.W.(Day 3)(AM)	Absent	1	cfu/100 ml	04/24/97	04/26/97	AMB
Sys 2 #14 P.W.(Day 3)(PM)	Absent	1	cfu/100 ml	04/24/97	04/26/97	AMB
Sys 2 #15 P.W.(Day 3)(AM)	Absent	1	cfu/100 ml	04/24/97	04/26/97	AMB
Sys 2 #15 P.W.(Day 3)(PM)	Absent	1	cfu/100 ml	04/24/97	04/26/97	AMB

Analysis Performed in Accordance with E.P.A. Methods
Laboratory Certification No. B86123
Laboratory Certification No. 86403

QA/QC Review 
BDL = Below Detection Limit
DL = Detection Limit

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

May 8, 1997
Report: 9704000259
Sample No: 9704000259 13

Attention: Bart Ziegler


Project: PBCWF Expansion - System 2
2956 Pinchurst Drive West Palm Beach, FL

Collected by: Bart Ziegler

REPORT OF ANALYSIS FOR: SM9222B TOTAL COLIFORM BACTERIA

SAMPLE ID	RESULT	DL	UNITS	DATE SAMPLED	DATE ANALYZED	ANALYST
Sys 2 #14 P.W.(Day 4)(AM)	Absent	1	cfu/100 ml	04/25/97	04/27/97	AMB
Sys 2 #14 P.W.(Day 4)(PM)	Absent	1	cfu/100 ml	04/25/97	04/27/97	AMB
Sys 2 #15 P.W.(Day 4)(AM)	Absent	1	cfu/100 ml	04/25/97	04/27/97	AMB
Sys 2 #15 P.W.(Day 4)(PM)	Absent	1	cfu/100 ml	04/25/97	04/27/97	AMB
Sys 2 #14 P.W.(Day 5)(AM)	Absent	1	cfu/100 ml	04/26/97	04/27/97	AMB
Sys 2 #14 P.W.(Day 5)(PM)	Absent	1	cfu/100 ml	04/26/97	04/27/97	AMB
Sys 2 #15 P.W.(Day 5)(AM)	Absent	1	cfu/100 ml	04/26/97	04/27/97	AMB
Sys 2 #15 P.W.(Day 5)(PM)	Absent	1	cfu/100 ml	04/26/97	04/27/97	AMB
Sys 2 #14 P.W.(Day 6)(AM)	Absent	1	cfu/100 ml	04/27/97	04/29/97	AMB
Sys 2 #14 P.W.(Day 6)(PM)	Absent	1	cfu/100 ml	04/27/97	04/29/97	AMB
Sys 2 #15 P.W.(Day 6)(AM)	Absent	1	cfu/100 ml	04/27/97	04/29/97	AMB
Sys 2 #15 P.W.(Day 6)(PM)	Absent	1	cfu/100 ml	04/27/97	04/29/97	AMB
Sys 2 #14 P.W.(Day 7)(AM)	Absent	1	cfu/100 ml	04/28/97	04/30/97	AMB

Analysis Performed in Accordance with E.P.A. Methods
Laboratory Certification No. E86138
Laboratory Certification No. 86405

QA/QC Review 
BDL = Below Detection Limit
DL = Detection Limit

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

May 8, 1997
Report: 970400259
Sample No: 970400259 25

Attention: Bart Ziegler


Project: PBCWP Expansion - System 2
2956 Pinehurst Drive West Palm Beach, FL

Collected by: Bart Ziegler

REPORT OF ANALYSIS FOR: SM9222B TOTAL COLIFORM BACTERIA

SAMPLE ID	RESULT	DL	UNITS	DATE SAMPLED	DATE ANALYZED	ANALYST
Sys 2 #14 P.W.(Day 7)(PM)	Absent	1	cfu/100 ml	04/28/97	04/30/97	AMB
Sys 2 #15 P.W.(Day 7)(AM)	Absent	1	cfu/100 ml	04/28/97	04/30/97	AMB
Sys 2 #15 P.W.(Day 7)(PM)	Absent	1	cfu/100 ml	04/28/97	04/30/97	AMB
Sys 2 #14 P.W.(Day 8)(AM)	Absent	1	cfu/100 ml	04/29/97	04/30/97	AMB
Sys 2 #14 P.W.(Day 8)(PM)	Absent	1	cfu/100 ml	04/29/97	04/30/97	AMB
Sys 2 #15 P.W.(Day 8)(AM)	Absent	1	cfu/100 ml	04/29/97	04/30/97	AMB
Sys 2 #15 P.W.(Day 8)(PM)	Absent	1	cfu/100 ml	04/29/97	04/30/97	AMB
Sys 2 #14 P.W.(Day 9)(AM)	Absent	1	cfu/100 ml	04/30/97	05/01/97	DJC
Sys 2 #14 P.W.(Day 9)(PM)	Absent	1	cfu/100 ml	04/30/97	05/01/97	DJC
Sys 2 #15 P.W.(Day 9)(AM)	Absent	1	cfu/100 ml	04/30/97	05/01/97	DJC
Sys 2 #15 P.W.(Day 9)(PM)	Absent	1	cfu/100 ml	04/30/97	05/01/97	DJC
Sys 2 #14 P.W.(Day10)(AM)	Absent	1	cfu/100 ml	05/01/97	05/02/97	DJC
Sys 2 #14 P.W.(Day10)(PM)	Absent	1	cfu/100 ml	05/01/97	05/02/97	DJC

Analysis Performed in Accordance with E.P.A. Methods
Laboratory Certification No. E86138
Laboratory Certification No. 86405

QA/QC Review 
BDL = Below Detection Limit
DL = Detection Limit

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

May 8, 1997
Report: 9704000259
Sample No: 9704000259 39

Attention: Bart Ziegler

Project: PBCWF Expansion - System 2
2936 Pinehurst Drive West Palm Beach, FL

Collected by: Bart Ziegler

REPORT OF ANALYSIS FOR: SM9222B TOTAL COLIFORM BACTERIA

SAMPLE ID	RESULT	DL UNITS	DATE SAMPLED	DATE ANALYZED	ANALYST
Sys 2 #15 P.W.(Day10)(AM)	Absent	1 cfu/100 ml	05/01/97	05/02/97	DJC
Sys 2 #15 P.W.(Day10)(PM)	Absent	1 cfu/100 ml	05/01/97	05/02/97	DJC

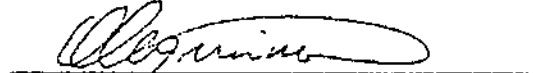
cfu = colony forming units

The Water Analysis is ACCEPTABLE by health department standards for safe public drinking water, with regards to Coliform bacteria using EPA approved methods.

Analysis contained herein conform to EPA and DEP approved methods per Envirodyne Comprehensive Quality Assurance Plan No. 890041G. Additional Laboratory Certification numbers: E86006, 86408, E83079, E86240. All relevant quality assurance samples were within specified control limits unless otherwise stated.



Michael Rentoumis
President, Envirodyne, Inc.



Oleg I. Minko, Ph.D.
Quality Assurance Director



Environmental Services of South Florida, Inc.

P.O. Box 10003 • Riviera Beach, Florida 33419 • (561) 848-7805

LAB # E85055
DHRB LAB #56117

LABORATORY ANALYSIS

WATER / WASTEWATER / SOIL / FOOD

CONSULTING

INDUSTRIAL / AGRICULTURAL / DOMESTIC

Johnson - Davis, Inc.

BACTERIOLOGICAL ANALYSIS

System Name: Palm Beach County System #2

Address: Palm Beach County, Florida

Sample Site: Palm Beach County Well Fields System #2
Pinhurst Drive

Date and Time of Collection: 5/15/97, 0930

E.S.S.F. Collector: M.P. Fiedor

Type of supply: Community Water System

Type of sample: Raw Water Line
Clearance

Date and Time of Sample Arrival in Lab: 5/15/97, 1200

Date and Time of Sample Analysis: 5/15/97, 1620

Analysis Method:

MP MTF MEM-MUG PA

Sample No.	Sample Point	Res. Cl (mg/l)	pH	Coliform, MF/100 ml Total	NON Coliform	Confirm Total	Confirm Fecal	Coliform E. Coli
1.				A	Light	A		
3.				A	Light			

- P - coliforms are present
A - Coliforms are absent

C - confluent growth
TNCU - too numerous to count

Michael A. Fiedor

Michael A. Fiedor
Director



Environmental Services of South Florida, Inc.

P.O. Box 10003 • Riviera Beach, Florida 33419 • (561) 848-7805

LAB # E66955
DHRS LAB #96117

LABORATORY ANALYSIS

WATER / WASTEWATER / SOIL / FOOD

CONSULTING

INDUSTRIAL / AGRICULTURAL / DOMESTIC

Johnson - Davis, Inc.

BACTERIOLOGICAL ANALYSIS

System Name: Palm Beach County System #2

Address: Palm Beach County, Florida

Sample Site: Palm Beach County Well Fields System #2
Pinehurst Drive

Date and Time of Collection: 5/16/97, 0645

E.S.S.F. Collector: M.P. Fiedor

Type of Supply: Community Water System

Type of Sample: Raw Water Line
Clearance

Date and Time of Sample Arrival in Lab: 5/16/97, 1420

Date and Time of Sample Analysis: 5/16/97, 1455

Analysis Method:

ME NTF MMO-MUG PA

Sample No.	Sample Point	Res. Cl (mg/l)	pH	Coliforms, MF/100 ml TOTAL	Non Coliform	Confirm Total	Confirm Fecal	Condition E. Coli
1.				A	Light			
3.				A	Light	A		

Michael A. Fiedor

* P - Coliforms are present
A - Coliforms are absent

C - Confluent growth
NTFC - Too numerous to count

Michael A. Fiedor
Director

System 3

SRWRF



ENVIRONMENTAL LABORATORIES, INC.

February 4, 1997

Mr. Bart Ziegler
Southeast Drilling
P.O. Box 271723
Tampa, FL 33688

Dear Mr. Ziegler:

Attached are the data reports for the following samples:

PPB Sample Number	Site Name	Your Sample ID	Sample Date	Sample Time
139431	Palm Beach Well Field	SRWRF PW-15	11/23/96	1500
139988	Palm Beach Well Field	SRWRF PW-16	12/8/96	1630

If you have any questions concerning these reports, please contact me.

Sincerely,

Paul Berman
Project Manager

PLB:cms

Enclosures

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (to be completed by system or lab)

System Name: System 3 - PBCWVO I.D. #: Well 15 - SRWRF Site
Address: 2065 Prairie Rd., P.O. Box 16097 WPB, FL 33416 Phone #: (561) 641-3429
Type (check one): (x) Community () Nontransient Noncommunity () Noncommunity

SAMPLE INFORMATION (to be completed by sampler)

Sample Date (MMDDYY) 1/1 Sample Time:
Sample Location (be specific):
Sampler Name and Phone:
Sampler's Signature: Title:

Check Type(s): () Distribution () Recheck of MCL () Resample of Lab Invalidated Sample
() Clearance () 1hm Max Res Time () Plant Tap
() Distrib entry pt () Raw () Composite of Multiple Sites-Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab) - ATTACH HRS ANALYTE SHEET*

Lab Name: PPB Environmental Laboratories, Inc. HRS #: 82282 Expiration Date:
Address: 6821 SW Archer Road, Gainesville, FL 32608 Phone #: (352) 377-2349

Subcontracted Lab HRS #: 83170, 82135, 84269, 82138 - ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (to be completed by lab) - SAMPLE NUMBER: 139431

Date Sample(s) Received: 11/25/96 Group(s) Analyzed & Results attached for compliance with 62-550, F.A.C.:

() Nitrate Only () Nitrite Only () Asbestos Only (x) Trihalomethanes
Inorganics- Volatile Organics- Secondaries- Pesticide/PCBs-
() All 17 (x) Partial (x) All 21 () Partial (x) All 14 () Partial () All 30 (x) Partial
Group I Unregulated- Group II Unregulated- Group III Unregulated- Radiochemicals-
() All 13 (x) Partial (x) All 23 () Partial (x) All 11 () Partial (x) Single Sample
() Qtrly Composite**

**Provide radiochemical sample dates & locations for each quarter

I, Paul Berman, do HEREBY CERTIFY that all attached analytical data are correct.

Signature Paul Berman

Title QA Officer Date 1/31/97

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: Sample Analysis Satisfactory:

Resample Requested for: Reason:

Person notified to resample: Date Notified:

DEP/HRS Reviewing Official:

*All HRS lab #s and their HRS Analyte Sheet for labs performing the attached water analyses must be provided. Failure to do so will result in rejection of the analyses and possible enforcement against the public water system for failure to sample.

INORGANIC ANALYSIS
62-550.310(1)
(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	139431	0.001 U	SM 3113B	01/17/97	0.001	82282
1010	BARIUM	(2)	139431	0.032	EPA 200.7	01/20/97	0.001	82282
1015	CADMIUM	(.005)	139431	0.0001 U	SM 3113B	01/22/97	0.0001	82282
1020	CHROMIUM	(0.1)	139431	0.011	EPA 200.7	01/20/97	0.005	82282
1024	CYANIDE	(0.2)	139431	0.004 U	SM 4500CNE	11/25/96	0.004	82282
1025	FLUORIDE	(4)	139431	0.33	SM 4500FC	12/11/96	0.02	82282
1030	LEAD	(0.015)	139431	0.001 U	SM 3113B	01/23/97	0.001	82282
1035	MERCURY	(0.002)	139431	0.0001 K	EPA 245.1	12/09/96	0.00005	82282
1036	NICKEL	(0.1)	139431	0.030 U	EPA 200.7	01/20/97	0.030	82282
1040	NITRATE	(10)	139431	0.372	EPA 353.2	12/18/96	0.004	82282
1041	NITRITE	(1)	139431	0.003 U	EPA 353.2	11/27/96	0.003	82282
1045	SELENIUM	(0.05)	139431	0.005 K	SM 3113B	01/26/97	0.001	82282
1052	SODIUM	(160)	139431	19.7	EPA 200.7	01/20/97	0.05	82282
1074	ANTIMONY	(0.006)	139431	0.004 K	SM 3113B	01/15/97	0.003	82282
1075	BERYLLIUM	(0.004)	139431	0.003 U	EPA 200.7	01/20/97	0.003	82282
1085	THALLIUM	(0.002)	139431	0.002 U	EPA 200.9	01/11/97	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS
62-550.320
(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1002	ALUMINUM	(0.2)	139431	0.447	EPA 200.7	01/28/97	0.01	82282
1017	CHLORIDE	(250)	139431	38.3	EPA 325.2	12/16/96	0.3	82282
1022	COPPER	(1)	139431	0.01 U	EPA 200.7	01/20/97	0.01	82282
1020	FLUORIDE	(2.0)	139431	0.33	SM 4500FC	12/11/96	0.02	82282
1028	IRON	(0.3)	139431	0.026	EPA 200.7	01/20/97	0.005	82282
1032	MANGANESE	(0.05)	139431	0.015 K	EPA 200.7	01/20/97	0.005	82282
1050	SILVER	(0.1)	139431	0.0001 U	SM 3113B	01/15/97	0.0001	82282
1055	SULFATE	(250)	139431	2	EPA 375.4	12/19/96	1	82282
1095	ZINC	(5)	139431	0.024	EPA 200.7	01/20/97	0.004	82282
1905	COLOR	(15 color units)	139431	40	SM 2120B	11/26/96	5	82282
1920	ODOR	(3 threshold odor number)	139431	1	SM 2150B	11/26/96	1	82282
1925	PH	(6.5-8.5)	139431	7.2	EPA 150.1	11/26/96	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		139431	279	SM 2540C	11/27/96	3	82282
2905	FOAMING AGENTS	(0.5)	139431	0.01 K	SM 5540C	11/25/96	0.025	82135

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).
K indicates analyte is less than value indicated, with value being greater than method detection limit.

U - Analyte was not detected; indicated concentration is method detection limit.

TRIHALOMETHANE ANALYSIS
62-550.310(2)(A)
(PWS027)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2950	TOTAL THMS	(0.10)	10002-01	0.0015 U	EPA 502.2	12/5/96	0.0015	84269

RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

Parameter ID	Name	(MCL pCi/l)	Sample Number	Analysis Result (pCi/l)	Analysis Method	Analysis Date	Error	Lab ID
4000	GROSS ALPHA		139431	1.4 ± 1.3	EPA 900.0	11/27/96	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		NA					
4030	RADIUM-228		NA					
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)
NA = NOT ANALYZED

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(B)
(PWS028)

Parameter ID	Name	(MCL µg/l)	Sample Number	Analysis Result (µg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2378	1,2,4-TRICHLOROBENZENE	(70)	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2380	CIS-1,2-DICHLOROETHYLENE	(70)	10002-01	0.2 U	EPA 502.2	12/05/96	0.2	84269
2955	XYLENES (TOTAL)	(10,000)	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2964	DICHLOROMETHANE	(5)	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2968	O-DICHLOROBENZENE	(600)	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2969	PARA-DICHLOROBENZENE	(75)	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2976	VINYL CHLORIDE	(1)	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2977	1,1-DICHLOROETHYLENE	(7)	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2979	TRANS-1,2-DICHLOROETHYLENE	(100)	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2980	1,2-DICHLOROETHANE	(3)	10002-01	0.2 U	EPA 502.2	12/05/96	0.2	84269
2981	1,1,1-TRICHLOROETHANE	(200)	10002-01	0.3 U	EPA 502.2	12/05/96	0.3	84269
2982	CARBON TETRACHLORIDE	(3)	10002-01	0.3 U	EPA 502.2	12/05/96	0.3	84269
2983	1,2-DICHLOROPROPANE	(5)	10002-01	0.3 U	EPA 502.2	12/05/96	0.3	84269
2984	TRICHLOROETHYLENE	(3)	10002-01	0.2 U	EPA 502.2	12/05/96	0.2	84269
2985	1,1,2-TRICHLOROETHANE	(5)	10002-01	0.3 U	EPA 502.2	12/05/96	0.3	84269
2987	TETRACHLOROETHYLENE	(3)	10002-01	0.2 U	EPA 502.2	12/05/96	0.2	84269
2989	MONOCHLOROBENZENE	(100)	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2990	BENZENE	(1)	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2991	TOLUENE	(1,000)	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2992	ETHYLBENZENE	(700)	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2996	STYRENE	(100)	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269

J - Analyte was not detected; indicated concentration is method detection limit.

PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(c)
(PWS029)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2005	ENDRIN	(2)	10002-01	0.01 U	EPA 508	11/26/96	0.01	84269
2010	LINDANE	(.2)	10002-01	0.01 U	EPA 508	11/26/96	0.01	84269
2015	METHOXYCHLOR	(40)	10002-01	0.02 U	EPA 508	11/26/96	0.02	84269
2020	TOXAPHENE	(3)	10002-01	0.2 U	EPA 508	11/26/96	0.2	84269
2031	DALAPON	(200)	10002-01	1 U	EPA 515.1	12/06/96	1	84269
2032	DIQUAT	(20)	10002-01	1 U	EPA 549.1	11/26/96	4	84269
2033	ENDOTHALL	(100)	10002-01	10 U	EPA 548	11/26/96	10	84269
2034	GLYPHOSATE	(700)	10002-01	10 U	EPA 547	12/03/96	10	84269
2035	DI(2-ETHYLHEXYL)ADIPATE	(400)	10002-01	1 U	EPA 506	11/26/96	1	84269
2036	OXAMYL (VYDATE)	(200)	10002-01	0.5 U	EPA 531.1	12/03/96	0.5	84269
2037	SIMAZINE	(4)	10002-01	0.1 U	EPA 507	11/26/96	0.1	84269
2039	DI(2-ETHYLHEXYL)PHTHALATE	(6)	10002-01	1 U	EPA 506	11/26/96	1	84269
2040	PICLORAM	(500)	10002-01	0.2 U	EPA 515.1	12/06/96	0.2	84269
2041	DINOSEB	(7)	10002-01	0.2 U	EPA 515.1	12/06/96	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	10002-01	0.1 U	EPA 505	12/05/96	0.1	84269
2046	CARBOFURAN	(40)	10002-01	0.5 U	EPA 531.1	12/03/96	0.5	84269
2050	ATRAZINE	(3)	10002-01	0.1 U	EPA 507	11/26/96	0.1	84269
2051	ALACHLOR	(2)	10002-01	0.3 U	EPA 507	11/26/96	0.3	84269
2065	HEPTACHLOR	(.4)	10002-01	0.01 U	EPA 508	11/26/96	0.01	84269
2067	HEPTACHLOR EPOXIDE	(.2)	10002-01	0.01 U	EPA 508	11/26/96	0.01	84269
2105	2,4-D	(70)	10002-01	0.5 U	EPA 515.1	12/06/96	0.5	84269
2110	2,4,5-TP (SILVEX)	(50)	10002-01	0.05 U	EPA 515.1	12/06/96	0.05	84269
2274	HEXACHLOROBENZENE	(1)	10002-01	0.01 U	EPA 508	11/26/96	0.01	84269
2306	BENZO(A)PYRENE	(.2)	10002-01	0.01 U	EPA 550	11/26/96	0.01	84269
2326	PENTACHLOROPHENOL	(1)	10002-01	0.05 U	EPA 515.1	12/06/96	0.05	84269
2383	PCB	(.5)	10002-01	0.05 U	EPA 508	11/26/96	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	10002-01	0.005 U	EPA 504	12/06/96	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	10002-01	0.005 U	EPA 504	12/06/96	0.005	84269
2959	CHLORDANE	(2)	10002-01	0.05 U	EPA 508	11/26/96	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2021	CARBARYL		10002-01	0.5 U	EPA 531.1	12/03/96	0.5	84269
2022	METHOMYL		10002-01	0.5 U	EPA 531.1	12/03/96	0.5	84269
2043	ALDICARB SULFOXIDE		10002-01	0.5 U	EPA 531.1	12/03/96	0.5	84269
2044	ALDICARB SULFONE		10002-01	0.5 U	EPA 531.1	12/03/96	0.5	84269
2045	METOLACHLOR		10002-01	0.3 U	EPA 507	11/26/96	0.3	84269
2047	ALDICARB		10002-01	0.5 U	EPA 531.1	12/03/96	0.5	84269
2066	3-HYDROXYCARBOFURAN		10002-01	0.5 U	EPA 531.1	12/03/96	0.5	84269
2077	PROPACHLOR		10002-01	0.05 U	EPA 508	11/26/96	0.05	84269
2356	ALDRIN		10002-01	0.01 U	EPA 508	11/26/96	0.01	84269
2364	DIELDRIN		10002-01	0.01 U	EPA 508	11/26/96	0.01	84269
2440	DICAMBA		10002-01	0.05 U	EPA 515.1	12/06/96	0.05	84269
2595	METRIBUZIN		10002-01	0.2 U	EPA 507	11/26/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

UNREGULATED GROUP II ANALYSIS
62-550.410
(PWS034)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2210	CHLOROMETHANE	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2212	DICHLORODIFLUOROMETHANE	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2214	BROMOMETHANE	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2216	CHLOROETHANE	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2218	TRICHLOROFLUOROMETHANE	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2408	DIBROMOMETHANE	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2410	1,1-DICHLOROPROPYLENE	10002-01	0.3 U	EPA 502.2	12/05/96	0.3	84269
2412	1,3-DICHLOROPROPANE	10002-01	0.3 U	EPA 502.2	12/05/96	0.3	84269
2413	1,3-DICHLOROPROPENE	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	10002-01	0.3 U	EPA 502.2	12/05/96	0.3	84269
2416	2,2-DICHLOROPROPANE	10002-01	0.3 U	EPA 502.2	12/05/96	0.3	84269
2941	CHLOROFORM	10002-01	0.2 U	EPA 502.2	12/05/96	0.2	84269
2942	BROMOFORM	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2943	BROMODICHLOROMETHANE	10002-01	0.3 U	EPA 502.2	12/05/96	0.3	84269
2944	DIBROMOCHLOROMETHANE	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2965	O-CHLOROTOLUENE	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2966	P-CHLOROTOLUENE	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2967	M-DICHLOROBENZENE	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269
2978	1,1-DICHLOROETHANE	10002-01	0.3 U	EPA 502.2	12/05/96	0.3	84269
2986	1,1,1,2-TETRACHLOROETHANE	10002-01	0.3 U	EPA 502.2	12/05/96	0.3	84269
2988	1,1,2,2-TETRACHLOROETHANE	10002-01	0.3 U	EPA 502.2	12/05/96	0.3	84269
2993	BROMOBENZENE	10002-01	0.5 U	EPA 502.2	12/05/96	0.5	84269

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2262	ISOPHORONE	10002-01	1 U	EPA 609	11/26/96	1	84269
2270	2,4-DINITROTOLUENE	10002-01	1 U	EPA 609	11/26/96	1	84269
2282	DIMETHYLPHTHALATE	10002-01	1 U	EPA 506	11/26/96	1	84269
2284	DIETHYLPHTHALATE	10002-01	1 U	EPA 506	11/26/96	1	84269
2290	DI-N-BUTYLPHTHALATE	10002-01	1 U	EPA 506	11/26/96	1	84269
2294	BUTYL BENZYL PHTHALATE	10002-01	1 U	EPA 506	11/26/96	1	84269
9089	DIOCTYLPHTHALATE	10002-01	1 U	EPA 506	11/26/96	1	84269
9108*	2-CHLOROPHENOL	10002-01	5 U	EPA 604	11/26/96	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	10002-01	20 U	EPA 604	11/26/96	20	84269
9115*	PHENOL	10002-01	5 U	EPA 604	11/26/96	5	84269
9116*	2,4,6-TRICHLOROPHENOL	10002-01	10 U	EPA 604	11/26/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (to be completed by system or lab)

System Name: System 3 - PBCWUD I.D. #: Well 16 - SRWRF Site
Address: 2065 Prairie Road, P.O. Box 16097, WPB FL 32416 Phone #: (561) 641-3429
Type (check one): (X) Community () Nontransient Noncommunity () Noncommunity

SAMPLE INFORMATION (to be completed by sampler)

Sample Date (MMDDYY): / / Sample Time:
Sample Location (be specific):
Sampler Name and Phone: ()
Sampler's Signature: Title:
Check Type(s): () Distribution () Recheck of MCL () Resample of Lab Invalidated Sample
() Clearance () Thm Max Res Time () Plant Tap
() Distrib entry pt () Raw () Composite of Multiple Sites-Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab) - ATTACH HRS ANALYTE SHEET*

Lab Name: PPB Environmental Laboratories, Inc. HRS #: 82282 Expiration Date:
Address: 6821 SW Archer Road, Gainesville, FL 32608 Phone #: (352) 377-2349

Subcontracted Lab HRS #: 83170, 82135, 84269, 82138 - ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (to be completed by lab) - SAMPLE NUMBER: 139988

Date Sample(s) Received: 12/10/96 Group(s) Analyzed & Results attached for compliance with 62-550, F.A.C.:
() Nitrate Only () Nitrite Only () Asbestos Only (x) Trihalomethanes
Inorganics- Volatile Organics- Secondaries- Pesticide/PCBs-
() All 17 (x) Partial (x) All 21 () Partial (x) All 14 () Partial () All 30 (x) Partial
Group I Unregulated- Group II Unregulated- Group III Unregulated- Radiochemicals-
() All 13 (x) Partial (x) All 23 () Partial (x) All 11 () Partial (x) Single Sample
() Qtrly Composite**
**Provide radiochemical sample dates & locations for each quarter

I, Paul Berman, do HEREBY CERTIFY that all attached analytical data are correct.
Signature: [Signature] Title: QA Officer Date: 1/31/97

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: Sample Analysis Satisfactory:
Resample Requested for: Reason:
Person notified to resample: Date Notified:
DEP/HRS Reviewing Official:

*All HRS lab #s and their HRS Analyte Sheet for labs performing the attached water analyses must be provided. Failure to do so will result in rejection of the analyses and possible enforcement against the public water system for failure to sample. Effective January 1995

INORGANIC ANALYSIS
62-550.310(1)
(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	139988	0.001 U	SM 3113B	01/24/97	0.001	82282
1010	BARIUM	(2)	139988	0.032	EPA 200.7	01/24/97	0.001	82282
1015	CADMIUM	(.005)	139988	0.0001 U	SM 3113B	01/22/97	0.0001	82282
1020	CHROMIUM	(0.1)	139988	0.014 K	EPA 200.7	01/24/97	0.005	82282
1024	CYANIDE	(0.2)	139988	0.004 U	SM 4500CNE	12/21/96	0.004	82282
1025	FLUORIDE	(4)	139988	0.30	SM 4500FC	12/11/96	0.02	82282
1030	LEAD	(0.015)	139988	0.001 U	SM 3113B	01/23/97	0.001	82282
1035	MERCURY	(0.002)	139988	0.00005 U	EPA 245.1	12/13/96	0.00005	82282
1036	NICKEL	(0.1)	139988	0.030 U	EPA 200.7	01/29/97	0.030	82282
1040	NITRATE	(10)	139988	0.01 K	EPA 353.2	01/03/97	0.004	82282
1041	NITRITE	(1)	139988	0.003 U	EPA 353.2	12/11/96	0.003	82282
1045	SELENIUM	(0.05)	139988	0.002 K	SM 3113B	01/21/97	0.001	82282
1052	SODIUM	(160)	139988	29	EPA 200.7	01/24/97	0.05	82282
1074	ANTIMONY	(0.006)	139988	0.003 U	SM 3113B	01/28/97	0.003	82282
1075	BERYLLIUM	(0.004)	139988	0.003 U	EPA 200.7	01/24/97	0.003	82282
1085	THALLIUM	(0.002)	139988	0.002 U	EPA 200.9	01/24/97	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS
62-550.320
(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1002	ALUMINUM	(0.2)	139988	0.052	EPA 200.7	01/29/97	0.01	82282
1017	CHLORIDE	(250)	139988	50	EPA 325.2	12/24/96	0.3	82282
1022	COPPER	(1)	139988	0.011	EPA 200.7	01/24/97	0.01	82282
1020	FLUORIDE	(2.0)	139988	0.30	SM 4500FC	12/11/96	0.02	82282
1028	IRON	(0.3)	139988	0.041	EPA 200.7	01/24/97	0.005	82282
1032	MANGANESE	(0.05)	139988	0.006	EPA 200.7	01/29/97	0.005	82282
1050	SILVER	(0.1)	139988	0.0001 U	SM 3113B	01/23/97	0.0001	82282
1055	SULFATE	(250)	139988	276	EPA 375.4	01/03/97	1	82282
1095	ZINC	(5)	139988	0.019	EPA 200.7	01/24/97	0.004	82282
1905	COLOR	(15 color units)	139988	50	SM 2120B	12/10/96	5	82282
1920	ODOR	(3 threshold odor number)	139988	2	SM 2150B	12/10/96	1	82282
1925	PH	(6.5-8.5)	139988	7.7	EPA 150.1	12/10/96	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		139988	193	SM 2540C	12/12/96	3	82282
2905	FOAMING AGENTS	(0.5)	139988	0.07	SM 5540C	12/12/96	0.025	82135

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).
K indicates analyte is less than value indicated, with value being greater than method detection limit.

U - Analyte was not detected; indicated concentration is method detection limit.

TRIHALOMETHANE ANALYSIS
62-550.310(2)(A)
(PWS027)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2950	TOTAL THMS	(0.10)	10071-01	0.0015 U	EPA 502.2	12/13/96	0.0015	84269

RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

Parameter ID	Name	(MCL pCi/l)	Sample Number	Analysis Result (pCi/l)	Analysis Method	Analysis Date	Error	Lab ID
4000	GROSS ALPHA		139988	1.8 ± 2.1	EPA 900.0	12/23/97	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		NA					
4030	RADIUM-228		NA					
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)
NA = NOT ANALYZED

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(B)
(PWS028)

Parameter ID	Name	(MCL µg/l)	Sample Number	Analysis Result (µg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2378	1,2,4-TRICHLOROENZENE	(70)	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2380	CIS-1,2-DICHLOROETHYLENE	(70)	09180-01	0.2 U	EPA 502.2	12/13/96	0.2	84269
2955	XYLENES (TOTAL)	(10,000)	09180-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2964	DICHLOROMETHANE	(5)	09180-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2968	O-DICHLOROENZENE	(600)	09180-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2969	PARA-DICHLOROENZENE	(75)	09180-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2976	VINYL CHLORIDE	(1)	09180-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2977	1,1-DICHLOROETHYLENE	(7)	09180-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2979	TRANS-1,2-DICHLOROETHYLENE	(100)	09180-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2980	1,2-DICHLOROETHANE	(3)	09180-01	0.2 U	EPA 502.2	12/13/96	0.2	84269
2981	1,1,1-TRICHLOROETHANE	(200)	09180-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2982	CARBON TETRACHLORIDE	(3)	09180-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2983	1,2-DICHLOROPROPANE	(5)	09180-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2984	TRICHLOROETHYLENE	(3)	09180-01	0.2 U	EPA 502.2	12/13/96	0.2	84269
2985	1,1,2-TRICHLOROETHANE	(5)	09180-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2987	TETRACHLOROETHYLENE	(3)	09180-01	0.2 U	EPA 502.2	12/13/96	0.2	84269
2989	MONOCHLOROENZENE	(100)	09180-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2990	BENZENE	(1)	09180-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2991	TOLUENE	(1,000)	09180-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2992	ETHYLBENZENE	(700)	09180-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2996	STYRENE	(100)	09180-01	0.5 U	EPA 502.2	12/13/96	0.5	84269

Analyte was not detected; indicated concentration is method detection limit.

PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(c)
(PWS029)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2005	ENDRIN	(2)	10071-01	0.01 U	EPA 508	12/11/96	0.01	84269
2010	LINDANE	(.2)	10071-01	0.01 U	EPA 508	12/11/96	0.01	84269
2015	METHOXYCHLOR	(40)	10071-01	0.02 U	EPA 508	12/11/96	0.02	84269
2020	TOXAPHENE	(3)	10071-01	0.2 U	EPA 508	12/11/96	0.2	84269
2031	DALAPON	(200)	10071-01	1 U	EPA 515.1	12/12/96	1	84269
2032	DIQUAT	(20)	10071-01	1 U	EPA 549.1	12/11/96	4	84269
2033	ENDOTHALL	(100)	10071-01	10 U	EPA 548	12/16/96	10	84269
2034	GLYPHOSATE	(700)	10071-01	10 U	EPA 547	12/23/96	10	84269
2035	DI(2-ETHYLHEXYL)ADIPATE	(400)	10071-01	1 U	EPA 506	12/11/96	1	84269
2036	OXAMYL (VYDATE)	(200)	10071-01	0.5 U	EPA 531.1	12/13/96	0.5	84269
2037	SIMAZINE	(4)	10071-01	0.1 U	EPA 507	12/11/96	0.1	84269
2039	DI(2-ETHYLHEXYL)PHTHALATE	(6)	10071-01	1 U	EPA 506	12/11/96	1	84269
2040	PICLORAM	(500)	10071-01	0.2 U	EPA 515.1	12/12/96	0.2	84269
2041	DINOSEB	(7)	10071-01	0.2 U	EPA 515.1	12/12/96	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	10071-01	0.1 U	EPA 505	12/26/96	0.1	84269
2046	CARBOFURAN	(40)	10071-01	0.5 U	EPA 531.1	12/13/96	0.5	84269
2050	ATRAZINE	(3)	10071-01	0.1 U	EPA 507	12/11/96	0.1	84269
2051	ALACHLOR	(2)	10071-01	0.3 U	EPA 507	12/11/96	0.3	84269
2065	HEPTACHLOR	(.4)	10071-01	0.01 U	EPA 508	12/11/96	0.01	84269
2067	HEPTACHLOR EPOXIDE	(.2)	10071-01	0.01 U	EPA 508	12/11/96	0.01	84269
2105	2,4-D	(70)	10071-01	0.5 U	EPA 515.1	12/12/96	0.5	84269
2110	2,4,5-TP (SILVEX)	(50)	10071-01	0.05 U	EPA 515.1	12/12/96	0.05	84269
2274	HEXACHLOROBENZENE	(1)	10071-01	0.01 U	EPA 508	12/11/96	0.01	84269
2276	BENZO(A)PYRENE	(.2)	10071-01	0.01 U	EPA 550	12/11/96	0.01	84269
2276	PENTACHLOROPHENOL	(1)	10071-01	0.05 U	EPA 515.1	12/12/96	0.05	84269
2383	PCB	(.5)	10071-01	0.05 U	EPA 508	12/11/96	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	10071-01	0.005 U	EPA 504	12/22/96	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	10071-01	0.005 U	EPA 504	12/22/96	0.005	84269
2959	CHLORDANE	(2)	10071-01	0.05 U	EPA 508	12/11/96	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2021	CARBARYL		10071-01	0.5 U	EPA 531.1	12/13/96	0.5	84269
2022	METHOMYL		10071-01	0.5 U	EPA 531.1	12/13/96	0.5	84269
2043	ALDICARB SULFOXIDE		10071-01	0.5 U	EPA 531.1	12/13/96	0.5	84269
2044	ALDICARB SULFONE		10071-01	0.5 U	EPA 531.1	12/13/96	0.5	84269
2045	METOLACHLOR		10071-01	0.3 U	EPA 507	12/11/96	0.3	84269
2047	ALDICARB		10071-01	0.5 U	EPA 531.1	12/13/96	0.5	84269
2066	3-HYDROXYCARBOFURAN		10071-01	0.5 U	EPA 531.1	12/13/96	0.5	84269
2077	PROPACHLOR		10071-01	0.05 U	EPA 508	12/11/96	0.05	84269
2356	ALDRIN		10071-01	0.01 U	EPA 508	12/11/96	0.01	84269
2364	DIELDRIN		10071-01	0.01 U	EPA 508	12/11/96	0.01	84269
2440	DICAMBA		10071-01	0.05 U	EPA 515.1	12/12/96	0.05	84269
2595	METRIBUZIN		10071-01	0.2 U	EPA 507	12/11/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

U - Analyte was less than indicated concentration; indicated concentration is method detection limit multiplied by sample dilution factor.

U - Reduced sample volume used for analysis due to interference from sediment.

UNREGULATED GROUP II ANALYSIS
62-550.410
(PWS034)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2210	CHLOROMETHANE	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2212	DICHLORODIFLUOROMETHANE	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2214	BROMOMETHANE	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2216	CHLOROETHANE	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2218	TRICHLOROFLUOROMETHANE	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2408	DIBROMOMETHANE	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2410	1,1-DICHLOROPROPYLENE	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2412	1,3-DICHLOROPROPANE	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2413	1,3-DICHLOROPROPENE	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2416	2,2-DICHLOROPROPANE	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2941	CHLOROFORM	10071-01	0.2 U	EPA 502.2	12/13/96	0.2	84269
2942	BROMOFORM	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2943	BROMODICHLOROMETHANE	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2944	DIBROMOCHLOROMETHANE	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2965	O-CHLOROTOLUENE	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2966	P-CHLOROTOLUENE	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2967	M-DICHLOROENZENE	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2978	1,1-DICHLOROETHANE	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2986	1,1,1,2-TETRACHLOROETHANE	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2988	1,1,2,2-TETRACHLOROETHANE	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2993	BROMOBENZENE	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2262	ISOPHORONE	10071-01	1 U	EPA 609	12/11/96	1	84269
2270	2,4-DINITROTOLUENE	10071-01	1 U	EPA 609	12/11/96	1	84269
2282	DIMETHYLPHthalate	10071-01	1 U	EPA 506	12/11/96	1	84269
2284	DIETHYLPHthalate	10071-01	1 U	EPA 506	12/11/96	1	84269
2290	DI-N-BUTYLPHthalate	10071-01	1 U	EPA 506	12/11/96	1	84269
2294	BUTYL BENZYL PHthalate	10071-01	1 U	EPA 506	12/11/96	1	84269
9089	DIOCTYLPHthalate	10071-01	1 U	EPA 506	12/11/96	1	84269
9108*	2-CHLOROPHENOL	10071-01	5 U	EPA 604	12/16/96	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	10071-01	20 U	EPA 604	12/16/96	20	84269
9115*	PHENOL	10071-01	5 U	EPA 604	12/16/96	5	84269
9116*	2,4,6-TRICHLOROPHENOL	10071-01	10 U	EPA 604	12/16/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FLORIDA 34657

813-855-1844

PPB Environmental Laboratories, Inc.
6821 SW Archer Road
Gainesville, Florida 32608

January 7, 1997
Project No. 10071
Page 1 of 6

LABORATORY REPORT

Project Description: PPB Project - Southeast Drilling
Sample Description: 01 - Water, PPB No. 139988, PW-16, sampled 12/9/96
Date Received: 12/11/96, 1230

- DEP Report Forms Attached

FHRS Environmental Lab No. E84129
FHRS Drinking Water Lab No. 84269
Comprehensive QA Plan No. 870317



Francis I. Daniels
Laboratory Director

WB No. 139988

TRIHALOMETHANE ANALYSIS
 62-550.310(2)(a)
 (PWS027)

<u>Parameter ID</u>	<u>NAME (MCL mg/l)</u>	<u>Sample Number</u>	<u>Analysis Result (mg/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2950	Total THMs (0.10)	10071-01	0.0015 U	EPA 502.2	12/13/96	0.0015	84269

VOLATILE ORGANIC ANALYSIS
 62-550.310(2) (b)
 (PWS028)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2378	1,2,4-Trichlorobenzene (70)	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2380	cis-1,2-Dichloroethene (70)	10071-01	0.2 U	EPA 502.2	12/13/96	0.2	84269
2955	Xylenes (Total) (10,000)	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2956	Dichloromethane (5)	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2968	o-Dichlorobenzene (600)	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2969	p-Dichlorobenzene (75)	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2976	Vinyl chloride (1)	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2977	1,1-Dichloroethene (7)	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2979	trans-1,2- Dichloroethene (100)	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2980	1,2- Dichloroethane (3)	10071-01	0.2 U	EPA 502.2	12/13/96	0.2	84269
2981	1,1,1-Trichloroethane (200)	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2982	Carbon tetrachloride (3)	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2983	1,2-Dichloropropane (5)	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2984	Trichloroethene (3)	10071-01	0.2 U	EPA 502.2	12/13/96	0.2	84269
2985	1,1,2-Trichloroethane (5)	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2987	Tetrachloroethene (3)	10071-01	0.2 U	EPA 502.2	12/13/96	0.2	84269
2989	Monochlorobenzene (100)	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2990	Benzene (1)	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2991	Toluene (1,000)	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2992	Ethylbenzene (700)	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2995	Styrene (100)	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

PESTICIDE & PCB CHEMICAL ANALYSIS
62-550.310(2) (c)
(PWS029)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result (ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2005	Endrin (2)	10071-01	0.01 U	EPA 508	12/11/96	0.01	84269
2010	Lindane (.2)	10071-01	0.01 U	EPA 508	12/11/96	0.01	84269
2015	Methoxychlor (40)	10071-01	0.02 U	EPA 508	12/11/96	0.02	84269
2020	Toxaphene (3)	10071-01	0.2 U	EPA 508	12/11/96	0.2	84269
2031	Dalapon (200)	10071-01	1 U	EPA 515.1	12/12/96	1	84269
2032	Diquat (20)	10071-01	1 U	EPA 549.1	12/11/96	1	84269
2033	Endothall (100)	10071-01	10 U	EPA 548.1	12/16/96	10	84269
2034	Glyphosate (700)	10071-01	10 U	EPA 547	12/23/96	10	84269
2035	Di(2-ethylhexyl)adipate (400)	10071-01	1 U	EPA 506	12/11/96	1	84269
2036	Oxamyl (Vydate) (200)	10071-01	0.5 U	EPA 531.1	12/13/96	0.5	84269
2037	Simazine (4)	10071-01	0.1 U	EPA 507	12/11/96	0.1	84269
2040	Di(2-ethylhexyl)phthalate (6)	10071-01	1 U	EPA 506	12/11/96	1	84269
2040	Picloram (500)	10071-01	0.2 U	EPA 515.1	12/12/96	0.2	84269
2041	Dinoseb (7)	10071-01	0.2 U	EPA 515.1	12/12/96	0.2	84269
2042	Hexachlorocyclopentadiene (50)	10071-01	0.1 U	EPA 505	12/26/96	0.1	84269
2046	Carbofuran (40)	10071-01	0.5 U	EPA 531.1	12/13/96	0.5	84269
2050	Atrazine (3)	10071-01	0.1 U	EPA 507	12/11/96	0.1	84269
2051	Alachlor (2)	10071-01	0.3 U	EPA 507	12/11/96	0.3	84269
2065	Heptachlor (.4)	10071-01	0.01 U	EPA 508	12/11/96	0.01	84269
2067	Heptachlor epoxide (.2)	10071-01	0.01 U	EPA 508	12/11/96	0.01	84269
2105	2,4-D (70)	10071-01	0.5 U	EPA 515.1	12/12/96	0.5	84269
2110	2,4,5-TP (Silvex) (50)	10071-01	0.05 U	EPA 515.1	12/12/96	0.05	84269
2274	Hexachlorobenzene (1)	10071-01	0.01 U	EPA 508	12/11/96	0.01	84269
2306	Benzo(a)pyrene (.2)	10071-01	0.01 U	EPA 550	12/11/96	0.01	84269
2326	Pentachlorophenol (1)	10071-01	0.05 U	EPA 515.1	12/12/96	0.05	84269
2383	PCBs (.5)	10071-01	0.05 U	EPA 508	12/11/96	0.05	84269
2931	Dibromochloropropane (.2)	10071-01	0.005 U	EPA 504.1	12/22/96	0.005	84269
2946	Ethylene dibromide (.02)	10071-01	0.005 U	EPA 504.1	12/22/96	0.005	84269
2959	Chlordane (2)	10071-01	0.05 U	EPA 508	12/11/96	0.05	84269

U - Analyte was not detected; indicated concentration is method detection limit.

BS No. 139988

UNREGULATED GROUP I ANALYSIS
 62-550.405
 (PWS035)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (mg/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2021	Carbaryl	10071-01	0.5 U	EPA 531.1	12/13/96	0.5	84269
2022	Methomyl	10071-01	0.5 U	EPA 531.1	12/13/96	0.5	84269
2043	Aldicarb sulfoxide	10071-01	0.5 U	EPA 531.1	12/13/96	0.5	84269
2044	Aldicarb sulfone	10071-01	0.5 U	EPA 531.1	12/13/96	0.5	84269
2045	Metolachlor	10071-01	0.3 U	EPA 507	12/11/96	0.3	84269
2047	Aldicarb	10071-01	0.5 U	EPA 531.1	12/13/96	0.5	84269
2066	3-Hydroxycarbofuran	10071-01	0.5 U	EPA 531.1	12/13/96	0.5	84269
2076	Butachlor	10071-01	0.4 U	EPA 507	12/11/96	0.4	84269
2077	Propachlor	10071-01	0.05 U	EPA 508	12/11/96	0.05	84269
2356	Aldrin	10071-01	0.01 U	EPA 508	12/11/96	0.01	84269
2364	Dieldrin	10071-01	0.01 U	EPA 508	12/11/96	0.01	84269
2595	Dicamba	10071-01	0.05 U	EPA 515.1	12/12/96	0.05	84269
2595	Metribuzin	10071-01	0.2 U	EPA 507	12/11/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

'B No. 139988

UNREGULATED GROUP II ANALYSIS
 62-550.410
 (PWS034)

<u>Parameter</u> <u>ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample</u> <u>Number</u>	<u>Analysis</u> <u>Result (ug/l)</u>	<u>Analyt.</u> <u>Method</u>	<u>Analysis</u> <u>Date</u>	<u>MDL</u>	<u>Lab</u> <u>ID</u>
2210	Chloromethane	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2212	Dichlorodifluoromethane	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2214	Bromomethane	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2216	Chloroethane	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2218	Trichlorofluoromethane	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2251	Methyl-tert-butyl-ether	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2408	Dibromomethane	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2410	1,1-Dichloropropene	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2412	1,3-Dichloropropane	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2413	1,3-Dichloropropene	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2414	1,2,3-Trichloropropane	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2416	2,2-Dichloropropane	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2941	Chloroform	10071-01	0.2 U	EPA 502.2	12/13/96	0.2	84269
2942	Bromoform	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2943	Bromodichloromethane	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2944	Dibromochloromethane	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2965	o-Chlorotoluene	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2966	p-Chlorotoluene	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2967	m-Dichlorobenzene	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269
2978	1,1-Dichloroethane	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2986	1,1,1,2-Tetrachloroethane	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2988	1,1,2,2-Tetrachloroethane	10071-01	0.3 U	EPA 502.2	12/13/96	0.3	84269
2993	Bromobenzene	10071-01	0.5 U	EPA 502.2	12/13/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

PB No. 139988

UNREGULATED GROUP III ANALYSIS
 62-550.415
 (PWS036 & 037*)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2262	Isophorone	10071-01	1 U	EPA 609	12/11/96	1	84269
2270	2,4-Dinitrotoluene	10071-01	1 U	EPA 609	12/11/96	1	84269
2282	Dimethylphthalate	10071-01	1 U	EPA 506	12/11/96	1	84269
2284	Diethylphthalate	10071-01	1 U	EPA 506	12/11/96	1	84269
2290	Di-n-butylphthalate	10071-01	1 U	EPA 506	12/11/96	1	84269
2294	Butyl benzyl phthalate	10071-01	1 U	EPA 506	12/11/96	1	84269
9089	Di-n-octylphthalate	10071-01	1 U	EPA 506	12/11/96	1	84269
9108*	2-Chlorophenol	10071-01	5 U	EPA 604	12/16/96	5	84269
9112*	2-Methyl-4,6-dinitrophenol	10071-01	20 U	EPA 604	12/16/96	20	84269
9115*	Phenol	10071-01	5 U	EPA 604	12/16/96	5	84269
9116*	2,4,6-Trichlorophenol	10071-01	10 U	EPA 604	12/16/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FLORIDA 34677

813-855-1844

PPB Environmental Laboratories, Inc.
6821 SW Archer Road
Gainesville, Florida 32608

December 26, 1996
Project No. 10002
Page 1 of 6

LABORATORY REPORT

Project Description: PPB Project - Southeast Drilling
Sample Description: 01 - Water, PPB No. 139431, sampled 11/23/96, 1500
Date Received: 11/26/96, 1230

- DEP Report Forms Attached

FHRS Environmental Lab No. E84129
FHRS Drinking Water Lab No. 84269
Comprehensive QA Plan No. 870317



Francis I. Daniels
Laboratory Director

WB No. 139431

TRIHALOMETHANE ANALYSIS
 62-550.310(2)(a)
 (PWS027)

Parameter ID	NAME (MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2950	Total THMs (0.10)	10002-01	0.0015 U	EPA 502.2	12/5/96	0.0015	84269

VOLATILE ORGANIC ANALYSIS
 62-550.310(2) (b)
 (PWS028)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result (ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2378	1,2,4-Trichlorobenzene (70)	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2380	cis-1,2-Dichloroethene (70)	10002-01	0.2 U	EPA 502.2	12/5/96	0.2	84269
2955	Xylenes (Total) (10,000)	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2964	Dichloromethane (5)	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2968	o-Dichlorobenzene (600)	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2969	p-Dichlorobenzene (75)	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2976	Vinyl chloride (1)	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2977	1,1-Dichloroethene (7)	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2979	trans-1,2- Dichloroethene (100)	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2980	1,2- Dichloroethane (3)	10002-01	0.2 U	EPA 502.2	12/5/96	0.2	84269
2981	1,1,1-Trichloroethane (200)	10002-01	0.3 U	EPA 502.2	12/5/96	0.3	84269
2982	Carbon tetrachloride (3)	10002-01	0.3 U	EPA 502.2	12/5/96	0.3	84269
2983	1,2-Dichloropropane (5)	10002-01	0.3 U	EPA 502.2	12/5/96	0.3	84269
2984	Trichloroethene (3)	10002-01	0.2 U	EPA 502.2	12/5/96	0.2	84269
2985	1,1,2-Trichloroethane (5)	10002-01	0.3 U	EPA 502.2	12/5/96	0.3	84269
2987	Tetrachloroethene (3)	10002-01	0.2 U	EPA 502.2	12/5/96	0.2	84269
2989	Monochlorobenzene (100)	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2990	Benzene (1)	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2991	Toluene (1,000)	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2992	Ethylbenzene (700)	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
96	Styrene (100)	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

PB No. 139431

PESTICIDE & PCB CHEMICAL ANALYSIS
 62-550.310(2) (c)
 (PWS029)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result (ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2005	Endrin (2)	10002-01	0.01 U	EPA 508	11/26/96	0.01	84269
2010	Lindane (.2)	10002-01	0.01 U	EPA 508	11/26/96	0.01	84269
2015	Methoxychlor (40)	10002-01	0.02 U	EPA 508	11/26/96	0.02	84269
2020	Toxaphene (3)	10002-01	0.2 U	EPA 508	11/26/96	0.2	84269
2031	Dalapon (200)	10002-01	1 U	EPA 515.1	12/6/96	1	84269
2032	Diquat (20)	10002-01	1 U	EPA 549.1	11/26/96	1	84269
2033	Endothall (100)	10002-01	10 U	EPA 548.1	11/26/96	10	84269
2034	Glyphosate (700)	10002-01	10 U	EPA 547	12/3/96	10	84269
2035	Di(2-ethylhexyl)adipate (400)	10002-01	1 U	EPA 506	11/26/96	1	84269
2036	Oxamyl (Vydate) (200)	10002-01	0.5 U	EPA 531.1	12/3/96	0.5	84269
2037	Simazine (4)	10002-01	0.1 U	EPA 507	11/26/96	0.1	84269
2039	Di(2-ethylhexyl)phthalate (6)	10002-01	1 U	EPA 506	11/26/96	1	84269
2040	Picloram (500)	10002-01	0.2 U	EPA 515.1	12/6/96	0.2	84269
2041	Dinoseb (7)	10002-01	0.2 U	EPA 515.1	12/6/96	0.2	84269
2042	Hexachlorocyclopentadiene (50)	10002-01	0.1 U	EPA 505	12/5/96	0.1	84269
2046	Carbofuran (40)	10002-01	0.5 U	EPA 531.1	12/3/96	0.5	84269
2050	Atrazine (3)	10002-01	0.1 U	EPA 507	11/26/96	0.1	84269
2051	Alachlor (2)	10002-01	0.3 U	EPA 507	11/26/96	0.3	84269
2065	Heptachlor (.4)	10002-01	0.01 U	EPA 508	11/26/96	0.01	84269
2067	Heptachlor epoxide (.2)	10002-01	0.01 U	EPA 508	11/26/96	0.01	84269
2105	2,4-D (70)	10002-01	0.5 U	EPA 515.1	12/6/96	0.5	84269
2110	2,4,5-TP (Silvex) (50)	10002-01	0.05 U	EPA 515.1	12/6/96	0.05	84269
2274	Hexachlorobenzene (1)	10002-01	0.01 U	EPA 508	11/26/96	0.01	84269
2306	Benzo(a)pyrene (.2)	10002-01	0.01 U	EPA 550	11/26/96	0.01	84269
2326	Pentachlorophenol (1)	10002-01	0.05 U	EPA 515.1	12/6/96	0.05	84269
2383	PCBs (.5)	10002-01	0.05 U	EPA 508	11/26/96	0.05	84269
2931	Dibromochloropropane (.2)	10002-01	0.005 U	EPA 504.1	12/6/96	0.005	84269
2946	Ethylene dibromide (.02)	10002-01	0.005 U	EPA 504.1	12/6/96	0.005	84269
2959	Chlordane (2)	10002-01	0.05 U	EPA 508	11/26/96	0.05	84269

U - Analyte was not detected; indicated concentration is method detection limit.

PB No. 139431

UNREGULATED GROUP I ANALYSIS
 62-550.405
 (PWS035)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (mg/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2021	Carbaryl	10002-01	0.5 U	EPA 531.1	12/3/96	0.5	84269
2022	Methomyl	10002-01	0.5 U	EPA 531.1	12/3/96	0.5	84269
2043	Aldicarb sulfoxide	10002-01	0.5 U	EPA 531.1	12/3/96	0.5	84269
2044	Aldicarb sulfone	10002-01	0.5 U	EPA 531.1	12/3/96	0.5	84269
2045	Metolachlor	10002-01	0.3 U	EPA 507	11/26/96	0.3	84269
2047	Aldicarb	10002-01	0.5 U	EPA 531.1	12/3/96	0.5	84269
2066	3-Hydroxycarbofuran	10002-01	0.5 U	EPA 531.1	12/3/96	0.5	84269
2077	Propachlor	10002-01	0.05 U	EPA 508	11/26/96	0.05	84269
2356	Aldrin	10002-01	0.01 U	EPA 508	11/26/96	0.01	84269
2364	Dieldrin	10002-01	0.01 U	EPA 508	11/26/96	0.01	84269
2440	Dicamba	10002-01	0.05 U	EPA 515.1	12/6/96	0.05	84269
95	Metribuzin	10002-01	0.2 U	EPA 507	11/26/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

PB No. 139431

UNREGULATED GROUP II ANALYSIS
 62-550.410
 (PWS034)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2210	Chloromethane	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2212	Dichlorodifluoromethane	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2214	Bromomethane	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2216	Chloroethane	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2218	Trichlorofluoromethane	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2251	Methyl-tert-butyl-ether	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2408	Dibromomethane	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2410	1,1-Dichloropropene	10002-01	0.3 U	EPA 502.2	12/5/96	0.3	84269
2412	1,3-Dichloropropane	10002-01	0.3 U	EPA 502.2	12/5/96	0.3	84269
2413	1,3-Dichloropropene	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2414	1,2,3-Trichloropropane	10002-01	0.3 U	EPA 502.2	12/5/96	0.3	84269
2416	2,2-Dichloropropane	10002-01	0.3 U	EPA 502.2	12/5/96	0.3	84269
2941	Chloroform	10002-01	0.2 U	EPA 502.2	12/5/96	0.2	84269
2942	Bromoform	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2943	Bromodichloromethane	10002-01	0.3 U	EPA 502.2	12/5/96	0.3	84269
2944	Dibromochloromethane	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2965	o-Chlorotoluene	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2966	p-Chlorotoluene	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2967	m-Dichlorobenzene	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269
2978	1,1-Dichloroethane	10002-01	0.3 U	EPA 502.2	12/5/96	0.3	84269
2986	1,1,1,2-Tetrachloroethane	10002-01	0.3 U	EPA 502.2	12/5/96	0.3	84269
2988	1,1,2,2-Tetrachloroethane	10002-01	0.3 U	EPA 502.2	12/5/96	0.3	84269
2993	Bromobenzene	10002-01	0.5 U	EPA 502.2	12/5/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

WB No. 139431

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2262	Isophorone	10002-01	1 U	EPA 609	11/26/96	1	84269
2270	2,4-Dinitrotoluene	10002-01	1 U	EPA 609	11/26/96	1	84269
2282	Dimethylphthalate	10002-01	1 U	EPA 506	11/26/96	1	84269
2284	Diethylphthalate	10002-01	1 U	EPA 506	11/26/96	1	84269
2290	Di-n-butylphthalate	10002-01	1 U	EPA 506	11/26/96	1	84269
2294	Butyl benzyl phthalate	10002-01	1 U	EPA 506	11/26/96	1	84269
9089	Di-n-octylphthalate	10002-01	1 U	EPA 506	11/26/96	1	84269
9108*	2-Chlorophenol	10002-01	5 U	EPA 604	11/26/96	5	84269
9112*	2-Methyl-4,6-dinitrophenol	10002-01	20 U	EPA 604	11/26/96	20	84269
9115*	Phenol	10002-01	5 U	EPA 604	11/26/96	5	84269
9116*	2,4,6-Trichlorophenol	10002-01	10 U	EPA 604	11/26/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

March 11, 1997
Report: 9702000246
Sample No: 9702000246 1

Attention: Bart Ziegler

Project: PBCWF Expansion
Palm Beach County, FL

Collected by: Bart Ziegler

REPORT OF ANALYSIS FOR: 909A TOTAL COLIFORM BACTERIA

SAMPLE ID	RESULT	DL	UNITS	DATE SAMPLED	DATE ANALYZED	ANALYST
SRWRF #15 Prod. Well-Day1	Absent	1	CFU/100 ml	02/26/97	02/27/97	AMB
SRWRF #16 Prod. Well-Day1	Absent	1	CFU/100 ml	02/26/97	02/27/97	AMB
SRWRF #15 Prod. Well-Day1	Absent	1	CFU/100 ml	02/26/97	02/27/97	AMB
SRWRF #16 Prod. Well-Day1	Absent	1	CFU/100 ml	02/26/97	02/27/97	AMB
SRWRF #15 Prod. Well-Day2	Absent	1	CFU/100 ml	02/27/97	02/28/97	DJC
SRWRF #16 Prod. Well-Day2	Absent	1	CFU/100 ml	02/27/97	02/28/97	DJC
SRWRF #15 Prod. Well-Day2	Absent	1	CFU/100 ml	02/27/97	02/28/97	DJC
SRWRF #16 Prod. Well-Day2	Absent	1	CFU/100 ml	02/27/97	02/28/97	DJC
SRWRF #15 Prod. Well-Day3	Absent	1	CFU/100 ml	02/28/97	03/01/97	DJC
SRWRF #16 Prod. Well-Day3	Absent	1	CFU/100 ml	02/28/97	03/01/97	DJC
SRWRF #15 Prod. Well-Day3	Absent	1	CFU/100 ml	02/28/97	03/01/97	DJC
SRWRF #16 Prod. Well-Day3	Absent	1	CFU/100 ml	02/28/97	03/01/97	DJC

Analysis Performed in Accordance with E.P.A. Methods
Laboratory Certification No. E86188
Laboratory Certification No. 86405

QA/QC Review *OM*
BDL=Below Detection Limit
DL=Detection Limit

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

March 11, 1997
Report: 9702000246
Sample No: 9702000246 13

Attention: Bart Ziegler


Project: PBCWF Expansion
Palm Beach County, FL

Collected by: Bart Ziegler

REPORT OF ANALYSIS FOR: 909A TOTAL COLIFORM BACTERIA

SAMPLE ID	RESULT	DL	UNITS	DATE SAMPLED	DATE ANALYZED	ANALYST
SRWRF #15 Prod. Well-Day4	Absent	1	CFU/100 ml	03/01/97	03/02/97	AMB
SRWRF #16 Prod. Well-Day4	Absent	1	CFU/100 ml	03/01/97	03/02/97	AMB
SRWRF #15 Prod. Well-Day4	Absent	1	CFU/100 ml	03/01/97	03/02/97	AMB
SRWRF #16 Prod. Well-Day4	Absent	1	CFU/100 ml	03/01/97	03/02/97	AMB
SRWRF #15 Prod. Well-Day5	Absent	1	CFU/100 ml	03/03/97	03/05/97	AMB
SRWRF #16 Prod. Well-Day5	Absent	1	CFU/100 ml	03/03/97	03/05/97	AMB
SRWRF #15 Prod. Well-Day5	Absent	1	CFU/100 ml	03/03/97	03/05/97	AMB
SRWRF #16 Prod. Well-Day5	Absent	1	CFU/100 ml	03/03/97	03/05/97	AMB
SRWRF #15 Prod. Well-Day6	Absent	1	CFU/100 ml	03/04/97	03/06/97	AMB
SRWRF #16 Prod. Well-Day6	Absent	1	CFU/100 ml	03/04/97	03/06/97	AMB
SRWRF #16 Prod. Well-Day6	Absent	1	CFU/100 ml	03/04/97	03/06/97	AMB
SRWRF #16 Prod. Well-Day7	Absent	1	CFU/100 ml	03/05/97	03/06/97	AMB
SRWRF #15 Prod. Well-Day7	Absent	1	CFU/100 ml	03/05/97	03/06/97	AMB

Analysis Performed in Accordance with E.P.A. Methods
Laboratory Certification No. E86188
Laboratory Certification No. 86405

QA/QC Review 
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DL=Detection Limit

Envirodyne Inc.

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561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

March 11, 1997
Report: 9702000246
Sample No: 9702000246 26

Attention: Bart Ziegler


Project: PBCWF Expansion
Palm Beach County, FL

Collected by: Bart Ziegler

REPORT OF ANALYSIS FOR: 909A TOTAL COLIFORM BACTERIA

SAMPLE ID	RESULT	DL	UNITS	DATE SAMPLED	DATE ANALYZED	ANALYST
SRWRF #16 Prod. Well-Day7	Absent	1	CFU/100 ml	03/05/97	03/06/97	AMB
SRWRF #15 Prod. Well-Day8	Absent	1	CFU/100 ml	03/06/97	03/08/97	DJC
SRWRF #16 Prod. Well-Day8	Absent	1	CFU/100 ml	03/06/97	03/08/97	DJC
SRWRF #15 Prod. Well-Day8	Absent	1	CFU/100 ml	03/06/97	03/08/97	DJC
SRWRF #16 Prod. Well-Day8	Absent	1	CFU/100 ml	03/06/97	03/08/97	DJC
SRWRF #15 Prod. Well-Day9	Absent	1	CFU/100 ml	03/07/97	03/09/97	AMB
SRWRF #16 Prod. Well-Day9	Absent	1	CFU/100 ml	03/07/97	03/09/97	AMB
SRWRF #15 Prod. Well-Day9	Absent	1	CFU/100 ml	03/07/97	03/09/97	AMB
SRWRF #16 Prod. Well-Day9	Absent	1	CFU/100 ml	03/07/97	03/09/97	AMB
SRWRF #15 Prod. Well-Day10	Absent	1	CFU/100 ml	03/08/97	03/10/97	AMB
SRWRF #16 Prod. Well-Day10	Absent	1	CFU/100 ml	03/08/97	03/10/97	AMB
SRWRF #15 Prod. Well-Day10	Absent	1	CFU/100 ml	03/08/97	03/10/97	AMB
SRWRF #16 Prod. Well-Day10	Absent	1	CFU/100 ml	03/08/97	03/10/97	AMB

Analysis Performed in Accordance with E.P.A. Methods
Laboratory Certification No. E86188
Laboratory Certification No. 86405

QA/QC Review 
BDL=Below Detection Limit
DL=Detection Limit

Envirodyne Inc.

4805 N.W. 2nd Avenue
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561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

March 11, 1997
Report: 9702000246
Sample No: 9702000246 39

Attention: Bart Ziegler

Project: PBCWF Expansion
Palm Beach County, FL

Collected by: Bart Ziegler

REPORT OF ANALYSIS FOR: 909A TOTAL COLIFORM BACTERIA

SAMPLE ID	RESULT	DL	UNITS	DATE SAMPLED	DATE ANALYZED	ANALYST
SRWRF #15 Prod.Well-Day11	Absent	1	CFU/100 ml	03/09/97	03/11/97	AMB
SRWRF #15 Prod.Well-Day11	Absent	1	CFU/100 ml	03/09/97	03/11/97	AMB

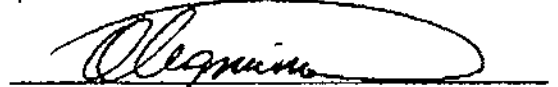
cfu = colony forming units

The Water Analysis is ACCEPTABLE by health department standards for safe public drinking water, with regards to Coliform bacteria using EPA approved methods.

Analysis contained herein conform to EPA and DEP approved methods per Envirodyne Comprehensive Quality Assurance Plan No. 890041G. Additional Laboratory Certification numbers: E86006, 86408, E83079, E86240. All relevant quality assurance samples were within specified control limits unless otherwise stated.



Michael Rentoumis
President, Envirodyne, Inc.



Oleg I. Minko, Ph.D.
Quality Assurance Director

To: <i>Montgomery Watson</i>	
From: <i>Artin: Tammy Watson</i>	
Phone #	Phone #
Fax # <i>4 pgs</i>	



Environmental Services of South Florida, Inc.

P.O. Box 10003 • Riviera Beach, Florida 33419 • (561) 848-7805

LAB # 25006
 DHS LAB #06117

LABORATORY ANALYSIS

WATER / WASTEWATER / SOIL / FOOD

CONSULTING

INDUSTRIAL / AGRICULTURAL / DOMESTIC

Johnson - Davis, Inc. BACTERIOLOGICAL ANALYSIS

System Name: Palm Beach County Utilities System #3

Address: Palm Beach County, Florida

Sample Site: P.B.C. Well Field Expansion, Hagen Ranch Road, Boynton Beach, Florida

Date and Time of Collection: 3/13/97, 1330

E.S.S.F. Collector: D. Fiedor

Type of Supply: Community Water System

Type of Sample: Main Clearance

Date and Time of Sample Arrival in Lab: 3/13/97, 1520

Date and Time of Sample Analysis: 3/13/97, 1555

Analysis Method:

Remarks:

MF

MTF MGD-MGG PA

Sample No.	Sample Point	Total Res.Cl (mg/l)	pH	Coliform, MF/100 ml		Non Coliform	Confirm Total	Confirm Fecal
				Total*	Fecal			
1A.	Source	3.6		A		None Detected		
2A.		3.6		A		None Detected		
3A.		3.7		A		None Detected		

* P - Coliforms are present
 A - Coliforms are absent

C - Confluent growth
 TNTC - Too numerous to count

Michael A. Fiedor
 Michael A. Fiedor
 Director



Environmental Services of South Florida, Inc.

P.O. Box 10003 • Riviera Beach, Florida 33419 • (561) 848-7805

LAB # E89025
DMRS LAB 208117

LABORATORY ANALYSIS

WATER / WASTEWATER / SOIL / FOOD

CONSULTING

INDUSTRIAL / AGRICULTURAL / DOMESTIC

Johnson - Davis, Inc.

BACTERIOLOGICAL ANALYSIS

System Name: Palm Beach County Utilities System #3

Address: Palm Beach County, Florida

Sample Site: P.B.C. Well Field Expansion, Hagen Ranch Road, Boynton Beach, Florida

Date and Time of Collection: 3/14/97, 0845

E.S.S.F. Collector: M.P. Fiedor

Type of Supply: Community Water System

Type of Sample: Main Clearance

Date and Time of Sample Arrival in Lab: 3/14/97, 1120

Date and Time of Sample Analysis: 3/14/97, 1505

Analysis Method:

Remarks:

MF MCF MFC-MIG FA

Sample No.	Sample Point	Total Res-C1 (mg/l)	pH	Coliform, MF/100 ml		Non Coliform	Confirm Total	Confirm Fecal
				Total*	Fecal			
1A.	Source	3.7	A	None Detected				
2A.		3.7	A	None Detected				
3A.		3.8	A	None Detected				

Michael A. Fiedor

* P - Coliforms are present
A - Coliforms are absent

C - Confluent growth
TNTC - Too numerous to count

Michael A. Fiedor
Director



ENVIRONMENTAL LABORATORIES, INC.

April 23, 1997

Mr. Bart Ziegler
 Southeast Drilling
 P.O. Box 271723
 Tampa, FL 33688

Dear Mr. Ziegler:

Post-It™ brand fax transmittal memo 7671		# of pages > 1
To <i>Tammy Watson</i>	From <i>Paul Berman</i>	
Co. <i>Montgomery Watson</i>	Co. <i>PPB</i>	
Dept.	Phone # <i>352-377-2349</i>	
Fax # <i>561-586-8834</i>	Fax # <i>352-395-6639</i>	

Attached is the data report for the following samples:

PPB Sample Number	Site Name	Your Sample ID	Sample Date	Sample Time
143065 9702311-01* 10469-01**	Palm Beach Well Field	SRPTW #17	02/18/97	1600
144206 9703340-03* 10613-01**	Palm Beach Well Field	SRPTW #18	03/19/97	1500

*Laboratory ID from Post Buckley Schuh & Jernigan (PBS&J)
 **Laboratory ID from Southern Analytical

If you have any questions concerning this report, please contact me.

Sincerely,

Paul Berman
 Project Manager

PLB:cms

Enclosures



ENVIRONMENTAL LABORATORIES, INC.

April 17, 1997

Mr. Bart Ziegler
Southeast Drilling
P.O. Box 271723
Tampa, FL 33688

Dear Mr. Ziegler:

Attached is the data report for the following sample:

PPB Sample Number	Site Name	Your Sample ID	Sample Date	Sample Time
144206	Palm Beach Well Field	SRPTW #18	03/19/97	1500

If you have any questions concerning this report, please contact me.

Sincerely,

Paul Berman

Paul Berman
Project Manager

PLB:cms

Enclosures

Post-it™ brand fax transmittal memo 7571 # of pages 8

To: <i>Bart Ziegler</i>	From: <i>Paul Berman</i>
Co: <i>Southeast Drilling</i>	Co: <i>PPB</i>
Dept:	Phone: <i>512-537-2143</i>
Fax:	Fax: <i>512-537-6639</i>

PPB Environmental Laboratories, Inc. • 5821 SW Archer Road • Gainesville, FL 32608 • (352) 377-2349

INORGANIC ANALYSIS
62-550.313(1)
(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	144206	1 U	SM 3113B	03/26/97	0.001	82282
1010	BIARIUM	(2)	144206	0.034	EPA 200.7	03/29/97	0.001	82282
1015	CADMIUM	(.005)	144206	0.0005 K	SM 3113B	03/28/97	0.0001	82282
1020	CHROMIUM	(0.1)	144206	0.010	EPA 200.7	03/29/97	0.005	82282
1024	CYANIDE	(0.2)	144206	0.004 U	SM 4500CNE	04/01/97	0.004	82282
1025	FLUORIDE	(4)	144206	0.24	SM 4500FC	04/16/97	0.02	82282
1030	LEAD	(0.015)	144206	0.001 U	SM 3113B	04/15/97	0.001	82282
1035	MERCURY	(0.002)	144206	0.0001 K	EPA 245.1	03/25/97	0.00005	82282
1036	NICKEL	(0.1)	144206	0.030 U	EPA 200.7	03/29/97	0.030	82282
1040	NITRATE	(10)	144206	0.004	EPA 353.2	03/26/97	0.004	82282
1041	NITRITE	(1)	144206	0.004 K	EPA 353.2	03/22/97	0.003	82282
1045	SELENIUM	(0.05)	144206	0.001 U	SM 3113B	03/29/97	0.001	82282
1052	SODIUM	(160)	144206	19.2	EPA 200.7	03/29/97	0.05	82282
1074	ANTIMONY	(0.006)	144206	0.003 U	SM 3113B	04/03/97	0.003	82282
1075	BERYLLIUM	(0.004)	144206	0.003 U	EPA 200.7	03/29/97	0.003	82282
1085	THALIUM	(0.002)	144206	0.002 U	EPA 200.9	04/03/97	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS
62-550.320
(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1002	ALUMINUM	(0.2)	144206	0.013	EPA 200.7	03/29/97	0.01	82282
1017	CHLORIDE	(250)	144206	0.038	EPA 325.2	03/24/97	0.3	82282
1022	COPPER	(1)	144206	0.01 U	EPA 200.7	03/29/97	0.01	82282
1020	FLUORIDE	(2.0)	144206	0.24	SM 4500FC	04/16/97	0.02	82282
1028	IRON	(0.3)	144206	0.01 K	EPA 200.7	03/29/97	0.005	82282
1032	MANGANESE	(0.05)	144206	0.005 U	EPA 200.7	03/28/97	0.005	82282
1050	SILVER	(0.1)	144206	0.001	SM 3113B	04/09/97	0.0001	82282
1055	SULFATE	(250)	144206	2	EPA 375.4	03/25/97	1	82282
1095	ZINC	(5)	144206	0.005	EPA 200.7	03/29/97	0.004	82282
1905	COLOR	(15 color units)	144206	40	SM 2120B	03/21/97	5	82282
1920	ODOR	(3 threshold odor number)	144206	1 U	SM 2150B	03/21/97	1	82282
1925	PH	(6.5-8.5)	144206	7.5	EPA 150.1	03/21/97	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		144206	318	SM 2540C	03/26/97	3	82282
2905	FOAMING AGENTS	(0.5)	144206	0.027	SM 5540C	03/21/97	0.025	82135

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).
K indicates analyte is less than value indicated, with value being greater than method detection limit.
U - Analyte was not detected; indicated concentration is method detection limit.

24/17/1997 13:49 356669

PPB ENV. LAB.

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PPB Environmental Laboratories, Inc. • 6821 SW Archer Road • Gainesville, FL 32608 • (352) 377-2349

RADIOCHEMICAL ANALYSIS*
62-550.510(5)
(PWS033)

<u>Parameter ID</u>	<u>Name</u>	<u>(MCL pCi/l)</u>	<u>Sample Number</u>	<u>Analysis Result (pCi/l)</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Error</u>	<u>Lab ID</u>
4000	GROSS ALPHA		9703340-03	1.6 ± 1.2	EPA 900.0	03/28/97	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		NA					
4030	RADIUM-228		NA					
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)
NA = NOT ANALYZED

04/17/1997 13:49 3975629

PPB ENV. LAB.

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Southern Analytical
Project No 10613
April 9, 1997

PPB No. 144206

TRIHALOMETHANE ANALYSIS
62-550.310(2)(a)
(PWS027)

Parameter ID	NAME (MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2950	Total THMs (0.10)	10613-01	0.0015 U	EPA 502.2	4/2/97	0.0015	84269

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(b)
(PWS028)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result (ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2378	1,2,4-Trichlorobenzene (70)	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2380	cis-1,2-Dichloroethene (70)	10613-01	0.2 U	EPA 502.2	4/2/97	0.2	84269
2955	Xylenes (Total) (10,000)	10613-01	0.74	EPA 502.2	4/2/97	0.5	84269
2964	Dichloromethane (5)	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2966	o-Dichlorobenzene (600)	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2969	p-Dichlorobenzene (75)	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2976	Vinyl chloride (1)	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2977	1,1-Dichloroethene (7)	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2979	trans-1,2-Dichloroethene (100)	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2980	1,2-Dichloroethane (3)	10613-01	0.2 U	EPA 502.2	4/2/97	0.2	84269
2981	1,1,1-Trichloroethane (200)	10613-01	0.3 U	EPA 502.2	4/2/97	0.3	84269
2982	Carbon tetrachloride (3)	10613-01	0.3 U	EPA 502.2	4/2/97	0.3	84269
2983	1,2-Dichloropropane (5)	10613-01	0.3 U	EPA 502.2	4/2/97	0.3	84269
2984	Trichloroethene (3)	10613-01	0.2 U	EPA 502.2	4/2/97	0.2	84269
2985	1,1,2-Trichloroethane (5)	10613-01	0.3 U	EPA 502.2	4/2/97	0.3	84269
2987	Tetrachloroethene (3)	10613-01	0.26	EPA 502.2	4/2/97	0.2	84269
2989	Monochlorobenzene (100)	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2990	Benzene (1)	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2991	Toluene (1,000)	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2992	Ethylbenzene (700)	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2995	Styrene (100)	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

APR/17/1997 13:49 3955539

PPB Eval. LAB.

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Southern Analytical
Project No. 10613
April 9, 1997

PPB No. 144206

PESTICIDE & PCB CHEMICAL ANALYSIS
62-550.310(2) (c)
(PWS020)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result (ug/l)	Analyt. Method	Analysis Date	MCL	Lab ID
2005	Endrin (2)	10613-01	0.01 U	EPA 508	3/28/97	0.01	84269
2010	Lindane (2)	10613-01	0.01 U	EPA 508	3/28/97	0.01	84269
2015	Methoxychlor (40)	10613-01	0.02 U	EPA 508	3/26/97	0.02	84269
2020	Toxaphene (3)	10613-01	0.2 U	EPA 508	3/26/97	0.2	84269
2031	Dalapon (200)	10613-01	1 U	EPA 515.1	3/25/97	1	84269
2032	Diquat (20)	10613-01	1 U	EPA 549.1	3/28/97	1	84269
2033	Endothal (100)	10613-01	10 U	EPA 548.1	3/26/97	10	84269
2034	Glyphosate (700)	10613-01	10 U	EPA 547	4/2/97	10	84269
2035	Di(2-ethylhexyl)adipate (400)	10613-01	1 U	EPA 506	3/26/97	1	84269
2036	Oxamyl (Vydate) (200)	10613-01	0.5 U	EPA 531.1	3/31/97	0.5	84269
2037	Simazine (4)	10613-01	0.1 U	EPA 507	3/28/97	0.1	84269
2039	Di(2-ethylhexyl)phthalate (6)	10613-01	1 U	EPA 506	3/26/97	1	84269
2040	Picloram (500)	10613-01	0.2 U	EPA 515.1	3/25/97	0.2	84269
2041	Dinoseb (7)	10613-01	0.2 U	EPA 515.1	3/25/97	0.2	84269
2042	Hexachlorocyclopentadiene (50)	10613-01	0.1 U	EPA 505	4/2/97	0.1	84269
2046	Carbofuran (40)	10613-01	0.5 U	EPA 531.1	3/31/97	0.5	84269
2050	Atrazine (3)	10613-01	0.1 U	EPA 507	3/26/97	0.1	84269
2051	Alachlor (2)	10613-01	0.3 U	EPA 507	3/26/97	0.3	84269
2065	Heptachlor (4)	10613-01	0.01 U	EPA 508	3/26/97	0.01	84269
2067	Heptachlor epoxide (2)	10613-01	0.01 U	EPA 508	3/26/97	0.01	84269
2105	2,4-D (70)	10613-01	0.5 U	EPA 515.1	3/25/97	0.5	84269
2110	2,4,5-TP (Silvex) (50)	10613-01	0.05 U	EPA 515.1	3/25/97	0.05	84269
2274	Hexachlorobenzene (1)	10613-01	0.01 U	EPA 508	3/26/97	0.01	84269
2306	Benzo(a)pyrene (2)	10613-01	0.01 U	EPA 550	3/28/97	0.01	84269
2326	Pentachlorophenol (1)	10613-01	0.05 U	EPA 515.1	3/25/97	0.05	84269
2383	PCBs (5)	10613-01	0.05 U	EPA 508	3/26/97	0.05	84269
2931	Dibromochloropropane (2)	10613-01	0.005 U	EPA 504.1	3/30/97	0.005	84269
2946	Ethylene dibromide (0.02)	10613-01	0.005 U	EPA 504.1	3/30/97	0.005	84269
2959	Chlordane (2)	10613-01	0.05 U	EPA 508	3/28/97	0.05	84269

U - Analyte was not detected; indicated concentration is method detection limit.

06/17/1997 13:49 3955535

PPB ENV. LAB.

PAGE 05

Southern Analytical
Project No. 10813
April 9, 1997

PPB No. 144206

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (mg/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2021	Carbaryl	10613-01	0.5 U	EPA 531.1	3/31/97	0.5	84269
2022	Methomyl	10613-01	0.5 U	EPA 531.1	3/31/97	0.5	84269
2043	Aldicarb sulfoxide	10613-01	0.5 U	EPA 531.1	3/31/97	0.5	84269
2044	Aldicarb sulfone	10613-01	0.5 U	EPA 531.1	3/31/97	0.5	84269
2045	Metolachlor	10613-01	0.3 U	EPA 507	3/26/97	0.3	84269
2047	Aldicarb	10613-01	0.5 U	EPA 531.1	3/31/97	0.5	84269
2066	3-Hydroxycarbofuran	10613-01	0.5 U	EPA 531.1	3/31/97	0.5	84269
2076	Butachlor	10613-01	0.4 U	EPA 508	3/26/97	0.4	84269
2077	Propachlor	10613-01	0.05 U	EPA 508	3/26/97	0.05	84269
2356	Aldrin	10613-01	0.01 U	EPA 508	3/26/97	0.01	84269
2364	Dieldrin	10613-01	0.01 U	EPA 508	3/26/97	0.01	84269
2440	Dicamba	10613-01	0.05 U	EPA 515.1	3/25/97	0.05	84269
2595	Metribuzin	10613-01	0.2 U	EPA 507	3/26/97	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

04/17/1997 13:49 3955533

FEB ENV. LAB.

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Southern Analytical
Project No. 10613
April 9, 1997

PPB No. 144206

UNREGULATED GROUP B ANALYSIS
62-550.410
(PWS034)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result (ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2210	Chloromethane	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2212	Dichlorodifluoromethane	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2214	Bromomethane	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2216	Chloroethane	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2218	Trichlorofluoromethane	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2251	Methyl-tert-butyl-ether	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2408	Dibromomethane	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2410	1,1-Dichloropropene	10613-01	0.3 U	EPA 502.2	4/2/97	0.3	84269
2412	1,3-Dichloropropane	10613-01	0.3 U	EPA 502.2	4/2/97	0.3	84269
2413	1,3-Dichloropropene	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2414	1,2,3-Trichloropropane	10613-01	0.3 U	EPA 502.2	4/2/97	0.3	84269
2416	2,2-Dichloropropane	10613-01	0.3 U	EPA 502.2	4/2/97	0.3	84269
2941	Chloroform	10613-01	0.2 U	EPA 502.2	4/2/97	0.2	84269
2942	Bromoform	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2943	Bromodichloromethane	10613-01	0.3 U	EPA 502.2	4/2/97	0.3	84269
2944	Dibromochloromethane	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2965	o-Chlorotoluene	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2966	p-Chlorotoluene	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2967	m-Dichlorobenzene	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269
2978	1,1-Dichloroethane	10613-01	0.3 U	EPA 502.2	4/2/97	0.3	84269
2986	1,1,1,2-Tetrachloroethane	10613-01	0.3 U	EPA 502.2	4/2/97	0.3	84269
2988	1,1,2,2-Tetrachloroethane	10613-01	0.3 U	EPA 502.2	4/2/97	0.3	84269
2993	Bromobenzene	10613-01	0.5 U	EPA 502.2	4/2/97	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

04/17/1997 13:49 3955839

PPB CIV. LAB.

PAGE 00

Southern Analytical
Project No. 10613
April 9, 1997

PPB No. 144208

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS038 & 037*)

Parameter ID NAME (MCL ug/l)	Sample Number	Analysis Result (ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2262 Isophorone	10613-01	1 U	EPA 609	3/26/97	1	84269
2270 2,4-Dinitrotoluene	10613-01	1 U	EPA 609	3/26/97	1	84269
2282 Dimethylphthalate	10613-01	1 U	EPA 506	3/26/97	1	84269
2284 Diethylphthalate	10613-01	1 U	EPA 506	3/26/97	1	84269
2290 Di-n-butylphthalate	10613-01	1 U	EPA 506	3/26/97	1	84269
2294 Butyl benzyl phthalate	10613-01	1 U	EPA 506	3/26/97	1	84269
9089 Di-n-octylphthalate	10613-01	1 U	EPA 506	3/26/97	1	84269
9108* 2-Chlorophenol	10613-01	5 U	EPA 604	3/26/97	5	84269
9112* 2-Methyl-4,6-dinitrophenol	10613-01	20 U	EPA 604	3/26/97	20	84269
9115* Phenol	10613-01	5 U	EPA 604	3/26/97	5	84269
9116* 2,4,6-Trichlorophenol	10613-01	10 U	EPA 604	3/26/97	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.



E N V I R O N M E N T A L L A B O R A T O R I E S . I N C .

April 4, 1997

Mr. Bart Ziegler
Southeast Drilling
P.O. Box 271723
Tampa, FL 33688

Dear Mr. Ziegler:

Attached is the data report for the following sample.:

Sample No.	143065
Site Name:	Palm Beach Well Field
Your Sample ID:	SRPTW #17
Sample Date:	02/18/97
Sample Time:	1600

If you have any questions concerning this report, please contact me.

Sincerely,

Paul L. Berman
Project Manager

PLB:cms

Enclosures



E N V I R O N M E N T A L L A B O R A T O R I E S . I N C .

April 4, 1997

Mr. Bart Ziegler
Southeast Drilling
P.O. Box 271723
Tampa, FL 33688

Dear Mr. Ziegler:

Enclosed are the analytical results for your water samples we received February 19 and 21, 1997.

All data were determined in accordance with published procedures (EPA-600/4-79-020, *Methods for Chemical Analysis of Water and Wastes*, Revised March 1983). Our laboratory is certified by the Florida DHRS (Lab Nos. 82282 and E82001).

Note that I have included a sheet for information regarding the well system. Please fill out the top portion of this form and submit it with the report to your client or regulatory agency.

If you have any questions concerning this report, please contact me.

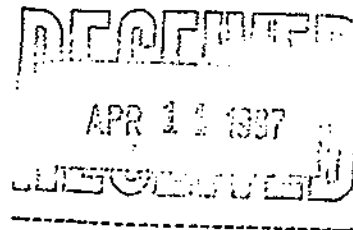
Sincerely,

Paul Berman

Paul L. Berman
Project Manager

PLB:cms

Enclosures



← Annex
← PAC SR #17

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (to be completed by system or lab)

System Name: _____ I.D. #: _____

Address: _____ Phone #: (____) _____

Type (check one): () Community () Nontransient Noncommunity () Noncommunity

SAMPLE INFORMATION (to be completed by sampler)

Sample Date (MMDDYY): ____/____/____ Sample Time: _____

Sample Location (be specific): _____

Sampler Name and Phone: _____ (____) _____

Sampler's Signature: _____ Title: _____

Check Type(s): () Distribution () Recheck of MCL () Resample of Lab Invalidated Sample
() Clearance () Thm Max Res Time () Plant Tap
() Distrib entry pt () Raw () Composite of Multiple Sites-Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab) - ATTACH HRS ANALYTE SHEET*

Lab Name: PPB Environmental Laboratories, Inc. HRS #: 82282 Expiration Date: _____

Address: 6821 SW Archer Road, Gainesville, FL 32608 Phone #: (352) 377-2349

Subcontracted Lab HRS #: 83170, 82135, 84269 - ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (to be completed by lab) - SAMPLE NUMBER: 143065

Date Sample(s) Received: 02/19/97 Group(s) Analyzed & Results attached for compliance with 62-550, F.A.C.:

() Nitrate Only () Nitrite Only () Asbestos Only (x) Trihalomethanes

Inorganics- Volatile Organics- Secondaries- Pesticide/PCBs-
() All 17 (x) Partial (x) All 21 () Partial (x) All 14 () Partial () All 30 (x) Partial

Group I Unregulated- Group II Unregulated- Group III Unregulated- Radiochemicals-
() All 13 (x) Partial (x) All 23 () Partial (x) All 11 () Partial (x) Single Sample
() Qtrly Composite**

**Provide radiochemical sample dates & locations for each quarter

I, Paul Berman, do HEREBY CERTIFY that all attached analytical data are correct.

Signature: [Handwritten Signature]

Title: QA Officer Date: 4/4/97

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: _____ Sample Analysis Satisfactory: _____

Resample Requested for: _____ Reason: _____

Person notified to resample: _____ Date Notified: _____

DEP/HRS Reviewing Official: _____

*All HRS lab #s and their HRS Analyte Sheet for labs performing the attached water analyses must be provided. Failure to do so will result in rejection of the analyses and possible enforcement against the public water system for failure to sample.

INORGANIC ANALYSIS
62-550.310(1)
(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	143065	0.001 U	SM 3113B	03/11/97	0.001	82282
1010	BARIUM	(2)	143065	0.030	EPA 200.7	03/06/97	0.001	82282
1015	CADMIUM	(.005)	143065	0.0005 K	SM 3113B	03/13/97	0.0001	82282
1020	CHROMIUM	(0.1)	143065	0.010 K	EPA 200.7	03/06/97	0.005	82282
1024	CYANIDE	(0.2)	143065	0.004 U	SM 4500CNE	03/04/97	0.004	82282
1025	FLUORIDE	(4)	143065	0.26	SM 4500FC	02/20/97	0.02	82282
1030	LEAD	(0.015)	143065	0.001 U	SM 3113B	03/10/97	0.001	82282
1035	MERCURY	(0.002)	143065	0.0001 K	EPA 245.1	02/26/97	0.00005	82282
1036	NICKEL	(0.1)	143065	0.030 U	EPA 200.7	03/06/97	0.030	82282
1040	NITRATE	(10)	143065	0.039	EPA 353.2	02/28/97	0.004	82282
1041	NITRITE	(1)	143065	0.016	EPA 353.2	02/19/97	0.003	82282
1045	SELENIUM	(0.05)	143065	0.002 K	SM 3113B	03/05/97	0.001	82282
1052	SODIUM	(160)	143065	21.2	EPA 200.7	03/06/97	0.05	82282
1074	ANTIMONY	(0.006)	143065	0.003 U	SM 3113B	03/17/97	0.003	82282
1075	BERYLLIUM	(0.004)	143065	0.004 K	EPA 200.7	03/06/97	0.003	82282
1085	THALLIUM	(0.002)	143065	0.002 U	EPA 200.9	03/05/97	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS
62-550.320
(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1002	ALUMINUM	(0.2)	143065	0.02 K	EPA 200.7	03/31/97	0.01	82282
1017	CHLORIDE	(250)	143065	46.8	EPA 325.2	03/13/97	0.3	82282
1022	COPPER	(1)	143065	0.01 U	EPA 200.7	03/06/97	0.01	82282
1020	FLUORIDE	(2.0)	143065	0.26	SM 4500FC	02/20/97	0.02	82282
1028	IRON	(0.3)	143065	0.060	EPA 200.7	03/28/97	0.005	82282
1032	MANGANESE	(0.05)	143065	0.005 U	EPA 200.7	03/06/97	0.005	82282
1050	SILVER	(0.1)	143065	0.0001 U	SM 3113B	03/12/97	0.0001	82282
1055	SULFATE	(250)	143065	7.0	EPA 375.4	03/11/97	1	82282
1095	ZINC	(5)	143065	0.020	EPA 200.7	03/28/97	0.004	82282
1905	COLOR	(15 color units)	143065	30	SM 2120B	02/19/97	5	82282
1920	ODOR	(3 threshold odor number)	143065	1	SM 2150B	02/19/97	1	82282
1925	PH	(6.5-8.5)	143065	7.2	EPA 150.1	02/19/97	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		143065	355	SM 2540C	02/25/97	3	82282
2905	FOAMING AGENTS	(0.5)	143065	0.025 U	SM 5540C		0.025	82135

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).

K indicates analyte is less than value indicated, with value being greater than method detection limit.

U - Analyte was not detected; indicated concentration is method detection limit.

TRIHALOMETHANE ANALYSIS
62-550.310(2)(A)
(PWS027)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2950	TOTAL THMS	(0.10)	10469-01	0.0015 U	EPA 502.2	03/04/97	0.0015	84269

RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

Parameter ID	Name	(MCL pCi/l)	Sample Number	Analysis Result (pCi/l)	Analysis Method	Analysis Date	Error	Lab ID
4000	GROSS ALPHA		9702311-01	0.9 ± 1.5	EPA 900.0	02/24/97	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		NA					
4030	RADIUM-228		NA					
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)
NA = NOT ANALYZED

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(B)
(PWS028)

Parameter ID	Name	(MCL µg/l)	Sample Number	Analysis Result (µg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2378	1,2,4-TRICHLOROBENZENE	(70)	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2380	CIS-1,2-DICHLOROETHYLENE	(70)	10469-01	0.2 U	EPA 502.2	03/04/97	0.2	84269
2955	XYLENES (TOTAL)	(10,000)	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2964	DICHLOROMETHANE	(5)	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2968	O-DICHLOROBENZENE	(600)	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2969	PARA-DICHLOROBENZENE	(75)	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2976	VINYL CHLORIDE	(1)	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2977	1,1-DICHLOROETHYLENE	(7)	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2979	TRANS-1,2-DICHLOROETHYLENE	(100)	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2980	1,2-DICHLOROETHANE	(3)	10469-01	0.2 U	EPA 502.2	03/04/97	0.2	84269
2981	1,1,1-TRICHLOROETHANE	(200)	10469-01	0.3 U	EPA 502.2	03/04/97	0.3	84269
2982	CARBON TETRACHLORIDE	(3)	10469-01	0.3 U	EPA 502.2	03/04/97	0.3	84269
2983	1,2-DICHLOROPROPANE	(5)	10469-01	0.3 U	EPA 502.2	03/04/97	0.3	84269
2984	TRICHLOROETHYLENE	(3)	10469-01	0.2 U	EPA 502.2	03/04/97	0.2	84269
2985	1,1,2-TRICHLOROETHANE	(5)	10469-01	0.3 U	EPA 502.2	03/04/97	0.3	84269
2987	TETRACHLOROETHYLENE	(3)	10469-01	0.2 U	EPA 502.2	03/04/97	0.2	84269
2989	MONOCHLOROBENZENE	(100)	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2990	BENZENE	(1)	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2991	TOLUENE	(1,000)	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2992	ETHYLBENZENE	(700)	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2996	STYRENE	(100)	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(c)
(PWS029)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2005	ENDRIN	(2)	10469-01	0.01 U	EPA 508	02/28/97	0.01	84269
2010	LINDANE	(.2)	10469-01	0.01 U	EPA 508	02/28/97	0.01	84269
2015	METHOXYCHLOR	(40)	10469-01	0.02 U	EPA 508	02/28/97	0.02	84269
2020	TOXAPHENE	(3)	10469-01	0.2 U	EPA 508	02/28/97	0.2	84269
2031	DALAPON	(200)	10469-01	1 U	EPA 515.1	02/26/97	1	84269
2032	DIQUAT	(20)	10469-01	1 U	EPA 549.1	02/25/97	4	84269
2033	ENDOTHALL	(100)	10469-01	10 U	EPA 548	02/26/97	10	84269
2034	GLYPHOSATE	(700)	10469-01	10 U	EPA 547	03/03/97	10	84269
2035	DI(2-ETHYLHEXYL)ADIPATE	(400)	10469-01	1 U	EPA 506	02/28/97	1	84269
2036	OXAMYL (VYDATE)	(200)	10469-01	0.5 U	EPA 531.1	03/06/97	0.5	84269
2037	SIMAZINE	(4)	10469-01	0.1 U	EPA 507	02/28/97	0.1	84269
2039	DI(2-ETHYLHEXYL)PHTHALATE	(6)	10469-01	1 U	EPA 506	02/28/97	1	84269
2040	PICLORAM	(500)	10469-01	0.2 U	EPA 515.1	02/26/97	0.2	84269
2041	DINOSEB	(7)	10469-01	0.2 U	EPA 515.1	02/26/97	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	10469-01	0.1 U	EPA 505	02/26/97	0.1	84269
2046	CARBOFURAN	(40)	10469-01	0.5 U	EPA 531.1	03/06/97	0.5	84269
2050	ATRAZINE	(3)	10469-01	0.1 U	EPA 507	02/28/97	0.1	84269
2051	ALACHLOR	(2)	10469-01	0.3 U	EPA 507	02/28/97	0.3	84269
2065	HEPTACHLOR	(.4)	10469-01	0.01 U	EPA 508	02/28/97	0.01	84269
2067	HEPTACHLOR EPOXIDE	(.2)	10469-01	0.01 U	EPA 508	02/28/97	0.01	84269
2105	2,4-D	(70)	10469-01	0.5 U	EPA 515.1	02/26/97	0.5	84269
2110	2,4,5-TP (SILVEX)	(50)	10469-01	0.05 U	EPA 515.1	02/26/97	0.05	84269
274	HEXACHLOROBENZENE	(1)	10469-01	0.01 U	EPA 508	02/28/97	0.01	84269
2306	BENZO(A)PYRENE	(.2)	10469-01	0.01 U	EPA 550	02/28/97	0.01	84269
2326	PENTACHLOROPHENOL	(1)	10469-01	0.05 U	EPA 515.1	02/26/97	0.05	84269
2383	PCB	(.5)	10469-01	0.05 U	EPA 508	02/28/97	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	10469-01	0.005 U	EPA 504.1	03/03/97	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	10469-01	0.005 U	EPA 504.1	03/03/97	0.005	84269
2959	CHLORDANE	(2)	10469-01	0.05 U	EPA 508	02/28/97	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2021	CARBARYL		10469-01	0.5 U	EPA 531.1	03/06/97	0.5	84269
2022	METHOMYL		10469-01	0.5 U	EPA 531.1	03/06/97	0.5	84269
2043	ALDICARB SULFOXIDE		10469-01	0.5 U	EPA 531.1	03/06/97	0.5	84269
2044	ALDICARB SULFONE		10469-01	0.5 U	EPA 531.1	03/06/97	0.5	84269
2045	METOLACHLOR		10469-01	0.3 U	EPA 507	02/28/97	0.3	84269
2047	ALDICARB		10469-01	0.5 U	EPA 531.1	03/06/97	0.5	84269
2066	3-HYDROXYCARBOFURAN		10469-01	0.5 U	EPA 531.1	03/06/97	0.5	84269
2077	PROPACHLOR		10469-01	0.05 U	EPA 508	02/28/97	0.05	84269
2356	ALDRIN		10469-01	0.01 U	EPA 508	02/28/97	0.01	84269
2364	DIELDRIN		10469-01	0.01 U	EPA 508	02/28/97	0.01	84269
2440	DICAMBA		10469-01	0.05 U	EPA 515.1	02/28/97	0.05	84269
2595	METRIBUZIN		10469-01	0.2 U	EPA 507	02/28/97	0.2	84269

J - Analyte was not detected; indicated concentration is method detection limit.

K - Analyte was less than indicated concentration; indicated concentration is method detection limit multiplied by sample dilution factor.

¹ - Reduced sample volume used for analysis due to interference from sediment.

UNREGULATED GROUP II ANALYSIS

62-550.410

(PWS034)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2210	CHLOROMETHANE	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2212	DICHLORODIFLUOROMETHANE	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2214	BROMOMETHANE	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2216	CHLOROETHANE	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2218	TRICHLOROFUOROMETHANE	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2408	DIBROMOMETHANE	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2410	1,1-DICHLOROPROPYLENE	10469-01	0.3 U	EPA 502.2	03/04/97	0.3	84269
2412	1,3-DICHLOROPROPANE	10469-01	0.3 U	EPA 502.2	03/04/97	0.3	84269
2413	1,3-DICHLOROPROPENE	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	10469-01	0.3 U	EPA 502.2	03/04/97	0.3	84269
2416	2,2-DICHLOROPROPANE	10469-01	0.3 U	EPA 502.2	03/04/97	0.3	84269
2941	CHLOROFORM	10469-01	0.2 U	EPA 502.2	03/04/97	0.2	84269
2942	BROMOFORM	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2943	BROMODICHLOROMETHANE	10469-01	0.3 U	EPA 502.2	03/04/97	0.3	84269
2944	DIBROMOCHLOROMETHANE	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2965	O-CHLOROTOLUENE	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2966	P-CHLOROTOLUENE	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2967	M-DICHLOROBENZENE	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269
2978	1,1-DICHLOROETHANE	10469-01	0.3 U	EPA 502.2	03/04/97	0.3	84269
2986	1,1,1,2-TETRACHLOROETHANE	10469-01	0.3 U	EPA 502.2	03/04/97	0.3	84269
2988	1,1,2,2-TETRACHLOROETHANE	10469-01	0.3 U	EPA 502.2	03/04/97	0.3	84269
2993	BROMOBENZENE	10469-01	0.5 U	EPA 502.2	03/04/97	0.5	84269

UNREGULATED GROUP III ANALYSIS

62-550.415

(PWS036 & 037*)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2262	ISOPHORONE	10469-01	1 U	EPA 609	02/28/97	1	84269
2270	2,4-DINITROTOLUENE	10469-01	1 U	EPA 609	02/28/97	1	84269
2282	DIMETHYLPHthalate	10469-01	1 U	EPA 506	02/28/97	1	84269
2284	DIETHYLPHthalate	10469-01	1 U	EPA 506	02/28/97	1	84269
2290	DI-N-BUTYLPHthalate	10469-01	1 U	EPA 506	02/28/97	1	84269
2294	BUTYL BENZYL PHthalate	10469-01	1 U	EPA 506	02/28/97	1	84269
9089	DIOCTYLPHthalate	10469-01	1 U	EPA 506	02/28/97	1	84269
9108*	2-CHLOROPHENOL	10469-01	5 U	EPA 604	02/28/97	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	10469-01	20 U	EPA 604	02/28/97	20	84269
9115*	PHENOL	10469-01	5 U	EPA 604	02/28/97	5	84269
9116*	2,4,6-TRICHLOROPHENOL	10469-01	10 U	EPA 604	02/28/97	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

MAY-29-'97 THU 09:16 ID:PCWJUD - ENGINEERING TEL NO:487 641-3447

#925 P31

PUBLIC WATER SYSTEM INFORMATION

System Name: Palm Beach County Water Utility SRWWTP

I.D. #:

Address: 12731 Hagen Ranch Road, Boynton Beach, Fl 33437

Phone #: (561) 499-0163

Type (check one): Community Nontransient Noncommunity Noncommunity

F

SAMPLE INFORMATION

Sample Date (MMDYY): 05/23/97

Sample Time: 1506

95-207

Sample Location: Well #18, Southern Regional Wastewater Treatment Plant

Sampler Name and Phone: R. Crisco

(561) 233-1363

Sampler's Signature: [Signature]

Title: Laboratory Technician

Check Type(s): Distribution Recheck of MCL Resample of Lab invalidated Sample
 Clearance Tim Max Res Time Plant Tap
 Distrib entry pt Raw Composite of Multiple Sites

LABORATORY CERTIFICATION INFORMATION

Lab Name: Palm Beach County Water Utility HRS #: 56259

Expiration Date: 06/30/97

Address: 3421 Wilder Avenue West Palm Beach, Florida 33409

Phone #: (561) 233-1363

Subcontracted Lab HRS #: N/A

ANALYSIS INFORMATION SAMPLE NUMBER: A805477

Date Sample(s) Received: 05/23/97

Group(s) Analyzed & Results attached for compliance with 62-551, F.A.C.:

- Nitrate Only
- Nitrite Only
- Asbestos Only
- Trihalomethanes
- Inorganics--
- All 17
- Partial
- Group I Unregulateds--
- All 13
- Partial
- Group II Unregulateds--
- All 23
- Partial
- Group III Unregulateds--
- All 11
- Partial
- Pesticides / PCBs
- All 30
- Partial
- Radiochemicals--
- Single Sample
- Qty Composite

I, Jaya Navani do HEREBY CERTIFY that all attached analytical data are correct.

Signature: [Signature]

Title: Laboratory Manager

Date: 5-28-97

COMPLIANCE INFORMATION

Sample Collection Satisfactory: _____

Sample Analysis Satisfactory: _____

Resample Requested for: _____

Reason: _____

Person notified to resample: _____

Date notified: _____

DEP/ACPHU Reviewing Official: _____

Post-It brand fax transmittal memo 7571 # of pages 2

To: <u>BART ZIEGLER</u>	From: <u>PAUL FELDMAN</u>
Co: <u>SOUTHEAST DRILLING</u>	Co: <u>PBCWUD</u>
Dept:	Phone #: <u>434-5356</u>
Fax #: <u>637-2673</u>	Fax #: <u>641-3447</u>

SAE:WILL
TAMMY WATSON

MAY-29-'97 THU 08:17 ID:PBCWJD - ENGINEERING TEL NO:407 641-3447

#925 P02

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
SRWWTP
VOLATILE ORGANIC ANALYSIS
62-551.310(2) (b)
(PWS028)

Parameter ID	NAME	Sample Number A20	Location Code	Analysis Result(ug/L)	Analytical Method	Detection Limit (ug/L)	Analysis Date
2378	1,2,4-trichlorobenzene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2380	Cis-1,2-dichloroethylene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2955	Xylenes (total)	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2964	Dichloromethane	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2968	O-dichlorobenzene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2969	Para-dichlorobenzene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2978	Vinyl chloride	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2977	1,1-dichloroethylene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2979	Trans-1,2-dichloroethene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2980	1,2-dichloroethane	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2981	1,1,1-trichloroethane	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2982	Carbon tetrachloride	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2983	1,2-dichloropropane	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2984	Trichloroethylene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2985	1,1,2-trichloroethane	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2987	Tetrachloroethylene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2989	Monochlorobenzene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2990	Benzene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2991	Toluene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2992	Ethylbenzene	5477	Well #18	< 0.5	502.2	0.5	05/24/97
2996	Styrene	5477	Well #18	< 0.5	502.2	0.5	05/24/97

COMMENTS:

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

April 8, 1997
Report: 9703000230
Sample No: 9703000230 1

Attention: Bart Ziegler

Project: PBCWF Expansion
12751 Hagen Ranch Road Boynton Beach, FL

Collected by: Bart Ziegler

REPORT OF ANALYSIS FOR: 909A TOTAL COLIFORM BACTERIA

SAMPLE ID	RESULT	DL	UNITS	DATE SAMPLED	DATE ANALYZED	ANALYST
SR #17 Prod Well:Day-1 AM	Absent	1	CFU/100 ml	03/23/97	03/25/97	AMB
SR #17 Prod Well:Day-1 PM	Absent	1	CFU/100 ml	03/23/97	03/25/97	AMB
SR #17 Prod Well:Day-2 AM	Absent	1	CFU/100 ml	03/24/97	03/25/97	AMB
SR #17 Prod Well:Day-2 PM	Absent	1	CFU/100 ml	03/24/97	03/25/97	AMB
SR #17 Prod Well:Day-3 AM	Absent	1	CFU/100 ml	03/25/97	03/26/97	DJC
SR #17 Prod Well:Day-3 PM	Absent	1	CFU/100 ml	03/25/97	03/26/97	DJC
SR #17 Prod Well:Day-4 AM	Absent	1	CFU/100 ml	03/26/97	03/28/97	JMJ
SR #17 Prod Well:Day-4 PM	Absent	1	CFU/100 ml	03/26/97	03/28/97	JMJ
SR #17 Prod Well:Day-5 AM	Absent	1	CFU/100 ml	03/27/97	03/28/97	JMJ
SR #17 Prod Well:Day-5 PM	Absent	1	CFU/100 ml	03/27/97	03/28/97	JMJ
SR #17 Prod Well:Day-6 AM	Absent	1	CFU/100 ml	03/28/97	03/29/97	HTG
SR #17 Prod Well:Day-6 PM	Absent	1	CFU/100 ml	03/28/97	03/29/97	HTG

Envirodyne Inc.

4305 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

April 8, 1997
Report: 9703000230
Sample No: 9703000230 13

Attention: Bart Ziegler

Project: PBCWF Expansion
12751 Hagen Ranch Road Boynton Beach, FL

Collected by: Bart Ziegler


REPORT OF ANALYSIS FOR: 909A TOTAL COLIFORM BACTERIA

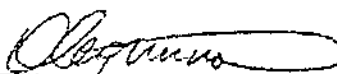
SAMPLE ID	RESULT	DL	UNITS	DATE SAMPLED	DATE ANALYZED	ANALYST
SR #17 Prod Well:Day-7 AM	Absent	1	CFU/100 ml	03/29/97	03/30/97	HTG
SR #17 Prod Well:Day-7 PM	Absent	1	CFU/100 ml	03/29/97	03/30/97	HTG
SR #17 Prod Well:Day-8 AM	Absent	1	CFU/100 ml	03/31/97	04/02/97	HTG
SR #17 Prod Well:Day-8 PM	Absent	1	CFU/100 ml	03/31/97	04/02/97	HTG
SR #17 Prod Well:Day-9 AM	Absent	1	CFU/100 ml	04/01/97	04/02/97	HTG
SR #17 Prod Well:Day-9 PM	Absent	1	CFU/100 ml	04/01/97	04/02/97	HTG
SR#17 Prod Well:Day-10 AM	Absent	1	CFU/100 ml	04/02/97	04/03/97	HTG
SR#17 Prod Well:Day-10 PM	Absent	1	CFU/100 ml	04/02/97	04/03/97	HTG

cfu = colony forming units

The Water Analysis is ACCEPTABLE by health department standards for safe public drinking water, with regards to Coliform bacteria using EPA approved methods.

Analysis contained herein conform to EPA and DEP approved methods per Envirodyne Comprehensive Quality Assurance Plan No. 89C041G. Additional Laboratory Certification numbers: E86006, 86408, E83079, E86240. All relevant quality assurance samples were within specified control limits unless otherwise stated.


Michael Rentoumis
President, Envirodyne, Inc.


Oleg L. Minko, Ph.D.
Quality Assurance Director

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

March 31, 1997
Report: 9703000191
Sample No: 9703000191 1

Attention: Bart Ziegler

Project: PBCWF Expansion
12751 Hagen Ranch Road Boynton Beach, FL

Collected by: Bart Ziegler

REPORT OF ANALYSIS FOR: 909A TOTAL COLIFORM BACTERIA

SAMPLE ID	RESULT	DL	UNITS	DATE SAMPLED	DATE ANALYZED	ANALYST
SR #18 Prod.Well:Day-1 AM	Absent	1	CFU/100 ml	03/18/97	03/20/97	AMB
SR #18 Prod.Well:Day-1 PM	Absent	1	CFU/100 ml	03/18/97	03/20/97	AMB
SR #18 Prod.Well:Day-2 AM	Absent	1	CFU/100 ml	03/19/97	03/20/97	AMB
SR #18 Prod.Well:Day-2 PM	Absent	1	CFU/100 ml	03/19/97	03/20/97	AMB
SR #18 Prod.Well:Day-3 AM	Absent	1	CFU/100 ml	03/20/97	03/22/97	DJC
SR #18 Prod.Well:Day-3 PM	Absent	1	CFU/100 ml	03/20/97	03/22/97	DJC
SR #18 Prod.Well:Day-4 AM	Absent	1	CFU/100 ml	03/21/97	03/22/97	DJC
SR #18 Prod.Well:Day-4 PM	Absent	1	CFU/100 ml	03/21/97	03/22/97	DJC
SR #18 Prod.Well:Day-5 AM	Absent	1	CFU/100 ml	03/22/97	03/25/97	AMB
SR #18 Prod.Well:Day-5 PM	Absent	1	CFU/100 ml	03/22/97	03/25/97	AMB
SR #18 Prod.Well:Day-6 AM	Absent	1	CFU/100 ml	03/23/97	03/25/97	AMB
SR #18 Prod.Well:Day-6 PM	Absent	1	CFU/100 ml	03/23/97	03/25/97	AMB

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

March 31, 1997
Report: 9703000191
Sample No: 9703000191 13

Attention: Bart Ziegler

Project: PBCWF Expansion
12751 Hagen Ranch Road Boynton Beach, FL

Collected by: Bart Ziegler

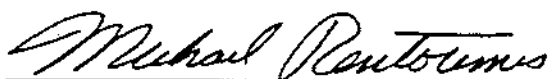
REPORT OF ANALYSIS FOR: 909A TOTAL COLIFORM BACTERIA

SAMPLE ID	RESULT	DL	UNITS	DATE SAMPLED	DATE ANALYZED	ANALYST
SR #18 Prod.Well:Day-7 AM	Absent	1	CFU/100 ml	03/24/97	03/25/97	AMB
SR #18 Prod.Well:Day-7 PM	Absent	1	CFU/100 ml	03/24/97	03/25/97	AMB
SR #18 Prod.Well:Day-8 AM	Absent	1	CFU/100 ml	03/25/97	03/26/97	DJC
SR #18 Prod.Well:Day-8 PM	Absent	1	CFU/100 ml	03/25/97	03/26/97	DJC
SR #18 Prod.Well:Day-9 AM	Absent	1	CFU/100 ml	03/26/97	03/28/97	JMJ
SR #18 Prod.Well:Day-9 PM	Absent	1	CFU/100 ml	03/26/97	03/28/97	JMJ
SR#18 Prod.Well:Day-10 AM	Absent	1	CFU/100 ml	03/27/97	03/28/97	JMJ
SR#18 Prod.Well:Day-10 PM	Absent	1	CFU/100 ml	03/27/97	03/28/97	JMJ

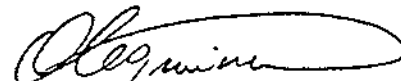
cfu = colony forming units

The Water Analysis is ACCEPTABLE by health department standards for safe public drinking water, with regards to Coliform bacteria using EPA approved methods.

Analysis contained herein conform to EPA and DEP approved methods per Envirodyne Comprehensive Quality Assurance Plan No. 890041G. Additional Laboratory Certification numbers: E86006, 86408, E83079, E86240. All relevant quality assurance samples were within specified control limits unless otherwise stated.



Michael Rentoumis
President, Envirodyne, Inc.



Oleg I. Minko, Ph.D.
Quality Assurance Director

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

April 4, 1997
Report: 9704000034
Sample No: 9704000034 1

Attention: Bart Ziegler

Project: PBCWF Expansion
12751 Hagen Ranch Road Boynton Beach, FL

SAMPLE ID: SR #15 Prod. Well

Collected by: Bart Ziegler

Collected on: 04/02/97
Received on: 04/02/97

Date of Analysis: 04/03/97
Date of Extraction: 04/03/97

8270A DIOXIN

PARAMETER	RESULT	DL UNITS	ANALYST
2,3,7,8-Tertachlorodibenzo-p-dioxin	Absent	20 µg/L	DWK

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

April 4, 1997
Report: 9704000034
Sample No: 9704000034 2

Attention: Bart Ziegler

Project: PBCWF Expansion
12751 Hagen Ranch Road Boynton Beach, FL

SAMPLE ID: SR #16 Prod. Well

Collected by: Bart Ziegler

Collected on: 04/02/97

Received on: 04/02/97

Date of Analysis: 04/03/97

Date of Extraction: 04/03/97

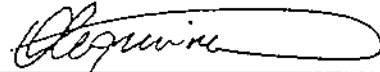
8270A DIOXIN

PARAMETER	RESULT	DL UNITS	ANALYST
2,3,7,8-Tertachlorodibenzo-p-dioxin	Absent	20 µg/L	DWK

Analysis contained herein conform to EPA and DEP approved methods per Envirodyne Comprehensive Quality Assurance Plan No. 890041G. Additional Laboratory Certification numbers: E86006, 86408, E83079, E86240, South Carolina 96022. All relevant quality assurance samples were within specified control limits unless otherwise stated.



Michael Rentoumis
President, Envirodyne, Inc.



Oleg I. Minko, Ph.D.
Quality Assurance Director

Envirodyne Inc

Post-It® Fax Note 7671		Date 4/24/97	# of pages 2
To Tammy	From Cheryl		
Co./Dept.	Co. Envirodyne		
Phone #	Phone #		
Fax #	Fax #		

WHS
1437
1225
1997
0033

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

Sample No: 9704000033 1

Attention: Bart Ziegler

Project: PBCWF Expansion
12751 Hagen Ranch Road Boynton Beach, FL

SAMPLE ID: SR #17 Prod. Well

Collected by: Bart Ziegler

Collected on: 04/02/97
Received on: 04/02/97

Date of Analysis: 04/08/97
Date of Extraction: 04/05/97

8270A DIOXIN

PARAMETER	RESULT	DL UNITS	ANALYST
2,3,7,8-Tertachlorodibenzo-p-dioxin	Absent	20 µg/L	DWK

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

April 9, 1997
Report: 9704000033
Sample No: 9704000033 2

Attention: Bart Ziegler

Project: PBCWF Expansion
12751 Hagen Ranch Road Boynton Beach, FL

SAMPLE ID: SR #18 Prod. Well

Collected by: Bart Ziegler

Collected on: 04/02/97

Received on: 04/02/97

Date of Analysis: 04/08/97

Date of Extraction: 04/05/97

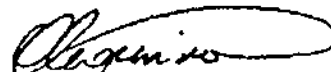
8270A DIOXIN

PARAMETER	RESULT	DL UNITS	ANALYST
2,3,7,8-Tertachlorodibenzo-p-dioxin	Absent	20 µg/L	DWK

Analysis contained herein conform to EPA and DEP approved methods per Envirodyne Comprehensive Quality Assurance Plan No. 890041G. Additional Laboratory Certification numbers: EB6006, 86408, EB3079, EB6240, South Carolina 96022. All relevant quality assurance samples were within specified control limits unless otherwise stated.



Michael Rantoumis
President, Envirodyne, Inc.



Oleg I. Minko, Ph.D.
Quality Assurance Director

System 3 Polo Trace

June 20, 1997

Mr. Bart Ziegler
Southeast Drilling
P.O. Box 271723
Tampa, FL 33688

Dear Mr. Ziegler:

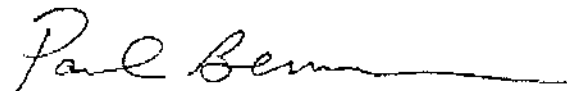
Attached are the data reports for the following samples:

PPB Sample Number	Southern Analytical Number	PBS&J* Number	Site Name	Your Sample ID	Sample Date	Sample Time
146675	10943-1	9705312-1	Palm Beach Well Field	PT PW 13	05/21/97	1600
146676	10943-2	9705312-2	Palm Beach Well Field	PT PW 14	05/21/97	1530

*PBS&J = Post Buckley Schuh and Jernigan

If you have any questions concerning these reports, please contact me.

Sincerely,



Paul Berman
Project Manager

PLB:cms

Enclosures

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (to be completed by system or lab)

System Name: _____ I.D. #: _____
 Address: _____ Phone #: (____) _____
 Type (check one): Community Nontransient Noncommunity Noncommunity

SAMPLE INFORMATION (to be completed by sampler)

Sample Date (MMDDYY): ____/____/____ Sample Time: _____
 Sample Location (be specific): _____
 Sampler Name and Phone: _____ (____) _____
 Sampler's Signature: _____ Title: _____
 Check Type(s): Distribution Recheck of MCL Resample of Lab Invalidated Sample
 Clearance 12m Max Res Time Plant Tap
 Distrib entry pt Raw Composite of Multiple Sites--Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab) - ATTACH HRS ANALYTE SHEET*

Lab Name: PPB Environmental Laboratories, Inc. HRS #: 82282 Expiration Date: _____
 Address: 6821 SW Archer Road, Gainesville, FL 32609 Phone #: (352) 377-2349

Subcontracted Lab HRS #: 83170, 82135, 84269, 82138 - ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (to be completed by lab) - SAMPLE NUMBER: 146675

Date Sample(s) Received: 05/22/97 Group(s) Analyzed & Results attached for compliance with 82-560, F.A.C.:

<input type="checkbox"/> Nitrate Only	<input type="checkbox"/> Nitrite Only	<input type="checkbox"/> Asbestos Only	<input checked="" type="checkbox"/> Trihalomethanes
Inorganics-- <input type="checkbox"/> All 17 <input checked="" type="checkbox"/> Partial	Volatile Organics-- <input checked="" type="checkbox"/> All 21 <input type="checkbox"/> Partial	Secondaries-- <input checked="" type="checkbox"/> All 14 <input type="checkbox"/> Partial	Pesticides/PCBs-- <input type="checkbox"/> All 30 <input checked="" type="checkbox"/> Partial
Group I Unregulateds-- <input type="checkbox"/> All 13 <input checked="" type="checkbox"/> Partial	Group II Unregulateds-- <input checked="" type="checkbox"/> All 23 <input type="checkbox"/> Partial	Group III Unregulateds-- <input checked="" type="checkbox"/> All 11 <input type="checkbox"/> Partial	Radiochemicals-- <input checked="" type="checkbox"/> Single Sample <input type="checkbox"/> Qtrly Composite**

**Provide radiochemical sample dates & locations for each quarter

I, Paul Berman, do HEREBY CERTIFY that all attached analytical data are correct.

Signature: 
 Title: QA Officer Date: 6/20/97

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: _____ Sample Analysis Satisfactory: _____
 Resample Requested for: _____ Reason: _____
 Person notified to resample: _____ Date Notified: _____
 DEP/HRS Reviewing Official: _____

*All HRS lab #s and their HRS Analyte Sheet for labs performing the attached water analyses must be provided. Failure to do so will result in rejection of the analyses and possible enforcement against the public water system for failure to sample.

Effective January 1995

PPB Environmental Laboratories, Inc. • 6821 SW Archer Road • Gainesville, FL 32608 • (352) 377-2349

INORGANIC ANALYSIS

62-550.310(1)

(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	146675	0.001 U	SM 3113B	06/19/97	0.001	82282
1010	BARIUM	(2)	146675	0.040	EPA 200.7	06/17/97	0.001	82282
1015	CADMIUM	(.005)	146675	0.0004 U	SM 3113B	06/17/97	0.0001	82282
1020	CHROMIUM	(0.1)	146675	0.01 K	EPA 200.7	06/17/97	0.005	82282
1024	CYANIDE	(0.2)	146675	0.004 U	SM 4500CNE	06/03/97	0.004	82282
1025	FLUORIDE	(4)	146675	0.32	SM 4500FC	06/10/97	0.02	82282
1030	LEAD	(0.015)	146675	0.001 U	SM 3113B	06/20/97	0.001	82282
1035	MERCURY	(0.002)	146675	0.0001 K	EPA 245.1	06/02/97	0.00005	82282
1036	NICKEL	(0.1)	146675	0.030 U	EPA 200.7	06/17/97	0.030	82282
1040	NITRATE	(10)	146675	0.029	EPA 353.2	06/03/97	0.004	82282
1041	NITRITE	(1)	146675	0.004	EPA 353.2	05/22/97	0.003	82282
1045	SELENIUM	(0.05)	146675	0.002	SM 3113B	06/18/97	0.001	82282
1052	SODIUM	(150)	146675	40.5	EPA 200.7	06/17/97	0.05	82282
1074	ANTIMONY	(0.006)	146675	0.003 U	SM 3113B	06/19/97	0.003	82282
1075	BERYLLIUM	(0.004)	146675	0.003 U	EPA 200.7	06/17/97	0.003	82282
1085	THALLIUM	(0.002)	146675	0.002 U	EPA 200.9	06/19/97	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS

62-550.320

(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1002	ALUMINUM	(0.2)	146675	0.1 K	EPA 202.2	06/17/97	0.01	82282
1017	CHLORIDE	(250)	146675	52	EPA 325.2	06/11/97	0.3	82282
1022	COPPER	(1)	146675	0.01 U	EPA 200.7	06/17/97	0.01	82282
1020	FLUORIDE	(2.0)	146675	0.32	SM 4500FC	06/10/97	0.02	82282
1028	IRON	(0.3)	146675	0.041	EPA 200.7	06/17/97	0.005	82282
1032	MANGANESE	(0.05)	146675	0.02 K	EPA 200.7	06/17/97	0.005	82282
1050	SILVER	(0.1)	146675	0.0002 K	SM 3113B	06/18/97	0.0001	82282
1055	SULFATE	(250)	146675	8	EPA 375.4	06/16/97	1	82282
1085	ZINC	(5)	146675	0.005	EPA 200.7	06/17/97	0.004	82282
1905	COLOR	(15-color units)	146675	60	SM 2120B	05/22/97	5	82282
1920	ODOR	(3 threshold odor number)	146675	1	SM 2150B	05/22/97	1	82282
1925	PH	(6.5-8.5)	146675	7.2	EPA 150.1	05/22/97	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		146675	420	SM 2540C	05/28/97	3	82282
2905	FOAMING AGENTS	(0.5)	146675	0.025 U	SM 5540C	05/23/97	0.025	82135

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).
 K indicates analyte is less than value indicated, with value being greater than method detection limit.
 U - Analyte was not detected; indicated concentration is method detection limit.

PPB Environmental Laboratories, Inc. • 6821 SW Archer Road • Gainesville, FL 32608 • (352) 377-2349

RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

<u>Parameter ID</u>	<u>Name</u>	<u>(MCL pCi/l)</u>	<u>Sample Number</u>	<u>Analysis Result (pCi/l)</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Error</u>	<u>Lab ID</u>
4000	GROSS ALPHA		9705312-1	2.2 ± 1.7	EPA 900.0	05/23/97	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		NA					
4030	RADIUM-228		NA					
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)

NA = NOT ANALYZED

Southern Analytical
Project No. 10943
June 9, 1997

PPB No. 146675

TRIHALOMETHANE ANALYSIS
62-550.310(2)(a)
(PWS027)

<u>Parameter ID</u>	<u>NAME (MCL mg/l)</u>	<u>Sample Number</u>	<u>Analysis Result (mg/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2950	Total THMs (0.10)	10943-01	0.0015 U	EPA 502.2	6/2/97	0.0015	84269

VOLATILE ORGANIC ANALYSIS
62-550.310(2) (b)
(PWS028)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2378	1,2,4-Trichlorobenzene (70)	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2380	cis-1,2-Dichloroethene (70)	10943-01	0.2 U	EPA 502.2	6/2/97	0.2	84269
2955	Xylenes (Total) (10,000)	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2964	Dichloromethane (5)	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2968	o-Dichlorobenzene (600)	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2969	p-Dichlorobenzene (75)	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2976	Vinyl chloride (1)	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2977	1,1-Dichloroethene (7)	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2979	trans-1,2-Dichloroethene (100)	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2980	1,2-Dichloroethane (3)	10943-01	0.2 U	EPA 502.2	6/2/97	0.2	84269
2981	1,1,1-Trichloroethane (200)	10943-01	0.3 U	EPA 502.2	6/2/97	0.3	84269
2982	Carbon tetrachloride (3)	10943-01	0.3 U	EPA 502.2	6/2/97	0.3	84269
2983	1,2-Dichloropropane (5)	10943-01	0.3 U	EPA 502.2	6/2/97	0.3	84269
2984	Trichloroethene (3)	10943-01	0.2 U	EPA 502.2	6/2/97	0.2	84269
2985	1,1,2-Trichloroethane (5)	10943-01	0.3 U	EPA 502.2	6/2/97	0.3	84269
2987	Tetrachloroethene (3)	10943-01	0.2 U	EPA 502.2	6/2/97	0.2	84269
2989	Monochlorobenzene (100)	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2990	Benzene (1)	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2991	Toluene (1,000)	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2992	Ethylbenzene (700)	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2996	Styrene (100)	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 10943
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PPB No. 146675

PESTICIDE & PCB CHEMICAL ANALYSIS
62-550.310(2) (c)
(PWS029)

Parameter ID	NAME (MCL ug/l)	Sample Number	Analysis Result (ug/l)	Analyt. Method	Analysis Date	MDL	Lab ID
2005	Endrin (.2)	10943-01	0.01 U	EPA 508	5/28/97	0.01	84269
2010	Lindane (.2)	10943-01	0.01 U	EPA 508	5/28/97	0.01	84269
2015	Methoxychlor (40)	10943-01	0.02 U	EPA 508	5/28/97	0.02	84269
2020	Toxaphene (3)	10943-01	0.2 U	EPA 508	5/28/97	0.2	84269
2031	Dalapon (200)	10943-01	1 U	EPA 515.1	6/3/97	1	84269
2032	Diquat (20)	10943-01	1 U	EPA 549.1	5/27/97	1	84269
2033	Endothall (100)	10943-01	10 U	EPA 548.1	5/28/97	10	84269
2034	Glyphosate (700)	10943-01	10 U	EPA 547	5/23/97	10	84269
2035	Di(2-ethylhexyl)adipate (400)	10943-01	1 U	EPA 506	5/28/97	1	84269
2036	Oxamyl (Vydate) (200)	10943-01	0.5 U	EPA 531.1	5/31/97	0.5	84269
2037	Simazine (4)	10943-01	0.1 U	EPA 507	5/28/97	0.1	84269
2039	Di(2-ethylhexyl)phthalate (6)	10943-01	1 U	EPA 506	5/28/97	1	84269
2040	Picloram (500)	10943-01	0.2 U	EPA 515.1	6/3/97	0.2	84269
2041	Dinoseb (7)	10943-01	0.2 U	EPA 515.1	6/3/97	0.2	84269
2042	Hexachlorocyclopentadiene (50)	10943-01	0.1 U	EPA 505	6/2/97	0.1	84269
2046	Carbofuran (40)	10943-01	0.5 U	EPA 531.1	5/31/97	0.5	84269
2050	Atrazine (3)	10943-01	0.1 U	EPA 507	5/28/97	0.1	84269
2051	Alachlor (2)	10943-01	0.3 U	EPA 507	5/28/97	0.3	84269
2065	Heptachlor (.4)	10943-01	0.01 U	EPA 508	5/28/97	0.01	84269
2067	Heptachlor epoxide (.2)	10943-01	0.01 U	EPA 508	5/28/97	0.01	84269
2105	2,4-D (70)	10943-01	0.5 U	EPA 515.1	6/3/97	0.5	84269
2110	2,4,5-TP (Silvex) (50)	10943-01	0.05 U	EPA 515.1	6/3/97	0.05	84269
2274	Hexachlorobenzene (1)	10943-01	0.01 U	EPA 508	5/28/97	0.01	84269
2306	Benzo(a)pyrene (.2)	10943-01	0.01 U	EPA 550	5/28/97	0.01	84269
2326	Pentachlorophenol (1)	10943-01	0.05 U	EPA 515.1	6/3/97	0.05	84269
2383	PCBs (.5)	10943-01	0.05 U	EPA 508	5/28/97	0.05	84269
2931	Dibromochloropropane (.2)	10943-01	0.005 U	EPA 504.1	5/31/97	0.005	84269
2946	Ethylene dibromide (.02)	10943-01	0.005 U	EPA 504.1	5/31/97	0.005	84269
2959	Chlordane (2)	10943-01	0.05 U	EPA 508	5/28/97	0.05	84269

U - Analyte was not detected; indicated concentration is method detection limit.

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PPS No. 146675

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2021	Carbaryl	10943-01	0.5 U	EPA 531.1	5/31/97	0.5	84269
2022	Methomyl	10943-01	0.5 U	EPA 531.1	5/31/97	0.5	84269
2043	Aldicarb sulfoxide	10943-01	0.5 U	EPA 531.1	5/31/97	0.5	84269
2044	Aldicarb sulfone	10943-01	0.5 U	EPA 531.1	5/31/97	0.5	84269
2045	Metolachlor	10943-01	0.3 U	EPA 507	5/28/97	0.3	84269
2047	Aldicarb	10943-01	0.5 U	EPA 531.1	5/31/97	0.5	84269
2068	3-Hydroxycarbofuran	10943-01	0.5 U	EPA 531.1	5/31/97	0.5	84269
2076	Butachlor	10943-01	0.4 U	EPA 508	5/28/97	0.4	84269
2077	Propachlor	10943-01	0.05 U	EPA 508	5/28/97	0.05	84269
2356	Aldrin	10943-01	0.01 U	EPA 508	5/28/97	0.01	84269
2364	Dieldrin	10943-01	0.01 U	EPA 508	5/28/97	0.01	84269
2440	Dicamba	10943-01	0.05 U	EPA 515.1	6/3/97	0.05	84269
2595	Metribuzin	10943-01	0.2 U	EPA 507	5/28/97	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 10943
June 9, 1997

PPB No. 146675

UNREGULATED GROUP II ANALYSIS
62-550.410
(PWS034)

<u>Parameter</u> <u>ID</u> <u>NAME</u> (<u>MCL ug/l</u>)	<u>Sample</u> <u>Number</u>	<u>Analysis</u> <u>Result (ug/l)</u>	<u>Analyt.</u> <u>Method</u>	<u>Analysis</u> <u>Date</u>	<u>MDL</u>	<u>Lab</u> <u>ID</u>
2210 Chloromethane	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2212 Dichlorodifluoromethane	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2214 Bromomethane	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2216 Chloroethane	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2218 Trichlorofluoromethane	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2251 Methyl-tert-butyl-ether	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2408 Dibromomethane	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2410 1,1-Dichloropropane	10943-01	0.3 U	EPA 502.2	6/2/97	0.3	84269
2412 1,3-Dichloropropane	10943-01	0.3 U	EPA 502.2	6/2/97	0.3	84269
2413 1,3-Dichloropropane	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2414 1,2,3-Trichloropropane	10943-01	0.3 U	EPA 502.2	6/2/97	0.3	84269
2416 2,2-Dichloropropane	10943-01	0.3 U	EPA 502.2	6/2/97	0.3	84269
2941 Chloroform	10943-01	0.2 U	EPA 502.2	6/2/97	0.2	84269
2942 Bromoform	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2943 Bromodichloromethane	10943-01	0.3 U	EPA 502.2	6/2/97	0.3	84269
2944 Dibromochloromethane	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2965 o-Chlorotoluene	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2966 p-Chlorotoluene	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2967 m-Dichlorobenzene	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269
2978 1,1-Dichloroethane	10943-01	0.3 U	EPA 502.2	6/2/97	0.3	84269
2986 1,1,1,2-Tetrachloroethane	10943-01	0.3 U	EPA 502.2	6/2/97	0.3	84269
2988 1,1,2,2-Tetrachloroethane	10943-01	0.3 U	EPA 502.2	6/2/97	0.3	84269
2993 Bromobenzene	10943-01	0.5 U	EPA 502.2	6/2/97	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 10943
June 9, 1997

PFB No. 146675

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2262	Isophorone	10943-01	1 U	EPA 609	5/28/97	1	84269
2270	2,4-Dinitrotoluene	10943-01	1 U	EPA 609	5/28/97	1	84269
2282	Dimethylphthalate	10943-01	1 U	EPA 506	5/28/97	1	84269
2284	Diethylphthalate	10943-01	1 U	EPA 506	5/28/97	1	84269
2290	Di-n-butylphthalate	10943-01	1 U	EPA 506	5/28/97	1	84269
2294	Butyl benzyl phthalate	10943-01	1 U	EPA 506	5/28/97	1	84269
9089	Di-n-octylphthalate	10943-01	1 U	EPA 506	5/28/97	1	84269
9108*	2-Chlorophenol	10943-01	5 U	EPA 604	5/28/97	5	84269
9112*	2-Methyl-4,6-dinitrophenol	10943-01	20 U	EPA 604	5/28/97	20	84269
9115*	Phenol	10943-01	5 U	EPA 604	5/28/97	5	84269
9116*	2,4,6-Trichlorophenol	10943-01	10 U	EPA 604	5/28/97	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

PPB Environmental Laboratories, Inc. • 6821 SW Archer Road • Gainesville, FL 32608 • (352) 377-2349

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (TO BE COMPLETED BY SYSTEM OR LAB)

SYSTEM NAME: _____ I.D. #: _____

ADDRESS: _____ PHONE #: (____) _____

TYPE (CHECK ONE) () COMMUNITY () NONTRANSIENT NONCOMMUNITY () NONCOMMUNITY

SAMPLE INFORMATION (TO BE COMPLETED BY SAMPLER)

SAMPLE DATE (MMDDYY): ____/____/____ SAMPLE TIME: _____

SAMPLE LOCATION (BE SPECIFIC): _____

SAMPLER NAME AND PHONE: _____ (____) _____

SAMPLER'S SIGNATURE: _____ TITLE: _____

CHECK TYPE(S): () DISTRIBUTION () RECHECK OF MDL () RESAMPLE OF LAB INVALIDATED SAMPLE
() CLEARANCE () 7-M MAX RES TIME () PLANT TAP
() DISTRIB ENTRY PT () RAW () COMPOSITE OF MULTIPLE SITES-ATTACH A FORMAT FOR EACH SITE

LABORATORY CERTIFICATION INFORMATION (TO BE COMPLETED BY LAB) - ATTACH HRS ANALYTE SHEET*

LAB NAME: PPB ENVIRONMENTAL LABORATORIES, INC. HRS #: 82282 EXPIRATION DATE: _____

ADDRESS: 6821 SW ARCHER ROAD, GAINESVILLE, FL 32608 PHONE #: (352) 377-2349

SUBCONTRACTED LAB HRS #: 83170, 82135, 84289, 82138 - ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (TO BE COMPLETED BY LAB) - SAMPLE NUMBER: 146676

DATE SAMPLE(S) RECEIVED: 05/22/97 GROUP(S) ANALYZED & RESULTS ATTACHED FOR COMPLIANCE WITH 62-550, F.A.C.:

- () NITRATE ONLY () NITRITE ONLY () ASBESTOS ONLY (x) TRIHALOMETHANES
INORGANICS- VOLATILE ORGANICS- SECONDARIES- PESTICIDE/PCBS-
() ALL 17 (x) PARTIAL (x) ALL 21 () PARTIAL (x) ALL 14 () PARTIAL () ALL 30 (x) PARTIAL
GROUP I UNREGULATEDS- GROUP II UNREGULATEDS- GROUP III UNREGULATEDS- RADIOCHEMICALS-
() ALL 13 (x) PARTIAL (x) ALL 23 () PARTIAL (x) ALL 11 () PARTIAL (x) SINGLE SAMPLE
() QTRLY COMPOSITE**

**PROVIDE RADIOCHEMICAL SAMPLE DATES & LOCATIONS FOR EACH QUARTER

I, PAUL BERMAN, DO HEREBY CERTIFY THAT ALL ATTACHED ANALYTICAL DATA ARE CORRECT.

SIGNATURE [Signature] _____

TITLE QA OFFICER DATE 6/20/97

COMPLIANCE INFORMATION (TO BE COMPLETED BY STATE)

SAMPLE COLLECTION SATISFACTORY: _____ SAMPLE ANALYSIS SATISFACTORY: _____

RESAMPLE REQUESTED FOR: _____ REASON: _____

PERSON NOTIFIED TO RESAMPLE: _____ DATE NOTIFIED: _____

DEP/HRS REVIEWING OFFICIAL: _____

*ALL HRS LAB #S AND THEIR HRS ANALYTE SHEET FOR LABS PERFORMING THE ATTACHED WATER ANALYSES MUST BE PROVIDED. FAILURE TO DO SO WILL RESULT IN REJECTION OF THE ANALYSES AND POSSIBLE ENFORCEMENT AGAINST THE PUBLIC WATER SYSTEM FOR FAILURE TO SAMPLE.

EFFECTIVE JANUARY 1995

PPB Environmental Laboratories, Inc. • 6821 SW Archer Road • Gainesville, FL 32608 • (352) 377-2349

INORGANIC ANALYSIS

62-550.310(1)

(PWS030)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (MG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (MG/L)	LAB ID
1005	ARSENIC	(.05)	146676	0.001 U	SM 3113B	06/19/97	0.001	82282
1010	BARIIUM	(2)	146676	0.038	EPA 200.7	06/17/97	0.001	82282
1015	CADMIUM	(.005)	146676	0.0001 U	SM 3113B	06/17/97	0.0001	82282
1020	CHROMIUM	(0.1)	146676	0.01 K	EPA 200.7	06/17/97	0.005	82282
1024	CYANIDE	(0.2)	146676	0.004 U	SM 4500CNE	06/03/97	0.004	82282
1025	FLUORIDE	(4)	146676	0.29	SM 4500FC	06/10/97	0.02	82282
1030	LEAD	(0.015)	146676	0.001 U	SM 3113B	06/20/97	0.001	82282
1035	MERCURY	(0.002)	146676	0.0001 K	EPA 245.1	06/02/97	0.00005	82282
1036	NICKEL	(0.1)	146676	0.030 U	EPA 200.7	06/17/97	0.030	82282
1040	NITRATE	(10)	146676	0.012	EPA 353.2	06/03/97	0.004	82282
1041	NITRITE	(1)	146676	0.004	EPA 353.2	05/22/97	0.003	82282
1045	SELENIUM	(0.05)	146676	0.001	SM 3113B	06/18/97	0.001	82282
1052	SODIUM	(160)	146676	35.9	EPA 200.7	06/17/97	0.05	82282
1074	ANTIMONY	(0.006)	146676	0.003 U	SM 3113B	06/19/97	0.003	82282
1075	BERYLLIUM	(0.004)	146676	0.003 U	EPA 200.7	06/17/97	0.003	82282
1085	THALLIUM	(0.002)	146676	0.002 U	EPA 200.9	06/19/97	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS

62-550.320

(PWS031)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS* RESULT (MG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (MG/L)	LAB ID
1002	ALUMINUM	(0.2)	146676	0.015	EPA 200.7	06/17/97	0.01	82282
1017	CHLORIDE	(250)	146676	60	EPA 325.2	06/11/97	0.3	82282
1022	COPPER	(1)	146676	0.01 U	EPA 200.7	06/17/97	0.01	82282
1020	FLUORIDE	(2.0)	146676	0.29	SM 4500FC	06/10/97	0.02	82282
1028	IRON	(0.3)	146676	0.034	EPA 200.7	06/17/97	0.005	82282
1032	MANGANESE	(0.05)	146676	0.02 K	EPA 200.7	06/17/97	0.005	82282
1050	SILVER	(0.1)	146676	0.0002 K	SM 3113B	06/18/97	0.0001	82282
1055	SULFATE	(250)	146676	5	EPA 375.4	06/16/97	1	82282
1095	ZINC	(5)	146676	0.005	EPA 200.7	06/17/97	0.004	82282
1905	COLOR	(15 COLOR UNITS)	146676	60	SM 2120B	05/22/97	5	82282
1920	ODOR (3 THRESHOLD ODOR NUMBER)		146676	2	SM 2150B	05/22/97	1	82282
1925	PH	(6.5-8.5)	146676	7.4	EPA 150.1	05/22/97	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		146676	398	SM 2540C	05/28/97	3	82282
2905	FOAMING AGENTS	(0.5)	146676	0.025 U	SM 5540C	05/23/97	0.025	82135

*ALL RESULTS AND METHOD DETECTION LIMITS IN MG/L EXCEPT COLOR (PCU), ODOR (THRESHOLD ODOR NUMBER), AND PH (STANDARD UNITS).

K INDICATES ANALYTE IS LESS THAN VALUE INDICATED, WITH VALUE BEING GREATER THAN METHOD DETECTION LIMIT.

U - ANALYTE WAS NOT DETECTED; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT.

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RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

<u>PARAMETER</u> <u>ID</u>	<u>NAME</u>	<u>(MCL PC/L)</u>	<u>SAMPLE</u> <u>NUMBER</u>	<u>ANALYSIS</u> <u>RESULT (PC/L)</u>	<u>ANALYSIS</u> <u>METHOD</u>	<u>ANALYSIS</u> <u>DATE</u>	<u>ERROR</u>	<u>LAB</u> <u>ID</u>
4000	GROSS ALPHA		9705312-2	1.1 ± 1.3	EPA 900.0	05/23/97	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		NA					
4030	RADIUM-228		NA					
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT. SEE 62-550.519, FAC)

NA = NOT ANALYZED

Southern Analytical
Project No. 10943
June 9, 1997

PPB No. 146676

TRIHALOMETHANE ANALYSIS
62-550.310(2)(a)
(PWS027)

<u>Parameter ID</u>	<u>NAME (MCL mg/l)</u>	<u>Sample Number</u>	<u>Analysis Result (mg/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2950	Total THMs (0.10)	10943-02	0.0015 U	EPA 502.2	6/2/97	0.0015	84269

VOLATILE ORGANIC ANALYSIS
62-550.310(2) (b)
(PWS028)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2378	1,2,4-Trichlorobenzene (70)	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2380	cis-1,2-Dichloroethene (70)	10943-02	0.2 U	EPA 502.2	6/2/97	0.2	84269
2955	Xylenes (Total) (10,000)	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2964	Dichloromethane (5)	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2968	o-Dichlorobenzene (600)	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2969	p-Dichlorobenzene (75)	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2976	Vinyl chloride (1)	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2977	1,1-Dichloroethene (7)	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2979	trans-1,2- Dichloroethene (100)	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2980	1,2- Dichloroethane (3)	10943-02	0.2 U	EPA 502.2	6/2/97	0.2	84269
2981	1,1,1-Trichloroethane (200)	10943-02	0.3 U	EPA 502.2	6/2/97	0.3	84269
2982	Carbon tetrachloride (3)	10943-02	0.3 U	EPA 502.2	6/2/97	0.3	84269
2983	1,2-Dichloropropane (5)	10943-02	0.3 U	EPA 502.2	6/2/97	0.3	84269
2984	Trichloroethene (3)	10943-02	0.2 U	EPA 502.2	6/2/97	0.2	84269
2985	1,1,2-Trichloroethane (5)	10943-02	0.3 U	EPA 502.2	6/2/97	0.3	84269
2987	Tetrachloroethene (3)	10943-02	0.2 U	EPA 502.2	6/2/97	0.2	84269
2989	Monochlorobenzene (100)	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2990	Benzene (1)	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2991	Toluene (1,000)	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2992	Ethylbenzene (700)	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2996	Styrene (100)	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 10943
June 9, 1997

PPB No. 146676

PESTICIDE & PCB CHEMICAL ANALYSIS
62-550,310(2) (c)
(FWS029)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2005	Endrin (.2)	10943-02	0.01 U	EPA 508	5/28/97	0.01	84269
2010	Lindane (.2)	10943-02	0.01 U	EPA 508	5/28/97	0.01	84269
2015	Methoxychlor (40)	10943-02	0.02 U	EPA 506	5/28/97	0.02	84269
2020	Toxaphene (3)	10943-02	0.2 U	EPA 508	5/28/97	0.2	84269
2031	Dalapon (200)	10943-02	1 U	EPA 515.1	6/3/97	1	84269
2032	Diquat (20)	10943-02	1 U	EPA 549.1	5/27/97	1	84269
2033	Endothall (100)	10943-02	10 U	EPA 548.1	5/28/97	10	84269
2034	Glyphosate (700)	10943-02	10 U	EPA 547	5/23/97	10	84269
2035	Di(2-ethylhexyl)adipate (400)	10943-02	1 U	EPA 506	5/28/97	1	84269
2036	Oxamyl (Vydate) (200)	10943-02	0.5 U	EPA 531.1	5/31/97	0.5	84269
2037	Simazine (4)	10943-02	0.1 U	EPA 507	5/28/97	0.1	84269
2039	Di(2-ethylhexyl)phthalate (6)	10943-02	1 U	EPA 506	5/28/97	1	84269
2040	Picloram (500)	10943-02	0.2 U	EPA 515.1	6/3/97	0.2	84269
2041	Dinoseb (7)	10943-02	0.2 U	EPA 515.1	6/3/97	0.2	84269
2042	Hexachlorocyclopentadiene (50)	10943-02	0.1 U	EPA 505	6/2/97	0.1	84269
2046	Carbofuran (40)	10943-02	0.5 U	EPA 531.1	5/31/97	0.5	84269
2050	Atrazine (3)	10943-02	0.1 U	EPA 507	5/28/97	0.1	84269
2051	Alechlor (2)	10943-02	0.3 U	EPA 507	5/28/97	0.3	84269
2065	Heptachlor (.4)	10943-02	0.01 U	EPA 508	5/28/97	0.01	84269
2067	Heptachlor epoxide (.2)	10943-02	0.01 U	EPA 508	5/28/97	0.01	84269
2105	2,4-D (70)	10943-02	0.5 U	EPA 515.1	6/3/97	0.5	84269
2110	2,4,5-TP (Silvex) (50)	10943-02	0.05 U	EPA 515.1	6/3/97	0.05	84269
2274	Hexachlorobenzene (1)	10943-02	0.01 U	EPA 508	5/28/97	0.01	84269
2306	Benzo(a)pyrene (.2)	10943-02	0.01 U	EPA 550	5/28/97	0.01	84269
2326	Pentachlorophenol (1)	10943-02	0.05 U	EPA 515.1	6/3/97	0.05	84269
2383	PCBs (.5)	10943-02	0.05 U	EPA 508	5/28/97	0.05	84269
2931	Dibromochloropropane (.2)	10943-02	0.005 U	EPA 504.1	5/31/97	0.005	84269
2946	Ethylene dibromide (.02)	10943-02	0.005 U	EPA 504.1	5/31/97	0.005	84269
2959	Chlordane (2)	10943-02	0.05 U	EPA 508	5/28/97	0.05	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 10943
June 9, 1997

PPB No. 146676

UNREGULATED GROUP I ANALYSIS
62-650,405
(PWS035)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2021	Carbaryl	10943-02	0.5 U	EPA 531.1	5/31/97	0.5	84269
2022	Methomyl	10943-02	0.5 U	EPA 531.1	5/31/97	0.5	84269
2043	Aldicarb sulfoxide	10943-02	0.5 U	EPA 531.1	5/31/97	0.5	84269
2044	Aldicarb sulfone	10943-02	0.5 U	EPA 531.1	5/31/97	0.5	84269
2045	Metolachlor	10943-02	0.3 U	EPA 507	5/29/97	0.3	84269
2047	Aldicarb	10943-02	0.5 U	EPA 531.1	5/31/97	0.5	84269
2066	3-Hydroxycarbofuran	10943-02	0.5 U	EPA 531.1	5/31/97	0.5	84269
2076	Butachlor	10943-02	0.4 U	EPA 508	5/28/97	0.4	84269
2077	Propachlor	10943-02	0.05 U	EPA 508	5/28/97	0.05	84269
2356	Aldrin	10943-02	0.01 U	EPA 508	5/28/97	0.01	84269
2364	Dieldrin	10943-02	0.01 U	EPA 508	5/28/97	0.01	84269
2440	Dicamba	10943-02	0.05 U	EPA 515.1	6/3/97	0.05	84269
2595	Metribuzin	10943-02	0.2 U	EPA 507	5/29/97	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 10943
June 9, 1997

PPS No. 146676

UNREGULATED GROUP II ANALYSIS
62-550.410
(PWS034)

<u>Parameter ID</u>	<u>NAME (MCL ug/l)</u>	<u>Sample Number</u>	<u>Analysis Result (ug/l)</u>	<u>Analyt. Method</u>	<u>Analysis Date</u>	<u>MDL</u>	<u>Lab ID</u>
2210	Chloromethane	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2212	Dichlorodifluoromethane	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2214	Bromomethane	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2216	Chloroethane	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2218	Trichlorofluoromethane	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2251	Methyl-tert-butyl-ether	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2408	Dibromomethane	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2410	1,1-Dichloropropene	10943-02	0.3 U	EPA 502.2	6/2/97	0.3	84269
2412	1,3-Dichloropropane	10943-02	0.3 U	EPA 502.2	6/2/97	0.3	84269
2413	1,3-Dichloropropene	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2414	1,2,3-Trichloropropane	10943-02	0.3 U	EPA 502.2	6/2/97	0.3	84269
2416	2,2-Dichloropropane	10943-02	0.3 U	EPA 502.2	6/2/97	0.3	84269
2941	Chloroform	10943-02	0.2 U	EPA 502.2	6/2/97	0.2	84269
2942	Bromoform	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2943	Bromodichloromethane	10943-02	0.3 U	EPA 502.2	6/2/97	0.3	84269
2944	Dibromochloromethane	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2965	o-Chlorotoluene	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2966	p-Chlorotoluene	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2967	m-Dichlorobenzene	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269
2978	1,1-Dichloroethane	10943-02	0.3 U	EPA 502.2	6/2/97	0.3	84269
2986	1,1,1,2-Tetrachloroethane	10943-02	0.3 U	EPA 502.2	6/2/97	0.3	84269
2988	1,1,2,2-Tetrachloroethane	10943-02	0.3 U	EPA 502.2	6/2/97	0.3	84269
2993	Bromobenzene	10943-02	0.5 U	EPA 502.2	6/2/97	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

Southern Analytical
Project No. 10943
June 9, 1997

PPB No. 146676

UNREGULATED GROUP III ANALYSIS
62-550.415
(PWS036 & 037*)

<u>Parameter</u> <u>ID</u> <u>NAME</u> (<u>MCL ug/l</u>)	<u>Sample</u> <u>Number</u>	<u>Analysis</u> <u>Result (ug/l)</u>	<u>Analyt.</u> <u>Method</u>	<u>Analysis</u> <u>Date</u>	<u>MDL</u>	<u>Lab</u> <u>ID</u>
2262 Isophorone	10943-02	1 U	EPA 609	5/28/97	1	84269
2270 2,4-Dinitrotoluene	10943-02	1 U	EPA 609	5/28/97	1	84269
2282 Dimethylphthalate	10943-02	1 U	EPA 506	5/28/97	1	84269
2284 Diethylphthalate	10943-02	1 U	EPA 506	5/28/97	1	84269
2290 Di-n-butylphthalate	10943-02	1 U	EPA 506	5/28/97	1	84269
2294 Butyl benzyl phthalate	10943-02	1 U	EPA 506	5/28/97	1	84269
9089 Di-n-octylphthalate	10943-02	1 U	EPA 506	5/28/97	1	84269
9108* 2-Chlorophenol	10943-02	5 U	EPA 604	5/28/97	5	84269
9112* 2-Methyl-4,6-dinitrophenol	10943-02	20 U	EPA 604	5/28/97	20	84269
9115* Phenol	10943-02	5 U	EPA 604	5/28/97	5	84269
9116* 2,4,6-Trichlorophenol	10943-02	10 U	EPA 604	5/28/97	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.

15619895225 ENVIRODYNE INC.

502 P25

MAY 28 1997 10:12

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

May 28, 1997
Report: 9705000258
Sample No: 9705000258 1

Attention: Bart Ziegler

Project: PSCWF Expansion - Polo Trace
13135 Hagea Ranch Road Boynton Beach, FL

SAMPLE ID: Prod. Well #13

Collected by: Bart Ziegler

Collected on: 05/21/97

Received on: 05/22/97

Date of Analysis: 05/24/97

Date of Extraction: 05/24/97

8270A DIOXIN

PARAMETER	RESULT	DL UNITS	ANALYST
2,3,7,8-Tertachlorodibenzo-p-dioxin	Absent	20 µg/L	DWK

15619895225 ENVIRODYNE INC.

562 P05 MAY 29 1997 10:12

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624May 28, 1997
Report: 9705000258
Sample No: 9705000258 2

Attention: Bart Ziegler

Project: PBCWF Expansion - Polo Trace
13155 Hagen Ranch Road Boynton Beach, FL

SAMPLE ID: Prod. Well #14

Collected by: Bart Ziegler

Collected on: 05/21/97

Received on: 05/22/97

Date of Analysis: 05/24/97

Date of Extraction: 05/24/97

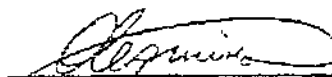
8270A DIOXIN

PARAMETER	RESULT	DL UNITS	ANALYST
2,3,7,8-Tetrachlorodibenzo-p-dioxin	Absent	20 µg/L	DWK

Analysis contained herein conform to EPA and DEP approved methods per Envirodyne Comprehensive Quality Assurance Plan No. 890041G. Additional Laboratory Certification numbers: E86006, 86409, E83079, E86240, South Carolina 86022. All relevant quality assurance samples were within specified control limits unless otherwise stated.



Michael Rentoumis
President, Envirodyne, Inc.



Oleg I. Minko, Ph.D.
Quality Assurance Director

15619895225 ENVIRODYNE INC.

552 PG1

MAY 29 '97 13:11

Envirodyne Inc.4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624May 28, 1997
Report: 9705000164
Sample No: 9705000164 1


Attention: Bart Ziegler

Project: PBCWF Expansion - Polo Trace
13135 Hagen Ranch Road Boynton Beach, FL

Collected by: Bart Ziegler

REPORT OF ANALYSIS FOR: SM9222B TOTAL COLIFORM BACTERIA

SAMPLE ID	RESULT	DL	UNITS	DATE SAMPLED	DATE ANALYZED	ANALYST
Polo Trace #13(Day-1,AM)	Absent	1	cfu/100 ml	05/13/97	05/14/97	JMJ
Polo Trace #13(Day-1,PM)	Absent	1	cfu/100 ml	05/13/97	05/14/97	JMJ
Polo Trace #14(Day-1,AM)	Absent	1	cfu/100 ml	05/13/97	05/14/97	JMJ
Polo Trace #14(Day-1,PM)	Absent	1	cfu/100 ml	05/13/97	05/14/97	JMJ
Polo Trace #13(Day-2,AM)	Absent	1	cfu/100 ml	05/14/97	05/16/97	JMJ
Polo Trace #13(Day-2,PM)	Absent	1	cfu/100 ml	05/14/97	05/16/97	JMJ
Polo Trace #14(Day-2,AM)	Absent	1	cfu/100 ml	05/14/97	05/16/97	JMJ
Polo Trace #14(Day-2,PM)	Absent	1	cfu/100 ml	05/14/97	05/16/97	JMJ
Polo Trace #13(Day-3,AM)	Absent	1	cfu/100 ml	05/15/97	05/16/97	JMJ
Polo Trace #13(Day-3,PM)	Absent	1	cfu/100 ml	05/15/97	05/16/97	JMJ
Polo Trace #14(Day-3,AM)	Absent	1	cfu/100 ml	05/15/97	05/16/97	JMJ
Polo Trace #14(Day-3,PM)	Absent	1	cfu/100 ml	05/15/97	05/16/97	JMJ

Analysis Performed in Accordance with E.P.A. Methods
Laboratory Certification No. E86153
Laboratory Certification No. 86405QA/QC Review 
BDL = Below Detection Limit
DL = Detection Limit

15619895225 ENVIRODYNE INC.

502 P02 MAY 29 1997 13:11

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624May 23, 1997
Report: 9705000164
Sample No: 9705000164 13

Attention: Bart Ziegler

Project: PBCWF Expansion - Polo Trace
13135 Hagen Ranch Road Boynton Beach, FL

Collected by: Bart Ziegler

REPORT OF ANALYSIS FOR: SM9222B TOTAL COLIFORM BACTERIA

SAMPLE ID	RESULT	DL	UNITS	DATE SAMPLED	DATE ANALYZED	ANALYST
Polo Trace #13(Day-4,AM)	Absent	1	cfu/100 ml	05/16/97	05/17/97	JMJ
Polo Trace #13(Day-4,PM)	Absent	1	cfu/100 ml	05/16/97	05/17/97	JMJ
Polo Trace #14(Day-4,AM)	Absent	1	cfu/100 ml	05/16/97	05/17/97	JMJ
Polo Trace #14(Day-4,PM)	Absent	1	cfu/100 ml	05/16/97	05/17/97	JMJ
Polo Trace #13(Day-5,AM)	Absent	1	cfu/100 ml	05/17/97	05/18/97	JMJ
Polo Trace #13(Day-5,PM)	Absent	1	cfu/100 ml	05/17/97	05/18/97	JMJ
Polo Trace #14(Day-5,AM)	Absent	1	cfu/100 ml	05/17/97	05/18/97	JMJ
Polo Trace #14(Day-5,PM)	Absent	1	cfu/100 ml	05/17/97	05/18/97	JMJ
Polo Trace #13(Day-6,AM)	Absent	1	cfu/100 ml	05/18/97	05/19/97	JMJ
Polo Trace #13(Day-6,PM)	Absent	1	cfu/100 ml	05/18/97	05/19/97	JMJ
Polo Trace #14(Day-6,AM)	Absent	1	cfu/100 ml	05/18/97	05/19/97	JMJ
Polo Trace #14(Day-6,PM)	Absent	1	cfu/100 ml	05/18/97	05/19/97	JMJ
Polo Trace #13(Day-7,AM)	Absent	1	cfu/100 ml	05/19/97	05/21/97	JMJ

Analysis Performed in Accordance with E.P.A. Methods
Laboratory Certification No. E26188
Laboratory Certification No. 96405QA/QC Review: *JMJ*
BDL = Below Detection Limit
DL = Detection Limit

15619893225 ENVIRODYNE INC.

502 P03 MAY 29 1997 13:11

Envirodyne Inc.

4305 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624May 28, 1997
Report: 9705000164
Sample No: 9705000164 26


Attention: Bart Ziegler

Project: PBCWF Expansion - Polo Trace
13135 Hagen Ranch Road Boynton Beach, FL

Collected by: Bart Ziegler

REPORT OF ANALYSIS FOR: SM9222B TOTAL COLIFORM BACTERIA

SAMPLE ID	RESULT	DL	UNITS	DATE SAMPLED	DATE ANALYZED	ANALYST
Polo Trace #13(Day-7,PM)	Absent	1	cfu/100 ml	05/19/97	05/21/97	JMJ
Polo Trace #14(Day-7,AM)	Absent	1	cfu/100 ml	05/19/97	05/21/97	JMJ
Polo Trace #14(Day-7,PM)	Absent	1	cfu/100 ml	05/19/97	05/21/97	JMJ
Polo Trace #13(Day-8,AM)	Absent	1	cfu/100 ml	05/20/97	05/22/97	JMJ
Polo Trace #13(Day-8,PM)	Absent	1	cfu/100 ml	05/20/97	05/22/97	JMJ
Polo Trace #14(Day-8,AM)	Absent	1	cfu/100 ml	05/20/97	05/22/97	JMJ
Polo Trace #14(Day-8,PM)	Absent	1	cfu/100 ml	05/20/97	05/22/97	JMJ
Polo Trace #13(Day-9,AM)	Absent	1	cfu/100 ml	05/21/97	05/22/97	JMJ
Polo Trace #13(Day-9,PM)	Absent	1	cfu/100 ml	05/21/97	05/22/97	JMJ
Polo Trace #14(Day-9,AM)	Absent	1	cfu/100 ml	05/21/97	05/22/97	JMJ
Polo Trace #14(Day-9,PM)	Absent	1	cfu/100 ml	05/21/97	05/22/97	JMJ
Polo Trace #13(Day-10,AM)	Absent	1	cfu/100 ml	05/22/97	05/23/97	JMJ
Polo Trace #13(Day-10,PM)	Absent	1	cfu/100 ml	05/22/97	05/23/97	JMJ

Analysis Performed in Accordance with E.P.A. Methods
Laboratory Certification No. 286188
Laboratory Certification No. 86405QA/QC Review 
BDL = Below Detection Limit
DL = Detection Limit

15619595225 ENVIRODYNE INC.

503 P04 MAY 29 1997 13:11

Envirodyne Inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33437
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

May 28, 1997
Report: 9705000164
Sample No: 9705000164 39

Attention: Bart Ziegler

Project: PBCWF Expansion - Polo Trace
13135 Hagen Ranch Road Boynton Beach, FL

Collected by: Bart Ziegler

REPORT OF ANALYSIS FOR: SM9222B TOTAL COLIFORM BACTERIA

SAMPLE ID	RESULT	DL	UNITS	DATE SAMPLED	DATE ANALYZED	ANALYST
Polo Trace #14(Day-10,AM)	Absent	1	cfu/100 ml	05/22/97	05/23/97	JMJ
Polo Trace #14(Day-10,PM)	Absent	1	cfu/100 ml	05/22/97	05/23/97	JMJ

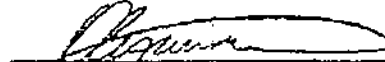
cfu = colony forming units

The Water Analysis is ACCEPTABLE by health department standards for safe public drinking water, with regards to Coliform bacteria using EPA approved methods.

Analysis contained herein conform to EPA and DEP approved methods per Envirodyne Comprehensive Quality Assurance Plan No. 890041G. Additional Laboratory Certification numbers: E86008, 86408, E83079, E86240. All relevant quality assurance samples were within specified control limits unless otherwise stated.



Michael Rentoumis
President, Envirodyne, Inc.



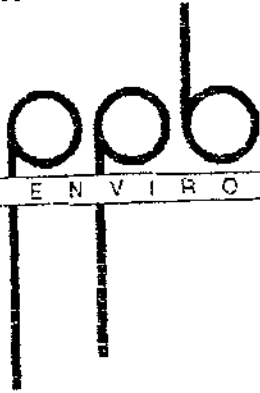
Olga L. Minko, Ph.D.
Quality Assurance Director

System 8

05/15/1997 09:46 3955539

PPB ENV. LAB.

PAGE 01



ENVIRONMENTAL LABORATORIES, INC.

May 15, 1997

Mr. Bart Ziegler
Southeast Drilling
P.O. Box 271723
Tampa, FL 33688

Dear Mr. Ziegler:

Attached are the data reports for the following samples:

PPB Sample Number	Southern Analytical Number	PBS&J* Number	Site Name	Your Sample ID	Sample Date	Sample Time
144206	10613-01	9703340-03	Palm Beach Well Field	SRPTW-13	03/19/97	1400
144499	10626-01	9703340-01	Palm Beach Well Field	System 8 #13	03/25/97	1500
144500	10626-02	9703340-02	Palm Beach Well Field	System 8 #14	03/25/97	1500

*PBS&J = Post Buckley Schuh and Jernigan

If you have any questions concerning these reports, please contact me.

Sincerely,

Paul Berman
Project Manager

PLB:cms

Enclosures

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (TO BE COMPLETED BY SYSTEM OR LAB)

SYSTEM NAME: _____ I.D. #: _____
ADDRESS: _____ PHONE #: (____) _____
TYPE (CHECK ONE): () COMMUNITY () NONTRANSIENT NONCOMMUNITY () NONCOMMUNITY

SAMPLE INFORMATION (TO BE COMPLETED BY SAMPLER)

SAMPLE DATE (MMDDYY): ____ / ____ / ____ SAMPLE TIME: _____
SAMPLE LOCATION (BE SPECIFIC): _____
SAMPLER NAME AND PHONE: _____ (____) _____
SAMPLER'S SIGNATURE: _____ TITLE: _____
CHECK TYPE(S): () DISTRIBUTION () RECHECK OF MCL () RESAMPLE OF LAB INVALIDATED SAMPLE
() CLEARANCE () THM MAX RES TIME () PLANT TAP
() DISTRIB ENTRY PT () RAW () COMPOSITE OF MULTIPLE SITES--ATTACH A FORMAT FOR EACH SITE

LABORATORY CERTIFICATION INFORMATION (TO BE COMPLETED BY LAB) - ATTACH HRS ANALYTE SHEET*

LAB NAME: PPB ENVIRONMENTAL LABORATORIES, INC. HRS #: 82282 EXPIRATION DATE: _____
ADDRESS: 6821 SW ARCHER ROAD, GAINESVILLE, FL 32608 PHONE #: (352) 377-2349

SUBCONTRACTED LAB HRS #: 83170, 82135, 84269, 82138 - ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (TO BE COMPLETED BY LAB) - SAMPLE NUMBER: 144499

DATE SAMPLE(S) RECEIVED: 03/26/97 GROUP(S) ANALYZED & RESULTS ATTACHED FOR COMPLIANCE WITH 62-550, F.A.C.:

() NITRATE ONLY	() NITRITE ONLY	() ASBESTOS ONLY	(x) TRIHALOMETHANES
INORGANICS--	VOLATILE ORGANICS--	SECONDARIES--	PESTICIDE/PCBS--
() ALL 17 (x) PARTIAL	(x) ALL 21 () PARTIAL	(x) ALL 14 () PARTIAL	() ALL 30 (x) PARTIAL
GROUP I UNREGULATEDS--	GROUP II UNREGULATEDS--	GROUP III UNREGULATEDS--	RADIOCHEMICALS--
() ALL 13 (x) PARTIAL	(x) ALL 23 () PARTIAL	(x) ALL 11 () PARTIAL	(x) SINGLE SAMPLE
			() QTRLY COMPOSITE**

**PROVIDE RADIOCHEMICAL SAMPLE DATES & LOCATIONS FOR EACH QUARTER

I, PAUL BERMAN, DO HEREBY CERTIFY THAT ALL ATTACHED ANALYTICAL DATA ARE CORRECT.
SIGNATURE Paul Berman
TITLE QA OFFICER DATE 5/14/97

COMPLIANCE INFORMATION (TO BE COMPLETED BY STATE)

SAMPLE COLLECTION SATISFACTORY: _____ SAMPLE ANALYSIS SATISFACTORY: _____
RESAMPLE REQUESTED FOR: _____ REASON: _____
PERSON NOTIFIED TO RESAMPLE: _____ DATE NOTIFIED: _____
DEP/HRS REVIEWING OFFICIAL: _____

*ALL HRS LAB #S AND THEIR HRS ANALYTE SHEET FOR LABS PERFORMING THE ATTACHED WATER ANALYSES MUST BE PROVIDED. FAILURE TO DO SO WILL RESULT IN REJECTION OF THE ANALYSES AND POSSIBLE ENFORCEMENT AGAINST THE PUBLIC WATER SYSTEM FOR FAILURE TO SAMPLE.
EFFECTIVE JANUARY 1995

INORGANIC ANALYSIS
62-550.310(1)
(PWS030)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (MG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (MG/L)	LAB ID
1005	ARSENIC	(.05)	144499	0.002 K	SM 3113B	05/01/97	0.001	82282
1010	BARIUM	(2)	144499	0.017	EPA 200.7	04/28/97	0.001	82282
1015	CADMIUM	(.005)	144499	0.0005 K	SM 3113B	04/24/97	0.0001	82282
1020	CHROMIUM	(0.1)	144499	0.010	EPA 200.7	04/28/97	0.005	82282
1024	CYANIDE	(0.2)	144499	0.004 U	SM 4500CNE	04/01/97	0.004	82282
1025	FLUORIDE	(4)	144499	0.19	SM 4500FC	04/17/97	0.02	82282
1030	LEAD	(0.015)	144499	0.002	SM 3113B	04/30/97	0.001	82282
1035	MERCURY	(0.002)	144499	0.0001 K	EPA 245.1	04/07/97	0.00005	82282
1036	NICKEL	(0.1)	144499	0.030 U	EPA 200.7	04/28/97	0.030	82282
1040	NITRATE	(10)	144499	0.014	EPA 353.2	04/10/97	0.004	82282
1041	NITRITE	(1)	144499	0.007	EPA 353.2	03/27/97	0.003	82282
1045	SELENIUM	(0.05)	144499	0.002 K	SM 3113B	04/28/97	0.001	82282
1052	SODIUM	(160)	144499	30	EPA 200.7	04/28/97	0.05	82282
1074	ANTIMONY	(0.006)	144499	0.003 U	SM 3113B	05/01/97	0.003	82282
1075	BERYLLIUM	(0.004)	144499	0.003 U	EPA 200.7	04/28/97	0.003	82282
1085	THALLIUM	(0.002)	144499	0.002 U	EPA 200.9	05/01/97	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS
62-550.320
(PWS031)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS* RESULT (MG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (MG/L)	LAB ID
1002	ALUMINUM	(0.2)	144499	0.01 U	EPA 200.7	05/07/97	0.01	82282
1017	CHLORIDE	(250)	144499	58	EPA 325.2	04/14/97	0.3	82282
1022	COPPER	(1)	144499	0.01 U	EPA 200.7	04/28/97	0.01	82282
1020	FLUORIDE	(2.0)	144499	0.19	SM 4500FC	04/17/97	0.02	82282
1028	IRON	(0.3)	144499	0.008 K	EPA 200.7	04/28/97	0.005	82282
1032	MANGANESE	(0.05)	144499	0.006	EPA 200.7	04/28/97	0.005	82282
1050	SILVER	(0.1)	144499	0.0001 U	SM 3113B	04/30/97	0.0001	82282
1055	SULFATE	(250)	144499	14	EPA 375.4	04/16/97	1	82282
1095	ZINC	(5)	144499	0.012	EPA 200.7	04/28/97	0.004	82282
1905	COLOR	(15 COLOR UNITS)	144499	80	SM 2120B	03/26/97	5	82282
1920	ODOR (3 THRESHOLD ODOR NUMBER)		144499	1 U	SM 2150B	03/26/97	1	82282
1925	PH	(6.5-8.5)	144499	7.0	EPA 150.1	03/26/97	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		144499	407	SM 2540C	03/28/97	3	82282
2905	FOAMING AGENTS	(0.5)	144499	0.025 U	SM 5540C	03/26/97	0.025	82135

*ALL RESULTS AND METHOD DETECTION LIMITS IN MG/L EXCEPT COLOR (PCU), ODOR (THRESHOLD ODOR NUMBER), AND PH (STANDARD UNITS).

K INDICATES ANALYTE IS LESS THAN VALUE INDICATED, WITH VALUE BEING GREATER THAN METHOD DETECTION LIMIT.

U - ANALYTE WAS NOT DETECTED; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT.

TRIHALOMETHANE ANALYSIS
62-550.310(2)(A)
(PWS027)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (UG/L)	LAB ID
2950	TOTAL THMS	(0.10)	10626-01	0.0015 U	EPA 502.2	04/04/97	0.0015	84269

RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

PARAMETER ID	NAME	(MCL PCI/L)	SAMPLE NUMBER	ANALYSIS RESULT (PCI/L)	ANALYSIS METHOD	ANALYSIS DATE	ERROR	LAB ID
4000	GROSS ALPHA		9703340-01	3.8 ± 2.0	EPA 900.0	03/27/97	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		9703340-01	1.1 ± 0.1		03/31/97		83170
4030	RADIUM-228		NA					
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)
NA = NOT ANALYZED

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(B)
(PWS028)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (UG/L)	LAB ID
2378	1,2,4-TRICHLOROENZENE	(70)	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2380	CIS-1,2-DICHLOROETHYLENE	(70)	10626-01	0.2 U	EPA 502.2	04/04/97	0.2	84269
2955	XYLENES (TOTAL)	(10,000)	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2964	DICHLOROMETHANE	(5)	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2968	O-DICHLOROENZENE	(600)	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2969	PARA-DICHLOROENZENE	(75)	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2976	VINYL CHLORIDE	(1)	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2977	1,1-DICHLOROETHYLENE	(7)	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2979	TRANS-1,2-DICHLOROETHYLENE	(100)	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2980	1,2-DICHLOROETHANE	(3)	10626-01	0.2 U	EPA 502.2	04/04/97	0.2	84269
2981	1,1,1-TRICHLOROETHANE	(200)	10626-01	0.3 U	EPA 502.2	04/04/97	0.3	84269
2982	CARBON TETRACHLORIDE	(3)	10626-01	0.3 U	EPA 502.2	04/04/97	0.3	84269
2983	1,2-DICHLOROPROPANE	(5)	10626-01	0.3 U	EPA 502.2	04/04/97	0.3	84269
2984	TRICHLOROETHYLENE	(3)	10626-01	0.2 U	EPA 502.2	04/04/97	0.2	84269
2985	1,1,2-TRICHLOROETHANE	(5)	10626-01	0.3 U	EPA 502.2	04/04/97	0.3	84269
2987	TETRACHLOROETHYLENE	(3)	10626-01	0.2 U	EPA 502.2	04/04/97	0.2	84269
2989	MONOCHLOROENZENE	(100)	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2990	BENZENE	(1)	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2991	TOLUENE	(1,000)	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2992	ETHYLBENZENE	(700)	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
396	STYRENE	(100)	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269

U - ANALYTE WAS NOT DETECTED; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT.

+ PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(C)
(PWS029)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (UG/L)	LAB ID
2005	ENDRIN	(2)	10626-01	0.01 U	EPA 508	03/31/97	0.01	84269
2010	LINDANE	(.2)	10626-01	0.01 U	EPA 508	03/31/97	0.01	84269
2015	METHOXYCHLOR	(40)	10626-01	0.02 U	EPA 508	03/31/97	0.02	84269
2020	TOXAPHENE	(3)	10626-01	0.2 U	EPA 508	03/31/97	0.2	84269
2031	DALAPON	(200)	10626-01	1 U	EPA 515.1	04/04/97	1	84269
2032	DIQUAT	(20)	10626-01	1 U	EPA 549.1	03/31/97	4	84269
2033	ENDOTHALL	(100)	10626-01	10 U	EPA 548	03/28/97	10	84269
2034	GLYPHOSATE	(700)	10626-01	10 U	EPA 547	04/02/97	10	84269
2035	DI(2-ETHYLHEXYL)ADIPATE	(400)	10626-01	1 U	EPA 506	03/31/97	1	84269
2036	OXAMYL (VYDATE)	(200)	10626-01	0.5 U	EPA 531.1	03/31/97	0.5	84269
2037	SIMAZINE	(4)	10626-01	0.1 U	EPA 507	03/31/97	0.1	84269
2039	DI(2-ETHYLHEXYL)PHTHALATE	(6)	10626-01	1 U	EPA 506	03/31/97	1	84269
2040	PICLORAM	(500)	10626-01	0.2 U	EPA 515.1	04/04/97	0.2	84269
2041	DINOSEB	(7)	10626-01	0.2 U	EPA 515.1	04/04/97	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	10626-01	0.1 U	EPA 505	04/04/97	0.1	84269
2046	CARBOFURAN	(40)	10626-01	0.5 U	EPA 531.1	03/31/97	0.5	84269
2050	ATRAZINE	(3)	10626-01	0.1 U	EPA 507	03/31/97	0.1	84269
2051	ALACHLOR	(2)	10626-01	0.3 U	EPA 507	03/31/97	0.3	84269
2065	HEPTACHLOR	(.4)	10626-01	0.01 U	EPA 508	03/31/97	0.01	84269
2067	HEPTACHLOR EPOXIDE	(.2)	10626-01	0.01 U	EPA 508	03/31/97	0.01	84269
2105	2,4-D	(70)	10626-01	0.5 U	EPA 515.1	04/04/97	0.5	84269
2110	2,4,5-TP (SILVEX)	(50)	10626-01	0.05 U	EPA 515.1	04/04/97	0.05	84269
2274	HEXACHLOROBENZENE	(1)	10626-01	0.01 U	EPA 508	03/31/97	0.01	84269
2306	BENZO(A)PYRENE	(.2)	10626-01	0.01 U	EPA 550	03/31/97	0.01	84269
2326	PENTACHLOROPHENOL	(1)	10626-01	0.05 U	EPA 515.1	04/04/97	0.05	84269
2383	PCB	(.5)	10626-01	0.05 U	EPA 508	03/31/97	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	10626-01	0.005 U	EPA 504	04/01/97	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	10626-01	0.005 U	EPA 504	04/01/97	0.005	84269
2959	CHLORDANE	(2)	10626-01	0.05 U	EPA 508	03/31/97	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL	LAB ID
2021	CARBARYL		10626-01	0.5 U	EPA 531.1	03/31/97	0.5	84269
2022	METHOMYL		10626-01	0.5 U	EPA 531.1	03/31/97	0.5	84269
2043	ALDICARB SULFOXIDE		10626-01	0.5 U	EPA 531.1	03/31/97	0.5	84269
2044	ALDICARB SULFONE		10626-01	0.5 U	EPA 531.1	03/31/97	0.5	84269
2045	METOLACHLOR		10626-01	0.3 U	EPA 507	03/31/97	0.3	84269
2047	ALDICARB		10626-01	0.5 U	EPA 531.1	03/31/97	0.5	84269
2066	3-HYDROXYCARBOFURAN		10626-01	0.5 U	EPA 531.1	03/31/97	0.5	84269
2077	PROPACHLOR		10626-01	0.05 U	EPA 508	03/31/97	0.05	84269
2356	ALDRIN		10626-01	0.01 U	EPA 508	03/31/97	0.01	84269
2364	DIELDRIN		10626-01	0.01 U	EPA 508	03/31/97	0.01	84269
2440	DICAMBA		10626-01	0.05 U	EPA 515.1	04/04/97	0.05	84269
2595	METRIBUZIN		10626-01	0.2 U	EPA 507	03/31/97	0.2	84269

I - ANALYTE WAS NOT DETECTED; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT.

UNREGULATED GROUP II ANALYSIS

62-550.410

(PWS034)

PARAMETER ID	NAME (MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (UG/L)	LAB ID
2210	CHLOROMETHANE	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2212	DICHLORODIFLUOROMETHANE	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2214	BROMOMETHANE	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2216	CHLOROETHANE	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2218	TRICHLOROFLUOROMETHANE	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2408	DIBROMOMETHANE	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2410	1,1-DICHLOROPROPYLENE	10626-01	0.3 U	EPA 502.2	04/04/97	0.3	84269
2412	1,3-DICHLOROPROPANE	10626-01	0.3 U	EPA 502.2	04/04/97	0.3	84269
2413	1,3-DICHLOROPROPENE	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	10626-01	0.3 U	EPA 502.2	04/04/97	0.3	84269
2416	2,2-DICHLOROPROPANE	10626-01	0.3 U	EPA 502.2	04/04/97	0.3	84269
2941	CHLOROFORM	10626-01	0.2 U	EPA 502.2	04/04/97	0.2	84269
2942	BROMOFORM	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2943	BROMODICHLOROMETHANE	10626-01	0.3 U	EPA 502.2	04/04/97	0.3	84269
2944	DIBROMOCHLOROMETHANE	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2965	O-CHLOROTOLUENE	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2966	P-CHLOROTOLUENE	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2967	M-DICHLOROENZENE	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269
2978	1,1-DICHLOROETHANE	10626-01	0.3 U	EPA 502.2	04/04/97	0.3	84269
986	1,1,1,2-TETRACHLOROETHANE	10626-01	0.3 U	EPA 502.2	04/04/97	0.3	84269
988	1,1,2,2-TETRACHLOROETHANE	10626-01	0.3 U	EPA 502.2	04/04/97	0.3	84269
2993	BROMOBENZENE	10626-01	0.5 U	EPA 502.2	04/04/97	0.5	84269

UNREGULATED GROUP III ANALYSIS

62-550.415

(PWS036 & 037*)

PARAMETER ID	NAME (MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (UG/L)	LAB ID
2262	ISOPHORONE	10626-01	1 U	EPA 609	03/31/97	1	84269
2270	2,4-DINITROTOLUENE	10626-01	1 U	EPA 609	03/31/97	1	84269
2282	DIMETHYLPHTHALATE	10626-01	1 U	EPA 506	03/31/97	1	84269
2284	DIETHYLPHTHALATE	10626-01	1 U	EPA 506	03/31/97	1	84269
2290	DI-N-BUTYLPHTHALATE	10626-01	1 U	EPA 506	03/31/97	1	84269
2294	BUTYL BENZYL PHTHALATE	10626-01	1 U	EPA 506	03/31/97	1	84269
9089	DIOCTYLPHTHALATE	10626-01	1 U	EPA 506	03/31/97	1	84269
9108*	2-CHLOROPHENOL	10626-01	5 U	EPA 604	04/01/97	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	10626-01	20 U	EPA 604	04/01/97	20	84269
9115*	PHENOL	10626-01	5 U	EPA 604	04/01/97	5	84269
9116*	2,4,6-TRICHLOROPHENOL	10626-01	10 U	EPA 604	04/01/97	10	84269

U - ANALYTE WAS NOT DETECTED; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT.

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (TO BE COMPLETED BY SYSTEM OR LAB)

SYSTEM NAME: _____ I.D. #: _____
ADDRESS: _____ PHONE #: () _____
TYPE (CHECK ONE): () COMMUNITY () NONTRANSIENT NONCOMMUNITY () NONCOMMUNITY

SAMPLE INFORMATION (TO BE COMPLETED BY SAMPLER)

SAMPLE DATE (MMDDYY): ___/___/___ SAMPLE TIME: _____
SAMPLE LOCATION (BE SPECIFIC): _____
SAMPLER NAME AND PHONE: _____ () _____
SAMPLER'S SIGNATURE: _____ TITLE: _____
CHECK TYPE(S): () DISTRIBUTION () RECHECK OF MCL () RESAMPLE OF LAB INVALIDATED SAMPLE
() CLEARANCE () THM MAX RES TIME () PLANT TAP
() DISTRIB ENTRY PT () RAW () COMPOSITE OF MULTIPLE SITES-ATTACH A FORMAT FOR EACH SITE

LABORATORY CERTIFICATION INFORMATION (TO BE COMPLETED BY LAB) - ATTACH HRS ANALYTE SHEET*

LAB NAME: PPB ENVIRONMENTAL LABORATORIES, INC. HRS #: 82282 EXPIRATION DATE: _____
ADDRESS: 6821 SW ARCHER ROAD, GAINESVILLE, FL 32608 PHONE #: (352) 377-2349

SUBCONTRACTED LAB HRS #: 83170, 82135, 84269, 82138 - ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (TO BE COMPLETED BY LAB) - SAMPLE NUMBER: 144500

DATE SAMPLE(S) RECEIVED: 03/26/97 GROUP(S) ANALYZED & RESULTS ATTACHED FOR COMPLIANCE WITH 62-550, F.A.C.:

() NITRATE ONLY	() NITRITE ONLY	() ASBESTOS ONLY	(x) TRIHALOMETHANES
INORGANICS-	VOLATILE ORGANICS-	SECONDARIES-	PESTICIDE/PCBS-
() ALL 17 (x) PARTIAL	(x) ALL 21 () PARTIAL	(x) ALL 14 () PARTIAL	() ALL 30 (x) PARTIAL
GROUP I UNREGULATEDS-	GROUP II UNREGULATEDS-	GROUP III UNREGULATEDS-	RADIOCHEMICALS-
() ALL 13 (x) PARTIAL	(x) ALL 23 () PARTIAL	(x) ALL 11 () PARTIAL	(x) SINGLE SAMPLE () QTRLY COMPOSITE**

**PROVIDE RADIOCHEMICAL SAMPLE DATES & LOCATIONS FOR EACH QUARTER

I, PAUL BERMAN, DO HEREBY CERTIFY THAT ALL ATTACHED ANALYTICAL DATA ARE CORRECT.
SIGNATURE *Paul Berman*
TITLE QA OFFICER DATE 5/14/97

COMPLIANCE INFORMATION (TO BE COMPLETED BY STATE)

SAMPLE COLLECTION SATISFACTORY: _____ SAMPLE ANALYSIS SATISFACTORY: _____
RESAMPLE REQUESTED FOR: _____ REASON: _____
PERSON NOTIFIED TO RESAMPLE: _____ DATE NOTIFIED: _____
DEP/HRS REVIEWING OFFICIAL: _____

*ALL HRS LAB #S AND THEIR HRS ANALYTE SHEET FOR LABS PERFORMING THE ATTACHED WATER ANALYSES MUST BE PROVIDED. FAILURE TO DO SO WILL RESULT IN REJECTION OF THE ANALYSES AND POSSIBLE ENFORCEMENT AGAINST THE PUBLIC WATER SYSTEM FOR FAILURE TO SAMPLE.
EFFECTIVE JANUARY 1995

INORGANIC ANALYSIS

62-550.310(1)

(PWS030)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (MG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (MG/L)	LAB ID
1005	ARSENIC	(.05)	144500	0.002 K	SM 3113B	05/01/97	0.001	82282
1010	BARIUM	(2)	144500	0.017	EPA 200.7	05/06/97	0.001	82282
1015	CADMIUM	(.005)	144500	0.0005 K	SM 3113B	04/24/97	0.0001	82282
1020	CHROMIUM	(0.1)	144500	0.010	EPA 200.7	04/28/07	0.005	82282
1024	CYANIDE	(0.2)	144500	0.004 U	SM 4500CNE	04/01/97	0.004	82282
1025	FLUORIDE	(4)	144500	0.20	SM 4500FC	04/17/97	0.02	82282
1030	LEAD	(0.015)	144500	0.002	SM 3113B	04/30/97	0.001	82282
1035	MERCURY	(0.002)	144500	0.0001 K	EPA 245.1	04/07/97	0.00005	82282
1036	NICKEL	(0.1)	144500	0.030 U	EPA 200.7	04/28/97	0.030	82282
1040	NITRATE	(10)	144500	0.070	EPA 353.2	04/10/97	0.004	82282
1041	NITRITE	(1)	144500	0.005	EPA 353.2	03/27/97	0.003	82282
1045	SELENIUM	(0.05)	144500	0.002 K	SM 3113B	04/28/97	0.001	82282
1052	SODIUM	(160)	144500	23	EPA 200.7	04/28/97	0.05	82282
1074	ANTIMONY	(0.006)	144500	0.003 U	SM 3113B	05/01/97	0.003	82282
1075	BERYLLIUM	(0.004)	144500	0.003 U	EPA 200.7	04/28/97	0.003	82282
1085	THALLIUM	(0.002)	144500	0.002 U	EPA 200.9	05/01/97	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS

62-550.320

(PWS031)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS* RESULT (MG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (MG/L)	LAB ID
1002	ALUMINUM	(0.2)	144500	0.01 U	EPA 200.7	05/07/97	0.01	82282
1017	CHLORIDE	(250)	144500	46	EPA 325.2	04/14/97	0.3	82282
1022	COPPER	(1)	144500	0.01 U	EPA 200.7	04/28/97	0.01	82282
1020	FLUORIDE	(2.0)	144500	0.20	SM 4500FC	04/17/97	0.02	82282
1028	IRON	(0.3)	144500	0.025	EPA 200.7	05/06/97	0.005	82282
1032	MANGANESE	(0.05)	144500	0.010	EPA 200.7	04/28/97	0.005	82282
1050	SILVER	(0.1)	144500	0.0001 U	SM 3113B	04/30/97	0.0001	82282
1055	SULFATE	(250)	144500	31	EPA 375.4	04/16/97	1	82282
1095	ZINC	(5)	144500	0.010	EPA 200.7	04/28/97	0.004	82282
1905	COLOR	(15 COLOR UNITS)	144500	100	SM 2120B	03/26/97	5	82282
1920	ODOR	(3 THRESHOLD ODOR NUMBER)	144500	1 U	SM 2150B	03/26/97	1	82282
1925	PH	(6.5-8.5)	144500	7.0	EPA 150.1	03/26/97	--	82282
1930	TOTAL DISSOLVED SOLIDS	(500)	144500	382	SM 2540C	03/28/97	3	82282
2905	FOAMING AGENTS	(0.5)	144500	0.030	SM 5540C	03/26/97	0.025	82135

*ALL RESULTS AND METHOD DETECTION LIMITS IN MG/L EXCEPT COLOR (PCU), ODOR (THRESHOLD ODOR NUMBER), AND PH (STANDARD UNITS).

K INDICATES ANALYTE IS LESS THAN VALUE INDICATED, WITH VALUE BEING GREATER THAN METHOD DETECTION LIMIT.

U - ANALYTE WAS NOT DETECTED; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT.

TRIHALOMETHANE ANALYSIS
62-550.310(2)(A)
(PWS027)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (UG/L)	LAB ID
2950	TOTAL THMS	(0.10)	10626-02	0.0015 U	EPA 502.2	04/05/97	0.0015	84269

RADIOCHEMICAL ANALYSIS*
62-550.310(5)
(PWS033)

PARAMETER ID	NAME	(MCL PCI/L)	SAMPLE NUMBER	ANALYSIS RESULT (PCI/L)	ANALYSIS METHOD	ANALYSIS DATE	ERROR	LAB ID
4000	GROSS ALPHA		9703340-02	2.6 ± 1.6	EPA 900.0	03/28/97	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		NA					
4030	RADIUM-228		NA					
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)
NA = NOT ANALYZED

VOLATILE ORGANIC ANALYSIS
62-550.310(2)(B)
(PWS028)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (UG/L)	LAB ID
2378	1,2,4-TRICHLOROENZENE	(70)	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2380	CIS-1,2-DICHLOROETHYLENE	(70)	10626-02	0.2 U	EPA 502.2	04/05/97	0.2	84269
2955	XYLENES (TOTAL)	(10,000)	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2964	DICHLOROMETHANE	(5)	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2968	O-DICHLOROENZENE	(600)	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2969	PARA-DICHLOROENZENE	(75)	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2976	VINYL CHLORIDE	(1)	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2977	1,1-DICHLOROETHYLENE	(7)	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2979	TRANS-1,2-DICHLOROETHYLENE	(100)	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2980	1,2-DICHLOROETHANE	(3)	10626-02	0.2 U	EPA 502.2	04/05/97	0.2	84269
2981	1,1,1-TRICHLOROETHANE	(200)	10626-02	0.3 U	EPA 502.2	04/05/97	0.3	84269
2982	CARBON TETRACHLORIDE	(3)	10626-02	0.3 U	EPA 502.2	04/05/97	0.3	84269
2983	1,2-DICHLOROPROPANE	(5)	10626-02	0.3 U	EPA 502.2	04/05/97	0.3	84269
2984	TRICHLOROETHYLENE	(3)	10626-02	0.2 U	EPA 502.2	04/05/97	0.2	84269
2985	1,1,2-TRICHLOROETHANE	(5)	10626-02	0.3 U	EPA 502.2	04/05/97	0.3	84269
2987	TETRACHLOROETHYLENE	(3)	10626-02	0.2 U	EPA 502.2	04/05/97	0.2	84269
2989	MONOCHLOROENZENE	(100)	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2990	BENZENE	(1)	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2991	TOLUENE	(1,000)	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2992	ETHYLBENZENE	(700)	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2996	STYRENE	(100)	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269

J - ANALYTE WAS NOT DETECTED; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT.

PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(C)
(PWS029)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (UG/L)	LAB ID
2005	ENDRIN	(2)	10626-02	0.01 U	EPA 508	03/31/97	0.01	84269
2010	LINDANE	(.2)	10626-02	0.01 U	EPA 508	03/31/97	0.01	84269
2015	METHOXYCHLOR	(40)	10626-02	0.02 U	EPA 508	03/31/97	0.02	84269
2020	TOXAPHENE	(3)	10626-02	0.2 U	EPA 508	03/31/97	0.2	84269
2031	DALAPON	(200)	10626-02	1 U	EPA 515.1	04/04/97	1	84269
2032	DIQUAT	(20)	10626-02	1 U	EPA 549.1	03/31/97	4	84269
2033	ENDOTHALL	(100)	10626-02	10 U	EPA 548	03/28/97	10	84269
2034	GLYPHOSATE	(700)	10626-02	10 U	EPA 547	04/02/97	10	84269
2035	DI(2-ETHYLHEXYL)ADIPATE	(400)	10626-02	1 U	EPA 506	03/31/97	1	84269
2036	OXAMYL (VYDATE)	(200)	10626-02	0.5 U	EPA 531.1	03/31/97	0.5	84269
2037	SIMAZINE	(4)	10626-02	0.1 U	EPA 507	03/31/97	0.1	84269
2039	DI(2-ETHYLHEXYL)PHTHALATE	(6)	10626-02	1 U	EPA 506	03/31/97	1	84269
2040	PICLORAM	(500)	10626-02	0.2 U	EPA 515.1	04/04/97	0.2	84269
2041	DINOSEB	(7)	10626-02	0.2 U	EPA 515.1	04/04/97	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	10626-02	0.1 U	EPA 505	04/04/97	0.1	84269
2046	CARBOFURAN	(40)	10626-02	0.5 U	EPA 531.1	03/31/97	0.5	84269
2050	ATRAZINE	(3)	10626-02	0.1 U	EPA 507	03/31/97	0.1	84269
2051	ALACHLOR	(2)	10626-02	0.3 U	EPA 507	03/31/97	0.3	84269
2065	HEPTACHLOR	(.4)	10626-02	0.01 U	EPA 508	03/31/97	0.01	84269
2067	HEPTACHLOR EPOXIDE	(.2)	10626-02	0.01 U	EPA 508	03/31/97	0.01	84269
2105	2,4-D	(70)	10626-02	0.5 U	EPA 515.1	04/04/97	0.5	84269
2110	2,4,5-TP (SILVEX)	(50)	10626-02	0.05 U	EPA 515.1	04/04/97	0.05	84269
2274	HEXACHLOROBENZENE	(1)	10626-02	0.01 U	EPA 508	03/31/97	0.01	84269
2306	BENZO(A)PYRENE	(.2)	10626-02	0.01 U	EPA 550	03/31/97	0.01	84269
2326	PENTACHLOROPHENOL	(1)	10626-02	0.05 U	EPA 515.1	04/04/97	0.05	84269
2383	PCB	(.5)	10626-02	0.05 U	EPA 508	03/31/97	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	10626-02	0.005 U	EPA 504	04/01/97	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	10626-02	0.005 U	EPA 504	04/01/97	0.005	84269
2959	CHLORDANE	(2)	10626-02	0.05 U	EPA 508	03/31/97	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

PARAMETER ID	NAME	(MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (UG/L)	LAB ID
2021	CARBARYL		10626-02	0.5 U	EPA 531.1	03/31/97	0.5	84269
2022	METHOMYL		10626-02	0.5 U	EPA 531.1	03/31/97	0.5	84269
2043	ALDICARB SULFOXIDE		10626-02	0.5 U	EPA 531.1	03/31/97	0.5	84269
2044	ALDICARB SULFONE		10626-02	0.5 U	EPA 531.1	03/31/97	0.5	84269
2045	METOLACHLOR		10626-02	0.3 U	EPA 507	03/31/97	0.3	84269
2047	ALDICARB		10626-02	0.5 U	EPA 531.1	03/31/97	0.5	84269
2066	3-HYDROXYCARBOFURAN		10626-02	0.5 U	EPA 531.1	03/31/97	0.5	84269
2077	PROPACHLOR		10626-02	0.05 U	EPA 508	03/31/97	0.05	84269
2356	ALDRIN		10626-02	0.01 U	EPA 508	03/31/97	0.01	84269
2364	DIELDRIN		10626-02	0.01 U	EPA 508	03/31/97	0.01	84269
2440	DICAMBA		10626-02	0.05 U	EPA 515.1	04/04/97	0.05	84269
2595	METRIBUZIN		10626-02	0.2 U	EPA 507	03/31/97	0.2	84269

* - ANALYTE WAS NOT DETECTED; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT.

UNREGULATED GROUP II ANALYSIS

62-550.410

(PWS034)

PARAMETER ID	NAME (MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (UG/L)	LAB ID
2210	CHLOROMETHANE	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2212	DICHLORODIFLUOROMETHANE	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2214	BROMOMETHANE	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2216	CHLOROETHANE	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2218	TRICHLOROFLUOROMETHANE	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2408	DIBROMOMETHANE	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2410	1,1-DICHLOROPROPYLENE	10626-02	0.3 U	EPA 502.2	04/05/97	0.3	84269
2412	1,3-DICHLOROPROPANE	10626-02	0.3 U	EPA 502.2	04/05/97	0.3	84269
2413	1,3-DICHLOROPROPENE	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	10626-02	0.3 U	EPA 502.2	04/05/97	0.3	84269
2416	2,2-DICHLOROPROPANE	10626-02	0.3 U	EPA 502.2	04/05/97	0.3	84269
2941	CHLOROFORM	10626-02	0.2 U	EPA 502.2	04/05/97	0.2	84269
2942	BROMOFORM	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2943	BROMODICHLOROMETHANE	10626-02	0.3 U	EPA 502.2	04/05/97	0.3	84269
2944	DIBROMOCHLOROMETHANE	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2965	O-CHLOROTOLUENE	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2966	P-CHLOROTOLUENE	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2967	M-DICHLOROBENZENE	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269
2978	1,1-DICHLOROETHANE	10626-02	0.3 U	EPA 502.2	04/05/97	0.3	84269
2986	1,1,1,2-TETRACHLOROETHANE	10626-02	0.3 U	EPA 502.2	04/05/97	0.3	84269
988	1,1,2,2-TETRACHLOROETHANE	10626-02	0.3 U	EPA 502.2	04/05/97	0.3	84269
2993	BROMOBENZENE	10626-02	0.5 U	EPA 502.2	04/05/97	0.5	84269

UNREGULATED GROUP III ANALYSIS

62-550.415

(PWS036 & 037*)

PARAMETER ID	NAME (MCL MG/L)	SAMPLE NUMBER	ANALYSIS RESULT (UG/L)	ANALYSIS METHOD	ANALYSIS DATE	MDL (UG/L)	LAB ID
2262	ISOPHORONE	10626-02	1 U	EPA 609	03/31/97	1	84269
2270	2,4-DINITROTOLUENE	10626-02	1 U	EPA 609	03/31/97	1	84269
2282	DIMETHYLPHTHALATE	10626-02	1 U	EPA 506	03/31/97	1	84269
2284	DIETHYLPHTHALATE	10626-02	1 U	EPA 506	03/31/97	1	84269
2290	DI-N-BUTYLPHTHALATE	10626-02	1 U	EPA 506	03/31/97	1	84269
2294	BUTYL BENZYL PHTHALATE	10626-02	1 U	EPA 506	03/31/97	1	84269
9089	DIOCTYLPHTHALATE	10626-02	1 U	EPA 506	03/31/97	1	84269
9108*	2-CHLOROPHENOL	10626-02	5 U	EPA 604	04/01/97	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	10626-02	20 U	EPA 604	04/01/97	20	84269
9115*	PHENOL	10626-02	5 U	EPA 604	04/01/97	5	84269
9116*	2,4,6-TRICHLOROPHENOL	10626-02	10 U	EPA 604	04/01/97	10	84269

U - ANALYTE WAS NOT DETECTED; INDICATED CONCENTRATION IS METHOD DETECTION LIMIT.

System 9



February 21, 1997

Mr. Bart Ziegler
Southeast Drilling
P.O. Box 271723
Tampa, FL 33688

Dear Mr. Ziegler:

Attached are the data reports for the following samples:

PPB Sample Number	Site Name	Your Sample ID	Sample Date	Sample Time
140507	Palm Beach Well Field	System 9 PW-1	12/19/96	1100

If you have any questions concerning these reports, please contact me.

Sincerely,

Paul Berman
Project Manager

PLB.cms

Enclosures

LAB FORMAT FOR REPORTING DRINKING WATER ANALYSES

PUBLIC WATER SYSTEM INFORMATION (to be completed by system or lab)

System Name: _____ I.D. #: _____
Address: _____ Phone #: () _____
Type (check one): () Community () Nontransient Noncommunity () Noncommunity

SAMPLE INFORMATION (to be completed by sampler)

Sample Date (MMDDYY): ___/___/___ Sample Time: _____
Sample Location (be specific): _____
Sampler Name and Phone: _____ () _____
Sampler's Signature: _____ Title: _____

Check Type(s): () Distribution () Recheck of MCL () Resample of Lab Invalidated Sample
() Clearance () Thm Max Res Time () Plant Tap
() Distrib entry pt () Raw () Composite of Multiple Sites-Attach a format for each site

LABORATORY CERTIFICATION INFORMATION (to be completed by lab) - ATTACH HRS ANALYTE SHEET*

Lab Name: PPB Environmental Laboratories, Inc. HRS #: 82282 Expiration Date: _____
Address: 6821 SW Archer Road, Gainesville, FL 32608 Phone #: (352) 377-2349

Subcontracted Lab HRS #: 83170, 82135, 84269, 82138 - ATTACH HRS ANALYTE SHEET FOR SUBCONTRACTED LAB, TOO*

ANALYSIS INFORMATION (to be completed by lab) - SAMPLE NUMBER: 140507

Date Sample(s) Received: 12/19/96 Group(s) Analyzed & Results attached for compliance with 62-550, F.A.C.:

() Nitrate Only	() Nitrite Only	() Asbestos Only	(x) Trihalomethanes
Inorganics--	Volatile Organics--	Secondaries--	Pesticide/PCBs--
() All 17 (x) Partial	(x) All 21 () Partial	(x) All 14 () Partial	() All 30 (x) Partial
Group I Unregulateds--	Group II Unregulateds--	Group III Unregulateds--	Radiochemicals--
() All 13 (x) Partial	(x) All 23 () Partial	(x) All 11 () Partial	(x) Single Sample
			() Qtrly Composite**

**Provide radiochemical sample dates & locations for each quarter

I, Paul Berman do HEREBY CERTIFY that all attached analytical data are correct.

Signature Paul Berman

Title QA Officer Date February 21, 1997

COMPLIANCE INFORMATION (to be completed by State)

Sample Collection Satisfactory: _____ Sample Analysis Satisfactory: _____

Resample Requested for: _____ Reason: _____

Person notified to resample: _____ Date Notified: _____

DEP/HRS Reviewing Official: _____

*All HRS lab #s and their HRS Analyte Sheet for labs performing the attached water analyses must be provided. Failure to do so will result in rejection of the analyses and possible enforcement against the public water system for failure to sample.

Effective January 1995

INORGANIC ANALYSIS
62-550.310(1)
(PWS030)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1005	ARSENIC	(.05)	140507	0.001 U	SM 3113B	01/27/97	0.001	82282
1010	BARIUM	(2)	140507	0.028	EPA 200.7	02/03/97	0.001	82282
1015	CADMIUM	(.005)	140507	0.0001 U	SM 3113B	01/30/97	0.0001	82282
1020	CHROMIUM	(0.1)	140507	0.014	EPA 200.7	02/03/97	0.005	82282
1024	CYANIDE	(0.2)	140507	0.004 U	SM 4500CNE	12/21/96	0.004	82282
1025	FLUORIDE	(4)	140507	0.36	SM 4500FC	01/15/97	0.02	82282
1030	LEAD	(0.015)	140507	0.001 U	SM 3113B	01/28/97	0.001	82282
1035	MERCURY	(0.002)	140507	0.00005 U	EPA 245.1	01/02/97	0.00005	82282
1036	NICKEL	(0.1)	140507	0.030 U	EPA 200.7	02/03/97	0.030	82282
1040	NITRATE	(10)	140507	0.01 K	EPA 353.2	01/14/97	0.004	82282
1041	NITRITE	(1)	140507	0.004	EPA 353.2	12/19/96	0.003	82282
1045	SELENIUM	(0.05)	140507	0.002 K	SM 3113B	02/06/97	0.001	82282
1052	SODIUM	(160)	140507	25.8	EPA 200.7	02/03/97	0.05	82282
1074	ANTIMONY	(0.006)	140507	0.004 K	SM 3113B	01/28/97	0.003	82282
1075	BERYLLIUM	(0.004)	140507	0.003 U	EPA 200.7	02/03/97	0.003	82282
1085	THALLIUM	(0.002)	140507	0.002 U	EPA 200.9	01/24/97	0.002	82282
1094	ASBESTOS	(7 MFL)						

SECONDARY CHEMICAL ANALYSIS
62-550.320
(PWS031)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis* Result (mg/l)	Analysis Method	Analysis Date	MDL (mg/l)	Lab ID
1002	ALUMINUM	(0.2)	140507	0.416	EPA 202.2	02/03/97	0.01	82282
1017	CHLORIDE	(250)	140507	51	EPA 325.2	01/10/97	0.3	82282
1022	COPPER	(1)	140507	0.035	EPA 200.7	02/03/97	0.01	82282
1020	FLUORIDE	(2.0)	140507	0.36	SM 4500FC	01/15/96	0.02	82282
1028	IRON	(0.3)	140507	0.108	EPA 200.7	02/03/97	0.005	82282
1032	MANGANESE	(0.05)	140507	0.010	EPA 200.7	02/03/97	0.005	82282
1050	SILVER	(0.1)	140507	0.0001 U	SM 3113B	02/06/97	0.0001	82282
1055	SULFATE	(250)	140507	28.7	EPA 375.4	01/15/97	1	82282
1095	ZINC	(5)	140507	0.023	EPA 200.7	02/03/97	0.004	82282
1905	COLOR	(15 color units)	140507	40	SM 2120B	12/19/96	5	82282
1920	ODOR	(3 threshold odor number)	140507	1 U	SM 2150B	12/19/96	1	82282
1925	PH	(6.5-8.5)	140507	7.0	EPA 150.1	12/19/96	--	82282
1930	TOTAL DISSOLVED SOLIDS (500)		140507	220	SM 2540C	12/23/96	3	82282
2905	FOAMING AGENTS	(0.5)	140507	0.01 K	SM 5540C	12/20/96	0.025	82135

*All results and method detection limits in mg/l except color (PCU), Odor (threshold odor number), and pH (standard units).
K indicates analyte is less than value indicated, with value being greater than method detection limit.
U - Analyte was not detected; indicated concentration is method detection limit.

TRIHALOMETHANE ANALYSIS

62-550.310(2)(A)

(PWS027)

Parameter ID	Name	(MCL mg/l)	Sample Number	Analysis Result (mg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2950	TOTAL THMs	(0.10)	10161-01	0.0015 U	EPA 502.2	12/28/96	0.0015	84269

RADIOCHEMICAL ANALYSIS*

62-550.310(5)

(PWS033)

Parameter ID	Name	(MCL pCi/l)	Sample Number	Analysis Result (pCi/l)	Analysis Method	Analysis Date	Error	Lab ID
4000	GROSS ALPHA		140507	1.3 ± 2.4	EPA 900.0	12/23/96	1	83170
4012	PHOTON EMITTERS		NA					
4020	RADIUM-226		NA					
4030	RADIUM-228		NA					
4101	MAN-MADE BETA		NA					

*(GROSS ALPHA GENERALLY ONLY REQUIREMENT, SEE 62-550.519, FAC)

NA = NOT ANALYZED

VOLATILE ORGANIC ANALYSIS

62-550.310(2)(B)

(PWS028)

Parameter ID	Name	(MCL µg/l)	Sample Number	Analysis Result (µg/l)	Analysis Method	Analysis Date	MDL	Lab ID
2378	1,2,4-TRICHLOROBENZENE	(70)	10162-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2380	CIS-1,2-DICHLOROETHYLENE	(70)	10162-01	0.2 U	EPA 502.2	12/28/96	0.2	84269
2955	XYLENES (TOTAL)	(10,000)	10162-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2964	DICHLOROMETHANE	(5)	10162-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2968	O-DICHLOROBENZENE	(600)	10162-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2969	PARA-DICHLOROBENZENE	(75)	10162-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2976	VINYL CHLORIDE	(1)	10162-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2977	1,1-DICHLOROETHYLENE	(7)	10162-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2979	TRANS-1,2-DICHLOROETHYLENE	(100)	10162-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2980	1,2-DICHLOROETHANE	(3)	10162-01	0.2 U	EPA 502.2	12/28/96	0.2	84269
2981	1,1,1-TRICHLOROETHANE	(200)	10162-01	0.3 U	EPA 502.2	12/28/96	0.3	84269
2982	CARBON TETRACHLORIDE	(3)	10162-01	0.3 U	EPA 502.2	12/28/96	0.3	84269
2983	1,2-DICHLOROPROPANE	(5)	10162-01	0.3 U	EPA 502.2	12/28/96	0.3	84269
2984	TRICHLOROETHYLENE	(3)	10162-01	0.2 U	EPA 502.2	12/28/96	0.2	84269
2985	1,1,2-TRICHLOROETHANE	(5)	10162-01	0.3 U	EPA 502.2	12/28/96	0.3	84269
2987	TETRACHLOROETHYLENE	(3)	10162-01	0.2 U	EPA 502.2	12/28/96	0.2	84269
2989	MONOCHLOROBENZENE	(100)	10162-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2990	BENZENE	(1)	10162-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2991	TOLUENE	(1,000)	10162-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2992	ETHYLBENZENE	(700)	10162-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2996	STYRENE	(100)	10162-01	0.5 U	EPA 502.2	12/28/96	0.5	84269

U - Analyte was not detected; indicated concentration is method detection limit.

PESTICIDE/PCB CHEMICAL ANALYSIS
62-550.310(2)(c)
(PWS029)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2005	ENDRIN	(2)	10071-01	0.01 U	EPA 508	12/24/96	0.01	84269
2010	LINDANE	(.2)	10071-01	0.01 U	EPA 508	12/24/96	0.01	84269
2015	METHOXYCHLOR	(40)	10071-01	0.02 U	EPA 508	12/24/96	0.02	84269
2020	TOXAPHENE	(3)	10071-01	0.2 U	EPA 508	12/24/96	0.2	84269
2031	DALAPON	(200)	10071-01	1 U	EPA 515.1	12/31/96	1	84269
2032	DIQUAT	(20)	10071-01	1 U	EPA 549.1	12/24/96	4	84269
2033	ENDOTHALL	(100)	10071-01	10 U	EPA 548	12/24/96	10	84269
2034	GLYPHOSATE	(700)	10071-01	10 U	EPA 547	12/24/96	10	84269
2035	DI(2-ETHYLHEXYL)ADIPATE	(400)	10071-01	1 U	EPA 506	12/24/96	1	84269
2036	OXAMYL (VYDATE)	(200)	10071-01	0.5 U	EPA 531.1	01/06/97	0.5	84269
2037	SIMAZINE	(4)	10071-01	0.1 U	EPA 507	12/24/96	0.1	84269
2039	DI(2-ETHYLHEXYL)PHTHALATE	(6)	10071-01	1 U	EPA 506	12/24/96	1	84269
2040	PICLORAM	(500)	10071-01	0.2 U	EPA 515.1	12/31/96	0.2	84269
2041	DINOSEB	(7)	10071-01	0.2 U	EPA 515.1	12/31/96	0.2	84269
2042	HEXACHLOROCYCLOPENTADIENE	(50)	10071-01	0.1 U	EPA 505	12/26/96	0.1	84269
2046	CARBOFURAN	(40)	10071-01	0.5 U	EPA 531.1	01/06/97	0.5	84269
2050	ATRAZINE	(3)	10071-01	0.1 U	EPA 507	12/24/96	0.1	84269
2051	ALACHLOR	(2)	10071-01	0.3 U	EPA 507	12/24/96	0.3	84269
2065	HEPTACHLOR	(.4)	10071-01	0.01 U	EPA 508	12/24/96	0.01	84269
2067	HEPTACHLOR EPOXIDE	(.2)	10071-01	0.01 U	EPA 508	12/24/96	0.01	84269
2105	2,4-D	(70)	10071-01	0.5 U	EPA 515.1	12/31/96	0.5	84269
2110	2,4,5-TP (SILVEX)	(50)	10071-01	0.05 U	EPA 515.1	12/31/96	0.05	84269
2274	HEXACHLOROBENZENE	(1)	10071-01	0.01 U	EPA 508	12/24/96	0.01	84269
2306	BENZO(A)PYRENE	(.2)	10071-01	0.01 U	EPA 550	12/24/96	0.01	84269
2326	PENTACHLOROPHENOL	(1)	10071-01	0.05 U	EPA 515.1	12/31/96	0.05	84269
2383	PCB	(.5)	10071-01	0.05 U	EPA 508	12/24/96	0.05	84269
2931	DIBROMOCHLOROPROPANE	(.2)	10071-01	0.005 U	EPA 504	12/23/96	0.005	84269
2946	ETHYLENE DIBROMIDE	(.02)	10071-01	0.005 U	EPA 504	12/23/96	0.005	84269
2959	CHLORDANE	(2)	10071-01	0.05 U	EPA 508	12/24/96	0.05	84269

UNREGULATED GROUP I ANALYSIS
62-550.405
(PWS035)

Parameter ID	Name	(MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2021	CARBARYL		10071-01	0.5 U	EPA 531.1	01/06/97	0.5	84269
2022	METHOMYL		10071-01	0.5 U	EPA 531.1	01/06/97	0.5	84269
2043	ALDICARB SULFOXIDE		10071-01	0.5 U	EPA 531.1	01/06/97	0.5	84269
2044	ALDICARB SULFONE		10071-01	0.5 U	EPA 531.1	01/06/97	0.5	84269
2045	METOLACHLOR		10071-01	0.3 U	EPA 507	12/24/96	0.3	84269
2047	ALDICARB		10071-01	0.5 U	EPA 531.1	01/06/97	0.5	84269
2066	3-HYDROXYCARBOFURAN		10071-01	0.5 U	EPA 531.1	01/06/97	0.5	84269
2077	PROPACHLOR		10071-01	0.05 U	EPA 508	12/24/96	0.05	84269
2356	ALDRIN		10071-01	0.01 U	EPA 508	12/24/96	0.01	84269
2364	DIELDRIN		10071-01	0.01 U	EPA 508	12/24/96	0.01	84269
2440	DICAMBA		10071-01	0.05 U	EPA 515.1	12/31/96	0.05	84269
2595	METRIBUZIN		10071-01	0.2 U	EPA 507	12/24/96	0.2	84269

U - Analyte was not detected; indicated concentration is method detection limit.

K - Analyte was less than indicated concentration; indicated concentration is method detection limit multiplied by sample dilution factor.

¹ - Reduced sample volume used for analysis due to interference from sediment.

UNREGULATED GROUP II ANALYSIS

62-550.410

(PWS034)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2210	CHLOROMETHANE	10071-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2212	DICHLORODIFLUOROMETHANE	10071-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2214	BROMOMETHANE	10071-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2216	CHLOROETHANE	10071-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2218	TRICHLOROFLUOROMETHANE	10071-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2251	METHYL-TERT-BUTYL-ETHER	10071-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2408	DIBROMOMETHANE	10071-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2410	1,1-DICHLOROPROPYLENE	10071-01	0.3 U	EPA 502.2	12/28/96	0.3	84269
2412	1,3-DICHLOROPROPANE	10071-01	0.3 U	EPA 502.2	12/28/96	0.3	84269
2413	1,3-DICHLOROPROPENE	10071-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2414	1,2,3-TRICHLOROPROPANE	10071-01	0.3 U	EPA 502.2	12/28/96	0.3	84269
2416	2,2-DICHLOROPROPANE	10071-01	0.3 U	EPA 502.2	12/28/96	0.3	84269
2941	CHLOROFORM	10071-01	0.2 U	EPA 502.2	12/28/96	0.2	84269
2942	BROMOFORM	10071-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2943	BROMODICHLOROMETHANE	10071-01	0.3 U	EPA 502.2	12/28/96	0.3	84269
2944	DIBROMOCHLOROMETHANE	10071-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2965	O-CHLOROTOLUENE	10071-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2966	P-CHLOROTOLUENE	10071-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2967	M-DICHLOROBENZENE	10071-01	0.5 U	EPA 502.2	12/28/96	0.5	84269
2978	1,1-DICHLOROETHANE	10071-01	0.3 U	EPA 502.2	12/28/96	0.3	84269
2986	1,1,1,2-TETRACHLOROETHANE	10071-01	0.3 U	EPA 502.2	12/28/96	0.3	84269
2988	1,1,2,2-TETRACHLOROETHANE	10071-01	0.3 U	EPA 502.2	12/28/96	0.3	84269
2993	BROMOBENZENE	10071-01	0.5 U	EPA 502.2	12/28/96	0.5	84269

UNREGULATED GROUP III ANALYSIS

62-550.415

(PWS036 & 037*)

Parameter ID	Name (MCL $\mu\text{g/l}$)	Sample Number	Analysis Result ($\mu\text{g/l}$)	Analysis Method	Analysis Date	MDL	Lab ID
2262	ISOPHORONE	10071-01	1 U	EPA 609	12/24/96	1	84269
2270	2,4-DINITROTOLUENE	10071-01	1 U	EPA 609	12/24/96	1	84269
2282	DIMETHYLPHthalATE	10071-01	1 U	EPA 506	12/24/96	1	84269
2284	DIETHYLPHthalATE	10071-01	1 U	EPA 506	12/24/96	1	84269
2290	DI-N-BUTYLPHthalATE	10071-01	1 U	EPA 506	12/24/96	1	84269
2294	BUTYL BENZYL PHthalATE	10071-01	1 U	EPA 506	12/24/96	1	84269
9089	DIOCTYLPHthalATE	10071-01	1 U	EPA 506	12/24/96	1	84269
9108*	2-CHLOROPHENOL	10071-01	5 U	EPA 604	12/16/96	5	84269
9112*	2-METHYL-4,6-DINITROPHENOL	10071-01	20 U	EPA 604	12/16/96	20	84269
9115*	PHENOL	10071-01	5 U	EPA 604	12/16/96	5	84269
9116*	2,4,6-TRICHLOROPHENOL	10071-01	10 U	EPA 604	12/16/96	10	84269

U - Analyte was not detected; indicated concentration is method detection limit.



Environmental Services of South Florida, Inc.

P.O. BOX 10000 • MIAMI BEACH, FLORIDA 33152 • (305) 585-5252

LAB # E60055
WRITING LAB # 00117

LABORATORY ANALYSIS

WATER / WASTEWATER / SOIL / FOOD

CONSULTING

INDUSTRIAL / AGRICULTURAL / DOMESTIC

Johnson - Davis, Inc.

BACTERIOLOGICAL ANALYSIS

System Name: Palm Beach County System #3

Address: Palm Beach County, Florida

Sample Site: Palm Beach County Well Fields System #9, S. W. 7th Street
Boca Raton, Florida

Date and Time of Collection: 5/15/97, 1040

E.S.S.F. Collector: M.P. Fiedor

Type of Supply: Community Water System

Type of Sample: Main Clearance

Date and Time of Sample Arrival in Lab: 5/16/97, 1420

Date and Time of Sample Analysis: 5/16/97, 1455

Analysis Method:



MEF MTO-MDG PA

Sample No.	Sample Point	Total Susp. Sol. (mg/l)	pH	Coliforms, ME/100 ml Total	Non Coliforms	Confirm Total	Confirm Fecal	Confirm E. Coli
2.				A	Light	A		

Michael A. Fiedor

* P - Coliforms are present
A - Coliforms are absent

C - Confident growth
TNTC - Too numerous to count

Michael A. Fiedor
Director



Environmental Services of South Florida, Inc.

P.O. Box 10003 • Riviera Beach, Florida 33419 • (561) 848-7805

LAB # F28055
DHS LAB #86117

LABORATORY ANALYSIS

WATER / WASTEWATER / SOIL / FOOD

CONSULTING

INDUSTRIAL / AGRICULTURAL / DOMESTIC

Johnson - Davis, Inc.

BACTERIOLOGICAL ANALYSIS

System Name: Palm Beach County System #9

Address: Palm Beach County, Florida

Sample Site: Palm Beach County Well Fields System #9, S. W. 7th Street
Boca Raton, Florida

Date and Time of Collection: 5/15/97, 1615

E.S.S.F. Collector: M.P. Fiedor

Type of Supply: Community Water System

Type of Sample: Main Clearance

Date and Time of Sample Arrival in Lab: 5/15/97, 1200

Date and Time of Sample Analysis: 5/15/97, 1525

Analysis Method:



MCF MUF MMD-MUG PA

Sample No.	Sample Point	Total Res. Col (mp/1l)	col	Coliforms, MP/100 ml Total Fecal	Non Coliforms	Confirm Total	Confirm Fecal	Confirm E. Coli
2.			A		Light			

RECEIVED
MAY 21 1997

MONTGOMERY WATSON
PALM BEACH COUNTY OFFICE

Michael A. Fiedor



CONFIDENTIAL

Michael A. Fiedor
DIRECTOR

A - Coliforms are absent

TNTC - Too numerous to count

Director

14879835225 ENVIRODYNE INC.

315 P86 MAY 03 '97 17:25

Envirodyne inc.

4805 N.W. 2nd Avenue
Boca Raton, FL 33431
561-989-5225

South East Drilling
11505 N. Grady Avenue
Tampa, FL 33624

May 1, 1997
Report: 9704000278
Sample No: 9704000278 i

Attention: Bart Ziegler

Project: PBCWF Expansion - System 9
22458 SW 7th Street Boca Raton, FL

Collected by: Bart Ziegler

Collected on: 04/23/97
Received on: 04/24/97

SAMPLE ID: Sys 9 #1R

Date of Analysis: 04/27/97
Date of Extraction: 04/25/97

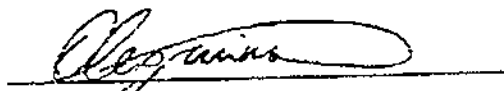
8270A DIOXIN

PARAMETER	RESULT	DL UNITS	ANALYST
2,3,7,8-Tertachlorodibenzo-p-dioxin	Absent	20 µg/L	DWK

Analysis contained herein conform to EPA and DEP approved methods per Envirodyne Comprehensive Quality Assurance Plan No. 890041G. Additional Laboratory Certification numbers: E86006, 88408, E83079, E86240, South Carolina 96022. All relevant quality assurance samples were within specified control limits unless otherwise stated.



Michael Rentoumis
President, Envirodyne, inc.



Greg Winko, Ph.D.
Quality Assurance Director



Appendix G



Well Completion Reports

WELL COMPLETION REPORT

FORM 0124
11/90

WELL PERMIT NO. SFD60796N

SFWMD WATER USE PERMIT NO. N/A

Delm Beach County Water Util. Dept., 2065 Prarie Rd., W.P.B., FL 33416-6097
City State Zip

Owner [Signature] Address 9078 City 164.5 State 164.5 Zip 1
Contractor's Signature License No. Completion Date Casing Depth Total Depth Well #

TYPE OF WORK: Construct () Repair () Abandon
WELL USE: Domestic Well () Public () Monitor () Test ()
Irrigation () Fire Well () Other _____

METHOD: Rotary with MUD () or Air (), Cable Tool (), Jet ()
Casing Driven (), Other _____

STATIC WATER LEVEL 6 Ft. below top of casing
PUMPING WATER LEVEL N/A Ft. after N/A Hrs. at N/A GPM
PUMP SIZE N/A H.P. CAPACITY N/A GPM
PUMP TYPE N/A INTAKE DEPTH N/A
From top of ground

LOCATION

Located Near _____
on System No. 1 WTB
County PBC

31 43 43
Section Township Range
Latitude-Longitude _____

LOCATE IN SECTION

Cuttings sent to District? () Yes
() No

Note: PWS Wells attach a site map if well location is different
from site location on permit application.

Grout	Casing & Screen	Depth (ft)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes Give color, grain size, and type of material Note cavities, depth to producing zones
		From	To	
	10"	164.5		
		164.5	107	Rocked well
				from 164.5 to 97
				1 1/2 yards
		107	0	Neat cement
Number of bags				

Casing: Black Steel () Galv. () PVC () Fiberglass ()
Screen: Type _____ Slot size _____
Screened from 164.5 (ft.) to 107 (ft.)
Type of grout with % additives _____
Water: Clear () Colored () Sulphur () Salty () Iron ()
Conductivity _____ Chlorides _____ mg/l

WELL COMPLETION REPORT

FORM 0124
Rev 11 90

WELL PERMIT NO. SF0607960

SFWMD WATER USE PERMIT NO. N/A

Palm Beach County Water Util. Dept., 2065 Prarie Rd., W.P.B., FL 33416-6097

Owner: [Signature] Address: 9078 City: 176 State: 176 Zip: 4
Contractor's Signature: License No.: Completion Date: Casing Depth: Total Depth: Well #:

TYPE OF WORK: Construct () Repair () Abandon
WELL USE: Domestic Well () Public Monitor () Test ()
Irrigation () Fire Well () Other _____
METHOD: Rotary with MUD () or Air (), Cable Tool (), Jet ()
Casing Driven (), Other N/A
STATIC WATER LEVEL 6 Ft. below top of casing
PUMPING WATER LEVEL N/A Ft. after N/A Hrs. at N/A GPM
PUMP SIZE N/A H.P. CAPACITY N/A GPM
PUMP TYPE N/A INTAKE DEPTH N/A
From top of ground

LOCATION

Located Near North of
Duncan, N. of 13th ST
County PBC

31 43 43
Section Township Range

Latitude-Longitude

LOCATE IN SECTION

Cuttings sent to District? () Yes
(X) No

Note: PWS Wells attach a site map if well location is different from site location on permit application.

Grout	Casing & Screen	Depth (ft)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Give color, grain size, and type of material. Note cavities, depth to producing zones.
		From	To	
	10" 176			
		176	127	1/2 yard gravel
		127		Neat cement
Number of bags				

Casing: Black Steel () Galv. () PVC () Fiberglass ()
Screen: Type _____ Slot size _____
Screened from _____ (ft.) to _____ (ft.)
Type of grout with % additives _____
Water: Clear () Colored () Sulphur () Salty () Iron ()
Conductivity _____ Chlorides _____ mg/l

WELL COMPLETION REPORT

FORM 0124
Rev 11/90

WELL PERMIT NO. SF060796P

SFWMW WATER USE PERMIT NO. N/A

Palm Beach County Water Util. Dept., 2065 Prarie Rd., W.P.B., FL 33416-6097

Owner _____ Address 9078 City _____ State _____ Zip 5
Contractor's Signature _____ License No. _____ Completion Date 06/28/96 Casing Depth 180 Total Depth 180 Well # _____

TYPE OF WORK: Construct () Repair () Abandon
WELL USE: Domestic Well () Public () Monitor () Test ()
Irrigation () Fire Well () Other N/A
METHOD: Rotary with MUD () or Air (), Cable Tool (), Jet ()
Casing Driven (), Other N/A

STATIC WATER LEVEL 6 Ft. below top of casing
PUMPING WATER LEVEL N/A Ft. after N/A Hrs. at N/A GPM
PUMP SIZE N/A H.P. CAPACITY N/A GPM
PUMP TYPE N/A INTAKE DEPTH N/A
From top of ground

LOCATION
Located Near South side of
Belveder, W. of 5th St
County PBC

 31 43 43
 Section Township Range

Latitude-Longitude

Cuttings sent to District? () Yes
) No

Note: PWS Wells attach a site map if well location is different from site location on permit application.

Grout	Casing & Screen	Depth (ft)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes Give color, grain size, and type of material Note cavities, depth to producing zones.
		From	To	
	10"	180		
		180	130	<u>1/2 yard rock</u>
		130	0	<u>Neat cement grout</u>
	Number of bags			

Casing: Black Steel () Galv. () PVC () Fiberglass ()
Screen: Type _____ Slot size _____
Screened from _____ (ft.) to _____ (ft.)
Type of grout with % additives _____
Water: Clear () Colored () Sulphur () Salty () Iron ()
Conductivity _____ Chlorides _____ mg/l

WELL COMPLETION REPORT
FORM 0124
Rev. 11/90

WELL PERMIT NO. SF0607960
SFWMD WATER USE PERMIT NO. N/A

Palm Beach Water Util. Dept., 2065 Prarie Rd., W.P.B., FL. 33416-6097

[Signature] Address: 9078 City: 180 State: 180 Zip: 6
Contractor's Signature License No. Completion Date Casing Depth Total Depth Well #

TYPE OF WORK: Construct () Repair () Abandon ()
WELL USE: Domestic Well () Public () Monitor () Test ()
Irrigation () Fire Well () Other _____

METHOD: Rotary with MUD () or Air (), Cable Tool (), Jet ()
Casing Driven (), Other N/A

STATIC WATER LEVEL 6 Ft. below top of casing
PUMPING WATER LEVEL N/A Ft. after N/A Hrs. at N/A GPM
PUMP SIZE N/A H.P. CAPACITY N/A GPM
PUMP TYPE N/A INTAKE DEPTH N/A
From top of ground

LOCATION
Located Near South side
Belveder, w. of Congress
County PBC
31 43 43
% % Section Township Range

Latitude-Longitude

LOCATE IN SECTION

te: **PWS Wells attach a site map if well location is different from site location on permit application.**

Grout	Casing & Screen	Depth (ft)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes Give color, grain size, and type of material Note cavities, depth to producing zones.
		From	To	
	10"	180		
		180	130	1/2 yard rock
		130	0	Cement grout.
Number of bags				

Casing: Black Steel () Galv. () PVC () Fiberglass ()
Screen: Type _____ Slot size _____
Screened from _____ (ft.) to _____ (ft.)
Type of grout with % additives _____
Water: Clear () Colored () Sulphur () Salty () Iron ()
Conductivity _____ Chlorides _____ mg/l

PALM BEACH CO WATER UTILITIES 2065 Prarie Rd. WPB FL 33416-6097

City WPB Address 9078 City 130 State 130 Zip Sys 2/Well # 15
 Contractor's Signature _____ License No. _____ Completion Date 2/8/96 Casing Depth _____ Total Depth _____ Well # _____

TYPE OF WORK: Construct () Repair () Abandon ()
 WELL USE: Domestic Well () Public () Monitor () Test ()
 Irrigation () Fire Well () Other _____
 METHOD: Rotary with MUD () or Air () , Cable Tool () , Jet ()
 Casing Driven () , Other _____
 STATIC WATER LEVEL 4.8 Ft. below top of casing
 PUMPING WATER LEVEL 7.4 Ft. after 8 Hrs. at 1000 GPM
 PUMP SIZE 50 H.P. CAPACITY 1000 GPM
 PUMP TYPE Sub INTAKE DEPTH 60
From top of ground

LOCATION
 Located Near 500' W of
Sys 2/Well # 14
 County Palm Beach
16 44 42
% % Section Township Range
 Latitude-Longitude _____

Cuttings sent to District? () Yes
 () No

LOCATE IN SECTION

Note: PWS Wells attach a site map if well location is different from site location on permit application.

Grout	Casing & Screen	Depth (ft)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Give color, grain size, and type of material. Note cavities, depth to producing zones.
		From	To	
NA	30" 50	0	8	Tan to White Sand
6"	24" 85	8	45	Tan to Brown Sand
8"	16" 130			w/shell
		45	57	Cemented Gray Sandstone
		57	75	White Shell & Gray Sandstone
		75	85	Gray Sandstone
		85	90	Lost circulation
		90	130	Grey to Tan Sandstone
Number of bags				
173	CF			

Casing: Black Steel () Galv. () PVC () Fiberglass ()
 Screen: Type SS Slot size 100
 Screened from 85 (ft.) to 125 (ft.)
 Type of grout with % additives 4%
 Water: Clear () Colored () Sulphur () Salty () Iron ()
 Conductivity _____ Chlorides _____ mg/l

PALM BEACH CO WATER UTILITIES 2065 Prarie Rd. WPB FL 33416-6097
 Owner _____ Address 9078 City 140 State _____ Zip _____
 Contractor's Signature _____ License No. 9078 Completion Date 2/8/96 Casing Depth 140 Total Depth 140 Sys 8 / Well # 13

TYPE OF WORK: Construct Repair () Abandon ()
 WELL USE: Domestic Well () Public Monitor () Test ()
 Irrigation () Fire Well () Other _____
 METHOD: Rotary with MUD or Air (), Cable Tool (), Jet ()
 Casing Driven (), Other _____
 STATIC WATER LEVEL _____ Ft. below top of casing
 PUMPING WATER LEVEL _____ Ft. after _____ Hrs. at _____ GPM
 PUMP SIZE NA H.P. CAPACITY NA GPM
 PUMP TYPE NA INTAKE DEPTH NA
From top of ground

LOCATION
 Located Near NE corner
of Sys 8 WTP
 County Palm Beach
27 43 42
% Section Township Range

Latitude-Longitude _____

Cuttings sent to District? () Yes
 (X) No

Note: PWS Wells attach a site map if well location is different from site location on permit application.

LOCATE IN SECTION

Grout	Casing & Screen	Depth (ft)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Give color, grain size, and type of material. Note cavities, depth to producing zones.
		From	To	
NA	30"	50	0	14 Sand
6"	24"	85	14	47 Shell with Sand
8"	16"	140	47	74 Gray Limestone
			74	111 Medium Shell
			111	140 Broken Shell & Limestone
Number of bags				
173	CF			

Casing: Black Steel Galv. () PVC Fiberglass ()
 Screen: Type SS Slot size 100
 Screened from 80 (ft.) to 135 (ft.)
 Type of grout with % additives 4%
 Water: Clear Colored () Sulphur () Salty () Iron ()
 Conductivity _____ Chlorides _____ mg/l

PALM BEACH CO WATER UTILITIES 2065 Prarie Rd. WPB FL 33416-6097
 Owner _____ Address 9078 City 125 State _____ Zip _____
 Contractor's Signature _____ License No. 9078 Completion Date 2/8/96 Casing Depth 125 Total Depth 125 Sys 2 # 14

TYPE OF WORK: Construct Repair () Abandon ()
 WELL USE: Domestic Well () Public Monitor () Test ()
 Irrigation () Fire Well () Other _____
 METHOD: Rotary with MUD or Air (), Cable Tool (), Jet ()
 Casing Driven (), Other _____
 STATIC WATER LEVEL 3.3 Ft. below top of casing
 PUMPING WATER LEVEL 4.2 Ft. after 8 Hrs. at 1000 GPM
 PUMP SIZE 50 H.P. CAPACITY 1000 GPM
 PUMP TYPE Sub INTAKE DEPTH 60
From top of ground

LOCATION
 Located Near 500' W of
Well # 13/Sys # 2
 County Palm Beach
16 44 42
% Section Township Range

Latitude-Longitude _____

Cuttings sent to District? () Yes
 (X) No

Note: PWS Wells attach a site map if well location is different from site location on permit application.

LOCATE IN SECTION

Grout	Casing & Screen	Depth (ft)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Give color, grain size, and type of material. Note cavities, depth to producing zones.
		From	To	
NA	30"	50	0	5 Tan to White Sand
6"	24"	80	5	45 Tan to Brn Snd w/ shell
8"	16"	125	45	55 Cemented Gray Sandstone
			55	78 White shell & Gray Sandstone
			78	85 Gray Sandstone
			85	125 Tan to Gray Sandstone
Number of bags				
173	CF			

Casing: Black Steel Galv. () PVC Fiberglass ()
 Screen: Type SS Slot size 100
 Screened from 80 (ft.) to 120 (ft.)
 Type of grout with % additives 4%
 Water: Clear () Colored () Sulphur () Salty () Iron ()

PALM BEACH CO. WATER UTILITIES 2065 Prarie Rd. WPB FL 33416-6097

Contractor's Signature: [Signature] Address: 9078 City: 145' State: 145' Zip: _____
License No.: 9078 Completion Date: 2/8/96 Casing Depth: _____ Total Depth: _____ SRWRF # 16
Well # _____

TYPE OF WORK: Construct Repair () Abandon ()
WELL USE: Domestic Well () Public Monitor () Test ()
Irrigation () Fire Well () Other _____
METHOD: Rotary with MUD or Air (), Cable Tool (), Jet ()
Casing Driven (), Other _____
STATIC WATER LEVEL 9 Ft. below top of casing
PUMPING WATER LEVEL 33 Ft. after 8 Hrs. at 2000GPM
PUMP SIZE 75 H.P. CAPACITY 1500 GPM
PUMP TYPE Sub INTAKE DEPTH 60
From top of ground

LOCATION
Located Near SW corner of SRWRB
County Palm Beach
4 46 42
Section Township Range
Latitude-Longitude _____

Cuttings sent to District? () Yes No
LOCATE IN SECTION
Note: PWS Wells attach a site map if well location is different from site location on permit application.

Grout Thickness & Depth	Casing & Screen Diameter & Depth	Depth (ft)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes Give color, grain size, and type of material Note cavities, depth to producing zones.	
		From	To		
NA	30"	60	0	5	Lt Brown Sand
6"	24"	100	5	15	Brown Sand
NA	16"	145	15	38	Dk Brown Sand
			38	98	Dk Brown Sand
			98	110	
				110	Gray to Green Sandstone
			110	115	Tan to Gray Sandstone
			115	145	Gray Sandstone
Number of bags					
192	CF				

Casing: Black Steel Galv. () PVC Fiberglass ()
Screen: Type SS Slot size 100
Screened from 100 (ft.) to 145 (ft.)
Type of grout with % additives 4%
Water: Clear Colored () Sulphur () Salty () Iron ()
Conductivity _____ Chlorides _____ mg/l

PALM BEACH CO WATER UTILITIES 2065 Prarie Rd WPB FL 33416-6097

Owner: [Signature] Address: 9078 City: 145 State: 145 Zip: _____
Contractor's Signature: _____ License No.: 9078 Completion Date: 2/8/96 Casing Depth: _____ Total Depth: _____ Sys # 8 Well # 14
Well # _____

TYPE OF WORK: Construct Repair () Abandon ()
WELL USE: Domestic Well () Public Monitor () Test ()
Irrigation () Fire Well () Other _____
METHOD: Rotary with MUD or Air (), Cable Tool (), Jet ()
Casing Driven (), Other _____
STATIC WATER LEVEL 10.3 Ft. below top of casing
PUMPING WATER LEVEL 11.3 Ft. after 8 Hrs. at 1000GPM
PUMP SIZE NA H.P. CAPACITY NA GPM
PUMP TYPE NA INTAKE DEPTH NA
From top of ground

LOCATION
Located Near SW corner of Sys 8/WTP
County Palm Beach
27 43 42
Section Township Range
Latitude-Longitude _____

Cuttings sent to District? () Yes No
LOCATE IN SECTION
Note: PWS Wells attach a site map if well location is different

Grout Thickness & Depth	Casing & Screen Diameter & Depth	Depth (ft)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes Give color, grain size, and type of material Note cavities, depth to producing zones.	
		From	To		
NA	30"	50	0	6	Brown to Tan Sand
6"	24"	80	80	10	with Hard Pan
8"	16"	145	6	10	Clayey Sand
			10	22	White Shell
			22	42	Brown Sand
			42	55	Gray Sandstone & Sand
			55	126	Gray to Lt Gray Sandstone
			126	145	Lt Grays Sandstone with shell fragments
Number of bags					
173	CF				

Casing: Black Steel Galv. () PVC Fiberglass ()
Screen: Type SS Slot size 100
Screened from 80 (ft.) to 140 (ft.)
Type of grout with % additives 4%
Water: Clear () Colored () Sulphur () Salty () Iron ()

PALM BEACH CO WATER UTILITIES 2065 Prarie Rd. WPB FL 33416-6097
 Owner [Signature] Address 9078 City 145' State 145' Zip SRWRF # 17
 Contractor's Signature [Signature] License No. 2/8/96 Completion Date 145' Casing Depth 145' Total Depth SRWRF # 17 Well #

TYPE OF WORK: Construct () Repair () Abandon ()
 WELL USE: Domestic Well () Public () Monitor () Test ()
 Irrigation () Fire Well () Other _____
 METHOD: Rotary with MUD () or Air (), Cable Tool (), Jet ()
 Casing Driven (), Other _____
 STATIC WATER LEVEL 10 Ft. below top of casing
 PUMPING WATER LEVEL 32 Ft. after 5 Hrs. at 1300GPM
 PUMP SIZE 75 H.P. CAPACITY 1500 GPM
 PUMP TYPE Sub INTAKE DEPTH 60'
From top of ground

LOCATION
 Located Near Center of
SRWRF
 County Palm Beach
4 46 42
% % Section Township Range
 Latitude-Longitude _____

Cuttings sent to District? () Yes
 () No

LOCATE IN SECTION

Note: PWS Wells attach a site map if well location is different from site location on permit application.

Grout	Casing & Screen	Depth (ft)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Give color, grain size, and type of material. Note cavities, depth to producing zones.
		From	To	
NA	30"	60	0	5 Lt Brown Sand
6"	24"	100	5	27 Brown Sand
NA	16"	145	27	36 Dk Brown Sand
			36	87 Brown Sand
			87	88 Gray Clay
			88	97 Brown Sand
			97	145 Gray Sandstone
Number of bags				
211	CF			

Casing: Black Steel () Galv. () PVC () Fiberglass ()
 Screen: Type SS Slot size 100
 Screened from 100 (ft.) to 145 (ft.)
 Type of grout with % additives 4%
 Water: Clear () Colored () Sulphur () Salty () Iron ()
 Conductivity _____ Chlorides _____ mg/l

PALM BEACH CO. WATER UTILITIES 2065 Prarie Rd. WPB FL 33416-6097
 Owner [Signature] Address 9078 City 145' State 145' Zip SRWRF # 15
 Contractor's Signature [Signature] License No. 2/8/97 Completion Date 145' Casing Depth 145' Total Depth SRWRF # 15 Well #

TYPE OF WORK: Construct () Repair () Abandon ()
 WELL USE: Domestic Well () Public () Monitor () Test ()
 Irrigation () Fire Well () Other _____
 METHOD: Rotary with MUD () or Air (), Cable Tool (), Jet ()
 Casing Driven (), Other _____
 STATIC WATER LEVEL 9.0 Ft. below top of casing
 PUMPING WATER LEVEL 51 Ft. after 8 Hrs. at 1000GPM
 PUMP SIZE 75 H.P. CAPACITY 1000 GPM
 PUMP TYPE Sub INTAKE DEPTH 60'
From top of ground

LOCATION
 Located Near SE corner of
SRWRF
 County Palm Bch Co.
4 46 42
% % Section Township Range
 Latitude-Longitude _____

Cuttings sent to District? () Yes
 () No

LOCATE IN SECTION

Note: PWS Wells attach a site map if well location is different from site location on permit application.

Grout	Casing & Screen	Depth (ft)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Give color, grain size, and type of material. Note cavities, depth to producing zones.
		From	To	
NA	30"	60	0	5 Lt Brown Sand
6"	24"	100	5	15 Dk Brown Sand
NA	16"	145	15	98 Brown Sand
			98	145 Gray Sandstone
Number of bags				
192	CF			

Casing: Black Steel () Galv. () PVC () Fiberglass ()
 Screen: Type SS Slot size 100
 Screened from 100 (ft.) to 140 (ft.)
 Type of grout with % additives 4%
 Water: Clear () Colored () Sulphur () Salty () Iron ()

WELL COMPLETION REPORT

FORM 0124
Rev. 11/90

WELL PERMIT NO. **SRF SF060796F**

SFWMD WATER USE PERMIT NO. _____

PALM BEACH CO WATER UTILITIES 2065 Prarie Rd. WPB FL 33416-6097

Owner *[Signature]* Address **9078** City **145'** State **145'** Zip **SRWRF # 18**
Contractor's Signature _____ License No. _____ Completion Date _____ Casing Depth _____ Total Depth _____ Well # _____

TYPE OF WORK: Construct () Repair () Abandon ()
WELL USE: Domestic Well () Public () Monitor () Test ()
Irrigation () Fire Well () Other _____
METHOD: Rotary with MUD () or Air (), Cable Tool (), Jet ()
Casing Driven (), Other _____

STATIC WATER LEVEL 8.5 Ft. below top of casing
PUMPING WATER LEVEL 50.2 Ft. after 8 Hrs. at 1500 GPM
PUMP SIZE 75 H.P. CAPACITY 1500 GPM
PUMP TYPE Sub INTAKE DEPTH 85'
From top of ground

Grout	Casing & Screen		Depth (ft)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes Give color, grain size, and type of material Note cavities, depth to producing zones.
	Thickness & Depth	Diameter & Depth	From	To	
NA	30"	60	0	5	Lt Brown Sand
6"	24"	100	5	90	Brown Sand
NA	16"	145	90	145	Gray Sandstone
Number of bags					
192	CF				

LOCATION
Located Near NE corner
of SRWRF
County Palm Beach
4 46 42
% % Section Township Range
Latitude-Longitude _____

LOCATE IN SECTION

Cuttings sent to District? () Yes
() No

Note: PWS Wells attach a site map if well location is different from site location on permit application.

Casing: Black Steel () Galv. () PVC () Fiberglass ()
Screen: Type SS Slot size 100
Screened from 100 (ft.) to 145 (ft.)
Type of grout with % additives 4%
Water: Clear () Colored () Sulphur () Salty () Iron ()
Conductivity _____ Chlorides _____ mg/l

WELL COMPLETION REPORT

FORM 0124
Rev. 11/90

WELL PERMIT NO. **SF060796E**

SFWMD WATER USE PERMIT NO. _____

PALM BEACH CO WATER UTILITIES 2065 Prarie Rd. WPB FL 33416-6097

Owner *[Signature]* Address **9078** City **135** State **135** Zip **Sys 9/ Well # 1**
Contractor's Signature _____ License No. _____ Completion Date _____ Casing Depth _____ Total Depth _____ Well # _____

TYPE OF WORK: Construct () Repair () Abandon ()
WELL USE: Domestic Well () Public () Monitor () Test ()
Irrigation () Fire Well () Other _____
METHOD: Rotary with MUD () or Air (), Cable Tool (), Jet ()
Casing Driven (), Other _____

STATIC WATER LEVEL 19.7 Ft. below top of casing
PUMPING WATER LEVEL 24.3 Ft. after 6 Hrs. at 700 GPM
PUMP SIZE 30 H.P. CAPACITY 1000 GPM
PUMP TYPE Sub INTAKE DEPTH 60
From top of ground

Grout	Casing & Screen		Depth (ft)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes Give color, grain size, and type of material Note cavities, depth to producing zones.	
	Thickness & Depth	Diameter & Depth	From	To		
NA	30"	60	0	5	Sand	
6"	24"	90	5	22	Limerock, shell Fragments w/sand	
	8"	16"	135	22	78	Gray Sand
Number of bags						
173	CF					

LOCATION
Located Near Midway E side
bet. N & S corner/SRWRF
County Palm Beach
30 47 42
% % Section Township Range
Latitude-Longitude _____

LOCATE IN SECTION

Cuttings sent to District? () Yes
() No

Note: PWS Wells attach a site map if well location is different from site location on permit application.

Casing: Black Steel () Galv. () PVC () Fiberglass ()
Screen: Type SS Slot size 100
Screened from 90 (ft.) to 130 (ft.)
Type of grout with % additives 4%
Water: Clear () Colored () Sulphur () Salty () Iron ()

**Palm Beach County Public
Health Unit
Releases**



Lawton Chiles
Governor

James T. Howell, M.D., M.P.H.
Secretary

June 10, 1997

Eugenia Carey, Manager,
Regulatory Compliance
Palm Beach County
Water Utilities Department
2085 Prairie Road
West Palm Beach, FL 33416

PROJECT: Palm Beach County Wellfield Expansion Project

WATER PERMIT NO: WC50-282172

Dear Ms. Carey:

The above referenced project is hereby released for service to the extent indicated below. This release is based on certification by the engineer-of-record that the water and/or sewage system has been constructed in substantial conformance with plans previously approved by this agency.

The system is released to the full extent of the approved plans

The system is partially released and limited to

Sincerely,

For the Division Director
Environmental Health & Engineering

A handwritten signature in cursive script that reads "James Holland".

James Holland
Environmental Engineer
Plan Review & Permits Section

FJG/JH/eb

c: Florida Department of Environmental Protection, Southeast District
Engineer-of-Record: Mark R. Nelson, P. E.



Lawton Chiles
Governor

James T. Howell, M.D., M.P.H.
Secretary

RECEIVED
JUL 07 1997

MONTGOMERY WATSON
PALM BEACH COUNTY OFFICE

July 2, 1997

Eugenia Carey, Manager,
Regulatory Compliance
Palm Beach County Water Utilities Dept.
P. O. Box 16097
West Palm Beach, FL 33416-6097

PROJECT: Polo Trace Potable Water Wells - Raw Water Pipeline

WATER PERMIT NO.: WC50-168944

Dear Ms. Carey:

The above referenced project is hereby released for service to the extent indicated below. This release is based on certification by the engineer-of-record that the water and/or sewage system has been constructed in substantial conformance with plans previously approved by this agency.

- The system is released to the full extent of the approved plans
- The system is partially released and limited to

Sincerely,

For the Division Director
Environmental Health & Engineering

James Holland
Environmental Engineer
Plan Review & Permits Section

FJG/JH/eb

c: Florida Department of Environmental Protection, Southeast District
Engineer-of-Record: Mark Nelson, P. E.



Lawton Chiles
Governor

James T. Howell, M.D., M.P.H.
Secretary

July 11, 1997

C. Lawton McCall, Director of Engineering
Palm Beach County Utilities
2065 Prairie Road
West Palm Beach, FL 33416

PROJECT: Palm Beach County Water Utilities Dept. Water Treatment Plant #9 Well #1

WATER PERMIT NO.: WC50-228676

Dear Mr. McCall:

The above referenced project is hereby released for service to the extent indicated below. This release is based on certification by the engineer-of-record that the water and/or sewage system has been constructed in substantial conformance with plans previously approved by this agency.

- The system is released to the full extent of the approved plans
 The system is partially released and limited to

Sincerely,

For the Division Director
Environmental Health & Engineering

A handwritten signature in cursive script that reads "James Holland".

James Holland
Environmental Engineer
Plan Review & Permits Section

FJG/JH/eb

c: Florida Department of Environmental Protection, Southeast District
Engineer-of-Record: Mark Nelson, P.E.

RECEIVED
JUL 14 1997

MONTGOMERY WATSON
PALM BEACH COUNTY OFFICE



Lawton Chiles
Governor

James T. Howell, M.D., M.P.H.
Secretary

June 10, 1997

Eugenia Carey, Manager,
Regulatory Compliance
Palm Beach County
Water Utilities Department
2065 Prairie Road
West Palm Beach, FL 33416

PROJECT: Wellfield Expansion Project/Wells 3W-15, 16, 17 & 18

WATER PERMIT NO.: WC50-282171

Dear Ms. Carey:

The above referenced project is hereby released for service to the extent indicated below. This release is based on certification by the engineer-of-record that the water and/or sewage system has been constructed in substantial conformance with plans previously approved by this agency.

- The system is released to the full extent of the approved plans
- The system is partially released and limited to

Sincerely,

For the Division Director
Environmental Health & Engineering

A handwritten signature in cursive script that reads "James Holland".

James Holland
Environmental Engineer
Plan Review & Permits Section

FJG/JH/eb

c: Florida Department of Environmental Protection, Southeast District
Engineer-of-Record: Mark R. Nelson, P. E.

July 11, 1997

C. Lawton McCall, Director of Engineering
Palm Beach County Utilities
2065 Prairie Road
West Palm Beach, FL 33416

PROJECT: Palm Beach County Water Utilities Dept. Wellfield Expansion at systems
1, 2, 3, 8 & 9

WATER PERMIT NO.: WC50-282170

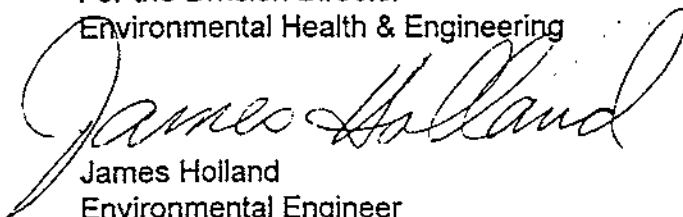
Dear Mr. McCall:

The above referenced project is hereby released for service to the extent indicated below. This release is based on certification by the engineer-of-record that the water and/or sewage system has been constructed in substantial conformance with plans previously approved by this agency.

- The system is released to the full extent of the approved plans
 The system is partially released and limited to

Sincerely,

For the Division Director
Environmental Health & Engineering



James Holland
Environmental Engineer
Plan Review & Permits Section

FJG/JH/eb

c: Florida Department of Environmental Protection, Southeast District
Engineer-of-Record: Mark Nelson, P.E.

RECEIVED
JUL 14 1997

MONTGOMERY WATSON
PALM BEACH COUNTY OFFICE



Appendix H





PALM BEACH COUNTY WATER UTILITIES DEPARTMENT

WELLFIELD EXPANSION PROJECT
AT SYSTEMS 1W, 2W, 3W, 8W AND 9W

PBCWUD PROJECT NO. WUD 95-207
MONTGOMERY WATSON PROJECT NO. 1565.1820
VOLUME 2 - DRAWINGS

DECEMBER 1995



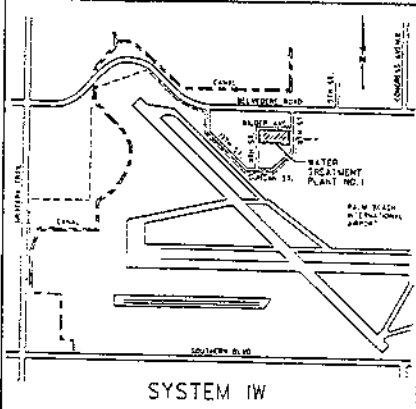
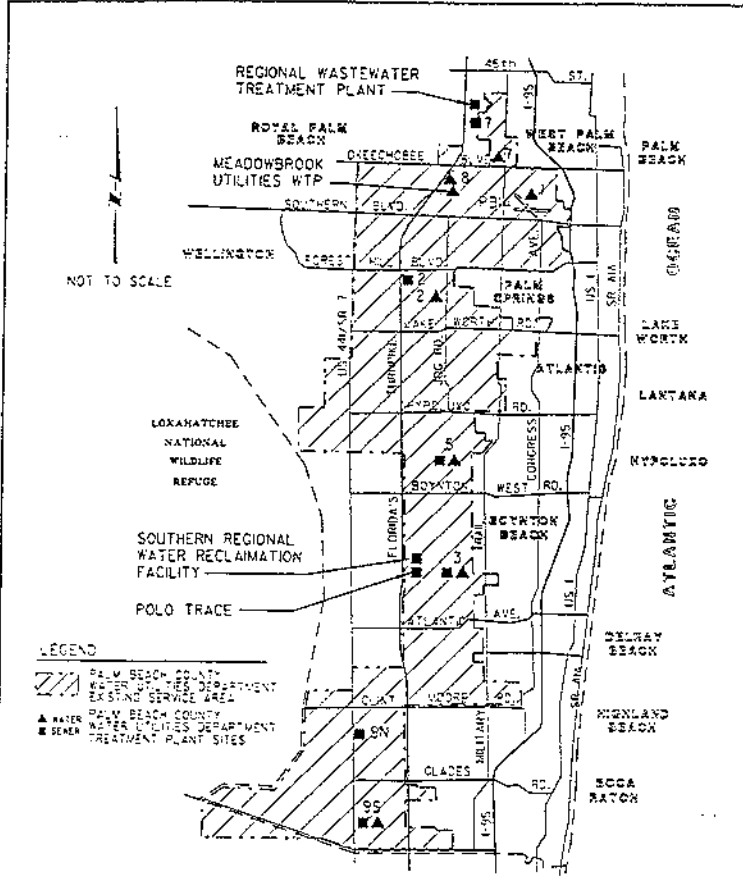
MONTGOMERY WATSON

Lake Worth, Florida

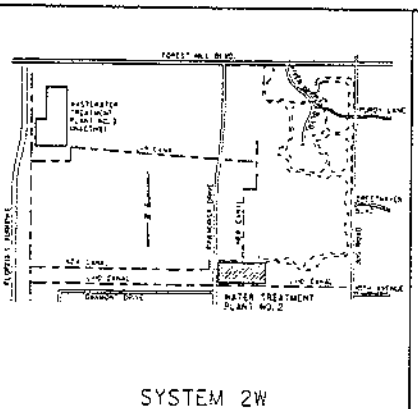
RECORD DRAWING
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Rev. Date 28 JUL 1997 18:28

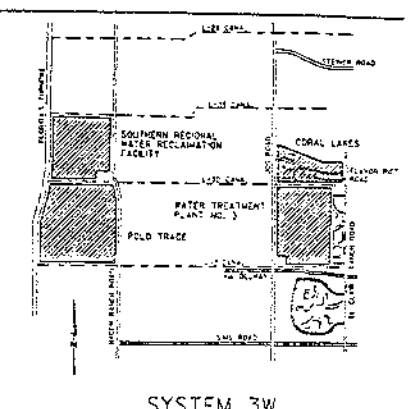
JOB NO. 95-180 FILE NO. 95-180-01



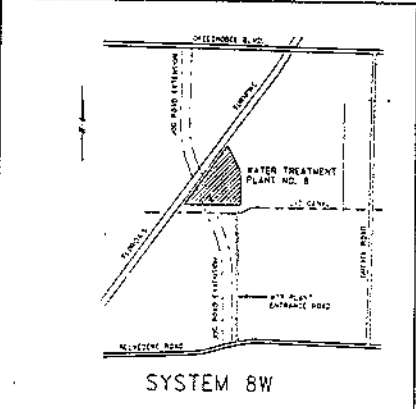
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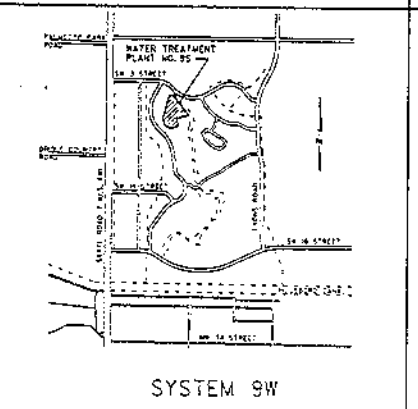
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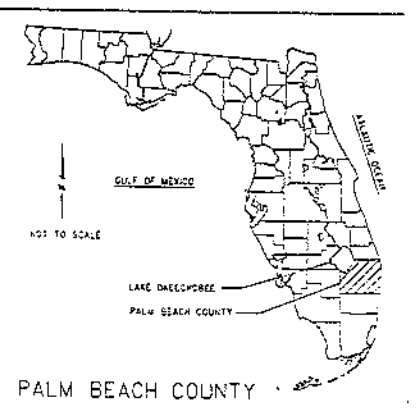
SYSTEM 3W



SYSTEM 8W



SYSTEM 9W



PALM BEACH COUNTY

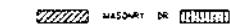



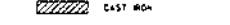



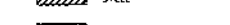







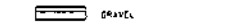



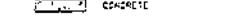











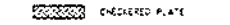



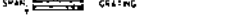



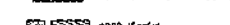







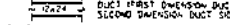



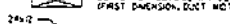



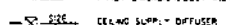



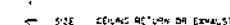



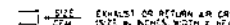



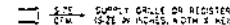



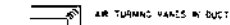



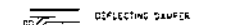



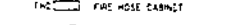











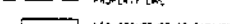



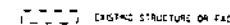



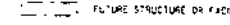



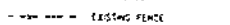



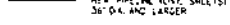



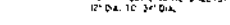



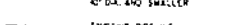







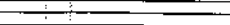



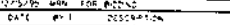







**PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
WATER AND WASTEWATER SERVICE AREA**

DESIGNED: M.R. NELSON	DRAWN: P.A. SOE	CHECKED: J.L. BURAN	DATE: 02/18/95
PROJECT: 48240	DATE: 02/18/95	DATE: 02/18/95	DATE: 02/18/95
SCALE: 1" = 100'	WARNING: THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION WITHOUT THE WRITTEN APPROVAL OF MONTGOMERY WATSON	NOTIFIED: MONTGOMERY WATSON	DATE: 02/18/95



RECORD DRAWING
These record drawings have been prepared based on information provided by others. The Engineer has not performed a field inspection and shall not be responsible for any errors or omissions which may be made by the contractor. See original contract drawings for more details.

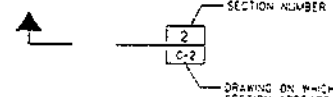
REV. DATE DESCRIPTION
 2 26/4/01 WITH RECORD REVISIONS
 3 12/2/02 NEW FOR RECORD
 REV DATE #1 DESCRIPTION

	MASONRY OR CONCRETE		100	CONTOUR LINE, FINISHED GRADE		Gate Valve, Buried with Valve Box		ROOM THERMOSTAT
	EAST IRON		103	CONTOUR LINE, EXISTING GRADE		Butterfly Valve, Buried with Valve Box		PRESSURE GAUGE
	STEEL		103.00	FINISHED ELEVATION		Eccentric Plug Valve, Buried with Valve Box		PRESSURE GAUGE WITH DIAPHRAGM SEAL
	BRONZE		103.00	EXISTING ELEVATION		Lubricated Plug Valve, Buried with Valve Box		PRESSURE SWITCH
	INSULATION		TOP	CUT ON FALL SLOPE TO BE CONSTRUCTED		Gate Valve		PRESSURE SWITCH WITH DIAPHRAGM SEAL
	GRAVEL		103	NEW A.C. PAVING		Butterfly Valve		FLANGED FITTING
	CONCRETE		FIN	EXISTING A.C. PAVING		Eccentric Plug Valve		WELDED FITTING
	EARTH		FM	PAVING		Lubricated Plug Valve		MECHANICAL TYPE FITTING (GROUDED)
	SAND		FM	FIRE HYDRANT		Close Valve		SCREENED SOCKET-WELD, BELL AND SPIGOT OR RUBBER FITTING
	ALUMINUM OR METAL BECKING		FM	MANHOLE		Ball Valve		SLEEVE-TYPE COUPLING
	CHECKERED PLATE		FM	PEO'S		Diaphragm Valve		FLANGED ADAPTER COUPLING
	GRATING		FM	PRESSURE CLEANOUT TO GRADE		Check Valve		FLANGED ADAPTER - SET SCREW TYPE EXPANSION JOINT
	PLASTIC, RUBBER OR NEOPRENE		FM	FLOOR CLEANOUT		Pressure Regulating Valve		MECHANICAL TYPE COUPLING
	WOOD FINISH		FM	CLEANOUT TO GRADE		Back-Pressure Valve		FLEXIBLE COUPLING
	WOOD FLOOR FRAMING OR OPENING OR DEPRESSION IN SLAB OR WALL		FM	BLOW OFF ASSEMBLY		Motor Operator for Valves (M = ELECTRIC, P = PNEUMATIC)		UNION
	DUCT (FIRST DIMENSION DUCT SIDE SHOWN, SECOND DIMENSION DUCT SIDE NOT SHOWN)		FM	HOB DRAIN		Temperature Control Valve		DUCK DISCONNECT COUPLER
	SUPPLY OR OUTSIDE AIR DUCT (FIRST DIMENSION DUCT SIDE SHOWN, SECOND DIMENSION DUCT SIDE NOT SHOWN)		FM	FLOOR DRAIN		Solenoid Valve		CHAPPED END OR PLUGGED END
	EXHAUST OR RETURN AIR DUCT (FIRST DIMENSION DUCT SIDE SHOWN, SECOND DIMENSION DUCT SIDE NOT SHOWN)		FM	FLOOR SINK		Multiport Valve - 3 Way		BLIND FLANGE
	CEILING SUPPLY DIFFUSER (SIZE IN INCHES)		FM	DRAIN TRAP		Multiport Valve - 4 Way		REDUCER OR INCREASER
	CEILING RETURN OR EXHAUST AIR GRILLE OR REGISTER (SIZE IN INCHES, WITH X HEIGHT)		FM	SOIL BOXING		Floating Operated Valve		CUT PIPE
	EXHAUST OR RETURN AIR GRILLE OR REGISTER (SIZE IN INCHES, WITH X HEIGHT)		FM	BENCH MARK		Needle Valve		STRAINER
	SUPPLY GRILLE OR REGISTER (SIZE IN INCHES, WITH X HEIGHT)		FM	HORIZONTAL AND VERTICAL CONTROL POINT		Pressure Relief Valve		DRAIN
	AIR TURNING VANES IN DUCT		FM	VAULT OR JUNCTION STRUCTURE		Angle Valve		FLOW TUBE
	DEFLECTING DAMPER		FM	CHANGE IN PIPING MATERIAL		Molded Valve		MAGNETIC METER
	FIRE HOSE CABINET		FM	ROUND OR DIAMETER		Hose Bib Valve		DENSITY METER
	FIRE EXTINGUISHER		FM	SQUARE		Rubber Level Control		PROPELLER METER
	LAMP HEATER		FM	ANGLE		Centrifugal or Turbine Pump or Fan		ORIFICE PLATE AND FLANGES
	CENTERLINE		FM	PIPE SIZE, FLUID ABBREVIATION AND TYPE OF PIPE		Metering Pump		RECTIFIER
	PROPERTY LINE		FM	PIPE CALLOUT (SEE PIPING SCHEDULE)		Addressing Cavity, Positive Displacement Pump		CONDENSATE TRAP
	NEW STRUCTURE OR FACILITY		FM	EQUIPMENT NUMBER		Blender or Compressor		PIPE SUPPORT (IN PLAN ONLY)
	EXISTING STRUCTURE OR FACILITY		FM	BACKFLOW VALVE		Injector or Eductor		CATCH BASIN
	FUTURE STRUCTURE OR FACILITY		FM	BACKFLOW PREVENTER		Flame Arrestor		PULSATION DAMPENER
	NEW FENCE		FM	STOP GATE		Air Vacuum and Air Release Assembly		EXPANSION CHAMBER WITH RUPTURE DISC
	EXISTING FENCE		FM	SLUICE GATE		Thermometer		RUPTURE DISC
	NEW PIPELINE (EVAL SHEETS) 36" DIA. AND LARGER		FM	SLUICE GATE		PIPE ANCHOR		FLOW SIGHT GLASS
	NEW PIPELINE (EVAL SHEETS) 12" DIA. TO 36" DIA.		FM					
	NEW PIPELINE (EVAL SHEETS) 6" DIA. AND SMALLER		FM					
	EXISTING PIPELINE		FM					

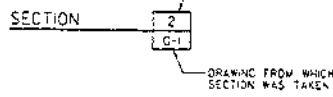
SECTION AND DETAIL IDENTIFICATION

SECTION IDENTIFICATION

11) SECTION CUT ON DRAWING D-1:

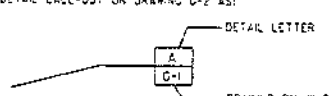


12) ON DRAWING C-2 THIS SECTION IS IDENTIFIED AS:

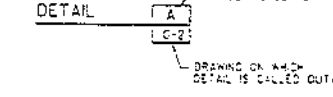


DETAIL IDENTIFICATION

11) DETAIL CALL-OUT ON DRAWING D-2 AS:

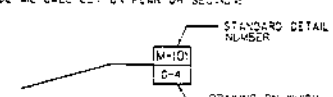


12) ON DRAWING G-1 THIS DETAIL IDENTIFIED AS:

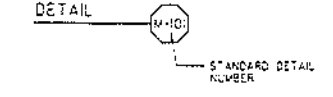


STANDARD DETAIL IDENTIFICATION

11) DETAIL CALL-OUT ON PLAN OR SECTION:



12) ON DRAWING D-4 THIS DETAIL IDENTIFIED AS:



*NOTE: IF PLAN AND SECTION FOR DETAIL CALL-OUT AND DETAIL ARE SHOWN ON SAME DRAWING, DRAWING NUMBER IS REPLACED BY A LINE.

NOTES:

11) ELECTRICAL SYMBOLS SHOWN ON ELECTRICAL SHEET CE-1.
 12) INSTRUMENTATION SYMBOLS SHOWN ON SHEET I-1.
 13) FOR WELDING SYMBOLS USE AMERICAN WELDING SOCIETY STANDARD SYMBOLS. SEE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL.

PROJECT ENGINEER: [Signature] 45280 P.L. NO. DATE

SCALE:	NONE
WARNING:	IF THIS BAR DOES NOT MEASURE THE CHANGE IS NOT TO SCALE
DESIGNED:	M.P. NELSON
DRAWN:	M.A. VOEL
CHECKED:	P.L. DURAN
DATE:	12/24/05

SCALE:	NONE	DESIGNED:	M.P. NELSON	DRAWN:	M.A. VOEL	CHECKED:	P.L. DURAN	DATE:	12/24/05
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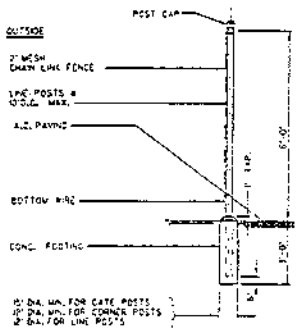
MONTGOMERY WATSON
 Lake Worth, Florida

RECORD DRAWING
 These records drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. See original contract drawings for complete schedule.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
 WELLFIELD EXPANSION PROJECT AT SYSTEMS IN CH, SW, BW AND SH

SYMBOLS

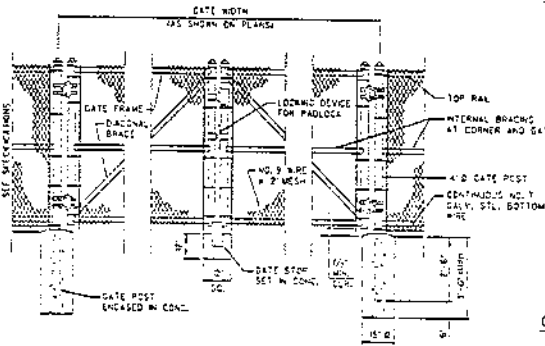
SHEET **G-5**
 OF 5 SHEETS



DESIGNATION

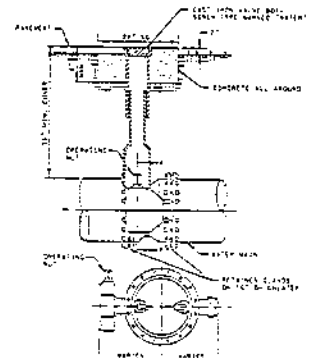
FABRIC	NO. 9 GALV. STEEL WRE. 2' WESH.
FABRIC TIES	NO. 9 GALV. STEEL WRE. SPACED W/APART ON POSTS AND 2' APART ON RAILS
CONNER POST	2-1/2" O.D. PIPE. 5/16" W/T
LINE POSTS	2-1/2" N. COLUMN SECTION. 3/4" W/T. OR STD. HEIGHT 2 1/2" O.D. PIPE. 5/16" W/T.
SLING GATE POSTS	2-1/2" O.D. PIPE. 5/16" W/T.
TOP RAIL & BRACES	1/4" O.D. PIP. 2 3/4" W/T. OR 1/4" x 1/4" x 1/4" C-CHANNEL SECTION. 2 1/2" W/T.
BOTTOM WIRE	1/4" O.D. SPRING WIRE. 7 GA.
ALL FINISH MATERIALS	TO BE HOT-DIPPED GALVANIZED AFTER FABRICATION.

NOTE: FOR WELLS IS AND IS AT SHOWN CHAIN LINK FENCE WESH SHALL BE COATED WITH BLACK VINYL.



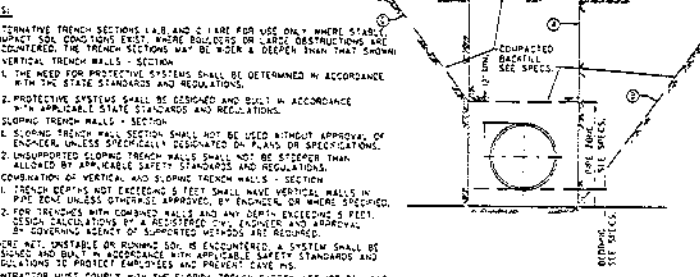
NOTES

- DROP ROD ASSEMBLY TO SECURELY ENCASE GATE STOP.
- EACH GATE LEAF TO BE INSTALLED WITH KEEPER TO SECURE IN OPEN POSITION.
- GATES LESS THAN 2' 0" WIDHT SHALL BE SINGLE LEAF.
- SEE CHAIN LINK FENCE DETAIL FOR ADDITIONAL REQUIREMENTS.



NOTES

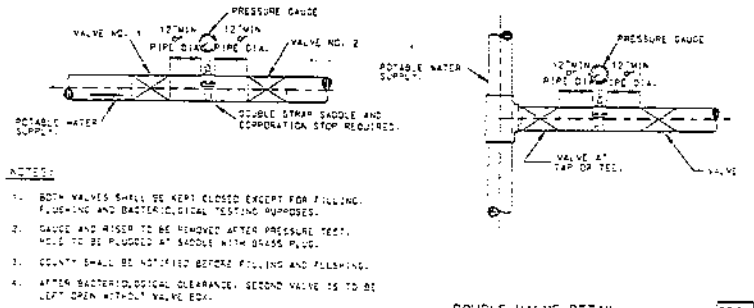
- CONCRETE COLUMN IS NOT REQUIRED IN PAVED AREAS IF PAVEMENT SURFACE IS FINISHED TO ORIGINAL FINISH ELEVATION.
- WHEN TOP OF OPERATING NUT IS DEEPER THAN 6" BELOW SURFACE, EXTENSION SHALL BE MADE TO BRIDGE OPERATING NUT TO BE BELOW FINISHED GRADE. EXTENSION SHALL BE MADE TO BE STAINLESS STEEL. STAINLESS STEEL CENTERCUT VALVE SHALL BE USED FOR THIS PURPOSE. SHALL BE AS REQUIRED.
- VALVE BODIES IN PAVEMENT SHALL HAVE LOCKING COVERS MARKED "WATER".



NOTES

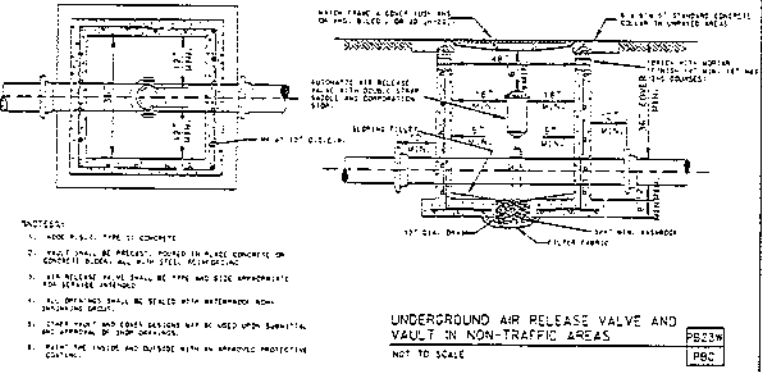
- ALTERNATIVE TRENCH SECTIONS L-1 & L-2 ARE FOR USE ONLY WHERE STABLE, COMPACT SOIL CONDITIONS EXIST. WHERE BOULDERS OR LARGE OBSTRUCTIONS ARE ENCOUNTERED, THE TRENCH SECTIONS MAY BE WIDER & DEEPER THAN THAT SHOWN.
- VERTICAL TRENCH WALLS - SECTION
 - THE NEED FOR PROTECTIVE SYSTEMS SHALL BE DETERMINED IN ACCORDANCE WITH THE STATE STANDARDS AND REGULATIONS.
 - PROTECTIVE SYSTEMS SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH APPLICABLE STATE STANDARDS AND REGULATIONS.
- SLOPING TRENCH WALLS - SECTION
 - SLOPING TRENCH WALL SECTION SHALL NOT BE USED WITHOUT APPROVAL OF ENGINEER, UNLESS SPECIFICALLY DESIGNATED ON PLANS OR SPECIFICATIONS.
 - UNSUPPORTED SLOPING TRENCH WALLS SHALL NOT BE DEEPER THAN ALLOWED BY APPLICABLE SAFETY STANDARDS AND REGULATIONS.
- COMBINATION OF VERTICAL AND SLOPING TRENCH WALLS - SECTION
 - TRENCH DEPTH NOT EXCEEDING 5 FEET SHALL HAVE VERTICAL WALLS IN DESIGN CALCULATIONS BY A REGISTERED CIVIL ENGINEER AND APPROVAL BY GOVERNING AGENCY OF JURISDICTION REQUIRED.
 - FOR TRENCHES WITH COMBINED WALLS AND ANY DEPTH EXCEEDING 5 FEET, DESIGN CALCULATIONS BY A REGISTERED CIVIL ENGINEER AND APPROVAL BY GOVERNING AGENCY OF JURISDICTION REQUIRED.
 - WHERE MET. UNSTABLE OR BLOWING SOIL IS ENCOUNTERED, A SYSTEM SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH APPLICABLE SAFETY STANDARDS AND REGULATIONS TO PROTECT EMPLOYEES AND PREVENT CAUSE INJURY.
 - CONTRACTOR MUST COMPLY WITH THE FLORIDA TRENCH SAFETY ACT (FLORIDA LAW OF FLORIDA EFFECTIVE OCTOBER 1, 1992).

NOTE: TRENCH SECTIONS SHOWN DO NOT DILUTEATE PAY LINES.



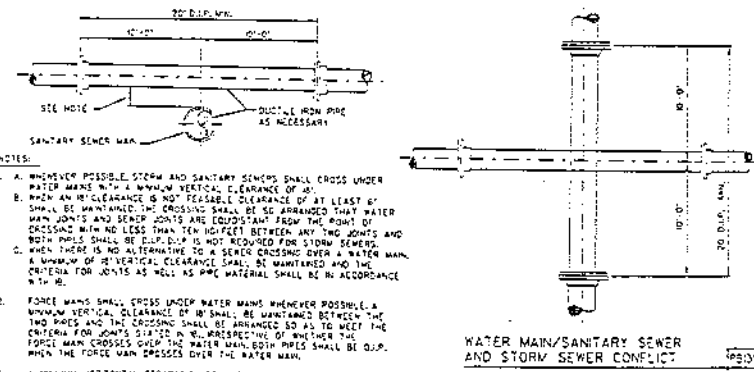
NOTES

- BOTH VALVES SHALL BE KEPT CLOSED EXCEPT FOR FILLING, FLUSHING AND BACTERIOLOGICAL TESTING PURPOSES.
- GAUGE AND RISER TO BE REMOVED AFTER PRESSURE TEST. HOLE TO BE PLUGGED AT SADDLE WITH BRASS PLUG.
- COUNTY SHALL BE NOTIFIED BEFORE FILLING AND FLUSHING.
- AFTER BACTERIOLOGICAL CLEARANCE, SECOND VALVE IS TO BE LEFT OPEN WITHOUT VALVE END.
- PRESSURE TEST PUMP CONNECTS TO SERVICE LINE. FIRE HYDRANTS OR BLOWOFFS. NO EXTRA TAPS ARE PERMITTED UNLESS NOTICED AND ARE NOT PRESENT IN TEST SECTION.



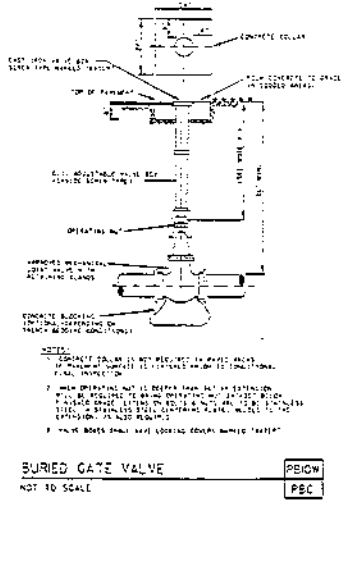
NOTES

- 4" HOB. P.S.D. 1/2" THICK CONCRETE
- VAULT SHALL BE REINFORCED WITH PLAIN CONCRETE OR CONCRETE BLOCK. ALL WITH STEEL REINFORCING.
- AIR RELEASE VALVE SHALL BE 1/2" AND SIZE APPROPRIATE FOR SERVICE PRESSURE.
- ALL BRACKETS SHALL BE FINISHED WITH WATERPROOF NON-DILUTEATING PAINT.
- START TRENCH AND COVER SECTIONS MAY BE USED UPON SUBMITTAL AND APPROVAL BY SHOP DRAWINGS.
- PAINT THE INTERIOR AND EXTERIOR WITH AN APPROVED PROTECTIVE COATING.



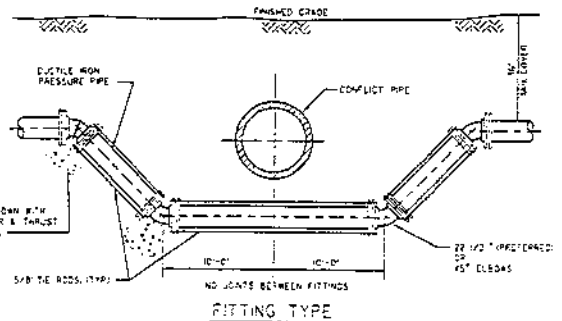
NOTES

- WHENEVER POSSIBLE, STORM AND SANITARY SEWERS SHALL CROSS UNDER WATER MAINS WITH A MINIMUM VERTICAL CLEARANCE OF 6'.
- IF AN INEVITABLE CROSSING IS NOT FEASIBLE, CLEARANCE OF AT LEAST 6' SHALL BE MAINTAINED. THE CROSSING SHALL BE SO ARRANGED THAT WATER MAIN JOINTS AND SEWER JOINTS ARE EQUIVDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN TEN (10) FEET BETWEEN ANY TWO JOINTS AND BOTH PIPES SHALL BE D.P.P. IF NOT REQUIRED FOR STORM SEWERS.
- WHEN THERE IS NO ALTERNATIVE TO A SEWER CROSSING OVER A WATER MAIN, A MINIMUM OF 12' VERTICAL CLEARANCE SHALL BE MAINTAINED AND THE CRITERIA FOR JOINTS AS WELL AS PIPING MATERIAL SHALL BE IN ACCORDANCE WITH 61.
- FORCE MAINS SHALL CROSS UNDER WATER MAINS WHENEVER POSSIBLE, A MINIMUM VERTICAL CLEARANCE OF 12' SHALL BE MAINTAINED BETWEEN THE TWO PIPES AND THE CROSSING SHALL BE SO ARRANGED AS TO MEET THE CRITERIA FOR JOINTS LISTED IN 61, RESPECTIVE OF WHETHER THE FORCE MAIN CROSSES OVER OR UNDER THE WATER MAIN. THE PIPES SHALL BE O.S.P. WHEN THE FORCE MAIN CROSSES OVER THE WATER MAIN.
- A MINIMUM HORIZONTAL SEPARATION OF 10' SHALL BE MAINTAINED BETWEEN A SEWER/FORCE MAIN AND A WATER MAIN.

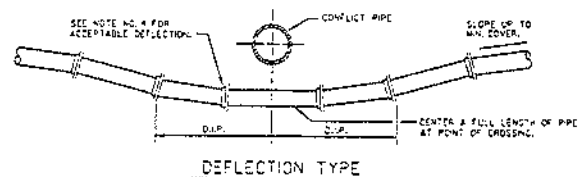


NOTES

- CONCRETE COLUMN IS NOT REQUIRED IN PAVED AREAS IF PAVEMENT SURFACE IS FINISHED TO ORIGINAL FINISH ELEVATION.
- WHEN TOP OF OPERATING NUT IS DEEPER THAN 6" BELOW SURFACE, EXTENSION SHALL BE MADE TO BRIDGE OPERATING NUT TO BE BELOW FINISHED GRADE. EXTENSION SHALL BE MADE TO BE STAINLESS STEEL. STAINLESS STEEL CENTERCUT VALVE SHALL BE USED FOR THIS PURPOSE. SHALL BE AS REQUIRED.
- VALVE BODIES IN PAVEMENT SHALL HAVE LOCKING COVERS MARKED "WATER".



FITTING TYPE



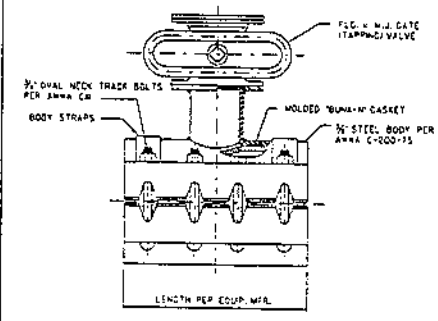
DEFLECTION TYPE

NOTES:

1. STORM SEWERS AND SANITARY PRESSURE LINES CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18" BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN TEN (10) FEET BETWEEN ANY TWO JOINTS AND BOTH PIPES SHALL BE D.I.P. WHERE THERE IS NO ALTERNATIVE TO SEWER PIPES CROSSING OVER A WATER MAIN THE CRITERIA FOR MINIMUM SEPARATION BETWEEN LINES AND JOINTS IN THE ABOVE SHALL BE REQUIRED AND BOTH PIPES SHALL BE D.I.P. IRRESPECTIVE OF SEPARATION. FOR WATER MAIN - FORCE MAIN CONDUITS.
2. FITTINGS SHALL BE RESTRAINED WITH RETAINER CLANDS AND EITHER THRUST BOLTS OR TIE RODS.
3. THE DEFLECTION TYPE CROSSING IS PREFERRED.
4. DO NOT EXCEED 75% OF MANUFACTURERS RECOMMENDED MAXIMUM JOINT DEFLECTION.
5. ALL EXPOSED TIE RODS/STEEL SHALL BE COATED WITH COAL-TAR EMBLAY.

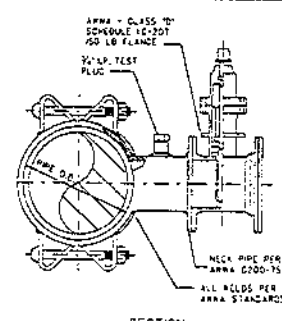
PRESSURE PIPE CONFLICT
NOT TO SCALE

PB1KW
PBC



PLAN

NOTE: WHERE BURIED, BODY STRAPS, NUTS & BOLTS SHALL BE 1/2" STAINLESS STEEL.

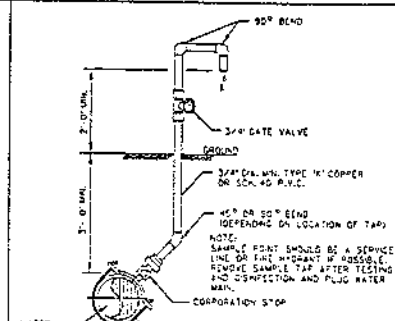


SECTION

TAPPING SLEEVE AND VALVE

MANUFACTURERS: MUELLER, FORD, ROMAC OR APPROVED EQUAL

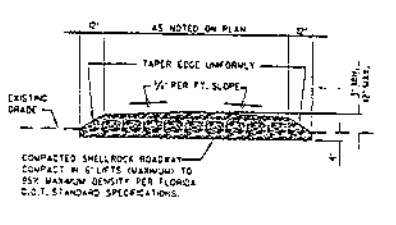
B
VAR



TYPICAL SAMPLING POINT

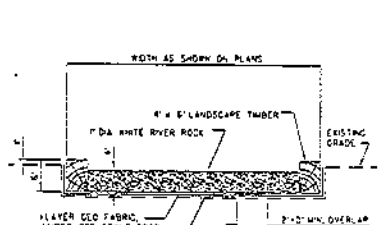
NOT TO SCALE

PB1W
PBC



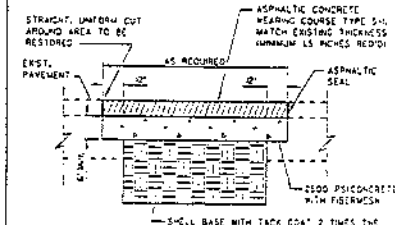
SHELLROCK ROADWAY

D
VAR



LANDSCAPE TIMBER INSTALLATION

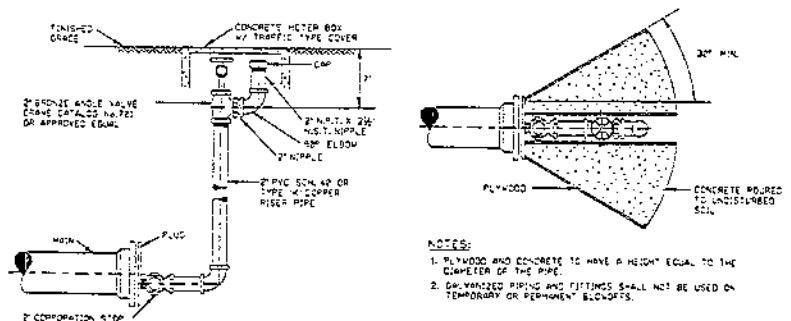
E
VAR



ASPHALT PAVEMENT REPAIR

NOT TO SCALE

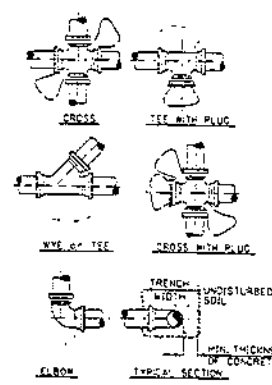
F
VAR



TYPICAL 2\"/>

NOT TO SCALE

PB1W
PBC



PIPE SIZE	THRUST BLOCK AREA REQ'D	PIPE SIZE	THRUST BLOCK AREA REQ'D	REMARKS
4"	21.0 SQ. FT.	20"	371.0 SQ. FT.	VALUES ARE FOR 90° BEND BASED ON 8000 P.S.F. SAFE BEARING LOAD AND PIPE PRESSURE OF 150 P.S.I.
6"	41.0 SQ. FT.	24"	531.0 SQ. FT.	
8"	61.0 SQ. FT.	27"	651.0 SQ. FT.	
10"	81.0 SQ. FT.	30"	811.0 SQ. FT.	
12"	101.0 SQ. FT.	36"	1011.0 SQ. FT.	FOR OTHER SIZES & PRESSURES THE AREA REQUIRED IS IN DIRECT PROPORTION
14"	121.0 SQ. FT.	42"	1211.0 SQ. FT.	
16"	141.0 SQ. FT.			
18"	161.0 SQ. FT.			

- NOTES:**
1. THRUST BLOCKS SHALL BE FORMED AND POURED AGAINST UNDISTURBED SOIL. KEEP 1" BOLTS CLEAR OF CONCRETE. WRAP IN VISQUEEN FOR FUTURE ACCESS WITH A MINIMUM OF 1" THICKNESS BETWEEN THE FITTING AND SOIL.
 2. BEFORE POURING, PLUGS SHALL BE WRAPPED WITH VISQUEEN AND A BOARD PLACED IN FRONT.
 3. CONCRETE SHALL BE 2500 P.S.I. MINIMUM.
 4. FOR OTHER FITTINGS USE THE FOLLOWING FACTORS:
 - A) TEE - 100%
 - B) 90° BEND - 200%
 - C) 45° BEND - 210%
 - D) DEAD END - 100%

TYPICAL THRUST BLOCK DETAILS

PB1W
PBC

NO.	DATE	DESCRIPTION
1	02/27/95	FOR BIDDING
2	02/28/95	RECORD DRAWING

SCALE:	NONE	WARNING:	D 1/4"
DESIGNED:	M.R. WATSON	DRAWN:	P.A. LOSE
CHECKED:	F.E. GUREN	DATE:	12/15/95

MONTGOMERY WATSON
Lake Worth, Florida

RECORD DRAWING
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PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
WELLFIELD EXPANSION PROJECT AT SYSTEMS IN, 2W, 3W, 5W & 9W
CIVIL DETAILS - 2

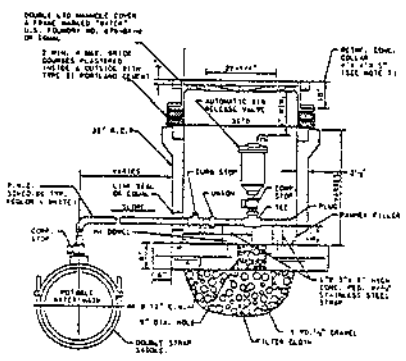
SHEET
GC-2
OF 4 SHEETS

MAXIMUM QUANTITY OF WATER (GALLONS PER HOUR) THAT MAY BE SUPPLIED TO MAINTAIN PRESSURE WITHIN 5 P.S.I. OF THE SPECIFIED TEST PRESSURE MECHANICAL OR PUSH-ON JOINT PIPE IN 8 FT. NOMINAL LENGTHS, PER 1000 FT. OF PIPE

ARC TEST PRESSURE P.S.I.	PIPE DIAMETER (INCHES)												
	2	3	4	6	8	10	12	14	16	18	20	24	30
200	0.21	0.32	0.43	0.64	0.85	1.06	1.28	1.49	1.70	1.91	2.12	2.35	3.29
150	0.19	0.28	0.37	0.55	0.74	0.92	1.10	1.29	1.47	1.66	1.84	2.21	2.76

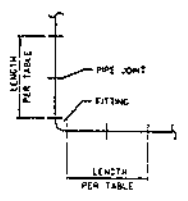
- NOTES:**
- TO OBTAIN THE MAXIMUM QUANTITY OF WATER FOR PIPE WITH 20 FT. NOMINAL LENGTHS, MULTIPLY THE LEAKAGE CALCULATED FROM THE TABLE BY 0.9.
 - THE MAXIMUM QUANTITY OF ADDED WATER FOR A PIPELINE IS CALCULATED BY MULTIPLYING THE QUANTITY PER HOUR AS OBTAINED FROM THE ABOVE TABLE BY THE DURATION OF THE TEST IN HOURS, AND BY THE TOTAL LENGTH OF THE LINE BEING TESTED DIVIDED BY 1000. IF THE LINE UNDER TEST CONTAINS SECTIONS OF VARIOUS DIAMETERS, THE MAXIMUM QUANTITY ADDED SHALL BE THE SUM OF THE COMPUTED QUANTITIES FOR EACH SIZE.
 - CHART DEVELOPED FROM A.W.P.A. MANUAL.
 - MAXIMUM TEST LENGTH = 2,500 FEET PER SECTION.
 - THIS STANDARD SHALL REFLECT ANY REVISION OF A.W.P.A. C-900.
 - STANDARD TEST PRESSURE = 150 P.S.I.
 - L = MAXIMUM QUANTITY OF WATER TO BE ADDED (GALLONS PER HOUR)
 - S = LENGTH OF PIPE TESTED (FEET)
 - D = DIAMETER OF PIPE (INCHES)
 - P = TEST PRESSURE (P.S.I.)
 - FORMULA BASIS: $L = \frac{150 \times 1000 \times 1000}{150 \times 1000}$
 - PIPES WITH ANY LEAKAGE WILL NOT BE ACCEPTED.

PRESSURE TEST CRITERIA PB25M PBC



- NOTES:**
- SECTION OF 24\"/>

OFFSET AIR RELEASE MANHOLE (WATER) PB25M PBC



PIPE DIA. (IN.)	MAXIMUM LENGTH OF PIPE TO BE RESTRAINED (IN FEET)							
	45° BEND	22.5° BEND	45° BEND	90° BEND	TEE (BRANCH)	DEAD END	REDUCER	VALVE
12	8	17	35	84	NA	103	NA	103
16	10	21	44	106	20	233	140	233
18	7	23	49	95	20	256	NA	256
20	12	25	52	125	20	280	60	280
24	14	28	60	142	20	325	240	323
30	16	33	68	165	392	392	NA	362
36	18	37	78	185	440	440	NA	440

NOTE:
ALL RESTRAINED PIPE SHALL BE RESTRAINED JOINT
IN ACCORDANCE WITH THE SPECIFICATIONS.

PIPE RESTRAINT LENGTHS 2 VAR

REV. 03/18/2018 26/28/2017 10/17

REV.	DATE	BY	DESCRIPTION
1	06/26/17	WNY	RECORD DRAWING
2	10/27/19	WNY	ADDENDUM NO. TRUWISONS
3	12/15/19	WNY	FOR BIDDING

SCALE: NONE

DESIGNED: M.R. NELSON
DRAWN: P.A. LOE
CHECKED: F.E. DURAN

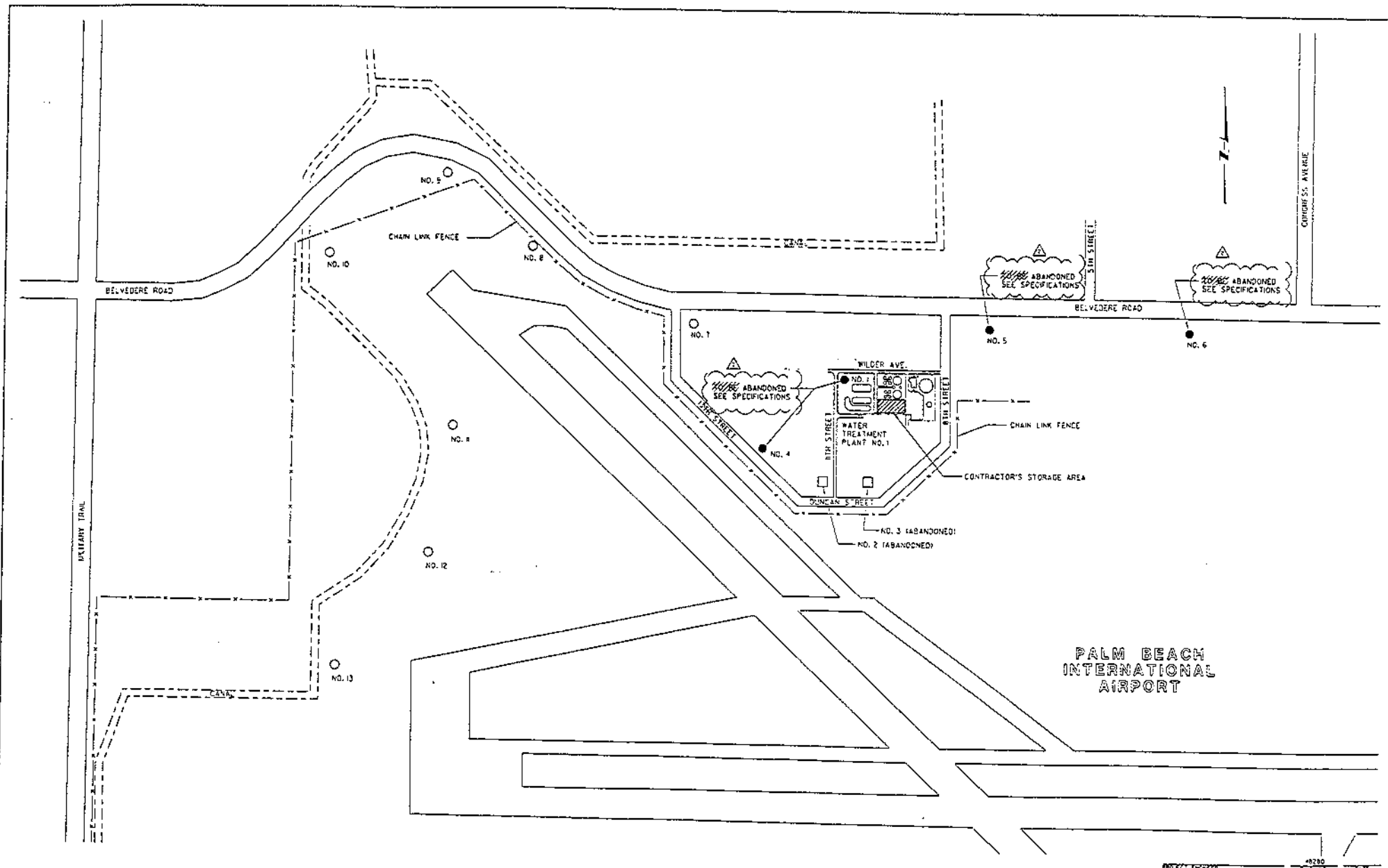
PROJECT: 48780
SUBJECT: WELLFIELD EXPANSION PROJECT AT SYSTEMS 1M, 2M, 3M, 5M & 9M
DATE: 02/15/16



RECORD DRAWING
These record drawings have been prepared based on information provided to us. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. See original contract drawings for more information.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
WELLFIELD EXPANSION PROJECT AT SYSTEMS 1M, 2M, 3M, 5M & 9M
CIVIL DETAILS - 3

SHEET GC-3 OF 3-CV-15



**PALM BEACH
INTERNATIONAL
AIRPORT**

NO.	DATE	BY	DESCRIPTION
3	06/21/17	WML	RECORD DRAWING
2	12/2/15	WML	FOR BIDDING


SCALE:

0 $\frac{1}{8}$ " = 1'

WARNING:
IF THIS BAR DOES NOT MEASURE TO THE DIMENSIONS SHOWN, THEN THIS DRAWING IS NOT TO SCALE.

DESIGNED **W.A. NELSON**
DRAWN **D.A. LOK**
CHECKED **J.C. O'BRIEN**

SUBMITTED **4/27/16** 12:45/16
PROJECT NUMBER **44280**
DATE **02/16/15**
BY **WML**



MONTGOMERY WATSON
Lava Worth, Florida

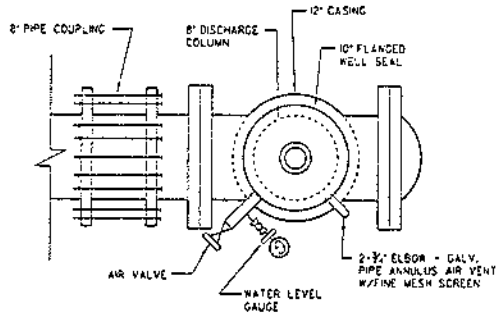
RECORD DRAWING
These records drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be discovered herein in 3 years from original contract completion for use and liability.

PROJECT NUMBER **44280** DATE

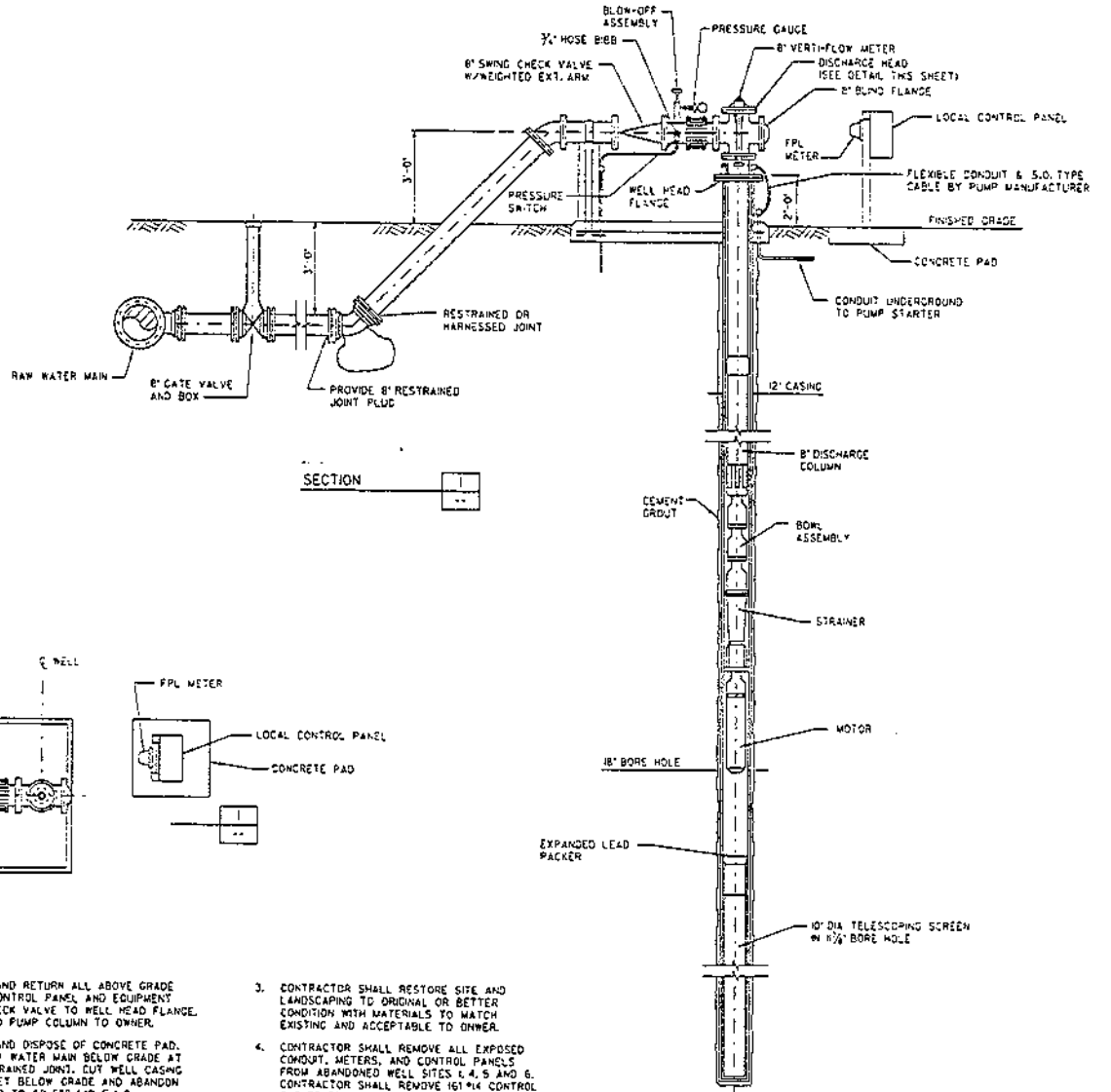
PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
WELLFIELD EXPANSION PROJECT AT SYSTEMS IW, 2N, 3N, 5W & 5R

SYSTEM IW SITE PLAN

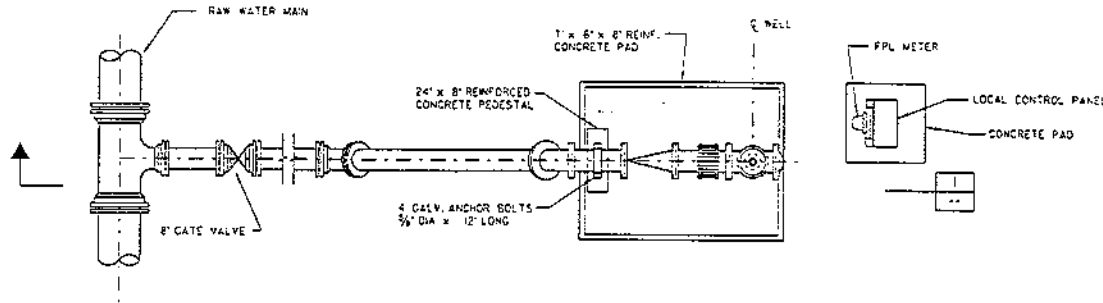
SHEET **IC-1**
OF **3** SHEETS



DISCHARGE HEAD DETAIL - PLAN



SECTION 1



WELL PUMP AND PIPE - PLAN

NOTES:

1. REMOVE AND RETURN ALL ABOVE GRADE PIPING, CONTROL PANEL AND EQUIPMENT FROM CHECK VALVE TO WELL HEAD FLANGE, PUMP AND PUMP COLUMN TO OWNER.
2. REMOVE AND DISPOSE OF CONCRETE PAD, PLUS RAW WATER MAIN BELOW GRADE AT 45° RESTRAINED JOINT, CUT WELL CASING TO 10 FEET BELOW GRADE AND ABANDON ACCORDING TO 62-532.440 F.A.C. SEE SPECIFICATION SECTION 2634.
3. CONTRACTOR SHALL RESTORE SITE AND LANDSCAPING TO ORIGINAL OR BETTER CONDITION WITH MATERIALS TO MATCH EXISTING AND ACCEPTABLE TO OWNER.
4. CONTRACTOR SHALL REMOVE ALL EXPOSED CONDUIT, METERS, AND CONTROL PANELS FROM ABANDONED WELL SITES 1, 4, 5 AND 6. CONTRACTOR SHALL REMOVE 16/14 CONTROL CABLES FROM WELLS TO WATER PLANT. CONTRACTOR SHALL CONTACT FPL AND COORDINATE REMOVAL OF THEIR EQUIPMENT.

REV. DATE BY DESCRIPTION

SCALE:	NONE
WARNING:	IF THIS BAR DOES NOT MEASURE UP THEN DRAWING IS NOT TO SCALE.
DESIGNED:	M.R. NELSON
DRAWN:	P.A. LOE
CHECKED:	J.E. DOMAN
DATE:	12/15/95

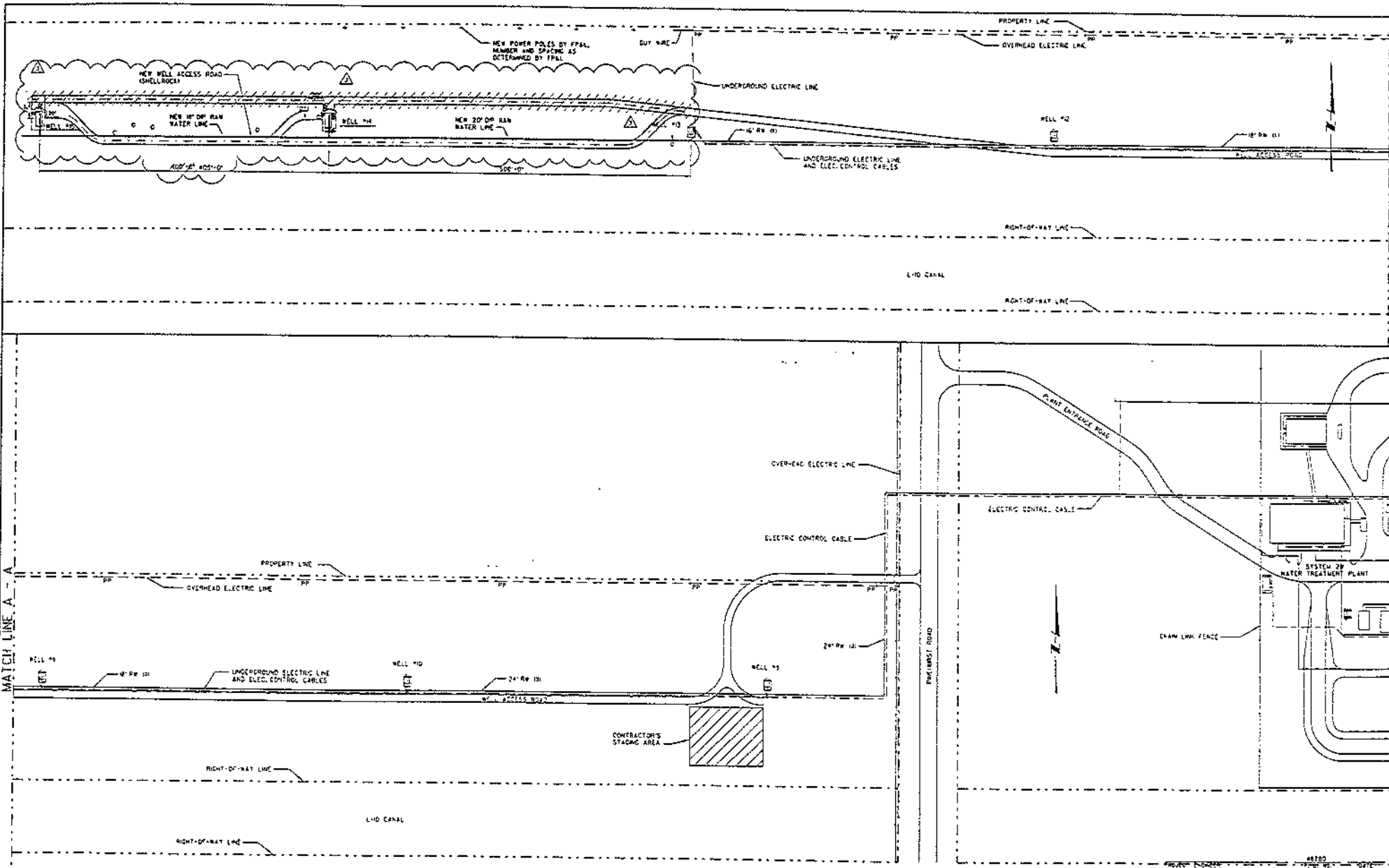
PROJECT NUMBER:	48280	DATE:	12/15/95
SUBMITTED:		DATE:	
APPROVED:		DATE:	
CONTRACT NUMBER:		DATE:	

MONTGOMERY WATSON
Lake Worth, Florida

RECORD DRAWING
These record drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein or in result. See separate contract drawings for conditions and requirements.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT	
WELLFIELD EXPANSION PROJECT AT SYSTEMS 1W, 2W, 3W, 4W & 5W	
SYSTEM 1W - TYPICAL WELL ABANDONMENT	


JOB NO. 015-110-0000 FILE NO. 015-110-0000-0000 DATE: 01/15/2015 09:05



REV.	DATE	BY	DESCRIPTION
1	06/05/15	MMH	RECORD DRAWING
2	07/07/15	MMH	ADDITONAL NO. 2 REVISIONS
3	07/07/15	MMH	FOR BOARD

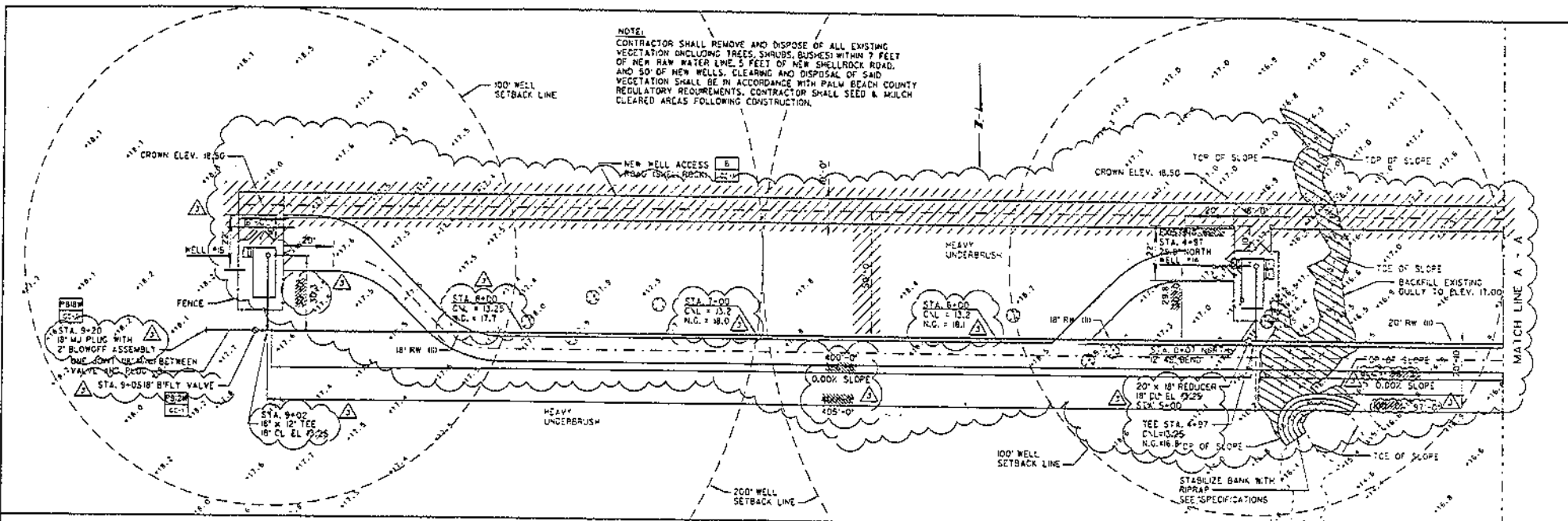
SCALE:	GRAPHIC	DESIGNED: M.R. NELSON	SUBMITTED:
PHONO:	0 1/2"	DRAWN: P.A. LUGG	PROJECT NUMBER: 48780
		CHECKED: F.E. DURAN	DATE: 01/15/15
			DATE: 01/15/15

WARNING: THIS BAR DOES NOT MEASURE. NEW DRAWING IS NOT TO SCALE.	MONTGOMERY WATSON Lake Worth, Florida
---	--


MONTGOMERY WATSON
 Lake Worth, Florida

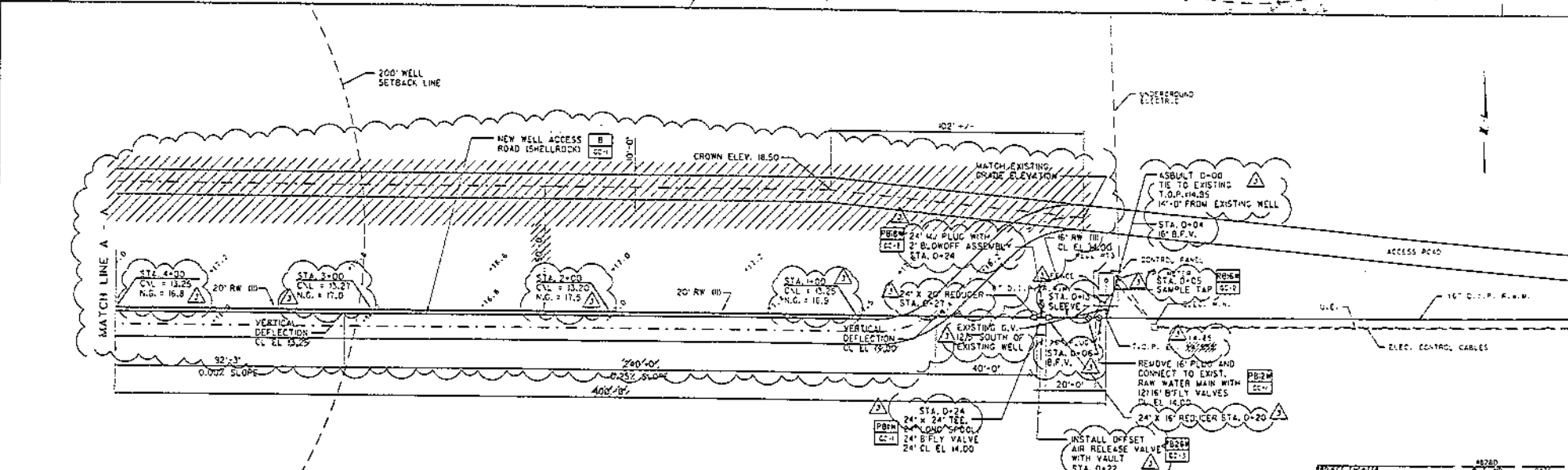
RECORD DRAWING
 These record drawings have been prepared based on information furnished to us by the Engineer. We are not responsible for any errors or omissions which may be incorporated herein as a result of any engineering changes for use and approval.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
 WELLFIELD EXPANSION PROJECT AT SYSTEMS 1W, 2W, 3W, 8W AND 9W
SYSTEM 2W SITE PLAN



NOTE:
 CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING VEGETATION INCLUDING TREES, SHRUBS, BUSHES WITHIN 7 FEET OF NEW RAW WATER LINE. 5 FEET OF NEW SHELLROCK ROAD AND 50' OF NEW WELLS. CLEARING AND DISPOSAL OF SAID VEGETATION SHALL BE IN ACCORDANCE WITH PALM BEACH COUNTY REGULATORY REQUIREMENTS. CONTRACTOR SHALL SEED & MULCH CLEARED AREAS FOLLOWING CONSTRUCTION.

P&S No. 165758930 - DATE: 10/26/23 - FILE: 100_0515_L165758930 - PROJECT: WELLFIELD EXPANSION PROJECT AT SYSTEMS IN 2N, 2W, 2Y AND 3N SHEET 20-2



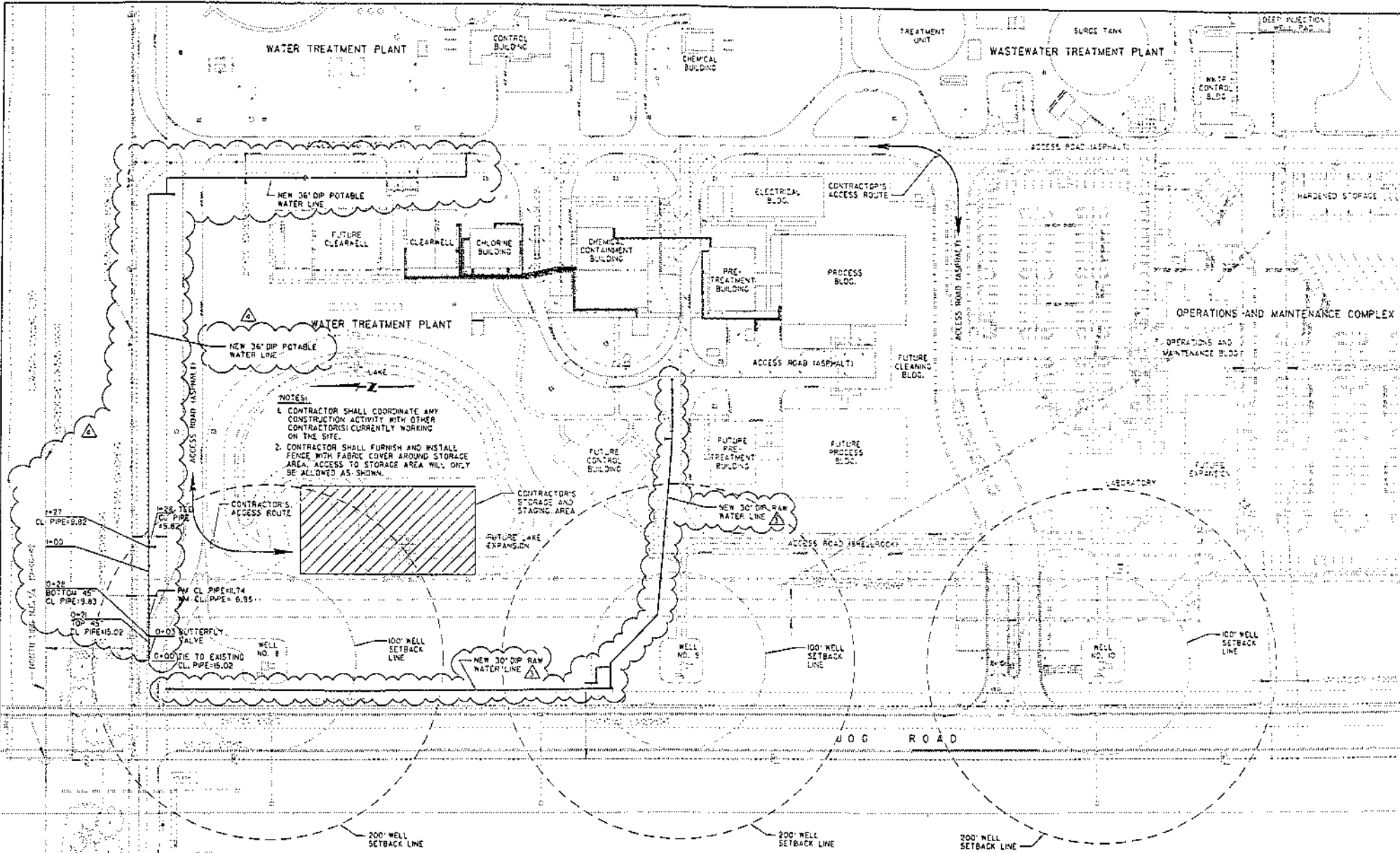
NO.	DATE	BY	DESCRIPTION
1	06/28/23	MMN	RECORD DRAWING
2	07/27/23	MMN	REVISION NO. 1 REVISIONS
3	10/26/23	MMN	FOR RECORDING

SCALE:	1" = 40'
WARNING:	THIS DRAWING DOES NOT WEAR OR THIS DRAWING IS NOT TO SCALE.
DESIGNED BY:	M.B. NELSON
GRAPHIC BY:	P.A. LOFF
CHECKED BY:	F.E. DURAN
SUBMITTED:	4/20/23
PROJECT NUMBER:	48282
DRAWING NUMBER:	20-2
DATE:	10/26/23



RECORD DRAWING
 These records represent those items provided based on information furnished by owner. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions, which may be recognized hereafter in a lawsuit. See original contract drawings for further information.

PROJECT NUMBER:	48282
DATE:	10/26/23
PALM BEACH COUNTY WATER UTILITIES DEPARTMENT	
WELLFIELD EXPANSION PROJECT AT SYSTEMS IN 2N, 2W, 2Y AND 3N	
SYSTEM 2W YARD PIPING PLAN	
SHEET:	20-2
OF 4 SHEETS	



- NOTES:**
1. CONTRACTOR SHALL COORDINATE ANY CONSTRUCTION ACTIVITY WITH OTHER CONTRACTORS CURRENTLY WORKING ON THE SITE.
 2. CONTRACTOR SHALL FURNISH AND INSTALL FENCE WITH FABRIC COVER AROUND STORAGE AREA. ACCESS TO STORAGE AREA WILL ONLY BE ALLOWED AS SHOWN.

2025.01.01 - 11:58 AM - FILE NO. C:\p1\proj\3110\3110.dwg - Rev. 04/10/10 - 10:58 AM - 10:58 AM - 10:58 AM

4	10/27/07	11	RECORD DRAWING
3	10/27/07	10	CONTRACTOR'S WORK ON 30" RAW WATER LINE
2	10/27/07	9	CONTRACTOR'S WORK ON ACCESS ROAD AND 15" POTABLE WATER LINE
1	10/27/07	8	CONTRACTOR'S WORK ON 30" RAW WATER LINE
REV.	DATE	BY	DESCRIPTION

SCALE: 1" = 30'

WARNING: THIS DRAWING IS NOT TO SCALE.

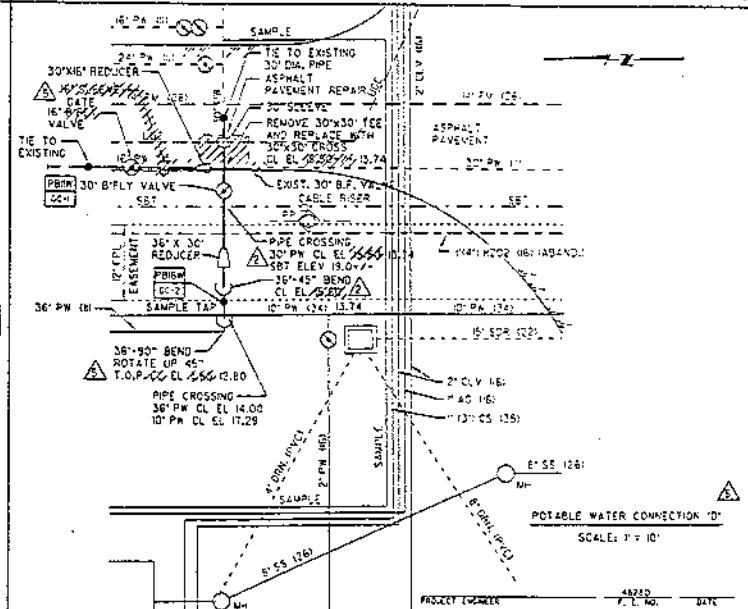
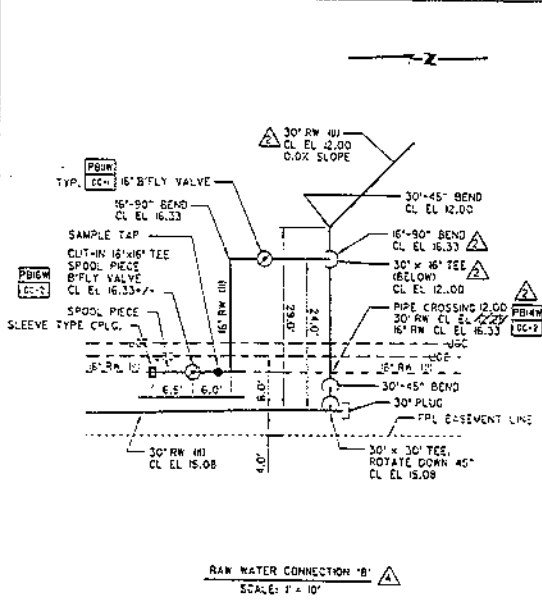
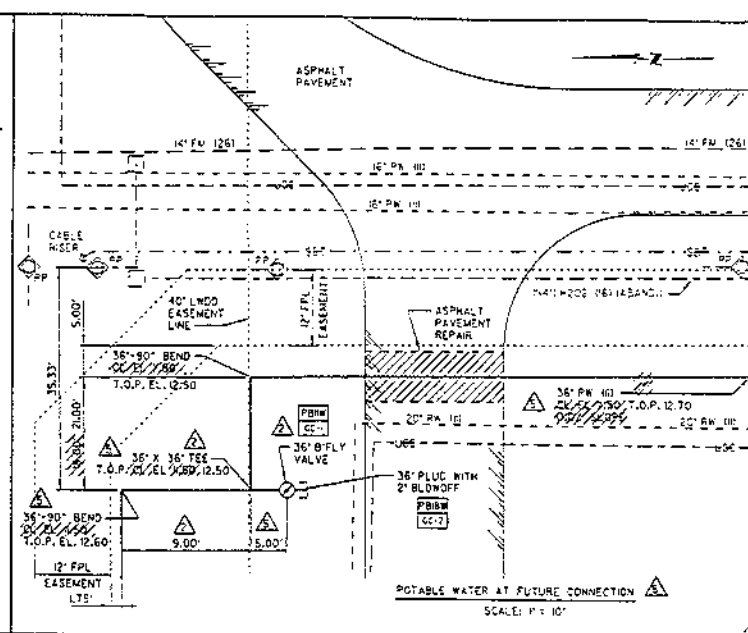
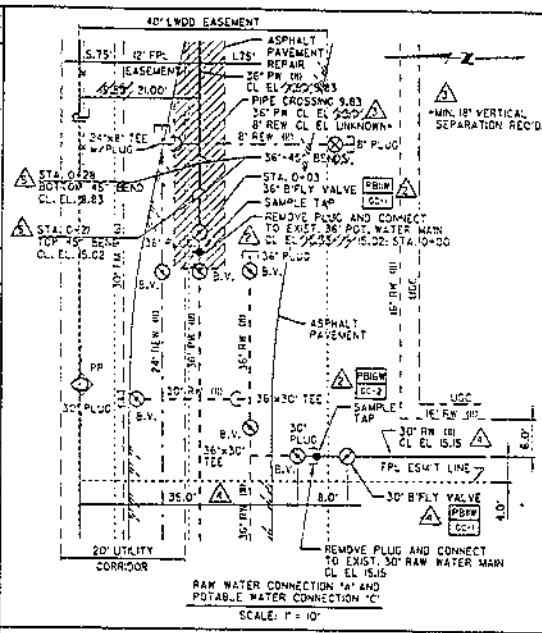
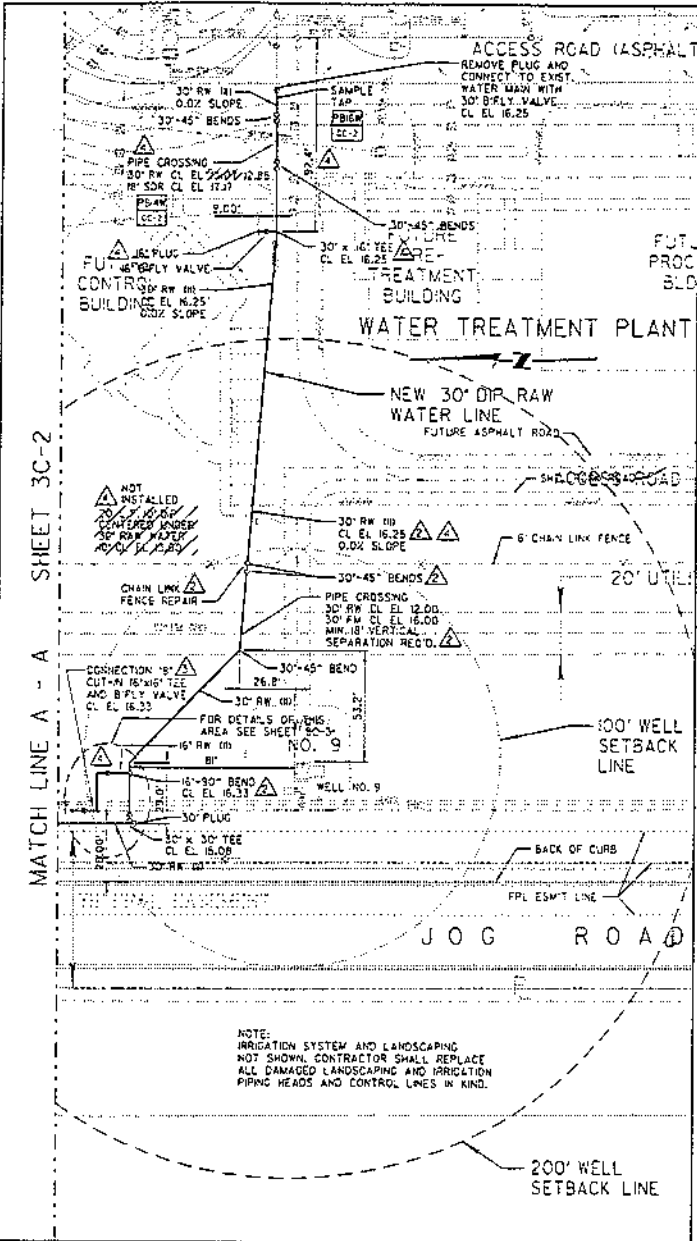
DESIGNED: M.R. NELSON
 DRAWN: P.A. JOE
 CHECKED: J.E. DUBAN

SUBMITTED: 48220 12/15/08
 PROJECT MANAGER: J.E. DUBAN
 SUBMITTED BY: J.E. DUBAN

MONTGOMERY WATSON
 Late Worth, Florida

RECORD DRAWING
 These records are to be maintained as a permanent record of the project. The Engineer has no liability for the accuracy of the information provided by others. The Engineer has no liability for the accuracy of the information provided by others. The Engineer has no liability for the accuracy of the information provided by others.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
 WELLFIELD EXPANSION PROJECT AT SYSTEMS 2A, 2W, 3W, 3W & 3W
 SYSTEM 3W SITE PLAN



5 10/23/2017 14 RECORD DRAWING
 4 10/23/2016 09 M.A.S.B. FOR 30\"/>

SCALE: 0 10
 IN/FOOT: 1\"/>

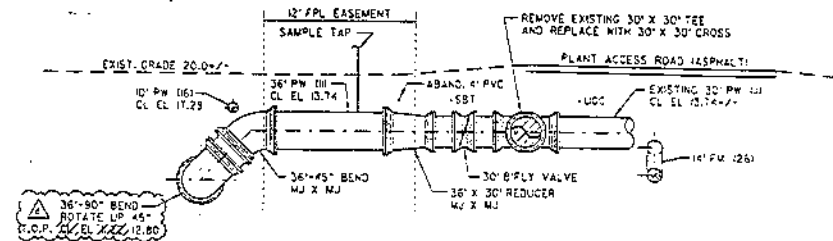
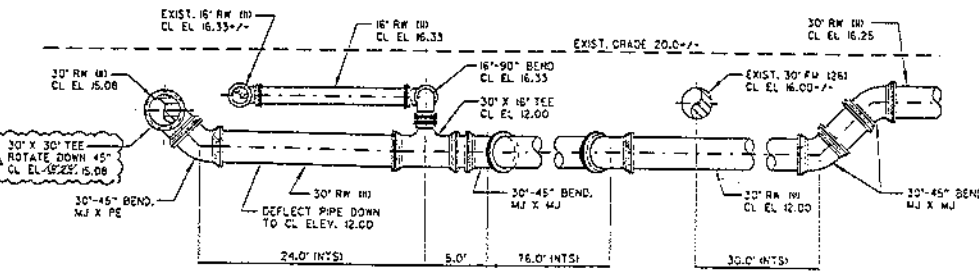
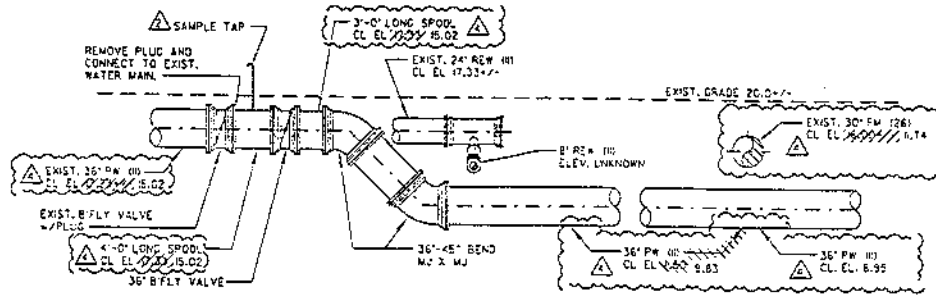
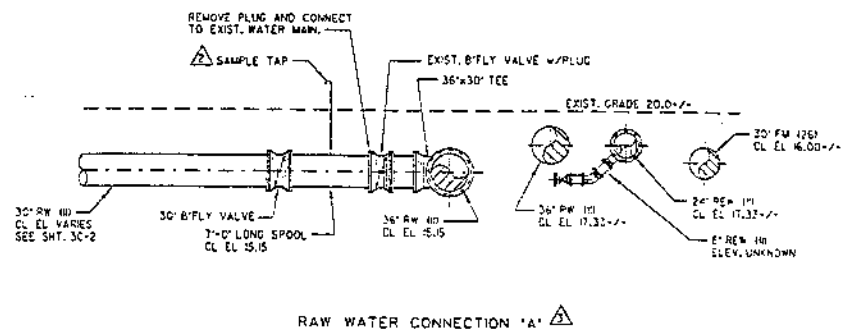
WARNING
 IF THIS BAR DOES NOT MEASURE
 THIS DRAWING IS NOT TO SCALE.

DESIGNED: M.R. NELSON
 DRAWN: P.A. LOY
 CHECKED: P.E. DUMAN
 DATE: 10/23/16

SUBMITTED: 48760 10/14/16
 PROJECT NUMBER: 1717/16
 DATE: 10/23/16

MONTGOMERY WATSON
 Lake Worth, Florida

RECORD DRAWING
 These record drawings have been prepared based on information or records on file. The Engineer has not warranted the accuracy of such information and shall not be responsible for any errors or omissions which may be made in reliance thereon as a result. See original contract documents for full and complete agreement.



NO. 106701/3/7/17	RECORD DRAWING
NO. 106701/3/7/17	INSTALLATION PERMIT FOR 30" RAW WATER LINE
NO. 106701/3/7/17	CONSTRUCTION REVISIONS
NO. 106701/3/7/17	CONSTRUCTION REVISIONS
NO. 106701/3/7/17	CONSTRUCTION REVISIONS
NO. 106701/3/7/17	CONSTRUCTION REVISIONS

SCALE:	HORIZONTAL: 1" = 5'	VERTICAL: 1" = 5'
WARNING:	IF THIS DRAWING DOES NOT MEASURE, THEN DRAWING IS NOT TO SCALE.	

DESIGNED: M.P. NELSON	DATE: 02/26/95
DRAWN: R.A. LUD	DATE: 02/26/95
CHECKED: F.E. DURAN	DATE: 02/26/95
APPROVED: [Signature]	DATE: 02/26/95

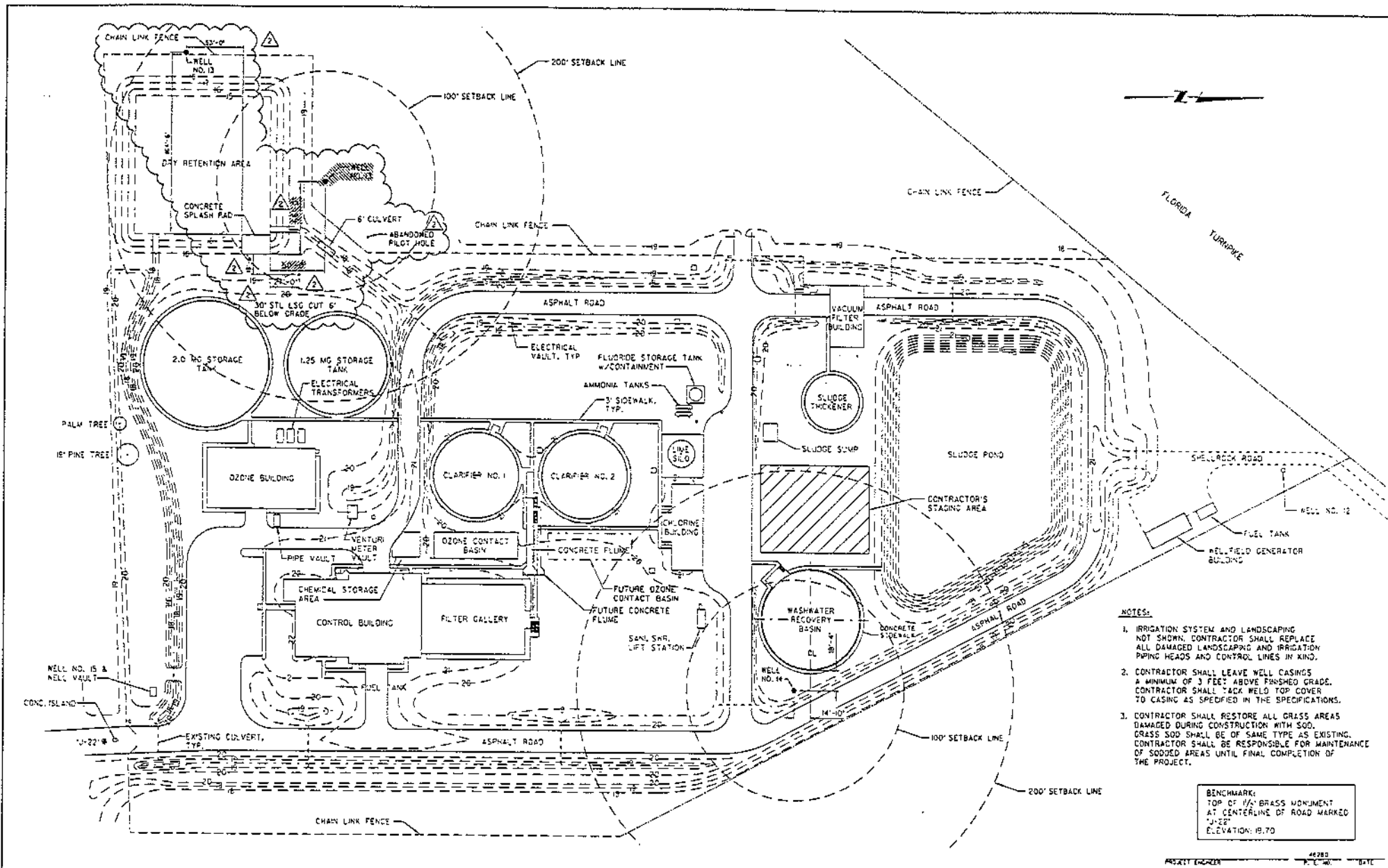
SUBMITTED: 02/26/95	DATE: 02/26/95
PROJECT NUMBER: 44280	DATE: 02/26/95
CONTRACT NO. 221900	DATE: 02/26/95

MONTGOMERY WATSON
Lake Worth, Florida

RECORD DRAWING
These record drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of such information and will not be responsible for any errors or omissions which may be incorporated herein as a result of the original contractor's drawings and the contractor's construction.

PROJECT NUMBER: 44280	DATE: 02/26/95
PALM BEACH COUNTY WATER UTILITIES DEPARTMENT	
WELLFIELD EXPANSION PROJECT AT SYSTEMS 1W, 2W, 3W, 5W & 9W	
SYSTEM 3W PIPING PROFILES	

REV. DATE: 12-SEP-1987
 FILE NO. 555-955
 PROJECT ENGINEER: ALE BR. ALBERT ZIEGLER
 PROJECT NO. 46280



- NOTES:**
- IRRIGATION SYSTEM AND LANDSCAPING NOT SHOWN. CONTRACTOR SHALL REPLACE ALL DAMAGED LANDSCAPING AND IRRIGATION PIPING HEADS AND CONTROL LINES IN KIND.
 - CONTRACTOR SHALL LEAVE WELL CASINGS A MINIMUM OF 3 FEET ABOVE FINISHED GRADE. CONTRACTOR SHALL TACK WELD TOP COVER TO CASING AS SPECIFIED IN THE SPECIFICATIONS.
 - CONTRACTOR SHALL RESTORE ALL GRASS AREAS DAMAGED DURING CONSTRUCTION WITH SOD. GRASS SOD SHALL BE OF SAME TYPE AS EXISTING. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF SODDED AREAS UNTIL FINAL COMPLETION OF THE PROJECT.

BENCHMARK:
 TOP OF 1 1/2" BRASS MONUMENT
 AT CENTERLINE OF ROAD MARKED
 "U-22"
 ELEVATION: 19.70

SCALE:	1" = 40'
WARNING:	IF THIS BAR DOES NOT MEASURE THE SAME AS NOT TO SCALE.
DESIGNED:	M.R. NELSON
DRAWN:	P.A. UDE
CHECKED:	F.E. DURAN
SUBMITTED:	PROJ. ENGINEER
DATE:	12/15/95

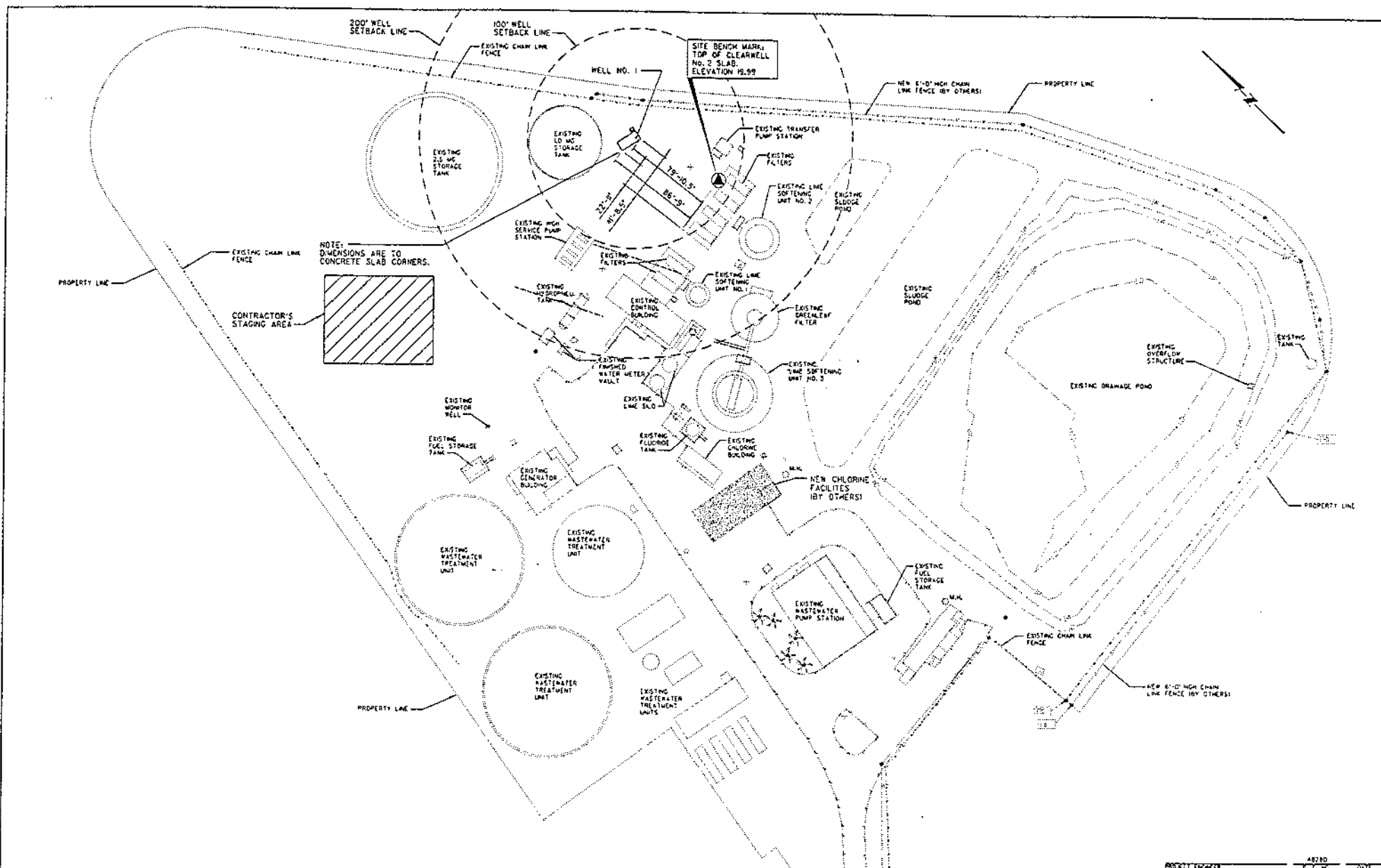
PROJECT NO.:	46280
DATE:	12/15/95
PROJECT ENGINEER:	ALE BR. ALBERT ZIEGLER
PROJECT NO.:	46280
DATE:	12/15/95


MONTGOMERY WATSON
 Lake Worth, Florida

RECORD DRAWING
 These plans drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. See original contract documents for full and complete terms.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT WELLFIELD EXPANSION PROJECT AT SYSTEMS 1M, 2M, 3M, 5M & 6M	SHEET 4C-1 OF 4 SHEETS
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FILE NO. 10551270 --- SEE NO. 104212701/104212702/104212703/104212704/104212705/104212706/104212707/104212708/104212709/104212710/104212711/104212712/104212713/104212714/104212715/104212716/104212717/104212718/104212719/104212720/104212721/104212722/104212723/104212724/104212725/104212726/104212727/104212728/104212729/104212730/104212731/104212732/104212733/104212734/104212735/104212736/104212737/104212738/104212739/104212740/104212741/104212742/104212743/104212744/104212745/104212746/104212747/104212748/104212749/104212750/104212751/104212752/104212753/104212754/104212755/104212756/104212757/104212758/104212759/104212760/104212761/104212762/104212763/104212764/104212765/104212766/104212767/104212768/104212769/104212770/104212771/104212772/104212773/104212774/104212775/104212776/104212777/104212778/104212779/104212780/104212781/104212782/104212783/104212784/104212785/104212786/104212787/104212788/104212789/104212790/104212791/104212792/104212793/104212794/104212795/104212796/104212797/104212798/104212799/104212800



NOTE: DIMENSIONS ARE TO CONCRETE SLAB CORNERS.

CONTRACTOR'S STAGING AREA

NEW CHLORINE FACILITIES (BY OTHERS)

PROJECT ENGINEER: 48780 DATE: 7-1-85

SCALE:	P = 40'
WARNING:	IF THIS BAR DOES NOT MEASURE THEN DRAWING IS NOT TO SCALE.

DESIGNED: M.P. NELSON	SUBMITTED: 4/17/85
DRAWN: P.A. LUCK	PROJECT MANAGER: 11/30
CHECKED: F.E. GURAN	INTEGRITY SYSTEM: 12/7/85

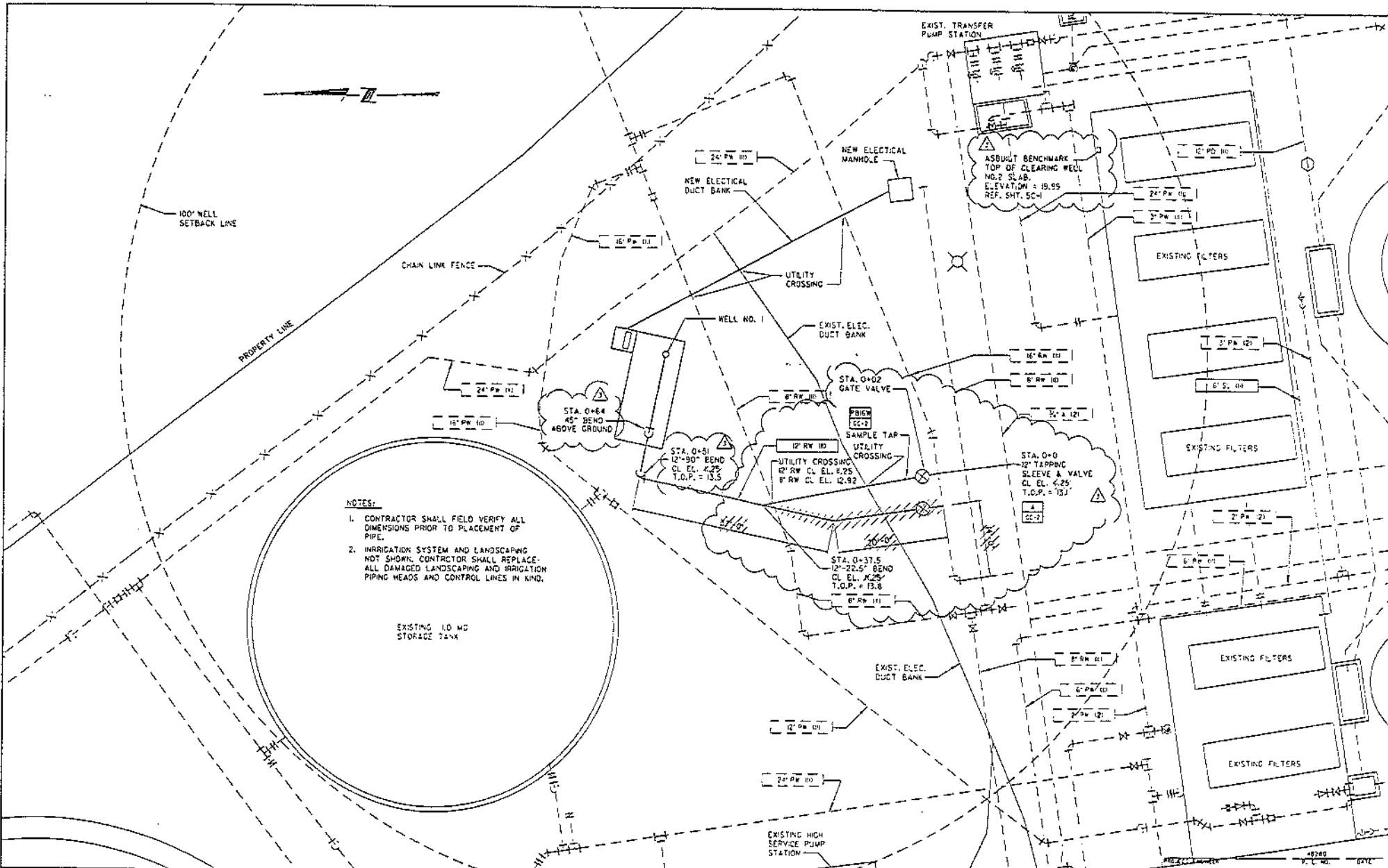
MONTGOMERY WATSON
 Late Worth, Florida

RECORD DRAWING
 These record drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be reflected hereon as a result. See original contract drawings for use and signature.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
 WELLFIELD EXPANSION PROJECT AT SYSTEMS 1W, 2W, 3W, 5W & 6W
 SYSTEM 5W SITE PLAN

SHEET 5C-1 OF 5 SHEETS

Rev. Date 28/06/1997 (B-3)
 Rev. Date 28/06/1997 (B-3)
 Rev. Date 28/06/1997 (B-3)




- NOTES:**
1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO PLACEMENT OF PIPE.
 2. IRRIGATION SYSTEM AND LANDSCAPING NOT SHOWN. CONTRACTOR SHALL REPLACE ALL DAMAGED LANDSCAPING AND IRRIGATION PIPING HEADS AND CONTROL LINES IN KIND.

DATE	BY	DESCRIPTION

SCALE:	
WARNING:	

DESIGNED BY	M. R. NELSON	SUBMITTED	48200	07/15/95
DRAWN BY	P. S. LOS	APPROVED BY		
CHECKED BY	F. E. DURAN	DATE	12/15/95	



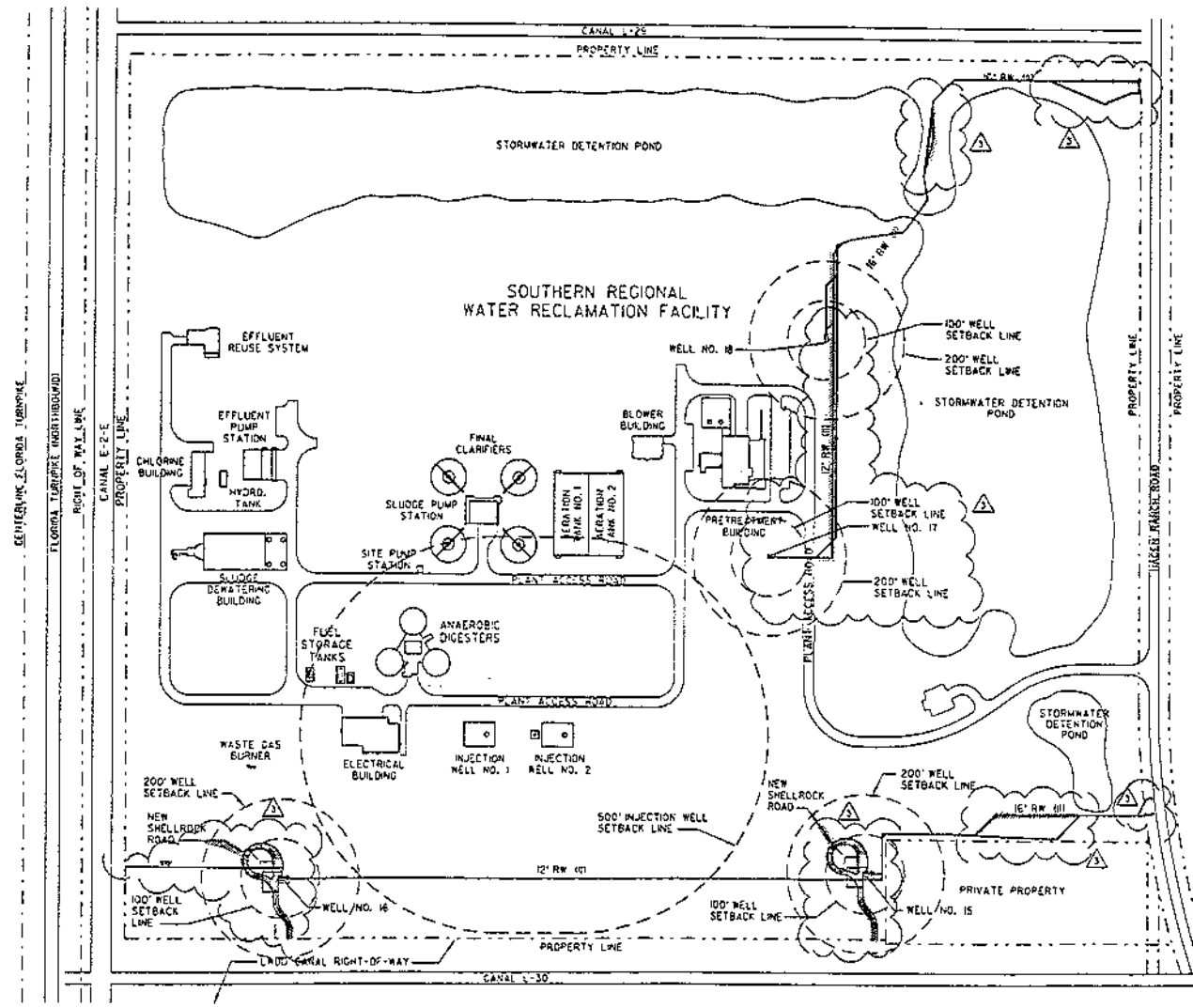
MONTGOMERY WATSON

Late Work Florida

RECORD DRAWING

These notes describe the work shown on this drawing and shall be read in conjunction with the drawings. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. See original contract drawings for more complete information.

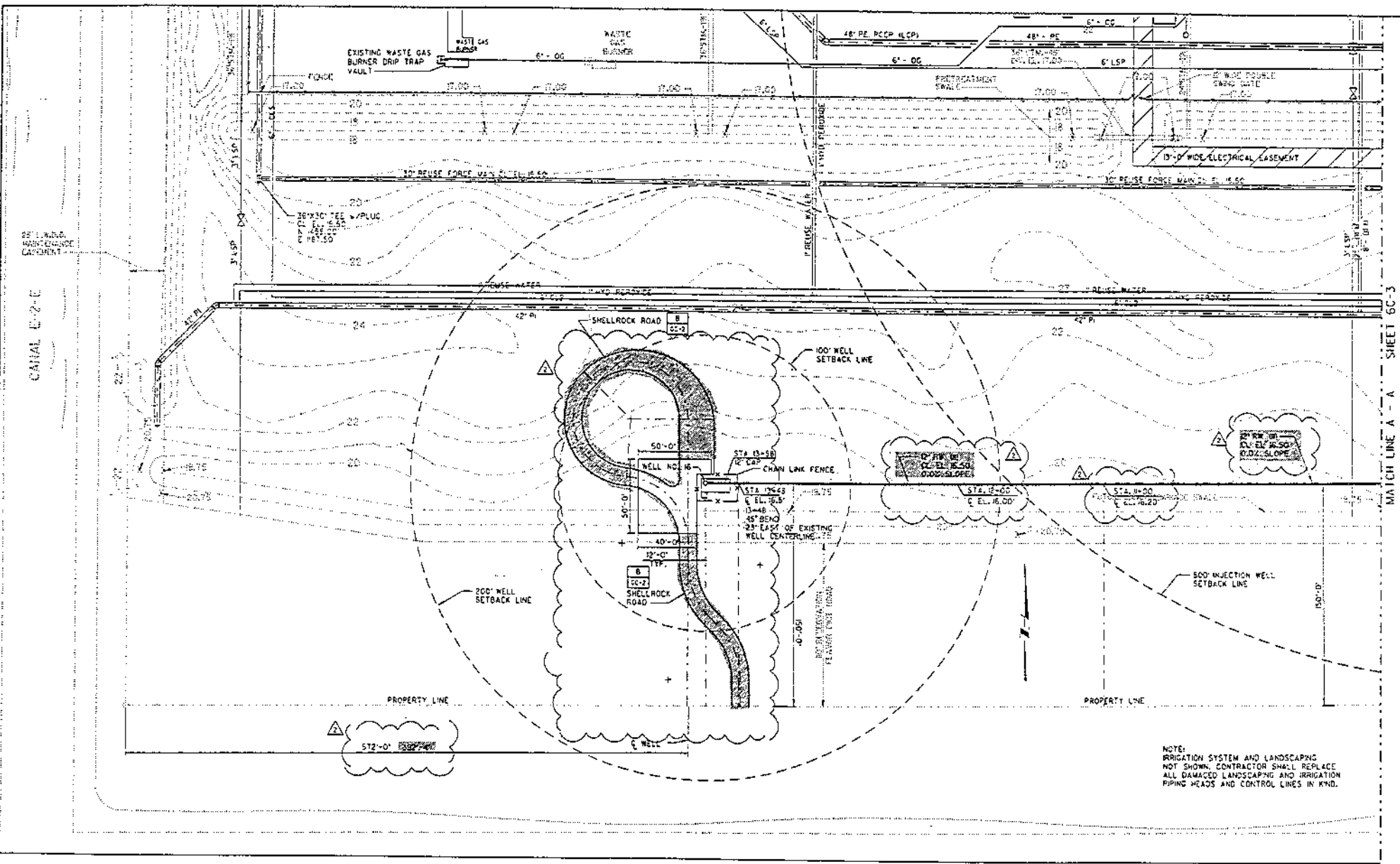
48820 SHEET 6C-1
 FILE NO. 62675108/03/0502/03/0502/03/0502/03/0502
 Rev. Date 12-SEP-17 05:42



NOTE:
 CONTRACTOR SHALL COORDINATE ANY
 CONSTRUCTION ACTIVITY WITH OTHER
 CONTRACTORS CURRENTLY WORKING
 ON THE SITE.

3 06/19/17 17 RECORD DRAWINGS 2 10/10/16 16W1 REVISION NO. 1 REVISIONS 1 12/27/15 15W1 FOR BIDING	SCALE: 1" = 60' WARNING IF THIS BAR DOES NOT MEASURE 1" THIS DRAWING IS NOT TO SCALE.	DESIGNED: M.A. NELSON DRAWN: P.A. LEE CHECKED: F.C. DURAY	SUBMITTED PROJECT NUMBER: 48280 DATE: 01/25/16 DATE: 12/26/15	 MONTGOMERY WATSON Late Work, Florida	RECORD DRAWING These records drawings have been prepared based on information furnished by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be hereinafter shown on a final, approved contract drawings for construction purposes.	PALM BEACH COUNTY WATER UTILITIES DEPARTMENT WELLFIELD EXPANSION PROJECT AT SYSTEMS 1W, 2W, 3W, 5W & 6W SOUTHERN REGIONAL WRF SITE PLAN	SHEET 6C-1 OF 4 SHEETS
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Job No. 551810, File No. 142710/0002/142710-01-1600/00, Rev. Date 26 JUL 1979, 1617



CANAL C-2-E

MATCH LINE A - A SHEET 6C-3

CANAL L-30

PROJECT ENGINEER: 48780 P.L. NO. DATE

2	04/24/79	W.M.	RECORD DRAWING
1	03/17/79	W.M.	FOR BIDDING
REV	DATE	BY	DESCRIPTION

SCALE: 1" = 30'

WARNING: 0 1/2 1
 IF THIS BAR DOES NOT MEASURE 15 INCH DRAWING IS NOT TO SCALE.

DESIGNED: M.B. NELSON
 DRAWN: P.A. LEE
 CHECKED: F.E. DURAN

SUBMITTED: PROJEKT WATSON
 48780 01/15/79
 01/15/79 SITE



MONTGOMERY WATSON

Lake Worth, Florida

RECORD DRAWING

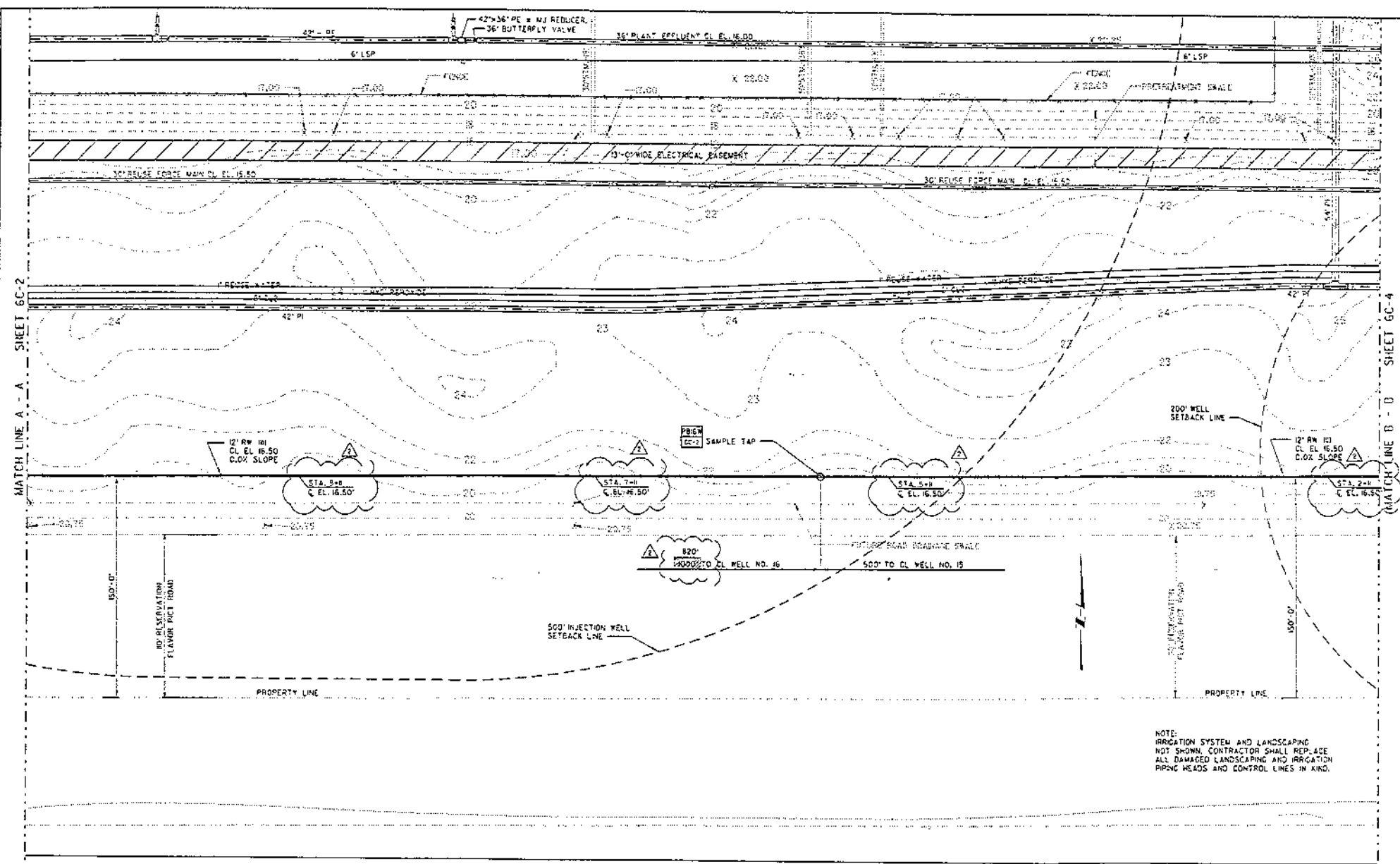
These records represent the work prepared under the supervision of the Professional Engineer. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be made hereafter, however, in a court of law, the Engineer's certificate shall be prima facie evidence of the accuracy of the information herein.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
 WELLFIELD EXPANSION PROJECT AT SYSTEMS 2A, 2B, 2C, 2D, 2E & 2F
 SOUTHERN REGIONAL WRF YARD PIPING PLAN

SHEET
6C-2
 OF 4 SHEETS

NOTE:
 IRRIGATION SYSTEM AND LANDSCAPING NOT SHOWN. CONTRACTOR SHALL REPLACE ALL DAMAGED LANDSCAPING AND IRRIGATION PIPING HEADS AND CONTROL LINES IN KIND.

Rev. 04/14/18 Rev. 06/14/18 Rev. 07/14/18 Rev. 08/14/18 Rev. 09/14/18 Rev. 10/14/18 Rev. 11/14/18 Rev. 12/14/18 Rev. 01/15/15 Rev. 02/15/15 Rev. 03/15/15 Rev. 04/15/15 Rev. 05/15/15 Rev. 06/15/15 Rev. 07/15/15 Rev. 08/15/15 Rev. 09/15/15 Rev. 10/15/15 Rev. 11/15/15 Rev. 12/15/15



NOTE:
IRRIGATION SYSTEM AND LANDSCAPING
NOT SHOWN, CONTRACTOR SHALL REPLACE
ALL DAMAGED LANDSCAPING AND IRRIGATION
PIPING HEADS AND CONTROL LINES IN KIND.

REV.	DATE	BY	DESCRIPTION
2	02/23/15	JST	RECORD DRAWMG
1	02/23/15	WBN	FOR BIDDING

SCALE: 1" = 30'

PARTIAL DRAINING
THIS PART DOES NOT DRAINAGE IS NOT TO SCALE.

DESIGNED: M.R. NELSON
DRAWN: P.A. LIDE
CHECKED: K.S. DURAN

PLUM-TICO
ANASTASIO MALVEIRA 48280 01/22/15
MONTGOMERY WATSON 01/22/15



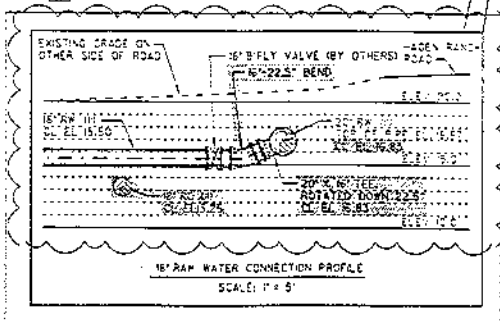
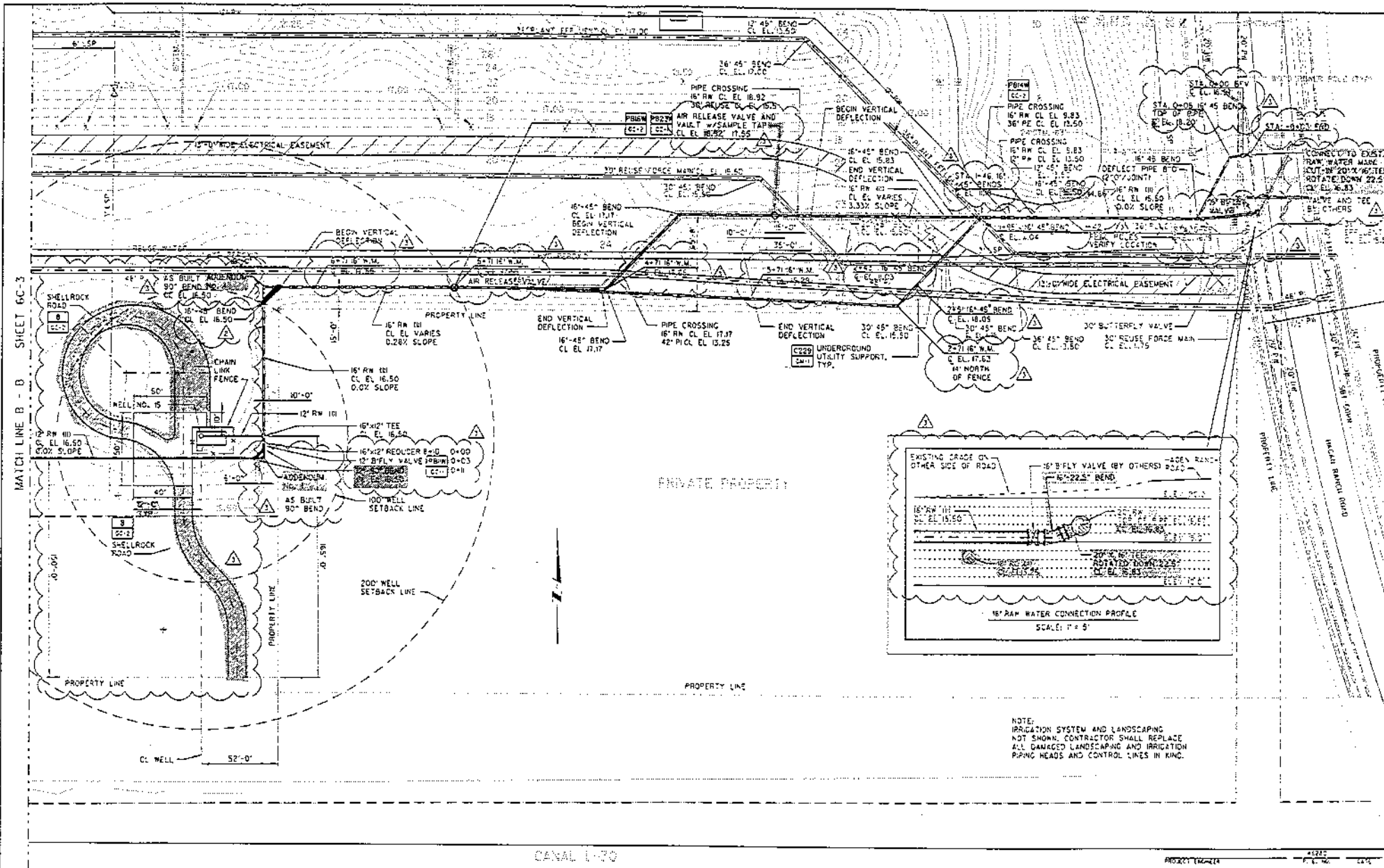
MONTGOMERY WATSON

Lake Worth, Florida

RECORD DRAWING
These record drawings have been prepared based on information furnished by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. See original contract drawings for full and complete terms.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
WELLFIELD EXPANSION PROJECT AT 5" SYSTEMS W-2W, 3W, 5W & 9W
SOUTHERN REGIONAL WRF YARD PIPING PLAN

SHEET
60-3
OF 3 SHEETS



NOTE:
IRRIGATION SYSTEM AND LANDSCAPING
NOT SHOWN. CONTRACTOR SHALL REPLACE
ALL DAMAGED LANDSCAPING AND IRRIGATION
PIPING HEADS AND CONTROL LINES IN KIND.

CANAL I-70

PROJECT NUMBER 45222
P.L. NO. 224

DATE	BY	DESCRIPTION
06/22/21	W.M.	REVISIONS
07/26/21	W.M.	REVISIONS
07/26/21	W.M.	REVISIONS

SCALE:	VERTICAL	HORIZONTAL
1" = 30'	1" = 10'	1" = 30'

DESIGNED	M.A. NELSON
DRAWN	P.A. LOE
CHECKED	J.E. DURAN

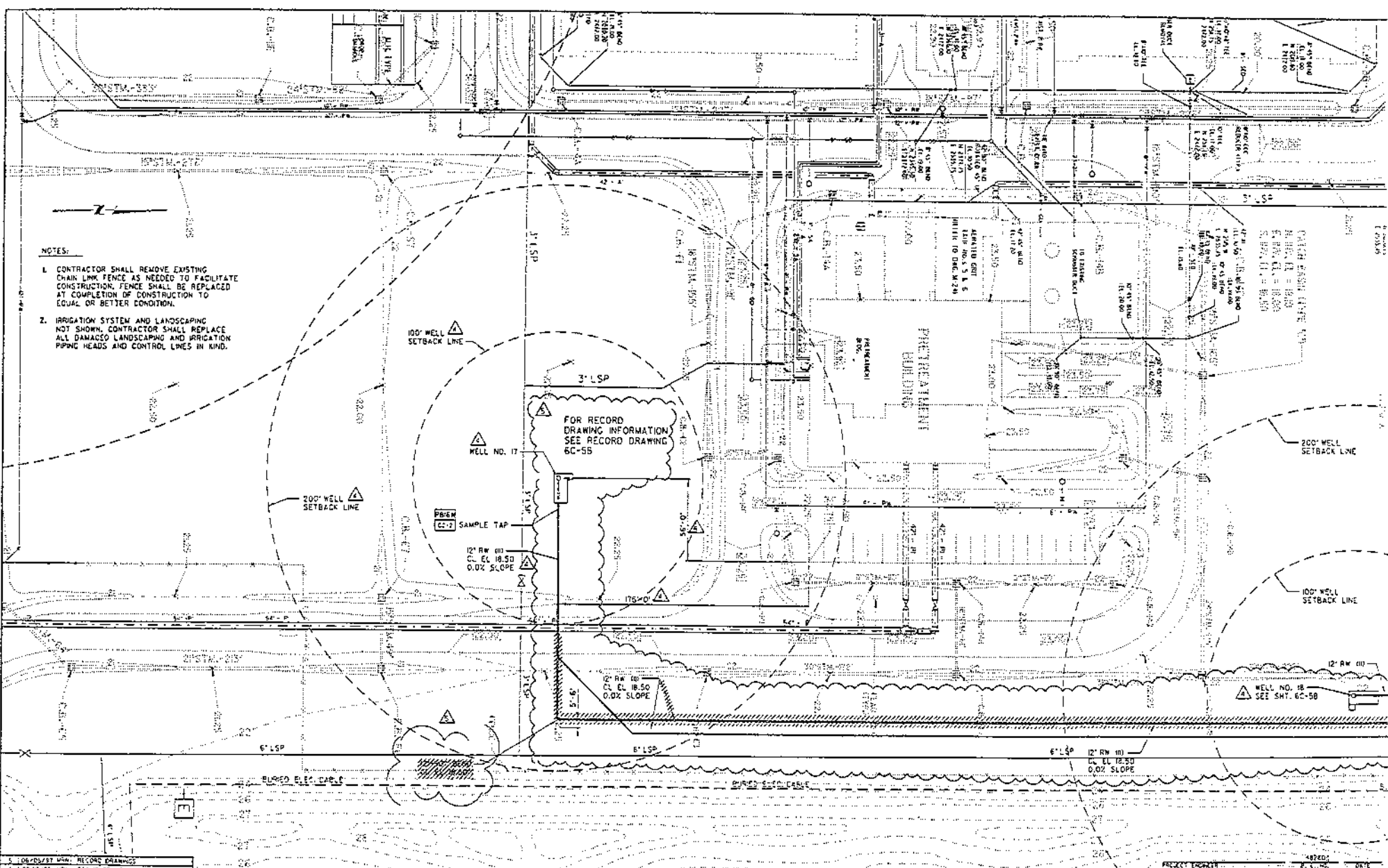
APPROVED	MONTGOMERY WATSON
DATE	07/26/21

MONTGOMERY WATSON
 15000 W. BAY DR. SUITE 100
 WEST PALM BEACH, FL 33411
 TEL: 561-833-8800
 FAX: 561-833-8801
 WWW.MONTGOMERYWATSON.COM

RECORD DRAWING
 These record drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be discovered herein at a later date. See original project drawings for record signatures.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT		SHEET
WELLFIELD EXPANSION PROJECT AT 5 TH STAGE IN 2 ^N , 2 ^N , 2 ^N , 2 ^N & 9 TH		60-4
SOUTHERN REGIONAL WRF YARD PIPING PLAN		OF 1 SHEETS

148 No. 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100



- NOTES:
- CONTRACTOR SHALL REMOVE EXISTING CHAIN LINK FENCE AS NEEDED TO FACILITATE CONSTRUCTION. FENCE SHALL BE REPLACED AT COMPLETION OF CONSTRUCTION TO EQUAL OR BETTER CONDITION.
 - IRRIGATION SYSTEM AND LANDSCAPING NOT SHOWN. CONTRACTOR SHALL REPLACE ALL DAMAGED LANDSCAPING AND IRRIGATION PIPING HEADS AND CONTROL LINES IN KIND.

FOR RECORD DRAWING INFORMATION SEE RECORD DRAWING 6C-55

REV.	DATE	BY	DESCRIPTION
1	06/05/87	WEN	RECORD DRAWINGS
2	10/20/88	WEN	RELOCATED WELL NO. 18 & 19
3	09/24/88	WEN	RELOCATED WELL NO. 17
4	03/14/88	WEN	ADDED SHEET 6C-54
5	10/26/88	WEN	PERMANENT MODIFICATIONS
6	10/26/88	WEN	ADDED NO. 19 REVISIONS
7	11/25/88	WEN	FOR RECORD

SCALE: 1" = 30'

DESIGNED: W.R. NELSON
 DRAWN: P.A. LUCE
 CHECKED: F.E. OLSEN

DATE: 02/25/89
 48780
 1" = 30'



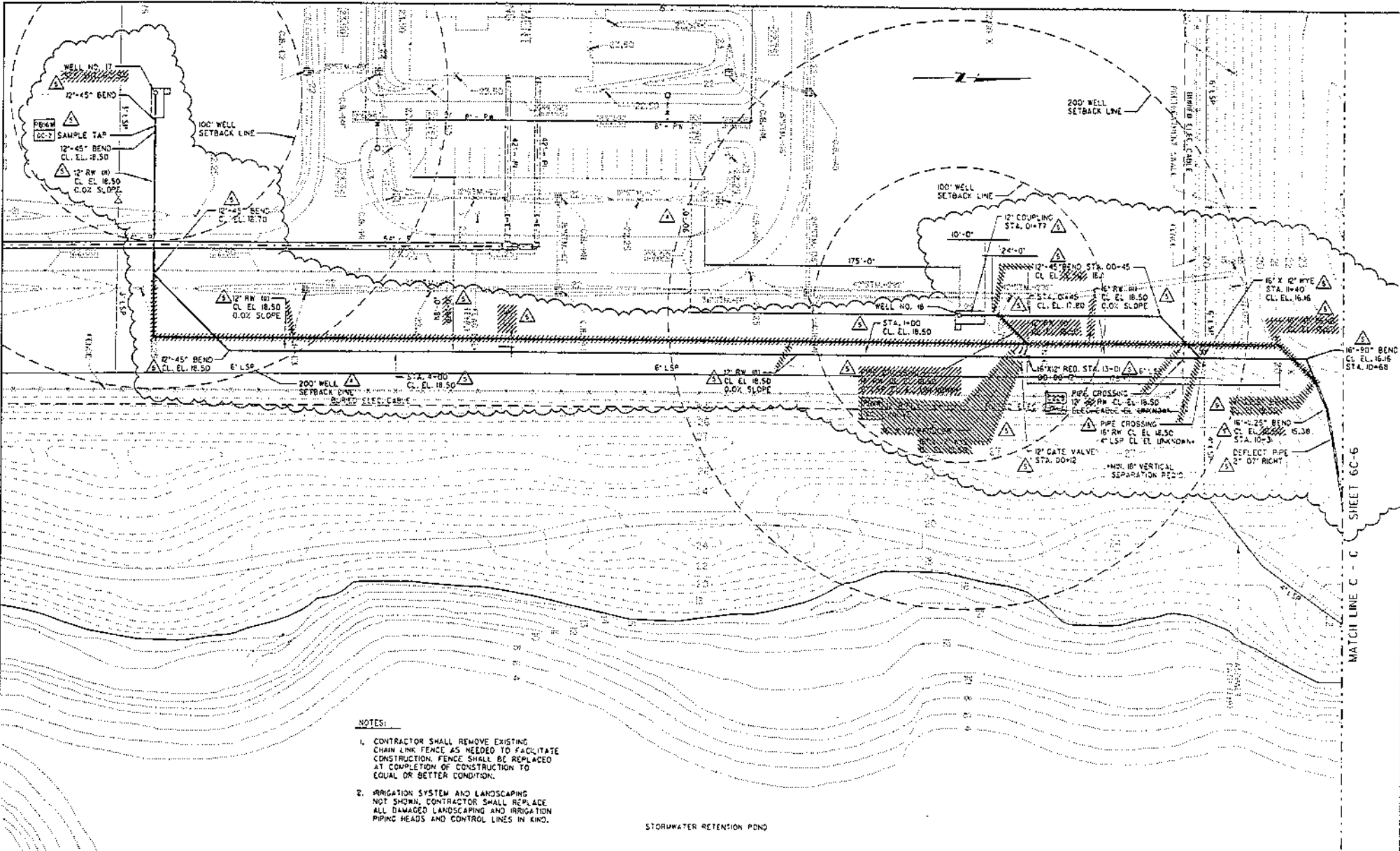
MONTGOMERY WATSON

Late Worth Florida

RECORD DRAWING
 These notes should be read in connection with all information provided by others. The Engineer has no responsibility for the accuracy of such information and shall be responsible for the work of construction which may be required to correct the same. See original contract drawings for more information.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
 WELLFIELD EXPANSION PROJECT AT SYSTEMS 16, 24, 26, 28 & 29
 SOUTHERN REGIONAL WRF YARD PIPING PLAN

SHEET
6C-5A
 27 OF 31 SHEETS



- NOTES:**
1. CONTRACTOR SHALL REMOVE EXISTING CHAIN LINK FENCE AS NEEDED TO FACILITATE CONSTRUCTION. FENCE SHALL BE REPLACED AT COMPLETION OF CONSTRUCTION TO EQUAL OR BETTER CONDITION.
 2. IRRIGATION SYSTEM AND LANDSCAPING NOT SHOWN. CONTRACTOR SHALL REPLACE ALL DAMAGED LANDSCAPING AND IRRIGATION PIPING HEADS AND CONTROL LINES IN KIND.

STORMWATER RETENTION POND

3	02/17/76	ADD RECORD DRAWING
4	02/17/76	REDESIGNED WELL NO. 15 & DRAINING
5	02/17/76	REDESIGNED WELL NO. 17
6	02/17/76	REDESIGNED WYE TO SE-5B
7	02/26/76	ADD PIPE MODIFICATIONS
8	02/27/76	ADD MANHOLE MODIFICATIONS
9	02/27/76	ADD MANHOLE MODIFICATIONS
10	02/27/76	ADD MANHOLE MODIFICATIONS
11	02/27/76	ADD MANHOLE MODIFICATIONS
REV	DATE	DESCRIPTION

SCALE	AS SHOWN
1" = 30'	

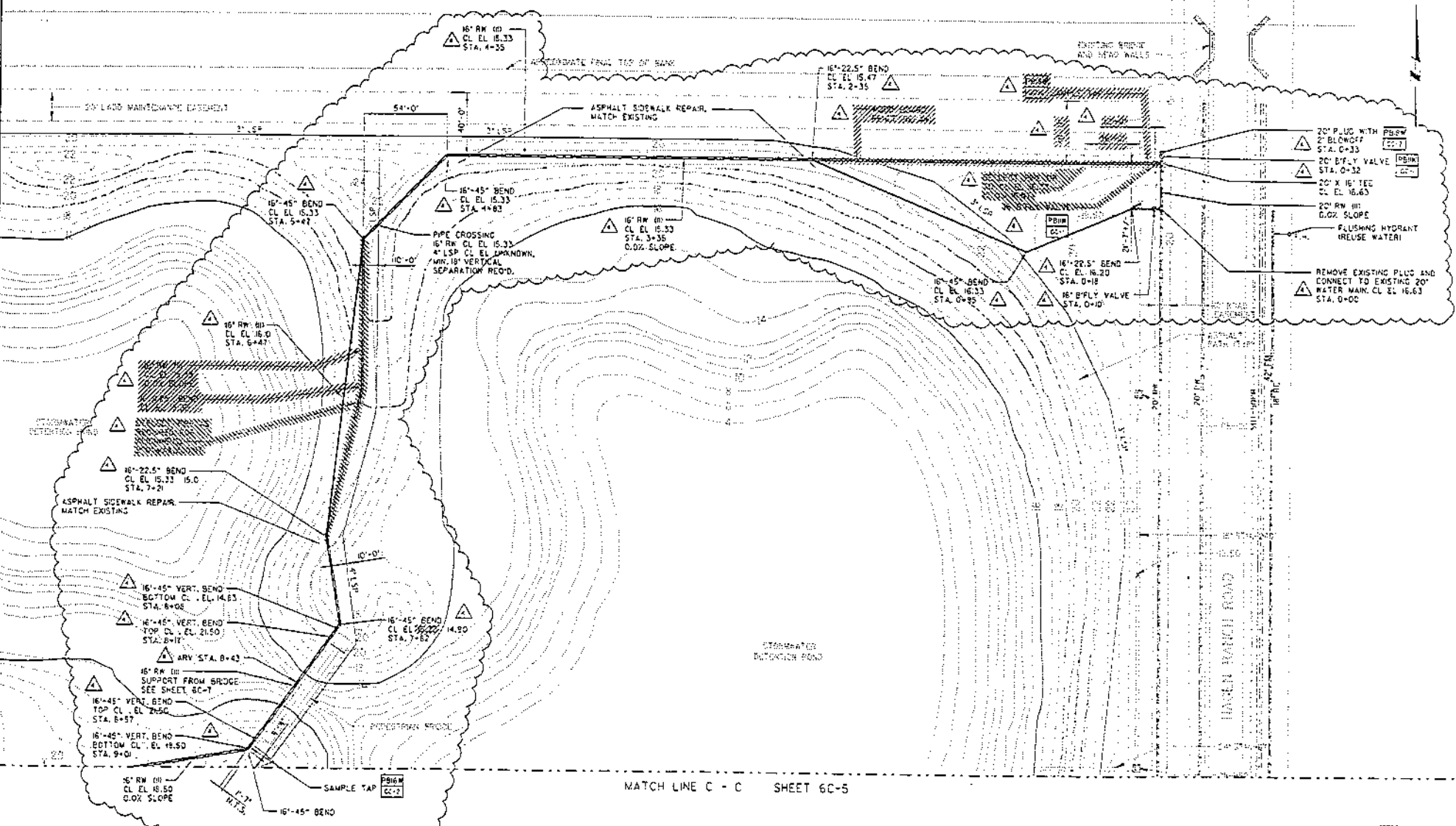
DESIGNED	W.E. NELSON
DRAWN	P.A. JOSE
CHECKED	J.E. DUBIN
PROJECT NUMBER	48280
DATE	12/16/75



RECORD DRAWING These record drawings have been prepared based on information furnished by others. This Engineer has not checked the accuracy of such information and shall not be responsible for any errors or omissions which may be discovered hereon as a result of such information.	
PALM BEACH COUNTY WATER UTILITIES DEPARTMENT WELLFIELD EXPANSION PROJECT AT SYSTEMS 14, 24, 34, 44 & 34 SOUTHERN REGIONAL WRF YARD PIPING PLAN	

CANAL L-29

EX-SITE
WELL POWER
FIELD 10-91



- 20" P. UC WITH 2" BLOWOFF STA. 0+33
- 20" DFL VALVE STA. 0+32
- 20" X 16" TEE CL. EL. 16.63
- 20" RW III 0.0% SLOPE
- FLUSHING HYDRANT (REUSE WATER)
- REMOVE EXISTING PLUG AND CONNECT TO EXISTING 20" WATER MAIN. CL. EL. 16.63 STA. 0+00

MATCH LINE C - C SHEET 6C-5

200 No. 503820 ... SEE PRO. 50377 FOR DATE EXAMINATION ... Rev. Date: 20 JAN. 1977. 1028

1	04/16/97	J22	RECORD DRAWING
2	02/27/96	MM	PERFORM MODIFICATIONS
3	02/07/96	MM	ADDITIONAL DIMENSIONS
4	3/28/95	MM	FOR BIDDING
REV.	DATE	BY	DESCRIPTION

SCALE	HORIZONTAL 1" = 30'
-------	------------------------

WARNING	D 1/2" I
DESIGNED	M.R. NELSON
DRAWN	P.A. LODE
CHECKED	F.E. DURAN

DATE	12/16/96
PROJECT	WELLFIELD EXPANSION
NO.	4282
DATE	12/16/96
BY	MM


MONTGOMERY WATSON
 Like Warm, Florida

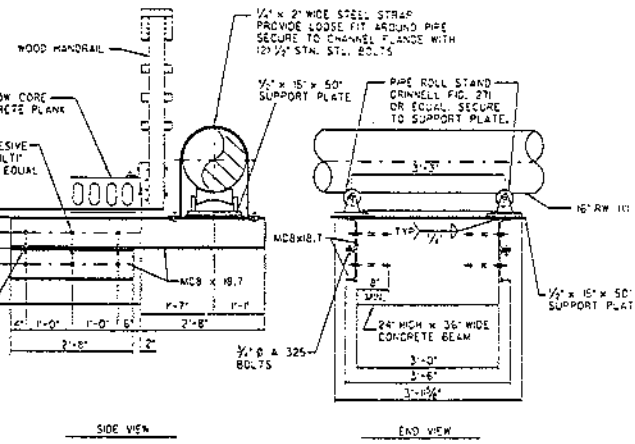
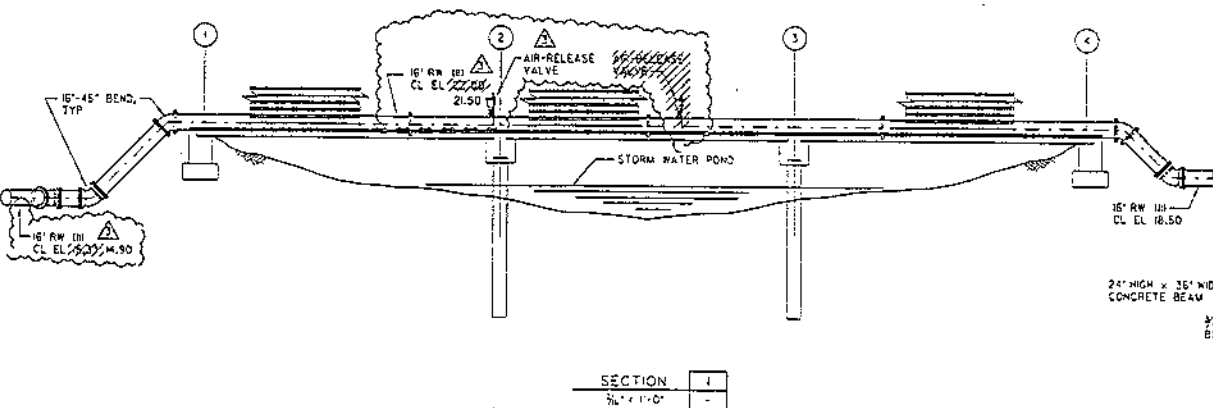
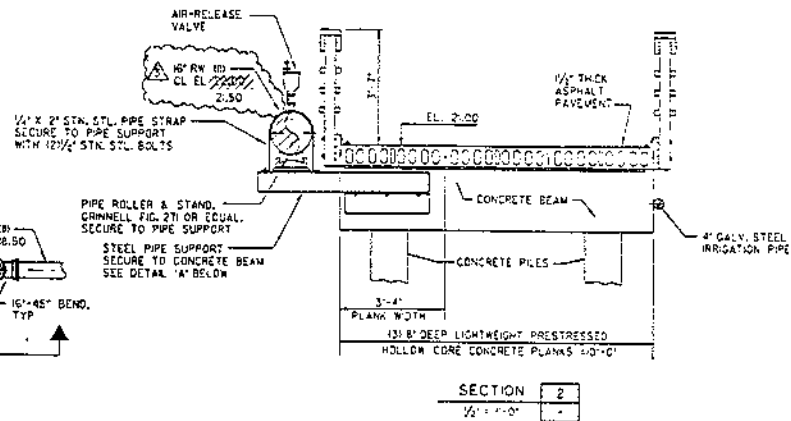
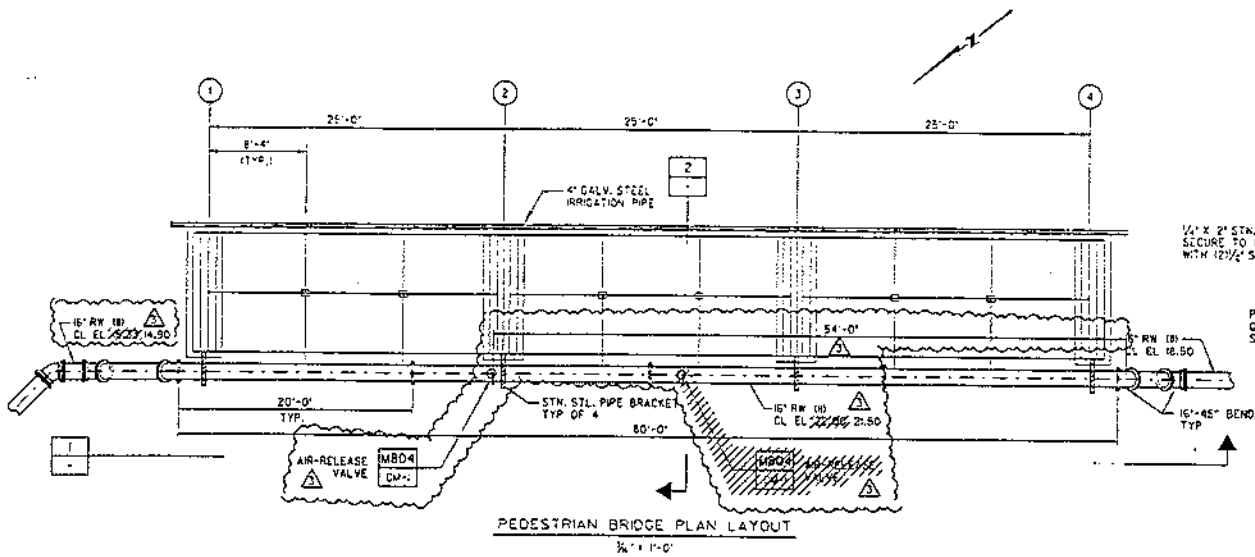
RECORD DRAWING

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PALM BEACH COUNTY WATER UTILITIES DEPARTMENT	
WELLFIELD EXPANSION PROJECT AT SYSTEMS IN, 2N, 3N, 4N & 5N	
SOUTHERN REGIONAL WRF YARD PIPING PLAN	

SHEET
60-6
OF 6 SHEETS

Rev. Date 20-10-1987
 FILE No. 66-212
 408 No. 4521820



1	DATE/REVISED	DESCRIPTION
2	12/27/85	FOR BIDDING
3	08/04/87	IN RECORD DRAWINGS
4	02/04/88	ADD HOLLOW AND TRENCHINGS

SCALE: AS NOTED

WARNING: THIS BAR DOES NOT GUARANTEE THE DRAWING IS NOT TO SCALE.

DESIGNED: M.R. WELSON
 DRAWN: P.A. LOE
 CHECKED: P.E. DURAN
 MONTGOMERY WATSON

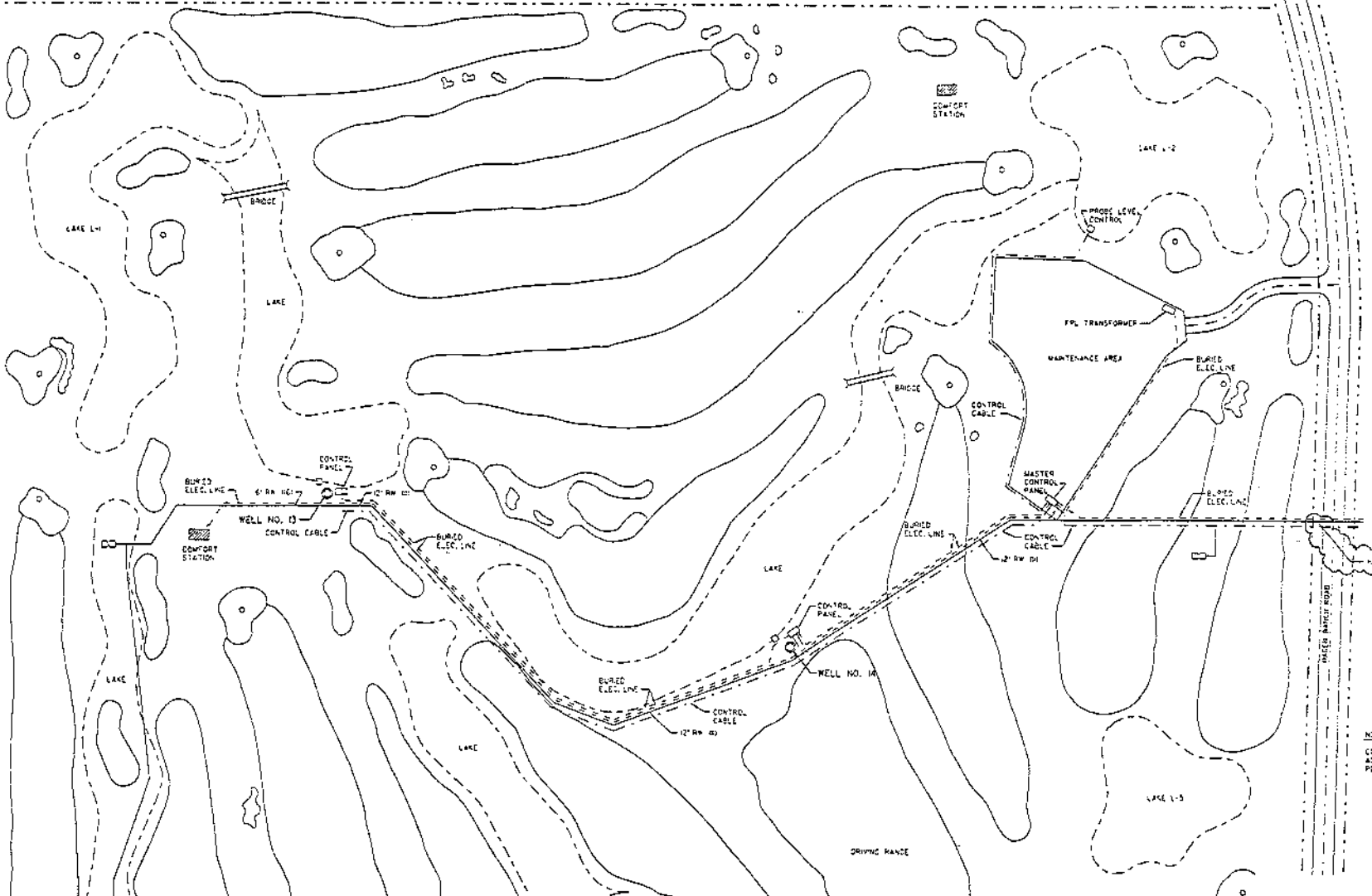
MONTGOMERY WATSON
 Lake Worth, Florida

RECORD DRAWING
 These record drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. See engineering contract drawings for true and accurate information.

PROJECT NUMBER: 49280
 DATE: _____
 PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
 WELLFIELD EXPANSION PROJECT AT SYSTEMS 1W, 2W, 3W, 4W & 5W
 SOUTHERN REGIONAL WRF
 STORMWATER POND CROSSING
 SHEET 6C-7 OF 8 SHEETS

SOUTHERN REGIONAL WATER RECLAMATION FACILITY

LW00 L-30 CANAL 100 FT. R/W



NOTE:
CONTRACTOR SHALL COORDINATE
ACCESS TO WELLS 13 AND 14 WITH
POLO TRACE MAINTENANCE STAFF

PROJECT DRAFTER
48240
P. E. NO. DATE

SCALE:
1" = 100'

DESIGNED: M.A. NELSON
DRAWN: P.A. LOCK
CHECKED: F.E. DURAN

SUBMITTED: 02/23/85
DATE: 02/23/85
SUBMITTED: 02/23/85
DATE: 02/23/85



MONTGOMERY WATSON
Lake Worth, Florida

RECORD DRAWING

These record drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein as a result of such information being based on incorrect data.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
WELLFIELD EXPANSION PROJECT AT SYSTEMS 1N, 2N, 3N, 6W & 9W

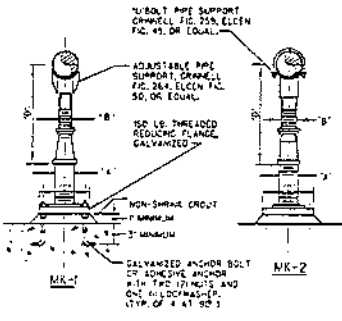
POLO TRACE SITE PLAN

SHEET
7C-1
OF 5 SHEETS

JOB NO. 165510270 FILE NO. 165510270/0165510270/01/7C-1

REV. DATE BY: DESCRIPTION

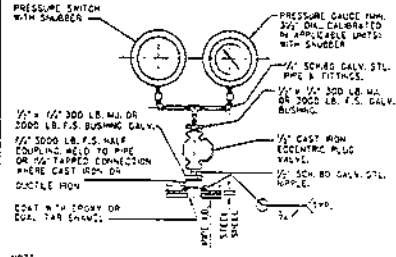
REV.	DATE	BY:	DESCRIPTION
2	06/17/87	MAN	RECORD DRAWDINGS
1	12/25/83	MAN	F.C.C. 820916



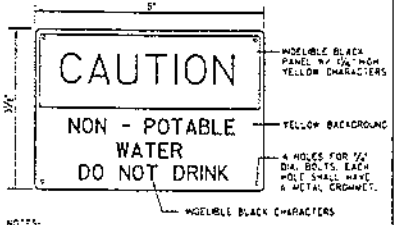
PIPE SIZE	ADJUSTABLE PIPE SUPPORT APPROXIMATE DIMENSIONS IN INCHES			
	"A"	"B"	"C"	"D"
2-1/2"	2-1/2"	1-1/2"	8"	6"
3"	2-1/2"	1-1/2"	8"	8-1/4"
3-1/2"	2-1/2"	1-1/2"	9"	8-1/2"
4"	3"	1-1/2"	9"	10-1/4"
6"	3"	2-1/2"	9"	11-1/4"
8"	3"	2-1/2"	9"	13-5/8"
10"	3"	2-1/2"	9"	14-5/8"
12"	3"	2-1/2"	9"	15-5/8"
14"	4"	3"	9"	17-1/4"
16"	4"	3"	9"	17-1/4"
18"	4"	3"	12-1/2"	21-1/4"
20"	4"	3"	12-1/2"	23-1/4"
24"	4"	4"	12-1/2"	24-1/2"
30"	4"	4"	12-1/2"	29-5/8"
36"	4"	4"	12-1/2"	32-5/8"
42"	4"	4"	12-1/2"	32-5/8"

= SEE W.P.R.

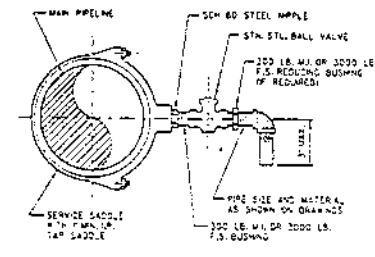
ADJUSTABLE PIPE SUPPORT WITH OR WITHOUT 'U' BOLT M-108 REV. 09587



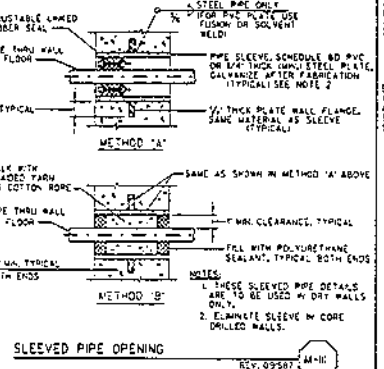
PRESSURE GAUGE AND PRESSURE SWITCH M-109 REV. 09587



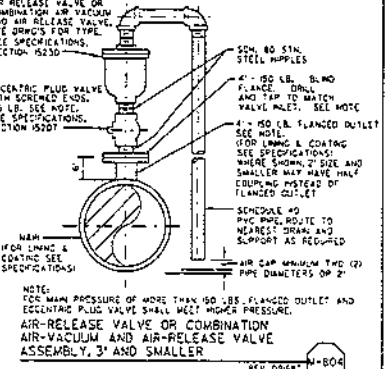
WARNING SIGN FOR NON-POTABLE WATER M-102 REV. 09587



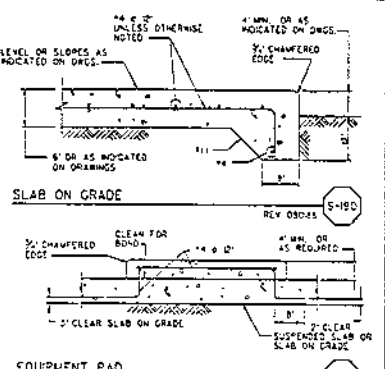
SMOOTH NOSED SAMPLE TAP A REV. 092692



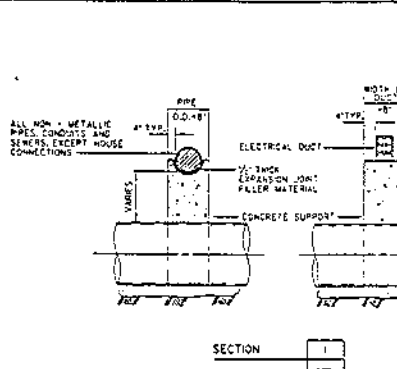
SLEEVED PIPE OPENING M-110 REV. 09587



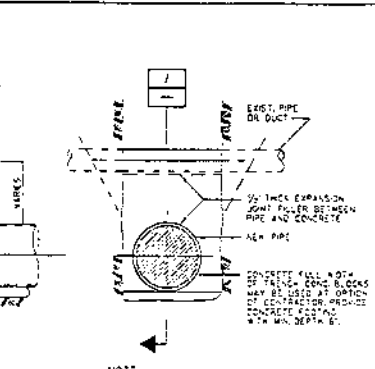
AIR-RELEASE VALVE OR COMBINATION AIR-VACUUM AND AIR-RELEASE VALVE ASSEMBLY, 3" AND SMALLER M-104 REV. 09587



EQUIPMENT PAD M-101 REV. 09587



HOUSE SEWER CONNECTION ACROSS PIPE TRENCH M-103 REV. 09587



UNDERGROUND UTILITY SUPPORT DETAILS C-229 REV. 09587

DATE: 08/11/09 FILE: P:\proj\2009\081109\081109.dwg

NO.	DATE	BY	DESCRIPTION
1	08/11/09	WJL	ISSUED FOR RECORD
2	08/11/09	WJL	ISSUED FOR RECORD

SCALE:	0 1/2" = 1'-0"
WARNING:	IF THIS BAR DOES NOT MOVE FOR RECORDING, THE DRAWING IS NOT TO SCALE.

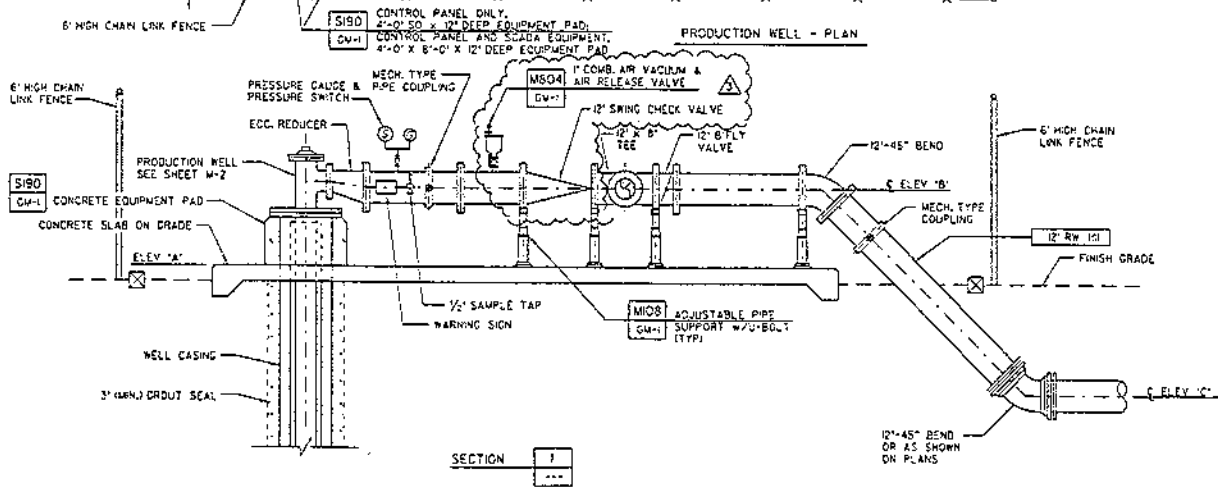
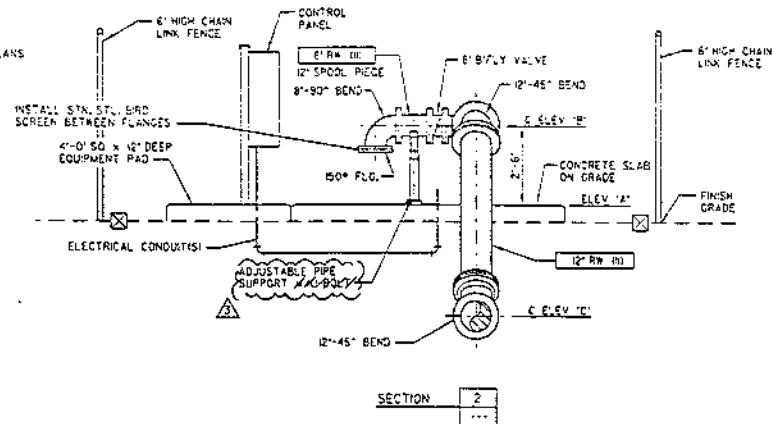
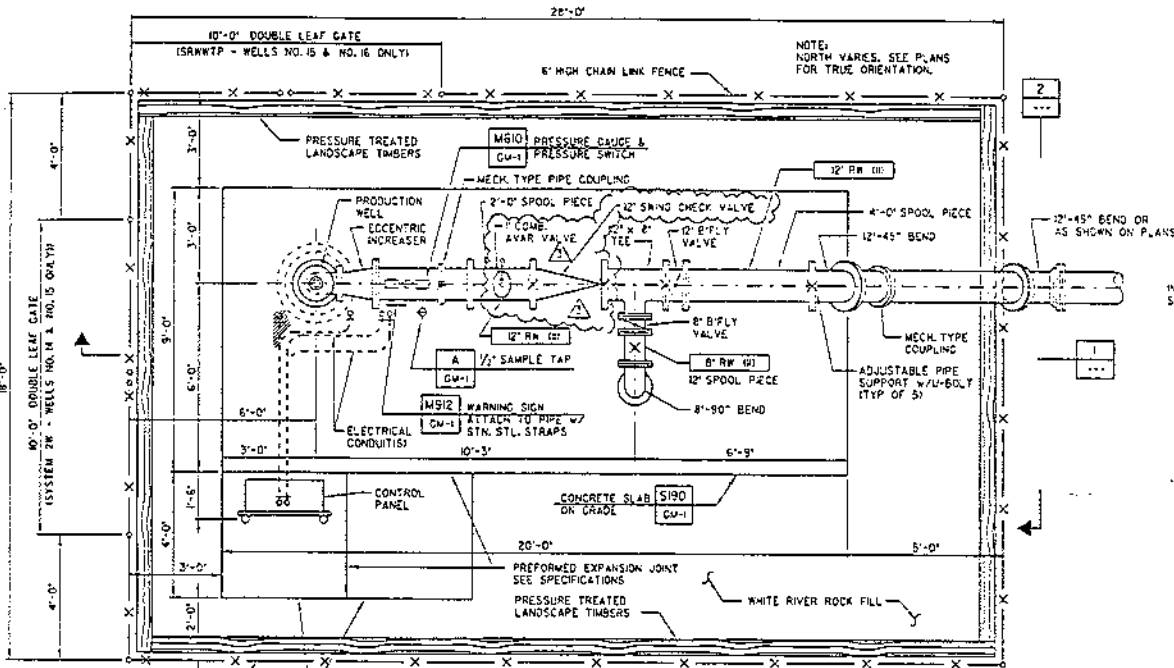
DESIGNED: M.R. NELSON	CHECKED: P.E. DEJAN
DRAWN: P.A. JOSE	DATE: 07/20/09
PROJECT: WELLS	SCALE: 1/2" = 1'-0"
DATE: 07/20/09	SCALE: 1/2" = 1'-0"



MONTGOMERY WATSON
Late Worth, Florida

RECORD DRAWING
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PALE BEACH COUNTY WATER UTILITIES DEPARTMENT
WELLSFIELD EXPANSION PROJECT AT SYSTEMS 10, 20, 30, 40 & 50
MECHANICAL AND STRUCTURAL DETAILS
SHEET
GM-1
OF 4 SHEETS



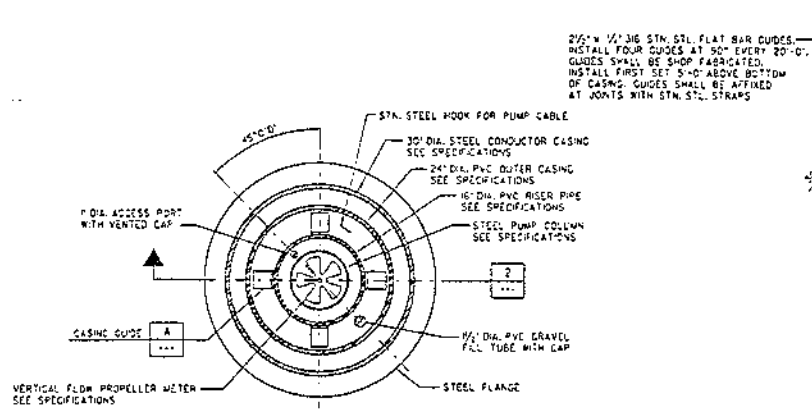
ELEVATION TABLE						
SYSTEM NUMBER	WELL NUMBER	EXIST. GRADE ELEVATION	FINISH GRADE ELEVATION	ELEV. 'A'	ELEV. 'B'	ELEV. 'C'
2	14	17.0 +/-	19.00 26.50	19.50	22.00	13.25
2	15	16.6 +/-	19.00 16.50	19.50	22.00	12.25
	9	17.0 +/-	17.25	17.75	20.25	11.25
SRWRP	15	23.5 +/-	22.79 21.25	23.29	25.75	14.50
SRWRP	16	20.0 +/-	20.25	20.75	23.25	16.50
SRWRP	17	23.0 +/-	23.25	23.75	26.25	18.50
SRWRP	16	22.25 +/-	22.50	23.00	25.50	18.50

- NOTES:
- EQUIPMENT PAD HEIGHT SHALL BE A MINIMUM OF 12" OR GREATER IF REQUIRED TO OBTAIN ELEVATION 'B'.
 - CHAIN LINK FENCE IS NOT REQUIRED FOR WELL NO. 1 AT SYSTEM 9H AND WELL NO. 18 AND 17 AT SOUTHERN REGIONAL WWP.
 - ONLY NEAR CHAIN LINK FENCE SECTION USE ELEVATION 'B' FOR SOUTHERN REGIONAL AND CHAIN LINK FENCE IS REQUIRED ON NORTH SOUTH AND EAST SOUTHS FOR WELL NO. 17. THE NEAR FENCE IS NOT REQUIRED.
 - GRADE AREA AROUND WELL FROM FENCE TO EXISTING GRADE AT 3% SLOPE.

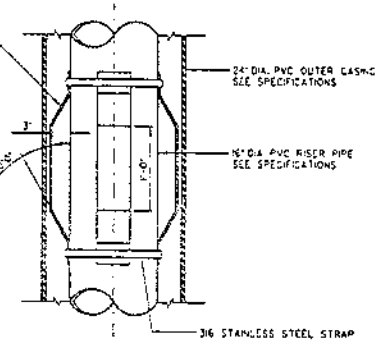
JOB NO. 555-1912 FILE NO. 555-1912 FROM OFFICE OF THE ENGINEER
 REV. DATE: 12-SEP-1992 @ 1612

1. 10/25/97 WWP RECORD DRAWINGS 2. 12/29/98 WWP RECORD DRAWINGS REVISIONS 3. 01/25/99 WWP FOR RECORD REV. DATE: 12/1 DESCRIPTION	SCALES: 1/4" = 1'-0" 1/8" = 1'-0" 1/2" = 1'-0" 3/4" = 1'-0" 1" = 1'-0" 1 1/4" = 1'-0" 1 1/2" = 1'-0" 1 3/4" = 1'-0" 2" = 1'-0" 2 1/4" = 1'-0" 2 1/2" = 1'-0" 2 3/4" = 1'-0" 3" = 1'-0" 3 1/4" = 1'-0" 3 1/2" = 1'-0" 3 3/4" = 1'-0" 4" = 1'-0" 4 1/4" = 1'-0" 4 1/2" = 1'-0" 4 3/4" = 1'-0" 5" = 1'-0" 5 1/4" = 1'-0" 5 1/2" = 1'-0" 5 3/4" = 1'-0" 6" = 1'-0" 6 1/4" = 1'-0" 6 1/2" = 1'-0" 6 3/4" = 1'-0" 7" = 1'-0" 7 1/4" = 1'-0" 7 1/2" = 1'-0" 7 3/4" = 1'-0" 8" = 1'-0" 8 1/4" = 1'-0" 8 1/2" = 1'-0" 8 3/4" = 1'-0" 9" = 1'-0" 9 1/4" = 1'-0" 9 1/2" = 1'-0" 9 3/4" = 1'-0" 10" = 1'-0" 10 1/4" = 1'-0" 10 1/2" = 1'-0" 10 3/4" = 1'-0" 11" = 1'-0" 11 1/4" = 1'-0" 11 1/2" = 1'-0" 11 3/4" = 1'-0" 12" = 1'-0" 12 1/4" = 1'-0" 12 1/2" = 1'-0" 12 3/4" = 1'-0" 13" = 1'-0" 13 1/4" = 1'-0" 13 1/2" = 1'-0" 13 3/4" = 1'-0" 14" = 1'-0" 14 1/4" = 1'-0" 14 1/2" = 1'-0" 14 3/4" = 1'-0" 15" = 1'-0" 15 1/4" = 1'-0" 15 1/2" = 1'-0" 15 3/4" = 1'-0" 16" = 1'-0" 16 1/4" = 1'-0" 16 1/2" = 1'-0" 16 3/4" = 1'-0" 17" = 1'-0" 17 1/4" = 1'-0" 17 1/2" = 1'-0" 17 3/4" = 1'-0" 18" = 1'-0" 18 1/4" = 1'-0" 18 1/2" = 1'-0" 18 3/4" = 1'-0" 19" = 1'-0" 19 1/4" = 1'-0" 19 1/2" = 1'-0" 19 3/4" = 1'-0" 20" = 1'-0" 20 1/4" = 1'-0" 20 1/2" = 1'-0" 20 3/4" = 1'-0" 21" = 1'-0" 21 1/4" = 1'-0" 21 1/2" = 1'-0" 21 3/4" = 1'-0" 22" = 1'-0" 22 1/4" = 1'-0" 22 1/2" = 1'-0" 22 3/4" = 1'-0" 23" = 1'-0" 23 1/4" = 1'-0" 23 1/2" = 1'-0" 23 3/4" = 1'-0" 24" = 1'-0" 24 1/4" = 1'-0" 24 1/2" = 1'-0" 24 3/4" = 1'-0" 25" = 1'-0" 25 1/4" = 1'-0" 25 1/2" = 1'-0" 25 3/4" = 1'-0" 26" = 1'-0" 26 1/4" = 1'-0" 26 1/2" = 1'-0" 26 3/4" = 1'-0" 27" = 1'-0" 27 1/4" = 1'-0" 27 1/2" = 1'-0" 27 3/4" = 1'-0" 28" = 1'-0" 28 1/4" = 1'-0" 28 1/2" = 1'-0" 28 3/4" = 1'-0" 29" = 1'-0" 29 1/4" = 1'-0" 29 1/2" = 1'-0" 29 3/4" = 1'-0" 30" = 1'-0" 30 1/4" = 1'-0" 30 1/2" = 1'-0" 30 3/4" = 1'-0" 31" = 1'-0" 31 1/4" = 1'-0" 31 1/2" = 1'-0" 31 3/4" = 1'-0" 32" = 1'-0" 32 1/4" = 1'-0" 32 1/2" = 1'-0" 32 3/4" = 1'-0" 33" = 1'-0" 33 1/4" = 1'-0" 33 1/2" = 1'-0" 33 3/4" = 1'-0" 34" = 1'-0" 34 1/4" = 1'-0" 34 1/2" = 1'-0" 34 3/4" = 1'-0" 35" = 1'-0" 35 1/4" = 1'-0" 35 1/2" = 1'-0" 35 3/4" = 1'-0" 36" = 1'-0" 36 1/4" = 1'-0" 36 1/2" = 1'-0" 36 3/4" = 1'-0" 37" = 1'-0" 37 1/4" = 1'-0" 37 1/2" = 1'-0" 37 3/4" = 1'-0" 38" = 1'-0" 38 1/4" = 1'-0" 38 1/2" = 1'-0" 38 3/4" = 1'-0" 39" = 1'-0" 39 1/4" = 1'-0" 39 1/2" = 1'-0" 39 3/4" = 1'-0" 40" = 1'-0" 40 1/4" = 1'-0" 40 1/2" = 1'-0" 40 3/4" = 1'-0" 41" = 1'-0" 41 1/4" = 1'-0" 41 1/2" = 1'-0" 41 3/4" = 1'-0" 42" = 1'-0" 42 1/4" = 1'-0" 42 1/2" = 1'-0" 42 3/4" = 1'-0" 43" = 1'-0" 43 1/4" = 1'-0" 43 1/2" = 1'-0" 43 3/4" = 1'-0" 44" = 1'-0" 44 1/4" = 1'-0" 44 1/2" = 1'-0" 44 3/4" = 1'-0" 45" = 1'-0" 45 1/4" = 1'-0" 45 1/2" = 1'-0" 45 3/4" = 1'-0" 46" = 1'-0" 46 1/4" = 1'-0" 46 1/2" = 1'-0" 46 3/4" = 1'-0" 47" = 1'-0" 47 1/4" = 1'-0" 47 1/2" = 1'-0" 47 3/4" = 1'-0" 48" = 1'-0" 48 1/4" = 1'-0" 48 1/2" = 1'-0" 48 3/4" = 1'-0" 49" = 1'-0" 49 1/4" = 1'-0" 49 1/2" = 1'-0" 49 3/4" = 1'-0" 50" = 1'-0" 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= 1'-0" 67" = 1'-0" 67 1/4" = 1'-0" 67 1/2" = 1'-0" 67 3/4" = 1'-0" 68" = 1'-0" 68 1/4" = 1'-0" 68 1/2" = 1'-0" 68 3/4" = 1'-0" 69" = 1'-0" 69 1/4" = 1'-0" 69 1/2" = 1'-0" 69 3/4" = 1'-0" 70" = 1'-0" 70 1/4" = 1'-0" 70 1/2" = 1'-0" 70 3/4" = 1'-0" 71" = 1'-0" 71 1/4" = 1'-0" 71 1/2" = 1'-0" 71 3/4" = 1'-0" 72" = 1'-0" 72 1/4" = 1'-0" 72 1/2" = 1'-0" 72 3/4" = 1'-0" 73" = 1'-0" 73 1/4" = 1'-0" 73 1/2" = 1'-0" 73 3/4" = 1'-0" 74" = 1'-0" 74 1/4" = 1'-0" 74 1/2" = 1'-0" 74 3/4" = 1'-0" 75" = 1'-0" 75 1/4" = 1'-0" 75 1/2" = 1'-0" 75 3/4" = 1'-0" 76" = 1'-0" 76 1/4" = 1'-0" 76 1/2" = 1'-0" 76 3/4" = 1'-0" 77" = 1'-0" 77 1/4" = 1'-0" 77 1/2" = 1'-0" 77 3/4" = 1'-0" 78" = 1'-0" 78 1/4" = 1'-0" 78 1/2" = 1'-0" 78 3/4" = 1'-0" 79" = 1'-0" 79 1/4" = 1'-0" 79 1/2" = 1'-0" 79 3/4" = 1'-0" 80" = 1'-0" 80 1/4" = 1'-0" 80 1/2" = 1'-0" 80 3/4" = 1'-0" 81" = 1'-0" 81 1/4" = 1'-0" 81 1/2" = 1'-0" 81 3/4" = 1'-0" 82" = 1'-0" 82 1/4" = 1'-0" 82 1/2" = 1'-0" 82 3/4" = 1'-0" 83" = 1'-0" 83 1/4" = 1'-0" 83 1/2" = 1'-0" 83 3/4" = 1'-0" 84" = 1'-0" 84 1/4" = 1'-0" 84 1/2" = 1'-0" 84 3/4" = 1'-0" 85" = 1'-0" 85 1/4" = 1'-0" 85 1/2" = 1'-0" 85 3/4" = 1'-0" 86" = 1'-0" 86 1/4" = 1'-0" 86 1/2" = 1'-0" 86 3/4" = 1'-0" 87" = 1'-0" 87 1/4" = 1'-0" 87 1/2" = 1'-0" 87 3/4" = 1'-0" 88" = 1'-0" 88 1/4" = 1'-0" 88 1/2" = 1'-0" 88 3/4" = 1'-0" 89" = 1'-0" 89 1/4" = 1'-0" 89 1/2" = 1'-0" 89 3/4" = 1'-0" 90" = 1'-0" 90 1/4" = 1'-0" 90 1/2" = 1'-0" 90 3/4" = 1'-0" 91" = 1'-0" 91 1/4" = 1'-0" 91 1/2" = 1'-0" 91 3/4" = 1'-0" 92" = 1'-0" 92 1/4" = 1'-0" 92 1/2" = 1'-0" 92 3/4" = 1'-0" 93" = 1'-0" 93 1/4" = 1'-0" 93 1/2" = 1'-0" 93 3/4" = 1'-0" 94" = 1'-0" 94 1/4" = 1'-0" 94 1/2" = 1'-0" 94 3/4" = 1'-0" 95" = 1'-0" 95 1/4" = 1'-0" 95 1/2" = 1'-0" 95 3/4" = 1'-0" 96" = 1'-0" 96 1/4" = 1'-0" 96 1/2" = 1'-0" 96 3/4" = 1'-0" 97" = 1'-0" 97 1/4" = 1'-0" 97 1/2" = 1'-0" 97 3/4" = 1'-0" 98" = 1'-0" 98 1/4" = 1'-0" 98 1/2" = 1'-0" 98 3/4" = 1'-0" 99" = 1'-0" 99 1/4" = 1'-0" 99 1/2" = 1'-0" 99 3/4" = 1'-0" 100" = 1'-0" 100 1/4" = 1'-0" 100 1/2" = 1'-0" 100 3/4" = 1'-0" 	DESIGNED: M.R. NELSON DRAWN: P.A. LIDE CHECKED: F.E. DURAN	MONTGOMERY WATSON 48290 P.L. NO. 5471	RECORD DRAWING THESE RECORD DRAWINGS HAVE BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE PALM BEACH COUNTY WATER UTILITIES DEPARTMENT. THE ENGINEER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE WORK AND DOES NOT GUARANTEE THE ACCURACY OF THE DRAWINGS. THE USER SHALL BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY BE INCURRED IN THE FIELD. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.	PALM BEACH COUNTY WATER UTILITIES DEPARTMENT WELLFIELD EXPANSION PROJECT AT SYSTEMS 19, 24, 34, 35, 36 & 39 PRODUCTION WELL - PLAN AND SECTIONS	SHEET M-1 OF 1 SHEETS
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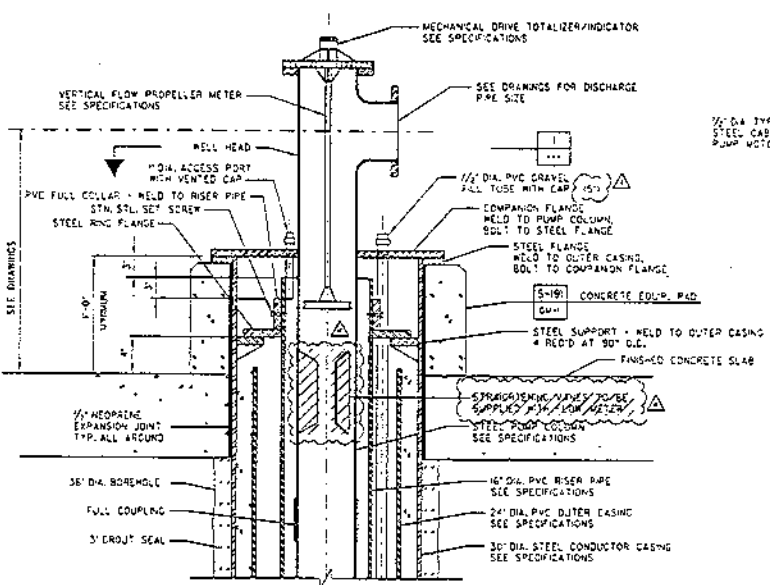
48220 P.E. No. 555-8270 DATE: 08/24/2017 11:00 AM 27-100-1007-08-45



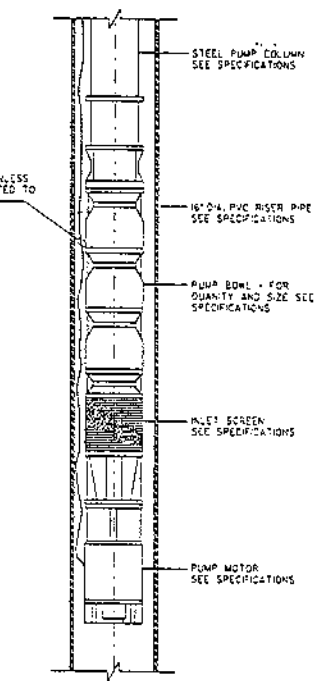
SECTION 1
3/4" x 1'-0"



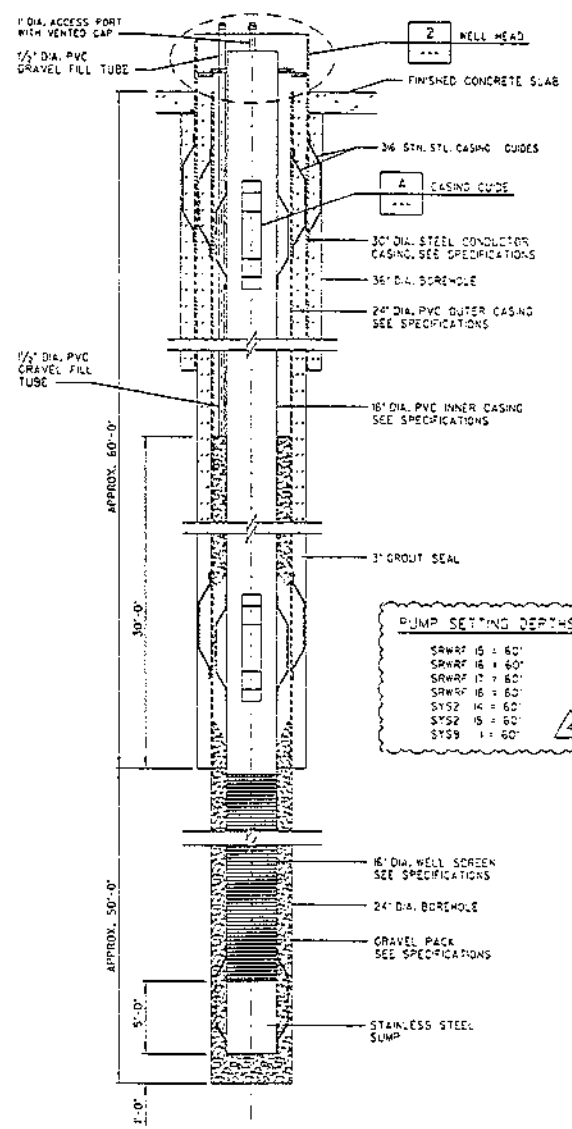
CASING GUIDE DETAIL A
3/4" x 1'-0"



WELL HEAD 2
3/4" x 1'-0"



SUBMERSIBLE PUMP DETAIL B
NOT TO SCALE



WELL CASING - SCREENED COMPLETION DESIGN 2
NOT TO SCALE

PUMP SETTING DEPTHS	
SWRF 15	60'
SWRF 16	60'
SWRF 17	60'
SWRF 18	60'
SWRF 19	60'
SWRF 20	60'
SWRF 21	60'
SWRF 22	60'
SWRF 23	60'

NOTE:
- SEE SPECIFICATIONS SECTION 02632 FOR MORE WELL DETAILS

REV.	DATE	BY	DESCRIPTION
1			DESIGNED
2			CHECKED
3			APPROVED

SCALE: AS NOTED

WARNING: IF THIS DRAWING IS USED FOR CONSTRUCTION, THE USER SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND MATERIALS ARE AS SHOWN ON THIS DRAWING. NOT TO SCALE.

DESIGNED: M.D. ABBOTT
CHECKED: C.E. GILMAN
SUBMITTED: 4/23/20
PROJECT NUMBER: 27-100-1007-08-45

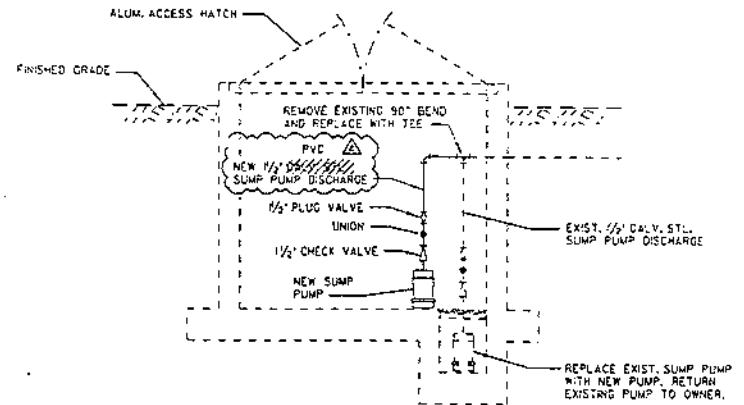
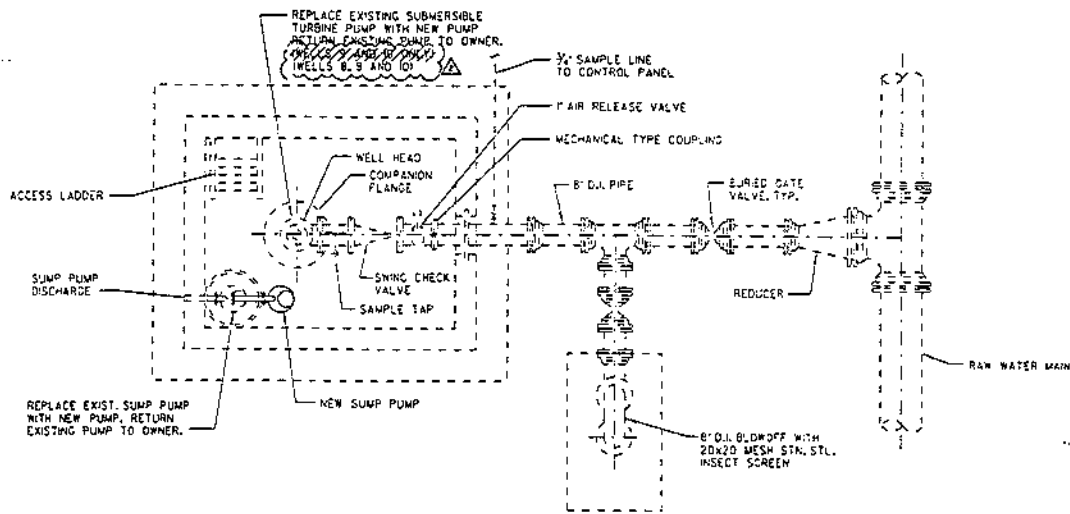


RECORD DRAWING
These record drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be encountered herein or in the field. See original contract drawings for bearing and location.

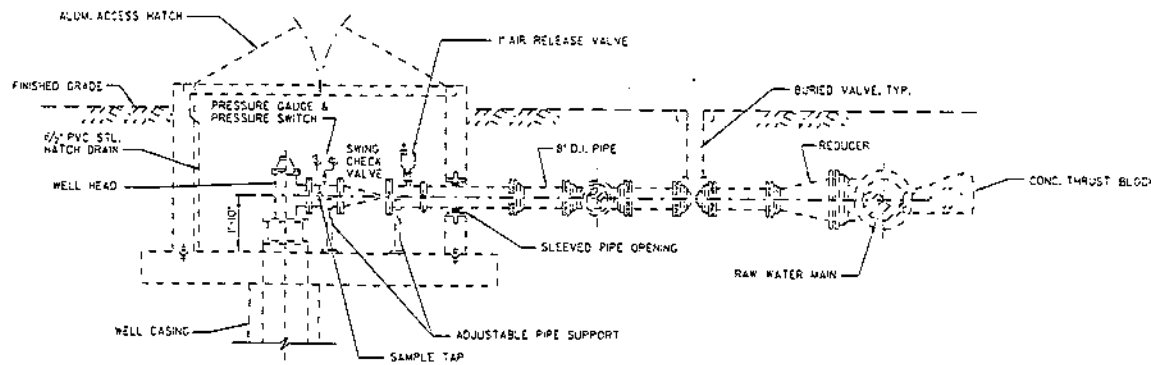
PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
WELLFIELD EXPANSION PROJECT AT SYSTEMS 19, 2A, 3A, 8A & 9A
PRODUCTION WELL DETAILS
SUBMERSIBLE PUMP TYPE

PROJECT NUMBER: 48220
DATE: 08/24/2017
SHEET: M-2 OF 4 SHEETS

JOB NO. 0521020 FILE NO. 0412-1-0000(0000) DATE 05/21/08 05:47
 PROJECT NUMBER 48280 P.L. NO. DATE



NOTE:
 COAT INTERIOR CONCRETE WALLS AND FLOOR WITH 2 COATS OF KYPEX AT A COVERAGE OF 15 LB PER SQ. YD PER COAT. CURE PER MANUFACTURER'S RECOMMENDATIONS.



REV.	DATE	BY	DESCRIPTION
1	07/25/05	MSW	FOR BIDDING
2	08/07/07	MSW	RECORD DRAWING

SCALE:	1/2" = 1'-0"	
WARNING:	0 1/2 1	
DESIGNED:	M.R. NELSON	
DRAWN:	P.A. GEE	
CHECKED:	K.S. BURAN	
REV. DATE	BY	DESCRIPTION

SUBMITTED:	48280	12/14/04
PROJECT NUMBER:	48280	01/05
DATE:	01/05/05	01/05/05

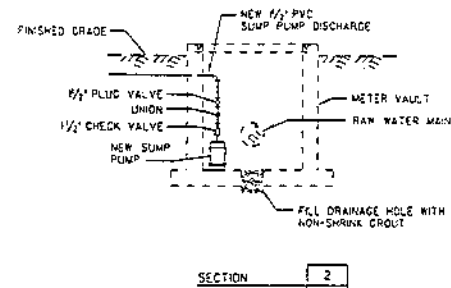
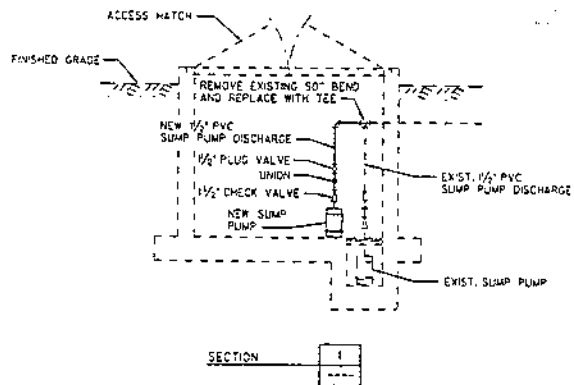
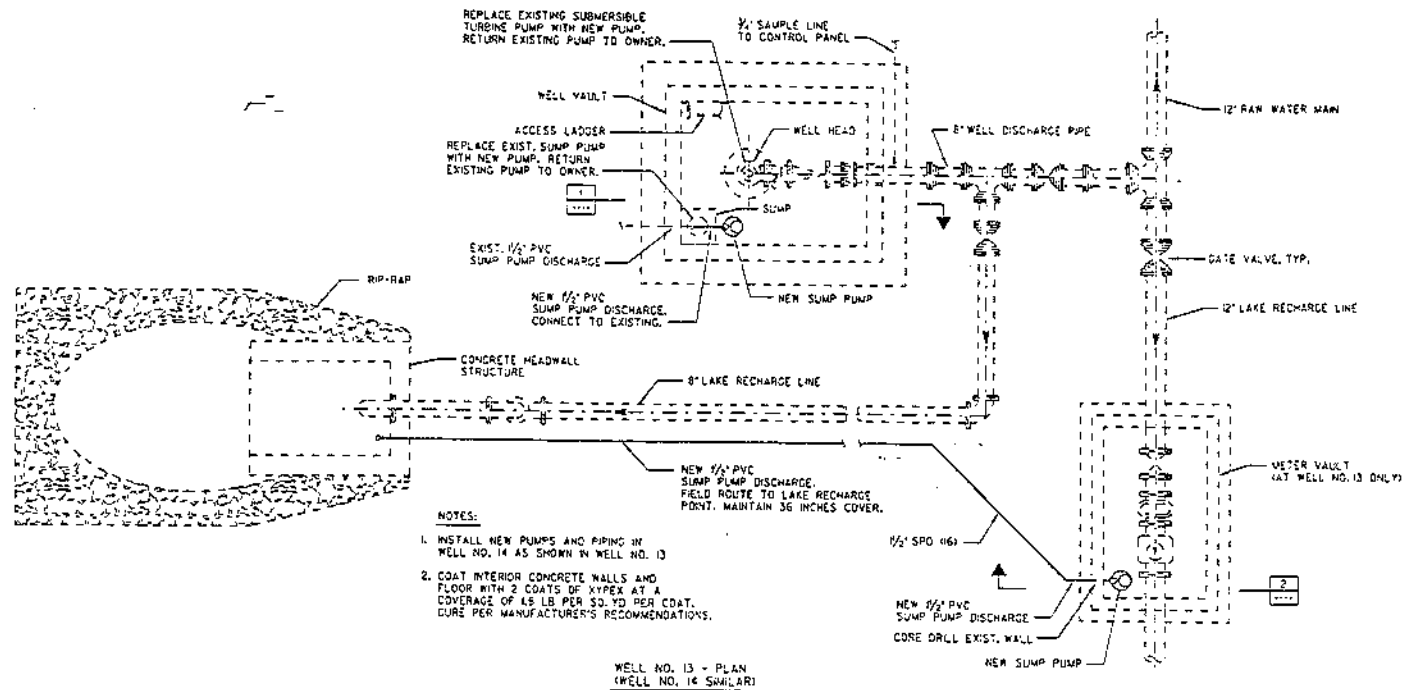
PROJECT NUMBER:	48280
DATE:	01/05/05


MONTGOMERY WATSON
 Lake Worth, Florida

RECORD DRAWING
 These record drawings have been prepared based on information obtained by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. See appropriate drawings for exact locations.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT		SHEET
WELLFIELD EXPANSION PROJECT AT SYSTEMS IN, 2W, 3W, 6W & 9W		M-3
SYSTEM 3W MODIFICATIONS		OF 4 SHEETS
WELLS NO. 8, 9 AND 10 - PLAN AND SECTIONS		

FILE NO. 158-18700 - FILE NO. 158-18700 (REV. 25-JUN-1987) 86/18
 AND NO. 158-18700 - FILE NO. 158-18700 (REV. 25-JUN-1987) 86/18



SCALE	3/8" = 1'-0"		
REVISIONS			
NO.	DATE	BY	DESCRIPTION
1			FOR RECORD
2			FOR RECORD

SCALE	3/8" = 1'-0"		
REVISIONS			
NO.	DATE	BY	DESCRIPTION
1			FOR RECORD
2			FOR RECORD

DESIGNED	M.R. NELSON
DRAWN	P.A. LUD
CHECKED	F.C. OLDMAN
SUBMITTED	
PROJECT NO.	48280
DATE	05/25/88
SCALE	AS SHOWN

MONTGOMERY WATSON
 Lake Worth, Florida

RECORD DRAWING
 These factors or details have been prepared based on information provided by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions when they are incorporated herein as a part of the contract or service for seal and signature.

PROJECT ENGINEER	48280	DATE
PALM BEACH COUNTY WATER UTILITIES DEPARTMENT		
WELLFIELD EXPANSION PROJECT AT SYSTEMS 14, 24, 34, 54 & 54		
POLO TRACE MODIFICATIONS		
WELLS NO. 13 AND 14 - PLAN AND SECTIONS		

P L A N S I N G L E L I N E D I A G R A M S C H E M A T I C D I A G R A M

- GROUND BUS
- EXPOSED CONDUIT
- CONDUIT CONCEALED ABOVE FLOOR
- CONDUIT RUN UNDERGROUND OR IN CONCRETE
- EXPOSED CONDUIT RUN BEHIND OBSTRUCTION
- BARE COPPER GROUND TO GROUND WIRE IN S.4.S. OR UNDERGROUND GROUND GRID. SIZE AS NOTED.
- UNDERGROUND TELEMETRY CONDUIT
- HOWE RUN TO PANEL: "LPH" CIRCUITS #1, 3, 7. CROSS MARKS INDICATE NUMBER OF CONDUCTORS. LONGER MARK INDICATES NEUTRAL OR GROUND CONDUCTORS SHALL BE NO. 12 UNLESS OTHERWISE NOTED. CONDUIT SHALL BE 3/4" UNLESS OTHERWISE NOTED. CONDUIT SIZES NOT IDENTIFIED SHALL BE 3/4" MINIMUM WITH 2 #12 & #12 GROUND.
- TELEPHONE CONDUIT ONLY, UNLESS OTHERWISE NOTED.
- CONDUIT RUN - CHANGE IN ELEVATION
- CONDUIT BENDS TOWARD OBSERVER
- CONDUIT BENDS AWAY FROM OBSERVER
- CONDUIT CAPPED, OR SEALED
- FLEXIBLE LIQUID-TIGHT CONDUIT CONNECTION
- IN-1 INDICATES CONDUIT NUMBER FROM MCC "M" CIRCUIT "L"
- CEILING OR PENDANT INCANDESCENT, MERCURY VAPOR, OR SIMILAR LAMP FIXTURE. "1" INDICATES DIRECT NUMBER. "0" INDICATES FIXTURE CONTROLLED BY SWITCH "0".
- WALL BRACKET INCANDESCENT, MERCURY VAPOR, OR SIMILAR LAMP FIXTURE WITH EXPOSED BACK BOX AND CONDUIT.
- WALL BRACKET FLOOD OR SPOTLIGHT WITH CONCEALED BACK BOX AND CONDUIT.
- POLE MOUNTED FIXTURE
- DISTRIBUTION TYPE AS INDICATED ON PLAN
- FIXTURE TYPE F-1, 2-60 WATT LAMPS
- 1 - NUMBER OF TYPE "F" FIXTURES
- FLUORESCENT LIGHTING FIXTURE, UNSWITCHED (SWITCHED AT LIGHTING PANEL ONLY)
- FLUORESCENT LIGHTING FIXTURE ON EMERGENCY CIRCUIT
- FLUORESCENT LIGHTING FIXTURE
- BATTERY EMERGENCY LIGHT FIXTURE
- SINGLE POLE SWITCH. "0" INDICATES CIRCUIT CONTROLLED
- DOUBLE POLE SWITCH
- THREE-WAY SWITCH
- FOUR-WAY SWITCH
- KEY-OPERATED SWITCH
- SWITCH AND PILOT LIGHT
- MANUAL MOTOR STARTER

- WALL FLOOR**
- 120V SINGLE RECEPTACLE, NEMA CONFIGURATION 5-20
- 120V DUPLEX RECEPTACLE, NEMA CONFIGURATION 5-20
- SINGLE SPECIAL-PURPOSE RECEPTACLE, 208V, 1PHASE, ASTERISK INDICATES NUMBER SUCH AS #AMPERAGE, UNLESS OTHERWISE NOTED.
- WELDING RECEPTACLE, 480V, 3 PHASE, 60A.
- SINGLE SPECIAL PURPOSE RECEPTACLE 480V.A.C. UNLESS OTHERWISE NOTED.
- CLOCK HANGER RECEPTACLE
- LIGHTING PANEL
- POWER PANEL
- MOTOR CONTROL CENTER
- FLOOR TYPE TELEPHONE OUTLET
- SOUND OR PAGING SYSTEM DEVICE, # DENOTES NUMBER TO DIFFERENTIATE BETWEEN DIFFERENT
- PUBLIC TELEPHONE SYSTEM OUTLET
- COMPUTER OUTLET
- EXIT LIGHT, SHOWN WITH TWO ILLUMINATED SIZES. ARROWS INDICATE DIRECTION OF EXIT
- GROUND CONNECTION BOLTED TYPE
- GROUNDING CONNECTION, EXOTHERMIC TYPE
- DISCONNECT SWITCH
- LOCAL COMBINATION STARTER
- CONTACTOR
- MOTOR
- PUSHBUTTON STATION "SS" - START-STOP, "LOS" - LOCKOUT-STOP, "SLOS" - START-LOCKOUT-STOP, "LR" - LOCAL-REMOTE
- RACEWAY BOX "JB" JUNCTION BOX WITH MANHOLE
- "MH" MANHOLE
- "PB" PULLBOX
- "TB" TERMINAL BOX
- JUNCTION BOX OR FITTING
- FIELD INSTRUMENT I.E.
 - "PS" - PRESSURE SWITCH LOW
 - "LS" - LEVEL SWITCH HIGH
 - "SV" - SOLENOID VALVE
 - "HS" - HAND SWITCH
 - "LVS" - LINE VOLTAGE THERMOSTAT
- HEATER
- HORN
- BELL
- DENOTES REFERENCE TO NOTE 1 I.E. - SEE NOTE 1
- GROUND ROD 3/4" X 10'-0" (UNLESS OTHERWISE NOTED)
- MOTOR OPERATED VALVE (STARTER NOT INTEGRAL)
- MOTOR OPERATED VALVE WITH INTEGRAL STARTER

- BUS
- ACROSS-THE-LINE, NON-REVERSING NEMA SIZE 2 MAGNETIC STARTER
- NEMA SIZE 4 MAGNETIC STARTER
- PM - PART WINDING, REV - REVERSING
- RV - REDUCED VOLTAGE, AUTO-TRANSFORMER
- SS - SOLID STATE CONTACTOR, SIZE 1AS NOTED
- WOLDED CASE CIRCUIT BREAKER, 3 POLE UNLESS OTHERWISE NOTED. 50A - TRIP RATING IN AMPERE
- NA - NON-AUTOMATIC
- MCP - MOTOR CIRCUIT PROTECTOR
- DRANDUT BREAKER, SIZE AS NOTED
- EO - DENOTES ELECTRICALLY OPERATED
- MEDIUM OR HIGH VOLTAGE DRANDUT BREAKER
- MEDIUM OR HIGH VOLTAGE STARTER
- LIGHTNING ARRESTOR AND SURGE CAPACITOR
- MOTOR HP NOTED
- TRANSFORMER WITH GROUNDED SECONDARY, KVA SIZE & VOLTAGE RATIO AS NOTED.
- POTENTIAL TRANSFORMER, RATIO AND NUMBER OF PT'S AS NOTED. DRANDUT INDICATED.
- CT CURRENT TRANSFORMER, RATIO AND NUMBER OF CT'S AS NOTED
- LOCAL CONTROL PANEL
- ELECTRICAL ENCLOSURE OUTLINE
- ELECTRICAL MOTOR OPERATED VALVE, WITH INTEGRAL REVERSING STARTER
- UNFUSED DISCONNECT SWITCH, SIZE AS NOTED
- FUSED DISCONNECT SWITCH
- KVAR CAPACITOR, KVAR AS NOTED
- KLOWATT-HOUR METER WITH DEMAND REGISTER
- WATT METER
- AMMETER
- VOLTMETER
- POWER FACTOR METER
- VAR METER
- AMMETER SWITCH
- VOLTMETER SWITCH

- CONTROL RELAY OR COIL
- EXAMPLE: 102 TIME DELAY RELAY NO. 2 (DR) CONTROL RELAY (M STARTER NO. 1) MAIN CONTACTOR COIL
- TIMED CONTACTS - CONTACT ACTION DELAYED AFTER COIL IS :
- EN-ENERGIZED
- NORMALLY OPEN WITH TIME DELAY CLOSING
- NORMALLY CLOSED WITH TIME DELAY OPENING
- DE-ENERGIZED
- NORMALLY OPEN WITH INSTANT CLOSING AND TIME DELAY OPENING
- NORMALLY CLOSED WITH INSTANT OPENING AND TIME DELAY CLOSING
- NORMALLY OPEN CONTACT
- NORMALLY CLOSED CONTACT
- TORQUE SWITCH (SPECIFY WHEN OPEN)
- NORMALLY OPEN LIMIT SWITCH
- NORMALLY CLOSED LIMIT SWITCH
- FLOAT TYPE LIQUID LEVEL SWITCH, CLOSING ON RISING LEVEL
- FLOAT TYPE LIQUID LEVEL SWITCH, OPENING ON RISING LEVEL
- VACUUM OR PRESSURE SWITCH, CLOSING ON RISING PRESSURE
- VACUUM OR PRESSURE SWITCH, OPENING ON RISING PRESSURE
- TEMPERATURE ACTUATED SWITCH, CLOSING ON RISING TEMPERATURE
- TEMPERATURE ACTUATED SWITCH, OPENING ON RISING TEMPERATURE
- FLOW SWITCH (AIR, WATER, ETC.), CLOSING ON FLOW INCREASE
- FLOW SWITCH (AIR, WATER, ETC.), OPENING ON FLOW INCREASE
- NORMALLY OPEN PUSHBUTTON, MOMENTARY CLOSE
- NORMALLY CLOSED PUSHBUTTON, MOMENTARY OPEN
- NOVING MAINTAINED PUSHBUTTON
- TWO-POSITION SELECTOR SWITCH: H-HAND, M-MANUAL, R-REMOTE, L-LOCAL, A-AUTOMATIC, O-OFF
- THREE-POSITION SELECTOR SWITCH (SAME AS ABOVE)
- THREE-POSITION SPRING RETURN-TO-CENTER MOMENTARY CONTACT SWITCH (LATCH-UNLATCH, ON-OFF, ETC.)
- SINGLE POLE TOGGLE SWITCH (ON-OFF, ETC.)
- SOLENOID VALVE
- GROUND CONNECTION
- OVERLOAD RELAY CONTACTS (MAGNETIC)

- MANUAL MOTOR STARTER WITH OVERLOAD PROTECTION
- FUSE
- RESISTOR (FIXED)
- POTENTIOMETER TYPE RESISTOR (CONTINUOUSLY ADJUSTABLE)
- PUSH-TO-TEST INDICATING LIGHT
- SURGE SUPPRESSOR
- ELAPSED TIME METER
- HEATER
- CROSSING OF CONDUCTORS - NOT CONNECTED
- CONNECTION OF CONDUCTORS, FITTING AS REQUIRED
- DISCONNECT SWITCH
- TERMINATION AT PLC I/O RACK, OR ANNUNCIATOR PANEL LOCATION #6 AS INDICATED.
- PANEL MOUNTED DEVICE
- FIELD OR REMOTE MOUNTED DEVICE
- HORN
- BELL

NO. 3	DATE	BY	REVISION
3	8-15-97	MBW	REVISIONS
1	12-12-94	MBW	ISSUE

SCALE:	NONE
WARNING:	0
IF THIS DRAW DOES NOT MEASURE THIS DRAWING IS NOT TO SCALE.	

DESIGNED BY:	J. NEZEL	DRAWN BY:	B. CONTINO
CHECKED BY:	S. BARROD	DATE:	8/15/97

MONTGOMERY WATSON
Lake Worth, Florida

RECORD DRAWING
These RECORD DRAWINGS have been produced based on information furnished by owner. The Engineer has not assumed the accuracy of such information and shall not be responsible for any errors or omissions, whether they be originating here or at a field. See scope contract drawings for this and address.

A B B R E V I A T I O N S

<p>A AMPERE, AUTO, AMMETER AC ALTERNATING CURRENT A/C AIR CONDITIONING AF AMPERE FRAME SIZE OF CKT. BRKRS. AFF ABOVE FINISHED FLOOR AL ALUMINUM AM AMMETER ANN ANNUNCIATOR AMP AMPERES, AMPERADE APPR APPROVED AS AMMETER SWITCH, ADJUSTABLE SPEED AT AMPERE TRIP ATS AUTOMATIC TRANSFER SWITCH AUTO AUTOMATIC AWG AMERICAN WIRE GAUGE</p> <p>BATT BATTERY BKR BREAKER BBL BUBBLER BLDG BUILDING</p> <p>C CONDUIT, CLOSED CAB CABINET CB CIRCUIT BREAKER CKT CIRCUIT CO CONDUIT ONLY COND CONDUIT COMPRT COMPARTMENT COMPRESSOR CP CONTROL PANEL CPT CONTROL POWER TRANSFORMER (BY INDIVIDUAL STARTER CIRCLES) CR CONTROL RELAY (MAGNETICALLY HELD) CT CURRENT TRANSFORMER CU COPPER</p> <p>DC DIRECT CURRENT DISC DISCONNECT DISTR DISTRIBUTION DPDT DOUBLE POLE DOUBLE THROW DWG DRAWING</p> <p>E EMPTY, EMERGENCY ELEV ELEVATION EMERG EMERGENCY ENT ELECTRICAL METALLIC TUBING ENCL ENCLOSURE EP EXPLOSION PROOF EQPT EQUIPMENT ER CONDUCTANCE LEVEL RELAY ETM ELAPSED TIME METER EXH EXHAUST EXIST EXISTING F FREQUENCY FA FIRE ALARM SYSTEM FDR FEEDER FLEX FLEXIBLE FLUOR FLUORESCENT FM FREQUENCY METER FUT FUTURE FVR FULL VOLTAGE REVERSING FNVR FULL VOLTAGE NON-REVERSING FAD FORWARD CONTACTOR COIL</p>	<p>GALV GALVANIZED GEN GENERATOR GRD GROUND HH HAND HOLE HD HIGH INTENSITY DISCHARGE HGH HIGH SPEED CONTACTOR MDA HAND - OFF - AUTOMATIC HP HORSE POWER HPS HIGH PRESSURE SODIUM HTR HEATER HVAC HEATING VENTILATION AIR CONDITIONING HZ HERTZ IMC INTERMEDIATE METAL CONDUIT INCAND INCANDESCENT IND INDICATION (SYSTEM) IND INPUT/OUTPUT INST INSTANTANEOUS (TO CONTACT) INSTR INSTRUMENT ISC SHORT CIRCUIT CURRENT, AMPS INVT INVERT</p> <p>JB JUNCTION BOX J BOX JUNCTION BOX</p> <p>KVA KILO (1000) VOLT AMPS KW KILOWATTS KWH KILOWATT HOUR</p> <p>LC LIGHTING CONTACTOR LCB LOCAL CONTROL BOARD LCP LOCAL CONTROL PANEL LOC LOCAL LOS PUSHBUTTON W/LOCK-OUT-STOP LS LEVEL SWITCH L.T. LYS LIGHT, LIGHTS LTG LIGHTING LOR LOW SPEED CONTACTOR</p> <p>M MOTOR CONTACTOR COIL MA MILLIAMPS MAN MANUAL MAG MAGNETIC MAX MAXIMUM MCC MOTOR CONTROL CENTER MCM MAIN CONTROL BOARD MDM THOUSAND CIRCULAR MILS MD MOTORIZED DAMPER MH HANDLE MIN MINUTES, MINIMUM MLO MAIN LUGS ONLY MOV MOTOR OPERATED VALVE MS MANUAL MOTOR STARTER MT, MTO MOUNT, MOUNTED MTR MOTOR MUX MULTIPLEXING PANEL</p> <p>N NEUTRAL NA NON-AUTOMATIC NC NORMALLY CLOSED NO, NOS NUMBER, NUMBERS, NORMALLY OPEN NP NAMEPLATE NC NOT IN CONTRACT NTS NOT IN THIS SECTION NTS NOT TO SCALE</p>	<p>O OPEN OC ON CENTER CC CENTER TO CENTER OL OVERLOAD RELAY</p> <p>P POLE PA PUBLIC ADDRESS SYSTEM PB PUSHBUTTON PCM PROCESS CONTROL MODULE PF POWER FACTOR PH, ϕ PHASE PNL PANEL PnlBO PANELBOARD POS POSITION POT POTENTIOMETER PR PRIMARY PS PRESSURE SWITCH PT POTENTIAL TRANSFORMER PVC POLYVINYL CHLORIDE PW PART WINDING PWR POWER</p> <p>REC RECEPTACLE RECPPTS RECEPTACLES REC'D REQUIRED REV REVERSE CONTACTOR COIL RGS RIGID GALVANIZED STEEL RUN RUN CONTACTOR COIL RTU REMOTE TERMINAL UNIT RVNR REDUCED VOLTAGE NON-REVERSING</p> <p>SDM SCHEDULE SEC SECONDS, SECONDARY SECT SECTION SEL SW SELECTOR SWITCH SEQ SEQUENCE SH.D SHIELDED SMT SHEET SIG SIGNAL SI, S2 START CONTACTOR COILS SP SPARE SPDT SINGLE POLE DOUBLE THROW SPCS SPECIFICATIONS SP HTR SPACE HEATER SPST SINGLE POLE SINGLE THROW ST, SH SHUNT TRIP STA STATION STD STANDARD STL STEEL STR STARTER SV SOLENOID VALVE SW SWITCH SYS SYSTEM TB TERMINAL BOX TC TIME CLOCK TACH TACHOMETER TEMP TEMPERATURE TERM TERMINAL TH THERMOSTAT TM REPEAT CYCLE TIMER TD TIME DELAY RELAY TS TEMPERATURE SWITCH TYP TYPICAL</p>
--	---	--

D E V I C E L I S T

FUNCTION	DESCRIPTION	FUNCTION	DESCRIPTION
25	GENERATOR SYNCHRONIZER	63X	AUXILIARY RELAY
27	UNDERVOLTAGE RELAY	65	GVERNOR CONTROL
32	DIRECTIONAL POWER RELAY	6.P	OVERFREQUENCY RELAY
43	SELECTOR SWITCH	6UJ	UNDERFREQUENCY RELAY
46	REVERSE-PHASE, OR PHASE-BALANCE CURRENT RELAY	6S	AUTOMATIC SELECTIVE CONTROL RELAY
47	UNDERVOLTAGE PHASE SEQUENCE RELAY	86	LOCK-OUT RELAY
49	TEMPERATURE RELAY FURNISHED WITH TRANSFORMER	66X	AUXILIARY LOCK-OUT RELAY
50G	INSTANTANEOUS OVERCURRENT GROUND RELAY	67	DIFFERENTIAL RELAY
5I	TIME OVERCURRENT RELAY		
5IN	TIME OVERCURRENT GROUND FAULT RELAY		
5IV	TIME OVERCURRENT RELAY WITH VOLTAGE RESTRAINT		
5O/SI	INSTANTANEOUS/TIME OVERCURRENT RELAY		
5ZCS	CIRCUIT BREAKER CONTROL SWITCH, 'TRIP'-'CLOSE' SPRING RETURN TO NORMAL		
5ZT	THE CIRCUIT BREAKER		
63	SUDDEN PRESSURE RELAY FURNISHED WITH TRANSFORMER		

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY EXACT LOCATION OF TERMINAL BOXES AND CONDUIT ENTRANCES OF ALL EQUIPMENT AGAINST SHOP DRAWINGS BEFORE STUCCOING UP CONDUITS.
2. CONDUIT FOR FUTURE EQUIPMENT OR EXTENSION SHALL BE TERMINATED AS SHOWN IN DETAIL OR AS SPECIFIED.
3. CONNECTION BETWEEN RIGID CONDUIT AND MOTOR TERMINAL BOX SHALL BE FLEXIBLE LIQUID-TIGHT CONDUIT.
4. EXPOSED FLEXIBLE CONNECTIONS SHALL BE FLEXIBLE LIQUID-TIGHT CONDUIT WITH APPROVED GROUNDING TYPE FITTINGS AND SHALL NOT EXCEED 30' IN LENGTH FOR 2" SIZE AND LARGER, MAXIMUM OF 18' FOR SIZES 1/2" AND SMALLER.
5. CONDUITS TERMINATING AT SWITCHBOARD, MOTOR CONTROL CENTER, POWER PANELS, CONTROL CABINETS, ETC., SHALL BE EQUIPPED WITH A GROUNDING BUSBING '02' TYPE '0B' AND GROUNDING AS A BANK WITH NO. 6 GROUND WIRE.
6. CONDUITS STUB-UPS SHALL NOT BE MORE THAN 6" FROM CENTER LINES OF TERMINAL BOXES.
7. MOTOR CONTROL CENTERS, SWITCHBOARDS, SWITCHGEAR AND ALL FREE STANDING PANELS SHALL BE SET ON CONCRETE PAD AND LEVELING CHANNELS EMBEDDED IN PAD AS SHOWN IN MCC DETAIL, UNLESS OTHERWISE INDICATED.
8. IN CASE OF INTERFERENCE BETWEEN ELECTRICAL EQUIPMENT SHOWN ON THE DRAWINGS AND OTHER EQUIPMENT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER BY WRITING AND THE ENGINEER SHALL REVIEW THE PROPOSED CHANGES BEFORE THEY ARE MADE.
9. ALL OUTDOOR DEVICES SHALL BE WEATHERPROOF.
10. ALL RECEPTACLES IN OUTDOOR AND ANTICIPATED WET AREAS SHALL BE GROUND FAULT INTERRUPTER RECEPTACLES.
11. ALL RECEPTACLES SHALL BE MOUNTED 42" ABOVE FLOOR SURFACE UNLESS OTHERWISE INDICATED.
12. LOCATION OF PULLBOXES ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE EXACT LOCATION OF PULLBOXES WITH MECHANICAL PIPING AND SHALL BE AWAY FROM FLOW LINES. ANY FIELD ADJUSTMENTS SHALL BE AT NO ADDITIONAL COST TO THE OWNER.
13. CONTRACTOR SHALL PROVIDE ADDITIONAL PULLBOXES WHERE THEY ARE REQUIRED TO MAKE A WORKABLE INSTALLATION.
14. CIRCUITS OF DIFFERENT SERVICE VOLTAGE SHALL BE INSTALLED IN SEPARATE RACEWAYS, MANHOLES, MANHOLES, PULLBOXES, AND JUNCTION BOXES. THE VOLTAGE AND SERVICE LEVELS ARE:
 - ① HIGH VOLTAGE 24KV
 - ② MEDIUM VOLTAGE 2.4-5 KV
 - ③ LOW VOLTAGE 120-480 V
 - ④ INSTRUMENTATION < 50 VDC
 - ⑤ TELEPHONE/COMMUNICATIONS
15. ALL DEVICES SHOWN IN THE CONTROL DIAGRAMS SHALL BE MOUNTED IN THE MCC UNLESS NOTED OTHERWISE.
16. ALL DEVICES SHOWN IN THE CONTROL DIAGRAMS FOR A PANEL SHALL BE MOUNTED IN THE PANEL UNLESS NOTED OTHERWISE.
17. ONLY NUMBER SHOWN THE NUMBER OF WIRES FOR THE LIGHTING AND RECEPTACLE CIRCUITS. CONTRACTOR SHALL DETERMINE THE NUMBER OF WIRES IN EACH CIRCUIT TO MAKE THE SYSTEM COMPLETE AND OPERABLE.

I/O INSTRUMENT WIRING DIAG.

1. ALL CONDUITS AND WIRES FROM FIELD DEVICES, EQUIPMENTS, AND LOCAL CONTROL PANELS TO TERMINAL CABINETS SHALL BE FURNISHED, INSTALLED AND TERMINATED UNDER DIVISION 16.
2. ALL CONDUITS FROM TERMINAL CABINETS TO REMOTE TELEMETRY UNIT (RTU) SHALL BE FURNISHED AND INSTALLED UNDER DIVISION 16.
3. ALL WIRES FROM TERMINAL CABINETS TO REMOTE TELEMETRY UNIT (RTU) SHALL BE FURNISHED, INSTALLED AND TERMINATED UNDER THIS BID PACKAGE. TERMINATIONS OF WIRES AT RTU SHALL BE UNDER BID PACKAGE 7. TESTING FOR CONTINUITY OF WIRES AND CABLES SHALL BE PERFORMED UNDER BID PACKAGE 7.
4. SEE INSTRUMENTATION DRAWINGS FOR LOCATION AND QUANTITY OF LIGHTING ARRESTERS. SEE DETAIL DRAWINGS FOR CONDUIT AND WIRING DETAILS.

NOTES ON SITE PLAN

1. ALL 480V, 120/240V FEEDER CABLES/CONDUITS SHALL BE ROUTED TO MANHOLES OR POWER PULLBOXES DESIGNATED AS 'MH' AND 'PB'.
2. ALL CONTROL CABLES/CONDUITS SHALL BE ROUTED TO PULLBOXES DESIGNATED AS 'CB'.
3. ALL TELEPHONE, PA SYSTEM, SIGNAL CABLES/CONDUITS SHALL BE ROUTED TO PULLBOXES DESIGNATED AS 'SB'.
4. ALL DATA HI-WAY CABLES/CONDUITS SHALL BE ROUTED TO PULLBOXES DESIGNATED AS 'TB'.

REV. 04/16 27-JUL-1991 16:03

SCALE: 0 1/2" = 1'	WARNING: THIS DRAWING IS NOT TO SCALE
DATE: 07/15/93	DRAWN BY: B. CONTINO
BY: [Signature]	CHECKED BY: B. ARONOFF

DESIGNED BY: J. NETZEL	SUBMITTED: 7/15/93	DATE: 07/15/93
DRAWN BY: B. CONTINO	CHECKED BY: B. ARONOFF	DATE: 07/15/93

MONTGOMERY WATSON

Lake Worth, Florida

RECORD DRAWING

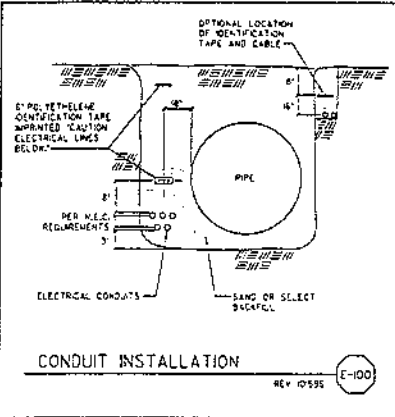
These plans drawn by this firm are not to be used for any other project without the express written consent of the Engineer. The Engineer has not verified the accuracy of any information obtained from other sources. The user shall be responsible for any errors or omissions which may result from the use of these plans. See separate contract documents for full terms and conditions.

PALM BEACH COUNTY UTILITIES DEPARTMENT

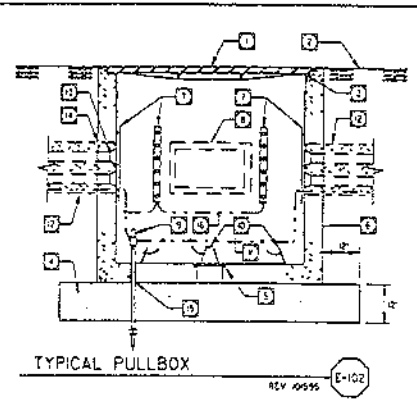
WELLFIELD EXPANSION PROJECT AT SYSTEMS 1B, 2B, 3B, 4B, & 5B

ELECTRICAL ABBREVIATIONS AND GENERAL NOTES

SHEET **GE-2** OF 4 SHEETS



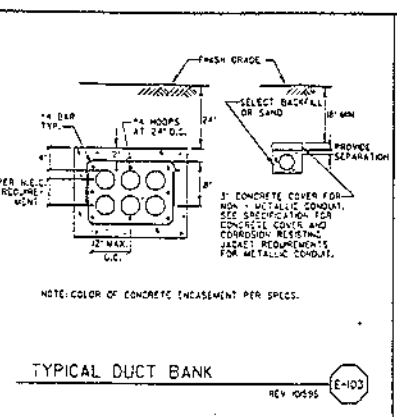
CONDUIT INSTALLATION
REV 10/95 E-100



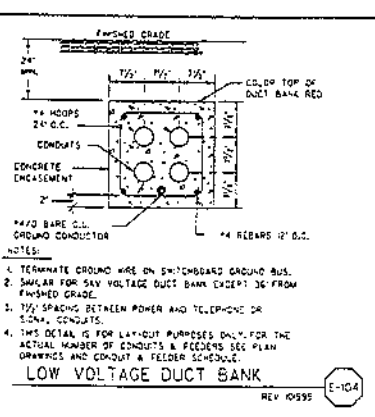
TYPICAL PULLBOX
REV 10/95 E-102

PULLBOX DETAIL NOTES:

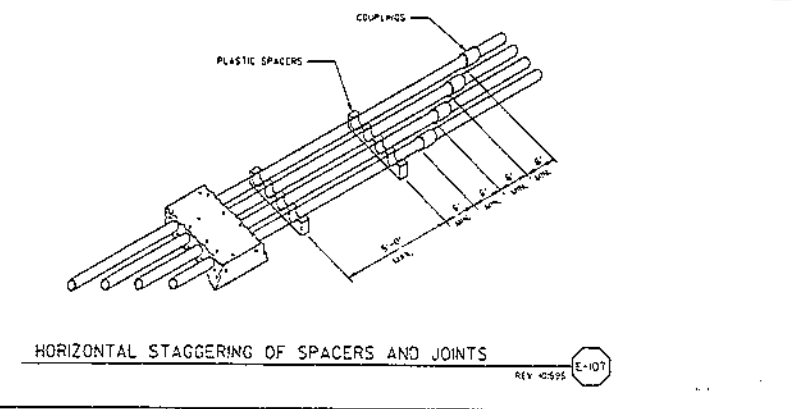
- HEAVY DUTY CAST IRON TRAFFIC RATED RECTANGULAR COVER AS MANUFACTURED BY U.S. FOUNDRY & MANUFACTURING CORP. OR EQUAL. COVER SHALL BE SOLID AND CASTED. WARNING ON COVER WITH RAISED LETTERS SHALL CONFORM SPECIFICATIONS. SIZES OF COVER MAY VARY.
- FINISHED GRADE.
- CAST IRON FRAME.
- COMPACTED RIVER ROCK, MINIMUM 3/4" DIAMETER.
- SLAB WITH 1/2" C.I. RIBBED GRATE AND FRAME, U.S. FOUNDRY CAT. # USF 3600 OR EQUAL.
- PRE-CAST CONCRETE (4000 PSI) AT 28 DAYS ELECTRIC HANDS AS MANUFACTURED BY U.S. PRE-CAST OR EQUAL. SEE MANU. SCHEDULE FOR SIZES.
- HOT DIP GALVANIZED UNDERGROUND CABLE TRAY AND HOOPS AS MANUFACTURED BY MCDERMID OR EQUAL. CAT. # DUTY FOR TRAY, 1000'S FOR SUPPORT AND 100' SERIES FOR RACK INSULATOR.
- CONCRETE ANCHORAGE, ONE PER SIDE.
- COPPER CLAD GROUND ROD 3/8" DIA. BY BLACKBURN OR EQUAL. GROUND ROD CLAMP TYPE CIRC58 BY BURN'D OR EQUAL. SPLICING W/ON INSTALLED ON FLOOR.
- 1/4" O.D. BARE COPPER CONTINUOUS GROUND CONDUCTOR.
- DUST BANK CONCRETE ENCASUREMENT.
- TERMINATE ALL CONDUITS IN MANHOLE WITH END BELLS. TYPICAL.
- DRY PACK ALL OPENINGS. CONDUIT INSTALLATIONS SHALL BE WATER-TIGHT.
- 1/4" BARE COPPER GROUND CONDUCTOR.
- 1/4" BARE COPPER GROUND CONDUCTOR.



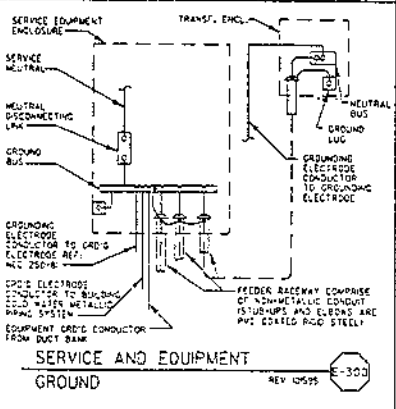
TYPICAL DUCT BANK
REV 10/95 E-103



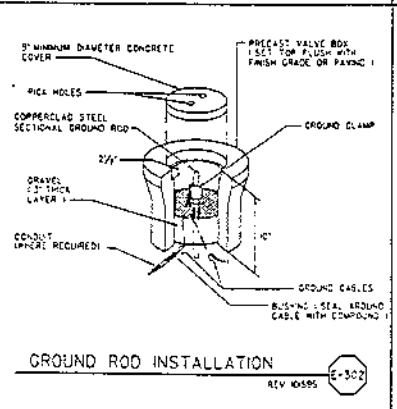
LOW VOLTAGE DUCT BANK
REV 10/95 E-104



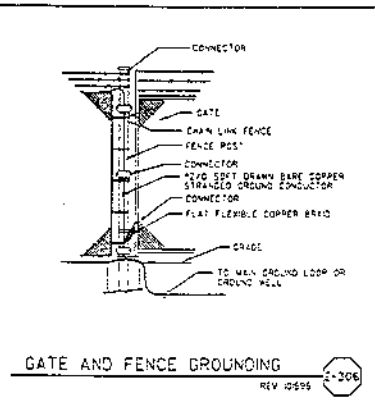
HORIZONTAL STAGGERING OF SPACERS AND JOINTS
REV 10/95 E-107



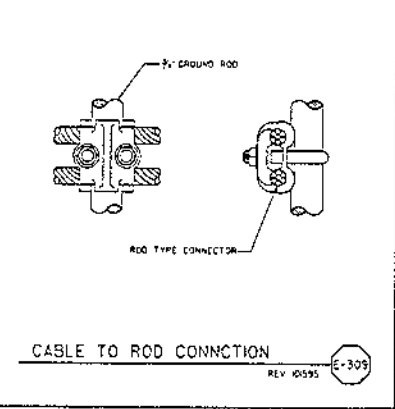
SERVICE AND EQUIPMENT GROUND
REV 10/95 E-300



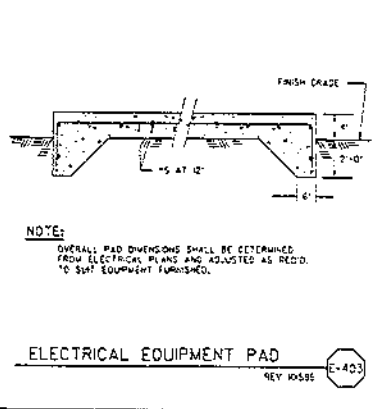
GROUND ROD INSTALLATION
REV 10/95 E-302



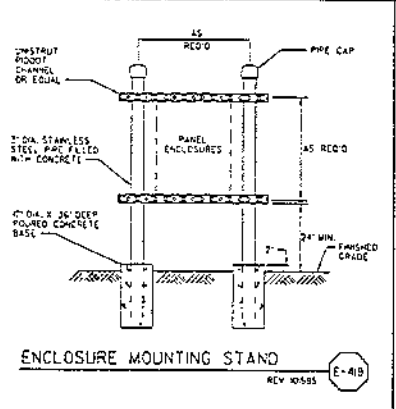
GATE AND FENCE GROUNDING
REV 10/95 E-306



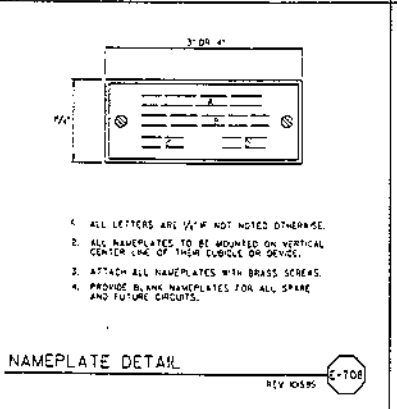
CABLE TO ROD CONNECTION
REV 10/95 E-309



ELECTRICAL EQUIPMENT PAD
REV 10/95 E-403



ENCLOSURE MOUNTING STAND
REV 10/95 E-419



NAMEPLATE DETAIL
REV 10/95 E-708

REV 10/95 E-100, E-102, E-103, E-104, E-107, E-300, E-302, E-306, E-309, E-403, E-419, E-708

REV	DATE	BY	DESCRIPTION
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2	1/22/95	WEN	FOR BIDDING

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NOT TO SCALE

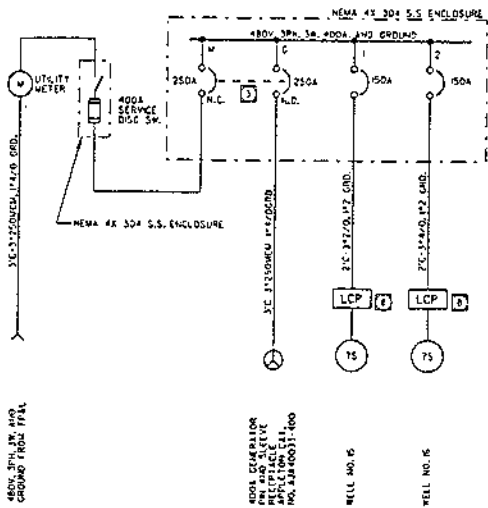
WARNING:
IF THIS BAR DOES NOT MEASURE 1/2\"/>

DESIGNED BY: J. NETZEL
DRAWN BY: B. CONTINO
CHECKED BY: R. BRORCO
SUBMITTED: 12/20/94
DATE: 12/20/94

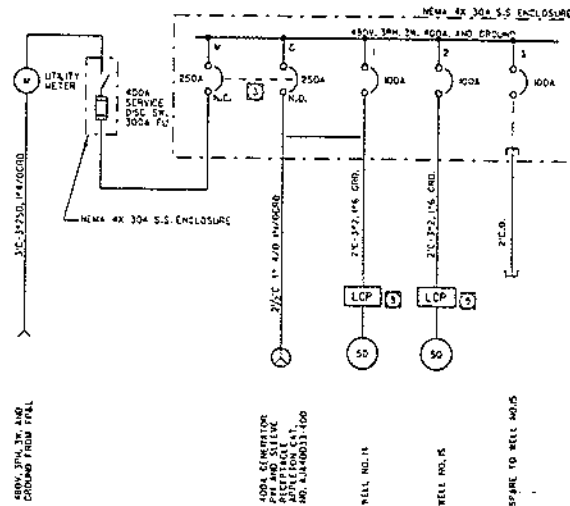


MONTGOMERY WATSON
Late Worth Florida

RECORD DRAWING
These record drawings have been approved based on information provided by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be discovered hereafter. It is advised that original contact drawings be retained and signed.



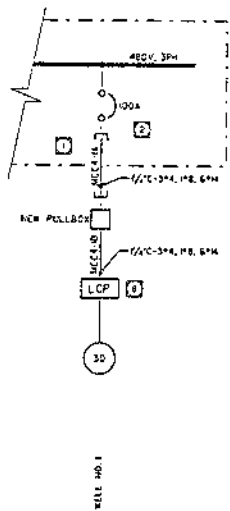
SRWRF WELL NO. 15 AND 16



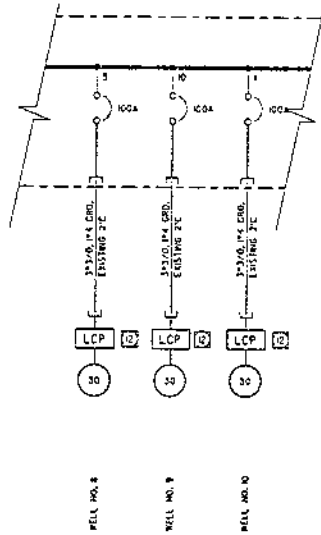
SYSTEM 2W WELLS 14 AND 15

NOTES

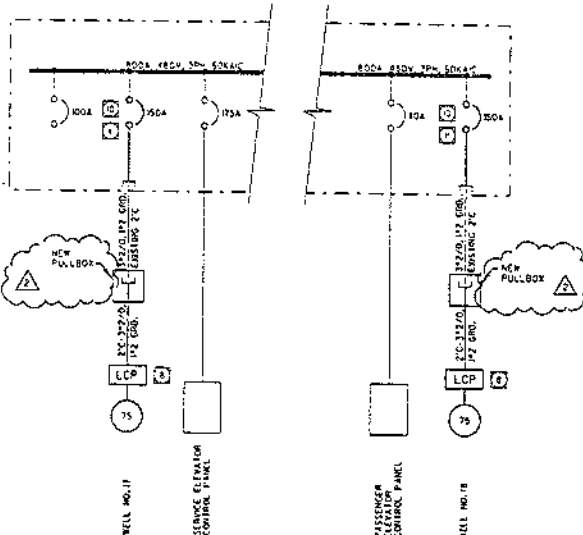
- 1 EXISTING CABLE TO OLD WELL NO. 1 SHALL BE REMOVED FROM THE WELL TO MCC-4 AND BE REPLACED WITH NEW CABLE FROM MCC-4 TO THE NEW PRODUCTION WELL NO. 1
- 2 REMOVE EXISTING STARTER AND PROVIDE AND INSTALL A NEW BREAKER CONNECT TO EXISTING CONTROLS IN MCC-4
- 3 MANUAL TRANSFER SWITCH WITH MECHANICAL INTERLOCK UTILITY AND GENERATOR MAIN CIRCUIT BREAKERS SHALL BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION. MANUAL TRANSFER SWITCH SHALL BE OPERATED WITHOUT EXPOSING THE OPERATOR TO CONTACT WITH LIVE PARTS.
- 4 INSTALL NEW TRANSFORMER ADJACENT TO EXISTING WELL LOCAL CONTROL PANEL.
- 5 INSTALL NEW CIRCUIT BREAKERS IN EXISTING WELL LOCAL CONTROL PANEL. MOUNT BREAKERS SO THAT THEY CAN BE OPERATED THROUGH DOOR IN DOOR PANEL.
- 6 REPLACE EXISTING LIGHTNING DAMAGED MOTOR STARTER WITH A NEW STARTER.
- 7 EXISTING WELL PUMP MOTOR TO BE REPLACED. RECONNECT MOTOR AS SHOWN.
- 8 PROVIDE SIZE 4 STARTER, 100A MAN. AND 100A MCP
- 9 PROVIDE SIZE 3 STARTER, 100A MAN. AND 100A MCP
- 10 PROVIDE NEW BREAKER EXISTING PRETREATMENT BUILDING SWITCHGEAR.
- 11 REMOVE EXISTING 100A BREAKER FROM PRETREATMENT BUILDING SWITCHGEAR.
- 12 RELOCATE LCP TO NEW SITE.



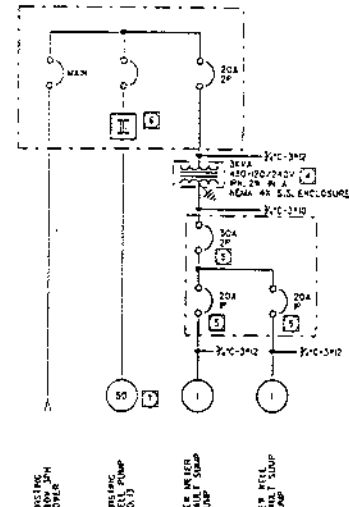
SYSTEM 9 EXISTING MCC-4



SYSTEM 3 EXISTING MCC-6M



SRWRF EXISTING PRETREATMENT SWITCHBOARD



POLO TRACE WELL NO. 13

JOB NO. 153,159, FILE NO. 153,159, REV. DATE 2/11/97, 8656

SCALE:	NONE
WARNING:	0 1/2 1
DESIGNED BY:	J. METZEL
DRAWN BY:	B. CONTINO
CHECKED BY:	B. ARBOR
REV. DATE:	BY DESCRIPTION

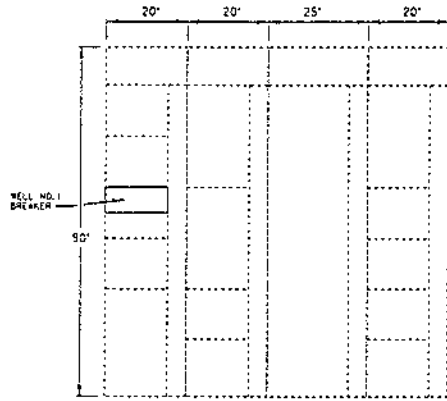
APPROVED:	DATE:	DATE:
PROJECT MANAGER:	4/28/96	0/0/96
DESIGNER:	0/0/96	0/0/96



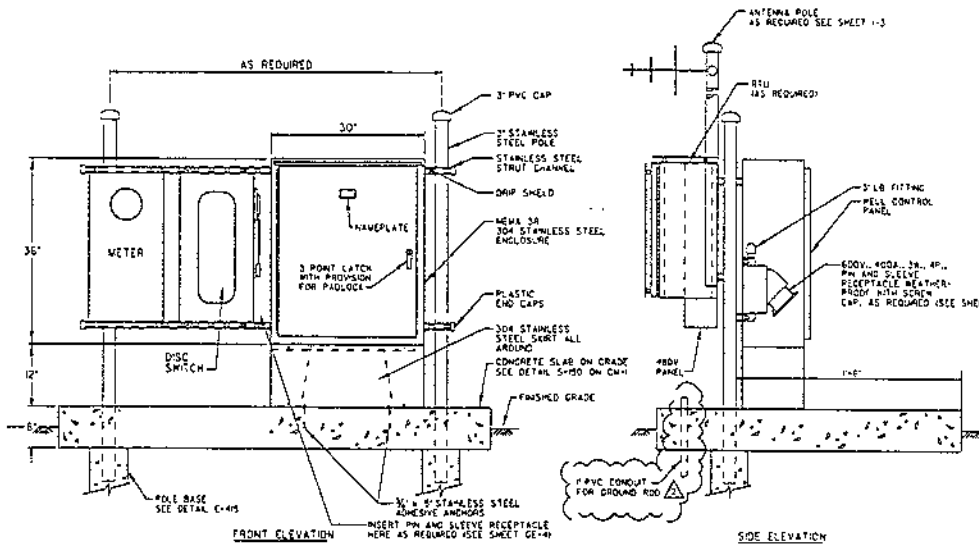
RECORD DRAWING
These record drawings have been prepared based on information furnished by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be experienced during the life of the project. Such omissions shall be the responsibility of the user and not the Engineer.

DESIGNED BY:	J. METZEL	DATE:	4/28/96
DRAWN BY:	B. CONTINO	DATE:	0/0/96
CHECKED BY:	B. ARBOR	DATE:	0/0/96
APPROVED:	DATE:	DATE:	
PROJECT MANAGER:	4/28/96	DESIGNER:	0/0/96
DESIGNER:	0/0/96	DATE:	0/0/96

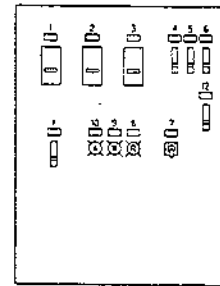
GE-4
SHEET 1 OF 1 SHEETS



EXISTING MCC-4 AT SYSTEM 9W CONTROL BLDG
(50'-0" MODEL '4)



TYPICAL WELL CONTROL PANEL



NAMEPLATE SCHEDULE	
1	MAIN BREAKER
2	MOTOR CIRCUIT
3	480V CONTROL
4	120V PANEL
5	SPARE
6	MOTOR SPACE HEATER
7	HAND-RESET/OFF-ADTO
8	RUNNING
9	PHASE LOSS
10	PRESSURE FAILURE
11	PANEL LIGHT
12	120V CONTROL

JOB NO. 155-1025 - FILE NO. 0097 / 6/23/87 / 12/23/88 - REV. DATE 12/23/87 - 07/12
 FILE NO. 0097 / 6/23/87 / 12/23/88 - REV. DATE 12/23/87 - 07/12

NO.	DATE	BY	DESCRIPTION
1	6/23/87	WIN	RECORD DRAWINGS
2	12/23/88	URN	FOR BIDDING

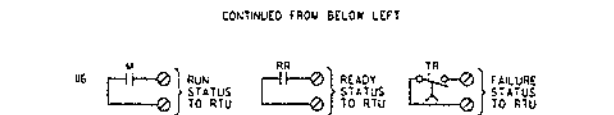
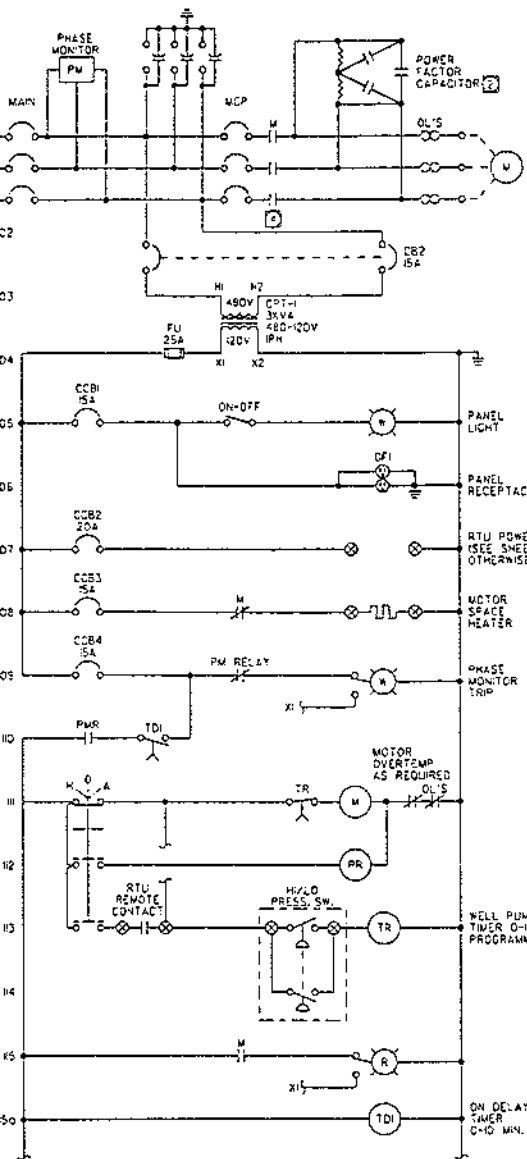
SCALE	NONE
WARNING	0 1/2 1/2 1/4
DESIGNED	J. INFELT
DRAWN	B. CONTINO
CHECKED	R. ARBORO

SUBMITTED	4/23/88	0/15/88
APPROVED	DATE	DATE
APPROVED	DATE	DATE

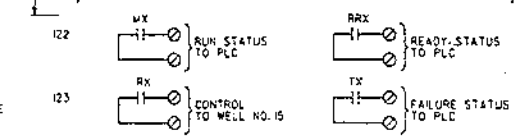
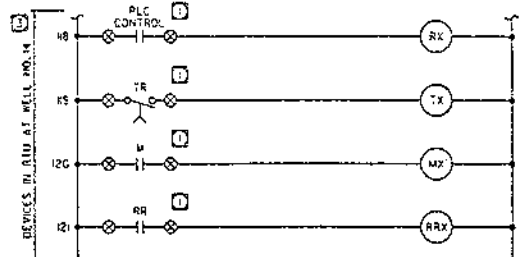
MONTGOMERY WATSON
 Lake Worth, Florida

RECORD DRAWING
 These record drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. See separate contract drawings for details and approvals.

ELECTROTECHNICAL	DATE
PALM BEACH COUNTY UTILITIES DEPARTMENT	
WELLFIELD EXPANSION PROJECT AT SYSTEMS 2W, 3W, 8W, & 9W	
ELEVATIONS	
SHEET	GE-5
OF 5 SHEETS	

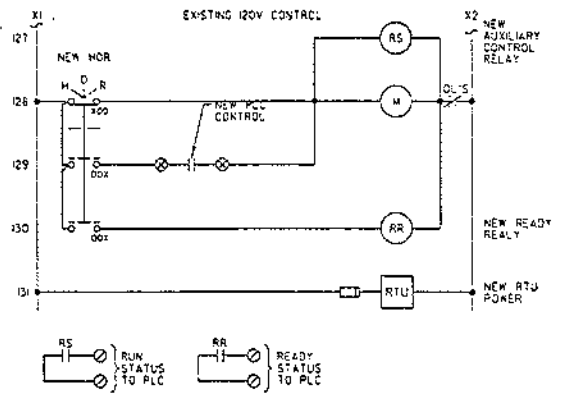


SYSTEM 2 WELL NO. 14 PUMP LOCAL CONTROL PANEL
 TYPICAL OF SYSTEM 2 WELL NO. 15, SRWMP WELLS NO. 16, 17, AND 18, AND SYSTEM 9 WELL NO. 1

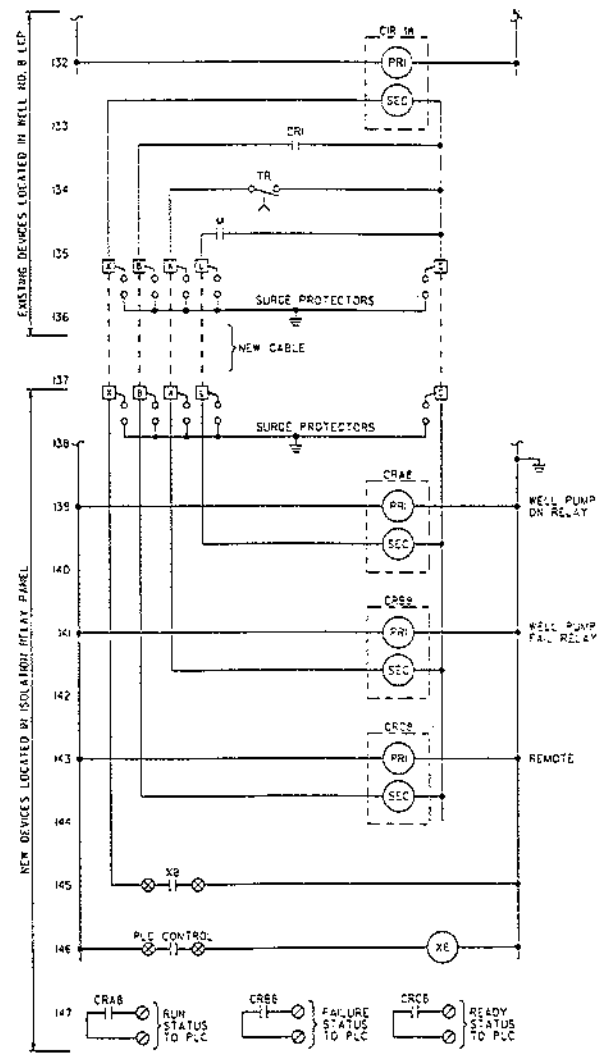


BUFFER RELAYS FOR SYSTEM 2 WELL NO. 15

- NOTES:
 1) RELAY CONTACTS IN SYSTEM 2 WELL NO. 15 LOCAL CONTROL PANEL.
 2) CORRECT MOTOR POWER FACTOR TO 85%. PROVIDE 5KVAR CAPACITORS FOR THE 10HP PUMP MOTORS AND 10KVAR FOR THE 75HP PUMP MOTORS.
 3) PROVIDE IDENTICAL RELAYS IN RTU'S FOR SRWMP WELLS 16 AND 18.
 4) SEE SINGLE LINE DIAGRAM FOR STARTER SIZE AND BREAKER SIZES.



CONTROL MODIFICATIONS TO SYSTEM 3W WELL NO. 3
 TYPICAL FOR WELLS NO. 4, 5, 6, AND 7



REMOTE CONTROL OF RAW WATER WELL NO. 8 FOR SYSTEM 3W
 TYPICAL FOR WELLS NO. 9 AND 10

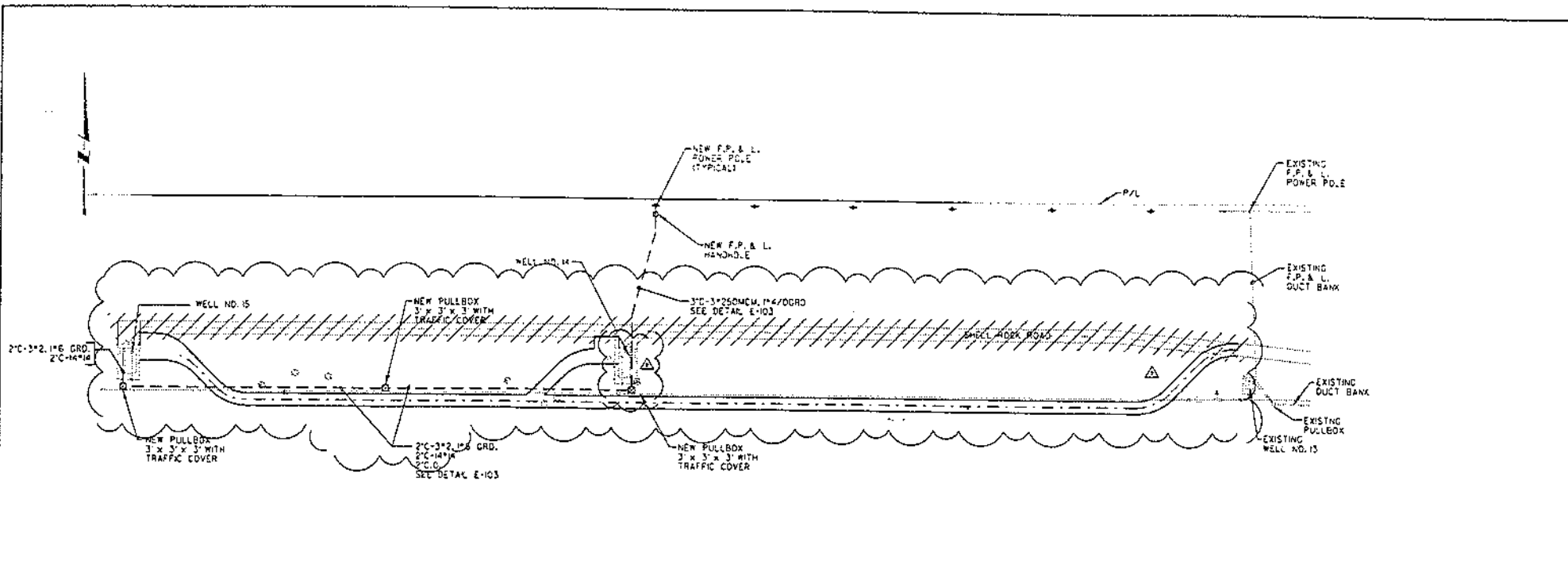
CONTINUED ABOVE RIGHT

1	67537
2	075275
REV	2014

DEVICES LOCATED IN WELL LOCAL CONTROL PANEL

1 2 3 4 5 6 7 8 9 10

Job No. 0551870 Rev. No. 04/17/07 01/06/07 08/05/07 08/05/07
 Rev. Date 7/11/07 01/06/07 08/05/07 08/05/07



SITE PLAN

DATE	BY	DESCRIPTION
2/4/07	JWH	RECORD DRAWINGS FOR BIDDING
11/27/05	JWH	

SCALE:	WARNING:
1" = 40'	0 1/2" = 1'
	IF THE BAR DOES NOT MEASURE THE DRAWING IS NOT TO SCALE.

DESIGNED: J. METZEL	APPROVED:
DRAWN: B. CONTINO	DATE: 07/05/05
CHECKED: R. ARBORE	DATE: 07/05/05

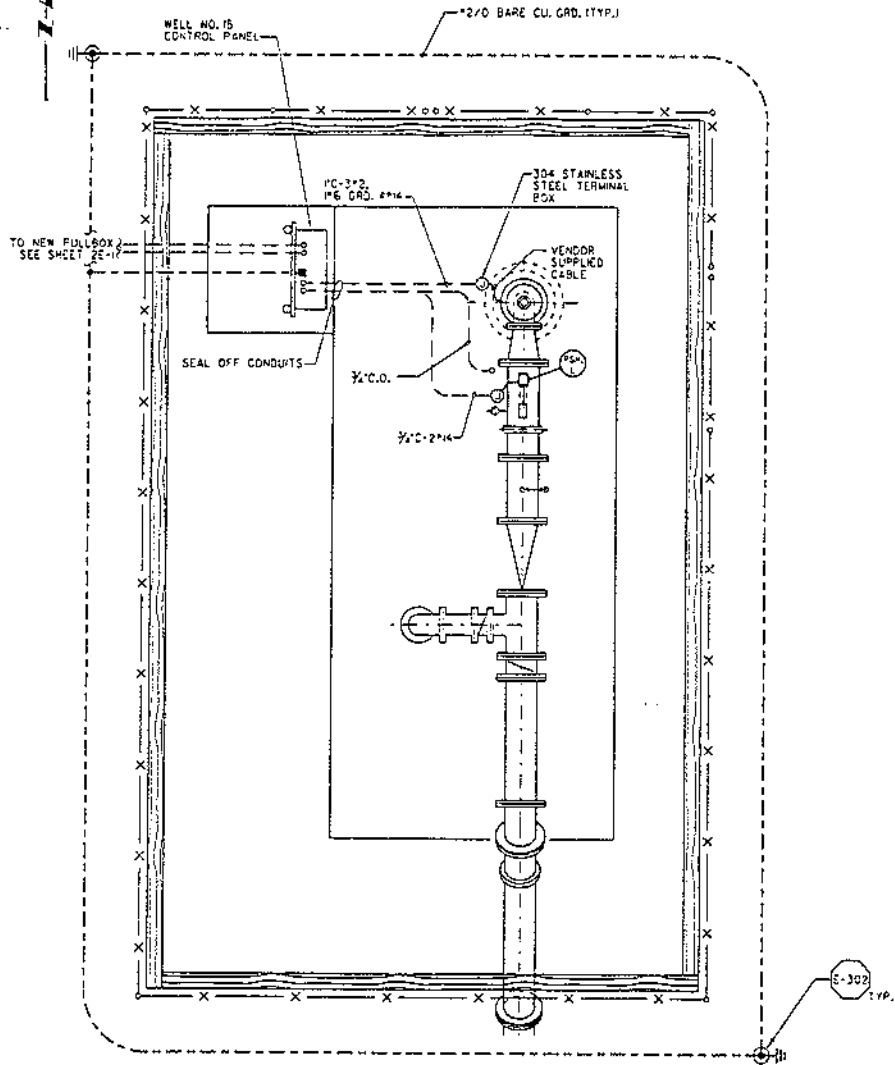
PROJECT NUMBER:	DATE:
	07/05/05


MONTGOMERY WATSON
Less Work. Florida

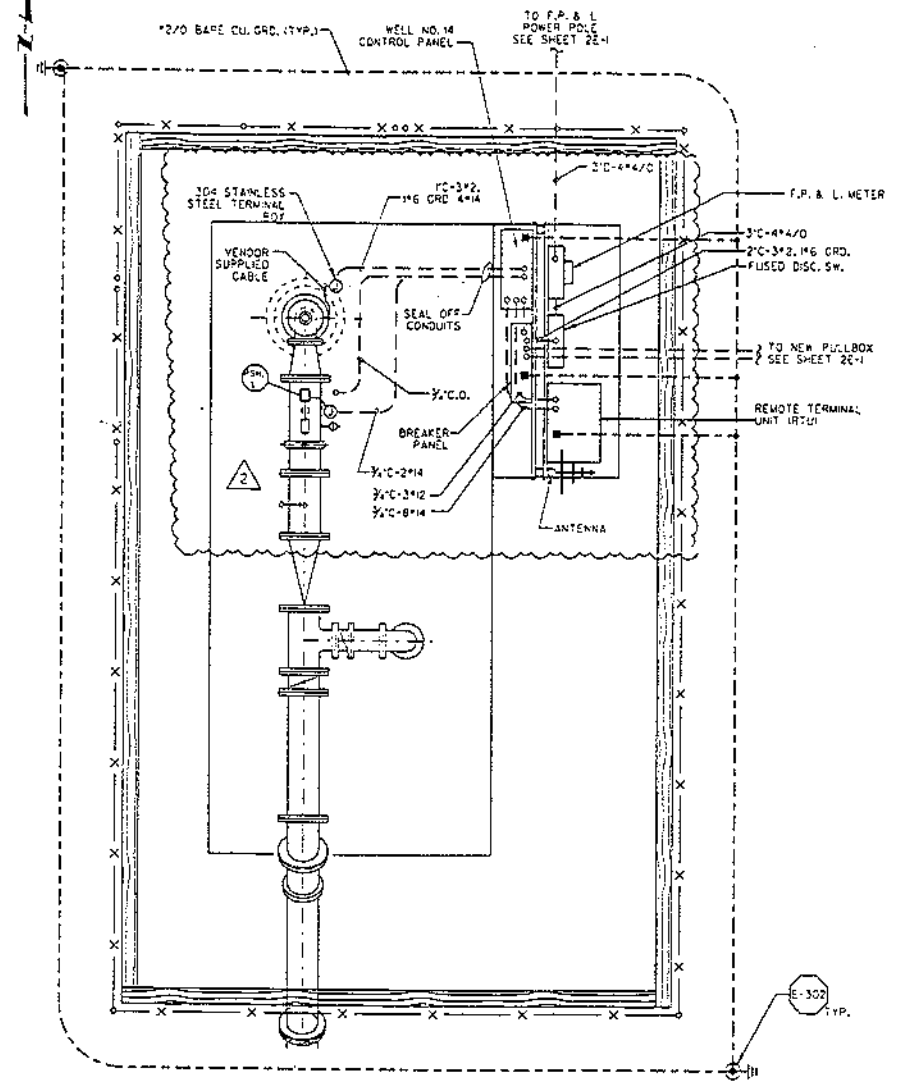
RECORD DRAWING

These record drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of both construction and ground as represented for any errors or omissions which may be incorporated herein as a result. See separate contract document for detailed agreement.

PALM BEACH COUNTY UTILITIES DEPARTMENT	
WELLFIELD EXPANSION PROJECT AT SYSTEMS 1P, 2N, 3M, 8N & 9W	
SYSTEM 2W	
ELECTRICAL SITE PLAN	



SYSTEM 2W WELL NO 15 - PLAN



SYSTEM 2W WELL NO 14 - PLAN

REV.	DATE	BY	DESCRIPTION
1	12/2/95	GH	FOR BIDDING
2	6/23/97	MW	RECORD DRAWING

SCALE: 1/2" = 1'-0"

WARNING
 0 1/4 1
 IF THIS BAR DOES NOT MEASURE THE DRAWING IS NOT TO SCALE.

DESIGNED: J. HETZEL
 DRAWN: B. CONTINO
 CHECKED: R. ABORDO

SUBMITTED: 48740 12/29/95 6:57

PROJECT NUMBER: 0205/95 0512

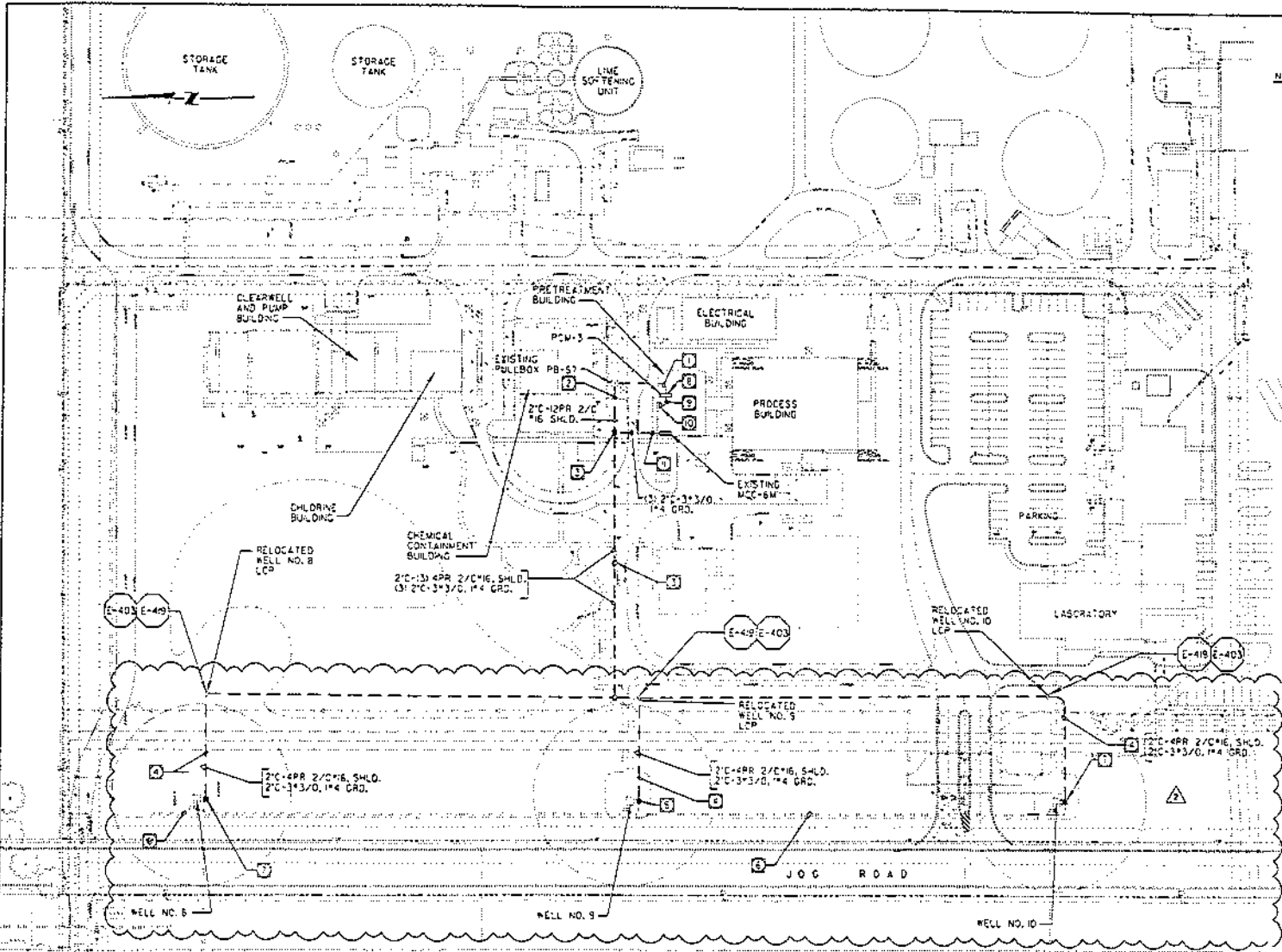
DATE: 0205/95 0512



RECORD DRAWING
 These record drawings have been prepared based on information furnished to us by the Engineer and we warrant the accuracy of such information and shall be held liable for any errors or omissions which may be made hereon. However, in a record, said engineer contract governs the record and signature.

ELECTRICAL ENGINEER PALM BEACH COUNTY UTILITIES DEPARTMENT WELLFIELD EXPANSION PROJECT AT SYSTEMS 1W, 2W, 3W, 4W, & 5W SYSTEM 2W ELECTRICAL WELLFIELD PLANS	SHEET 2E-2 OF 4 SHEETS
---	-------------------------------------

FILE NO. 0521830 TEL. NO. 412-770-0100 FAX: 412-770-0100
 REV. 03/16/79 JAS. HUNZ. 08/93



NOTES:

- 1 PULL NEW 12PR 2/C#16 SHLD. CABLE WITH OVERALL SH-ELD AND JACKET IN EXISTING 2" CONDUIT.
- 2 CONNECT NEW CONDUIT TO EXISTING CONCRETE PULLBOX PB-ST.
- 3 NEW PULLBOX, 4' x 4' x 4' WITH TRAFFIC COVER.
- 4 SEE SYSTEM 3 WELL SITE PLANS FOR CONDUITS BETWEEN WELL AND WELL CONTROL PANEL.
- 5 PULLBOX AT WELL SITE NO. 9; SEE WELL PLANS FOR DETAILS.
- 6 REMOVE EXISTING 12PR #22 GA. CONTROL WIRE FROM EXISTING CONDUIT.
- 7 PULLBOX AT WELL SITE, 2' x 2' x 2'; SEE WELL PLANS FOR DETAILS.
- 8 EXISTING PCM-3; INSTALL IN NEW DISCRETE OUTPUT CARD, ALLEN-BRADLEY 1756-PAAS AND ON DISCRETE INPUT CARD, ALLEN-BRADLEY 1771-ING6, IN EXISTING ALLEN-BRADLEY PLC.
- 9 2" WITH 12PR 2/C#16 SHLD. CABLES, 2R#4 AND 3#2.
- 10 PROVIDE AND INSTALL A NEW ISOLATION RELAY PANEL.
- 11 CONNECT TO EXISTING CONDUIT STUB-OUTS (3 - 2" C.D.) FROM EXISTING MCC-6M.

SITE PLAN

REV.	DATE	BY	DESCRIPTION
1	12/2/93	MMH	FOR BIDDING
2	6/23/97	MMH	RECORD DRAWING

SCALE:	HARING:	DESIGNED:	CHECKED:
1" = 40'	D 1/8" = 1'	J. NETZEL	R. ABONDO
		DRAWN:	
		E. CONTINO	

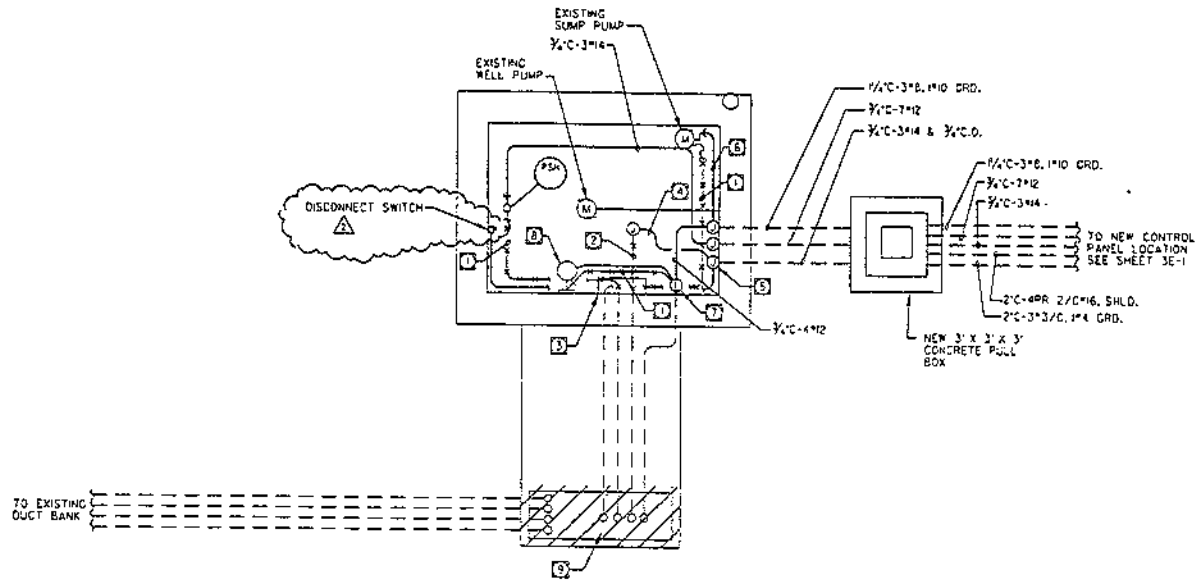
SUPPLIED:	DATE:	BY:
	4/2/00	JMM/ML
MONTGOMERY WATSON		

MONTGOMERY WATSON
Let's Work Florida

RECORD DRAWING
 These record drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be made hereon unless it is shown that original contract drawings for these drawings have been provided for the Engineer's reference.

PALM BEACH COUNTY UTILITIES DEPARTMENT		SHEET
WELLFIELD EXPANSION PROJECT AT SYSTEMS 1A, 2B, 3A, 6M, 8 & 9M		3E-1
SYSTEM 3W		OF 4 SHEETS
ELECTRICAL SITE PLAN		

JOB No. 155-1925 FILE No. 155-1925(1) Rev. Date 12-SEP-1977 BR/SG
 Rev. Date 12-SEP-1977 BR/SG
 Job No. 155-1925 FILE No. 155-1925(1) Rev. Date 12-SEP-1977 BR/SG



TYPICAL WELLSITE PLAN

- NOTES:
- 1 REMOVE THE EXISTING EXPOSED RIGID CONDUIT FROM THE VAULT.
 - 2 REMOVE THE EXISTING EXPOSED RIGID CONDUIT FROM VAULT. PULL WIRES BACK FROM THE LOCAL CONTROL PANEL.
 - 3 EXISTING POTTED SPLICE BOX FOR WELL PUMP POWER CORD AND POWER CONDUCTORS FROM THE LOCAL CONTROL PANEL.
 - 4 INSTALL NEW CONDUIT TO WELL PUMP SPLICE BOX, PULL EXISTING CABLES THROUGH THE NEW CONDUIT TO THE NEW JUNCTION BOX.
 - 5 SPLICE EXISTING POWER CONDUCTORS IN NEW SPLICE BOX. SPLICES SHALL BE WATERPROOFED PER SPECIFICATIONS.
 - 6 3/4\"/>

DATE	BY	DESCRIPTION
12/23/75	WEN	FOR RECORD
3/23/81	WEN	RECORD DRAWING

SCALE: 3/4" = 1'-0"

WARNING: THIS BAR DOES NOT MEASURE IF THE DRAWING IS NOT TO SCALE.

DESIGNED: J. MEITZEL
 DRAWN: B. CONTINO
 CHECKED: B. BRONDO

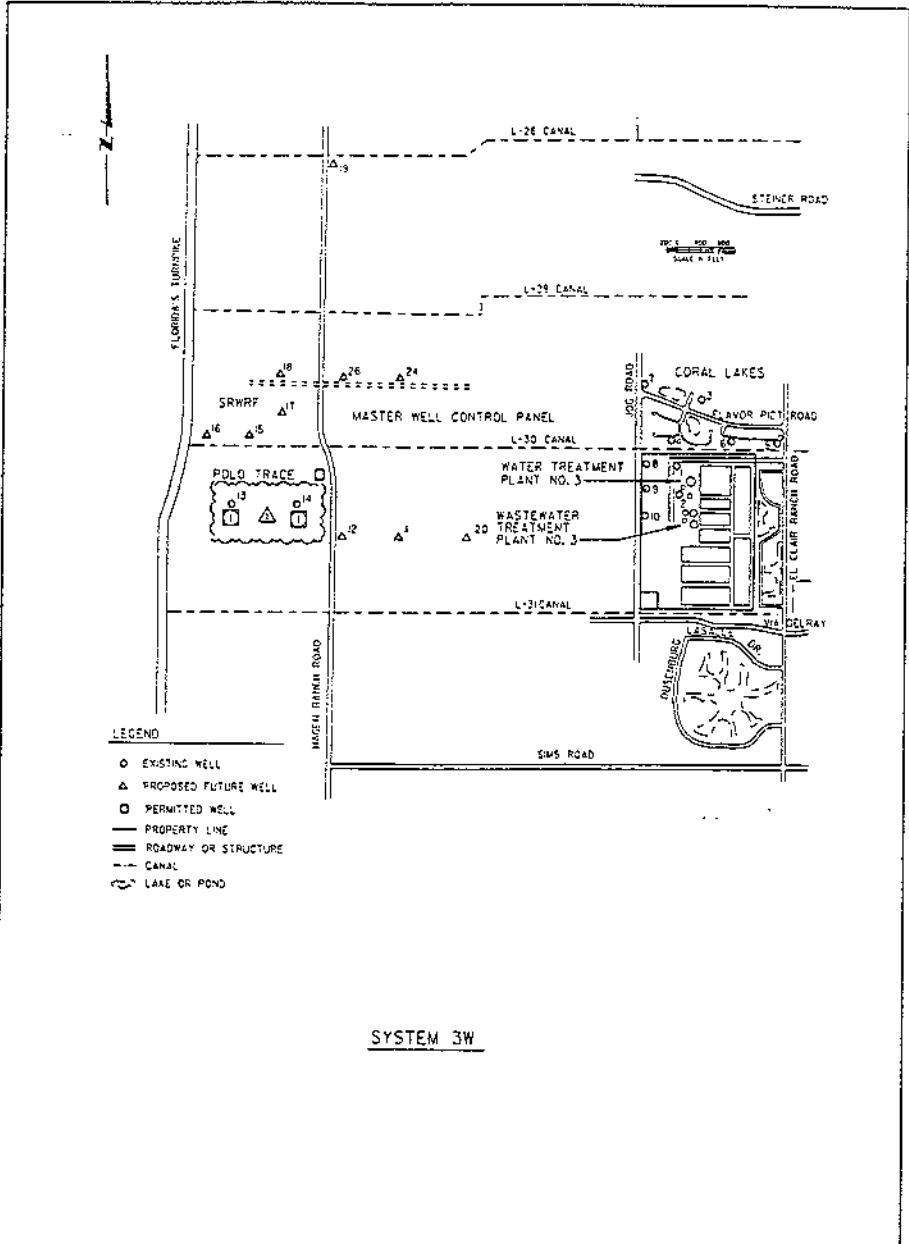
SUBMITTED: [] 1978
 APPROVED: []
 CONTRACT NO. 155-1925
 DATE: 12/23/75

MONTGOMERY WATSON
 Like Worth, Florida

RECORD DRAWING
 These record drawings have been prepared based on information furnished by owner. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. See organization drawings for details and approvals.

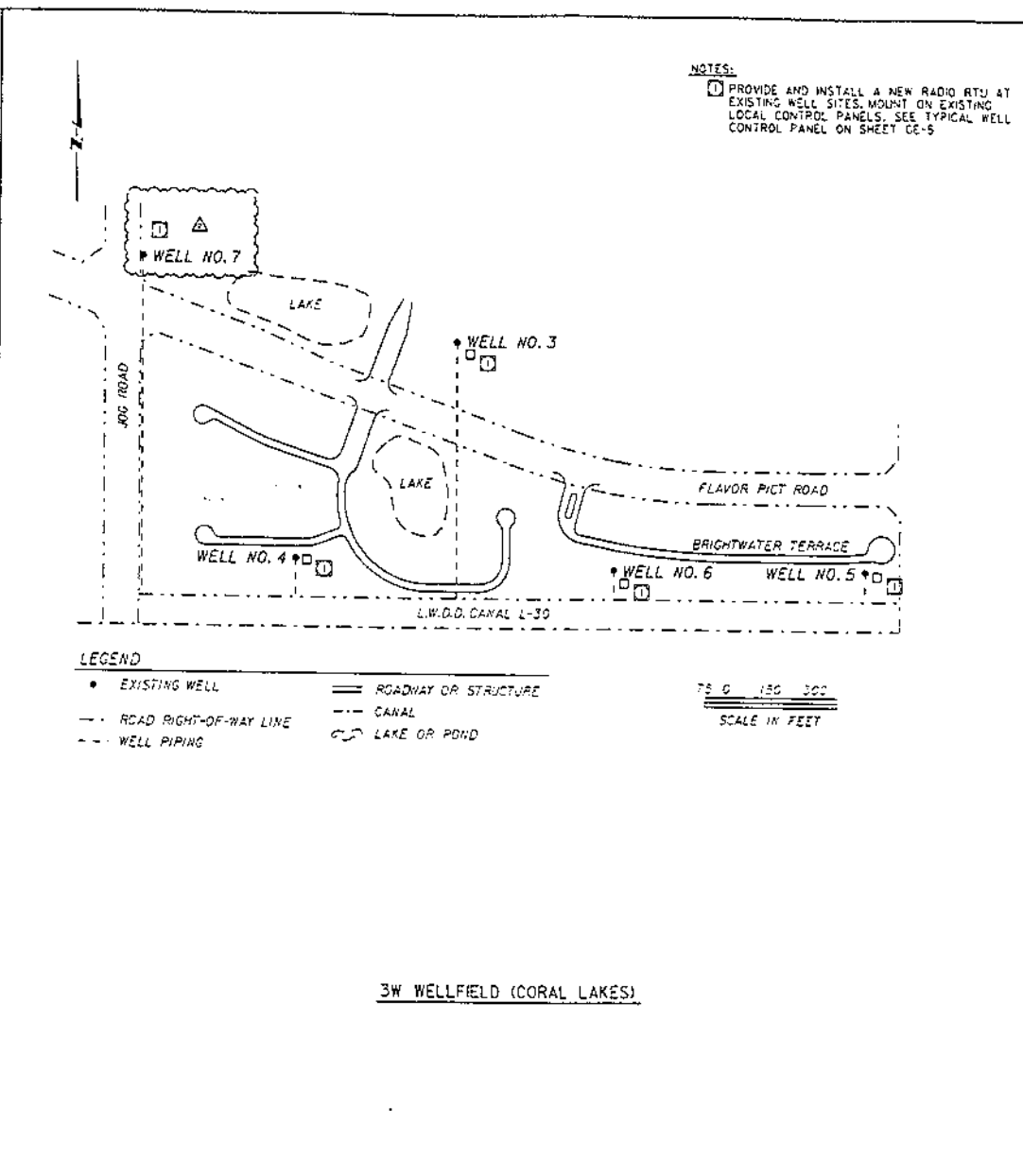
ELECTRICAL ENGINEER		F. E. NO.	DATE
PALM BEACH COUNTY UTILITIES DEPARTMENT			
WELLFIELD EXPANSION PROJECT AT SYSTEMS 1W, 2W, 3W, 6W, & 3W			
SYSTEM 3W			
ELECTRICAL WELLFIELD PLAN			
			SHEET 3E-2 OF 4 SHEETS

JOB No. 05510201... FILE No. 05510201... Rev. Date 12/26/95... 0011



- LEGEND**
- EXISTING WELL
 - △ PROPOSED FUTURE WELL
 - PERMITTED WELL
 - PROPERTY LINE
 - == ROADWAY OR STRUCTURE
 - - - CANAL
 - LAKE OR POND

SYSTEM 3W



- LEGEND**
- EXISTING WELL
 - == ROADWAY OR STRUCTURE
 - - - CANAL
 - LAKE OR POND
 - - - ROAD RIGHT-OF-WAY LINE
 - - - WELL PIPING

NOTES:
 ① PROVIDE AND INSTALL A NEW RADIO RTU AT EXISTING WELL SITES. MOUNT ON EXISTING LOCAL CONTROL PANELS. SEE TYPICAL WELL CONTROL PANEL ON SHEET CE-5

75 0 150 300
 SCALE IN FEET

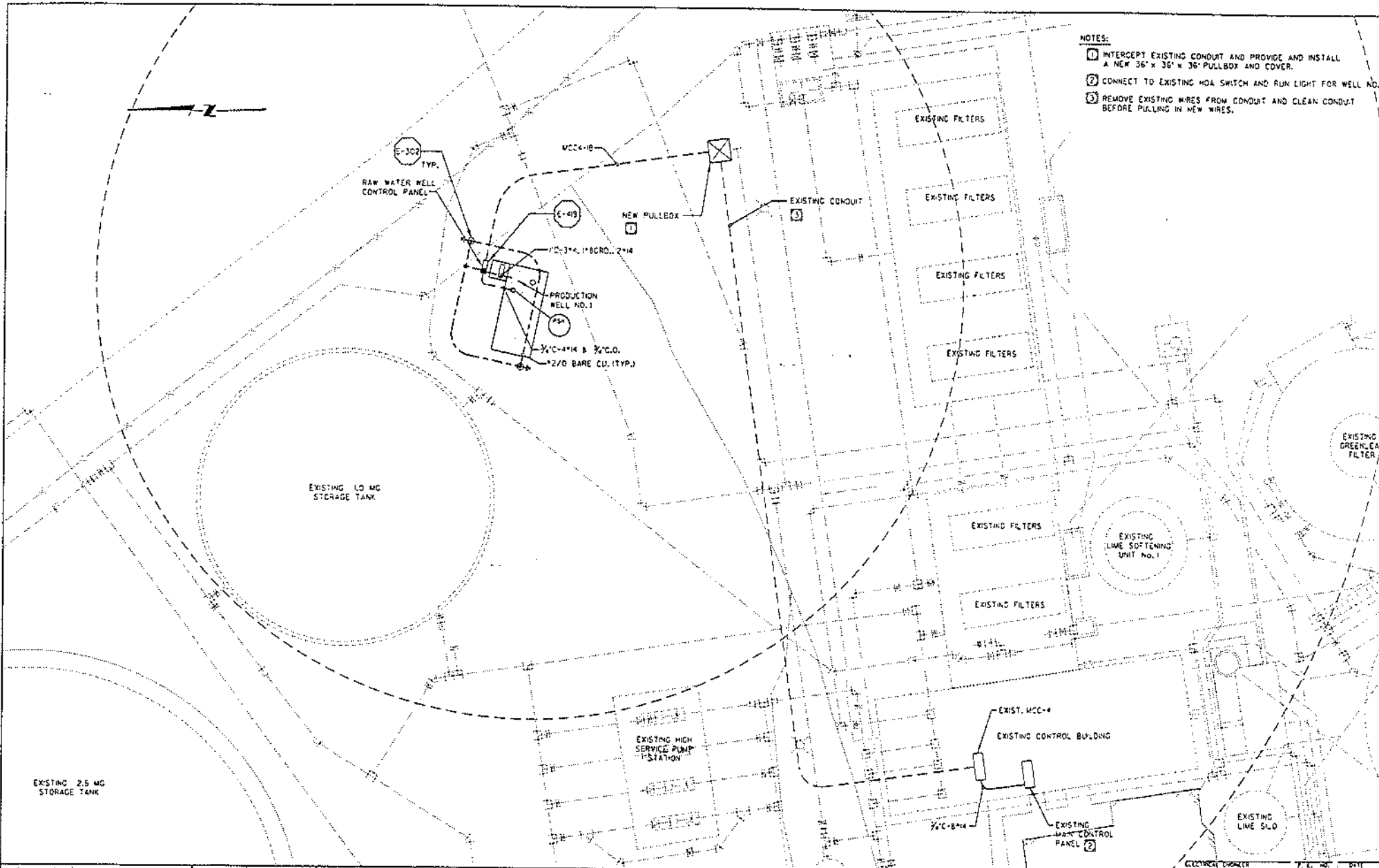
3W WELLFIELD (CORAL LAKES)

DESIGNED: J. KRIZEL DRAWN: B. COMTRIO CHECKED: R. BARRODO		SUBMITTED: _____ PREPARED BY: _____ MONTGOMERY WATSON		ELECTRICAL ENGINEER: _____ P. E. NO.: _____ DATE: _____	
SCALES: AS NOTED WARNING: THIS BAR DOES NOT MEASURE IF THIS DRAWING IS NOT TO SCALE.		PROJECT NO.: 44280 DATE: 02/05/95		PALM BEACH COUNTY UTILITIES DEPARTMENT WELLFIELD EXPANSION PROJECT AT SYSTEMS JW, 2W, SW, BN, & 3W SYSTEM 3W WELLFIELD SITE PLAN	
REV: DATE BY DESCRIPTION		1 12/26/95 MRN FOR RECORD		SHEET: 3E-3 OF 4 SHEETS	



RECORD DRAWING
 These record drawings have been prepared based on information provided to us by the City of Palm Beach. We warrant the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein in a record. The original contract documents for record information.

Job No. 051800 - P.L.C. No. 2007/001/010/02/03/04/05/06/07/08/09/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31/32/33/34/35/36/37/38/39/40/41/42/43/44/45/46/47/48/49/50/51/52/53/54/55/56/57/58/59/60/61/62/63/64/65/66/67/68/69/70/71/72/73/74/75/76/77/78/79/80/81/82/83/84/85/86/87/88/89/90/91/92/93/94/95/96/97/98/99/100
 Rev. Date 25 JUN 1973 0059



- NOTES:**
- 1 INTERCEPT EXISTING CONDUIT AND PROVIDE AND INSTALL A NEW 36" x 36" x 36" PULLBOX AND COVER.
 - 2 CONNECT TO EXISTING MOA SWITCH AND RUN LIGHT FOR WELL NO. 1
 - 3 REMOVE EXISTING WIRES FROM CONDUIT AND CLEAN CONDUIT BEFORE PULLING IN NEW WIRES.

DATE	BY	DESCRIPTION
2/14/76	WBN	RECORD DRAWING FOR BIDDING
11/27/75	WBN	WBN

SCALE: 1" = 40'
 WARNING: IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DESIGNED: J. HEISEL
 DRAWN: B. CONTINO
 CHECKED: R. ABRON

SUBMITTED: 4/20/75
 PROJECT NUMBER: 051800
 DATE: 2/23/75

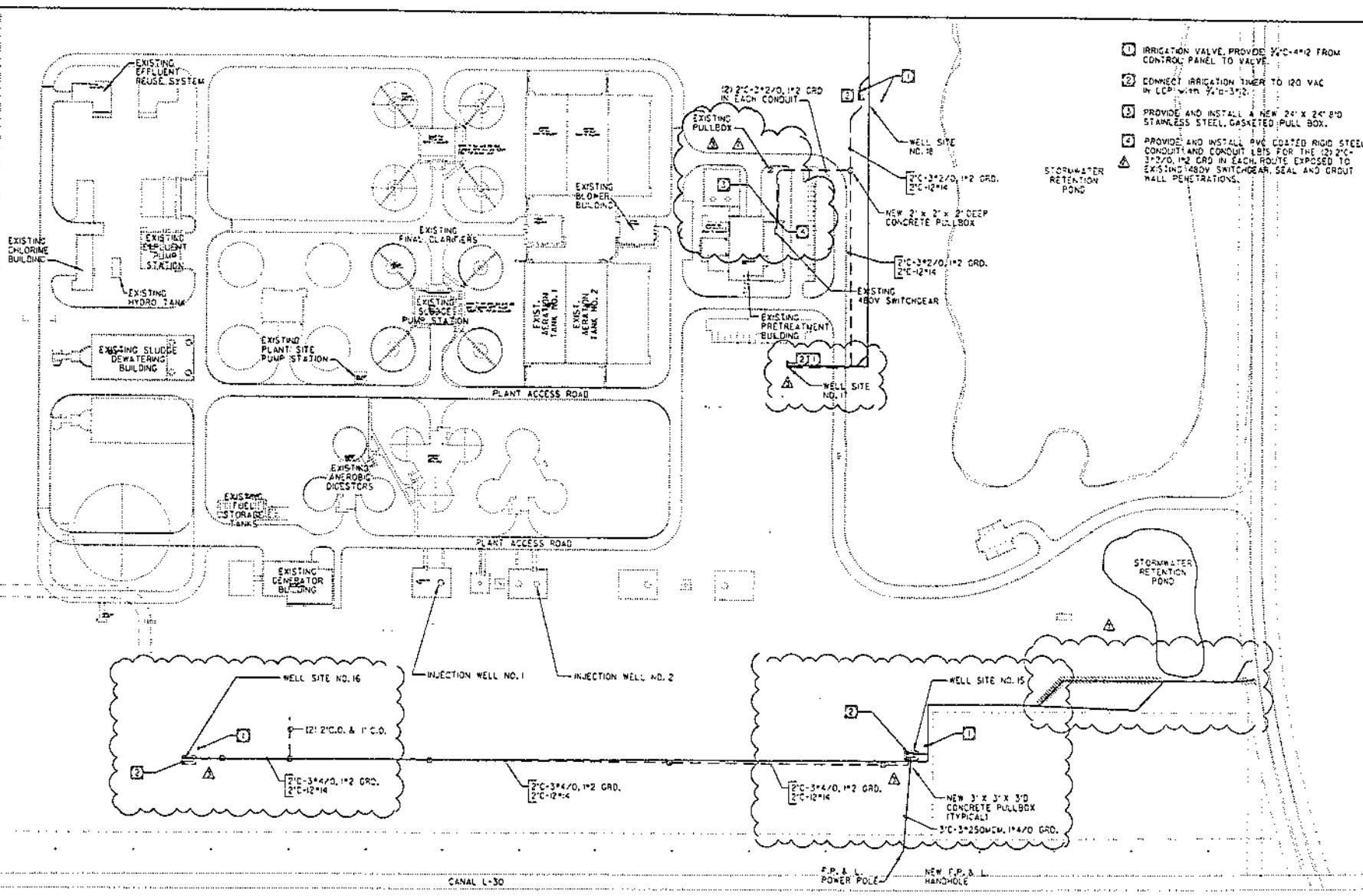

MONTGOMERY WATSON
 Lake Worth, Florida

RECORD DRAWING
 These record drawings have been prepared based on information furnished by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein in a contract. See separate contract drawings for record and legalizing.

PALM BEACH COUNTY UTILITIES DEPARTMENT
 WELLFIELD EXPANSION PROJECT AT SYSTEMS TN, 2W, 3N, 3W, & 3W
 SYSTEM 3W
 ELECTRICAL SITE PLAN

SHEET
5E-1
 OF 5 SHEETS

JOB NO. 155-010 FILE NO. 155-010(1) DATE 08/11/11 REV. DATE 08/11/11 DWT



- 1 IRRIGATION VALVE, PROVIDE 2" C-4" x 2" FROM CONTROL PANEL TO VALVE
- 2 CONNECT IRRIGATION TIMER TO 120 VAC IN LCP WITH 7/8" x 3/8"
- 3 PROVIDE AND INSTALL A NEW 24" x 24" 8" D STAINLESS STEEL, GASKETED PULL BOX.
- 4 PROVIDE AND INSTALL PVC COATED RIGID STEEL CONDUIT AND CONDUIT LBS FOR THE (2) 2" C-3" x 2" 1/2" GRD IN EACH ROUTE EXPOSED TO EXISTING ABOVE SWITCHGEAR, SEAL AND GROUT WALL PENETRATIONS.

SITE PLAN

NO.	DATE	DESCRIPTION
1	6/27/09	RECORD DRAWING
2	1/24/09	CHANGE ORDER
3	12/2/09	FOR RECORD

SCALE:	HARNED:	DESIGNED:	SUBMITTED:
1" = 40'	0/35'	J. METZEL	4/2/10
		B. CONTINO	7/2/10
		CHECKED: R. ASORZO	8/11/11

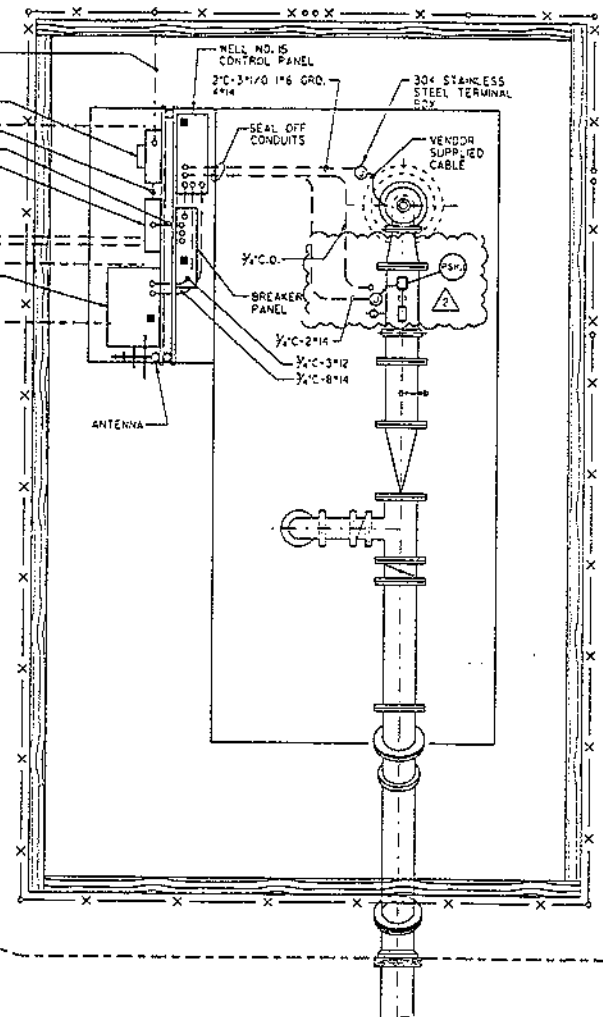
MONTGOMERY WATSON
 Lake Worth, Florida

RECORD DRAWING
These RECORD Drawings have been produced based on information provided by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein as a result of any original contract drawings or field measurements.

PALM BEACH COUNTY UTILITIES DEPARTMENT WELLFIELD EXPANSION PROJECT AT SYSTEMS 1W, 2W, 3W, 4W, 5W & 6W SOUTHERN REGIONAL WRF ELECTRICAL SITE PLAN	SHEET 6E-1 OF 2 SHEETS
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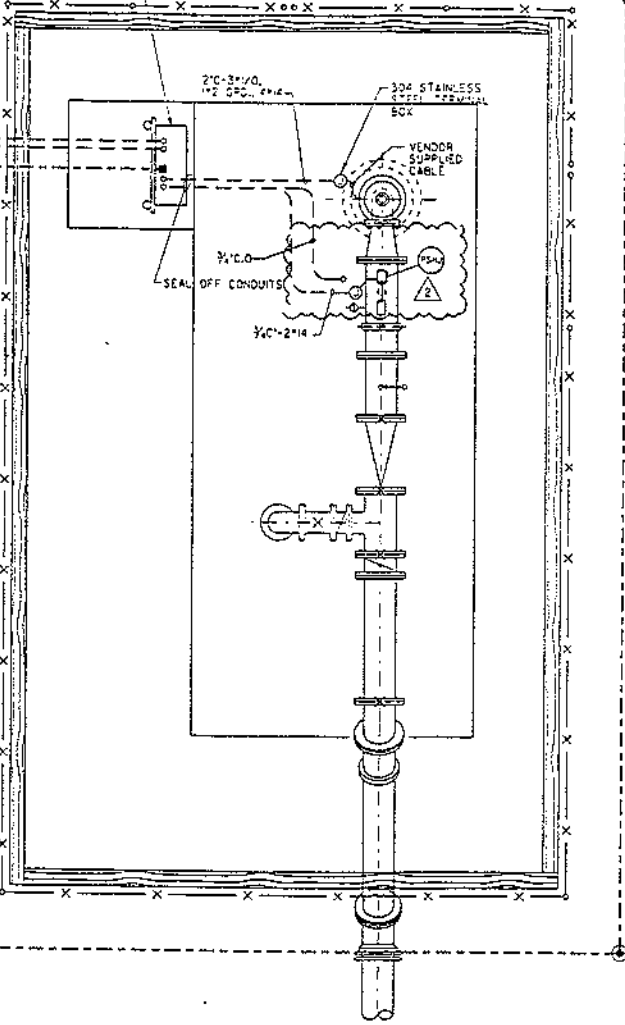
REV. 04/19 27 JUL 1997 B1/3/0

TO F.P. & L. POWER POLE SEE SHEET 66-1



SRWRF WELL NO 15 - PLAN

WELL NO. 16 CONTROL PANEL



SRWRF WELL NO 16 - PLAN
(TYPICAL FOR SRWRF WELL NO. 16)

DATE	B1	DESCRIPTION
7/23/95		FOR BIDDING
6/23/97		REVISED DRAWING

SCALE:	WARNING:
1/2" = 1'-0"	DO NOT MEASURE FROM THIS DRAWING IS NOT TO SCALE.

DESIGNED BY:	SUBMITTED:
J. NETZEL	
DRAWN BY:	DATE:
B. CONTINO	07/23/95
CHECKED BY:	DATE:
B. BARBORO	07/23/95
INTERFERED BY:	DATE:

PROJECT NUMBER:	DATE:
	07/23/95



MONTGOMERY WATSON

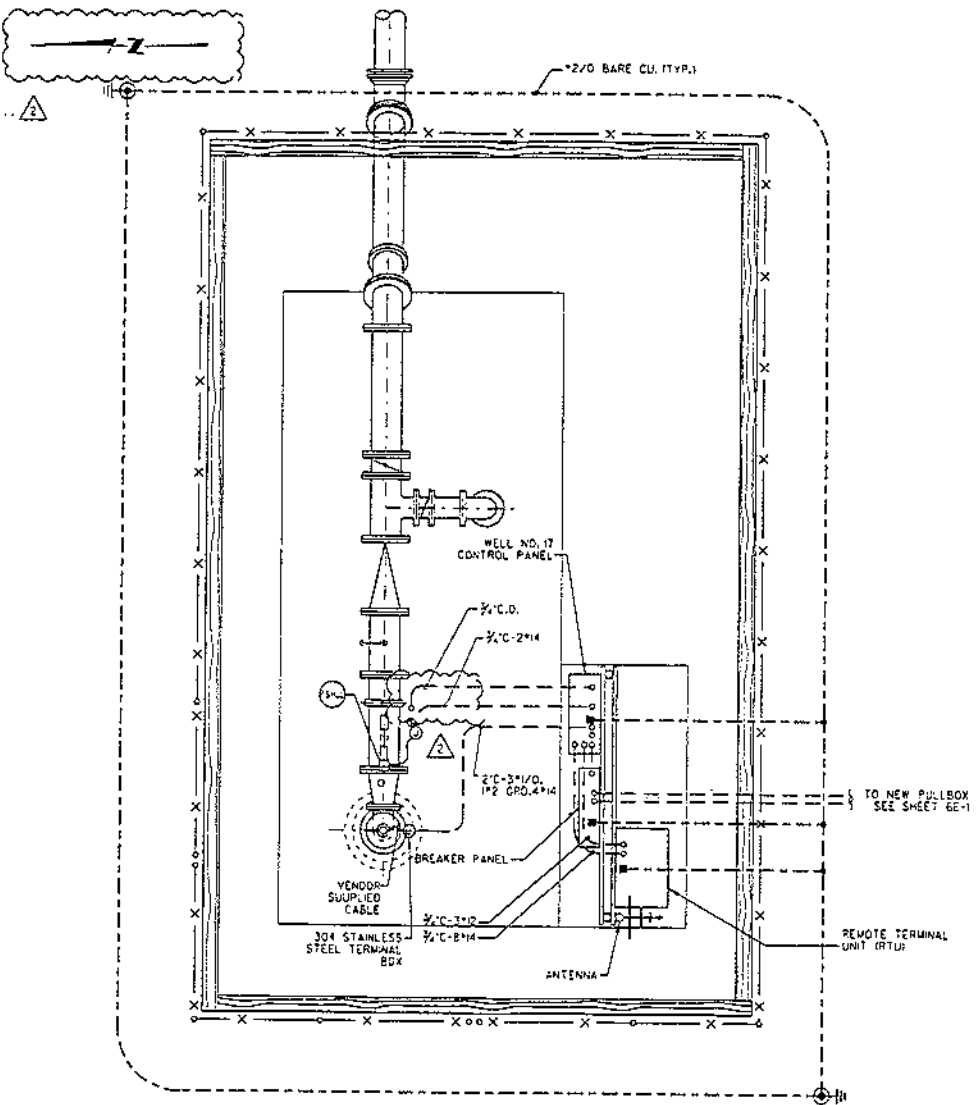
Lake Worth, Florida

RECORD DRAWING
These record drawings have been prepared based on original drawings provided for same. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. See original drawings for additional information.

SOUTH FLORIDA UTILITIES DEPARTMENT
PALM BEACH COUNTY UTILITIES DEPARTMENT
WELLFIELD EXPANSION PROJECT AT SYSTEMS IN 2H, 3H, 4H & 5H
SOUTHERN REGIONAL WRF
ELECTRICAL WELLFIELD PLANS - 1

SHEET
6E-2

FILE NO. 655492D - FILE NO. 2019-27 (rev. 2/20/19) (rev. 2/20/19) (rev. 2/20/19) (rev. 2/20/19)

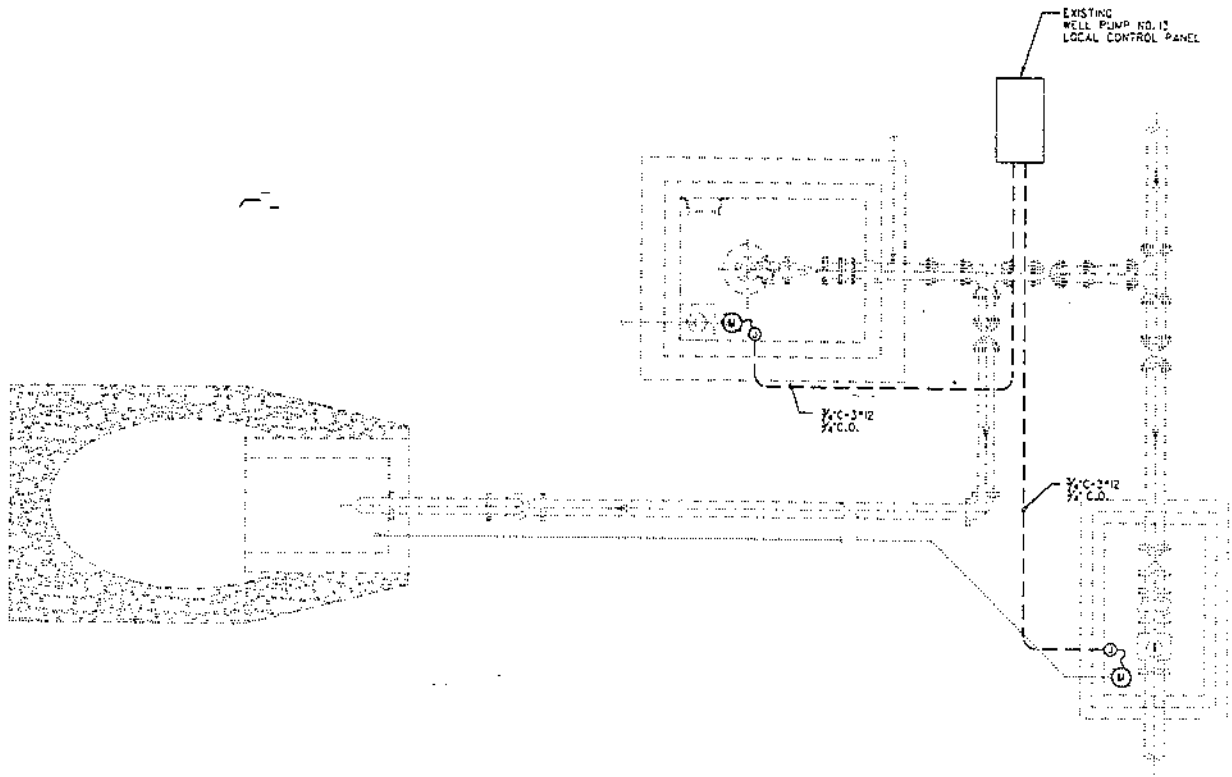


SRWRF WELL NO 17 - PLAN

	SCALE: $\frac{1}{2}'' = 1'-0''$	WARNING: IF THIS BAR DOES NOT MEASURE TO THIS DRAWING IS NOT TO SCALE	DESIGNED: J. NETZEL DRAWN: B. CONTINO CHECKED: B. ARONOFF	SUBMITTED: PROJECT NUMBER: 48280 DATE: 02/25/95 MONTGOMERY WATSON DATE: 02/25/95	MONTGOMERY WATSON <small>Lake Worth, Florida</small>	RECORD DRAWING <small>These notes describe how these drawings shall be prepared, printed or otherwise provided by others. The Engineer has no control over the accuracy or completeness of such information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. See engineer contract documents for additional regulations.</small>	ELECTRICAL ENGINEER P.E. NO. _____ DATE _____ PALM BEACH COUNTY UTILITIES DEPARTMENT WELLFIELD EXPANSION PROJECT AT SYSTEMS IN, 2W, 3W, 6W, & 9W SOUTHERN REGIONAL WRF WELLFIELD PLANS - II	SHEET 6E-3 OF 4 SHEETS
--	------------------------------------	--	---	--	--	--	--	-------------------------------------

Rev. Date 25 JUN 1997 0657

JOB NO. 10551820 P.E. No. 0001 / 0002 / 0003 / 0004 / 0005 / 0006 / 0007 / 0008 / 0009 / 0010 / 0011 / 0012 / 0013 / 0014 / 0015 / 0016 / 0017 / 0018 / 0019 / 0020



ELECTRICAL PLAN

REV	DATE	BY	DESCRIPTION
2	6/24/97	JWH	RECORD DRAWING FOR BOBWC
1	12/25/95	UNKN	FOR BOBWC

SCALE:	WARNING
1/4" = 1'-0"	0 1/2 1
	IF THIS BAR DOES NOT MEASURE 1" THE DRAWING IS NOT TO SCALE.

DESIGNED: J. NETZEL	SUBMITTED:
DRAWN: B. CONTINO	PROJECT MANAGER:
CHECKED: B. ARBOLD	DATE: 6/25/95

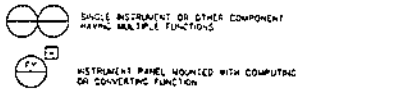
MONTGOMERY WATSON	DATE: 6/25/95
PROJECT MANAGER:	DATE: 6/25/95

MONTGOMERY WATSON
Lake Worth, Florida

RECORD DRAWING
 These record drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors of omission which may be experienced hereafter by a third party. See original contract drawings for additional information.

PALM BEACH COUNTY UTILITIES DEPARTMENT	
WELLFIELD EXPANSION PROJECT AT SYSTEMS 18, 20, 20A, 20B, & 20C	
POLO TRACE WELL NO. 13	
ELECTRICAL PLAN	

GENERAL INSTRUMENT OR FUNCTION SYMBOLS					IDENTIFICATION LETTERS					ABBREVIATIONS							
	PRIMARY LOCATION NORMALLY ACCESSIBLE TO OPERATOR	FIELD MOUNT	AUXILIARY LOCATION NORMALLY ACCESSIBLE TO OPERATOR	NORMALLY UNACCESSIBLE OR BEHIND THE PANEL DEVICES OR FUNCTIONS	FIRST-LETTER					SUCCEEDING-LETTERS							
					MEASURED OR INDICATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER								
DISCRETE INSTRUMENTS					A ANALOG												
SHARED DISPLAY, SHARED CONTROL					B BURNER COMBUSTION												
COMPUTER FUNCTION					C CATALYST												
PROGRAMMABLE LOGIC CONTROL					D DRYER												
					E ELECTRIC/ELECTRONIC												
					F FLOW RATE												
					G GASES												
					H HAZARDOUS												
					I INSTALL												
					J JUNCTION												
					K KRYOGENIC												
					L LEVEL												
					M MOTOR												
					N NOISE												
					O OIL												
					P PRESSURE												
					Q QUANTITY												
					R REACTION												
					S SPEED												
					T TEMPERATURE												
					U ULTRASONIC												
					V VIBRATION												
					W WATER												
					X X-RAY												
					Y EVENT OR STATUS												
					Z POSITION, DIMENSION												



CONVERT

A ANALOG	C CURRENT	L LOGICAL AND
B BINARY	D TIME DELAY	M MODERATOR
D DIGITAL	E ELECTROMAGNETIC SIGNAL	O LOCAL OR
E ELECTROMAGNETIC SIGNAL	F FLOW	P PNEUMATIC
F FLOW	G GASES	R RESISTANCE
G GASES	H HAZARDOUS	S SELECT
H HAZARDOUS	I INSTALL	T TIME
I INSTALL	J JUNCTION	V VOLUME
J JUNCTION	K KRYOGENIC	W WATER
K KRYOGENIC	L LOGICAL AND	X X-RAY
L LOGICAL AND	M MODERATOR	Y EVENT OR STATUS
M MODERATOR	O LOCAL OR	Z POSITION, DIMENSION
O LOCAL OR	P PNEUMATIC	
P PNEUMATIC	R RESISTANCE	
R RESISTANCE	S SELECT	
S SELECT	T TIME	
T TIME	V VOLUME	
V VOLUME	W WATER	
W WATER	X X-RAY	
X X-RAY	Y EVENT OR STATUS	
Y EVENT OR STATUS	Z POSITION, DIMENSION	
Z POSITION, DIMENSION		

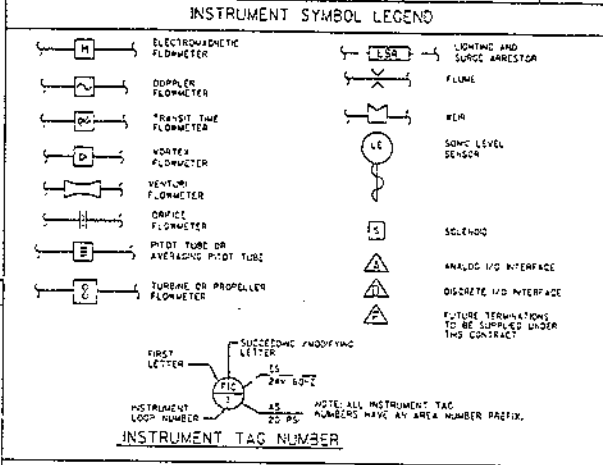
INSTRUMENT LINE SYMBOLS

PROCESS LINE OR INSTRUMENT CONNECTION TO PROCESS	-----
PNEUMATIC SYMBOL	-----
ELECTRIC SYMBOL	-----
HYDRAULIC SYMBOL	-----
CAPILLARY TUBE	-----
ELECTROMAGNETIC OR SOME SIGNAL (GROSS)	-----
ELECTROMAGNETIC OR SOME SIGNAL (NET GUIDES TO HEAT, RADIO WAVES, RADIATION, LIGHT)	-----
INTERNAL SYSTEM LINK (SOFTWARE OR DATA LINK)	-----
MECHANICAL LINK	-----
PNEUMATIC BINARY SIGNAL	-----
ELECTRIC BINARY SIGNAL	-----

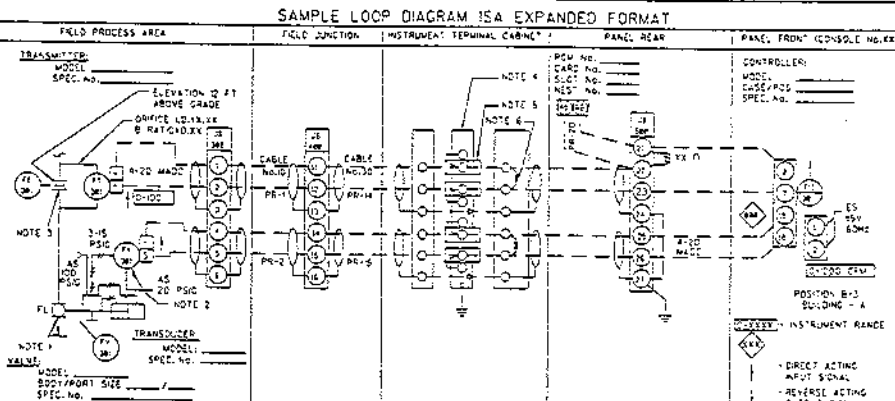
* THE FOLLOWING ABBREVIATIONS ARE USED TO DENOTE THE TYPES OF POWER SUPPLY. THEY MAY ALSO BE USED TO CLARIFY A PNEUMATIC SUPPLY.

AS - AIR SUPPLY	HS - HYDRAULIC SUPPLY
IA - INSTRUMENT AIR	IS - INERT GAS SUPPLY
PA - PLANT AIR	SS - STEAM SUPPLY
ES - ELECTRIC SUPPLY	WS - WATER SUPPLY
GS - GAS SUPPLY	

** THE PNEUMATIC SIGNAL SYMBOLS APPLIES TO A SIGNAL AND NOT A SUPPLY SOURCE. WHEN USING ANY GAS AS A SIGNAL MEDIUM OTHER THAN AIR, THE GAS IS IDENTIFIED BY AN ABBREVIATION ON THE SIGNAL LINE.

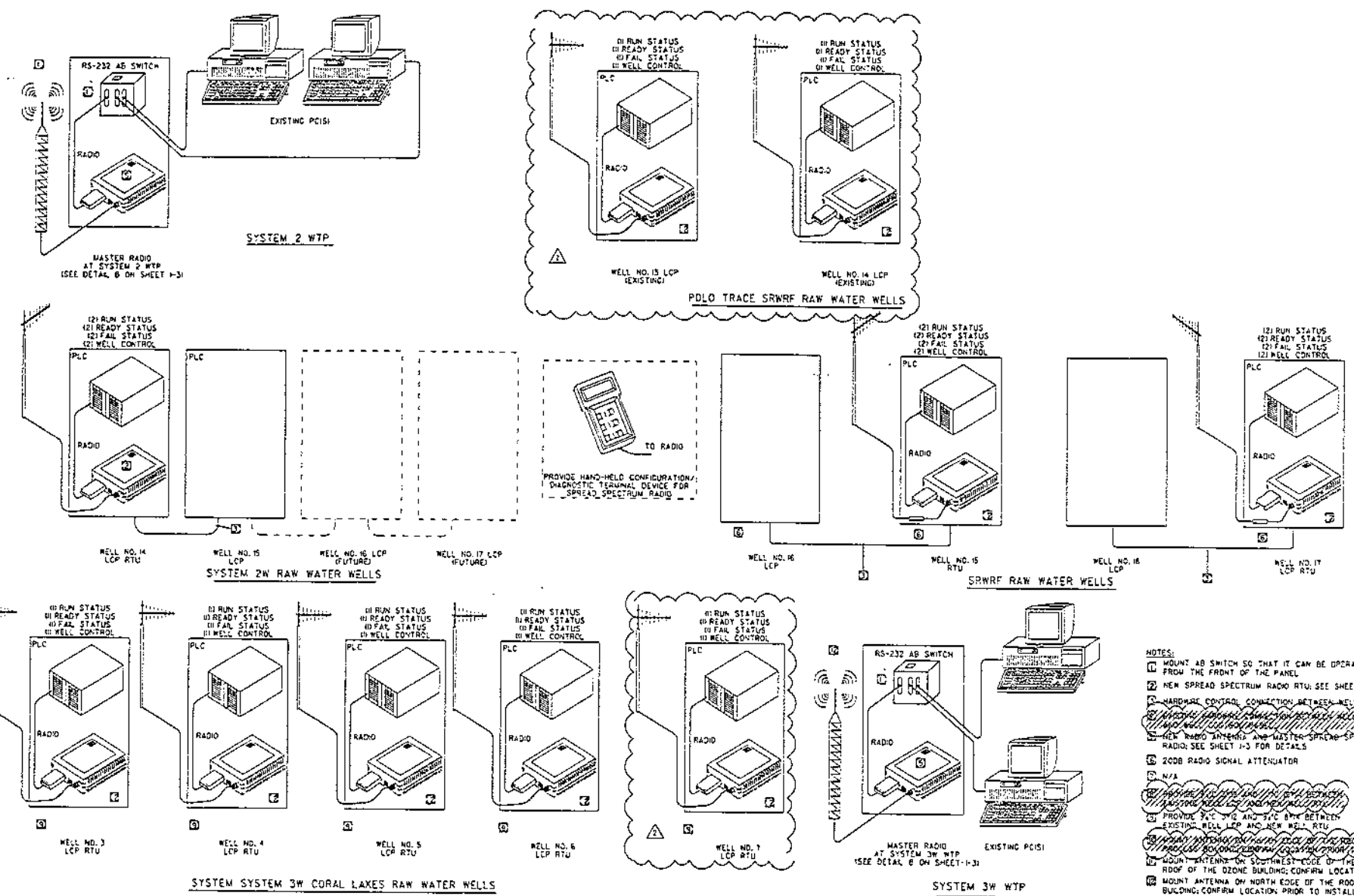


- NOTES
- ADDITIONAL INSTRUMENTATION AND CONTROL SYMBOLS MAY BE USED AS REQUIRED. SYMBOLS AND NOMENCLATURE ARE BASED ON ISA STANDARD 5.5.
 - SEE ASSOCIATED ELECTRICAL AND MECHANICAL SYMBOL SHEETS FOR ADDITIONAL SYMBOLS AND ABBREVIATIONS.
 - FOR PIPE SIZE, MATERIAL, AS WELL AS DETAILS OF WATER COUPLING AND OTHER MECHANICAL EQUIPMENT (E.G. VALVE, PUMP, ETC.) SEE MECHANICAL DRAWINGS AND SPECIFICATIONS.
 - POWER SUPPLIES FOR LOOPS AND SYSTEMS SHALL BE FURNISHED BY THE INSTRUMENTATION MANUFACTURER TO MEET THE PARTICULAR CHARACTERISTICS (E.G. VOLTAGE AND CURRENT REQUIREMENTS) OF COMPONENTS IN EACH LOOP OR SYSTEM.
 - LIGHT SOLID LINE INSTRUMENT SYMBOL INDICATES EXISTING OR SUPPLIED BY OTHER THAN INSTRUMENT SUPPLIER.
 - DASHED LINE INSTRUMENT SYMBOL INDICATES FUTURE EQUIPMENT OR FUNCTION.
 - HEAVY SOLID LINE INSTRUMENT SYMBOL INDICATES TO BE SUPPLIED BY THIS CONTRACT.



Rev. Data 27 JAN. 1977 (0111)
 FILE NO. 2727
 JOB NO. 2727

Job No. 2727
 F.C. No. 207
 Date: 12/15/98
 Rev. Date: 12/15/98
 12/15/98



- NOTES:**
- 1 MOUNT AB SWITCH SO THAT IT CAN BE OPERATED FROM THE FRONT OF THE PANEL
 - 2 NEW SPREAD SPECTRUM RADIO RTU; SEE SHEET 1-3 FOR DETAIL 1-404
 - 3 HARDWARE CONTROL CONNECTION BETWEEN WELLS
 - 4 NEW RADIO ANTENNA AND WIRELESS SPREAD SPECTRUM RADIO; SEE SHEET 1-3 FOR DETAILS
 - 5 20DB RADIO SIGNAL ATTENUATOR
 - 6 N/A
 - 7 PROVIDE 24VDC AND GND B/W BETWEEN EXISTING WELL LCP AND NEW WELL RTU
 - 8 MOUNT ANTENNA ON NORTH EDGE OF THE ROOF OF THE PROCESS BUILDING; CONFIRM LOCATION PRIOR TO INSTALLATION

SCALE	WARNING
NONE	IF THIS DRAWING IS NOT TO SCALE
DESIGNED BY	APPROVED BY
DRAWN BY	CHECKED BY
REV. DATE	DESCRIPTION

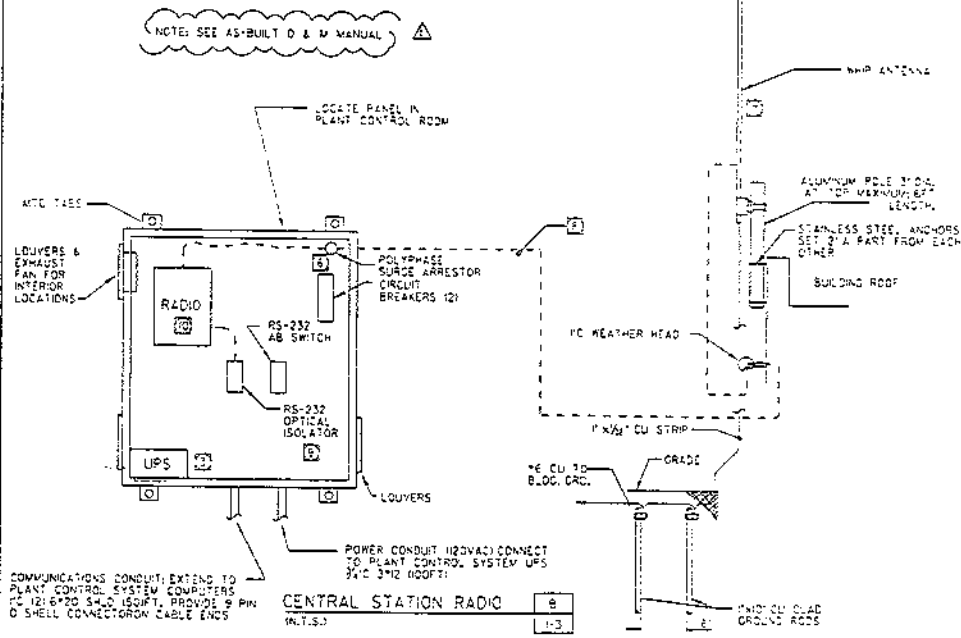
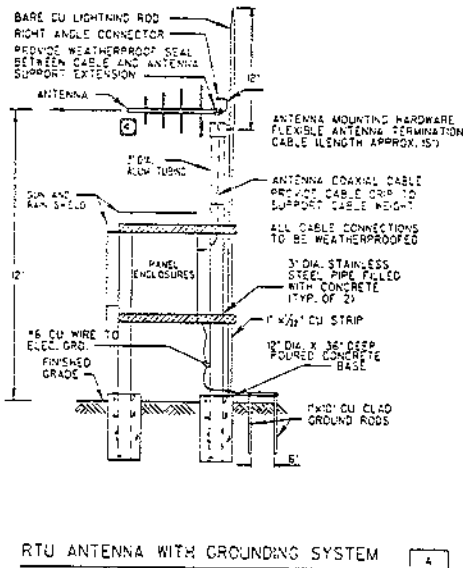
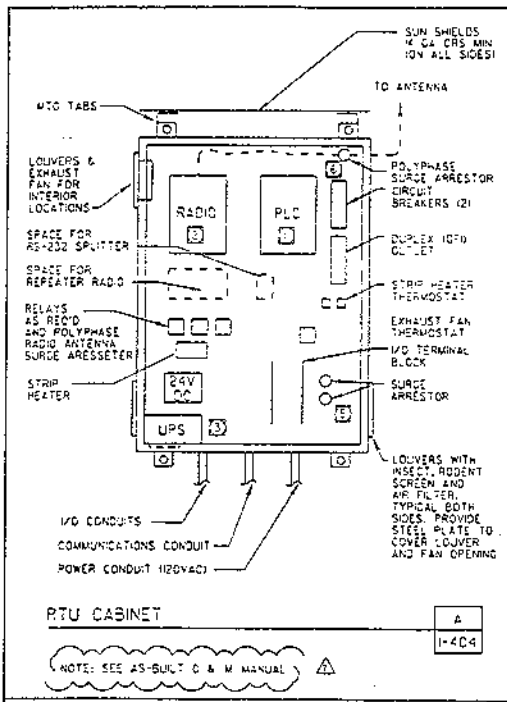
DESIGNED BY	J. NETZEL	APPROVED BY	_____
DRAWN BY	S. SINGH	CHECKED BY	_____
DATE	12/15/98	DATE	12/15/98

MONTGOMERY WATSON
 Late Work Florida

RECORD DRAWING

This record drawing has been prepared based on information provided to us. The Engineer has not performed the physical work and cannot be held responsible for any errors or omissions which may be present hereon. It is recommended that the contractor verify all dimensions and quantities before beginning construction.

CONTRACT NUMBER	P.C. NO.	DATE
PALM BEACH COUNTY UTILITIES DEPARTMENT		
WELLFIELD EXPANSION PROJECT AT SYSTEMS 2W, 3W, 2B, & 3B		
TELEMETRY BLOCK DIAGRAM		
SHEET		1-2



NOTES:

- PLC SHALL BE MODICON MODEL 984-M5 WITH MODBUS PLUS PORT AND MODBUS PORT.
- THE SPREAD SPECTRUM RADIO SHALL BE A DIGITAL RADIO UTILIZING SPREAD SPECTRUM FREQUENCY HOPPING TECHNOLOGY OPERATING IN THE 902-928 MHZ RANGE. IT SHALL SUPPORT A DATA TRANSMISSION RATE OF 4800 BPS MIN. THE FREQUENCY HOPPING RANGE SHALL INCLUDE 64 FREQUENCIES PER CHANNEL OVER THE OPERATING RANGE. IT SHALL HAVE AT LEAST 4 USER SELECTABLE HOP PATTERNS AND AT LEAST 255 USER SELECTABLE SYSTEM ADDRESSES. IT SHALL HAVE AT LEAST 6 USER SELECTABLE DUPLEX CHANNELS AND 1 SIMPLEX CHANNEL. SIGNAL RECEPTION INTERMODULATION SHALL BE 150DB MINIMUM. DESENSITIZATION SHALL BE 65DB MINIMUM ON 25 KHZ CHANNELS. SPURIOUS AND IMAGE REJECTION SHALL BE GREATER THAN 65 DB. THE UNIT SHALL INCLUDE NEW COMPATIBLE SYSTEM DIAGNOSTIC SOFTWARE AND USER CONFIGURATION UTILITY SOFTWARE, DIAGNOSTIC TESTS AND CHANGES TO THE UNIT'S OPERATIONAL PARAMETERS SHALL BE INITIATED THROUGH THE UNIT'S RS-232 PORT. THE TRANSMITTER SHALL FULLY COMPLY WITH ALL APPLICABLE EMI STANDARDS AND FCC RULES AND REGULATIONS. IT SHALL BE FCC PART 15.07 ACCEPTED FOR THE APPLICATION. POWER OUTPUT SHALL BE 1 WATT MAXIMUM. THE RADIO SHALL BE THE MDS 9305 SPREAD SPECTRUM RADIO TRANSMITTER BY MICROWAVE DATA SYSTEMS OR EQUAL.

- UPS POWER SUPPLY.
- THE ANTENNA SHALL BE A 9DB GAIN DIRECTIONAL YAGI ANTENNA. IT SHALL BE RATED FOR 150 MPH WINDS. THE SPREAD SPECTRUM RADIO ANTENNA SHALL BE THE DB-488 BY DECIBEL PRODUCTS OR EQUAL.
- DEVICE SURGE ARRESTORS; SEE SPECIFICATIONS.
- A LIGHTNING SUPPRESSOR SHALL BE FURNISHED FOR THE ANTENNA COAXIAL FEED LINE. IT SHALL BE RATED FOR THE OPERATING POWER AND FREQUENCY. THE LIGHTNING SUPPRESSOR SHALL BE POLYPHASE CORP. IS-50 SERIES OR EQUAL.
- THE ANTENNA SHALL BE A 6DB GAIN OMNI-DIRECTIONAL WIND ANTENNA. IT SHALL BE RATED FOR 100 MPH WINDS. THE ANTENNA SHALL BE THE DB-589 BY DECIBEL PRODUCTS OR EQUAL.
- THE TRANSMISSION CABLE BETWEEN THE ANTENNA AND THE RADIO SHALL BE COAXIAL, LOW LOSS JACKETED 1/2" FOAM PEWAX, ANDREWS CORP. TYPE LDF4, OR EQUAL. PROVIDE 100FT OF FC AND CABLE AT EACH MASTER RADIO SITE.
- THE OPTICAL ISOLATOR SHALL BREAK ALL GALVANIC CONNECTIONS IN THE RS-232 LOOP.
- RADIO AT CENTRAL STATION RADIO SHALL BE MDS MODEL 930M OR EQUAL.

GENERAL NOTES:

- ALL CABINETS SHALL BE FABRICATED STAINLESS STEEL OF WELDED CONSTRUCTION, WEATHERPROOF NEMA 3R AS SHOWN WITH NEOPRENE GASKETS. CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF SPECIFICATIONS.
- THE CABINETS SHALL BE SIZED SPECIFIED TO HOLD REQUIRED EQUIPMENT INCLUDING FUTURE EQUIPMENT. THE FRONT AND REAR COVERS, IF REQUIRED, SHALL BE PROVIDED WITH SCREEN AND PADLOCK HASP.
- HEATERS OR VENTILATION SHALL BE PROVIDED AS REQUIRED TO ASSURE OPERATION UNDER FIELD CONDITIONS FOR EQUIPMENT DESIGNED FOR CONTINUOUS OPERATION IN AN AMBIENT TEMPERATURE OF +20 DEGREES C TO 60 DEGREES C AND WITH A RELATIVE HUMIDITY OF FROM 5 TO 95 PERCENT NON-CONDENSING AT THE SPES. THE EQUIPMENT SHALL BE OPERABLE, EITHER DIRECTLY OR INDIRECTLY, THROUGH SUITABLE POWER SUPPLIES FROM A COMMERCIAL POWER SOURCE OF FROM 105 TO 130 VOLTS 60 HZ. EACH CABINET SHALL BE EQUIPPED WITH BOTTOM COVERED OPENINGS WITH A REMOVABLE FILTER FOR ADEQUATE AIR CIRCULATION. EACH OUTDOOR ENCLOSURE SHALL INCLUDE SUN SHIELDS ON ALL SIDES OF THE CABINET.
- EACH TWO-WAY COMMAND SHALL CONSIST OF TWO STATUS OUTPUTS IN THE FORM OF INTERPOSING RELAY CONTACT CLOSURES. E.G. ONE RELAY CONTACT CLOSURE FOR 'START' AND ONE RELAY CONTACT CLOSURE FOR 'STOP'. EACH INTERPOSE RELAY SHALL BE OF PLUG-IN CONSTRUCTION AND SHALL BE PROVIDED WITH A FORM 'D' CONTACT RATED 10 AMPERES AT 28 VOLTS DC OR 120 VOLTS AC.
- RELAY CONTACT OUTPUTS SHALL BE WIRED TO TERMINAL BLOCKS WITH INCLUDED BARRIERS AND SCREW TYPE TERMINALS. INTERPOSING RELAY COILS SHALL BE PROVIDED WITH ARC SUPPRESSION ADEQUATE TO PREVENT DAMAGE OR STRESS TO SOLID STATE COMPONENTS IN THE RTU. INTERPOSER RELAY CONTACTS SHALL BE PROVIDED WITH ARC SUPPRESSION ADEQUATE TO PREVENT ARCING OR OTHER DAMAGE TO THE CONTACTS IN THE SERVICE FOR WHICH THEY ARE TO BE USED. RELAYS SHALL HAVE A MINIMUM LIFE OF 100,000 OPERATIONS AT RATED LOAD. ALL RELAYS SHALL BE PROVIDED WITH DUST COVERS.
- ALL CABINETS SHALL BE PROVIDED WITH CORROSION INHIBITORS ZERUST MODEL VC-6-2.
- MISCELLANEOUS COMPONENTS: ALL CONNECTORS, TERMINATORS, CABLE SPLITTERS, CABLE TAPS, AND ADAPTERS REQUIRED TO ALLOW SUCCESSFUL RTU OPERATION AS DEFINED IN THE CONTRACT SPECIFICATIONS SHALL BE PROVIDED BY THE CONTRACTOR.
- POWER FAIL ALARM: PROVIDE RELAY ACCESS 120V UTILITY POWER TO PROVIDE POWER FAILURE CONTACT.
- ALL CABINETS SHALL BE SIZED BY VENDOR.

GENERAL NOTES: SEE AS-BUILT O & M MANUAL

DATE: 12/22/95

SCALE:	WARNING	DESIGNED BY: METZEL	APPROVED BY:
NAME:	C 1/2 1	ORRN: S. SINGH	4820 12/25/95
DATE BY:	NO. OF SHEETS: 05	CHECKED: A. G.	12/25/95
	NO. OF SHEETS: 05		12/25/95

DATE BY:	DESCRIPTION:

DATE BY:	DESCRIPTION:

MONTGOMERY WATSON
Larr Worth Plando

RECORD DRAWING
These notes & drawings have been prepared based on information provided by owner. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. See specifications for details for general information.

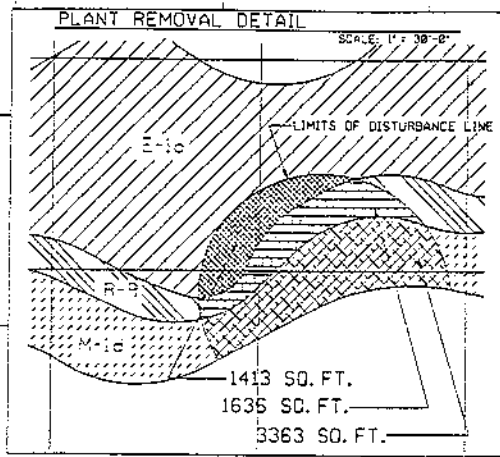
PALM BEACH COUNTY UTILITIES DEPARTMENT
WELLFIELD EXPANSION PROJECT AT SYSTEMS IN, DV, 3N, ENL, B, 3N
RADIO TELEMETRY DETAIL SHEET

DATE: 12/22/95

SHEET 1-3

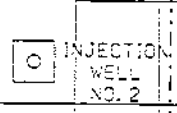
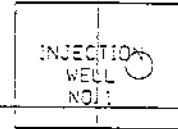
New Date: 23-JUL-2017 09:35

JOB NO. 16518700 - 14.6 sq. AC. 1/2" = 1' (1/4" = 1' 0")

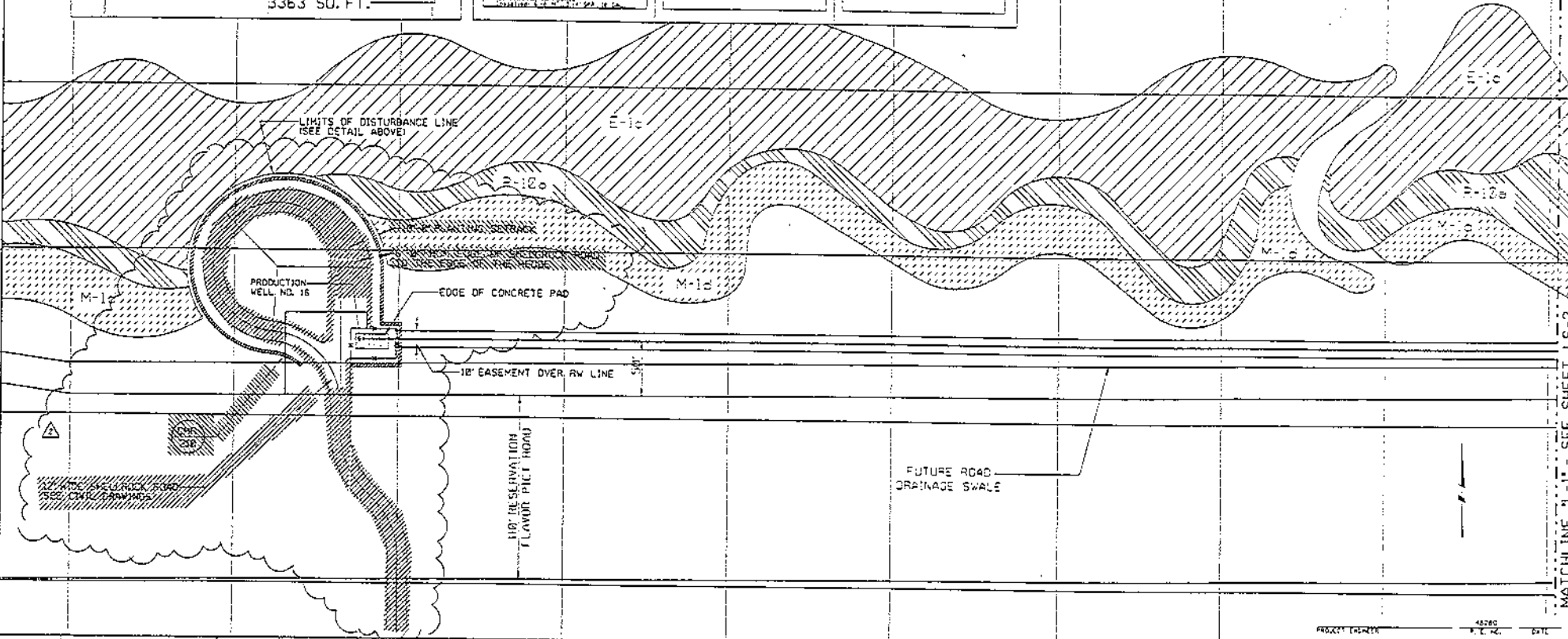


PLANT REMOVAL LIST (Refer to Detail for Locations)

E-1c	R-9	M-1d
1. 1/2" DIA. PIPES	1. 1/2" DIA. PIPES	1. 1/2" DIA. PIPES
2. 1" DIA. PIPES	2. 1" DIA. PIPES	2. 1" DIA. PIPES
3. 1 1/2" DIA. PIPES	3. 1 1/2" DIA. PIPES	3. 1 1/2" DIA. PIPES
4. 2" DIA. PIPES	4. 2" DIA. PIPES	4. 2" DIA. PIPES
5. 3" DIA. PIPES	5. 3" DIA. PIPES	5. 3" DIA. PIPES
6. 4" DIA. PIPES	6. 4" DIA. PIPES	6. 4" DIA. PIPES
7. 6" DIA. PIPES	7. 6" DIA. PIPES	7. 6" DIA. PIPES
8. 8" DIA. PIPES	8. 8" DIA. PIPES	8. 8" DIA. PIPES
9. 10" DIA. PIPES	9. 10" DIA. PIPES	9. 10" DIA. PIPES
10. 12" DIA. PIPES	10. 12" DIA. PIPES	10. 12" DIA. PIPES
11. 14" DIA. PIPES	11. 14" DIA. PIPES	11. 14" DIA. PIPES
12. 16" DIA. PIPES	12. 16" DIA. PIPES	12. 16" DIA. PIPES
13. 18" DIA. PIPES	13. 18" DIA. PIPES	13. 18" DIA. PIPES
14. 20" DIA. PIPES	14. 20" DIA. PIPES	14. 20" DIA. PIPES
15. 24" DIA. PIPES	15. 24" DIA. PIPES	15. 24" DIA. PIPES
16. 30" DIA. PIPES	16. 30" DIA. PIPES	16. 30" DIA. PIPES
17. 36" DIA. PIPES	17. 36" DIA. PIPES	17. 36" DIA. PIPES
18. 42" DIA. PIPES	18. 42" DIA. PIPES	18. 42" DIA. PIPES
19. 48" DIA. PIPES	19. 48" DIA. PIPES	19. 48" DIA. PIPES
20. 54" DIA. PIPES	20. 54" DIA. PIPES	20. 54" DIA. PIPES
21. 60" DIA. PIPES	21. 60" DIA. PIPES	21. 60" DIA. PIPES
22. 72" DIA. PIPES	22. 72" DIA. PIPES	22. 72" DIA. PIPES
23. 84" DIA. PIPES	23. 84" DIA. PIPES	23. 84" DIA. PIPES
24. 96" DIA. PIPES	24. 96" DIA. PIPES	24. 96" DIA. PIPES
25. 108" DIA. PIPES	25. 108" DIA. PIPES	25. 108" DIA. PIPES
26. 120" DIA. PIPES	26. 120" DIA. PIPES	26. 120" DIA. PIPES
27. 144" DIA. PIPES	27. 144" DIA. PIPES	27. 144" DIA. PIPES
28. 168" DIA. PIPES	28. 168" DIA. PIPES	28. 168" DIA. PIPES
29. 192" DIA. PIPES	29. 192" DIA. PIPES	29. 192" DIA. PIPES
30. 216" DIA. PIPES	30. 216" DIA. PIPES	30. 216" DIA. PIPES
31. 240" DIA. PIPES	31. 240" DIA. PIPES	31. 240" DIA. PIPES
32. 270" DIA. PIPES	32. 270" DIA. PIPES	32. 270" DIA. PIPES
33. 300" DIA. PIPES	33. 300" DIA. PIPES	33. 300" DIA. PIPES
34. 360" DIA. PIPES	34. 360" DIA. PIPES	34. 360" DIA. PIPES
35. 420" DIA. PIPES	35. 420" DIA. PIPES	35. 420" DIA. PIPES
36. 480" DIA. PIPES	36. 480" DIA. PIPES	36. 480" DIA. PIPES
37. 540" DIA. PIPES	37. 540" DIA. PIPES	37. 540" DIA. PIPES
38. 600" DIA. PIPES	38. 600" DIA. PIPES	38. 600" DIA. PIPES
39. 720" DIA. PIPES	39. 720" DIA. PIPES	39. 720" DIA. PIPES
40. 840" DIA. PIPES	40. 840" DIA. PIPES	40. 840" DIA. PIPES
41. 960" DIA. PIPES	41. 960" DIA. PIPES	41. 960" DIA. PIPES
42. 1080" DIA. PIPES	42. 1080" DIA. PIPES	42. 1080" DIA. PIPES
43. 1200" DIA. PIPES	43. 1200" DIA. PIPES	43. 1200" DIA. PIPES
44. 1440" DIA. PIPES	44. 1440" DIA. PIPES	44. 1440" DIA. PIPES
45. 1680" DIA. PIPES	45. 1680" DIA. PIPES	45. 1680" DIA. PIPES
46. 1920" DIA. PIPES	46. 1920" DIA. PIPES	46. 1920" DIA. PIPES
47. 2160" DIA. PIPES	47. 2160" DIA. PIPES	47. 2160" DIA. PIPES
48. 2400" DIA. PIPES	48. 2400" DIA. PIPES	48. 2400" DIA. PIPES
49. 2700" DIA. PIPES	49. 2700" DIA. PIPES	49. 2700" DIA. PIPES
50. 3000" DIA. PIPES	50. 3000" DIA. PIPES	50. 3000" DIA. PIPES



PROPOSED PLANT LIST
KEY: CHR DTA: 210
CELETED FROM CONTRACT



REV	DATE	BY	DESCRIPTION
2	06/17/17	JWB	RECORD DRAWING
1	05/23/17	JWB	FOR BIDDING

SCALE: 1" = 30'	WARNING: 0 1/2" 1"	DESIGNED: RBS	CHECKED: RBS	DATE: 06/17/17
PROJECT NUMBER: 16518700	DATE: 06/17/17	PROJECT NUMBER: 16518700	DATE: 06/17/17	PROJECT NUMBER: 16518700

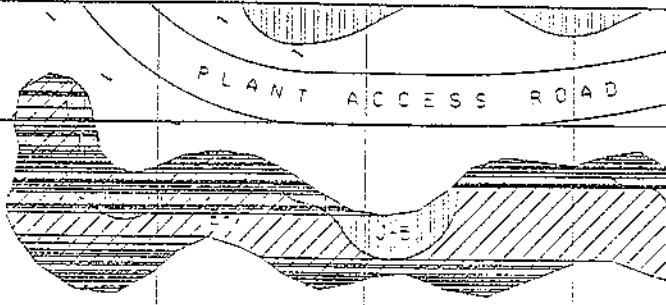
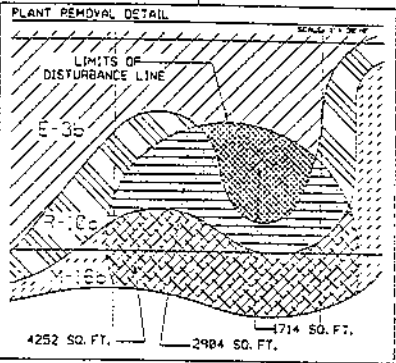
MONTGOMERY WATSON
Like Warm, Florida

RECORD DRAWING
These record drawings have been prepared based on information provided by others. The Engineer has not verified the accuracy of such information and shall be responsible for any errors or omissions which may be incorporated herein as a result. The Engineer's contract shall govern in the event of any conflict.

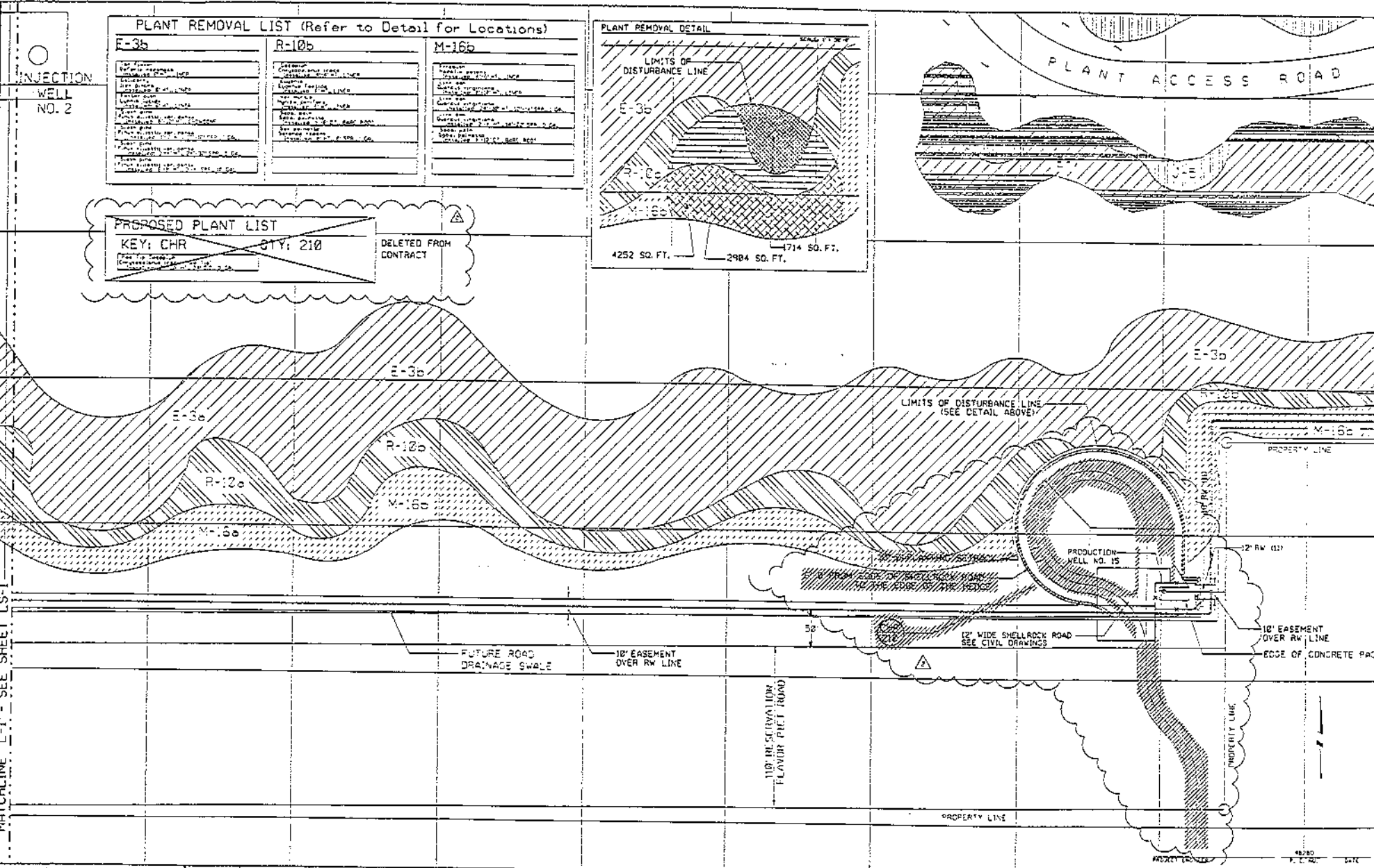
PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
WELLFIELD EXPANSION PROJECT AT SYSTEMS 1R, 2W, SW, SW & SW
WELL NO. 16 LANDSCAPE PLAN
SHEET LS-1

MATCHLINE 1'-1" SEE SHEET LS-2

PLANT REMOVAL LIST (Refer to Detail for Locations)		
E-3b	R-10b	M-16b
1. Plant 2. Species 3. Size 4. Location 5. Date 6. Reason 7. Status 8. Notes	1. Plant 2. Species 3. Size 4. Location 5. Date 6. Reason 7. Status 8. Notes	1. Plant 2. Species 3. Size 4. Location 5. Date 6. Reason 7. Status 8. Notes



PROPOSED PLANT LIST
 KEY: CHR ~~STY~~; 210
 DELETED FROM CONTRACT



MATCHLINE 'L-1' - SEE SHEET LS-1
 Rev. Date: 2/1/05, 1/15/07, 6/6/08
 Job No. 0533020

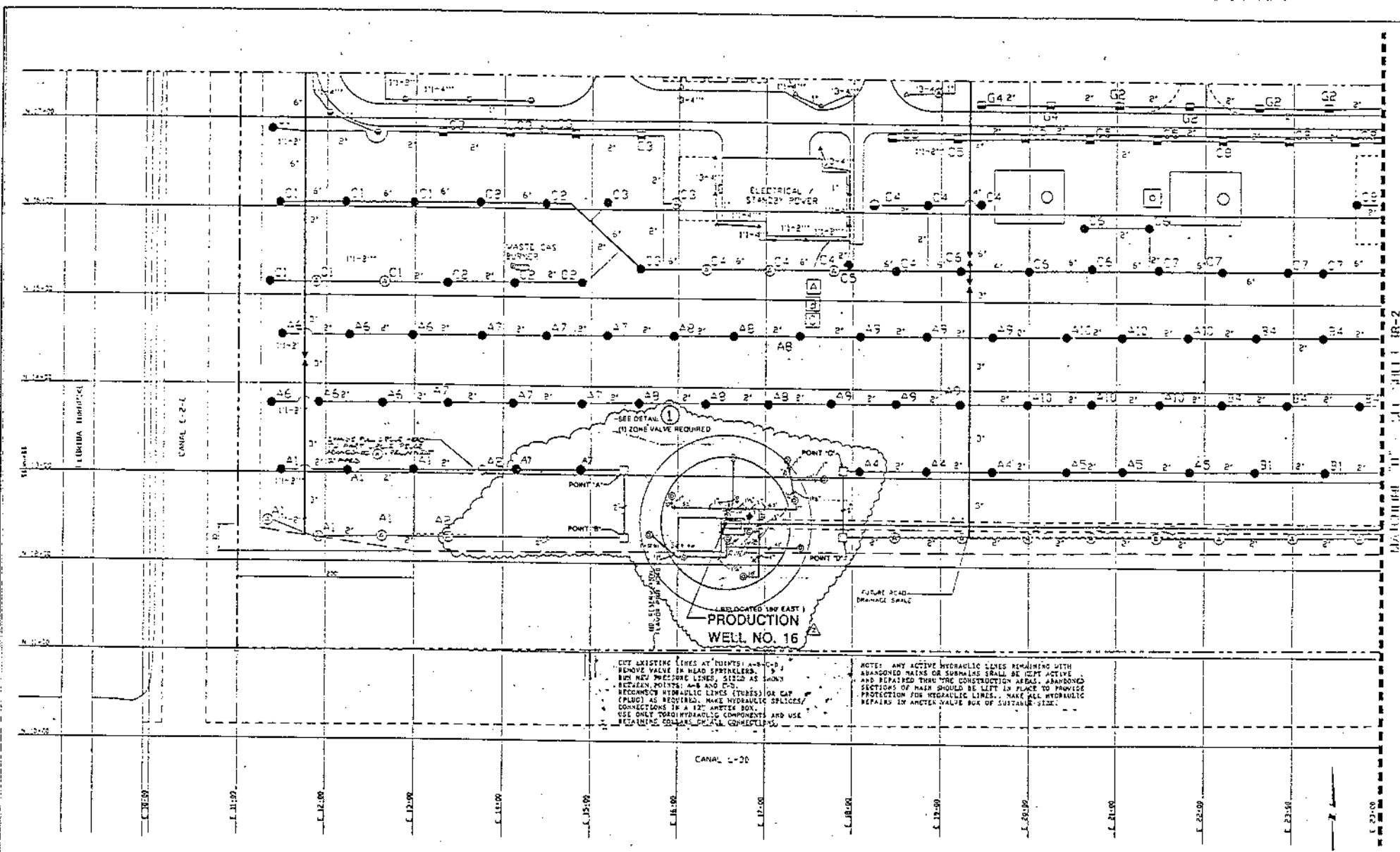
SCALE: 1" = 30'	WARNING: 0 1/2 1	DESIGNED: RTB	SUBMITTED: 4/28/05
2 20/4/07 BY WEN RECORD DRAWINGS	IF THIS SEAL DOES NOT MEASURE IF THEN DRAWING IS NOT TO SCALE	DRAWN: JSC	PRICE: VARIANTE
REV. DATE BY DISTRIBUTION	CHECKED: RBS	DATE: 12/16/05	DATE: 12/16/05

MONTGOMERY WATSON
 Lake Worth, Florida

RECORD DRAWING
 These record drawings have been prepared based on information furnished by owner. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be incorporated herein as a result of any unexplained changes to record and landscape.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
 WELLFIELD EXPANSION PROJECT AT SYSTEMS IN 74, 26, 5W & 9W
 WELL NO. 15 LANDSCAPE PLAN
 SHEET
LS-2
 OF 4 SHEETS

208 No. 100-1820 Rev. to 100-1820-17 MontWatson.com Date: 11/16/2011 Mr. Don Fitzgerald



CUT EXISTING LINES AT POINTS A-B-C-D
 REMOVE VALVE IN HEAD SPRINKLER
 RUN NEW WIRELINE LINES, SIZED AS SHOWN
 BETWEEN POINTS, AND AS NOTED
 RECONNECT HYDRAULIC LINES (TUBES) OR CAP
 (PLUG) AS REQUIRED. MAKE HYDRAULIC SPLICES/
 CONNECTIONS IN A 1 1/2" ANCHOR BOX.
 USE ONLY TORQ HYDRAULIC COMPONENTS AND USE
 RETAINING COLLARS PER ALL CONNECTIONS.

NOTES: ANY ACTIVE HYDRAULIC LINES REMAINING WITH
 ABANDONED MAINS OR SUBMANS SHALL BE LEFT ACTIVE
 AND REPAIRED THROUGH THE CONSTRUCTION AREAS. ABANDONED
 SECTIONS OF MAIN SHOULD BE LEFT IN PLACE TO PROVIDE
 PROTECTION FOR HYDRAULIC LINES. MAKE ALL HYDRAULIC
 REPAIRS IN ANCHOR VALVE BOX OF SUSTAINABLE SIZE.

NOTE: ADJUST PIPING TO MINIMIZE DISTURBANCE TO EXISTING PLANT MATERIAL

PROJECT ENGINEER P. L. RO SHEET

1	10/11/11	ISSUED FOR RECORD
2	11/13/11	ISSUED FOR RECORD DRAWING

SCALE:	0 1/2"
	1" = 50'

DESIGNED BY	Montgomery Watson
DRAWN BY	D. Fitzgerald
CHECKED BY	

APPROVED BY	<i>Montgomery Watson</i>	45200
PROJECT NUMBER	45200	
DATE	11/16/2011	

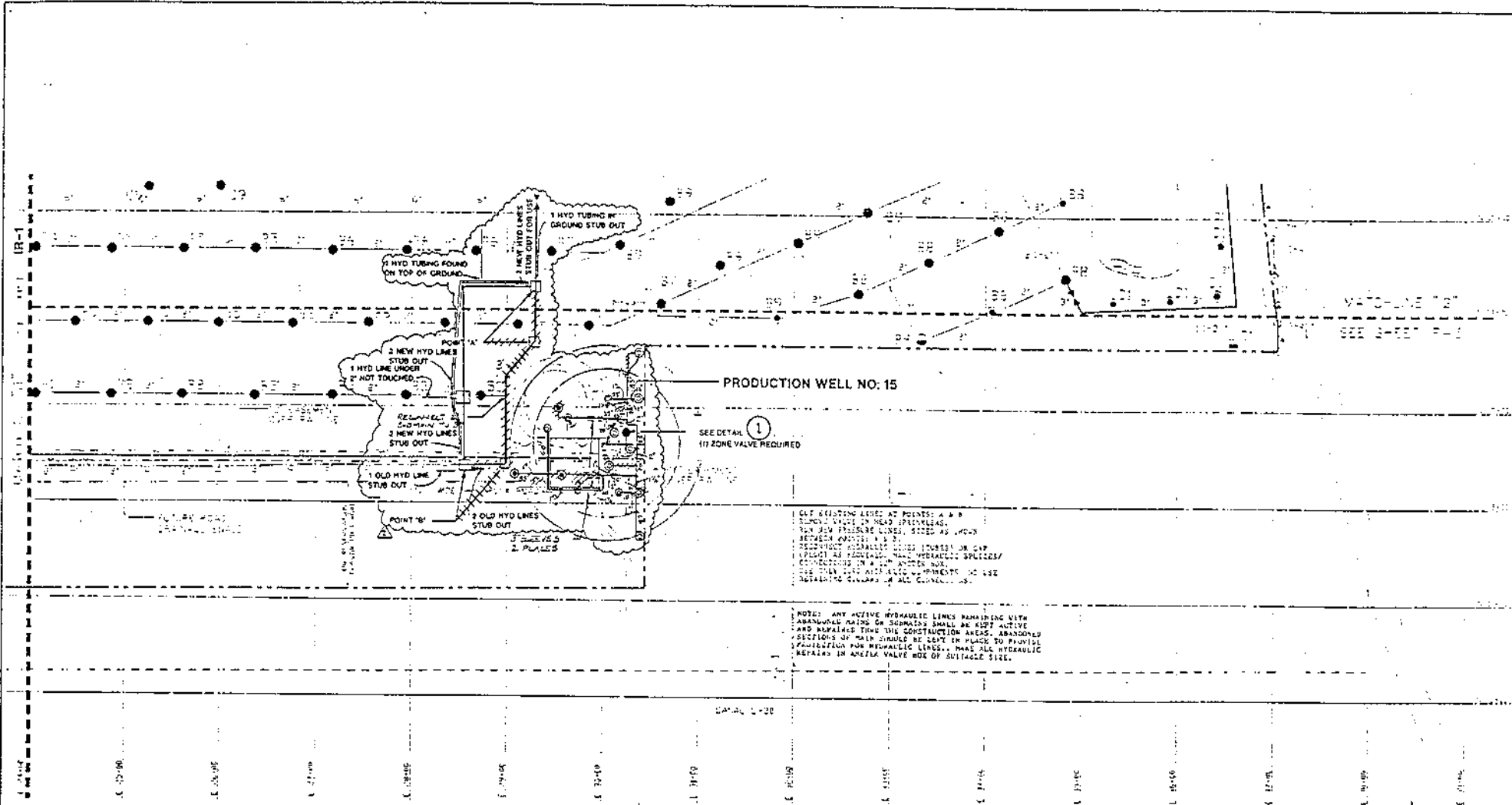


MONTGOMERY WATSON
 Lake Worth, Florida

RECORD DRAWING
 These plans represent the work as approved and shall be used for the purpose of construction and for the purpose of determining the status of the project. The Engineer has no responsibility for any errors or omissions that may occur in the construction of the project and is not to be held responsible for any damage or injury to persons or property resulting from the use of these plans.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
 WELLSFIELD EXPANSION PROJECT AT SYSTEMS 1W, 2W, 3W, 8W & 5W
WELL NO. 16 IRRIGATION PLAN

SHEET
 IR - 1
 OF 3 SHEETS



NOTE: ADJUST PIPING TO MINIMIZE DISTURBANCE TO EXISTING PLANT MATERIAL.

DATE	12/01/98
BY	MPH FOR RECORD
DATE	07/13/97
BY	MPH RECORD DRAWING
DATE	
BY	

SCALE	1" = 50'
-------	----------

WARNING	3/1/77
THIS DRAWING	IS TO BE USED
FOR	CONSTRUCTION
ONLY	UNLESS
OTHERWISE	NOTED

DESIGNED BY	<i>Don R. Wilson</i>
DRAWN BY	<i>Don R. Wilson</i>
CHECKED BY	<i>Don R. Wilson</i>

DATE	07/13/97
BY	<i>Don R. Wilson</i>
DATE	07/13/97
BY	<i>Don R. Wilson</i>



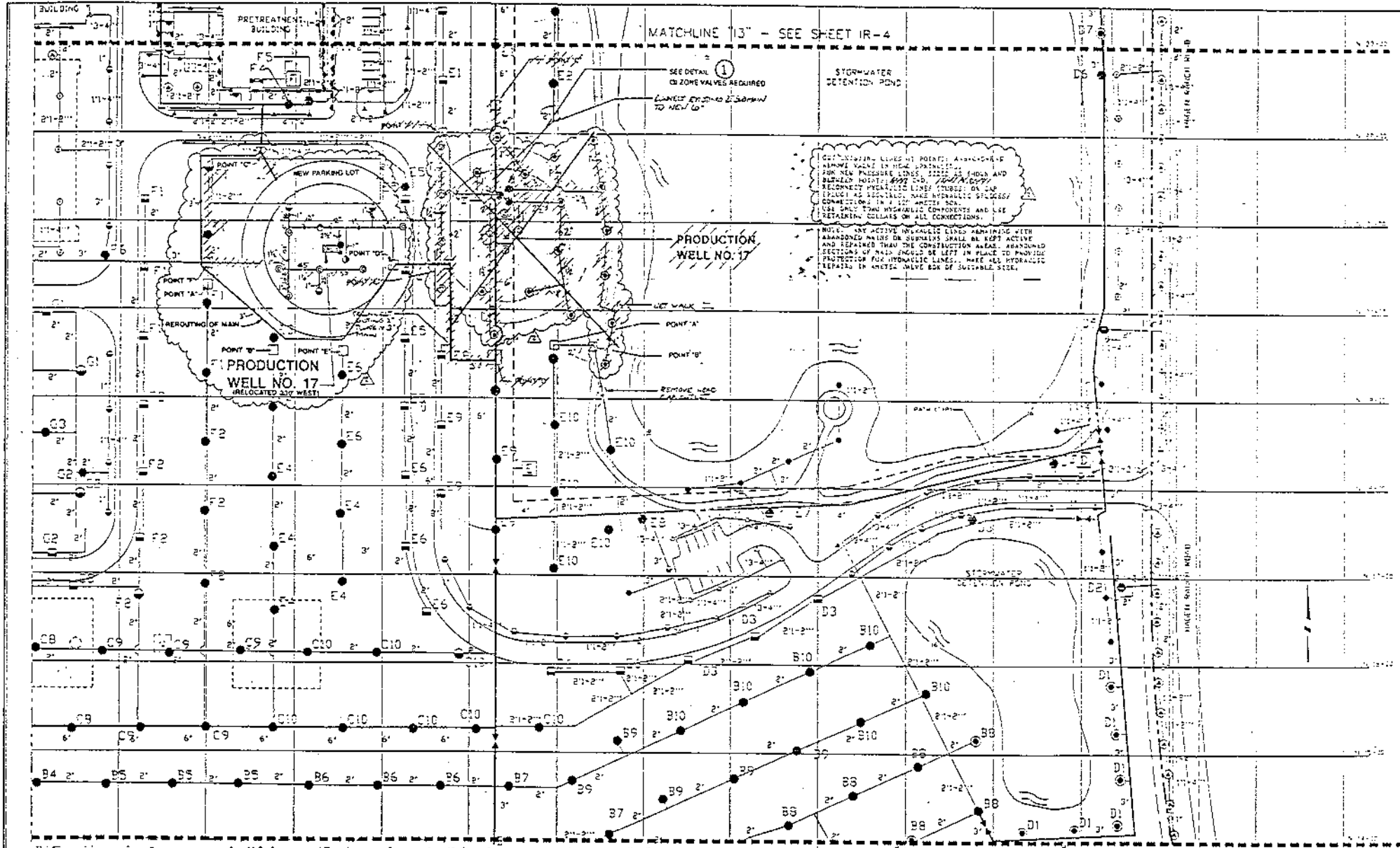
MONTGOMERY WATSON
Lake Worth, Florida

RECORD DRAWING
These record drawings have been prepared based on information furnished by owner. The Engineer has not verified the accuracy of such information and shall not be responsible for any errors or omissions which may be made in the construction of the project. See original contract for conditions of contract.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
WELLFIELD EXPANSION PROJECT AT SYSTEM 14, 24, 34, 36 & 38
WELL NO. 15 IRRIGATION PLAN

SHEET
IR-2

23-AE-1543-M750 - Proj No 14093465/14093465 - Rev Data 11/10/2018 11:00AM
 3 - 8133-97 - MAIN RECORD DRAWING
 DATE: 11/10/2018
 DESIGNED BY: [Signature]
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]



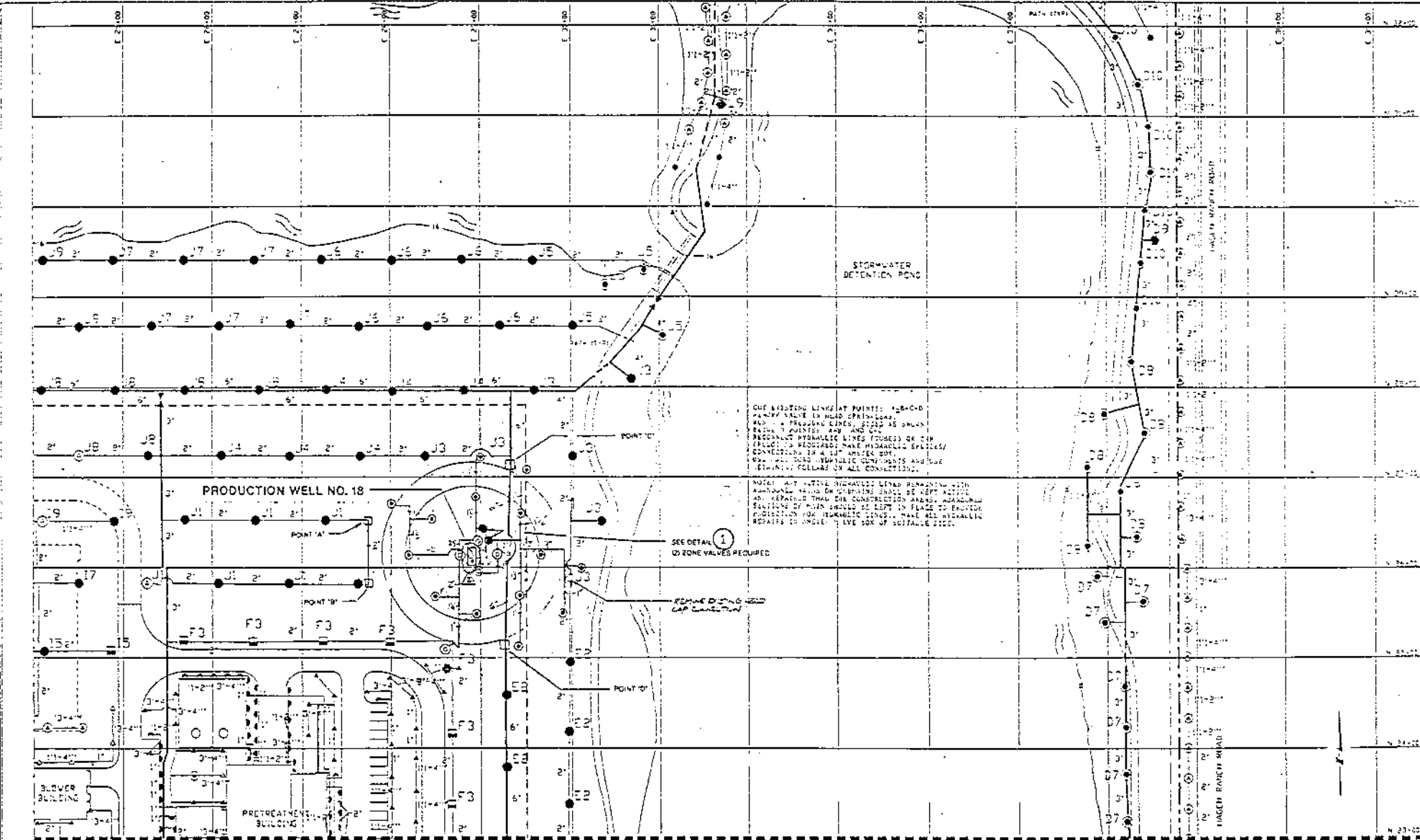
NOTE: ADJUST PIPING TO MINIMIZE DISTURBANCE TO EXISTING PLANT MATERIAL MATCHLINE "12" - SEE SHEET IR-2

ELEVATIONS LISTED AT POINTS A THROUGH F REMOVE MAINS IN NEW SPRINKLER FOR NEW PASSAGE LINES. REMOVE AND PATCH HOLES. #899 TO #799/11000/10000 RECONNECT HYDRAULIC LINES (RUBBER ON LAP) PLACE AS SPECIALS. MAKE HYDRAULIC SLOPES/ CONNECTIONS IN 4" DIA. HDPE/CS. USE ONLY TWO HYDRAULIC COMPONENTS AND USE RETAINING COLLARS ON ALL CONNECTIONS.

 NOTE: ANY ACTIVE HYDRAULIC LINES REMAINING WITH ABANDONED MAINS OR SUBMANS SHALL BE KEPT ACTIVE AND REPAIRED PRIOR TO CONSTRUCTION AREA. ABANDONED SECTIONS OF MAIN SHOULD BE LEFT IN PLACE TO PROVIDE PROTECTION FOR HYDRAULIC LINES. MAKE ALL HYDRAULIC REPAIRS IN HOLES - MINIMUM SIZE OF SCHEDULE 40.

SCALE: 1" = 50' MAPING: 0 1/2"	DESIGNER: [Signature] DRAWN: [Signature] CHECKED: [Signature]	SUBMITTED: [Signature] PROJECT NO.: 14093465 DATE: 11/10/2018	 MONTGOMERY WATSON Lake Worth, Florida	RECORD DRAWING These record drawings have been prepared based on information furnished by others. The Engineer has not verified the accuracy of such information and cannot be held responsible for any errors or omissions which may be discovered hereon as a result of such information.	PALM BEACH COUNTY WATER UTILITIES DEPARTMENT WELLFIELD EXPANSION PROJECT AT SYSTEMS 1A, 2A, 3A, 4A, 5A WELL NO. 17 IRRIGATION PLAN	SHEET IR-3
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410 to 150,000, Fee for Engineering Services - See Item 100 of Schedule of Rates



ONE EXISTING LINES AT POINTS: 1-B-C-D
 AND/OR VALUE IN HEAD OPERATIONS
 AND/OR PRESSURE LINES, 2-12 AS ONLY
 FROM POINTS: 8-10 AND 1-2
 REDUCING HYDRAULIC LINES (TUBES) OR CAN
 BE USED TO REQUIRED MAKE HYDRAULIC SPIRALS/
 CONVERTABLE OR A LIP ARMED PIPE.
 USE THE SAME HYDRAULIC COMPONENTS AND USE
 STAINLESS STEEL ON ALL CONNECTIONS.

NOTE: ALL EXISTING HYDRAULIC LINES REMAINING WITH
 REMAINING VALUE OR OPERATING SHALL BE KEPT AS IS.
 ALL EXISTING THEM FOR CONSTRUCTION AND/OR ADDITIONAL
 EQUIPMENT OF THIS SHALL BE KEPT IN PLACE TO PROTECT
 PRODUCTION AND REMAINING LINES. MAKE ALL HYDRAULIC
 REMAINS TO MAKE TO LIVE SIDE OF SOLIDITY SIDE.

NOTE: ADJUST PIPING TO MINIMIZE DISTURBANCE TO EXISTING PLANT MATERIAL

MATCHLINE "13" - SEE SHEET IR-3

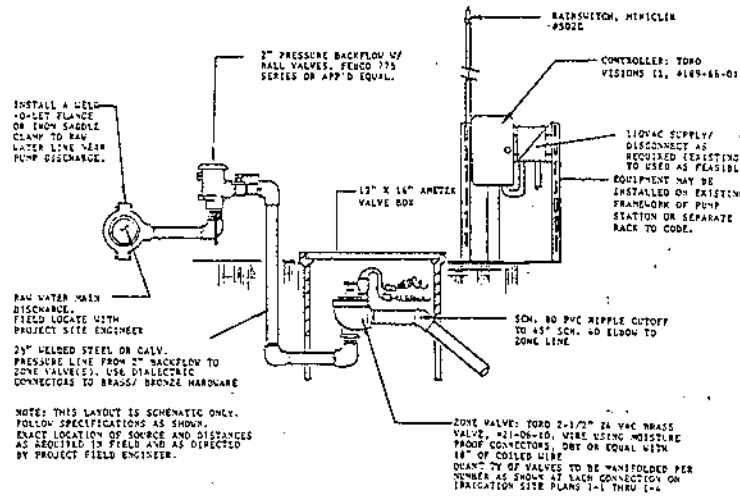
1	CONTRACT NO. 2008-000000
2	13 IR-3 RECORD DRAWING

SCALE	1" = 50'
WARNING	0 1/2
DESIGNED BY	10/20/08 <i>[Signature]</i>
DRAWN BY	<i>[Signature]</i>
CHECKED BY	<i>[Signature]</i>

MONTGOMERY WATSON
 Lake Worth, Florida

RECORD DRAWING
 These record drawings have been prepared based on information provided by owner. The Engineer has not conducted the accuracy of such information and should be responsible for any, lack of information which may be provided herein as a result. See original contract documents for full and complete terms and conditions.

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT
 WELLFIELD EXPANSION PROJECT AT SYSTEMS 1A, 2W, 3W, 5W & 3W
WELL NO 18 IRRIGATION PLAN
 SHEET
 IR-4



① POINT OF CONNECTION & CONTROL DETAILS

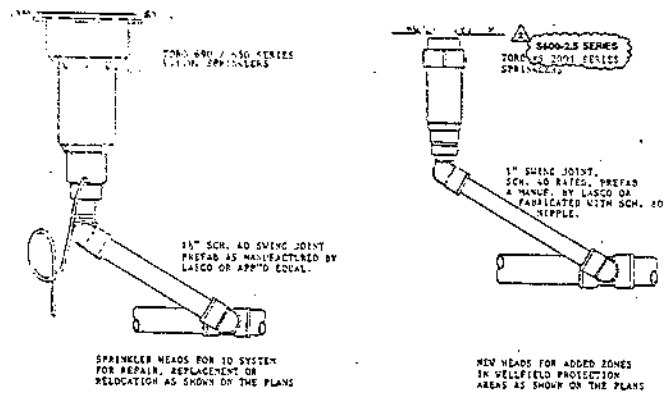
SPRINKLER HEAD LEGEND			
SYM.	TYPE	MODEL	QUAN.
⊙	2" POP UP MOTORS	TORO 5400-25 (R&L, RMC)	10
⊙	2" POP UP MOTORS	TORO 5400-25 (R&L, RMC)	10
⊙	EXISTING 2" POP UP MOTORS TO BE PUT ON RISERS		2
▲	EXISTING 1/2" POP UP SPRAYS TO BE PUT ON RISERS		10

NOTE: FOR LEGEND ON EXISTING HEADS WHICH MAY NEED REPLACEMENT DUE TO CONSTRUCTION DAMAGE REFER TO "RECORD IRRIGATION PLANS" BY HAZEN AND SAWYER, DATED DEC. 1938

- SYMBOLS**
- — POINTS OF CONNECTION TO REROUTE EXISTING OR WATER IRRIGATION SYSTEM AROUND NEW WELL FIELD CONSTRUCTION AREAS
 - — AMETEK BOXES AT THESE SPLICE POINTS.
 - — VALVE CONTROL POINTS OF CONNECTION TO MAIN WATER LINE AT EACH NEW PRODUCTION WELL STATION PER RELATED DETAIL.

- NOTES:**
- PIPING: MAIN LINES: 2" AND 2-1/2" SHALL BE PVC, SCH. 40 PVC, SOLVENT WELD.
 - 3" AND LARGER SHALL BE PVC, CLASS 200 "M" RING PIPE WITH EPDM COATED WELDED STEEL FITTINGS AS MANUFACTURED BY AMES OR PIERCE.
 - ALL MAIN LINES TO BE THROUST BLOCKED PER SPECS.
 - ZONE LINES: CLASS 100 PVC, SOLVENT WELD.
 - FABRICATION: SOLVENT WELD JOINTS TO BE SQUARE CUT, CLEANED, PRIMED, AND FULLY ENGAGED. USE GREY MEDIUM BODY PVC CEMENT ONLY. ALLOW TO CURE 7-10 HOURS BEFORE PRESSURIZING.
 - GENERAL: SEE SPECIFICATIONS FOR ALL OTHER PIPING, WIRING, AND INSTALLATION PROCEDURES, REQUIREMENTS, ETC.

NOTE: ALL PIPING WITHIN 100' OF EACH PRODUCTION WELL SHALL MEET FORCE MAIN REQUIREMENTS PER HEALTH CODE REQUIREMENTS



SPRINKLER HEAD DETAILS

MEMORANDUM



MONTGOMERY WATSON

To: Mark Abbott **Date:** September 2, 1998
From: Robert T. Verrastro **Reference:**
Copy: Charles Reynolds
Subject: Field Testing of the PBCWUD Supply Wells at the SRWRF and Polo Trace

Last Friday (August 28, 1998), Charles and I performed some brief testing of the new supply wells at the SRWRF and Polo Trace, in an effort to assess the ongoing source of sand into the raw water pipeline feeding Plant 3 membrane softening plant. The testing included measurement of pumping water levels, flow rates and sand content, as measured with an Imhoff cone. During our visit, we learned that Polo Trace Wells #13 and #14 were feeding Plant 3, along with SRWRF Wells #15 and #16. The other wells at the SRWRF (Wells #17 and #18) were supplementing the reuse system there.

Here's what we found during our testing, along with some comments as to the original behavior of the wells:

Polo Trace Well #13

The well was found operating at a rate of 1,100 gpm. There was no sand observed in the Imhoff cone during pumpage at this rate. We did not alter the pumping rate of this well during our visit. Water-level data was not available, due to an obstruction in the annular space.

Polo Trace Well #14

The well was found pumping at a rate of 1,150 gpm. There was no sand observed in the Imhoff cone during pumpage at this rate. We did not alter the pumping rate of this well during our visit. The pumping water level was found to be approximately 21 feet bls. This pumping water level is significantly less than that observed during July 1996, when the new 10-inch diameter pump was installed in the well. At that time, the well exhibited a pumping water level of 38 feet bls while pumped at a rate of 1,000 gpm.

SRWRF #15

This well was found pumping at a rate of 600 gpm with no sand observed in the Imhoff cone. The pumping water level was approximately 26 feet bls. We increased the pumping rate to 800 gpm and measured the water level at 34 feet bls. There was a small

quantity of very fine-grained sand (perhaps 5 ppm) observed in the Imhoff cone during pumpage at that rate for 10 minutes. The drawdown induced in this well appears to have decreased somewhat over the past year, which indicates that development is ongoing. Originally, the well exhibited a pumping water level of 37 feet bls during pumpage at 700 gpm. You may remember that this is the well we had to acidize to increase yield.

SRWRF #16

This well was found operating at a rate of 800 gpm with no sand observed in the Imhoff cone. The pumping water level was 17 feet bls, which was nearly identical to that when the well was first installed. We adjusted the pumping rate to 1,000 gpm and observed a small quantity of sand (perhaps 5 ppm) after 10 minutes of pumping at that rate. We then adjusted the flow rate to 1,200 gpm and observed more sand (perhaps 20 ppm) at that rate. The pumping water level at 1,200 gpm was approximately 20 feet bls, which was about the same as during December 1996. We then adjusted the rate to 1,400 gpm and observed more sand (perhaps 40 ppm) after pumping for approximately 1 hour.

SRWRF #17

This well was not operating when we visited it. Mr. David Dalton turned the well on for us, and it was found to be operating at a rate of 1,075 gpm. The pumping water was found to be 23 feet bls, which is close to that observed when the well was first installed. There was some sand (about 20 ppm) observed 5 minutes after startup. Within 15 minutes, the sand content appeared to decrease to approximately 10 ppm. Mr. Dalton indicated that it took about 1 hour for sand content to decrease to acceptable limits at this well.

SRWRF #18

This well was not operating when we visited it. We turned the well on, and it was found to be operating at a rate of 1,000 gpm. The pumping water level at this rate was approximately 28.5 feet bls, which was close to that observed when the well was first installed. The sand content immediately following startup was approximately 30 ppm, but after about an hour, it had declined to approximately 5 ppm.

SUMMARY COMMENTS AND OBSERVATIONS

It appears that many of the original differences in specific capacity and sand content exhibited by the wells at the SRWRF have "evened out" over the last year of operation. All of the wells (including Well #15) are capable of being pumped at rates in excess of 1,000 gpm. However, it also appears that all of the wells now produce appreciable quantities of sand when pumped at rates in excess of 1,000 gpm. Charles and I visited Bob Dobrodziej after collecting the data. During our conversation, Mr. Dobrodziej indicated that there have been over 100 power outages in the system over the past year. If, indeed the wells have been turned off and on that many times over the past year,

then perhaps the surging associated with multiple startups has caused some disturbance of the original characteristics of the wells.

PBCWUD
SRWRF WELL #17
DIAGNOSTIC TESTING
8-Aug-97

TIME	PUMPING RATE (GPM)	MINUTES	DEPTH TO WATER (FBTOC)	DRAWDOWN (FT)	SPECIFIC CAPACITY (GPM/FT)	INSTANTANEOUS SAND CONTENT IMHOFF CONE (PPM)	ORIGINAL STEP TEST SPECIFIC CAPACITY (GPM/FT)	ORIGINAL STEP TEST SAND CONTENT (PPM)
11:25	0	0	11.17	0	NA	NA		
11:27	500	2	15	3.83	130	3,000	64	10
		3	15.2	4	125	200		
		7	15.4	4.23	118	<100		
		10	15.6	4.43	112	trace		
11:38	1,000	1	20.64	9.47	105	<100	61	33
		2	21.9	10.73	93	500		
		7	22.35	11.18	89	900		
		10	22.62	11.45	87	500		
		20	22.9	11.73	85	300		
		30	23.05	11.88	84	300		
		50	23.3	12.13	82	<100		
		110	22.6	11.43	87	trace		
13:30	1,500	2	29.4	18.23	82	1,400	58	7
		6	29.6	18.4	81	1,100		
		10	NA	NA	NA	700		
		30	30.15	18.9	79	500		
		40	30.15	18.9	79	200		
		50	30.2	19.03	79	100		
		60	30.22	19	79	<100		
14:50	1,500	80	30.35	19.18	78	trace		