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BSU-MW

COMPLETION REPORT FOR BURNT STORE UTILITIES CLASS I INJECTION WELL SYSTEM, PUNTA GORDA, CHARLOTTE COUNTY, FLORIDA

Prepared for:

Southern States Utilities
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I. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

The following conclusions are made as a result of the drilling and initial testing undertaken as part of the Burnt Store Utilities injection well system installation:

- The Burnt Store Utilities Class I injection well (CH-314) was permitted for, and is intended to be used for, disposal of up to 290,000 gallons per day (gpd) of reverse osmosis concentrate from the Burnt Store Utilities water treatment plant.

- The well was constructed with a 7 5/8-inch outside diameter, one-half inch wall thickness, steel injection casing, a retrievable tubing packer, and a three-inch inside diameter fiberglass tubing.

- A corrosion-prevention fluid (Baracor 100) was emplaced in the annulus between the fiberglass tubing and the steel injection casing.

- Total depth of the injection well is 3268 feet; the open-hole portion of the well extends from 2528 feet to total depth.

- The injection zone is the highly permeable, fractured and cavernous, "Boulder Zone" of the (Early Eocene-age) Oldsmar formation.

- The base of the underground source of drinking water (USDW) at the site was determined to occur at an approximate depth of 1310 feet.

- A dual zone monitoring well (CH-315) was constructed approximately 100 feet southwest of the injection well.

- The two zones to be monitored by the dual zone monitoring well are the (Middle Eocene age) lower Avon Park formation (approximately 660 feet above the top of the injection zone) and the Crystal River formation of the (Late Eocene age) Ocala Group (approximately 1240 feet above the top of the injection zone).

- Surface facilities at the site include an 80 foot by 120 foot cement pad (retained from the drilling operations), an injection pump system, a 500 gallon annular fluid tank, and various control and monitoring systems.

B. Recommendations

The following recommendations are made as a result of the drilling and initial testing undertaken as part of the Burnt Store Utilities injection well system installation:

- A request should be submitted to the Florida Department of Environmental Protection (FDEP) to begin operational testing for the Burnt Store Utilities injection well system.

- Those parameters delineated in the supporting documentation for the construction permit application, and included by reference in the limiting conditions of the FDEP Class I construction permit, should be monitored during the operational testing period as indicated herein.

II. INTRODUCTION

This report describes the installation and testing of the Class I injection well (CH-314) and the dual zone monitoring well (CH-315) at the Burnt Store Utilities reverse osmosis (RO) water treatment plant (WTP) site in Punta Gorda, Charlotte County, Florida. A general site location map is provided as Figure 2-1. A site map showing the location of the injection well system relative to the WTP is provided as Figure 2-2.

The wells were constructed in conformance with the well specifications prepared as part of the supporting documentation (ViroGroup, Inc., 1994) submitted to the Florida Department of Environmental Protection (FDEP) along with the Underground Injection Control (UIC) permit application. The FDEP UIC Class I well construction permit (#UC08-247431) was issued on January 31, 1995. A copy of this permit, along with copies of the Southwest Florida Water Management District (SWFWMD) drilling permits, is included in Appendix A of this report.

The purpose of the injection well (IW) is to dispose of up to 290,000 gallons per day (gpd) of RO concentrate generated by the WTP. RO concentrate is classified as an industrial waste and therefore requires a discharge permit. Underground injection, via a tubing and packer injection well, must be into a permeable zone isolated by upper confinement from the base of any underground source of drinking water (USDW). The USDW is defined as having a total dissolved solids (TDS) concentration less than 10,000 milligrams per liter (mg/l).

Prior to commencement of drilling of the IW and the dual zone monitoring wells (DZMW), a well prognosis was prepared. A copy of this well prognosis is provided in Appendix B of this report. Anticipated stratigraphic tops, lithologic and water sample collection procedures, and potential zones for packer testing and coring were delineated. As described in a later portion of this report, the subsurface

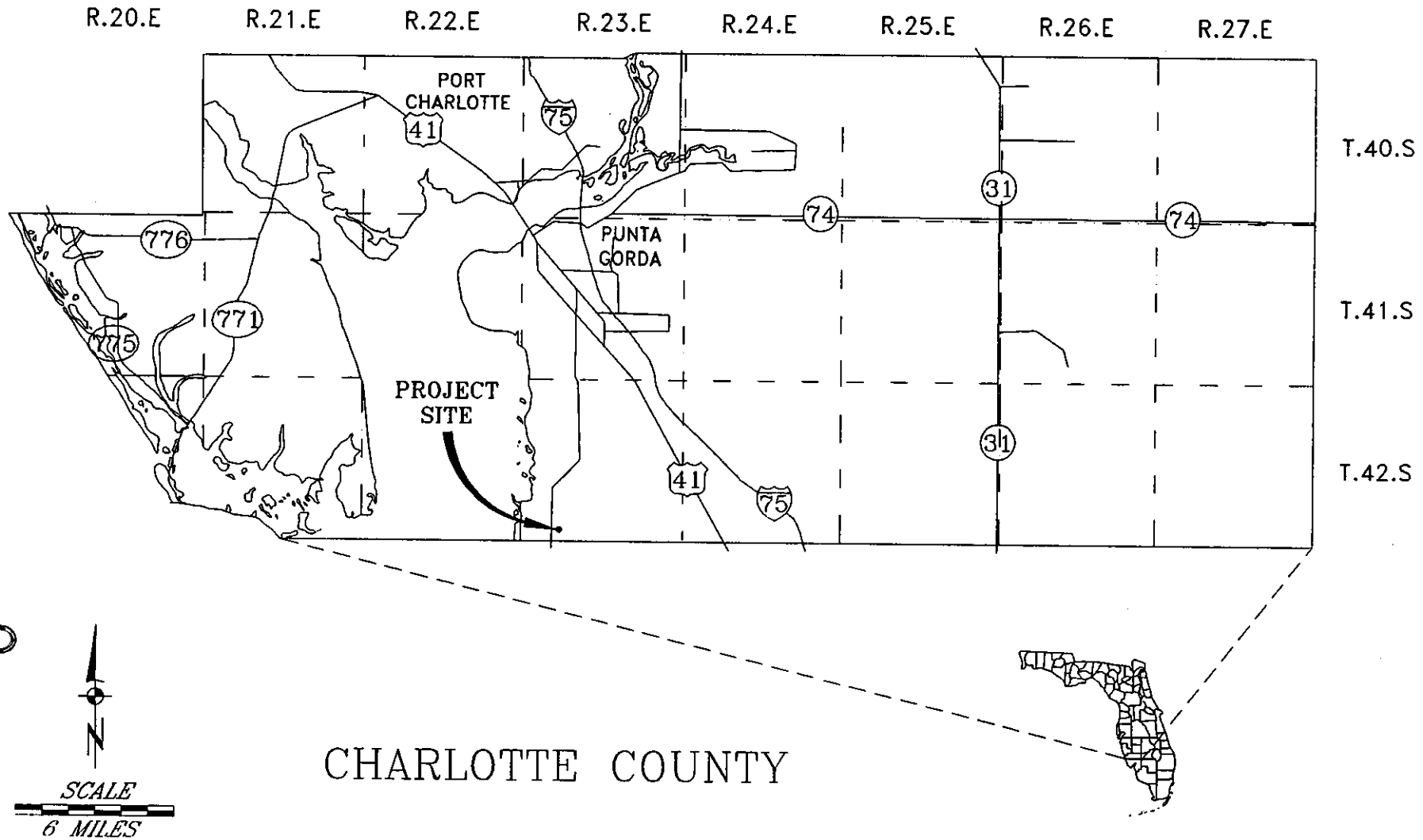

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FIGURE 2-1. SITE LOCATION MAP.

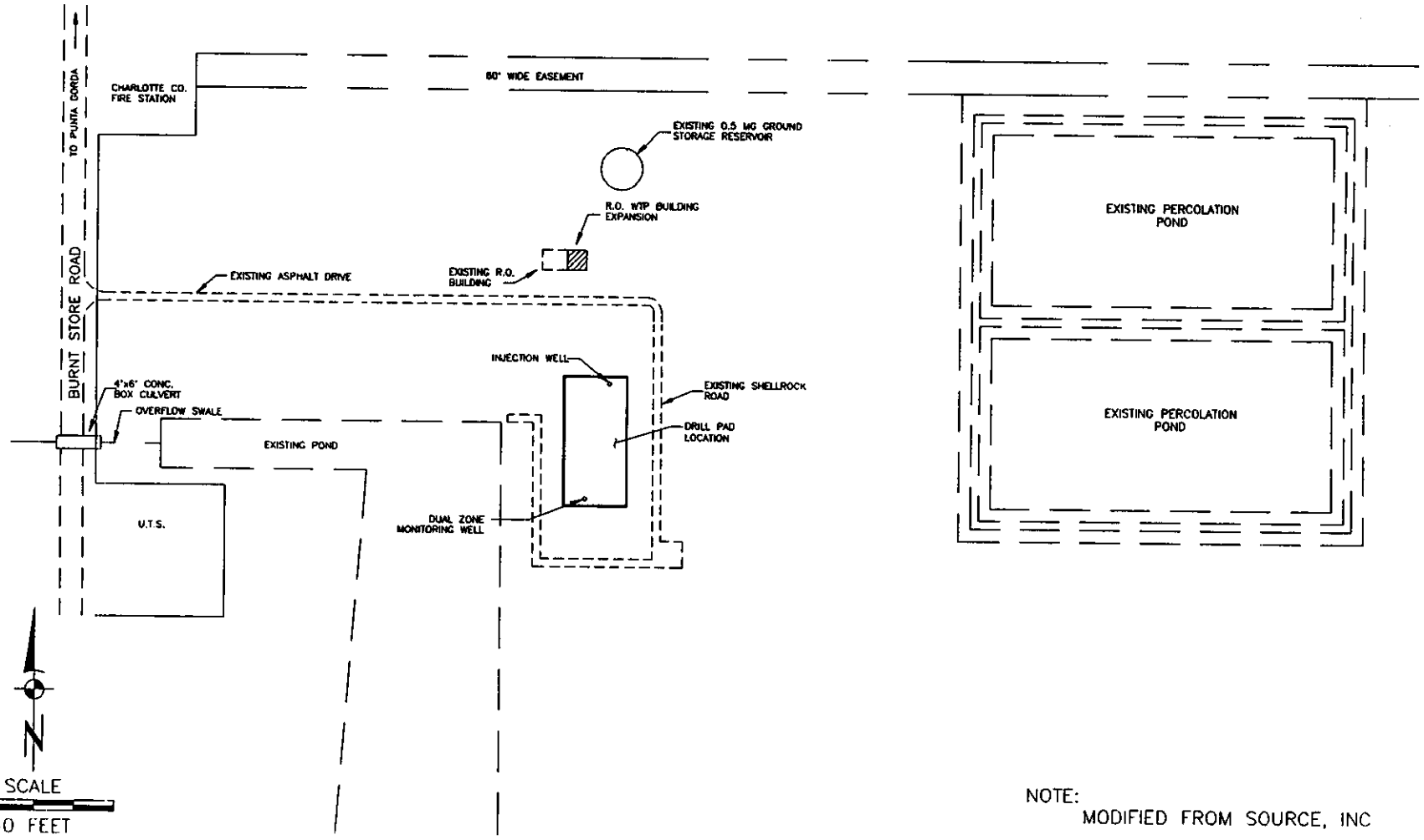

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FIGURE 2-2. SITE MAP.

conditions encountered at the site, were, for the most part, close to those anticipated by the well prognosis.

Well construction operations, for the subsurface portion of the Burnt Store Utilities injection well system, commenced on June 23, 1995 and were completed on September 19, 1995. Daily reports for the IW and the DZMW are included in Appendix C of this report. The wells were installed by Youngquist Brothers, Inc. drilling company, Fort Myers, Florida. Well site geology was provided by ViroGroup, Inc.

In conformance with the limiting conditions of the FDEP construction permit, weekly construction progress reports were submitted to the FDEP and members of the Technical Advisory Committee (TAC), composed of the SWFWMD and the United States Geological Survey. FDEP personnel were notified of significant testing events during construction of both the IW and the DZMW, and were present for all pressure testing. Copies of all geophysical logs, lithologic logs, pressure test results, casing mill certificates, core and packer test data, and other pertinent information, were supplied to the FDEP and the TAC along with the weekly progress reports.

III. INJECTION WELL (CH-314) INSTALLATION

A. Pad Monitoring Wells

Prior to commencement of drilling operations for the IW, a 80 foot by 120 foot cement pad, equipped with a three foot high cement retaining wall, was constructed at the site (Figure 3-1). Four shallow groundwater monitoring wells (CH-310, 311, 312, 313) were installed outside of the pad, one proximal to each pad corner. Construction details for the four pad monitoring wells are summarized on Table 3-1 and a schematic illustration of a typical pad monitoring well is provided as Figure 3-2. Subsequent to installation, the measuring points of each of the pad monitoring wells was surveyed relative to National Geodetic Vertical Datum (NGVD) by a registered land surveyor. Lithologic descriptions for the four pad monitoring wells are included in Appendix D of this report. The purpose of the pad monitoring wells was to provide a means of assessing any potential impacts to the shallow surficial aquifer at the site resulting from uncontrolled leaks or spills of saltwater emanating from deep saline aquifers during the drilling operations. The pad monitoring wells were monitored each week during the drilling operations for water levels, conductivity, dissolved chloride concentrations, and pH. Copies of the weekly monitoring reports for the four pad monitoring wells are included in Appendix E of this report. No significant changes in water quality in the surficial aquifer were recorded during the installation of the IW and the DZMW.

B. Injection Well (CH-314)

A brief summary of the construction sequence for the IW is provided as Table 3-2. A schematic illustration of the IW is presented as Figure 3-3. A summary of the construction details for the IW is provided as Table 3-3. The lithologic log for the IW is included in appendix D of this report. A closed drilling fluid system, utilizing the mud rotary method to the upper casing setting depth of 550 feet and the reverse

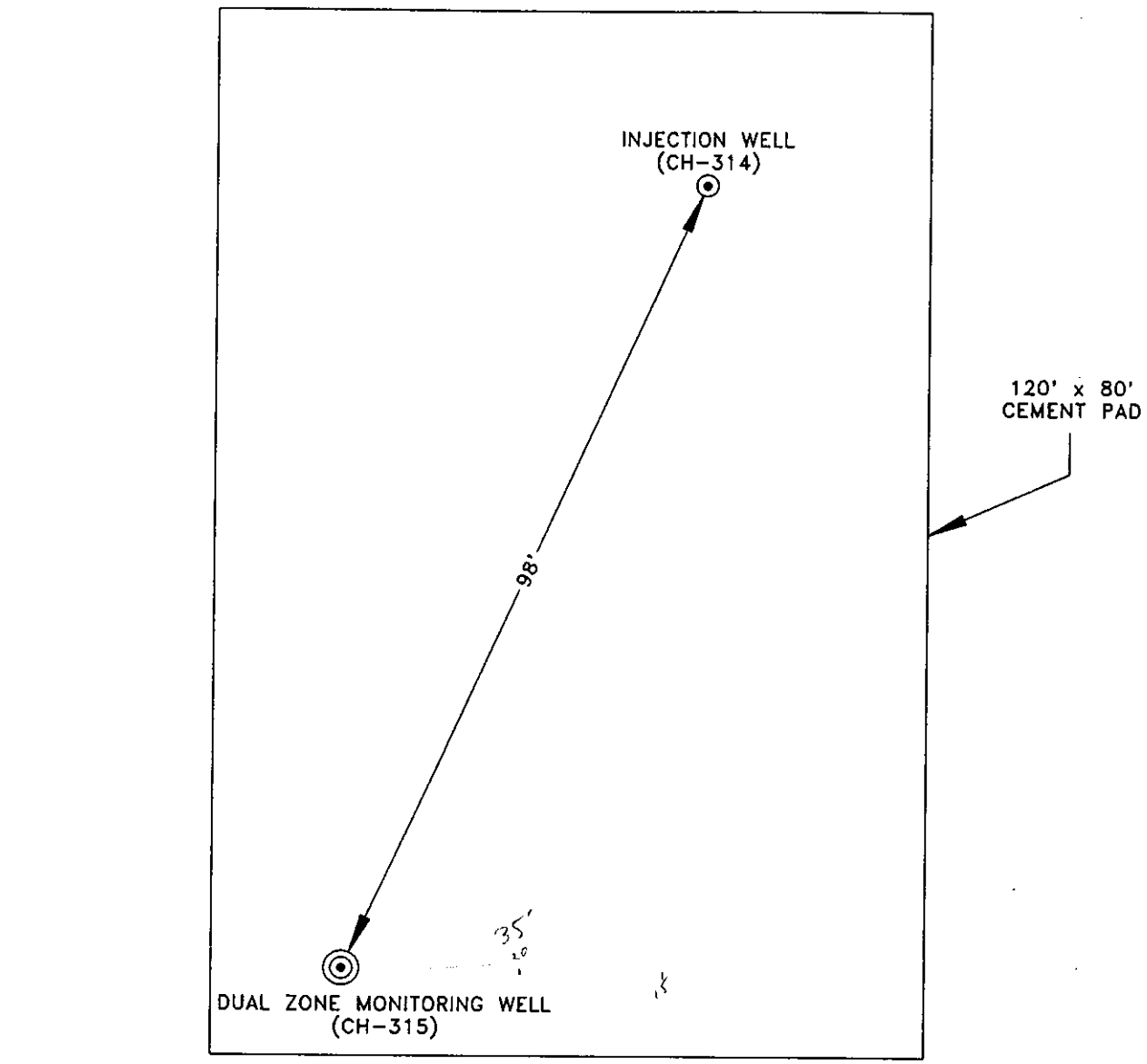

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FIGURE 3-1. WELL SITE LAYOUT MAP.

TABLE 3-1.

SUMMARY OF SHALLOW PAD MONITORING WELL CONSTRUCTION DETAILS

WELL #	TOTAL DEPTH (ft)	CASING/ SCREEN DIAMETER (in)	SCREEN LENGTH (ft)	SCREEN SLOT SIZE (in)	CASING STICKUP (ft. ALS)
CH-310	20	2	10	.010	2.10
CH-311	20	2	10	.010	2.11
CH-312	20	2	10	.010	1.05*
CH-313	20	2	10	.010	2.08

*Originally 2.00 feet, but later cut off.

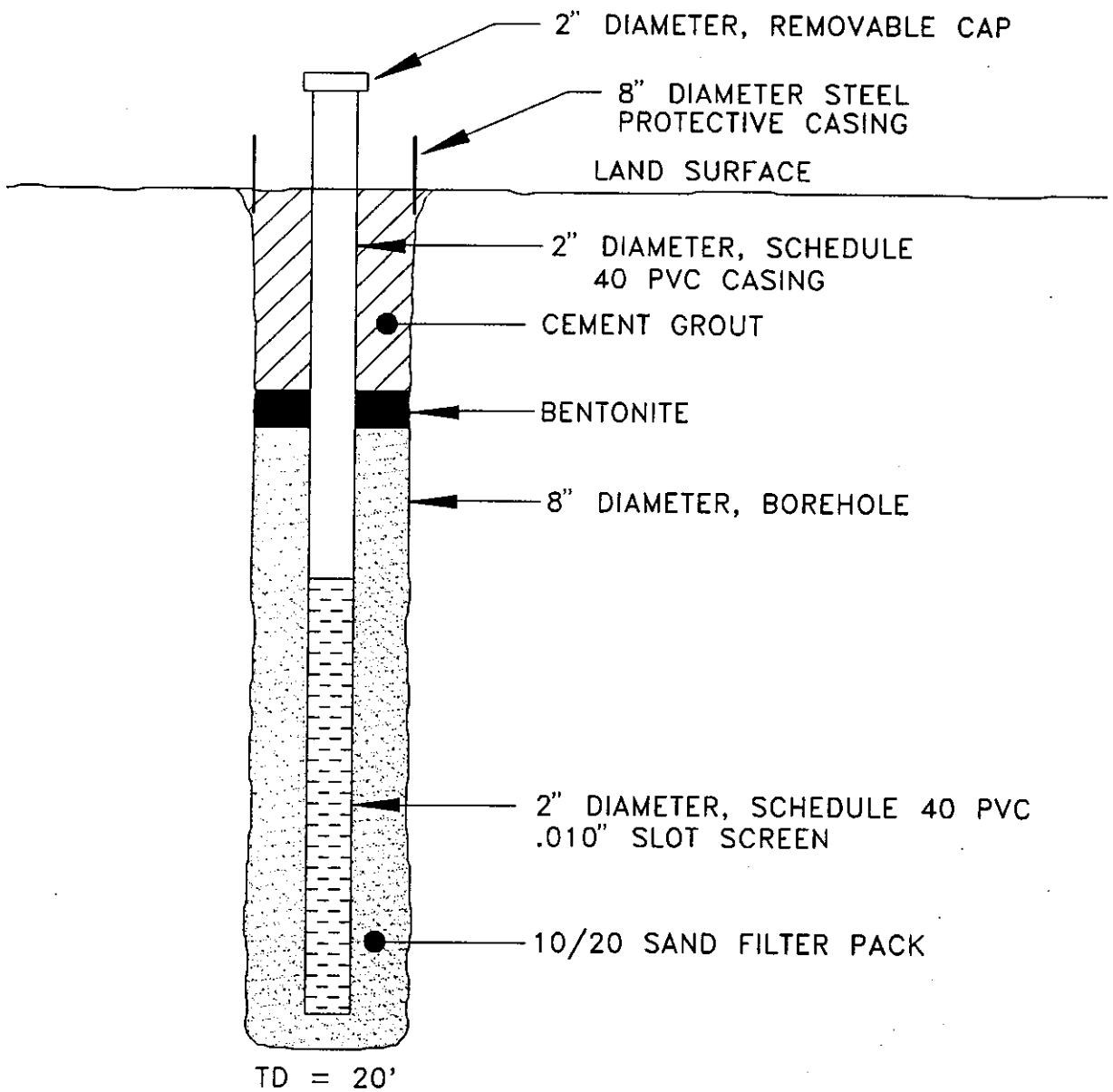

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FIGURE 3-2. SCHEMATIC ILLUSTRATION SHOWING CONSTRUCTION DETAILS FOR A TYPICAL SHALLOW MONITORING WELL INSTALLED PROXIMAL TO THE DRILLING PAD AT THE BURNT STORE UTILITIES IW SITE.

TABLE 3-2.

SUMMARY OF INJECTION WELL (CH-314) CONSTRUCTION SEQUENCE

Date	Activities of Significance
06/13/95	Began moving in Youngquist Bros. Rig #88 and laying cement work pad.
06/16/95	Moved rig and equipment onto cement pad.
06/19/95	Moved in Youngquist Bros. Rig #44 to drill shallow pad monitoring wells.
06/20/95	Completed installation and development of four shallow pad monitoring wells.
06/22/95	Drilled mouse hole and rat hole.
06/23/95	Spudded injection well at 12:00 Noon. Drilled 12-inch diameter pilot hole to 368 feet.
06/25/95	Completed reaming 36-inch diameter hole to 195 feet. Ran GR-Caliper. Landed 30-inch diameter steel casing at 192 feet.
06/26/95	Pressure grouted 36-inch diameter steel casing with 93 barrels neat cement.
06/27/95	Drilled 12-inch diameter pilot-hole to 546 feet. Ran GR, and DIL logs.
06/28/95	Reamed 29-inch diameter hole to 552 feet.
06/29/95	Ran Caliper log. Landed 24-inch diameter steel casing at 550 feet. Pressure grouted with 153 barrels 12% and 33 barrels neat cement.
07/01/95	Switched to reverse air rotary system.
07/03/95	Completed drilling 12-inch diameter pilot-hole to 1475 feet. Ran packer test #1 (single packer) of interval 1453-75 feet.
07/04/95	Ran GR/Caliper/Temperature, DIL, BHC Sonic, and Flowmeter logs.
07/05/95	Ran packer test #2 (straddle) of interval 1324-64 feet. Ran packer test #3 (straddle) to interval 1251-91 feet.
07/07/95	Completed reaming 22 1/2-inch diameter hole to 1357 feet.
07/08/95	Ran GR-Caliper log. Landed 18-inch diameter steel casing at 1349 feet.

TABLE 3-2. (CONTINUED)

SUMMARY OF INJECTION WELL (CH-314) CONSTRUCTION SEQUENCE

Date	Activities of Significance
07/09/95	Killed well. Pressure grouted first stage with 205 barrels 12% and 50 barrel neat cement.
07/10/95	Completed cementing 18-inch casing annulus.
07/12/95	Cut Core #1 (1927-59 feet).
07/14/95	Cut Core #2 (2045-75 feet).
07/21/95	Cut Core #3 (2346-68 feet).
07/25/95	Cut Core #4 (2407-21 feet).
08/06/95	Reamed 3240 feet with 12-inch diameter pilot hole. Ran GR/Caliper/Temperature, Dual Induction, BHC sonic, Static Flowmeter logs.
08/08/95	Ran Video Survey to 2187 feet, hit bridge, went in hole open-ended with drill pipe to 2270 feet, ran Video Survey from 2270 to 2740 feet (couldn't get past 2740 feet).
08/12/95	Completed reaming 16 1/2-inch diameter hole to 2497 feet.
08/15/95	Completed cleaning out 12-inch pilot (below reamed hole) to 3240 feet, drilled 28 feet new footage (to 3268 feet). Ran GR/Caliper log from total depth to 1300 feet.
08/16/95	Ran BHC Sonic and Dual Induction logs.
08/18/95	Landed 7 5/8-inch diameter steel casing with cementing packer at 2510 feet (N.B. later determined to actually be 2528 feet). Seated packer. Placed four bags hole plug and 15 buckets gravel in annulus. Went in annulus with tremie to 2536 feet, but did not tag packer.
08/20/95	Set cement basket #1 at 2530 feet.
08/21/95	Set cement basket #2 at 2527 feet (N.B. Later tagged at 2530 feet).
08/30/95	Completed cementing annulus. Milled out cement baskets.

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TABLE 3-2. (CONTINUED)

SUMMARY OF INJECTION WELL (CH-314) CONSTRUCTION SEQUENCE

Date	Activities of Significance
08/31/95	Purged well and sampled for Primary and Secondary Drinking Water analyses.
09/01/95	Ran Sector Bond log.
09/04/95	Ran Video Survey.
09/06/95	Ran pressure test on 7 5/8-inch diameter injection casing. Witnessed by FDEP.
09/08/95	Set TIW THS-6 model retrievable packer.
09/09/95	Installed 3 1/2-inch diameter fiberglass tubing.
09/10/95	Installed annular fluid.
09/12/95	Conducted annular pressure test. Witnessed by FDEP.
09/22/95	Conducted injection test.
09/25/95	Conducted Radioactive Tracer Survey test.
09/26/95	Began rigging down and moving out equipment.

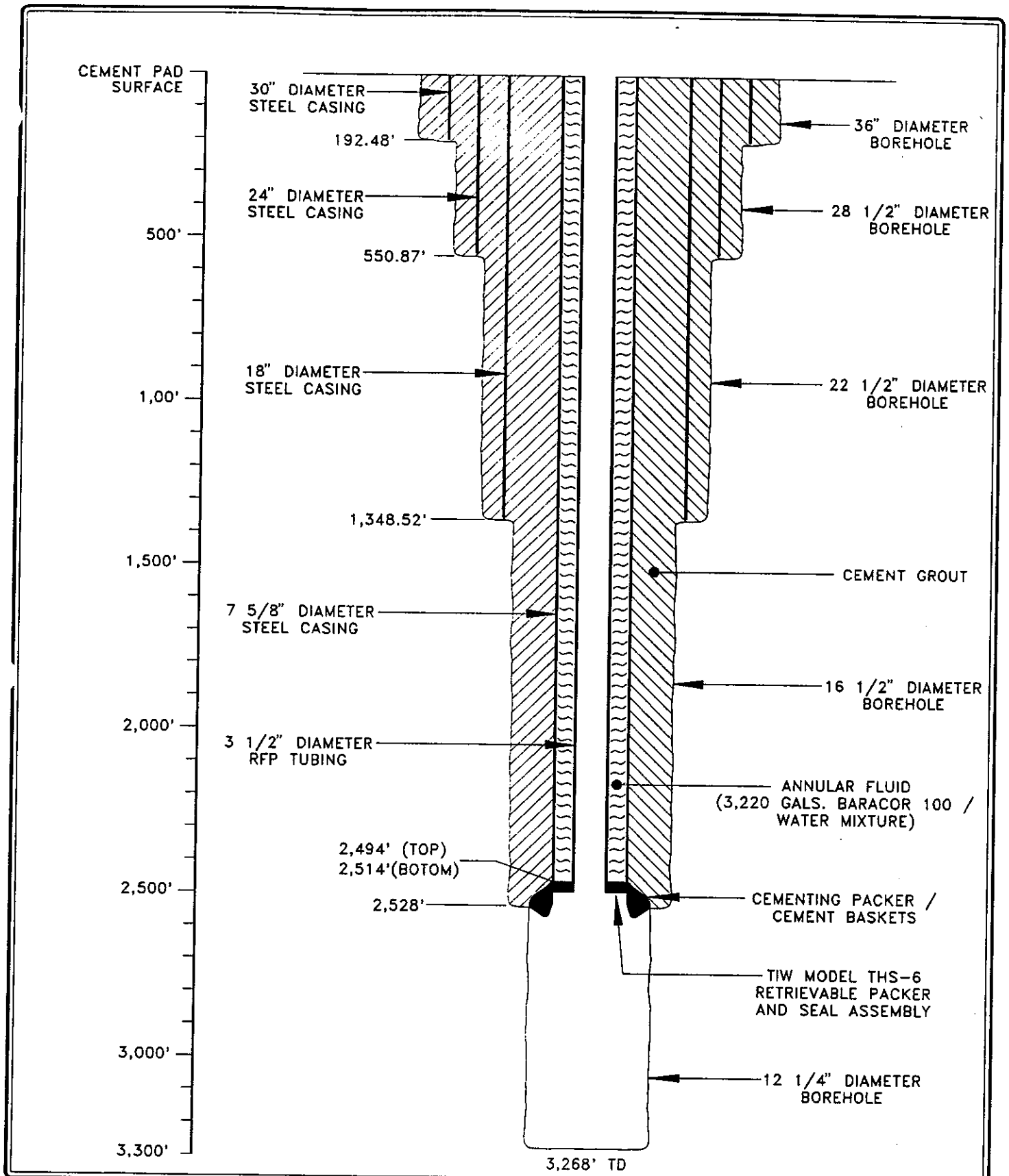

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FIGURE 3-3. SCHEMATIC DIAGRAM SHOWING INJECTION WELL (CH-314) CONSTRUCTION DETAILS.

TABLE 3-3.

SUMMARY OF INJECTION WELL CONSTRUCTION DETAILS

CASING DIAMETER (OD-in.)	CASING DIAMETER (ID-in.)	CASING MATERIAL	SETTING DEPTH (ft.)
30	29.25	Steel	192
24	23.50	Steel	551
18	17.42	Steel	1349
7 5/8	6.63	Steel	2528
3 1/2	3.00	Fiberglass	2514

Other Construction Details:

Total Depth of Well: 3268'
Annular Fluid Between RFP Tubing and 7 5/8" Injection Casing:
3220 Gallons Baracor 100/Water Mix
Tubing Packer: Texas Iron Works THS-6 Retrievable Type

air rotary method below that depth, was used for drilling of both the IW and the DZMW.

The IW was permitted and constructed with a tubing and packer design. The tubing installed is of 3 1/2-inch outside diameter, 3-inch inside diameter reinforced fiberglass plastic (RFP) manufacture. The packer installed is a Texas Iron Works (TIW) model THS-6 retrievable packer. The annular fluid emplaced between the tubing and the 6 5/8-inch inside diameter steel injection casing is Halliburton Baracor 100. Copies of the mill certificates for the IW casings are included in Appendix F of this report. Copies of the cement records for the IW casing setting are included in Appendix G of this report.

IV. DUAL ZONE MONITORING WELL (CH-315) INSTALLATION

The DZMW was installed at the site using a second Youngquist Brothers, Inc. (YBI) drilling rig. Construction operations occurred concurrently with the drilling of the IW. Construction of the DZMW commenced on July 16, 1995 and was completed on September 19, 1995. A brief summary of the construction sequence for the DZMW is provided as Table 4-1. A schematic illustration of the DZMW is provided as Figure 4-1. A summary of the construction details is provided as Table 4-2. The lithologic log for the DZMW is included in Appendix D of this report. Copies of the mill certificates for the DZMW casings are included in Appendix F of this report. Copies of the cement records for the DZMW casing settings are included in Appendix G of this report.

TABLE 4-1.

SUMMARY OF DUAL ZONE MONITORING WELL (CH-315)
CONSTRUCTION SEQUENCE

Date	Activities of Significance
07/11/95	Began moving in Youngquist Bros. Rig #248 and equipment.
07/15/95	Spudded well at 7:16 AM.
07/16/95	Completed drilling 29-inch diameter hole to 204 feet. Ran GR-Caliper log.
07/17/95	Landed 24-inch diameter steel casing at 200 feet. Pressure grouted with 90 barrels 12% and 85 barrels neat cement.
07/19/95	Completed drilling 22 1/2-inch diameter hole to 555 feet. Ran GR-Caliper log.
07/20/95	Landed 18-inch diameter steel casing at 551 feet. Pressure grouted with 105 barrels 12% and 48 barrels neat cement.
07/26/95	Completed switching to reverse air rotary system.
07/28/95	Completed drilling 16-inch diameter hole to 1210 feet. Ran Dual Induction, GR-Caliper logs.
07/29/95	Landed 9 5/8-inch diameter steel casing at 1207 feet. Pressure grouted first stage with 180 barrels 12% and 30 barrels neat cement.
07/30/95	Tremied second cement stage - 107 barrels 12%. Tagged cement at 30 feet.
07/31/95	Conducted pressure test on 9 5/8-inch diameter steel casing. Witnessed by FDEP.
08/01/95	Ran cement Bond Log.
08/10/95	Completed drilling 8 3/4-inch hole to 1880 feet.
08/11/95	Ran GR-Temperature-Caliper, Dual Induction, BHC Sonic logs.
08/12/95	Landed 4 1/2-inch diameter steel casing with cementing packer at 1832 feet. Seated packer and pumped 1 1/2 barrels neat cement.

TABLE 4-1. (CONTINUED)

SUMMARY OF DUAL ZONE MONITORING WELL (CH-315)
CONSTRUCTION SEQUENCE

Date	Activities of Significance
08/13/95	Went in annulus with tremie. Tagged cement at 1868 feet in open hole. Filled open hole with sand. Pumped second stage cement - 1 1/2 barrels neat. Tagged after 8 hours at 1780 feet.
08/16/95	Completed cementing annulus of 4 1/2-inch diameter casing 1287 feet. Killed well with barite slug.
08/17/95	Set test packer at 1818 feet. Attempted to pressurize, wouldn't hold.
08/18/95	Pulled test packer out of hole. Found damaged. Ordered new test packer.
08/19/95	Rigged down and moved out Youngquist Bros. Rig #248.
08/31/95	Purged both monitoring zones and procured water samples from each for Primary and Secondary Drinking Water analyses.
09/07/95	Resampled both monitoring zones for Primary and Secondary Drinking Water analyses (original set was not delivered to laboratory within holding times).
09/19/95	Conducted pressure test on 4 1/2-inch diameter steel casing. Witnessed by FDEP.
09/26/95	Reran Cement Bond log on 4 1/2-inch diameter casing.

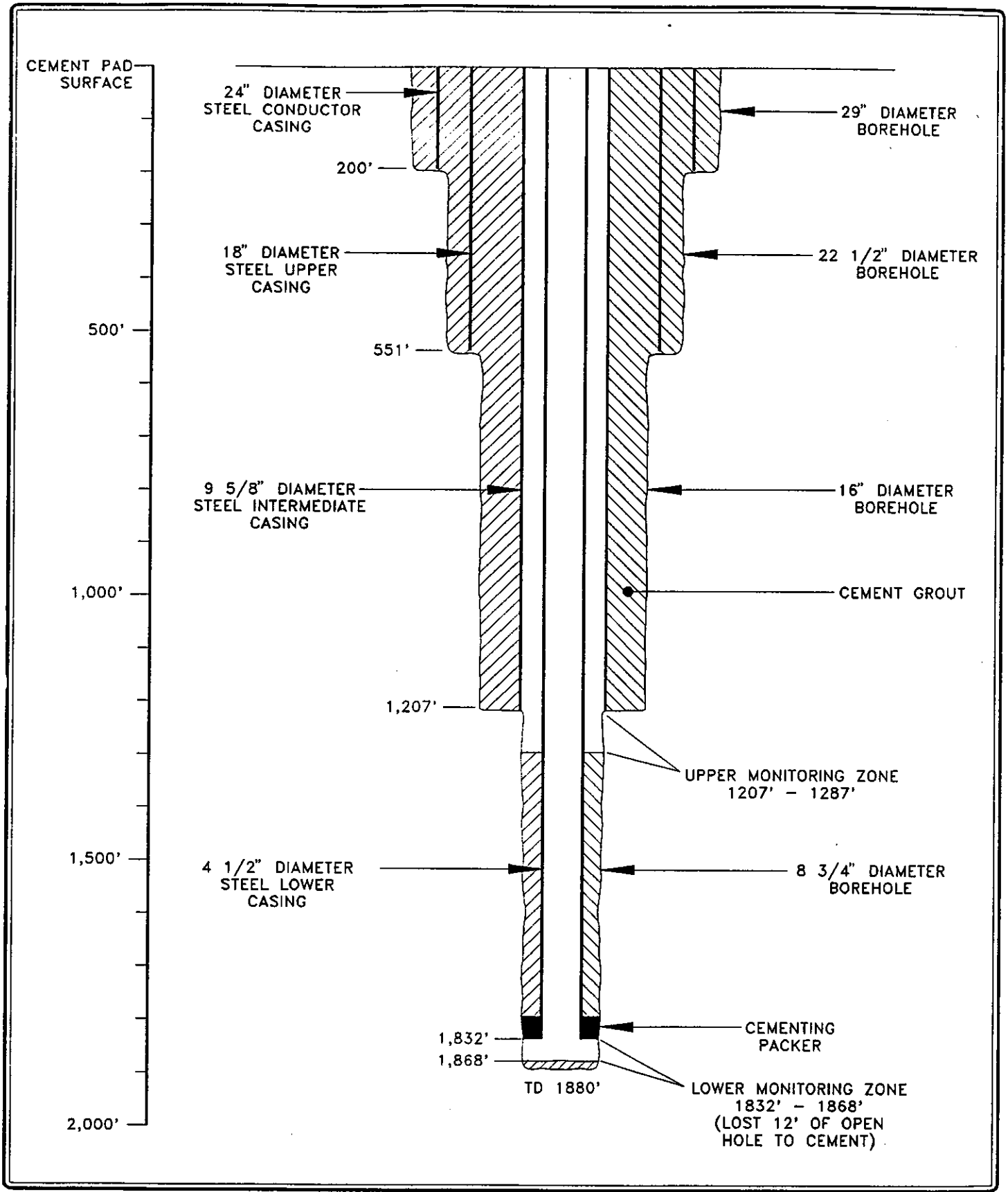

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FIGURE 4-1. SCHEMATIC DIAGRAM SHOWING DUAL ZONE MONITORING WELL (CH-315) CONSTRUCTION DETAILS.

TABLE 4-2.

SUMMARY OF DUAL ZONE MONITORING WELL CONSTRUCTION DETAILS

CASING DIAMETER (OD-in.)	CASING SUMMARY CASING DIAMETER (ID-in.)	MATERIAL	SETTING DEPTH (ft.)
24	23.50	Steel	200
18	17.42	Steel	551
9 5/8	8.83	Steel	1207
4 1/2	3.92	Steel	1832

Other Construction Details:

Total Depth of Well: 1868 feet
Upper Monitoring Zone: 1207-1287 feet
Lower Monitoring Zone: 1832-1868 feet

V. DATA COLLECTION AND ANALYSES

A. Strip Log

In addition to the lithologic log, a detailed strip log was maintained throughout the drilling operations of the IW. The strip log provides a detailed presentation of drilling rate, lithology, core intervals and results, packer test intervals and results, reverse air water quality, and casing setting depths for this well. A copy of the strip log is included in Appendix H of this report.

B. Geophysical Logging Program

A suite of open-hole geophysical logs, including dual induction laterolog (DIL) gamma ray (GR), and caliper, was run at each casing setting depth in both the IW and DZMW. In addition to these logs, for each casing setting depth below the upper casing (and also at total depth), a borehole-compensated (BHC) sonic log was run. DIL logs provide information relative to formation resistivity (the inverse of conductivity). GR logs are useful in stratigraphic correlations with off-setting wells. BHC sonic logs provide information relative to porosity and also give some indications regarding the presence of fracture permeability.

Cased hole logs run in the IW and DZMW included temperature and cement bond logs (CBL). Temperature logs are useful in determining the status of cement curing behind casing. Cement bond logs are useful in determining bonding of the cement to the casing and the borehole wall.

A summary of the geophysical logs run in the IW is provided on Table 5-1. A summary of the geophysical logs run in the DZMW is provided on Table 5-2. A set of geophysical logs for each well is contained in Appendix I of this report.

TABLE 5-1.

SUMMARY OF GEOPHYSICAL LOGS RUN IN THE INJECTION WELL (CH-314)

DATE	LOG TYPE	FOOTAGE
June 26, 1995	Caliper/GR	200 to Surface
June 28, 1995	Dual Induction	545 to 188
June 29, 1995	Caliper	550 to 192
June 30, 1995	Temperature	537 to 20
July 04/1995	Dual Induction	1469 to 540
July 04, 1995	BHC Sonic	1469 to 495
July 04, 1995	Caliper/GR	1469 to 540
July 04, 1995	Fluid Resistivity	1469 to 500
July 04, 1995	Flowmeter (Static and Dynamic)	1469 to 540
July 08, 1995	Caliper/GR	1355 to 544
July 10, 1995	Temperature	1345 to Surface
August 07, 1995	Flowmeter	2740 to 1300
August 07, 1995	BHC Sonic	2740 to 1300
August 07, 1995	Dual Induction	2740 to 1300
August 07, 1995	Temperature	2740 to 1300
August 07, 1995	Caliper/GR	2740 to 1300
August 16, 1995	Dual Induction	3268 to 2500
August 16, 1995	BHC Sonic	3268 to 2500
August 16, 1995	Caliper/GR	3268 to 1300
September 01, 1995	Sector Bond Log	2545 to Surface
September 25, 1995	Temperature	3263 to Surface
September 26, 1995	Radioactive Tracer Survey	NA

TABLE 5-2.

SUMMARY OF GEOPHYSICAL LOGS RUN IN THE DUAL ZONE MONITORING WELL

DATE	LOG TYPE	FOOTAGE
July 20, 1995	Caliper/GR	556 to 168
July 21, 1995	Temperature	550 to Surface
July 28, 1995	Caliper/GR	1210 to 530
July 28, 1995	Dual Induction	1210 to 530
July 30, 1995	Temperature	1172 to Surface
August 01, 1995	Cement Bond Log	1172 to Surface
August 11, 1995	Dual Induction	1880 to 1200
August 11, 1995	BHC Sonic	1880 to 1200
August 11, 1995	Flowmeter	1880 to 1200
August 11, 1995	Temperature	1880 to 1200
August 18, 1995	Temperature	1700 to 10
August 28, 1995	Cement Bond Log	1835 to 880
September 26, 1995	Cement Bond Log	1835 to 880

C. Packer Testing

Packer tests were conducted in order to delineate the base of the underground source of drinking water (USDW). Three packer tests were performed. One single packer test (i.e. of the bottom-hole section) and two dual (i.e. straddle) packer tests were performed. Depending upon the hydrostatic pressure of the particular interval tested, water samples were procured from the isolated test interval either by allowing the well to flow or by pumping. The water samples obtained from the test zones were analyzed on-site for conductivity, pH, and dissolved chloride concentrations. An estimate of TDS was made from the conductivity values. In addition, one gallon samples of groundwater obtained from the test intervals were transported to an analytical laboratory for analyses of dissolved chloride, sulfate and TDS concentrations. The samples were cooled in route to the laboratory and a complete chain-of-custody was maintained throughout the sampling, transport, and analytical operations. A summary of the intervals tested and the data obtained is presented on Table 5-3. More complete water quality analyses for the packer test intervals are contained in Appendix E of this report.

Based upon the results of the packer testing program, and also utilizing data from analyses of the open-hole geophysical logs, the base of the USDW was determined to occur at an approximate depth of 1310 feet at the site.

D. Coring Program

A coring program was conducted from the purpose of quantifying confinement between the base of the USDW and the proposed injection zone. A total of four four-inch diameter cores were taken in the IW pilot hole. A summary of the cored intervals, generalized lithologic descriptions, and vertical permeability ranges is provided on Table 5-4.

TABLE 5-3.

SUMMARY OF WATER QUALITY FOR THE PACKER TEST INTERVALS

PACKER TEST #	TYPE	INTERVAL TESTED (ft.)	TOTAL DISSOLVED SOLIDS (mg/l)	CONDUCTIVITY (umhos/cm)	DISSOLVED CHLORIDES (ug/l)
1	Single Packer	1453-75	39,400	46,700	19,700
2	Straddle	1324-64	17,100	20,400	7615
3	Straddle	1251-91	3110	4220	1220

TABLE 5-4.

SUMMARY OF CORED INTERVALS

CORE #1	INTERVAL CORED (ft.)	RECOVERY (ft.)	PLUGS SENT FOR LABORATORY ANALYSES	AVERAGE VERTICAL PERMEABILITY RANGE (cm/sec)	LITHOLOGY
1	1929-59	3	1957, 1959	9.7×10^{-8}	Limestone
2	2045-75	26	2064, 2068, 2069, 2074	3.2×10^{-7}	Limestone
3	2346-68	22	2353, 2362, 2364, 2367	6.1×10^{-8}	Dolomite
4	2407-21	14	2408, 2418	3.1×10^{-9}	Dolomite

Representative portions of each core were sent to an geotechnical laboratory for analyses. The laboratory analyses included detailed lithologic descriptions and determination of porosity and horizontal and vertical permeabilities. Complete core analyses are included in Appendix J of this report. All unused portions of each core were transported to the Florida Geological Survey (FGS) core laboratory in Tallahassee.

The coring program substantiated that significant confinement exists at the site between the base of the USDW and the selected injection zone.

E. Water Quality Analyses

Water samples were procured during the IW construction by three methods: (1) from the reverse air drilling fluid return stream, (2) from packer testing, and (3) from pumping the open-hole section below the injection casing.

In the DZMW subsurface water samples were obtained from: (1) the reverse air drilling fluid return stream, and (2) the two monitoring zones after the monitoring casings had been set. In the DZMW, the upper monitoring zone has sufficient artesian pressure to flow, whereas the lower monitoring zone must be pumped in order to obtain a water sample.

During reverse air drilling, treated water from the WTP (i.e. water with dissolved chlorides less than 250 mg/l) was often added to the "mud" pits to replace fluid lost during the drilling operations. This resulted in a constant dilution of the return water stream and generally rendered the reverse air water quality analyses nonrepresentative, particularly when significant lengths of open-hole section were present. In shorter open-hole sections (generally after setting a string of casing) and in intervals where permeabilities and yields were high, more representative formation samples could be obtained from the reverse air return stream.

Reverse air water quality analyses were performed on-site and include determination of conductivity and dissolved chloride concentrations. Estimates of total dissolved solids (TDS) concentrations were obtained by applying a multiplication factor (i.e. 0.74) to the conductivity values. Reverse air water quality samples were obtained at 30 foot intervals during the drilling of the IW. The reverse air water quality analyses are contained in Appendix E of this report.

Water quality analyses from the packer test intervals were significantly more accurate than the reverse air water quality analyses. The packer testing procedure, intervals tested, and analytical results were described in a previous section of this report. The water quality analytical results from the packer test intervals are contained in Appendix E of this report.

Representative water samples were obtained from the injection zone in the IW and from the lower monitoring zone in the DZMW by pumping; and from the upper monitoring zone in the DZMW by flowing the well. Water samples from each of these three zones were transported to an analytical laboratory for Primary and Secondary Drinking Water analyses. A condensed summary of the inorganic analyses for each of the three zones is presented on Table 5-5. The complete water quality analytical results are included in Appendix E of this report.

F. Video Surveys

Video surveys were run in the injection well on two occasions:

(1) in the pilot hole to a depth of 2740 feet
(2) to a depth of 3150 feet after setting the 7 5/8-inch OD injection casing

TABLE 5-5.

SUMMARY OF PRIMARY AND SECONDARY DRINKING WATER QUALITY ANALYSES FOR THE UPPER MONITORING ZONE, LOWER MONITORING ZONE AND INJECTION ZONE

PARAMETER	UPPER MONITORING ZONE	LOWER MONITORING ZONE	INJECTION ZONE	UNITS	MCL	MDL
Chloride	677	19,800	19,600	mg/l	250	.4
Fluoride	.97	.81	.92	mg/l	4.0	.1
Sulfate	244	295	3030	mg/l	250	1.0
Total Dissolved Solids	1860	38,300	39,100	mg/l	500	5.0
Total Suspended Solids	6.7	60.7	8.0	mg/l		.3
Bicarbonate	136	91.1	103	mg/l		.4
Color	5	200	50	Color Units	15	1.0
Turbidity	14	96	20	Nephelometric Turbidity Units		.1
Odor	<1	<1	<1	Odor Number	3	1.0
Biological Oxygen Demand	1.48	1.37	NA	mg/l		1.0
Chemical Oxygen Demand	10.0	10.0	66.7			10.0
Specific Gravity	.99	1.01	1.02	NU		.1
Nitrite	<.001	.003	<.001	mg/l	1	.001
Nitrate	.008	.004	.007	mg/l	10	.001

TABLE 5-5. (CONTINUED)

SUMMARY OF PRIMARY AND SECONDARY DRINKING WATER QUALITY ANALYSES FOR THE UPPER MONITORING ZONE, LOWER MONITORING ZONE AND INJECTION ZONE

PARAMETER	UPPER MONITORING ZONE	LOWER MONITORING ZONE	INJECTION ZONE	UNITS	MCL	MDL
Ammonia	.36	.118	.08	mg/l		.01
Total Kjeldahl Nitrogen	.64	.44	.36	mg/l	10	.02
Total Organic Carbon	1.2	.5	<.4	mg/l		.40
Total Phosphorous	<.002	.008	.013	mg/l		.002
Cyanide	<2	<2	<2	ug/l	200	2
Copper	3	40	20	ug/l	1000	1.0
Lead	<1	30	9	ug/l	15	1.0
Zinc	30	470	390	ug/l		1.0
Arsenic	8.2	80	80	ug/l		
Barium	.52	.19	.08	mg/l		.0001
Cadmium	.9	3.1	2.1	ug/l		.1
Selenium	2.10	.05	1.95	mg/l	.05	.001
Iron	.53	19.30	2.49	mg/l	.3	.001
Sodium	354	13,484	12,700	mg/l		.139

TABLE 5-5. (CONTINUED)

SUMMARY OF PRIMARY AND SECONDARY DRINKING WATER QUALITY ANALYSES FOR THE UPPER MONITORING ZONE, LOWER MONITORING ZONE AND INJECTION ZONE

PARAMETER	UPPER MONITORING ZONE	LOWER MONITORING ZONE	INJECTION ZONE	UNITS	MCL	MDL
Aluminum	76	76	76	mg/l	.2	.001
Foaming Agents	.11	.15	<.10	mg/l	.5	.1
Gross Alpha	2.7	218	274	pCi/l	15	3.5
Radium 226	3.9	24	76	pCi/l	5*	.3
Radium 228	0.7	1.8	3.7	pCi/l	5*	.7
Hardness	567	5960	5280	mg/l		.4
pH	7.7	7.6	7.4	Standard Units		.1

NA = Not Analyzed

*Combined Radium 226 & Radium 228

The video surveys showed extensive fracturing and cavernous permeability in three general zones:

(1) between 2112 and 2208 feet
(2) between 2548 and 2858 feet
(3) between 2911 and 2950 feet

Numerous other zones, generally less than 20 feet thick, are also present below the injection casing setting depth, that exhibit extensive fracturing and cavernous permeability. The high permeability zones identified on the video surveys generally agree very well with those identified by BHC sonic log analyses.

G. Deviation Surveys

Deviation surveys were performed at approximate 90 foot intervals in all pilot holes and reamed holes for both the IW and the DZMW. The deviation surveys were performed by YBI using Totco Sure-Shot instruments. A tabulation of the deviation surveys for the IW is provided in Appendix K of this report. A summary of the deviation surveys for the DZMW is also provided in Appendix K. No deviations greater than 0.375 degrees were recorded in any portion of either well.

VI. SITE GEOLOGY AND HYDROLOGY

A. Stratigraphy

The anticipated subsurface geology of the Burnt Store Utilities site was described in the Area of Review portion of the FDEP construction permit application supporting documentation (ViroGroup, Inc., 1994). The actual stratigraphy, as encountered in the IW and DZMW, is described below. A generalized hydrostratigraphic column for the Burnt Store area is provided on Figure 6-1. Only those variances which are considered significant are described in detail. The anticipated stratigraphic formation tops, as delineated in the well prognosis prepared prior to drilling, are compared with the actual stratigraphic tops on Table 6-1. A cross-section through the Burnt Store Injection Well is provided as Figure 6-2.

1. Undifferentiated Holocene-Pleistocene Deposits

The undifferentiated Holocene-Pleistocene age deposits at the site consist of unconsolidated sand and poorly consolidated shelly sandstone. An approximate 10 foot thick limestone unit with good moldic porosity occurs at the base of the undifferentiated Holocene-Pleistocene deposits. The total thickness of the undifferentiated Holocene-Pleistocene deposits at the site is about 25 feet.

2. Tamiami Formation

The Tamiami formation (Pliocene age) unconformably underlies the undifferentiated Holocene-Pleistocene deposits at the site. It consists of an upper unnamed clay member, which is about 40 feet thick, and a lower unnamed limestone member, which is about 30 feet thick. The limestone is micritic and fossiliferous and exhibits fair to good interparticle porosity.

TABLE 6-1.

SUMMARY OF ANTICIPATED VERSUS ACTUAL FORMATION TOPS

FORMATION	ANTICIPATED DEPTH (ft.)	ACTUAL DEPTH (ft.)
Undifferentiated Holocene-Pleistocene	Surface	Surface
Tamiami (Pliocene)	20	21
Peace River (Miocene)	100	98
Lehigh Acres Sandstone (Mbr) of Peace River Fm..	140	130
Arcadia	200	188
Lower Hawthorn Mbr. of Acardia Fm.	540	542
Suwannee (Oligocene)	700	714
Crystal River (Eocene)	1200	1197
Williston	1470	1427
Avon Park	1580	1532
Oldsmar	2000	1990
"Boulder" Zone of Oldsmar Fm.	2500	2548

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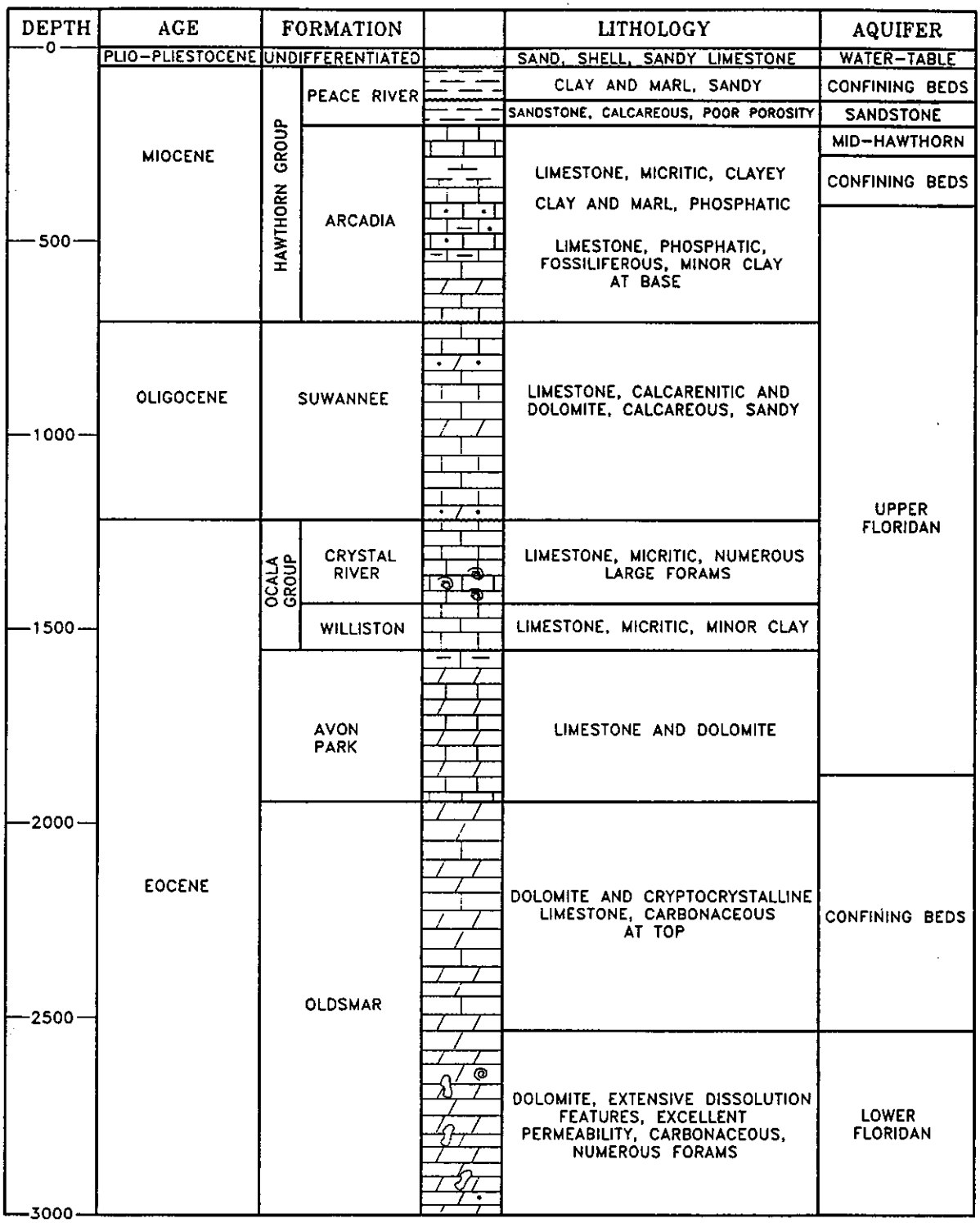

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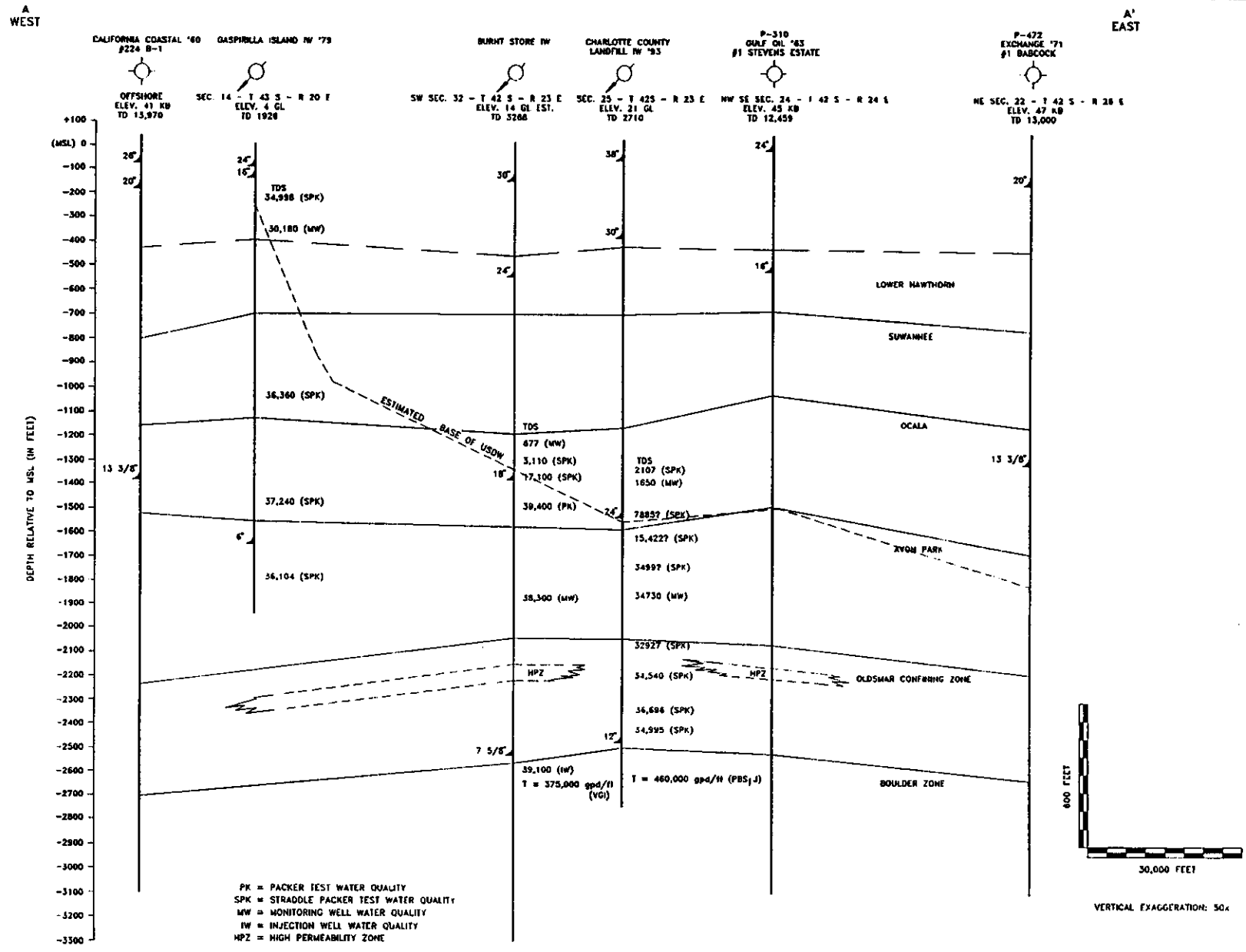
PROJECT NAME: BURNT STORE IW NUMBER: 01-03244.00

FIGURE 6-1. GENERALIZED HYDROSTRATIGRAPHIC COLUMN FOR THE BURNT STORE UTILITY SITE, CHARLOTTE COUNTY, FLORIDA.



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DRN. BY: CAM DWG NO. A-013244DC-2 DATE: 10/26/95

PROJECT NAME: BURNT STORE IW PROJECT NUMBER: 01-03244.00

FIGURE 6-2. CROSS SECTION A-A'.

3. Peace River Formation (of Hawthorn Group)

The Peace River formation (Middle Miocene age) unconformably underlies the Tamiami formation at the site. It can be subdivided into two members. These are, in order of increasing depth, the Cape Coral Clay member and the Lehigh Acres Sandstone member.

The Cape Coral Clay member is about 30 feet thick at the site. It consists of a light olive gray, soft, semi-cohesive, silty clay with some fine grained phosphate. The top of the Cape Coral Clay was encountered at the depth of 98 feet in the IW.

The Lehigh Acres Sandstone member of the Peace River formation consists of a calcareous, poorly to well cemented, silty sandstone, with poor porosity. Some relatively thick clay intervals are also present. The Lehigh Acres Sandstone is about 60 feet thick at the site. It was encountered at a depth of 130 feet.

4. Arcadia Formation (of Hawthorn Group)

The Arcadia formation (Early Miocene age) is, in contrast to overlying stratigraphic units, a predominantly carbonate unit. It was encountered at a depth of 188 feet in the IW. It unconformably underlies the Peace River formation at the site. It consists of interbedded phosphatic limestones, clays, and lime mud units. The best porosity exhibited in any of the limestone units occurs in the basal unit, which is also the thickest. This unit, informally named the Lower Hawthorn (or Tampa) member, which is about 165 feet thick at the site, contains some intervals which are characterized by good to excellent moldic porosity. The overall thickness of the Arcadia formation at the site is about 515 feet.

5. Suwannee Formation

The Suwannee formation (Oligocene age) consists of moderately indurated, fossiliferous, calcarenitic to micritic limestones at the site. It was encountered at a depth of 714 feet. The Suwannee formation unconformably underlies the Hawthorn Group. Poor to good moldic and interparticle porosity characterizes the limestones of the Suwannee formation. An oolitic layer about 20 feet thick is present in the lower part of the Suwannee at the site. Some interbedded lime mud intervals of up to 10 feet in thickness are also present in the Suwannee interval. The overall thickness of the Suwannee formation at the site is about 485 feet.

6. Crystal River Formation (of Ocala Group)

The Crystal River formation (Late Eocene age) was encountered at a depth of 1197 feet in the IW. This stratigraphic unit unconformably underlies the Suwannee formation. It consists of biomicritic limestone with good to excellent interparticle porosity. The fossil assemblage is dominated by large foraminifera, particularly Operculinides sp. and Lepiclocyclina sp. Thin interbedded lime mud units are also present at the site in the Crystal River formation. The Crystal River formation is about 230 feet thick at the site.

7. Williston Formation (of Ocala Group)

The Williston formation conformably underlies the Crystal River formation at the site. It was encountered at a depth of 1427 feet in the IW. It consists principally of calcarenitic limestone with thin interbedded lime mud layers. Porosity in the limestone units is poor to good. The thickness of the Williston formation is about 80 feet at the site.

8. Avon Park Formation

The Avon Park formation (Middle Eocene age) unconformably underlies the Ocala Group at the site. It was encountered at a depth of 1532 feet in the IW. It consists mainly of micritic to calculitic limestones with some thin dolomite layers. The overall porosity of this unit is low. The thickness of the Avon Park formation in the Burnt Store Utilities IW is about 460 feet.

9. Oldsmar Formation

The Oldsmar formation (Early Eocene age) unconformably underlies the Avon Park formation at the site. It was encountered at a depth of 1990 feet in the IW. It consists of relatively low porosity micritic to calculitic limestones in the upper approximate 100 feet and dolomites with extensive fracture permeability in the lower portion of the formation. The overall thickness of the Oldsmar formation at the site likely exceeds 1400 feet. A total of approximately 1280 feet of this formation was penetrated in the IW.

The first significant zone of fracture and cavernous permeability, commonly referred to as a "boulder zone" occurred at a depth of 2112 feet in the IW. This first "boulder" zone is 98 feet thick. It is underlain by relatively low permeability dolomites to an approximate depth of 2528 feet.

A second thicker "boulder" zone occurs at a depth of 2548 feet in the IW. This second "boulder" zone extends to a depth of 2860 feet.

A third, much thinner "boulder" zone occurs between the approximate depths of 2910 to 2948 feet.

Because of its greater thickness and the additional confinement present above it, the second "boulder" zone (i.e. between 2548 and 2860 feet) was selected as the primary injection interval for the Burnt Store Utilities IW.

B. Hydrology

As indicated on Figure 6-1, those zones which serve as water supply sources in the Burnt Store area include the undifferentiated Holocene-Pleistocene deposits (water-table aquifer), the Tamiami formation, the Lehigh Acres Sandstone member of the Peace River formation (Sandstone aquifer), and the numerous limestone zones of the Arcadia formation (Mid- and Lower Hawthorn aquifers). Of these, the aquifers of the Arcadia formation, which contain slightly brackish to brackish groundwater, are the most important sources of supply.

Other potential sources of supply in the Burnt Store area include the Suwannee formation and the upper part of the Crystal River formation of the Ocala Group (i.e. the Upper Floridan aquifer).

All of the aquifers denoted above are separated from the injection zone by intervening confining zones of significant thickness.

C. Groundwater Quality

Based upon the water quality analyses performed on groundwater samples obtained from packer testing, as well as from geophysical log interpretation data, the base of the USDW was found at an approximate depth of 1310 feet in the IW. Table 6-2 presents a summary of TDS, conductivity, and dissolved chloride concentrations versus depth for the packer test intervals, the monitoring intervals in the DZMW, and the injection zone in the IW. Table 6-3 presents a summary of the inorganic portion of the Primary and Secondary Drinking Water analyses conducted on groundwater

samples obtained from the monitoring zones in the DZMW and the injection zone in the IW. The complete Primary and Secondary Drinking Water analyses are contained in Appendix E.

Water samples were collected at 30 foot intervals from the reverse air discharge stream throughout the drilling of the IW. These water samples were analyzed for conductivity and dissolved chloride concentrations. An estimate of TDS was made for each sample from the conductivity data (using a multiplication factor 0.74). However, as previously described, because fresh water (i.e. treated water from the Burnt Store Utilities WTP) was added to the "mud" pits at various rates throughout most of the drilling operations, the water samples obtained from the reverse air discharge stream tend to be nonrepresentative of the native water in the formations penetrated. A complete set of water quality analyses for samples obtained from the reverse air discharge stream is also contained in Appendix E.

D. Injection Zone(s)

As described in previous sections of this report, the injection zone selected for the Burnt Store Utilities injection well is the second "boulder" zone which occurs between the appropriate depths of 2548 and 2860 feet. The 7 5/8 inch diameter injection casing was set at a depth of 2528 feet in the IW. Because the open-hole section of the IW extends to the total depth (3268 feet) of the well, the third "boulder" zone (2910 to 2948 feet), as well as thinner highly permeable zones, also serve as injection disposal conduits. The native water quality in the injection zone(s) has a TDS concentration of about 39,000 mg/l. The injection zone is overlain by low permeability confining units of considerable thickness. A quantification of the transmissivity of the injection zone is provided in a subsequent section of this report.

E. Monitoring Zones

The two monitoring zones in the DZMW are:

(1) 1210 to 1287 feet
(2) 1832 to 1868 feet.

The upper monitoring zone is in the Crystal River formation. The uncemented annulus between the 9 5/8-inch outside diameter (OD) intermediate casing and the 4 1/2-inch OD lower casing allows groundwater emanating from the upper monitoring to be sampled at the surface. Hydrostatic pressure in the relatively fresh upper monitoring zone is sufficient to allow the well to flow at approximately 70 gallons per minute (gpm).

The lower monitoring zone is in the Avon Park formation. The open-hole section of the DZMW below the 4 1/2-inch OD lower casing allows for groundwater entering the well to be sampled from inside the 4 1/2-inch diameter casing. The lower monitoring zone is saline and therefore, does not flow at the surface. This zone can be pumped at a rate of approximately 10 gpm.

VII. WELL TESTING PROGRAM

A. Casing Pressure Tests

Pressure tests were conducted in the injection well on the following occasions:

(1) On the 7 5/8-inch OD steel injection casing on September 6, 1995

(2) On the 3 1/2-inch OD RFP tubing/6 5/8-inch ID injection casing annulus on September 12, 1995.

Both tests were witnessed by an FDEP representative. No significant pressure decreases were noted during the one-hour tests. The pressure test data for the IW is contained in Appendix J.

Pressure tests were conducted in the DZMW on the following occasions:

(1) On the 9 5/8-inch OD steel casing for he upper monitoring zone on July 31, 1995.

(2) On the 4 1/2-inch OD steel casing for the lower monitoring zone on September 19, 1995.

Both tests in the DZMW were witnessed by an FDEP representative. No significant pressure decreases were noted during either one-hour test. The pressure test data for the DZMW is included in Appendix L.

B. Injection Test

A 12-hour injection test was conducted in the IW on September 22, 1995. Prior to conducting the test, approximately 60 hours of background bottom hole pressure

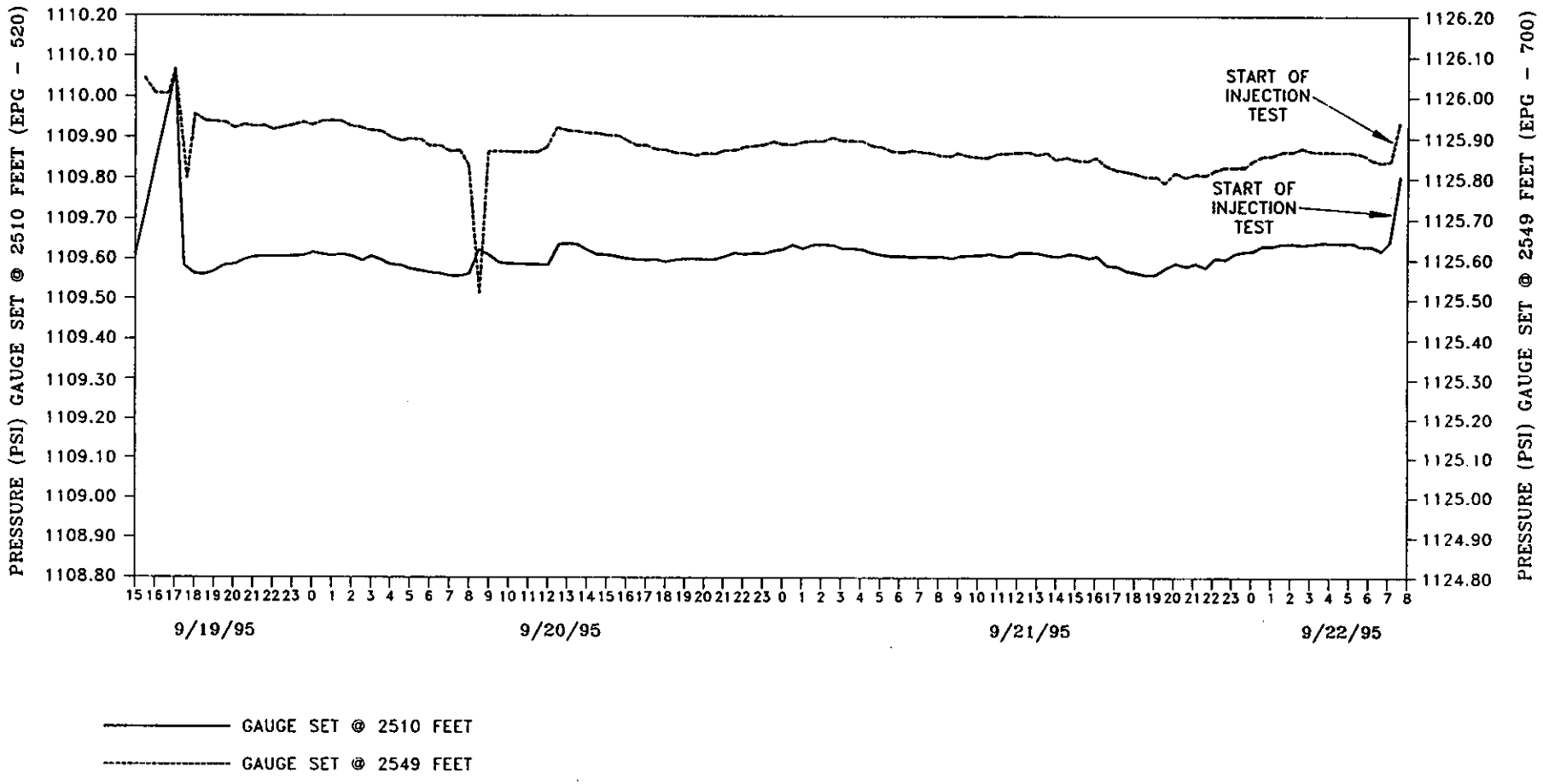
(BHP) and bottom hole temperature (BHT) data was collected by Florida Geophysical, Inc. in the IW using a wireline tool. The background water level data is shown on Figure 7-1. Background water level data was also recorded for 60 hours in both zones of the DZMW. Pressure transducers and an automated data logger was used to collect the water level data in the DZMW. The barometric pressure at the site was also recorded throughout the background, injection, and recovery period.

The injection rate for the injection test was 177 gpm. A maximum BHP increase of 0.04 psi (approximately 0.09 feet) was recorded during the injection test. No changes in pressure were noted in either monitoring zone during the injection test (the lower monitoring zone is approximately 660 feet above the top of the injection zone and the upper monitoring zone is approximately 1240 feet above the top of the injection zone).

Recovery data was recorded in the IW for a period of approximately 57 hours after the injection test had been completed. Approximately 49 hours of water level data was also recorded in the two monitoring zones of the DZMW after the injection test in the IW had been completed. All water level data for the injection test is included in Appendix K of this report.

Semi-logarithmic plots of BHP versus time during the injection test and during the recovery period are presented as Figures 7-2 and 7-3 respectively. An average transmissivity for the injection zone of approximately 200,000 gpd/ft was calculated.

Plots of background, test, and recovery data for both monitoring zones are provided on Figure 7-4. A plot of barometric pressure recorded throughout the test period, are contained in Appendix M.



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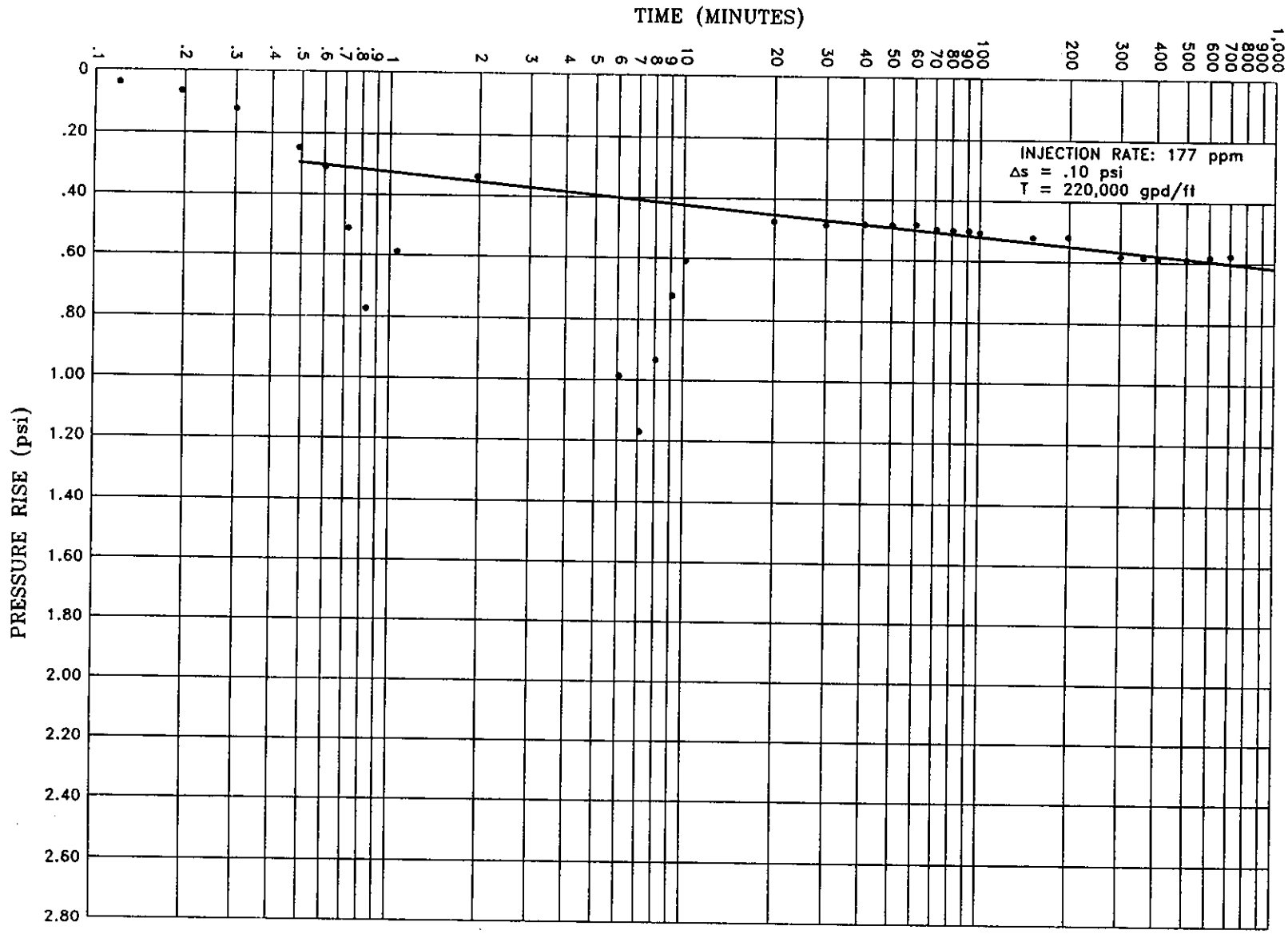
	PROJECT NAME: BURNT STORE IW		PROJECT NUMBER: 01-03244.00

FIGURE 7-1. BACKGROUND BOTTOMHOLE PRESSURE IN THE INJECTION WELL PRIOR TO CONDUCTING THE INJECTION TEST.



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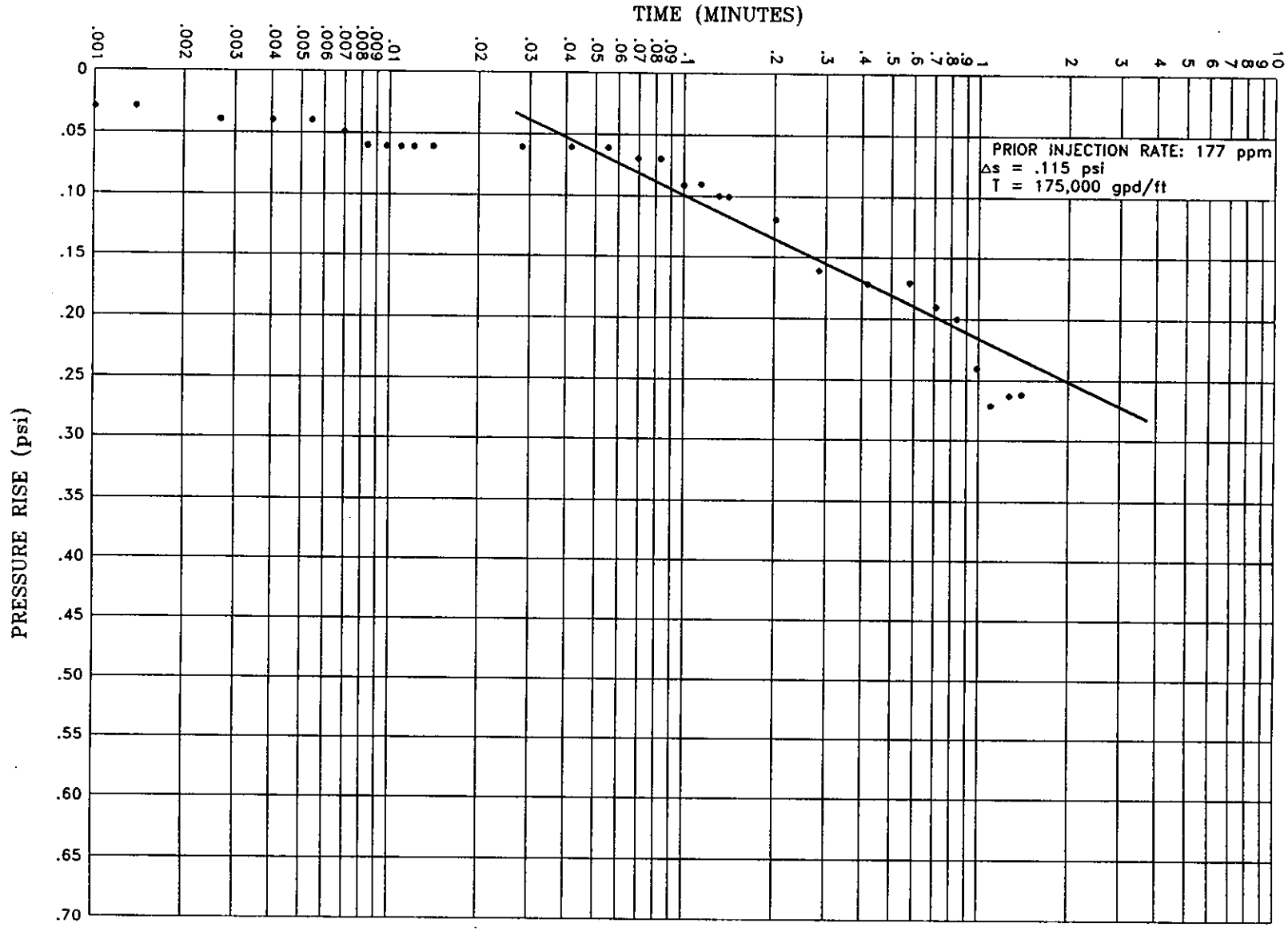
	PROJECT NAME: BURNT STORE IW		PROJECT NUMBER: 01-03244.00

FIGURE 7-2. SEMI-LOG PLOT OF DRAWDOWN VERSUS TIME IN THE INJECTION WELL (CH-314) DURING THE INJECTION TEST.



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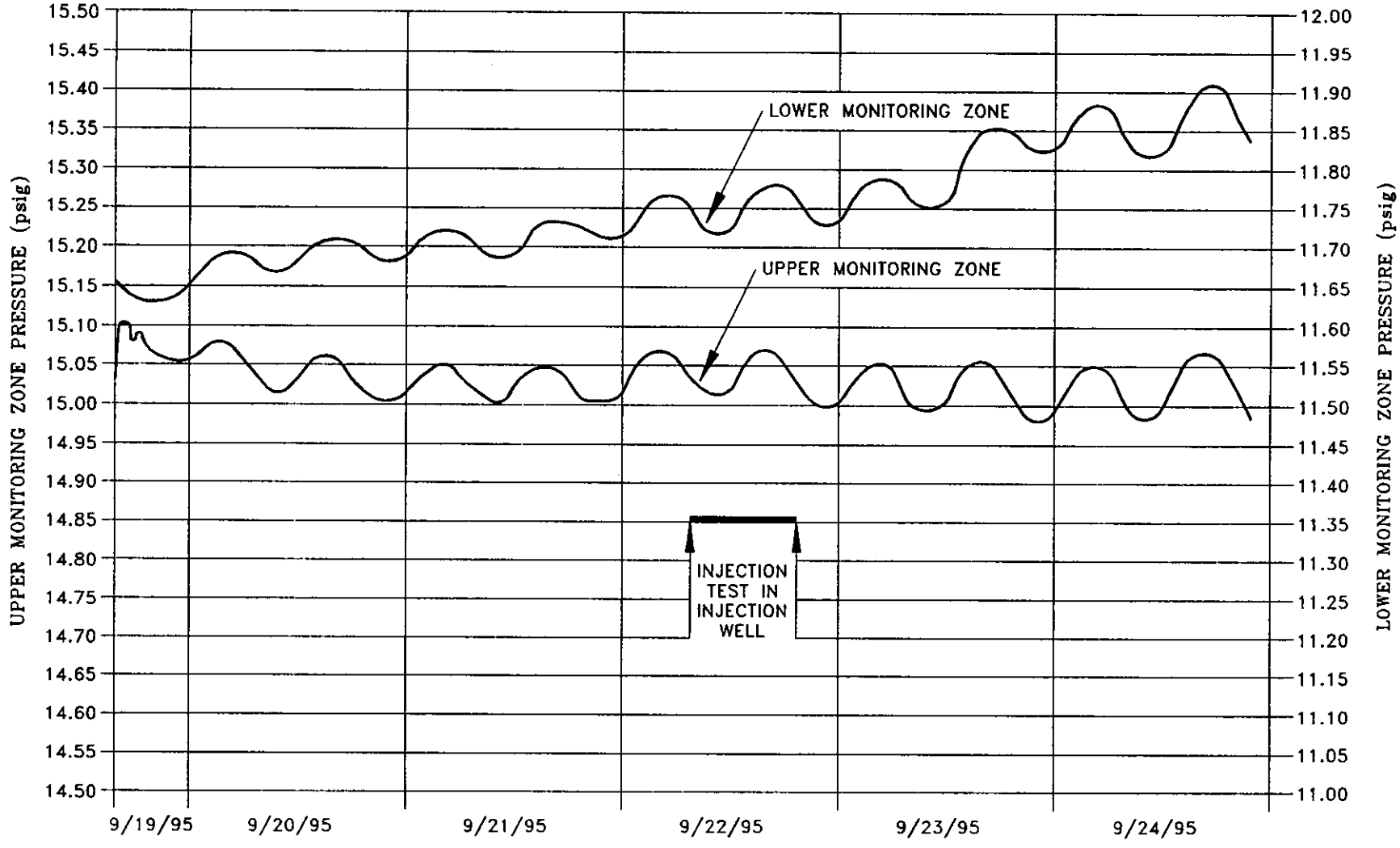
	DRN. BY: CAM	DWG. NO. A-013244BE-3	DATE: 11/6/95
	PROJECT NAME: BURNT STORE IW		PROJECT NUMBER: 01-03244.00

FIGURE 7-3. SEMI-LOG PLOT OF RECOVERY VERSUS TIME IN THE INJECTION WELL (CH-314) FOLLOWING THE INJECTION TEST.



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	DRN. BY: CAM	DWG. NO. A-01324488-2	DATE: 10/25/95
	PROJECT NAME: BURNT STORE IW		PROJECT NUMBER: 01-03244.00

FIGURE 7-4. PLOT OF PRESSURES RECORDED FOR BOTH MONITORING ZONES IN THE DUAL ZONE MONITORING WELL PRIOR TO, DURING, AND AFTER THE INJECTION TEST IN THE INJECTION WELL.

C. Radioactive Tracer Survey

A radioactive tracer survey was conducted in the IW on September 25, 1995. The test was conducted by Florida Geophysical, Inc. in accordance with the specifications (ViroGroup, Inc., 1994). No significant upward movement of the tracer slugs was noted during the various portions of the test. A copy of the geophysical log for the tracer survey is contained in Appendix I of this report.

VIII. INJECTION WELL OPERATION

A. Conceptual Design

The Burnt Store Utilities IW (CH-314) was designed for, and is intended to, dispose of reverse osmosis concentrate from the Burnt Store Utilities WTP. Concentrate volumes, as shown on Table 8-1, from this plant are anticipated to increase from the current (1995) approximate 115,000 gpd to approximately 340,000 gpd in the year 2005 (ViroGroup, Inc., 1995).

The design injection rate is 8 feet per second. This equates to a maximum injection rate for a 24 hour IW operating period of approximately 260,000 gpd. Initially, however, due to the lower disposal rates, the IW will most likely be operated for less than 12 hours per day.

Concentrate from the WTP is to be transported via a four-inch diameter Schedule 80 PVC pipeline. A high pressure centrifugal pump is to be used to deliver the concentrate to the IW. This pump is a 316-Stainless Steel, 30 horsepower Ingersoll Rand model HOC 2.

The cement pad built for well construction and emergency spill containment purposes is to remain in place. A sump, equipped with a small pump (a cast iron 5 horsepower Hydramatic model 3HRC 500 M3-4) is to be incorporated into the pad to convey stormwater and any minor inadvertent spills into the IW.

The engineering design for the surface facilities for the Burnt Store IW were prepared by Source, Inc. As-builts, also prepared by Source, Inc., are to be provided under separate cover. An Operations & Maintenance manual for the Burnt Store IW system has also been prepared by Source, Inc. with ViroGroup, Inc. assistance.

TABLE 8-1.

SUMMARY OF ANNUAL ANTICIPATED INJECTION QUANTITIES AND OPERATING SCHEDULE THROUGH THE YEAR

YEAR	PROJECT MAXIMUM DAY CONCENTRATE VOLUME (Gals)	PROJECTED AVERAGE DAY CONCENTRATE VOLUME (Gals)	INJECTION RATE (ft/sec)	INJECTION RATE (GPM)	AVERAGE HOURS/DAY OPERATION
1995	114,000	67,000	8	177	6.3
1996	137,000	81,000	8	177	7.6
1997	159,000	93,000	8	177	8.8
1998	182,000	107,000	8	177	10.1
1999	205,000	121,000	8	177	11.4
2000	227,000	133,000	8	177	12.5
2001	250,000	147,000	8	177	13.8
2002	271,000	159,000	8	177	15.0
2003	295,000	173,000	8	177	16.3
2004	317,000	186,000	8	177	17.5
2005	340,000	200,000	8	177	18.8

B. Monitoring Program

The monitoring program for the IW system is as stipulated in the FDEP permit application supporting documentation (ViroGroup, Inc., 1995) and as approved by the FDEP in the construction permit (Appendix A). The monitoring program for the IW and the DZMW is summarized on Table 8-2. The pressure data, which is to be recorded continuously, will be measured by the instrumentation specified by the surface facilities design engineer. This data will be relayed telemetrically to the WTP and digitally recorded. Chemical analyses of the injectate will be performed daily by WTP personnel.

The weekly analyses to be conducted on water samples obtained from the two zones of the DZMW will also be performed by WTP personnel. A minimum of five casing volumes, herein calculated as approximately 60,000 gallons for the upper monitoring zone and approximately 24,000 gallons for the lower monitoring, should be purged before the water samples are obtained. Since the upper monitoring zone flows at the surface, it will not be necessary to install a sampling pump into the annulus between the 9 5/8-inch OD and 4 1/2-inch OD steel casings in the DZMW. However, a sampling pump will be needed to pump water from the lower monitoring zone. All purged water should be conveyed into the IW for disposal.

All monitoring data obtained for the IW and the DZMW should be tabulated and submitted to the FDEP Fort Myers office on a monthly basis

After the operational testing period has been completed, an UIC Class I operation permit should be obtained from the FDEP. Issuance of that permit will likely result in a modified monitoring program with quarterly and annual analyses.

TABLE 8-2

BURNT STORE UTILITIES INJECTION WELL SYSTEM
MONITOR PROGRAM

Parameter	Measured	Tabulated
INJECTION WELL		
Injection Pressure (psi)	Continuously	Daily
Maximum Injection Pressure (psi)	Continuously	Daily
Minimum Injection Pressure (psi)	Continuously	Daily
Average Injection Pressure (psi)	Continuously	Daily
Flow Rate (gpm)	Continuously	Daily
Maximum Flow Rate (gpm)	Continuously	Daily
Minimum Flow Rate (gpm)	Continuously	Daily
Total Volume Injected (gals.)	Continuously	Daily
Annular Pressure (psi)	Continuously	Daily
Temperature (°C) of Injectate	Daily	Daily
Specific Conductance (umhos/cm) of Injectate	Daily	Daily
Total Dissolved Solids (mg/l) of Injectate	Daily	Daily
Dissolved Chlorides (mg/l) of Injectate	Daily	Daily
EACH ZONE OF THE DUAL ZONE MONITORING WELL		
Water Level (ft)/Pressure (psi)	Continuously	Daily
Maximum Water Level Pressure (psi)	Continuously	Daily
Minimum Water Level Pressure (psi)	Continuously	Daily
pH (SU)	Weekly	Weekly
Temperature (°C)	Weekly	Weekly
Specific Conductance (uhmos/cm)	Weekly	Weekly
Total Dissolved Solids (mg/l)	Weekly	Weekly
Dissolved Chloride (mg/l)	Weekly	Weekly

IX. REFERENCES

ViroGroup, Inc., 1994, UIC Class I Injection Well Permit Application and Supporting Documentation for the Burnt Store Utilities Site, Charlotte County, Florida, prepared for Southern States Utilities, 86p.

ViroGroup, Inc., 1995, Feedwater System Evaluation, Burnt Store Utilities, Charlotte County, Florida, prepared for Southern States Utilities, 31p.

APPENDIX A

FDEP CONSTRUCTION PERMIT AND MISCELLANEOUS CORRESPONDENCE FROM THE FDEP

Department of Environmental Protection

Lawton Chiles
Governor

South District
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901

Virginia B. Wetherell
Secretary

In the Matter of an
Application for Permit by:

Rafael A. Terrero, P.E.
Southern States Utilities, Inc.
1000 Color Place
Apopka, Florida 32703

Charlotte County - UIC
Burnt Store Utility IW-1

_____/

Enclosed is Permit Number UC08-247431 to construct a class I injection well, issued pursuant to Section(s) 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 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Fort Myers, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

P. J. Ware

Peter J. Ware
Director of
District Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this INTENT TO ISSUE and all copies were mailed by certified mail before the close of business on January 31, 1995 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT

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

Karen L. Mialy
Clerk

1-31-95
Date

PJW/VNM/dd

Enclosures

Copies furnished to:

L. Horvath, P.E.- ViroGroup, Inc., Missimer Division
TAC

Department of Environmental Protection

Lawton Chiles
Governor

South District
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901

Virginia B. Wetherell
Secretary

PERMITTEE:

Southern States Utilities, Inc.
1000 Color Place
Apopka, Florida 32703

I.D. No: 5208P05024
Permit/Certification
Number: UC08-247431
Date of Issue: January 31, 1995
Expiration Date: January 31, 2000
County: Charlotte
Latitude: 26° 46′ 15" N
Longitude: 82° 02′ 20" W
Section/Town/Range: 32/42S/23E
Project: Burnt Store Utility IW-1

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-3, 62-4, 62-550, 62-600 and 62-28. 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 a nominal 4.5 inch diameter Class I injection well (IW-1) using tubing and packer with a 7 5/8 inch cemented steel casing to 2,550 feet below land surface (bls) and a total depth of 2,800 feet bls utilized for the disposal of 290,000 gallons per day of non-hazardous, industrial wastewater from the existing reverse osmosis water treatment plant, which currently discharges to the Charlotte Harbor. The monitor wells will monitor from approximately 1,350 to 1,500 feet bls and 1,900 to 2,000 feet bls.

The application to construct a Class I injection well system, DER Form 17-1.209(9), was received May 9, 1994 with supporting documents and additional information last received November 10, 1994. The certificate of financial responsibility was issued November 7, 1994. Project is located at the Burnt Store Utility WTP, 17430 Burnt Store Road, Punta Gorda, Florida.

Subject to General Conditions 1-16 and Specific Conditions 1-8.

PERMITTEE:

Southern States Utilities, Inc.

I.D. No.: 5208P05024
Permit/Cert. No.: UC08-247431
Date of Issue: January 31, 1995
Expiration Date: January 31, 2000

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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) F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither 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 is not a waiver of or approval 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 for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by any order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and 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.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credential or other documents as may be required by law, and at reasonable times, access to the premises where the permitted activity is located or conducted to:

GENERAL CONDITIONS:

a. Have access to and copy any records that must be kept under the conditions of the permit;
b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
c. Sample or monitor 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 provide the Department with the following information:
   a. A description of and cause of non-compliance; and
   b. The period of non-compliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance. 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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-3.051, shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

11. This permit is transferable only upon Department approval in accordance with F.A.C. Rules 62-4.120 and 62-30.300, F.A.C. as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

GENERAL CONDITIONS:

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

(a) Determination of Best Available Control Technology (BACT)
(b) Determination of Prevention of Significant Deterioration (PSD)
(c) Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
(d) Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

(a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the Department.

(b) The permittee shall hold 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), required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

(c) Records of monitoring information shall include:

1. the date, exact place, and time of sampling or measurements;
2. the person responsible for performing the sampling or measurements;
3. the dates analyses were performed;
4. the person responsible for performing the analyses;
5. the analytical techniques or methods used;
6. 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 the 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 corrected promptly.

GENERAL CONDITIONS:

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 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 24 hours and again within 72 hours, and a final written report provided within two 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 an 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 62-28.230(4)(b), F.A.C.

(d) The Department shall be notified at least 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.

SPECIFIC CONDITIONS:

1. Site Requirements

a. A drilling pad shall be provided to collect spillage of contaminants and to support the heaviest load that will be encountered during drilling.

b. The disposal of drilling fluids, cuttings, formation water or waste shall be in a sound environmental manner that avoids violation of surface and ground water quality standards. The disposal method shall be approved by the Department prior to start of construction.

c. Provide specific drilling pad dimensions and design details prior to commencing construction and shortly after selection of drilling contractor.

SPECIFIC CONDITIONS:

d. The four water table monitoring wells shall be sampled and analyzed prior to drilling this injection well and then weekly thereafter. Sampling shall include specific conductance, pH, chloride, temperature and water level.

e. A survey indicating the exact location in metes and bounds of all wells authorized by this permit shall be provided prior to issuance of an operating permit.

2. Construction and Testing Requirements

a. The permittee shall contact the TAC chairman so that he may schedule progress review meetings at appropriate times with the TAC and permittee for the purpose of reviewing the results of tests, geophysical logging, surveys, drilling records and construction problems. At a minimum, meetings shall be scheduled for the purpose of selecting final setting depth for the 7 5/8 inch casing, the 4.5 inch tubing and for the inner casing of the deep monitor well.

b. All drilling shall be inside a blow out preventer upon penetration of the Floridan Aquifer.

c. Mechanical integrity testing is a two part demonstration which includes a pressure test to demonstrate that no leaks are present in the casing, tubing or packer and a temperature or noise log and radioactive tracer survey to demonstrate the absence of leaks behind the casing. Verification of pressure gauge calibration must be provided at the scheduled tests.

d. Department approval and Technical Advisory Committee (TAC) review pursuant to F.A.C. Rule 62-28 is required for the following stages of construction:

(1) Intermediate casing seat selection (injection and monitor wells).
(2) Final casing seat selection (injection and monitor wells).
(3) Operational (long term) testing with effluent.

e. The cementing program, as required in Section 62-28.220(5), Florida Administrative Code, shall be submitted to the Department and the technical Advisory Committee for review. Cementing shall not commence prior to approval being granted.

f. All temperature surveys (except for mechanical integrity demonstration) shall be run within 48 hours after cementing.

SPECIFIC CONDITIONS:

g. TAC meetings are scheduled on the 1st Tuesday of each month subject to a 5 working day prior notice and timely receipt of critical data by all TAC members. Emergency meetings may be arranged when justified to avoid undue construction delay.

h. The Engineer of Record shall insure that safe internal pressures are maintained during the cementing of all casings.

i. The background water quality of the injection zone shall be established prior to commencement of any injection testing. Parameters to be measured are contained on Page 44 of the April, 1994 technical specifications.

The parameters listed on pages 46-49 of the technical specifications will be analyzed in the monitor zones prior to the injection of any effluent into the well. Included in these parameters are the primary and secondary water quality standards and the list on page 44 of the April, 1994 technical specifications. These parameters shall also be analyzed in the effluent prior to submitting application for an operating permit.

j. The injection and monitor well(s) at the site shall be abandoned when no longer usable for their intended purpose, or when posing potential threat to the quality of the waters of the State. Within 180 days of well abandonment, the permittee shall submit to the Department and the TAC the proposed plugging method, pursuant to Rule 62-28.350, F.A.C.

k. All salt used in well drilling shall be stored in an environmentally sound manner. Accurate records shall be kept on the amount of salt used.

l. All dual induction, sonic and caliper geophysical logs run on the pilot holes of all injection and monitor wells shall be submitted with scales of both two inches equals one hundred feet (2"=100') and five inches equals one hundred feet (5"=100').

3. Quality Assurance/Quality Control Requirements

a. This permit approval is based upon evaluation of the data contained in the application dated May 9, 1994, and the plans and/or specifications submitted in support of the application. Any changes in the plans and/or technical specifications, except as provided elsewhere in this permit, must be approved by the Department before being implemented.

b. A professional engineer registered pursuant to Chapter 471, Florida Statutes shall be retained throughout the construction period to be responsible for the construction operation and to

SPECIFIC CONDITIONS:

certify the application, specifications, completion report and other related documents. The Department shall be notified immediately of any change of engineer.

c. Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.) F.S., applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who approved or prepared them.

d. The Department shall be notified immediately of any problems that may seriously hinder compliance with this permit, construction progress, or good construction practice. The Department may require a detailed written report describing the problem, remedial measures taken to assure compliance and measures taken to prevent recurrence of the problem.

e. Issuance of a Class I Test/Injection well construction and testing permit does not obligate the Department to authorize operation of the injection or monitor wells, unless the wells qualify for an operation permit applied for by the permittee and issued by the Department.

4. Reporting Requirements

a. All reports and surveys required by this permit must be submitted concurrently to all the members of the TAC. The TAC consists of representatives from these agencies:

Florida Department of Environmental Protection
South District
2295 Victoria Avenue, Suite 364
Fort Myers, FL 33901

Florida Department of Environmental Protection
Bureau of Drinking Water and Ground Water Resources
UIC Section
2600 Blair Stone Rd.
Tallahassee, FL 32399-2400

Southwest Florida Water Management District
Well Construction Permitting
2379 Broad Street
Brooksville, FL 34609-6899

SPECIFIC CONDITIONS:

United States Environmental Protection Agency
Ground Water Management Unit
345 Courtland Street
Atlanta, Georgia 30065

United States Geological Society
4710 Eisenhower Blvd.
Tampa, FL 33614

b. Members of the TAC shall receive a weekly summary of the daily log kept by the contractor. The weekly reporting period shall run Friday through Thursday and reports shall be mailed each Friday. The report shall include but is not limited to the following:

(1) Description of daily footage drilled by diameter of bit or size of hole opener or reamer being used;
(2) Description of formation and depth encountered; and specific conductance of water samples collected during drilling. Description of work during installation and cementing of casings; include amounts of casing and actual cement used versus calculated volume required.
(3) Lithological description of drill cuttings collected every ten (10) feet or at every change in formation. Description of work and type of testing accomplished, geophysical logging, pumping tests, and coring results.
(4) Description of any construction problems that develop and their status to include a description of what is being done or has been done to correct the problem.
(5) Description of the amount of salt used.
(6) Results of any water quality analyses performed as required by this permit.
(7) Copies of the driller's log are to be submitted with the weekly summary.

c. The Department must be notified seventy-two (72) hours prior to all testing for mechanical integrity on the injection and monitor wells. Testing should begin during daylight hours Monday through Friday.

d. Annotated copies of geophysical logs, lithologic descriptions and logs and water quality data (from drilling and packer tests) must be submitted to TAC for intermediate and final casing seat selection approvals by the Department.

e. An evaluation of all test results and geophysical logs must be submitted with all test data.

SPECIFIC CONDITIONS:

f. After completion of construction and testing, a final report shall be submitted to the Department and the TAC. The report shall include, but not be limited to, all information and data collected under Rule 62-28.330(2) and Rule 62-28.330(3), F.A.C., with appropriate interpretations. Mill certificates for the casing(s) shall be included in this report. To the extent possible, the transmissivity of the injection zone and maximum capacity within safe pressure limits shall be estimated.

5. Operational Testing Requirements

a. The Department shall require operational testing to demonstrate that the well can absorb the design and peak daily flows that are expected over the next five years, prior to granting approval for operation.

b. No effluent shall be injected into the well without written authorization from the Department. The letter authorizing operational testing with effluent shall list specific conditions for operation and monitoring during the operational testing phase of the project.

c. If any monitoring data indicates the movement of injection fluids or formation fluid into underground sources of drinking water, the Department shall prescribe such additional requirements for construction, corrective action (including possible closure of the injection well), operation, monitoring, or reporting as are necessary to prevent such movement. These additional requirements shall be imposed by modifying the permit, or by enforcement action if the permit has been violated.

d. Prior to operational testing approval, at a minimum the following items must be submitted to and approved by the Department and TAC review:

(1) Borehole television survey of final casing;
(2) Geophysical logs with interpretations;
(3) Certification of mechanical integrity and interpreted test data;
(4) Injection test data and evaluation;
(5) Confining zone data (cores, etc.) and confirmation of confinement;
(6) Background water quality data (monitor zones);
(7) Waste stream analysis;
(8) Surface equipment completion certified pursuant to Rule 62-600.540(4), F.A.C.
(9) Draft operation and maintenance manual with emergency procedures.

SPECIFIC CONDITIONS:

e. The permittee shall use continuous indicating and recording devices to monitor injection flow rate, injection pressure, annular pressure and monitor zone pressures. The case of operational failure of any of these instruments for a period of more than 48 hours, the permittee shall report to the Department in writing the remedial action to be taken and the date when the failure will be corrected.

6. Emergency Disposal

a. All applicable federal, state and local permits must be in place to allow for any alternate discharges due to emergency or planned outage conditions.

b. Any changes in emergency disposal methods must be submitted for Technical Advisory Committee (TAC) review and Department approval.

7. Financial Responsibility

a. The permittee shall maintain the resources necessary to close, plug and abandon the injection and associated monitor wells, at all times (Rule 62-28.270(9), F.A.C.).

b. The permittee shall review annually the plugging and abandonment cost estimates. An increase in any one year shall require the permittee to submit documentation to obtain an updated Certificate of Demonstration of Financial Responsibility.

c. In the event that the mechanism used to demonstrate financial responsibility should become invalid for any reason, the permittee shall notify the Department of Environmental Protection in writing within 14 days of such invalidation. The permittee shall, within 30 days of said notification, submit to the Department for approval, new financial documentation in order to comply with Rule 62-28.270(9), F.A.C., and the conditions of this permit.

PERMITTEE:

Southern States Utilities, Inc.

I.D. No.: 5208P05024
Permit/Cert. No.: UC08-247431
Date of Issue: January 31, 1995
Expiration Date: January 31, 2000

SPECIFIC CONDITIONS:

8. The permittee is reminded of the necessity to comply with the pertinent regulations of any other regulatory agency, as well as any county, municipal, and federal regulations applicable to the project. These regulations may include, but not limited to, those of the Federal Emergency Management Agency in implementing flood control measures. This permit should not be construed to imply compliance with the rules and regulations of other regulatory agencies.

Note: In the event of an emergency the permittee shall contact the Department by calling (904)413-9911. During normal business hours, the permittee shall call (813)332-6975.

Issued this 31st day of January, 1995.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Peter J. Ware
Director of
District Management

PJW/VNM/dd

Department of Environmental Protection

Lawton Chiles
Governor

South District
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901-3881

Virginia B. Wetherell
Secretary

August 3, 1995

Ralph Terrero, P.E.
Southern States Utilities,Inc
1000 Color Place
Apopka, Florida 32703

Re: Charlotte County - UIC
Burnt Store Utility IW-1
Permit No. UC08-247431

Dear Mr. Terrero:

MODIFICATION OF CONDITIONS
PERMIT NO. UC08-247431

The Department has received the application for modification (Application #274874) of the technical specifications (April, 1994, ViroGroup, Inc.) for the injection well system. The modification calls for a change of the internal tubing to 3.0 inch I.D. fiberglass. The Department hereby approves the proposed change pursuant to the conditions and documentation submitted with the application on July 25, 1995. All other aspects of the well design shall remain as permitted.

This letter must be attached to your permit and becomes a permanent part thereof.

Sincerely,

Abdul B. Ahmadi, Ph.D.,P.E.
Water Facilities Administrator

ABA/JM/klm

cc: Lloyd E. Horvath, P.E. - ViroGroup
Joe Haberfeld, P.G. - FDEP

Department of Environmental Protection

Lawton Chiles
Governor

South District
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901-3881

Virginia B. Wetherell
Secretary

NOTICE OF PERMIT

CERTIFIED MAIL NO. Z 026 504 731
RETURN RECEIPT REQUESTED

In the Matter of an
Application for Permit by:

Ralph A. Terrero, P.E.
Southern States Utilities, Inc.
1000 Color Place
Apopka, Florida 32703

File No. 5208P05024
Charlotte County - UIC
Burnt Store Utility IW-1

Enclosed is the modification to Permit Number UC08-247431 to change the injection well construction design, issued pursuant to Section 403.087, Florida Statutes.

A person whose substantial interests are affected by the Department's proposed permitting decision 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 at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. 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 Department 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 Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department'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 Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

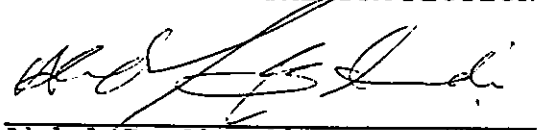
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department 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 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. 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, F.A.C.

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 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Fort Myers, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Abdul B. Ahmadi, Ph.D., P.E.
Water Facilities Administrator

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this **NOTICE OF PERMIT** and all copies were mailed by certified mail before the close of business on August 3, 1995 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT

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

Karen L. Mialy
Clerk

8-3-95
Date

ABA/JBM/klm

Copies furnished to:
LLoyd E. Horvath, P.E. - ViroGroup
Joe Haberfeld, P.G. - FDEP

Department of Environmental Protection

Lawton Chiles
Governor

South District
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901

Virginia B. Wetherell
Secretary

July 12, 1995

Rafael A. Terrero, P.E.
Southern States Utilities, Inc.
1000 Color Place
Apopka, Florida 32703

Re: Charlotte County - UIC
Burnt Store Utility IW-1
GMS #5208P05024
Permit #UC08-247431
Intermediate Casing Depth

Dear Mr. Terrero:

In response to the July 6th request by ViroGroup, please accept this letter as the Department's approval to set intermediate casing in the Burnt Store Utility IW-1 well at a depth of 1348 feet log depth.

Should you have any questions regarding this matter, please call me at (941) 332-6975.

Sincerely,

Jack Myers, P.G.
Technical Support
Water Facilities

JM/ish

cc: Dan Aquaviva, P.G., ViroGroup
Joe Haberfeld, P.G., FDEP
Charles DaVault, P.E., FDEP

Department of Environmental Protection

Lawton Chiles
Governor

South District
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901-3881

Virginia B. Wetherell
Secretary

July 26, 1995

Rafael A. Terrero, P.E.
Southern States Utilities, Inc.
1000 Color Place
Apopka, FL 32703

Re: Charlotte County - UIC
Burnt Store Utility IW-1
GMS #5208P05024
Permit #UC08-247431
Monitor Well Casing Depth

Dear Mr. Terrero:

In response to the July 20th request by ViroGroup, please accept this letter as the Department's approval to set casing in the dual zone monitoring well (DZMW) at a depth of 1205 feet. This also constitutes approval for the upper monitoring zone to be from 1205 feet to 1265 feet.

Should you have any questions regarding this matter, please call me at (941)332-6975.

Sincerely,

Jack Myers, P.G.
Technical Support
Water Facilities

JM/mk

cc: Dan Acquaviva, P.G., ViroGroup
Joe Haberfeld, P.G., FDEP

Department of Environmental Protection

Lawton Chiles
Governor

South District
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901-3881

Virginia B. Wetherell
Secretary

August 14, 1995

Rafael A. Terrero, P.E.
Southern States Utilities, Inc.
1000 Color Place
Apopka, Florida 32703

Re: Charlotte County - UIC
Burnt Store Utility IW-1
GMS #5208P05024
Permit #UC08-247431
Final Casing Depths

Dear Mr. Terrero:

In response to the August 9th request by ViroGroup, please accept this letter as the Department's approval to set final casing in the injection well at approximately 2512 feet. Also, the lower monitoring zone in the dual zone monitoring well will be from 1830 to 1880 feet with the final casing set at 1830 feet.

Should you have any questions regarding this matter, please call me at (941) 332-6975.

Sincerely,

Jack Myers, P.G.
Technical Support
Water Facilities

JM/klm

cc: Dan Acquaviva, P.G., ViroGroup
Joe Haberfeld, P.G., FDEP
E. Esham, SWFWMD
D. Duerr, USGS

APPENDIX B

WELL PROGNOSIS

WELL PROGNOSIS

Project Name: SSU - Burnt Store Utilities Class I Injection Well

Project Number: 03244

Well Name: Burnt Store Utilities IW-1

Location: SW SW Sec. 32 - T42S - R23E

Elevation: Est. 14' (GL)

Anticipated Stratigraphic Tops:

Pamlico/Ft. Thompson Fm. (Holocene-Pleistocene)	Surface
Tamiami Fm. (Pliocene)	20'
Cape Coral Clay Mbr. of Peace River Fm. (Miocene)	100'
Lehigh Acres Sandstone Mbr. of Peach River Fm.	140'
Mid-Hawthorn Mbr. of Arcadia Fm.	200'
Lower Hawthorn Mbr. of Arcadia Fm.	540'
Suwannee Fm. (Oligocene)	700'
Crystal River Fm. of Ocala Group	1200'
Williston Fm. of Ocala Group	1470'
Avon Park Fm.	1580'
Oldsmar Fm.	2000'
"Boulder Zone" of Oldsmar Fm.	2500'

Control Wells:

Gulf Vanderbilt (Sec. 35-41S-21E)
Charlotte County Landfill Injection Well (Sec. 25-42S-23E)

Anticipated Packer Test Zones:

Lower Suwannee Fm.
Crystal River Fm.
Williston Fm.

Anticipated Core Zones:

Upper Oldsmar

Anticipated Total Depth: 2800'

Anticipated Casing Program:

Conductor: 30-inch, 0.250 inch wall thickness steel @ 205'

Upper: 24-inch, 0.250 inch wall thickness steel @ 545'

Intermediate: 18-inch, 0.250 inch wall thickness steel @ 1650'

Injection: 7⅝-inch, 0.500 inch wall thickness steel @ 2550'

Anticipated Geophysical Logging Program:

See Technical Specifications for Details
Also: Sector Bond Log (or Combination CBL/CET) after setting injection casing.

Sample Collection Program:

Lithologic Samples - Every 10'
Water - Every 30' from 545' to Total Depth

Drilling Method:

Mud rotary to upper casing setting depth
Reverse air rotary below upper casing

Additional Instructions:

Call in morning report every day by 9:00 a.m.
All casing setting depths, test zones, case zones, and packer seats must be reviewed by and approved by the project manager.

N.B. This is a Class I injection well; accurate depth and lithologic control is critical. All anticipated stratigraphic tops listed above were obtained from analysis of regional well control, actual depths and unit thicknesses may be significantly different at this site.

Prognosis Prepared By:

Daniel J. Acquaviva, P.G. 6/8/95

APPENDIX D

LITHOLOGIC LOGS

1. SHALLOW PAD MONITORING WELL CH-310
2. SHALLOW PAD MONITORING WELL CH-311
3. SHALLOW PAD MONITORING WELL CH-312
4. SHALLOW PAD MONITORING WELL CH-313
5. INJECTION WELL (CH-314)
6. DUAL ZONE MONITORING WELL (CH-315)

LITHOLOGIC LOG FOR SHALLOW MONITORING WELL #1 (CH-310)

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
0-5	Sand, brownish gray (5YR 4/1), quartz, fine to medium grained, moderately well sorted, subangular,with organic debris and trace of shell fragments.
5-16	Sandstone, pale yellow brown (10 YR 6/2), poorly consolidated with abundant shell fragments, and sand, fine to medium grained, poorly sorted, subangular.
16-20	Limestone, pale yellowish brown (10 YR 6/2), micritic, poor apparent porosity and permeability, very hard, with pelecypods and trace phosphate, black (N1), also, thin layers of biomicritic, moldic limestone, medium gray (N5), with common fine to medium grained sand, abundant pelecypods, good apparent porosity and permeability.

Total Depth = 20 ft. BLS

LITHOLOGIC LOG FOR SHALLOW MONITORING WELL #2 (CH-311)

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
0-5	Sand, brownish gray (5YR 4/1), quartz, fine to medium grained, moderately well sorted, subangular, with organic debris and trace of shell fragments.
5-15	Sandstone, pale yellow brown (10 YR 6/2), poorly consolidated with abundant shell fragments, and sand, fine to medium grained, poorly sorted, subangular.
15-20	Limestone, pale yellowish brown (10 YR 6/2), micritic, poor apparent porosity and permeability, very hard, with pelecypods and trace phosphate, black (N1), also, thin layers of biomicritic, moldic limestone, medium gray (N5), with common fine to medium grained sand, abundant pelecypods, good apparent porosity and permeability.

Total Depth = 20 ft. BLS

LITHOLOGIC LOG FOR SHALLOW MONITORING WELL #3 (CH-312)

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
0-5	Sand, brownish gray (5YR 4/1), quartz, fine to medium grained, moderately well sorted, subangular, with organic debris and trace of shell fragments.
5-14	Sandstone, pale yellow brown (10 YR 6/2), poorly consolidated with abundant shell fragments, and sand, fine to medium grained, poorly sorted, subangular.
14-20	Limestone, pale yellowish brown (10 YR 6/2), micritic, poor apparent porosity and permeability, very hard, with pelecypods and trace phosphate, black (N1), also, thin layers of biomicritic, moldic limestone, medium gray (N5), with common fine to medium grained sand, abundant pelecypods, good apparent porosity and permeability.

Total Depth = 20 ft. BLS

LITHOLOGIC LOG FOR SHALLOW MONITORING WELL #4 (CH-313)

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
0-4	Sand, brownish gray (5YR 4/1), quartz, fine to medium grained, moderately well sorted, subangular, with organic debris and trace of shell fragments.
4-16	Sandstone, pale yellow brown (10 YR 6/2), poorly consolidated with abudant shell fragments, and sand, fine to meidum grained, poorly sorted, subangular.
16-20	Limestone, pale yellowish brown (10 YR 6/2), micritic, poor apparent porosity and permeability, very hard, with pelecypods and trace phosphate, black (N1), also, thin layers of biomicritic, moldic limestone, medium gray (N5), with common fine to medium grained sand, abundant pelecypods, good apparent porosity and permeability.

Total Depth = 20 ft. BLS

LITHOLOGIC LOG FOR BURNT STORE UTILITIES INJECTION WELL (CH-314)

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
0-2	No cuttings retrieved - bit inside pit casing
2-15	Fill - cuttings from drilling rat hold and mouse hole.
15-21	Limestone, pale yellowish brown (10YR 6/2) to medium light gray (N6), biomicritic, shelly, friable to moderately hard, abundant bivalve and gastropod fragments, excellent moldic and interparticle porosity, excellent apparent permeability, with trace (5%) phosphate grarnules, 1 - 2 mm, black (N9).
21-25	Limestone, pale yellowish brown (10YR 6/2), biomicritic, moderately shelly, moldic, common bivalve fragments, excellent moldic porosity, excellent apparent permeability, with trace (5%) phosphate granules, as above.
25-67	Clay, yellowish gray (5Y 7/2) to light olive gray (5Y 6/1), soft, semi-cohesive, very low apparent porosity and apparent permeability with trace (<5%) fine grained phosphate, black (N9).
67-98	Limestone, yellowish gray (5Y 7/2), micritic, fair to good interparticle porosity, fossiliferous, hard, trace (5%) fine grained phosphate, black (N9).
98-128	Clay, light olive gray (5Y 5/2), soft, semicohesive, same trace (<5%) fine grained phosphate, minor shell fragments.
128-158	Sandstone, yellowish gray (5Y 7/2), very calcareous, poor porosity and apparent permeability, friable to well cemented.
158-178	Clay, pale olive (10Y 6/2), stiff, cohesive, trace phosphate grains (<5%).
178-188	Sandstone, medium light gray (N6), very calcareous, very fine grained, poorly to well cemented, very phosphatic (disseminated grains), some shell material, fair porosity.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES INJECTION WELL (CH-314) Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
188-209	Clay, yellowish gray (5Y 8/1), sticky.
209-230	Limestone, yellowish gray (5Y 7/2), sandy, phosphatic, micritic, some shell material, fair porosity.
230-268	Lime mud, yellowish gray (5Y 7/2), some very fine grained sand, shelly, trace phosphate (<5%), and Limestone, yellowish gray (5Y 7/2), micritic, phosphatic, good porosity.
268-271	Limestone, yellowish gray (5Y 7/2), micritic, good porosity.
271-278	Clay, light olive gray (5Y 8/1), soft, semi-cohesive, common phosphate grains; with interbedded limestone, light olive gray (5Y 5/2), micritic, poor porosity.
278-307	Lime mud, yellowish gray (5Y 8/1), soft, semi-cohesive, common phosphate grains; with interbedded limestone, light olive gray (5Y 5/2), micritic, poor porosity.
307-315	Clay, pale olive (10Y 6/2), stiff, cohesive, trace phosphate.
315-333	Limestone, yellowish gray (5Y 7/2), hard, micritic, poor porosity, microcrystalline testure, common lime mud, very light gray (N8), soft, semi-cohesive.
333-338	Lime mud, very light gray (N8), soft, semi cohesive, trace very fine grained phosphate, common clay, yellowish gray (5Y 7/2), stiff, and limestone, yellowish gray (5Y 7/2), micritic, poor porosity.
338-354	Limestone, light gray (N7), micritic, hard, slightly calcarenitic, occassional very fine grained phosphate, same lime mud interbedded.
354-414	Lime mud, light gray (N8), soft, sticky, occassional shell fragments, minor very fine grained phosphate.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES INJECTION WELL (CH-314) Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
414-432	Limestone, very light gray (N8) to yellowish gray (5Y 8/1), micritic, hard fair porosity, trace fine grained phosphate and interbedded lime mud.
432-465	Clay, yellowish gray (5Y 8/1), soft, semi-cohesive, with minor shell fragments and trace phosphate nodules.
465-474	Lime mud, yellowish gray (5Y 8/1), soft, semi cohesive, with minor limestone; very pale orange (10Y 8/2), micritic, fair to good porosity and apparent permeability.
474-488	Clay, yellowish gray (5Y 8/1), cohesive, sticky.
488-498	Limestone, light olive gray (5Y 6/1), microcrystalline, hard, excellent moldic porosity and apparent permeability, trace phosphate grains and minor clay as above.
498-505	Limestone, yellowish gray (5Y 8/1), marly, soft, good porosity and apparent permeability; with occasional clay, yellowish gray (5Y 8/1), soft, semi-cohesive with trace phosphate grains.
505-513	Lime mud, yellowish gray (5Y 8/1), soft, with some finely disseminated phosphate grains.
513-525	Liemstone, yellowish gray (5Y 8/1), biomicritic, good to excellent modic porosity, trace phosphate grains.
525-532	Lime mud, yellowish, gray (5Y 8/1), sticky, clayey.
532-542	Clay, light olive gray (5Y 6/1), some phosphate rubble, cohesive, sticky.
542-552	Limestone, grayish orange (10YR 7/4), biomicritic, dolomitic, phosphatic, good to excellent modic porosity.
552-580	Limestone, light olive gray (5Y 6/1), dolomitic, cryptocrystalline to micritic, finely phosphatic, moderately hard, good to escellent vuggy porosity, good apparent permeability.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES INJECTION WELL (CH-314) Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
570-577	Dolomite, yellowish gray (5Y 8/1), calcareous, cryptocrystalline, hard, good interparticle porosity.
577-579	Lime mud, yellowish gray (5Y 8/1), soft, cohesive; limestone, light olive gray (5Y 6/1), cryptocrystalline, hard, poor apparent porosity.
579-590	Limestone, light olive gray (5Y 6/1), dolomitic, phosphatic, cryptocrystalline, good moldic porosity.
590-596	Lime mud, yellowish gray (5Y 8/1), phosphatic, sticky, clayey.
596-600	Limestone, light gray (N7), calcarenitic, good interparticle porosity, finely disseminated phosphate.
660-610	Limestone, yellowish gray (5Y 8/1), finely phosphatic, fossiliferous, mostly recrystallized, good to excellent moldic porosity.
610-628	Limestone, yellowish gray (5Y 8/1), calcarenitic to biomicritic, good moldic porosity, harder and mostly recrystallized near base.
628-645	Lime mud, yellowish gray (5Y 8/1); and limesotne, yellowish gray (5Y 8/1), biomicritic to calcarenitic, finely phosphatic.
645-665	Limestone, yellowish gray (5Y 8/1), calcarenitic to biomicritic, fair interparticle porosity, finely disseminated phosphate.
665-671	Lime mud, yellowish gray (5Y 8/1), runny, soupy, minor phosphate.
671-699	Limestone, yellowish gray (5Y 8/1), cryptocrystalline, poor to fair moldic porosity, minor phosphate.
699-703	Lime mud, yellowish gray (5Y 8/1) to light olove gray (5Y 6/1), sticky, cohesive, finely phosphatic.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES INJECTION WELL (CH-314) Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
703-725	Limestone, light brownish gray (5YR 6/1), dolomitic, hard, cryptocrystalline, poor to fair porosity, slightly sucrosic, very poor to fair apparent permeability, finely phosphatic.
725-728	Lime mud, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), sticky, clayey.
728-750	Limestone, very light gray (N8), to yellowish gray (5Y 8/1), fossiliferous, biomicritic, minor phosphate grains, good moldic porosity.
750-769	Limestone, light olive gray (5Y 6/1), common calcite spar infilling, moderately hard.
769-778	Limestone light olive gray (5Y 6/1), sparite, microcrystalline, finely phosphatic, moderately soft, fair intercrystalline porosity.
778-782	Lime mud, very light gray (N8), soft, cohesive, finely phosphatic.
782-805	Limestone, light gray (N7), microcrystalline, soft poor apparent porosity; limestone, very light gray (N8) micrite, moderately soft, phosphatic, poor apparent porosity.
805-815	Lime mud, yellowish gray (5Y 8/1), silty, soupy to slightly cohesive, phosphatic.
815-845	Limestone, yellowish gray (5Y 8/1), biomicrite and micrite, soft, finely phosphatic, trace calcite spar, poor moldic porosity.
845-851	Lime mud, very pale orange (10YR 8/2), soft, moderately cohesive.
851-864	Limestone, very pale orange (10YR 8/2), micrite, moderately soft, very finely phosphatic, poor apparent porosity.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES INJECTION WELL (CH-314) Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
864-878	Limestone, light olive gray (5Y 6/1), dolomitic micrite, moderately hard, phosphatic, moderately sandy, poor apparent porosity.
878-890	Dolomite, yellowish gray (5Y 7/2), microcrystalline, hard, finely phosphatic, poor apparent porosity.
890-898	Lime mud, yellowish gray (5Y 8/1), soft, moderately cohesive, poor apparent permeability; dolomite, yellowish gray (5Y 8/1), microcrystalline, hard, finely phosphatic, trace vuggy porosity.
898-910	Limestone, yellowish gray (5Y 7/2), sandy biomicrite, common phosphate grains, fair to good moldic porosity; lime mud/clay, yellowish gray (5Y 7/2), sandy phosphatic.
910-925	Limestone, light olive gray (5Y 6/1), sandy, dolomitic, hard, finely phosphatic, poor apparent porosity.
925-957	Lime mud, light olive gray (5Y 6/1), soft, somewhat cohesive.
957-975	Limestone, yellowish gray (5Y 8/1), calcarenite, soft, good interparticle porosity.
975-995	Lime mud, yellowish gray (5Y 8/1), soft, slightly fluid, trace phosphate, poor apparent porosity and permeability.
995-1008	Limestone, very pale orange, (10YR 8/2) to pale yellowish brown (10YR 6/2), calcarenite, moderately soft, good interparticle porosity.
1008-1011	Carbonate clay, very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), moderately stiff, cohesive.
1011-1020	Limestone, mottled medium gray (N5) and pale yellowish brown (10YR 6/2), sparite, moderatley hard, good to excellent moldic porosity.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES INJECTION WELL (CH-314) Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
1020-1025	Lime mud, yellowish gray (5Y 8/1), sticky, soft.
1025-1050	Limestone, yellowish gray (5Y 8/1) biomicrite, moderately hard, finely phosphatic, fair moldic porosity.
1050-1058	Limestone, yellowish gray (5Y 7/2) biomicrite to calcarenite, moderately soft, good to excellent interparticle and moldic porosity.
1058-1070	Limestone, yellowish gray (5Y 8/1), fossiliferous calcarenite, soft, good interparticle porosity, fair vuggy porosity.
1070-1081	Limestone, yellowish gray (5Y 8/2), biomicrite to calcarenite, good interparticle and moldic porosity.
1081-1091	Lime mud, yellowish gray (5Y 8/2), cohesive.
1091-1104	Limestone, light olive gray (5Y 6/1), calcarenitic to oolitic, good interparticle porosity.
1104-1110	Lime mud, light brownish gray (5YR 6/1), silty, phosphatic.
1110-1130	No returns.
1130-1159	Limestone, light olive gray (5Y 6/1), biomicrite mostly recrystallized, good moldic porosity.
1159-1189	Limestone, yellowish gray (5Y 8/1), micrite, minor phosphate grains.
1189-1197	Lime mud, yellowish gray (5Y 8/1), runny, and limestone, yellowish gray micrite.
1197-1210	Limestone, very pale orange (10YR 8/2), biomicrite, good interparticle and vuggy porosity, trace phosphate grains, moderate induration.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES INJECTION WELL (CH-314) Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
1210-1220	Limestone, very pale orange (10YR 8/2), biomicrite, good interparticle and vuggy porosity, trace foraminifera, trace phospahte grains, moderate induration.
1220-1230	Limestone, very light gray (N8) to yellowish gray (5Y 8/1), biomicrite, excellent moldic porosity, trace foraminifera.
1230-1250	Limestone, very pale orange (10YR 8/2) biomicrite, good interparticle porosity, trace phosphate and formaminifera.
1250-1290	Limestone, very pale orange (10YR 8/2), biomicrite, good interparticle porosity, trace foraminifera, trace lime and mud, trace phosphate.
1290-1310	Limestone, very pale orange (10YR 8/2), biomicrite, good interparticle porosity, occasional lime mud, trace foraminifera, trace phosphate.
1310-1320	Limestone, pale yellowish brown (10YR 6/2), biomicrite, poor interparticle porosity, occasional lime mud, common phosphate.
1320-1342	Limestone, very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), biomicrite, fair interparticle porosity, trace lime mud, minor phosphate.
1348-1412	Limestone, very pale orange (10YR 8/2), micrite and biomicrite, calcarenitic texture, moderately soft, fair interparticle porosity, fair to good moldic porosity, increasing with depth.
1412-1416	Lime mud, yellowish gray, cohesive.
1416-1456	Limestone, as above, micrite, fair to good interparticle porosity.
1456-1458	Lime mud, yellowish gray, sticky, semi cohesive.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES INJECTION WELL (CH-314) Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
1458-1476	Limestone, very pale orange (10YR 8/2), biomicrite, calcarenitic texture, some recrystallized Lepidocyclina foraminifera.
1476-1500	Liemstone, very pale orange (10 YR 8/2) to pale yellow brown (10 YR 6/2), micritic, poor to fair interparticle porosity, with trace Lime mud, yellow gray (5Y 7/2) sticky, soft.
1500-1504	Lime mud, light olive grey (5Y 5/2), cohesive.
1504-1532	Limestone, very pale orange (10 YR 8/2), biomicritic, calcarenitic, poor to fair interparticle porosity, some recrystallized Lepidocyclina foraminifera.
1532-1558	Dolomite, moderate olive brown (5Y 4/4), hard, micritic, with fair to good intercrystalline and solution porosity.
1558-1570	Dolomite, light olive gray (5Y 5/2) to moderate olive brown (5 YR 4/4), hard, micritic, fair intercrystalline porosity.
1570-1602	Dolomite, moderate olive brown (5Y 4/4), hard, micritic, fair to good intercrystalline porosity.
1602-1630	Dolomite, moderate olive brown (5Y 4/4), fractured, hard, micritic, fair intercrystaline porosity, some recrystallized echinoid fossils, with trace limestone, very pale orange (10 YR 8/2), micritic, hard, good intercrystalline porosity.
1630-1643	Dolomite, moderate olive brown (5Y 4/4), micritic, hard, fair to good intercrystallilne porosity.
1643-1646	Dolomite, as above with minor clay, medium light gray (N6), brittle.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
INJECTION WELL (CH-314)
Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
1646-1650	Limestone, very pale orange (10YR 8/2), micritic, good intercrystalline porosity, and lime mud, very pale orange (10YR 8/2), soft, semi-cohesive and minor dolomite as above.
1650-1656	Limestone, very pale orange (10 YR 8/2), micritic, good intercrystalline porosity, and common clay very pale orange (10 YR 8/2), soft, semi-cohesive.
1656-1659	Dolomite, moderate yellowish brown (10YR 5/4), hard, poor solution porosity, poor apparent permeability.
1659-1665	Limestone, very pale orange (10YR 8/2) to yellowish gray (5Y 8/1), calcarenitic to micritic, fair interparticle porosity, low apparent permeability, interbeded with lime mud, yellowish gray, stiff.
1665-1667	Lime mud, light olive grey (54 5/2), cohesive.
1667-1679	Limestone, very pale orange (10YR 8/2) to yellowish gray (5Y 8/1), calcarenitic, good interparticle porosity, fair apparent permeability.
1679-1681	Dolomite, dark yellowish brown (10YR 4/2), hard, microcrystalline, poor to very poor porosity, very poor apparent permeability.
1681-1689	Limestone, calcarenitic to micritic, yellowish gray (5Y 8/2), fair to poor interparticle porosity, poor apparent permeability.
1689-1702	Dolomite, light olive gray (5Y 5/2) to yellowish gray (5Y 8/1), mottled, calcareous hard, very poor porosity and apparent permeability, interbedded with occasional limestone, calcarenitic to micritic, yellowish gray (5Y 8/1), fair to poor interparticle porosity, poor apparent permeability.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES INJECTION WELL (CH-314) Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
1702-1714	Limestone, calcarenitic to micritic, very pale orange (10YR 8/2), fair interparticle porosity, fair apparent permeability.
1714-1717	Dolomite, dark yellowish brown (10YR 4/2), hard, poor solution porosity, poor apparent permeability.
1717-1738	Limestone, calcarenitic to micritic, very pale orange (10YR 8/2), fair interparticle porosity, fair apparent permeability.
1738-1739	Dolomite, dark yellowish brown (10YR 4/2), hard, poor solution porosity, poor apparent permeability.
1739-1761	Limestone, calcarenitic, very pale orange (10YR 8/2), fair interparticle porosity, fair apparent permeability, with trace clay, very pale orange, stiff.
1761-1763	Limestone, calcarenitic to micritic, very pale orange (10YR 8/2), fair interparticle porosity, fair apparent permeability, interbedded with dolomite, dark yellowish brown (10YR 4/2), hard, poor solution porosity, poor apparent permeability.
1763-1770	Limestone, micritic, very pale orange (10YR 8/2), poor interparticle porosity, poor apparent permeability.
1770-1772	Dolomitic limestone, light olive gray (5Y 5/2) to yellowish gray (5Y 8/1), mottled, hard, very poor porosity and apparent permeability.
1772-1797	Limestone, micritic, very pale orange (10YR 8/2), poor interparticle porosity, poor apparent permeability.
1797-1849	Limestone, micritic, very pale orange (10YR 8/2), poor interparticle porosity, poor apparent permeability, with occasional lignitic streaks, black (N1), interbedded with dolomite, dark yellowish brown (10YR 4/2), hard, poor solution porosity, poor apparent permeability.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES INJECTION WELL (CH-314) Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
1849-1861	Dolomite, moderate olive brown (5Y 4/4), hard, micritic, poor intercrystalline porosity.
1861-1867	Limestone, pale yellow brown (10YR 6/2), hard, dolomitic, poor intercrystalline porosity.
1867-1893	Dolomite, moderate olive brown (5Y 4/4), hard, micritic, poor intercrystalline porosity, with Limestone, light olive gray (5Y 6/1), dolomitic, fair porosity with occasional carbonaceous streaks.
1893-1895	Lime mud, very pale orange (10YR 8/2) to yellow gray (5Y 7/2), sticky.
1895-1913	Limestone, very pale orange (10YR 8/2), micritic to biomicritic, fair interparticle porosity, with common Clay, yellow gray (5Y 7/2), sticky, semi-cohesive.
1913-1927	Limestone, very pale orange orange (10YR 8/2), micritic, calcarenitic, poor solution and intercrystalline porosity, with minor Clay, very pale orange (10YR 8/2), sticky, semi-cohesive.
1927-1955	Limestone, very pale oragne (10YR 8/2), micritic, calcarenitic, poor solution and intercrystalline porosity, with minor Clay, very pale orange (10YR 8/2), sticky, semi-cohesive.
1955-1975	Limestone, very pale (10YR 8/2) to pale moderately brown (10YR 6/2), micritic to calcarenitic, poor intercrystalline and solution porosity with some interbedded rip-up clasts, granule to pebble sized.
1975-1987	Dolomite, dark yellowish brown (10YR 4/2), recrystallized, tight, hard, trace to poor solution porosity.
1987-1998	Dolomite, dusky yelowish brown (10YR 2/2) to dark yellowish brown (10YR 4/2), very hard, microcrystalline, very poor porosity and apparent permeability.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES INJECTION WELL (CH-314) Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
1998-2005	Limestone, very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), microcrystalline, hard, poor porosity.
2005-2009	Dolomite, dark yellowish brown (10YR 4/2), very hard, microcrystalline, very poor porosity and apparent permeability.
2009-2013	Limestone, very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), microcrystalline, hard, poor porosity and apparent permeability.
2013-2015	Dolomite, dusky yellowish brown (10YR 2/2) to dark yellowish brown (10YR 4/2), very hard, microcrystalline, very poor porosity and apparent permeability, occasional fair solution porosity.
2015-2026	Limestone, very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), microcrystalline, hard to moderately hard, poor porosity and apparent permeability with trace clay, white (N9), stiff.
2026-2032	Dolomite, dusky yellowish brown (10YR 2/2) to dark yellowish brown (10YR 4/2), very hard, microcrystalline, very poor porosity and apparent permeability, occasional fair solution porosity, interbedded with occasional limestone, very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), microcrystalline, hard ot moderately permeability.
2032-2041	Limestone, very pale orange (10YR 8/2), microcrystalline, moderatley hard, fair porosity and apparent permeability, interbedded with occasional dolomite, dark yellowish brown (10YR 4/2), very hard, microcrystalline, poor to fair solution porosity and poor apparent permeability.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES INJECTION WELL (CH-314) Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
2041-2045	Dolomite, dusky yellowish brown (10YR 2/2) to dark yellowish brown (10YR 4/2), very hard, microcrystalline, very poor porosity and apparent permeability, minor solution porosity, interbedded with minor limestone, very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), microcrystalline, hard, poor porosity and apparent permeability.
2045-2047	Dolomite, dusky yellowish brown (10YR 2/2) to dark yellowish brown (10YR 4/2), very hard, microcrystalline, very poor porosity and apparent permeability, minor solution porosity, interbedded with minor limestone, very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), microcrystalline, hard, poor porosity and apparent permeability.
2047-2061	No returns.
2061-2063.5	Limestone, very pale orange (10YR 8/22) to pale yellowish brown (10YR 6/2), calcilutitic to calcarenitic, minor vertical fractures, large rip-up clasts, minor carbonaceous layers, good vugular porosity, fair to good permeability.
2063.5-2064.5	Limestone, very pale orange (10YR 8/2), calcilutitic, poor porosity.
2064.5-2065.5	Limestone, very pale orange (10YR 8/2), interlayered calcarenitic and calcilutitic, minor carbonaceous layers, poor vugular porosity, small vertical fractures, some styolites.
2065.5-2067	Limestone, grayish orange (10YR 7/4), biomicritic, minor vertical fractures, poor porosity, fair permeability.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
INJECTION WELL (CH-314)
Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
2067-2072	Limestone, grayish orange (10YR 7/4), biomicritic to calcilutitic, some calcarenitic layers, numerous styolities and small vertical fractures, carbonaceous material, good vugular porosity, calcarenitic layers, granular to pebble size rip-up clasts.
2072-2073.5	Dolomite, dark yellowish brown (10YR 2/2), fair vugular porosity, samll fractures, fair to good porosity, dense, recrystallized.
2073.5-2090	Limestone, grayish orange (10YR 7/4), calcarenitic to calcilutitic, minor carbonaceous layer, good vugular porosity, small fractures, minor styolites, some interbedded lime mud.
2090-2108	Limestone, pale yellowish brown (10YR 6/2), calcilutitic to calcarenitic, moderately hard, common fractures, fair to good interparticle and vugular porosity.
2108-2167	Dolomite, dark yellowish brown (10YR 4/2) to brownish black (5YR 2/1), hard, dense microcrystalline to coarsely crystalline, good vugular porosity.
2167-2185	Dolomite, dark yellow brown (10YR 4/2), microcrystalline, very hard, poor to fair vugular porosity.
2185-2210	Dolomite, pale yellow brown (10YR 4/2) to light brownish gray (5YR 2/1), microcrystalline to crystalline, fair to good vugular porosity, trace limestone, biomicritic.
2210-2222	Dolomite, dusky yellow brown (10YR 4/2), dense, microcrystalline, very hard, poor porosity.
2222-2238	Dolomite, dark yellow brown (10YR 4/2), dense, hard, fair apparent porosity and permeability.
2238-2252	Dolomite, pale yellow brown (10YR 6/2) to grayish orange (10YR 7/4), dense, very hard, good vugular porosity.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES INJECTION WELL (CH-314) Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
2252-2282	Dolomite, dusky yellowish brown (10YR 2/2) to pale yellowish brown (10YR 4/3), dense moderately hard, poor to fair porosity and apparent permeability.
2282-2290	Dolomite, pale yellowish brown (10YR 4/2), dense hard, vertical fractures, poor to fair proosity and apparent permeability.
2290-2307	Dolomite, dark yellowish brown (10YR 4/2), dense, hard, microcrystalline, moderate porosity.
2307-2332	Dolomite, brownish gray (5YR 4/1), dense, hard, microcrystalline to cryptocrystalline, fair vugular porosity.
2332-2342	Dolomite, dark yellowish, brown (10YR 4/2), hard, dense, microcrystalline, poor to fair porosity and apparent permeability.
2342-2346	Limestone, light olive gray (5YR 6/1), dolomitic, dense, very hard, microcrystalline, laminated, poor porosity and apparent permeability.
2346-2347	Dolomite, light olive gray (5Y 6/1), dense, very hard, microcrystalline, laminated, poor porosity and apparent permeability.
2347-2352	Lost core, no retrieval.
2353-2356	Limestone, yellowish gray (5Y 7/2) to light olive gray (5Y 5/2), dolomitic, micritic to calcilutitic, poor vugular porosity, laminated, with trace carbonaceous material, black (N1), rip-up clasts and minor scour contacts, trace interbedded dolosilt, light olive gray (5Y 5/2).
2356-2363	Dolomite, olive gray (5Y 4/1), microcrystalline to medium crystalline, microsucrosic to sucrosic, fair vugular porosity, trace dolosilt, light olive gray (5Y 5/2), and minor carbonaceous material, black (N1).

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
INJECTION WELL (CH-314)
Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
2363-2397	Dolomite, dark yellowish brown (10YR 4/2) to olive gray (5Y 4/1), microcrystalline to medium crystalline, microsucrosic to sucrosic, fair to poor intercrystalline and vugular porosity, poor apparent permeability, with localized occasional fair permeability in recrystallized vugs and samll fractures.
2397-2402	Dolomite, pale yellowish brown (10YR 6/2), finely to coarsely crystalline, poor intercrystalline porosity, poor apparent permeability, with common recrystallized carbonaceous material.
2402-2421	Dolomite, dark yellowish brown (10YR 4/2), microcrystalline, mottled, good vugular porosity, good apparent permeability.
2418-2421	Dolomite, dark yellowish brown (10YR 4/2), microcrystalline, mottled, good vugular porosity, good apparent permeability.
2421-2429	Dolomite, dark yellowish brown (10YR 4/2), very hard, microcrystalline to finely crystalline, trace interstitial anhydrite, poor to fair vugular porosity, poor apparent permeability, minor dolosit.
2429-2448	Dolomite, moderate yellowish brown (10YR 5/4) to dark yellowish brown, very hard, microcrystalline, poor vugular porosity, poor apparent permeability.
2448-2471	Dolomite, dark yellowish brwon (5YR 4/2) to grayish brown (5YR 3/2), very hard, microcrystalline, microsucrosic, poor to fair vugular porosity, poor apparent permeability, with minor recrystallized calcite in vugs.
2471-2480	Dolomite, grayish brown (5YR 3/2), very hard, microcrystalline, microsucrosic, poor vugular porosity, poor apparent permeability, with minor recrystallized calcite.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
INJECTION WELL (CH-314)
Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
2480-2484	Dolomite, dark yellowish brown (10YR 4/2) to grayish brown (5YR 3/2), microcrystalline, microsucrosic, good to excellent solution and vugular porosity, good apparent permeability.
2484-2497	Dolomite, dark yellowish brown (10YR 4/2) to grayish brown (5YR 3/2), finely crystalline, microsucrosic, very hard, poor to fair vugular porosity, poor apparent permeability.
2497-2516	Dolomite, dark yellow brown (10YR 4/2) to grayish brown (4YR 3/2), microcrystalline, microsucrosic, very hard, poor to fair vugular porosity, poor apparent permeability.
2516-2521	Dolomite, dark yellowish brown (10YR 4/2) very hard, microcrystalline, with trace finely crystalline infilling in voids, fair to good vugular porosity, fair to poor apparent permeability.
2521-2547	Dolomite, dark yellowish brown to dusky yellowish brwon (10YR 2/2), with occasional black (N9) carbonaceous laminae, very hard, microcrystalline, very poor porosity, very poor apparent permeability.
2547-2577	Dolomite, dark yellowish brown (10YR 4/2), microcrystalline, with trace finely crystalline ifilling of voids, good vugular porosity, fair to good apparent permeability, with trace carbonaceous laminae, black (N9).
2577-2596	Dolomite, grayish orange (10YR 7/4), crumbly, microcrystalline, excellent vuggy solution porosity, good to excellent apparent permeability; with interbedded Dolomite, dark yellow brown (10YR 4/2) to grayish brown (5YR 3/2), hard, microcrystalline, fair to poor vugular porosity, poor apparent permeability.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
INJECTION WELL (CH-314)
Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
2596-2614	Dolomite, dark yellowish brown (10YR 4/2), microcrystalline, hard, moderate vugular porosity.
2614-2657	Dolomite, dark yellowish brwon (10YR 4/2), micro to cryptocrystalline, hard, poor apparent porosity.
2657-2674	Dolomite, dusky yellowish brown (10YR 2/2), microcrystalline, very hard, poor apparent porosity.
2674-2688	Dolomite, moderate yellowish brown (10YR 5/4), crumbly, poor induration, excellent porosity, good to excellent apparent permeability.
2688-2706	Dolomite, moderate yellowish brown (10YR 5/4) crumbly, poor induration, excellent vugular porosity, good to excellent apparent permeability; with minor interbedded Dolomite, dark yellowish brown (10YR 4/2), moderately hard, microcrystalline, fair to good porosity and apparent permeability, trace carbonaceous material and dolosilt.
2706-2728	Dolomite, dark yellowish brown (1oYR 5/4), moderately hard, microcrystalline to very finely crystalline, good vugular porosity and good apparent permeability, minor carbonaceous material and dolosilt.
2728-2752	Dolomite, moderate yellowish brown (10YR 5/4), moderately hard, microcrystalline to very finely crystalline, good vugular porosity, good to excellent apparent permeability.
2752-2767	Dolomite, dark yellowish brown (10YR 4/2), microcrystalline, moderatley hard, good intercrystalline porosity, fair to good apparent permeability.
2767-2774	Dolomite, dark yellowish brown (10YR 4/2), microcrystalline, hard, well indurated, fair intercrystalline porosity, poor apparent permeability.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES INJECTION WELL (CH-314) Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
2774-2780	Dolomite, dark yellowish brown (10YR 4/2), microcrystalline, hard, well indurated, fair vugular porosity poor intercrystalline porosity, low apparent permeability.
2780-2812	Dolomite, dark yellowish brown (10YR 4/2), microcrystalline, hard, well indurated, poor vugular and intercrystalline porosity, poor apparent permeability.
2812-2810	Dolomite, moderate yellowish brown (10YR 5/4), microcrystalline, moderately hard, fair vugular porosity, poor apparent permeability.
2820-2845	Dolomite, dusky yellowish brown (10YR 2/2), micro- to cryptocrystalline, hard, very well indurated, dense, poor porosity and apparent permeability.
2845-2860	Dolomite, dark yellowish brwon (10YR 4/2), micro to cryptocrystalline, hard, moderate induration, poor to fair porosity and apparent permeability.
2860-2878	Dolomimte, moderate yellowish brown (10YR 5/4) to grayish orange (10YR 7/4), microcrystalline to very finely crystalline, poor to fair induration, poor porosity and apparent permeability.
2878-2888	Dolomite, dark yellowish brown (10YR 4/2), micro-to cryptocrystalline, hard, well indruated, dense, poor porosity and permeability.
2888-2905	Dolomite, moderate yellowish brown (10YR 5/4), microcrystalline, hard, moderate induration, poor to fair porosity and apparent permeability.
2905-2921	Dolomite, moderate yellowish brown (10YR 5/4), microcrystalline to cryptocrystalline, hard, well indurated, poor porosity and apparent permeability.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES INJECTION WELL (CH-314) Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
2921-2936	Dolomite, dark yellowish brown (10YR 4/2), microcrystalline, hard, moverately well indruated, good to excellent vugular porosity, good apparent permeability.
2936-2953	Dolomite, dark yellowish brown (10YR 4/2), microcrystalline, hard, well indurated, fair vugular porosity.
2973-2990	Dolomite, dark yellowish brown (10YR 4/2), micro to cryptocrystalline, hard, well indruated, poor porosity and apparent permeability, trace interstitial anhydrite.
2990-2998	Dolomite, dark yellowish brown (10YR 5/4), microcrystalline, hard, well indurated, por to fair porosity and apparent permeability, trace interstitial anhydrite.
2998-3011	Dolomite, moderate yellowish brwon (10YR 5/4), microcrystallien, sucrosic texture, hard, moderate induration, fair intercrystalline porosity, poor apparent permeabililty.
3011-3033	Dolomite, dark yellowish brown (10YR 4/2), microcrystalline, hard, well indruated, poor porosity and apparent permeability.
3033-3068	Dolomite, pale yellowish brown (10YR 6/2), finely crystalline, sucrosic, fair vugular porosity, minor carbonaceous material, trace interstital anhydrite, trace, lime mud.
3068-3076	Dolomite, very pale orange (10YR 8/2), cryptocrystalline, well indruated, dense poor porosity and apparent permeability.
3976-3088	Dolomite, dark yellowish orange (10YR 6/6), cryptocrystalline, hard, well indurated, poor porosity and apparent permeability.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
INJECTION WELL (CH-314)
Continued

DEPTH INTERVAL (FT-BLS)	SAMPLE DESCRIPTION
3088-3102	Dolomite, dusky yellowish brown (10YR 2/2), cryptocrystalline, well indurated, dense, poor porosity and apparent permeability.
3102-3148	Dolomite, olive black, (5Y 2/1), microcrystalline, microsucrosic, hard dense, poor intercrystalline porosity and poor apparent permeability.
3148-3165	Dolomite, olive black (5Y 2/1), finely crystalline, fair to good vugular porosity, some indications of fracturing, fair apparent porosity.
3165-3187	Dolomite, olive balck (5Y 2/1) to dusky yellowish brown (10YR 2/2), finely crystalline, dense, well indurated, poor porosity and apparent permeability.
3187-3204	Dolomite, olive black (5Y 2/1) to dusky yellowish brown (10YR 2/2), fine to medium crystalline, fair vugular porosity, hard, dense, poor to fair apparent permeability, trace lignite.
3204-3210	Dolomite, pale yellowish brown (10YR 6/2), sucrossic, fine to medium, crystalline, very well indurated, dense, poor porosity and apparent permeability.
3210-3217	No sample.
3217-3222	Dolomite, brownish gray (5YR 4/1), sucrosic, fine to medium, crystalline, fair fracture porosity, well indurated, poor to fair apparent permeability.
3222-3240	Dolomite, grayish black (N2) to olive black (5Y 2/1), sucrosic, fine to medium crystalline, fair vuggy porosity, moderately well to well indurated, poor apparent permeability.
3240-3268	Dolomite, grayish black (N2) to olive black (5Y 2/1), succrossic, hard, fair vugular porosity, poor apparent permeability.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
DUAL ZONE MONITORING WELL (CH-315)

DEPTH INTERVAL (FEET BPL)	SAMPLE DESCRIPTION
0-2	No cuttings retrieved - bit inside pit casing.
2-15	Fill - cuttings from drilling rat hole and mouse hole.
15-25	Limestone, biomicritic, shelly, pale yellowish brown (10YR 6/2) to medium light gray (N6), friable to moderately hard, abundant bivalve and gasdtropod fragments, excellent moldic and interparticle porosity, excellent moldic porosity, excellent apparent permeability, with trace (5%) phosphate granules, as above.
25-67	Clay, yellowish gray (5YR 7/2) to light olive gray (5YR 6/1), soft, semi-cohesive, very low apparent porosity and apparent permeability, with trace fine grained phosphate, black (N9).
67-98	Limestone, yellowish gray (5YR 7/2), micritic fair to good interparticle porosity, fossiliferous, hard, trace fine grained phosphate, black (N9).
98-118	Clay, grayish olive (10Y 4/2), cohesive, with coarse shell fragments and limestone cobbles.
118-122	Clay, grayish olive (10Y 4/2), soft, with fine shell and limestone pebbles.
122-134	Clay, olive gray (5Y 4/1), soft, trace fine shell fragments.
134-152	Sandstone, olive gray (5Y 4/1) to medium gray (N5), carbonaceous matrix, well indurated, phosphatic, moderately hard, poor interparticle porosity, abundant shell fragments (bivalves), trace fossils, trace calcite spar cement.
152-174	Lime mud, light gray (5Y 6/1), to olive gray (5Y 4/1), fluid phosphatic, sandy to silty, common shell fragments, common phosphates, trace fossils.
174-178	Lime mud, dark greenish gray (5YR 4/1), very sandy, slightly cohesive, soft, abundant phosphate, black, trace fossils.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
DUAL ZONE MONITORING WELL (CH-315)
Continued

DEPTH INTERVAL (FEET BPL)	SAMPLE DESCRIPTION
178-190	Limestone, light gray (5Y 6/1), micritic, moderate phosphates, slightly sandy, moderately soft.
190-204	Lime mud, greenish grey (5Y 6/1), abundant sand, highlyt phosphatic, moderately soft, common phosphate grains.
204-226	Limestone, light gray (5Y 6/1), micritic, abundant phosphate grains (black), trace phosphate granules; minor lime mud.
226-238	Lime mud, light olive gray (5Y 6/1), cohesive, soft, common phosphate grains, black (N9), common limestone, interbedded with limestone, pale yellowish brown (10YR 6/2), poor induration.
238-250	Lime mud, light olive gray (5Y 6/1), cohesive, soft, common phosphate grains, black (N9) interbedded with limestone, pale yellowish brown (10YR 6/2), poor induration.
250-268	Limestone, yellowish gray (5YR 7/2), micritic, good porosity, hard.
268-310	Lime mud, yellowish gray (5YR 8/1), soft, semi-cohesive, common phosphate grains; with interbedded limestone, light olive gray (5YR 5/2), micritic, poor porosity.
310-319	Clay, pale ovive (10yr 6/2), stiff, cohesive, trace phosphatic minerals.
319-328	Limestone, yellowish gray (5YR 7/2), hard, micritic, poor porosity, micricrystalline texture, common lime mud, very light gray (N8), soft, semi cohesive.
328-341	Lime mud, very light gray (N8), soft, semi cohesive, trace very fine grained phosphate, common clay, yellowish gray (5YR 7/2), stiff.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
DUAL ZONE MONITORING WELL (CH-315)
Continued

DEPTH INTERVAL (FEET BPL)	SAMPLE DESCRIPTION
341-357	Limestone, light gray (N7), micritic, hard, slightly calcarenitic, occasional very fine grained phosphate, same lime mud interbedded.
357-406	Lime mud, light gray (N8), soft sticky, occasional shell fragments, minor very fine grained phosphate.
406-425	Limestone, very light gray (N8) to yellowish gray (5YR 8/1), micritic, hard, fair porosity, trace fine grained phosphate and interbedded lime mud.
425-465	Clay, yellowish gray (5YR 8/1), soft, semi-cohesive with minor shell fragments and trace phosphate nodules.
465-485	Clay, yellowish gray (5YR 8/1), soft semi cohesive, with minor limestone; very pale orange (10YR 8/2), micritic,fair to good porosity and apparent permeability.
485-498	Limestone, light live gray (5YR 6/1), micricrystalline, hard, excellent porosity and apparent permeability, trace phosphate grains and minor clay as above.
498-505	Limestone, yellowish gray (5YR 8/1), marly, soft, good porosity and apparent permeability with occasional clay; yellowish gray (5YR 8/1), soft, semi-cohesive with trace phosphate grains.
505-513	Lime mud, yellowish gray (5YR 8/1), soft, with some finely disseminated phosphate grains.
513-525	Limestone, yellowish gray (5YR 8/1), biomicrite, good to excellent modlic porosity, trace phosphate grains.
525-532	Lime mud, yellowish gray (5YR 8/1), sticky, clayey.
532-542	Clay, light olive gray (5YR 6/1), some phospahte rubble, cohesive, sticky.
542-552	Limestone, grayish orange (10YR 7/4), biomicritic, dolomitic, phosphatic, good to excellent moldic porosity.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
DUAL ZONE MONITORING WELL (CH-315)
Continued

DEPTH INTERVAL (FEET BPL)	SAMPLE DESCRIPTION
552-555	Limestone, light live gray (5YR 6/1), dolomitic, cryptocrystalline to micritic, finely phosphatic, moderately hard, good to excellent vugular porosity, good apparent permeability.
555-570	Limestone, light olive gray (5Y 6/1), dolomitic, cryptocrystalline to micritic, finely phosphatic, moderately hard, good to excellent vugular porosity, good apparent permeability.
570-577	Dolomite, yellowish gray (5Y 8/1), calcareous, cryptocrystalline, hard, good interparticle porosity.
577-579	Lime mud, yelowish gray (5Y 8/1), soft, cohesive; limestone, light olive gray (5Y 6/1), cryptocrystalline, hard, poor apparent porosity.
579-590	Limestone, light olive gray (5Y 6/1), dolomitic, phosphatic, cryptocrystalline, good moldic porosity.
590-596	Lime mud, yellowish gray (5Y 8/1), phosphatic, sticky, clayey.
596-600	Limestone, light gray (N7), calcarenitic, good interparticle porosity, finely disseminated phosphate.
600-610	Limestone, yellowish gray (5Y 8/1), finely phosphatic, fossiliferous, mostly recrystallized, good to excellent moldic porosity.
610-628	Limestone, yellowish gray (5Y 8/1), calcarenitic to biomicritic, good moldic porosity, harder and mostly recrystallized near base.
628-645	Lime mud, yellowish gray (5Y 8/1); and limesotne, yellowish gray (5Y 8/1), biomicritic to calcarenitic, finely phosphatic.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
DUAL ZONE MONITORING WELL (CH-315)
Continued

DEPTH INTERVAL (FEET BPL)	SAMPLE DESCRIPTION
645-665	Limestone, yellowish gray (5Y 8/1), calcarenitic to biomicritic, fair interparticle porosity, finely disseminated phosphate.
665-671	Lime mud, yellowish gray (5Y 8/1), runny, soupy, minor phosphate.
671-699	Limestone, yellowish gray (5Y 8/1), cryptocrystalline, poor to fair moldic porosity, minor phosphate.
699-703	Lime mud, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), sticky, cohesive, finely phosphatic.
703-725	Limestone, light brownish gray (5YR 6/1), dolomitic, hard, cryptocrystalline, poor to fair porosity, slightly sucrosic, very poor to fair apparent permeability, finely phosphatic.
725-728	Lime mud, yellowish gray (5Y 8/1) to light olive gray (5Y 6/1), sticky, clayey.
728-735	Limestone, very light gray (N8), to yellowish gray (5Y 8/1), fossiliferous, biomicritic, minor phosphate grains, good moldic porosity.
735-750	Limestone, very light gray (N8) to yellowish gray (5Y 8/1), fossiliferous, biomicritic, minor phosphate grains, good moldic porosity.
750-769	Limestone, light olive gray (5Y 6/1), common calcite spar infilling, moderatley hard.
769-778	Limestone, light olive gray (5Y 6/1) sparite, microcrystalline, finely phosphatic, moderatley soft, fair intercrystalline porosity.
778-782	Lime mud, very light gray (N8), soft, cohesive, finely phosphatic.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
DUAL ZONE MONITORING WELL (CH-315)
Continued

DEPTH INTERVAL (FEET BPL)	SAMPLE DESCRIPTION
782-805	Limestone, light gray (N7), microcrystalline, soft poor apparent porosity; limestone, very light gray (N8), micrite, moderatley soft, phosphatic, poor porosity.
805-815	Lime mud, yellowish gray(5Y 8/1), silty, soupy to slightly cohesive, phosphatic.
815-845	Limestone, yellowish gray (5Y 8/1) biomicrite and micrite, soft, finely phosphatic, trace calcite spar, poor moldic porosity.
845-851	Lime mud, very pale orange (10YR 8/2), soft, moderately cohesive.
851-864	Limestone, very pale orange (10YR 8/2) micrite, moderatley soft, very finely phosphatic, poor porosity.
864-878	Limestone, light olive gray (5Y 6/1), dolomitic, micritic, moderately hard, phosphatic, moderately sandy, poor porosity.
878-890	Dolomite, yellowish gray (5Y 7/2), microcrystalline, hard, finely phosphatic, poor porosity.
890-898	Lime mud, yellowish gray (5Y 8/1), soft, moderately cohesive, poor apparent permeability; and Dolomite, yellowish gray (5Y 8/1), microcrystalline, hard, finely phosphatic, trace vuggy porosity.
898-910	Limestone, yellowish gray (5Y 7/2), sandy, biomicritic, common phosphate grains, fair to good moldic porosity; lime mud/clay, yellowish gray (5Y 7/2), sandy, phosphatic.
920-925	Limestone, light olive gray (5Y 6/1), sandy, dolomitic, hard, finely phosphatic, poor porosity.
925-957	Lime mud, light olive gray (5Y 6/1), soft, somewhat cohesive.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
DUAL ZONE MONITORING WELL (CH-315)
Continued

DEPTH INTERVAL (FEET BPL)	SAMPLE DESCRIPTION
957-975	Limestone, yellowish gray (5Y 8/1) calcarenite, soft, good interparticle porosity.
975-995	Lime mud, yellowish gray (5Y 8/1), soft, slightly fluid, trace phosphate, poor porosity and permeability.
995-1008	Limestone, very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2) calcarenite, moderately soft, good interparticle porosity.
1008-1011	Clay, very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), carbonate, moderately stiff, cohesive.
1011-1020	Limestone, medium gray (N5) and pale yellowish brown (10YR 6/2), mottled, sparite, moderately hard, good to excellent moldic porosity.
1020-1025	Liem mud, yellowish gray (5Y 8/1), sticky, soft.
1025-1050	Limestone, yellowish gray (5Y 8/1) biomicritic, moderately hard, finely phosphatic, good moldic porosity.
1050-1058	Limestone, yellowish gray (5Y 7/2), biomicrite, to calcarenite, moderately soft, good to excellent interparticle and moldic porosity.
1058-1070	Limestone, yellowish gray (5Y 8/1), fossiliferous calcarenite, soft, good interparitcle and vugular porosity.
1070-1081	Limestone, yellowish gray (5Y 8/2), biomicrite to calcarenite, good interparticle and moldic porosity.
1081-1091	Lime mud, yellowish gray(5Y 8/2), cohesive.
1091-1104	Limestone, light olive gray (5Y 6/1), calcarenitic to oolitic, good interparticle porosity.
1104-1114	Lime mud, light brownish gray (5YR 6/1), silty, phosphatic.
1114-1130	Limestone, yellowish gray (5Y 7/2), oolitic to oomicritic, good interparticle porosity.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
DUAL ZONE MONITORING WELL (CH-315)
Continued

DEPTH INTERVAL (FEET BPL)	SAMPLE DESCRIPTION
1130-1159	Limestone, light olive gray (5Y 6/1), biomicrite mostly recrystallized, good moldic porosity.
1159-1189	Limestone, yellowish gray (5Y 8/1), micritic, minor phosphate grains.
1189-1197	Lime mud, yellowish gray (5Y 8/1), runny, and Limestone, yellowish gray, micritic.
1197-1210	Limestone, very pale orange (10YR 8/2) biomicrite, good interparticle and vugular porosity, trace phosphate grains, moderate induration.
1210-1220	Limestone, very pale orange (10YR 8/2), biomicritic, good interparticle and vugular porosity, trace foraminifera, trace phosphate grains, moderate induration.
1220-1230	Limestone, very light gray (N8) to yellowish gray (5Y 8/1) biomicritic, excellent moldic porosity, trace foraminifera.
1230-1250	Limestone, very pale orange (10YR 8/2) biomicritic, good interparticle porosity, trace phosphate and foraminifera.
1250-1290	Limestone, very pale orange (10YR 8/2) biomicritic, good interparticle porosity, trace foraminifera, trace lime mud.
1290-1310	Limestone, very pale orange (10YR 8/2), biomicritic, good interparticle porosity, occasional lime mud, trace foraminifera, trace phosphate.
1310-1320	Limestone, pale yellowish brown (10YR 6/2), biomicritic, poor interparticle porosity, occasional lime mud, common phosphate.
1320-1342	Limestone, very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), biomicritic, fair interparticle porosity, trace lime mud, minor phosphate.
1342-1348	Lime mud, yellowish gray (5Y 8/1), cohesive; limestone, very pale orange (10YR 8/2), trace phosphate.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
DUAL ZONE MONITORING WELL (CH-315)
Continued

DEPTH INTERVAL (FEET BPL)	SAMPLE DESCRIPTION
1342-1348	Lime mud, yellowish gray (5Y 8/1), cohesive, and Limestone, very pale orange (10YR 8/2), trace phosphate.
1348-1412	Limestone, very pale orange (10YR 8/2), micritic and biomicritic to calcarenitic, moderately soft, fair interparticle porosity, fair to good moldic porosity, increasing with depth.
1412-1416	Lime mud, yellowish gray (5Y 8/1), cohesive.
1416-1456	Limestone, very pale orange (10YR 8/2), micritic, fair to good interparticle porosity.
1456-1458	Lime mud, yellowish gray (5Y 8/1), sticky, semi-cohesive.
1458-1476	Limestone, very pale orange (10YR 8/2), biomicritic to calcarenitic, some recrystallized Lepidocyclina foraminifera.
1476-1499	Limestone, very pale orange (10YR 8/2), biomicritic to calcarenitic, poor to fair interparticle porosity.
1499-1503	Limestone, very pale orange (10YR 8/2) to pale yellowish brown (10YR 6/2), dismicritic, poor to fair interparticle porosity with trace Lime mud, yellowish gray (5Y 7/2), sticky, soft.
1503-1531	Limestone, very pale orange (10 YR 8/2), biomicritic to calcarenitic, poor to fair interparticle porosity, some recrystallized Lepidocyclina foraminifera.
1531-1558	Dolomite, moderate olive brown (5Y 4/4), hard, micritic, with fair to good intercrystalline and solution porosity.
1558-1570	Dolomite, light olive gray (5Y 5/2) to moderate olive brown (5 YR 4/4), hard, micritic, fair intercrystalline porosity.
1570-1602	Dolomite, moderate olive brown (5Y 4/4), hard, micritic, fair to good intercrystalline porosity.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
DUAL ZONE MONITORING WELL (CH-315)
Continued

DEPTH INTERVAL (FEET BPL)	SAMPLE DESCRIPTION
1602-1630	Dolomite, moderate olive brown (5Y 4/4), fractured, hard, micritic, fair inter crystalline porosity, some recrystallized echinoid fossils, with trace Limestone, very pale orange (10YR 8/2), micritic, hard, good intercrystalline porosity.
1630-1643	Dolomite, moderate olive brown (5Y 4/4), micritic, hard, fair to good intercrystalline porosity.
1643-1646	Dolomite, moderate olive brown (5Y 4/4), microcrystalline, hard, fair to good intercrystalline porosity, with minor Clay, medium light gray (N6), brittle
1646-1650	Limestone, very pale orange (10YR 8/2), micritic, good intercrystalline porosity, with common Clay, very pale orange (10 YR 8/2), soft, semi-cohesive and minor dolomite, as above.
1650-1654	Limestone, very pale orange (10YR 8/2), micritic, good intercrystalline porosity and common Clay, very pale orange (10YR 8/2), soft, semi-cohesive.
1654-1659	Dolomite, moderate yellowish brown (10YR 5/4), hard, poor solution porosity, poor apparent permeability.
1659-1671	Limestone, very pale orange (10YR 8/2) to yellowish gray (5Y 8/1), calcarenitic to micritic, fair interparticle porosity, poor apparent permeability, interbedded with Lime Mud, yellowish gray, stiff.
1671-1680	Limestone, very pale orange (10YR 8/2) to yellowish gray (5Y 8/1), calcarenitic, good interparticle porosity, fair apparent permeability.
1680-1682	Dolomite, dark yellowish brown (10YR 4/2), hard, microcrystalline, poor to very poor porosity, very poor apparent permeability.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
DUAL ZONE MONITORING WELL (CH-315)
Continued

DEPTH INTERVAL (FEET BPL)	SAMPLE DESCRIPTION
1682-1691	Limestone, calcarenitic to micritic, yellowish gray (5Y 8/1), fair to poor interparticle porosity, poor apparent permeability.
1691-1698	Limestone, light olive gray (5Y 5/2) to yellowish gray (5Y 8/1), dolomitic, mottled, hard, very poor porosity and apparent permeability.
1698-1705	Dolomite, moderate yellowish brown (10YR 5/4), hard, poor solution porosity, poor apparent permeability, interbedded with occasional Limestone, yellowish gray (5Y 8/1), calcarenitic to micritic, fair to poor interparticle porosity, poor apparent permeability.
1705-1714	Limestone, very pale orange (10YR 8/2), calcarenitic to micritic, fair interparticle porosity, fair apparent permeability.
1714-1717	Dolomite, dark yellowish brown (10YR 4/2), hard, poor solution porosity, poor apparent permeability,
1717-1738	Limestone, very pale orange (10YR 8/2), calcarenitic to micritic, fair interparticle porosity, fair apparent permeability.
1738-1739	Dolomite, dark yellowish brown (10YR 4/2), hard, poor solution porosity, poor apparent permeability,
1739-1761	Limestone, very pale orange (10YR 8/2), calcarenitic, fair interparticle porosity, fair apparent permeability, with trace Clay, very pale orange, stiff.
1761-1763	Limestone, very pale orange (10YR 8/2), calcarenitic to micritic, fair interparticle porosity, fair apparent permeability, interbedded with Dolomite, dark yellowish brown (10YR 4/2), hard, poor solution porosity, poor apparent permeability.
1763-1770	Limestone, very pale orange (10YR 8/2), micritic, poor interparticle porosity, poor apparent permeability.

LITHOLOGIC LOG FOR BURNT STORE UTILITIES
DUAL ZONE MONITORING WELL (CH-315)
Continued

DEPTH INTERVAL (FEET BPL)	SAMPLE DESCRIPTION
1770-1772	Limestone, light olive gray (5Y 5/2) to yellowish gray (5Y 8/1), dolomitic, mottled, hard, very poor porosity and apparent permeability.
1772-1797	Limestone, very pale orange (10YR 8/2), micritic, poor interparticle porosity, poor apparent permeability.
1797-1848	Limestone, very pale orange (10YR 8/2), micritic, poor interparticle porosity, poor apparent permeability, with occasional lignitic streaks, black (N1), interbedded with Dolomite, dark yellowish brown (10YR 4/2), hard, poor solution porosity, poor apparent permeability.
1848-1861	Dolomite, moderate olive brown (5Y 4/4), hard, micritic, poor intercrystalline porosity.
1861-1867	Limestone, pale yellowish brown (10YR 6/2), hard, dolomitic, poor intercrystalline porosity.
1867-1880	Dolomite, moderate olive brown (5Y 4/4), hard, micritic, poor intercrystalline porosity, with Limestone, light olive gray (5Y 6/1), dolomitic, fair porosity with occasional carbonaceous streaks.

VIROGROUP, INC.

PERIMETER MONITOR WELLS (WATER TABLE)

Permit # UC08-247431
YOUNGQUIST BROS./SSU - BURNT STORE INJECTION WELL

Water Quality Sampling Results

SAMPLED THURSDAY, SEPTEMBER 27, 1995

WELL NUMBER	WATER LEVEL (FT. BELOW TOC)	TD (FT. BELOW TOC)	TOC (FT. ABOVE LAND SUR.)	CHLORIDE (mg/l)	CONDUCTIVITY (umhos/cm)	TEMPERATURE (C°)
1 (CH-310)	4.76	21.91	2.10	60	690	25.0
2 (CH-311)	4.21	21.90	2.11	80	700	25.0
3 (CH-312)	3.42	20.80 **	1.05 **	65	800	25.0
4 (CH-313)	5.42	19.92	2.08	75	750	25.0

** TOC and TD changed due to well casing being cut off.

REVERSE AIR WATER QUALITY SAMPLES

BURNT STORE INJECTION WELL (CH-314)

SAMPLE NO.	DATE	DEPTH (FT)	Cl (mg/l)	K (umhos)	TEMP (C)	EST. TDS (mg/l)
A-575	7/1	575	420	2900	26	2150
A-600	7/1	600	500	2810	31	2080
A-630	7/1	630	500	2810	30	2080
A-660	7/1	660	500	2850	29	2110
A-690	7/1	690	480	2700	28.5	2000
A-720	7/1	720	500	2600	25	1920
A-750	7/1	750	480	2740	28	2030
A-780	7/1	780	560	2400	28	1780
A-810	7/1	810	540	2200	NM	1630
A-840	7/1	840	520	2100	NM	1550
A-870	7/1	870	540	2090	NM	1550
A-900	7/1	900	540	2000	NM	1480
A-936	7/1	936	500	1750	NM	1300
A-966	7/1	966	500	1700	NM	1260
B-966	7/1	966	500	1600	NM	1180
A-1026	7/2	1036	480	1600	24	1180
A-1056	7/2	1056	520	1620	23	1200
A-1086	7/2	1086	500	1680	23	1240
A-1115	7/2	1115	540	1600	23	1180
A-1145	7/2	1145	520	1700	24	1260
A-1175	7/2	1175	480	1700	23	1260
A-1205	7/2	1205	480	1450	23	1070

REVERSE AIR WATER QUALITY SAMPLES

BURNT STORE INJECTION WELL (CH-314)
(Continued)

SAMPLE NO.	DATE	DEPTH (FT)	Cl (mg/l)	K (umhos)	TEMP (C)	EST. TDS (mg/l)
A-1236	7/2	1236	560	1400	24	1040
A-1265	7/2	1265	440	1800	28	1330
A-1356	7/3	1356	540	1950	29	1440
A-1386	7/3	1386	420	1500	28	1110
A-1416	7/3	1416	480	1600	28	1180
B-1416	7/3	1416	660	220	28	1630
A-1426	7/3	1426	600	2020	28	1490
A-1436	7/3	1436	600	2000	28	1480
A-1446	7/3	1446	660	2200	29	1630
A-1456	7/3	1456	600	2000	29	1480
A-1466	7/3	1466	600	1900	29	1410
A-1476	7/3	1476	600	1900	29	1410

REVERSE AIR WATER QUALITY SAMPLES

BURNT STORE INJECTION WELL (CH-314)
(Continued)

SAMPLE NO.	DATE	DEPTH (FT)	Cl (mg/l)	K (umhos)	TEMP (C)	EST. TDS (ppm)
B-1476	7/11	1476	1000	5900	25	4366
B-1506	7/11	1506	1150	5900	25	4366
B-1536	7/11	1536	1150	5800	25	4292
B-1566	7/11	1566	2250	7776	27	5754
B-1596	7/11	1596	6850	14,960	32	11,085
B-1626	7/11	1626	19,000	28,864	32	21,359
B-1656	7/11	1656	18,700	27,720	32	27,719
B-1686	7/11	1686	14,500	24,500	26	18,130
B-1716	7/11	1716	13,500	24,500	26	18,130
B-1746	7/11	1746	12,500	22,540	26	16,680
B-1776	7/12	1776	15,200	24,500	26	18,130
B-1806	7/12	1806	18,000	25,970	26	19,218
B-1836	7/12	1836	19,000	25,650	30	18,981
B-1866	7/12	1866	20,750	27,260	28	20,172
B-1896	7/12	1896	23,750	30,380	26	22,481
B-1926	7/12	1926	22,750	28,388	28	21,007
B-1956	7/13	1956	15,000	24,480	24	18,115
B-2016	7/14	2016	13,000	24,440	23	18,085
B-2046	7/14	2046	14,800	24,480	24	18,115

REVERSE AIR WATER QUALITY SAMPLES

BURNT STORE INJECTION WELL (CH-314)
(Continued)

DATE	DEPTH (FT)	Cl (mg/l)	K (umhos)	K (umhos) coor. to 25	TEMP (C)	EST. TDS (ppm)
7/13	2046	14,800	24,000	24,480	24	18,115
7/14	2106	14,800	31,000	30,380	30	22,481
7/14	2139	16,800	35,000	30,100	32	22,274
7/16	2167	19,700	30,000	29,400	26	21,756
7/17	2197	17,500	34,500	31,050	30	22,977
7/18	2257	17,000	33,000	30,360	29	22,244
7/18	2286	19,000	37,000	31,820	32	23,547

BURNT STORE INJECTION WELL (CH-314)

REVERSE AIR WATER QUALITY SAMPLES

WEEK ENDING 7/27/95

DEPTH (FT)	Cl (mg/l)	K (umhos)	K (umhos) corr. to 25	TEMP (C)	EST. TDS (ppm)
2376	19,250	27,000	28,620	21.8	21,179
2406	21,000	27,000	28,620	21.8	21,179
2436	24,250	32,500	31,525	23.7	24,050
2466	21,750	27,000	29,160	21.4	21,578
2496	18,650	30,500	21.110	24.0	23,021

BURNT STORE INJECTION WELL (CH-314)

REVERSE AIR WATER QUALITY SAMPLES

WEEK ENDING 8-03-95

DEPTH (FT)	Cl (mg/l)	K (umhos)	K (umhos) corr. to 25	TEMP (C)	EST.TDS (ppm)
2497	18,650	30,500	31,110	24	23,020
2537	18,050	34,000	31,620	32	23,399
2557	17,000	30,500	37,440	20.6	27,706
2587	18,500	33,000	33,660	24	24,908
2617	16,650	34,500	32,430	28	23,998
2647	17,000	34,000	31,760	28	23,502
2674	17,300	38,000	32,680	32	24,183
2707	19,000	34,200	30,780	30	22,777
2737	20,000	34,000	29,920	31	22,140
2767	18,400	32,000	31,360	26	23,206
2797	19,100	32,000	31,360	26	23,206
2827	19,000	33,000	29,700	30	21,978
2857	19,200	34,400	30,960	30	22,910
2887	19,300	36,000	31,680	31	23,443
2917	19,800	35,100	31,590	30	23,376
2947	19,000	33,500	33,500	25	24,790
2977	20,500	31,500	28,980	29	21,445
3007	21,000	34,800	30,624	31	22,661
3037	19,000	30,000	30,600	24	22,644
3067	19,500	36,000	32,400	31	23,976
3097	20,800	36,200	32,580	31	24,109
3127	18,300	31,100	31,100	25	23,014
3157	21,400	32,000	30,400	27.5	28,880
3187	21,200	35,800	32,220	30	23,843

BURNT STORE INJECTION WELL (CH-314)

REVERSE AIR WATER QUALITY SAMPLES

WEEK ENDING 8-10-95

DEPTH (FT)	Cl (mg/l)	K (umhos)	K (umhos) corr. to 25°C	TEMP (C)	EST.TDS (ppm) (mg/l)
3218	22,600	>50,000		26°	>37,000

BURNT STORE INJECTION WELL (CH-314)

REVERSE AIR WATER QUALITY SAMPLES

WEEK ENDING 8-17-95

DEPTH (FT)	Cl (mg/l)	K (umhos)	K (umhos) corr. to 25°C	TEMP (C)	EST.TDS (ppm) (mg/l)
3248	21,400	35,300	32,476	29	24,032
3268	21,400	35,600	32,752	29	24,236

BURNT STORE INJECTION WELL

PACKER TEST #1

SINGLE PACKER WATER QUALITY SAMPLES

DEPTH INTERVAL: 1453' - 1475' (TD) BPL

DATE	TIME SINCE START OF DEVELOPMENT	Cl (mg/l)	K (umhos)	TEMP (C)	EST.TDS (mg/l)
7/4/95	9 hours	17,000	36,000	29	27,000

BURNT STORE INJECTION WELL

PACKER TEST #2

STRADDLE PACKER WATER QUALITY SAMPLES

DEPTH INTERVAL: 1324' - 1363' BPL

DATE	TIME SINCE START OF DEVELOPMENT	Cl (mg/l)	K (umhos)	TEMP (°C)	EST.TDS (ppm)
7-5-95	1 hour	800	3000	29	2200
7-5-95	2 hours	4320	11500	29	8500
7-5-95	3 hours	6350	17000	32	12500
7-5-95	4 hours	6220	16000	30	12000
7-5-95	5 hours	6950	17500	30	13000
7-5-95	6 hours	7550	17000	30	12500
7-5-95	7 hours	7500	16800	30	12500
7-5-95	8 hours	7500	17000	30	12500

BURNT STORE INJECTION WELL

PACKER TEST #3

STRADDLE PACKER WATER QUALITY SAMPLES

DEPTH INTERVAL: 1251' - 1291' BPL

DATE	TIME SINCE START OF DEVELOPMENT	Cl (mg/l)	K (umhos)	TEMP (°C)	EST.TDS (ppm)
7-5-95	1 hour	1100	3400	30	2500
7-6-95	2 hours	1500	3500	31	2600
7-6-95	3 hours	1600	3600	30	2700
7-6-95	4 hours	1700	3600	30	2700
7-6-95	5 hours	1700	3650	31	2700
7-6-95	6 hours	1700	3650	31	2700

FDHRS CERTIFICATION
Drinking Water: 85116
Environmental: E85086

EQL
CHEMISTRY SAMPLE ANALYSIS

FDEP COMPREHENSIVE QUALITY ASSURANCE PLAN #870264G

Customer: YOUNGQUIST BROTHERS
ATTN: CHRISTINE WYATT

LABID: 95/ 1322/13299 Report Date: 07/13/95 Page: 1

Sample#: 5382 Sample Date: 07/04/95
Station: Location: IW-1
Customer Project: BURNT STORE

Group	Analysis	Result	Units	Method	MDL	Analysis Date	*DQ
Minerals							
	TOT. DISS. SOLIDS	39400.000	mg/L	EPA 160.1	5.000	07/06/95	
	CONDUCTIVITY	46700.000	umhos	EPA 120.1	0.100	07/07/95	
	CHLORIDE (Diss)	19700.000	mg/L	SM4500-Cl	0.400	07/07/95	
	SULFATE (Diss)	2680.000	mg/L	EPA 375.4	1.000	07/07/95	

NOTE: * See attached Data Qualifier Codes
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Environmental Quality Laboratory, Inc.
4000 TAMIAMI TRAIL, PORT CHARLOTTE, FLORIDA 33953
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FDHRS CERTIFICATION
Drinking Water: 85116
Environmental: E85086

EQL

CHEMISTRY SAMPLE ANALYSIS

FDEP COMPREHENSIVE QUALITY ASSURANCE PLAN #870264G

Customer: YOUNGQUIST BROTHERS
ATTN: CHRISTINE WYATT

LABID: 95/ 1322/13304 Report Date: 07/13/95 Page: 1

Sample#: 5421 Sample Date: 07/06/95
Station: Location: IW-1 TEST #2
Customer Project: BURNT STORE

Group	Analysis	Result	Units	Method	MDL	Analysis Date	*DQ
Minerals							
	TOT. DISS. SOLIDS	17100.000	mg/L	EPA 160.1	5.000	07/06/95	
	CONDUCTIVITY	20400.000	umhos	EPA 120.1	0.100	07/07/95	
	CHLORIDE (Diss)	7615.000	mg/L	SM4500-Cl	0.400	07/07/95	
	SULFATE (Diss)	330.000	mg/L	EPA 375.4	1.000	07/07/95	

Sample#: 5422 Sample Date: 07/06/95
Station: Location: IW-1 TEST #3
Customer Project: BURNT STORE

Group	Analysis	Result	Units	Method	MDL	Analysis Date	*DQ
nerals							
	)T. DISS. SOLIDS	3110.000	mg/L	EPA 160.1	5.000	07/06/95	
	CONDUCTIVITY	4220.000	umhos	EPA 120.1	0.100	07/07/95	
	CHLORIDE (Diss)	1220.000	mg/L	SM4500-Cl	0.400	07/07/95	
	SULFATE (Diss)	199.000	mg/L	EPA 375.4	1.000	07/07/95	

NOTE: * See attached Data Qualifier Codes
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TAMIAMI TRAIL PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137
FX 813-629-7467

October 09, 1995

YOUNGQUIST BROTHERS
ATTN: CHRISTINE WYATT
15465 PINE RIDGE ROAD
FORT MYERS FL 33908

Cust. Proj:BURNT STORE UTLILTIES

Attached are the results from 1 sample(s) collected by you and sent to the Environmental Quality Laboratory for analysis. The EQ Lab identification number is 95/1322/13693; please refer to this number when requesting information regarding these data. Also, this letter should be attached to any data submitted by you to regulatory agencies.

The Laboratory has an approved FDER Comprehensive Quality Assurance Plan (#870264G) which specifies the procedures used in the analyses of the above referenced samples. In addition, the Laboratory is certified by DHRS for the analysis of environmental and drinking water samples (#E85086 & 85116) respectively. These certification numbers should be referenced when attesting to regulatory agencies regarding the protocols of the analytical procedures used.

The Environmental Quality Laboratory is pleased to have served you and hopes to meet any future laboratory needs you may have.

Sincerely yours,

Ralph T. Montgomery, Ph.D
Laboratory Director

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL, PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137
FX 813-629-7467

CHEMISTRY SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS
ATTN: CHRISTINE WYATT
Customer Project: BURNT STORE UTLILTIES

LABID: 95/ 1322/13693 **Report Date: 10/09/95** **Page: 1**

Sample#: 6892 Sample Date: 08/31/95
Station: Location: INJECTION WELL

Group / Analysis		Result	Units	Analysis Date	MDL	Method	*DQ Code
Acid Base							
LAB pH (Units)		7.390	units	08/31/95	0.1000	EPA 150.1	
C03-CaC03	<	0.400	mg/L	09/01/95	0.4000	SM 406C/2	U
BICARBONATE CaC03		103.000	mg/L	09/01/95	0.4000	SM 406C/2	
Minerals							
CHLORIDE		19600.000	mg/L	09/01/95	0.4000	SM4500-C1	
FLUORIDE		0.924	mg/L	09/07/95	0.1000	EPA 340.2	
HARD-CaC03		5280.000	mg/L	09/12/95	0.4000	APHA 2340	
SULFATE		3030.000	mg/L	09/08/95	1.0000	EPA 375.4	
OT. DISS. SOLIDS		39100.000	mg/L	09/01/95	5.0000	EPA 160.1	
TAL SUSPENDED SOLIDS		8.000	mg/L	09/01/95	0.3000	EPA 160.2	
CYANIDE	<	0.002	mg/L	09/11/95	0.0020	EPA 335.2	U
SPECIFIC GRAVITY		1.020	NU	09/14/95	0.1000	APHA 2710	
Esthetic Properties							
COLOR (Color Units)		50.000	Co-Pt	08/31/95	1.0000	EPA 110.2	
TURBIDITY		20.000	NTU	08/31/95	0.1000	EPA 180.1	
ODOR (TON)	<	1.000	TON	08/31/95	1.0000	SM 207/21	U
Demands							
CHEMICAL OXYGEN DEMAND		66.700	mg/L	09/28/95	10.0000	EPA 410.4	
Nutrients							
TOT. NITRATE+NITRITE		0.007	mg/L	09/11/95	0.0010	EPA 353.2	
AMMONIA/AMMONIUM-NITROGEN		0.078	mg/L	09/11/95	0.0100	EPA 350.1	
TOT.KJEL.N		0.356	mg/L	09/09/95	0.0200	EPA 351.1	
ORGANIC NITROGEN		0.278	mg/L	10/06/95	N/A	APHA 4500	
TOTAL PHOSPHORUS		0.013	mg/L	09/28/95	0.0020	EPA 365.3	
TOTAL ORGANIC CARBON	<	0.400	mg/L	09/01/95	0.4000	SM 505A/5	U
NITRITE	<	0.001	mg/L	08/31/95	0.0010	EPA 354.1	
NITRATE		0.007	mg/L	09/18/95	0.0010	CALC.	
Trace Metals							
COPPER		20.000	ug/L	09/08/95	1.0000	EPA 220.2	
LEAD		9.000	ug/L	09/08/95	1.0000	EPA 239.2	
ZINC		390.000	ug/L	09/08/95	1.0000	EPA 289.1	
ARSENIC		80.000	ug/L	09/08/95	0.1000	EPA 206.2	
BARIUM		80.000	ug/L	09/08/95	0.1000	EPA 208.1	
CADMIUM		2.100	ug/L	09/08/95	0.1000	EPA 231.2	

TE: * See Attached Sheet for Data Qualifier Codes
Reported results not valid without accompanying signature page.

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EQL

CHEMISTRY SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS
ATTN: CHRISTINE WYATT
Customer Project: BURNT STORE UTLILTIES

LABID: 95/ 1322/13693 **Report Date: 10/09/95** **Page: 2**

CHROMIUM		8.000	ug/L	09/08/95	1.0000	EPA 218.2	
SELENIUM		1950.000	ug/L	09/08/95	1.0000	EPA 270.2	
SILVER		1.500	ug/L	09/09/95	0.1100	EPA 272.2	
MERCURY		0.100	ug/L	09/07/95	0.1000	EPA 245.2	
NICKEL		40.000	ug/L	09/08/95	1.0000	EPA 249.1	
MANGANESE		20.000	ug/L	09/08/95	1.0000	EPA 243.2	
IRON		2.490	mg/L	09/08/95	0.0010	EPA 236.1	
SODIUM		12700.000	mg/L	09/08/95	0.1390	EPA 273.1	
ALUMINUM		76000.000	ug/L	09/08/95	1.0000	EPA 202.1	
BERYLLIUM		9.300	ug/L	09/08/95	1.0000	EPA 210.2	
THALLIUM		1.700	ug/L	09/08/95	1.0000	EPA 279.2	
ANTIMONY		2.000	ug/L	09/08/95	0.1000	EPA 204.2	
Extractables							
FOAMING AGENTS	<	0.100	LAS(mg/L)	08/31/95	0.1000	EPA 425.1	U
diological							
OSS ALPHA		274.000	pCi/l	09/17/95	74.0000	EPA 900	I
RADIUM 226		76.000	pCi/l	09/13/95	2.0000	EPA 903.1	
RADIUM 228		3.700	pCi/l	09/15/95	1.0000	EPA 904.0	I

NOTE: * See Attached Sheet for Data Qualifier Codes
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1009 TAMIAMI TRAIL, PORT CHARLOTTE, FLORIDA 33953
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EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS
Report Date: 10/06/95

Sample Date: 08/31/95 Sample No.: 6892 E.Q.Lab ID: 95/1322/13693
Sample Code: Cust. Proj.: BURNT STORE UTLILTIES
Sample Location: INJECTION WELL

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
PEST. & PCB [62-550.310(2)(c)]	ug/L			
Extraction Date: N/A	EPA 608, 615, 624			
Endrin	< 0.1000	09/27/95	0.1000	U
Lindane (gamma-BHC)	< 0.1000	09/27/95	0.1000	U
Methoxychlor	< 0.1000	09/27/95	0.1000	U
Toxaphene	< 0.5000	09/27/95	0.5000	U
Methomyl (Lanate)	< 1.0000	09/05/95	1.0000	U
Dalapon	< 1.0000	09/12/95	1.0000	U
Diquat	< 4.0000	09/12/95	4.0000	U
Endothall	< 9.0000	09/11/95	9.0000	U
Glyphosate (Round-up)	< 10.0000	09/07/95	10.0000	U
Di(2-ethylhexyl)adipate	< 0.1000	09/27/95	0.1000	U
Oxamyl (Vydate)	< 1.0000	09/05/95	1.0000	U
Simazine (Princep)	< 0.1000	09/27/95	0.1000	U
Di(2-ethylhexyl)phthalate	1.0000	09/27/95	0.1000	V*
Picloram	< 0.2000	09/12/95	0.2000	U
Dinoseb	< 0.2000	09/12/95	0.2000	U
Hexachlorocyclopentadiene	< 0.1000	09/27/95	0.1000	U
Carbofuran	< 1.0000	09/05/95	1.0000	U
Atrazine	< 0.1000	09/27/95	0.1000	U
Alachlor (Lasso)	< 0.1000	09/27/95	0.1000	U
Heptachlor	< 0.1000	09/27/95	0.1000	U
Heptachlor Epoxide	< 0.1000	09/27/95	0.1000	U
2,4-D	< 0.1000	09/12/95	0.1000	U
2,4,5-TP (Silvex)	< 0.2000	09/12/95	0.2000	U
Hexachlorobenzene	< 0.1000	09/27/95	0.1000	U
Benzo(a)pyrene	< 0.1000	09/27/95	0.1000	U
Pentachlorophenol	< 0.0400	09/12/95	0.0400	U
PCB's	< 0.1000	09/11/95	0.1000	U
Dibromochloropropane (DBCP)	< 0.0100	09/08/95	0.0100	U
Ethylene dibromide/EDB	< 0.0100	09/08/95	0.0100	U
Chlordane	< 0.1000	09/27/95	0.1000	U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes
* V: Method Blank 1.1 µg/L

Environmental Quality Laboratory, Inc.
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EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS
Report Date: 10/06/95

Sample Date: 08/31/95 Sample No.: 6892 E.Q.Lab ID: 95/1322/13693
Sample Code: Cust. Proj.: BURNT STORE UTLILTIES
Sample Location: INJECTION WELL

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
TRIHALOMETHANE [62-550.310(2)(a)]	mg/L			
Extraction Date: N/A	EPA 624			
Chloroform	< 0.0005	09/01/95	0.0005	U
Bromoform	< 0.0005	09/01/95	0.0005	U
Bromodichloromethane	< 0.0005	09/01/95	0.0005	U
Dibromochloromethane	< 0.0005	09/01/95	0.0005	U
Total TTHM	< 0.0005	09/01/95	0.0005	U
VOLATILE ORGANIC [62-550.310(2)(b)]	ug/L			
Extraction Date: N/A	EPA 624			
1,2,4-trichlorobenzene	< 0.5000	09/01/95	0.5000	U
cis-1,2-dichloroethylene	< 0.5000	09/01/95	0.5000	U
Total Xylenes	< 0.5000	09/01/95	0.5000	U
Dichloromethane	< 0.5000	09/01/95	0.5000	U
o-dichlorobenzene	< 0.5000	09/01/95	0.5000	U
Para-dichlorobenzene	< 0.5000	09/01/95	0.5000	U
Vinyl Chloride	< 0.5000	09/01/95	0.5000	U
1,1,-dichloroethylene	< 0.5000	09/01/95	0.5000	U
tr-1,2-dichloroethylene	< 0.5000	09/01/95	0.5000	U
1,2-dichloroethane	< 0.5000	09/01/95	0.5000	U
1,1,1-trichloroethane	< 0.5000	09/01/95	0.5000	U
Carbon tetrachloride	< 0.5000	09/01/95	0.5000	U
1,2-dichloropropane	< 0.5000	09/01/95	0.5000	U
Trichloroethylene	< 0.5000	09/01/95	0.5000	U
1,1,2-trichloroethane	< 0.5000	09/01/95	0.5000	U
Tetrachloroethylene	< 0.5000	09/01/95	0.5000	U
Monochlorobenzene	< 0.5000	09/01/95	0.5000	U
Benzene	< 0.5000	09/01/95	0.5000	U
Toluene	< 0.5000	09/01/95	0.5000	U
Ethylbenzene	< 0.5000	09/01/95	0.5000	U
Styrene	< 0.5000	09/01/95	0.5000	U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

Environmental Quality Laboratory, Inc.
1009 JAMIAMI TRAIL PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137
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EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS
Report Date: 10/06/95

Sample Date: 08/31/95 Sample No.: 6892 E.Q.Lab ID: 95/1322/13693
Sample Code: Cust. Proj.: BURNT STORE UTLILTIES
Sample Location: INJECTION WELL

Parameter Name		Analysis Result	Analysis Date	Det.Lt. Used	*DQ
UNREG.GROUP II PURG. [62-550.410(1)] ug/L					
Extraction Date: N/A		EPA 624			
Chloromethane	<	0.5000	09/08/95	0.5000	U
Dichlorodifluoromethane	<	0.5000	09/08/95	0.5000	U
Bromomethane	<	0.5000	09/08/95	0.5000	U
Chloroethane	<	0.5000	09/08/95	0.5000	U
Trichlorofluoromethane	<	0.5000	09/08/95	0.5000	U
trans-1,3-dichloropropene	<	0.5000	09/08/95	0.5000	U
cis-1,3-dichloropropene	<	0.5000	09/08/95	0.5000	U
Methyl-tert-butylether (MTBE)	<	0.5000	09/08/95	0.5000	U
Dibromomethane	<	0.5000	09/08/95	0.5000	U
1,1-dichloropropylene	<	0.5000	09/08/95	0.5000	U
1,3-dichloropropane	<	0.5000	09/08/95	0.5000	U
1,2,3-trichloropropane	<	0.5000	09/08/95	0.5000	U
2,2-dichloropropane	<	0.5000	09/08/95	0.5000	U
Chloroform	<	0.5000	09/08/95	0.0005	U
Bromoform	<	0.5000	09/08/95	0.0005	U
Bromodichloromethane	<	0.5000	09/08/95	0.0005	U
Dibromochloromethane	<	0.5000	09/08/95	0.0005	U
o-chlorotoluene	<	0.5000	09/08/95	0.5000	U
p-chlorotoluene	<	0.5000	09/08/95	0.5000	U
m-dichlorobenzene	<	0.5000	09/08/95	0.5000	U
1,1-dichloroethane	<	0.5000	09/08/95	0.5000	U
1,1,1,2-tetrachloroethane	<	0.5000	09/08/95	0.5000	U
1,1,2,2-tetrachloroethane	<	0.5000	09/08/95	0.5000	U
Bromobenzene	<	0.5000	09/08/95	0.5000	U
UNREG.GROUP I (62-550.405) ug/L					
Extraction Date: N/A		EPA 608,615			
Carbaryl	<	1.0000	09/05/95	1.0000	U
Methomyl (Lanate)	<	1.0000	09/05/95	1.0000	U
Aldicarb sulfoxide	<	0.5000	09/05/95	0.5000	U
Aldicarb sulfone	<	0.5000	09/05/95	0.5000	U
Metolachlor	<	0.1000	09/27/95	0.1000	U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

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PH 813-625-3137
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EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Report Date: 10/06/95

Sample Date: 08/31/95 Sample No.: 6892 E.Q.Lab ID: 95/1322/13693
Sample Code: Cust. Proj.: BURNT STORE UTLILTIES
Sample Location: INJECTION WELL

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
Aldicarb (Temik)	< 0.5000	09/05/95	0.5000	U
3-Hydroxycarbofuran	< 1.0000	09/05/95	1.0000	U
Butachlor	< 0.1000	09/27/95	0.1000	U
Propachlor	< 0.1000	09/27/95	0.1000	U
Aldrin	< 0.1000	09/27/95	0.1000	U
Dieldrin	< 0.1000	09/27/95	0.1000	U
Dicamba (Banvel)	< 0.1000	09/12/95	0.1000	U
Metribuzin	< 0.1000	09/27/95	0.1000	U
UNREG.GROUP III (62-550.415) ug/L				
Extraction Date: 09/05/95 EPA 625				
Isophorone	< 1.0000	09/26/95	1.0000	U
2,4-dinitrotoluene	< 1.0000	09/26/95	1.0000	U
Dimethylphthalate	< 1.0000	09/26/95	1.0000	U
Diethylphthalate	< 2.0000	09/26/95	2.0000	U
Di-n-butylphthalate	< 1.0000	09/26/95	1.0000	U
Butyl benzyl phthalate	< 1.0000	09/26/95	1.0000	U
Di-n-octyl phthalate	< 1.0000	09/26/95	1.0000	U
2-chlorophenol	< 1.0000	09/26/95	1.0000	U
2-methyl-4,6-dinitrophenol	< 1.0000	09/26/95	1.0000	U
Phenol	< 1.0000	09/26/95	1.0000	U
2,4,6-trichlorophenol	< 1.0000	09/26/95	1.0000	U
ORGANOCHLORINE PESTICIDES ug/L				
Extraction Date: 09/05/95 EPA 625				
a-BHC	< 1.0000	09/26/95	1.0000	U
b-BHC	< 1.0000	09/26/95	1.0000	U
d-BHC	< 1.0000	09/26/95	1.0000	U
Endosulfan I	< 1.0000	09/26/95	1.0000	U
Endosulfan II	< 1.0000	09/26/95	1.0000	U
Endosulfan Sulfate	< 1.0000	09/26/95	1.0000	U
4,4'-DDE	< 1.0000	09/26/95	1.0000	U
4,4'-DDD	< 1.0000	09/26/95	1.0000	U
4,4'-DDT	< 1.0000	09/26/95	1.0000	U
Endrin Aldehyde	< 1.0000	09/26/95	1.0000	U

NOTE: Reported Results not valid without accompanying signature page.
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EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Report Date: 10/06/95

Sample Date: 08/31/95 Sample No.: 6892 E.Q.Lab ID: 95/1322/13693
Sample Code: Cust. Proj.: BURNT STORE UTLILTIES
Sample Location: INJECTION WELL

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
Endrin	< 1.0000	09/26/95	0.1000	U
Lindane (gamma-BHC)	< 1.0000	09/26/95	0.1000	U
Toxaphene	< 10.0000	09/26/95	0.5000	U
Heptachlor	< 1.0000	09/26/95	0.1000	U
Heptachlor Epoxide	< 1.0000	09/26/95	0.1000	U
Aldrin	< 1.0000	09/26/95	0.1000	U
Dieldrin	< 1.0000	09/26/95	0.1000	U
PCB-1016	< 10.0000	09/26/95	10.0000	U
PCB-1221	< 10.0000	09/26/95	10.0000	U
PCB-1232	< 50.0000	09/26/95	50.0000	U
PCB-1242	< 10.0000	09/26/95	10.0000	U
PCB-1248	< 10.0000	09/26/95	10.0000	U
PCB-1254	< 10.0000	09/26/95	10.0000	U
PCB-1260	< 10.0000	09/26/95	10.0000	U
Chlordane	< 1.0000	09/26/95	0.1000	U
PURGEABLE AROMATICS/HALOCARBONS	ug/L			
Extraction Date: N/A	EPA 624			
Chloromethane	< 0.5000	09/01/95	0.5000	U
Dichlorodifluoromethane	< 0.5000	09/01/95	0.5000	U
Bromomethane	< 0.5000	09/01/95	0.5000	U
Chloroethane	< 0.5000	09/01/95	0.5000	U
Trichlorofluoromethane	< 0.5000	09/01/95	0.5000	U
trans-1,3-dichloropropene	< 0.5000	09/01/95	0.5000	U
cis-1,3-dichloropropene	< 0.5000	09/01/95	0.5000	U
Chloroform	< 0.5000	09/01/95	0.0005	U
Bromoform	< 0.5000	09/01/95	0.0005	U
Bromodichloromethane	< 0.5000	09/01/95	0.0005	U
Dibromochloromethane	< 0.5000	09/01/95	0.0005	U
p-xylene	< 0.5000	09/01/95	0.5000	U
Dichloromethane	< 0.5000	09/01/95	0.5000	U
m-dichlorobenzene	< 0.5000	09/01/95	0.5000	U
o-dichlorobenzene	< 0.5000	09/01/95	0.5000	U
Para-dichlorobenzene	< 0.5000	09/01/95	0.5000	U
Vinyl Chloride	< 0.5000	09/01/95	0.5000	U
1,1,-dichloroethylene	< 0.5000	09/01/95	0.5000	U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137
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EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Page#: 6
Report Date: 10/06/95

Sample Date: 08/31/95 Sample No.: 6892 E.Q.Lab ID: 95/1322/13693
Sample Code: Cust. Proj.: BURNT STORE UTLILTIES
Sample Location: INJECTION WELL

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
1,1-dichloroethane	< 0.5000	09/01/95	0.5000	U
tr-1,2-dichloroethylene	< 0.5000	09/01/95	0.5000	U
1,2-dichloroethane	< 0.5000	09/01/95	0.5000	U
1,1,1-trichloroethane	< 0.5000	09/01/95	0.5000	U
Carbon tetrachloride	< 0.5000	09/01/95	0.5000	U
1,2-dichloropropane	< 0.5000	09/01/95	0.5000	U
Trichloroethylene	< 0.5000	09/01/95	0.5000	U
1,1,2-trichloroethane	< 0.5000	09/01/95	0.5000	U
Tetrachloroethylene	< 0.5000	09/01/95	0.5000	U
1,1,2,2-tetrachloroethane	< 0.5000	09/01/95	0.5000	U
Monochlorobenzene	< 0.5000	09/01/95	0.5000	U
Benzene	< 0.5000	09/01/95	0.5000	U
Toluene	< 0.5000	09/01/95	0.5000	U
Ethylbenzene	< 0.5000	09/01/95	0.5000	U
m-xylene	< 0.5000	09/01/95	0.5000	U
o-xylene	< 0.5000	09/01/95	0.5000	U
2-Chloroethylvinyl ether	< 10.0000	09/01/95	10.0000	U
Acrolein	< 10.0000	09/01/95	10.0000	U
Acrylonitrile	< 10.0000	09/01/95	10.0000	U
BASE/NEUTRAL/ACIDS	ug/L			
Extraction Date: 09/05/95	EPA 625			
Di(2-ethylhexyl)phthalate	< 1.0000	09/26/95	0.1000	U
Hexachlorocyclopentadiene	< 1.0000	09/26/95	0.1000	U
Isophorone	< 1.0000	09/26/95	1.0000	U
2,4-dinitrotoluene	< 1.0000	09/26/95	1.0000	U
Hexachlorobenzene	< 1.0000	09/26/95	0.1000	U
Dimethylphthalate	< 1.0000	09/26/95	1.0000	U
Diethylphthalate	< 2.0000	09/26/95	2.0000	U
Di-n-butylphthalate	< 1.0000	09/26/95	1.0000	U
Butyl benzyl phthalate	1.3000	09/26/95	1.0000	
Benzo(a)pyrene	< 1.0000	09/26/95	0.1000	U
Pentachlorophenol	< 1.0000	09/26/95	0.0400	U
Hexachlorobutadiene	< 1.0000	09/26/95	1.0000	U
Naphthalene	< 1.0000	09/26/95	1.0000	U
1,2,4-trichlorobenzene	< 1.0000	09/26/95	0.5000	U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL, PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137
FX 813-629-7447

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Report Date: 10/06/95

Sample Date: 08/31/95 Sample No.: 6892 E.Q.Lab ID: 95/1322/13693
Sample Code: Cust. Proj.: BURNT STORE UTLILTIES
Sample Location: INJECTION WELL

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
m-dichlorobenzene	< 1.0000	09/26/95	0.5000	U
o-dichlorobenzene	< 1.0000	09/26/95	0.5000	U
Para-dichlorobenzene	< 1.0000	09/26/95	0.5000	U
Acenaphthene	< 1.0000	09/26/95	1.0000	U
Acenaphthylene	< 1.0000	09/26/95	1.0000	U
Benzidine	< 4.0000	09/26/95	4.0000	U
Benzo(a)anthracene	< 1.0000	09/26/95	1.0000	U
Benzo(b)fluoranthene	< 1.0000	09/26/95	1.0000	U
Benzo(ghi)perylene	< 1.0000	09/26/95	1.0000	U
Benzo(k)fluoranthene	< 1.0000	09/26/95	1.0000	U
Bis(2-chloroethoxy)methane	< 1.0000	09/26/95	1.0000	U
Bis(2-chloroethyl)ether	< 1.0000	09/26/95	1.0000	U
Bis(2-chloroisopropyl)ether	< 1.0000	09/26/95	1.0000	U
4-Bromophenyl phenyl ether	< 1.0000	09/26/95	1.0000	U
2-Chloronaphthalene	< 1.0000	09/26/95	1.0000	U
4-Chlorophenyl phenyl ether	< 1.0000	09/26/95	1.0000	U
Chrysene	< 1.0000	09/26/95	1.0000	U
Dibenzo(a,h)anthracene	< 1.0000	09/26/95	1.0000	U
3,3-Dichlorobenzidine	< 3.0000	09/26/95	3.0000	U
2,6-Dinitrotoluene	< 1.0000	09/26/95	1.0000	U
1,2-Diphenylhydrazine	< 1.0000	09/26/95	1.0000	U
Fluoranthene	< 1.0000	09/26/95	1.0000	U
Fluorene	< 1.0000	09/26/95	1.0000	U
Hexachloroethane	< 1.0000	09/26/95	1.0000	U
Indeno(1,2,3-cd)pyrene	< 1.0000	09/26/95	1.0000	U
Nitrobenzene	< 1.0000	09/26/95	1.0000	U
N-nitrosodimethylamine	< 3.0000	09/26/95	3.0000	U
N-nitrosodi-n-propylamine	< 1.0000	09/26/95	1.0000	U
N-nitrosodiphenylamine	< 1.0000	09/26/95	1.0000	U
Pyrene	< 1.0000	09/26/95	1.0000	U
Anthracene	< 1.0000	09/26/95	1.0000	U
Phenanthrene	< 1.0000	09/26/95	1.0000	U
Di-n-octyl phthalate	< 1.0000	09/26/95	1.0000	U
2-chlorophenol	< 1.0000	09/26/95	1.0000	U
2,4-Dichlorophenol	< 1.0000	09/26/95	1.0000	U
2,4-Dimethylphenol	< 1.0000	09/26/95	1.0000	U
4,6-Dinitro-2-methyl phenol	< 1.0000	09/26/95	1.0000	U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL, PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137
FX 813-629-7447

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Report Date: 10/06/95

Sample Date: 08/31/95 Sample No.: 6892 E.Q.Lab ID: 95/1322/13693
Sample Code: Cust. Proj.: BURNT STORE UTLILTIES
Sample Location: INJECTION WELL

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
2-methyl-4,6-dinitrophenol	< 1.0000	09/26/95	1.0000	U
2-Nitrophenol	< 1.0000	09/26/95	1.0000	U
4-Nitrophenol	< 1.0000	09/26/95	1.0000	U
Phenol	< 1.0000	09/26/95	1.0000	U
2,4,6-trichlorophenol	< 1.0000	09/26/95	1.0000	U
4-chloro-3-methyl phenol	< 1.0000	09/26/95	1.0000	U
2,4-dinitrophenol	< 1.0000	09/26/95	1.0000	U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137
FX 813-629-7447

EQL

October 13, 1995

YOUNGQUIST BROTHERS
ATTN: CHRISTINE WYATT
15465 PINE RIDGE ROAD
FORT MYERS FL 33908

Cust. Proj:BURNT STORE UTILITIES

Attached are the results from 2 sample(s) collected by you and sent to the Environmental Quality Laboratory for analysis. The EQ Lab identification number is 95/1322/13694; please refer to this number when requesting information regarding these data. Also, this letter should be attached to any data submitted by you to regulatory agencies.

The Laboratory has an approved FDER Comprehensive Quality Assurance Plan (#870264G) which specifies the procedures used in the analyses of the above referenced samples. In addition, the Laboratory is certified by DHRS for the analysis of environmental and drinking water samples (#E85086 & 85116) respectively. These certification numbers should be referenced when attesting to regulatory agencies regarding the protocols of the analytical procedures used.

The Environmental Quality Laboratory is pleased to have served you and hopes to meet any future laboratory needs you may have.

Sincerely yours,

Ralph T. Montgomery, Ph.D
Laboratory Director

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL PORT CHARLOTTE FLORIDA 33953
PH 813-625-3137
FX 813-629-7467

EQL

CHEMISTRY SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS
ATTN: CHRISTINE WYATT
Customer Project: BURNT STORE UTILITIES

LABID: 95/ 1322/13694 **Report Date:** 10/13/95 **Page:** 1

Sample#: 6893 **Sample Date:** 09/07/95
Station: **Location:** ZONE 1 UPPER ZONE

Group	Analysis		Result	Units	Analysis Date	MDL	Method	*DQ Code
Acid Base								
	LAB pH (Units)		7.710	units	09/07/95	0.1000	EPA 150.1	
	C03-CaC03	<	0.400	mg/L	09/08/95	0.4000	SM 406C/2	U
	BICARBONATE CaC03		136.000	mg/L	09/08/95	0.4000	SM 406C/2	
Minerals								
	CHLORIDE		677.000	mg/L	09/14/95	0.4000	SM4500-C1	
	FLUORIDE		0.968	mg/L	09/07/95	0.1000	EPA 340.2	
	HARD-CaC03		567.500	mg/L	09/12/95	0.4000	APHA 2340	
	SULFATE		244.000	mg/L	09/21/95	1.0000	EPA 375.4	
	OT. DISS. SOLIDS		1860.000	mg/L	09/12/95	5.0000	EPA 160.1	
	OTAL SUSPENDED SOLIDS		6.700	mg/L	09/12/95	0.3000	EPA 160.2	
	CYANIDE	<	0.002	mg/L	09/11/95	0.0020	EPA 335.2	U
	SPECIFIC GRAVITY		0.990	NU	09/14/95	0.1000	APHA 2710	
Esthetic Properties								
	COLOR (Color Units)		5.000	Co-Pt	09/07/95	1.0000	EPA 110.2	
	TURBIDITY		14.000	NTU	09/07/95	0.1000	EPA 180.1	
	ODOR (TON)	<	1.000	TON	09/06/95	1.0000	SM 207/21	U
Demands								
	BOD(5-DAY)		1.480	mg/L	09/08/95	1.0000	EPA 405.1	
	CHEMICAL OXYGEN DEMAND	<	10.000	mg/L	09/28/95	10.0000	EPA 410.4	U
Nutrients								
	TOT. NITRATE+NITRITE		0.008	mg/L	09/11/95	0.0010	EPA 353.2	
	AMMONIA/AMMONIUM-NITROGEN		0.362	mg/L	09/11/95	0.0100	EPA 350.1	
	TOT.KJEL.N		0.635	mg/L	09/09/95	0.0200	EPA 351.1	
	ORGANIC NITROGEN		0.273	mg/L	10/06/95	N/A	APHA 4500	
	TOTAL PHOSPHORUS	<	0.002	mg/L	09/28/95	0.0020	EPA 365.3	U
	TOTAL ORGANIC CARBON		1.200	mg/L	09/12/95	0.4000	SM 505A/5	
	NITRITE	<	0.001	mg/L	09/07/95	0.0010	EPA 354.1	U
	NITRATE		0.008	mg/L	10/06/95	0.0010	CALC.	
Trace Metals								
	COPPER		3.000	ug/L	09/08/95	1.0000	EPA 220.2	
	LEAD	<	1.000	ug/L	09/08/95	1.0000	EPA 239.2	U
	ZINC		30.000	ug/L	09/08/95	1.0000	EPA 289.1	
	ARSENIC		8.200	ug/L	09/08/95	0.1000	EPA 206.2	
	ARIUM		520.000	ug/L	09/08/95	0.1000	EPA 208.1	

NOTE: * See Attached Sheet for Data Qualifier Codes
Reported results not valid without accompanying signature page.

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL PORT CHARLOTTE, FLORIDA 33953 PH 813-625-3137

EQL

CHEMISTRY SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS
ATTN: CHRISTINE WYATT
Customer Project: BURNT STORE UTILITIES

LABID: 95/ 1322/13694 **Report Date: 10/13/95**

CADMIUM		0.900	ug/L	09/08/95 0.1000	EPA 231.2	
CHROMIUM		1.700	ug/L	09/08/95 1.0000	EPA 218.2	
SELENIUM		2100.000	ug/L	09/08/95 1.0000	EPA 270.2	
SILVER		0.110	ug/L	09/09/95 0.1100	EPA 272.2	
MERCURY	<	0.100	ug/L	09/13/95 0.1000	EPA 245.2	U
NICKEL		20.000	ug/L	09/08/95 1.0000	EPA 249.1	
MANGANESE		40.000	ug/L	09/08/95 1.0000	EPA 243.2	
IRON		0.530	mg/L	09/08/95 0.0010	EPA 236.1	
SODIUM		354.000	mg/L	09/08/95 0.1390	EPA 273.1	
ALUMINUM		76000.000	ug/L	09/08/95 1.0000	EPA 202.1	
BERYLLIUM		2.900	ug/L	09/08/95 1.0000	EPA 210.2	
THALLIUM		1.200	ug/L	09/08/95 1.0000	EPA 279.2	
ANTIMONY		0.500	ug/L	09/08/95 0.1000	EPA 204.2	
tractables						
)AMING AGENTS		0.110	LAS(mg/L)	09/08/95 0.1000	EPA 425.1	
Radiological						
GROSS ALPHA		2.700	pCi/l	09/19/95 3.5000	EPA 900	T
RADIUM 226		3.900	pCi/l	09/26/95 0.3000	EPA 903.1	
RADIUM 228		0.700	pCi/l	09/26/95 0.7000	EPA 904.0	T

NOTE: * See Attached Sheet for Data Qualifier Codes
Reported results not valid without accompanying signature page.

EQL

BACTERIOLOGICAL ANALYSIS

Customer: YOUNGQUIST BROTHERS
ATTN: CHRISTINE WYATT

Report Date: 10/06/95

Sample Date: 09/07/95 Sample Time: 9:10 Labid: 95/ 1322/ 13694
Customer Project: BURNT STORE UTILITIES

Parameter: **TOTAL COLIFORM**

Sta.	Samp.	Location	Sample#	Value #/100ml		DQ Code	Note
	ZONE 1	UPPER ZONE	6893	<	5	U	
	ZONE 2	LOWER ZONE	6894	<	20		Non-Coliform Colonies

Note: See Attached Sheet for Data Qualifier (DQ) Codes.

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137

EQL

COLLECTION AND ANALYSIS INFORMATION

Labid: 95/ 1322/ 13694 Report Date: 10/06/95

Report To: YOUNGQUIST BROTHERS

Sample#	Coll. Date	Coll. Time	Bac-T Analyzed Date	Analyzed Time
6893	09/07/95	9:10	09/07/95	11:30
6894	09/07/95	8:50	09/07/95	11:30

Environmental Quality Laboratory, Inc.
PH 813-625-3137

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS
Report Date: 10/06/95

Sample Date: 09/07/95 Sample No.: 6893 E.Q.Lab ID: 95/1322/13694
Sample Code: Cust. Proj.: BURNT STORE UTILITIES
Sample Location: ZONE 1 UPPER ZONE

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
PEST. & PCB [62-550.310(2)(c)]	ug/L			
Extraction Date: N/A	EPA 608, 615, 624			
Endrin	< 0.1000	09/27/95	0.1000	U
Lindane (gamma-BHC)	< 0.1000	09/27/95	0.1000	U
Methoxychlor	< 0.1000	09/27/95	0.1000	U
Toxaphene	< 0.5000	09/27/95	0.5000	U
Methomyl (Lanate)	< 1.0000	09/12/95	1.0000	U
Dalapon	< 1.0000	09/12/95	1.0000	U
Diquat	< 4.0000	09/12/95	4.0000	U
Endothall	< 1.0000	09/11/95	9.0000	U
Glyphosate (Round-up)	< 10.0000	09/13/95	10.0000	U
Di(2-ethylhexyl)adipate	< 0.1000	09/27/95	0.1000	U
Oxamyl (Vydate)	< 1.0000	09/12/95	1.0000	U
Simazine (Princep)	< 0.1000	09/27/95	0.1000	U
Di(2-ethylhexyl)phthalate	9.3000	09/27/95	0.1000	V*
Picloram	< 0.2000	09/12/95	0.2000	U
Dinoseb	< 0.2000	09/12/95	0.2000	U
Hexachlorocyclopentadiene	< 0.1000	09/27/95	0.1000	U
Carbofuran	< 1.0000	09/12/95	1.0000	U
Atrazine	< 0.1000	09/27/95	0.1000	U
Alachlor (Lasso)	< 0.1000	09/27/95	0.1000	U
Heptachlor	< 0.1000	09/27/95	0.1000	U
Heptachlor Epoxide	< 0.1000	09/27/95	0.1000	U
2,4-D	< 0.1000	09/12/95	0.1000	U
2,4,5-TP (Silvex)	< 0.2000	09/12/95	0.2000	U
Hexachlorobenzene	< 0.1000	09/27/95	0.1000	U
Benzo(a)pyrene	< 0.1000	09/27/95	0.1000	U
Pentachlorophenol	< 0.0400	09/12/95	0.0400	U
PCB's	< 0.1000	09/11/95	0.1000	U
Dibromochloropropane (DBCP)	< 0.0100	09/08/95	0.0100	U
Ethylene dibromide/EDB	< 0.0100	09/08/95	0.0100	U
Chlordane	< 0.1000	09/27/95	0.1000	U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes
* V: Method Blank 1.1 µg/L

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137
FX 813-629-7447

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Report Date: 10/06/95

Sample Date: 09/07/95 Sample No.: 6893 E.Q.Lab ID: 95/1322/13694
Sample Code: Cust. Proj.: BURNT STORE UTILITIES
Sample Location: ZONE 1 UPPER ZONE

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
TRIHALOMETHANE [62-550.310(2)(a)] mg/L Extraction Date: N/A EPA 624				
Chloroform	< 0.0005	09/08/95	0.0005	U
Bromoform	< 0.0005	09/08/95	0.0005	U
Bromodichloromethane	< 0.0005	09/08/95	0.0005	U
Dibromochloromethane	< 0.0005	09/08/95	0.0005	U
Total TTHM	< 0.0005	09/08/95	0.0005	U
VOLATILE ORGANIC [62-550.310(2)(b)] ug/L Extraction Date: N/A EPA 624				
1,2,4-trichlorobenzene	< 0.5000	09/08/95	0.5000	U
cis-1,2-dichloroethylene	< 0.5000	09/08/95	0.5000	U
Total Xylenes	< 0.5000	09/08/95	0.5000	U
Dichloromethane	< 0.5000	09/08/95	0.5000	U
o-dichlorobenzene	< 0.5000	09/08/95	0.5000	U
Para-dichlorobenzene	< 0.5000	09/08/95	0.5000	U
Vinyl Chloride	< 0.5000	09/08/95	0.5000	U
1,1,-dichloroethylene	< 0.5000	09/08/95	0.5000	U
tr-1,2-dichloroethylene	< 0.5000	09/08/95	0.5000	U
1,2-dichloroethane	< 0.5000	09/08/95	0.5000	U
1,1,1-trichloroethane	< 0.5000	09/08/95	0.5000	U
Carbon tetrachloride	< 0.5000	09/08/95	0.5000	U
1,2-dichloropropane	< 0.5000	09/08/95	0.5000	U
Trichloroethylene	< 0.5000	09/08/95	0.5000	U
1,1,2-trichloroethane	< 0.5000	09/08/95	0.5000	U
Tetrachloroethylene	< 0.5000	09/08/95	0.5000	U
Monochlorobenzene	< 0.5000	09/08/95	0.5000	U
Benzene	< 0.5000	09/08/95	0.5000	U
Toluene	< 0.5000	09/08/95	0.5000	U
Ethylbenzene	< 0.5000	09/08/95	0.5000	U
Styrene	< 0.5000	09/08/95	0.5000	U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Report Date: 10/06/95

Sample Date: 09/07/95 Sample No.: 6893 E.Q.Lab ID: 95/1322/13694
Sample Code: Cust. Proj.: BURNT STORE UTILITIES
Sample Location: ZONE 1 UPPER ZONE

Parameter Name		Analysis Result	Analysis Date	Det.Lt. Used	*DQ
UNREG.GROUP II PURG. [62-550.410(1)] ug/L					
Extraction Date: N/A		EPA 624			
Chloromethane	<	0.5000	09/08/95	0.5000	U
Dichlorodifluoromethane	<	0.5000	09/08/95	0.5000	U
Bromomethane	<	0.5000	09/08/95	0.5000	U
Chloroethane	<	0.5000	09/08/95	0.5000	U
Trichlorofluoromethane	<	0.5000	09/08/95	0.5000	U
trans-1,3-dichloropropene	<	0.5000	09/08/95	0.5000	U
cis-1,3-dichloropropene	<	0.5000	09/08/95	0.5000	U
Methyl-tert-butylether (MTBE)	<	0.5000	09/08/95	0.5000	U
Dibromomethane	<	0.5000	09/08/95	0.5000	U
1,1-dichloropropylene	<	0.5000	09/08/95	0.5000	U
1,3-dichloropropane	<	0.5000	09/08/95	0.5000	U
1,2,3-trichloropropane	<	0.5000	09/08/95	0.5000	U
2,2-dichloropropane	<	0.5000	09/08/95	0.5000	U
Chloroform	<	0.5000	09/08/95	0.0005	U
Bromoform	<	0.5000	09/08/95	0.0005	U
Bromodichloromethane	<	0.5000	09/08/95	0.0005	U
Dibromochloromethane	<	0.5000	09/08/95	0.0005	U
o-chlorotoluene	<	0.5000	09/08/95	0.5000	U
p-chlorotoluene	<	0.5000	09/08/95	0.5000	U
m-dichlorobenzene	<	0.5000	09/08/95	0.5000	U
1,1-dichloroethane	<	0.5000	09/08/95	0.5000	U
1,1,1,2-tetrachloroethane	<	0.5000	09/08/95	0.5000	U
1,1,2,2-tetrachloroethane	<	0.5000	09/08/95	0.5000	U
Bromobenzene	<	0.5000	09/08/95	0.5000	U
UNREG.GROUP I (62-550.405) ug/L					
Extraction Date: N/A		EPA 608,615			
Carbaryl	<	1.0000	09/12/95	1.0000	U
Methomyl (Lanate)	<	1.0000	09/12/95	1.0000	U
Aldicarb sulfoxide	<	0.5000	09/12/95	0.5000	U
Aldicarb sulfone	<	0.5000	09/12/95	0.5000	U
Aldicarb (Temik)	<	0.5000	09/12/95	0.5000	U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Report Date: 10/06/95

Sample Date: 09/07/95 Sample No.: 6893 E.Q.Lab ID: 95/1322/13694
Sample Code: Cust. Proj.: BURNT STORE UTILITIES
Sample Location: ZONE 1 UPPER ZONE

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
3-Hydroxycarbofuran	< 1.0000	09/12/95	1.0000	U
Dicamba (Banvel)	< 0.1000	09/12/95	0.1000	U
UNREG.GROUP III (62-550.415) ug/L				
Extraction Date: 09/12/95 EPA 625				
Isophorone	< 1.0000	09/26/95	1.0000	U
2,4-dinitrotoluene	< 1.0000	09/26/95	1.0000	U
Dimethylphthalate	< 1.0000	09/26/95	1.0000	U
Diethylphthalate	< 2.0000	09/26/95	2.0000	U
Di-n-butylphthalate	< 1.0000	09/26/95	1.0000	U
Butyl benzyl phthalate	< 1.0000	09/26/95	1.0000	U
Di-n-octyl phthalate	< 1.0000	09/26/95	1.0000	U
2-chlorophenol	< 1.0000	09/26/95	1.0000	U
2-methyl-4,6-dinitrophenol	< 1.0000	09/26/95	1.0000	U
Phenol	< 1.0000	09/26/95	1.0000	U
2,4,6-trichlorophenol	< 1.0000	09/26/95	1.0000	U
ORGANOCHLORINE PESTICIDES ug/L				
Extraction Date: 09/12/95 EPA 625				
a-BHC	< 1.0000	09/26/95	1.0000	U
b-BHC	< 1.0000	09/26/95	1.0000	U
d-BHC	< 1.0000	09/26/95	1.0000	U
Endosulfan I	< 1.0000	09/26/95	1.0000	U
Endosulfan II	< 1.0000	09/26/95	1.0000	U
Endosulfan Sulfate	< 1.0000	09/26/95	1.0000	U
4,4'-DDE	< 1.0000	09/26/95	1.0000	U
4,4'-DDD	< 1.0000	09/26/95	1.0000	U
4,4'-DDT	< 1.0000	09/26/95	1.0000	U
Endrin Aldehyde	< 1.0000	09/26/95	1.0000	U
Endrin	< 1.0000	09/26/95	0.1000	U
Lindane (gamma-BHC)	< 1.0000	09/26/95	0.1000	U
Toxaphene	< 10.0000	09/26/95	0.5000	U
Heptachlor	< 1.0000	09/26/95	0.1000	U
Heptachlor Epoxide	< 1.0000	09/26/95	0.1000	U
Aldrin	< 1.0000	09/26/95		U

)TE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Report Date: 10/06/95

Sample Date: 09/07/95 Sample No.: 6893 E.Q.Lab ID: 95/1322/13694
Sample Code: Cust. Proj.: BURNT STORE UTILITIES
Sample Location: ZONE 1 UPPER ZONE

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
Dieldrin	< 1.0000	09/26/95		U
PCB-1016	< 10.0000	09/26/95	10.0000	U
PCB-1221	< 10.0000	09/26/95	10.0000	U
PCB-1232	< 50.0000	09/26/95	50.0000	U
PCB-1242	< 10.0000	09/26/95	10.0000	U
PCB-1248	< 10.0000	09/26/95	10.0000	U
PCB-1254	< 10.0000	09/26/95	10.0000	U
PCB-1260	< 10.0000	09/26/95	10.0000	U
Chlordane	< 1.0000	09/26/95	0.1000	U
PURGEABLE AROMATICS/HALOCARBONS		ug/L		
Extraction Date: N/A		EPA 624		
Chloromethane	< 0.5000	09/08/95	0.5000	U
Dichlorodifluoromethane	< 0.5000	09/08/95	0.5000	U
Bromomethane	< 0.5000	09/08/95	0.5000	U
Chloroethane	< 0.5000	09/08/95	0.5000	U
Trichlorofluoromethane	< 0.5000	09/08/95	0.5000	U
trans-1,3-dichloropropene	< 0.5000	09/08/95	0.5000	U
cis-1,3-dichloropropene	< 0.5000	09/08/95	0.5000	U
Chloroform	< 0.5000	09/08/95	0.0005	U
Bromoform	< 0.5000	09/08/95	0.0005	U
Bromodichloromethane	< 0.5000	09/08/95	0.0005	U
Dibromochloromethane	< 0.5000	09/08/95	0.0005	U
p-xylene	< 0.5000	09/08/95	0.5000	U
Dichloromethane	< 0.5000	09/08/95	0.5000	U
m-dichlorobenzene	< 0.5000	09/08/95	0.5000	U
o-dichlorobenzene	< 0.5000	09/08/95	0.5000	U
Para-dichlorobenzene	< 0.5000	09/08/95	0.5000	U
Vinyl Chloride	< 0.5000	09/08/95	0.5000	U
1,1,-dichloroethylene	< 0.5000	09/08/95	0.5000	U
1,1-dichloroethane	< 0.5000	09/08/95	0.5000	U
tr-1,2-dichloroethylene	< 0.5000	09/08/95	0.5000	U
1,2-dichloroethane	< 0.5000	09/08/95	0.5000	U
1,1,1-trichloroethane	< 0.5000	09/08/95	0.5000	U
Carbon tetrachloride	< 0.5000	09/08/95	0.5000	U
1,2-dichloropropane	< 0.5000	09/08/95	0.5000	U

)TE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137
FX 813-629-7467

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Report Date: 10/06/95

Sample Date: 09/07/95 Sample No.: 6893 E.Q.Lab ID: 95/1322/13694
Sample Code: Cust. Proj.: BURNT STORE UTILITIES
Sample Location: ZONE 1 UPPER ZONE

Parameter Name		Analysis Result	Analysis Date	Det.Lt. Used	*DQ
Trichloroethylene	<	0.5000	09/08/95	0.5000	U
1,1,2-trichloroethane	<	0.5000	09/08/95	0.5000	U
Tetrachloroethylene	<	0.5000	09/08/95	0.5000	U
1,1,2,2-tetrachloroethane	<	0.5000	09/08/95	0.5000	U
Monochlorobenzene	<	0.5000	09/08/95	0.5000	U
Benzene	<	0.5000	09/08/95	0.5000	U
Toluene	<	0.5000	09/08/95	0.5000	U
Ethylbenzene	<	0.5000	09/08/95	0.5000	U
m-xylene	<	0.5000	09/08/95	0.5000	U
o-xylene	<	0.5000	09/08/95	0.5000	U
2-Chloroethylvinyl ether	<	10.0000	09/08/95	10.0000	U
Acrolein	<	10.0000	09/08/95	10.0000	U
Acrylonitrile	<	10.0000	09/08/95	10.0000	U
BASE/NEUTRAL/ACIDS		ug/L			
Extraction Date: 09/12/95		EPA 625			
Di(2-ethylhexyl)phthalate		9.3000	09/26/95	0.1000	V*
Hexachlorocyclopentadiene	<	1.0000	09/26/95	0.1000	U
Isophorone	<	1.0000	09/26/95	1.0000	U
2,4-dinitrotoluene	<	1.0000	09/26/95	1.0000	U
Hexachlorobenzene	<	1.0000	09/26/95	0.1000	U
Dimethylphthalate	<	1.0000	09/26/95	1.0000	U
Diethylphthalate	<	2.0000	09/26/95	2.0000	U
Di-n-butylphthalate	<	1.0000	09/26/95	1.0000	U
Butyl benzyl phthalate	<	1.0000	09/26/95	1.0000	U
Benzo(a)pyrene	<	1.0000	09/26/95	0.1000	U
Pentachlorophenol	<	1.0000	09/26/95	0.0400	U
Hexachlorobutadiene	<	1.0000	09/26/95	1.0000	U
Naphthalene	<	1.0000	09/26/95	1.0000	U
1,2,4-trichlorobenzene	<	1.0000	09/26/95	0.5000	U
m-dichlorobenzene	<	1.0000	09/26/95	0.5000	U
o-dichlorobenzene	<	1.0000	09/26/95	0.5000	U
Para-dichlorobenzene	<	1.0000	09/26/95	0.5000	U
Acenaphthene	<	1.0000	09/26/95	1.0000	U
Acenaphthylene	<	1.0000	09/26/95	1.0000	U
Benzidine	<	4.0000	09/26/95	4.0000	U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes
* V: Method Blank 1.1 µg/L

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL, PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137
FX 813-629-7467

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Report Date: 10/06/95

Sample Date: 09/07/95 Sample No.: 6893 E.Q.Lab ID: 95/1322/13694
Sample Code: Cust. Proj.: BURNT STORE UTILITIES
Sample Location: ZONE 1 UPPER ZONE

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
Benzo(a)anthracene	< 1.0000	09/26/95	1.0000	U
Benzo(b)fluoranthene	< 1.0000	09/26/95	1.0000	U
Benzo(ghi)perylene	< 1.0000	09/26/95	1.0000	U
Benzo(k)fluoranthene	< 1.0000	09/26/95	1.0000	U
Bis(2-chloroethoxy)methane	< 1.0000	09/26/95	1.0000	U
Bis(2-chloroethyl)ether	< 1.0000	09/26/95	1.0000	U
Bis(2-chloroisopropyl)ether	< 1.0000	09/26/95	1.0000	U
4-Bromophenyl phenyl ether	< 1.0000	09/26/95	1.0000	U
2-Chloronaphthalene	< 1.0000	09/26/95	1.0000	U
4-Chlorophenyl phenyl ether	< 1.0000	09/26/95	1.0000	U
Chrysene	< 1.0000	09/26/95	1.0000	U
Dibenzo(a,h)anthracene	< 1.0000	09/26/95	1.0000	U
3,3-Dichlorobenzidine	< 3.0000	09/26/95	3.0000	U
2,6-Dinitrotoluene	< 1.0000	09/26/95	1.0000	U
1,2-Diphenylhydrazine	< 1.0000	09/26/95	1.0000	U
Fluoranthene	< 1.0000	09/26/95	1.0000	U
Fluorene	< 1.0000	09/26/95	1.0000	U
Hexachloroethane	< 1.0000	09/26/95	1.0000	U
Indeno(1,2,3-cd)pyrene	< 1.0000	09/26/95	1.0000	U
Nitrobenzene	< 1.0000	09/26/95	1.0000	U
N-nitrosodimethylamine	< 3.0000	09/26/95	3.0000	U
N-nitrosodi-n-propylamine	< 1.0000	09/26/95	1.0000	U
N-nitrosodiphenylamine	< 1.0000	09/26/95	1.0000	U
Pyrene	< 1.0000	09/26/95	1.0000	U
Anthracene	< 1.0000	09/26/95	1.0000	U
Phenanthrene	< 1.0000	09/26/95	1.0000	U
Di-n-octyl phthalate	< 1.0000	09/26/95	1.0000	U
2-chlorophenol	< 1.0000	09/26/95	1.0000	U
2,4-Dichlorophenol	< 1.0000	09/26/95	1.0000	U
2,4-Dimethylphenol	< 1.0000	09/26/95	1.0000	U
4,6-Dinitro-2-methyl phenol	< 1.0000	09/26/95	1.0000	U
2-methyl-4,6-dinitrophenol	< 1.0000	09/26/95	1.0000	U
2-Nitrophenol	< 1.0000	09/26/95	1.0000	U
4-Nitrophenol	< 1.0000	09/26/95	1.0000	U
Phenol	< 1.0000	09/26/95	1.0000	U
2,4,6-trichlorophenol	< 1.0000	09/26/95	1.0000	U
4-chloro-3-methyl phenol	< 1.0000	09/26/95	1.0000	U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Report Date: 10/06/95

Sample Date: 09/07/95 Sample No.: 6893 E.Q.Lab ID: 95/1322/13694
Sample Code: Cust. Proj.: BURNT STORE UTILITIES
Sample Location: ZONE 1 UPPER ZONE

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
2,4-dinitrophenol	< 1.0000	09/26/95	1.0000	U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL, PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137

EQL

CHEMISTRY SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS
ATTN: CHRISTINE WYATT
Customer Project: BURNT STORE UTILITIES

LABID: 95/ 1322/13694 Report Date: 10/13/95 Page: 3

Sample#: 6894 Sample Date: 09/07/95
Station: Location: ZONE 2 LOWER ZONE

Group	Analysis		Result	Units	Analysis Date	MDL	Method	*DQ Code
Acid Base								
	LAB pH (Units)		7.600	units	09/07/95	0.1000	EPA 150.1	
	C03-CaC03	<	0.400	mg/L	09/08/95	0.4000	SM 406C/2	U
	BICARBONATE CaC03		91.100	mg/L	09/08/95	0.4000	SM 406C/2	
Minerals								
	CHLORIDE		19800.000	mg/L	09/14/95	0.4000	SM4500-C1	
	FLUORIDE		0.805	mg/L	09/07/95	0.1000	EPA 340.2	
	HARD-CaC03		5960.000	mg/L	09/12/95	0.4000	APHA 2340	
	SULFATE		295.000	mg/L	09/21/95	1.0000	EPA 375.4	
	T. DISS. SOLIDS		38300.000	mg/L	09/12/95	5.0000	EPA 160.1	
	TOTAL SUSPENDED SOLIDS		60.700	mg/L	09/12/95	0.3000	EPA 160.2	
	CYANIDE	<	0.002	mg/L	09/11/95	0.0020	EPA 335.2	U
	SPECIFIC GRAVITY		1.010	NU	09/14/95	0.1000	APHA 2710	
Esthetic Properties								
	COLOR (Color Units)		200.000	Co-Pt	09/07/95	1.0000	EPA 110.2	
	TURBIDITY		96.000	NTU	09/07/95	0.1000	EPA 180.1	
	ODOR (TON)	<	1.000	TON	09/06/95	1.0000	SM 207/21	U
Demands								
	BOD(5-DAY)		1.370	mg/L	09/08/95	1.0000	EPA 405.1	
	CHEMICAL OXYGEN DEMAND	<	10.000	mg/L	09/28/95*******		EPA 410.4	U
Nutrients								
	TOT. NITRATE+NITRITE		0.007	mg/L	09/11/95	0.0010	EPA 353.2	
	AMMONIA/AMMONIUM-NITROGEN		0.118	mg/L	09/11/95	0.0100	EPA 350.1	
	TOT.KJEL.N		0.436	mg/L	09/09/95	0.0200	EPA 351.1	
	ORGANIC NITROGEN		0.318	mg/L	10/06/95	N/A	APHA 4500	
	TOTAL PHOSPHORUS		0.008	mg/L	09/28/95	0.0020	EPA 365.3	
	TOTAL ORGANIC CARBON		0.500	mg/L	09/12/95	0.4000	SM 505A/5	
	NITRITE		0.003	mg/L	09/07/95	0.0010	EPA 354.1	
	NITRATE		0.004	mg/L	10/06/95	0.0010	CALC.	
Trace Metals								
	COPPER		40.000	ug/L	09/08/95	1.0000	EPA 220.2	
	LEAD		30.000	ug/L	09/08/95	1.0000	EPA 239.2	
	ZINC		470.000	ug/L	09/08/95	1.0000	EPA 289.1	
	ARSENIC		80.000	ug/L	09/08/95	0.1000	EPA 206.2	
	BARIUM		190.000	ug/L	09/08/95	0.1000	EPA 208.1	

NOTE: * See Attached Sheet for Data Qualifier Codes
Reported results not valid without accompanying signature page.

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL PORT CHARLOTTE, FLORIDA 33953 PH 813-625-3137

EQL

CHEMISTRY SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS
ATTN: CHRISTINE WYATT
Customer Project: BURNT STORE UTILITIES

LABID: 95/ 1322/13694 **Report Date: 10/13/95** **Page: 4**

CADMIUM		3.100	ug/L	09/08/95	0.1000 EPA 231.2	
CHROMIUM		10.000	ug/L	09/08/95	1.0000 EPA 218.2	
SELENIUM		50.000	ug/L	09/08/95	1.0000 EPA 270.2	
SILVER		2.000	ug/L	09/09/95	0.1100 EPA 272.2	
MERCURY	<	0.100	ug/L	09/13/95	0.1000 EPA 245.2	U
NICKEL		50.000	ug/L	09/08/95	1.0000 EPA 249.1	
MANGANESE		240.000	ug/L	09/08/95	1.0000 EPA 243.2	
IRON		19.300	mg/L	09/08/95	0.0010 EPA 236.1	
SODIUM		13484.000	mg/L	09/08/95	0.1390 EPA 273.1	
ALUMINUM		76000.000	ug/L	09/08/95	1.0000 EPA 202.1	
BERYLLIUM		8.900	ug/L	09/08/95	1.0000 EPA 210.2	
THALLIUM		2.200	ug/L	09/08/95	1.0000 EPA 279.2	
ANTIMONY		2.600	ug/L	09/08/95	0.1000 EPA 204.2	
tractables						
AMING AGENTS		0.150	LAS(mg/L)	09/08/95	0.1000 EPA 425.1	
diological						
GROSS ALPHA		218.000	pCi/l	09/21/95	80.0000 EPA 900	I
RADIUM 226		24.000	pCi/l	09/26/95	1.0000 EPA 903.1	
RADIUM 228		1.800	pCi/l	09/26/95	0.8000 EPA 904.0	I

NOTE: * See Attached Sheet for Data Qualifier Codes
Reported results not valid without accompanying signature page.

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL, PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137

EQL

BACTERIOLOGICAL ANALYSIS

Customer: YOUNGQUIST BROTHERS
ATTN: CHRISTINE WYATT

Report Date: 10/13/95

Sample Date: 09/07/95 Sample Time: 9:10 Labid: 95/ 1322/ 13694
Customer Project: BURNT STORE UTILITIES

Parameter: **TOTAL COLIFORM**

Sta.	Samp.	Location	Sample#	Value #/100ml		DQ Code	Note
	ZONE 1	UPPER ZONE	6893	<	5	U	
	ZONE 2	LOWER ZONE	6894	<	20		Non-Coliform Colonies

Note: See Attached Sheet for Data Qualifier (DQ) Codes.

Environmental Quality Laboratory, Inc.
1009 JAMIAMI TRAIL, PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137

EQL

COLLECTION AND ANALYSIS INFORMATION

Labid: 95/ 1322/ 13694 Report Date: 10/13/95

Report To: YOUNGQUIST BROTHERS

Sample#	Coll. Date	Coll. Time	Bac-T Analyzed Date	Analyzed Time
6893	09/07/95	9:10	09/07/95	11:30
6894	09/07/95	8:50	09/07/95	11:30

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL, PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Report Date: 10/06/95

Sample Date: 09/07/95 Sample No.: 6894 E.Q.Lab ID: 95/1322/13694
Sample Code: Cust. Proj.: BURNT STORE UTILITIES
Sample Location: ZONE 2 LOWER ZONE

Parameter Name	Analysis Result	Analysis Date	Det.Lt. *DQ Used
PEST. & PCB [62-550.310(2)(c)]	ug/L		
Extraction Date: N/A	EPA 608, 615, 624		
Endrin	< 0.1000	09/27/95	0.1000 U
Lindane (gamma-BHC)	< 0.1000	09/27/95	0.1000 U
Methoxychlor	< 0.1000	09/27/95	0.1000 U
Toxaphene	< 0.5000	09/27/95	0.5000 U
Methomyl (Lanate)	< 1.0000	09/12/95	1.0000 U
Dalapon	< 1.0000	09/12/95	1.0000 U
Diquat	< 4.0000	09/12/95	4.0000 U
Endothall	< 9.0000	09/11/95	9.0000 U
Glyphosate (Round-up)	< 10.0000	09/13/95	10.0000 U
Di(2-ethylhexyl)adipate	< 0.1000	09/27/95	0.1000 U
Oxamyl (Vydate)	< 1.0000	09/12/95	1.0000 U
Simazine (Princep)	< 0.1000	09/27/95	0.1000 U
Di(2-ethylhexyl)phthalate	9.0000	09/27/95	0.1000
Picloram	< 0.2000	09/12/95	0.2000 U
Dinoseb	< 0.2000	09/12/95	0.2000 U
Hexachlorocyclopentadiene	< 0.1000	09/27/95	0.1000 U
Carbofuran	< 1.0000	09/12/95	1.0000 U
Atrazine	< 0.1000	09/27/95	0.1000 U
Alachlor (Lasso)	< 0.1000	09/27/95	0.1000 U
Heptachlor	< 0.1000	09/27/95	0.1000 U
Heptachlor Epoxide	< 0.1000	09/27/95	0.1000 U
2,4-D	< 0.1000	09/12/95	0.1000 U
2,4,5-TP (Silvex)	< 0.1000	09/12/95	0.2000 U
Hexachlorobenzene	< 0.1000	09/27/95	0.1000 U
Benzo(a)pyrene	< 0.1000	09/27/95	0.1000 U
Pentachlorophenol	< 0.0400	09/12/95	0.0400 U
PCB's	< 0.1000	09/11/95	0.1000 U
Dibromochloropropane (DBCP)	< 0.0100	09/08/95	0.0100 U
Ethylene dibromide/EDB	< 0.0100	09/08/95	0.0100 U
Chlordane	< 0.1000	09/27/95	0.1000 U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Report Date: 10/06/95

Sample Date: 09/07/95 Sample No.: 6894 E.Q.Lab ID: 95/1322/13694
Sample Code: Cust. Proj.: BURNT STORE UTILITIES
Sample Location: ZONE 2 LOWER ZONE

Parameter Name	Analysis Result	Analysis Date	Det.Lt. *DQ Used
TRIHALOMETHANE [62-550.310(2)(a)] mg/L Extraction Date: N/A EPA 624			
Chloroform	< 0.0005	09/08/95	0.0005 U
Bromoform	< 0.0005	09/08/95	0.0005 U
Bromodichloromethane	< 0.0005	09/08/95	0.0005 U
Dibromochloromethane	< 0.0005	09/08/95	0.0005 U
Total TTHM	< 0.0005	09/08/95	0.0005 U
VOLATILE ORGANIC [62-550.310(2)(b)] ug/L Extraction Date: N/A EPA 624			
1,2,4-trichlorobenzene	< 0.5000	09/08/95	0.5000 U
cis-1,2-dichloroethylene	< 0.5000	09/08/95	0.5000 U
Total Xylenes	< 0.5000	09/08/95	0.5000 U
Dichloromethane	< 0.5000	09/08/95	0.5000 U
o-dichlorobenzene	< 0.5000	09/08/95	0.5000 U
Para-dichlorobenzene	< 0.5000	09/08/95	0.5000 U
Vinyl Chloride	< 0.5000	09/08/95	0.5000 U
1,1,-dichloroethylene	< 0.5000	09/08/95	0.5000 U
tr-1,2-dichloroethylene	< 0.5000	09/08/95	0.5000 U
1,2-dichloroethane	< 0.5000	09/08/95	0.5000 U
1,1,1-trichloroethane	< 0.5000	09/08/95	0.5000 U
Carbon tetrachloride	< 0.5000	09/08/95	0.5000 U
1,2-dichloropropane	< 0.5000	09/08/95	0.5000 U
Trichloroethylene	< 0.5000	09/08/95	0.5000 U
1,1,2-trichloroethane	< 0.5000	09/08/95	0.5000 U
Tetrachloroethylene	< 0.5000	09/08/95	0.5000 U
Monochlorobenzene	< 0.5000	09/08/95	0.5000 U
Benzene	< 0.5000	09/08/95	0.5000 U
Toluene	< 0.5000	09/08/95	0.5000 U
Ethylbenzene	< 0.5000	09/08/95	0.5000 U
Styrene	< 0.5000	09/08/95	0.5000 U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Page#: 11
Report Date: 10/06/95

Sample Date: 09/07/95 Sample No.: 6894 E.Q.Lab ID: 95/1322/13694
Sample Code: Cust. Proj.: BURNT STORE UTILITIES
Sample Location: ZONE 2 LOWER ZONE

Parameter Name		Analysis Result	Analysis Date	Det.Lt.	*DQ Used
UNREG.GROUP II PURG. [62-550.410(1)] ug/L					
Extraction Date: N/A		EPA 624			
Chloromethane	<	0.5000	09/08/95	0.5000	U
Dichlorodifluoromethane	<	0.5000	09/08/95	0.5000	U
Bromomethane	<	0.5000	09/08/95	0.5000	U
Chloroethane	<	0.5000	09/08/95	0.5000	U
Trichlorofluoromethane	<	0.5000	09/08/95	0.5000	U
trans-1,3-dichloropropene	<	0.5000	09/08/95	0.5000	U
cis-1,3-dichloropropene	<	0.5000	09/08/95	0.5000	U
Methyl-tert-butylether (MTBE)	<	0.5000	09/08/95	0.5000	U
Dibromomethane	<	0.5000	09/08/95	0.5000	U
1,1-dichloropropylene	<	0.5000	09/08/95	0.5000	U
1,3-dichloropropane	<	0.5000	09/08/95	0.5000	U
1,2,3-trichloropropane	<	0.5000	09/08/95	0.5000	U
2,2-dichloropropane	<	0.5000	09/08/95	0.5000	U
Chloroform	<	0.5000	09/08/95	0.5000	U
Bromoform	<	0.5000	09/08/95	0.0005	U
Bromodichloromethane	<	0.5000	09/08/95	0.0005	U
Dibromochloromethane	<	0.5000	09/08/95	0.0005	U
o-chlorotoluene	<	0.5000	09/08/95	0.0005	U
p-chlorotoluene	<	0.5000	09/08/95	0.5000	U
m-dichlorobenzene	<	0.5000	09/08/95	0.5000	U
1,1-dichloroethane	<	0.5000	09/08/95	0.5000	U
1,1,1,2-tetrachloroethane	<	0.5000	09/08/95	0.5000	U
1,1,2,2-tetrachloroethane	<	0.5000	09/08/95	0.5000	U
Bromobenzene	<	0.5000	09/08/95	0.5000	U
UNREG.GROUP I (62-550.405) ug/L					
Extraction Date: N/A		EPA 608,615			
Carbaryl	<	1.0000	09/12/95	1.0000	U
Methomyl (Lanate)	<	1.0000	09/12/95	1.0000	U
Aldicarb sulfoxide	<	0.5000	09/12/95	0.5000	U
Aldicarb sulfone	<	0.5000	09/12/95	0.5000	U
Aldicarb (Temik)	<	0.5000	09/12/95	0.5000	U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL, PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137
FX 813-629-7447

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Report Date: 10/06/95

Sample Date: 09/07/95 Sample No.: 6894 E.Q.Lab ID: 95/1322/13694
Sample Code: Cust. Proj.: BURNT STORE UTILITIES
Sample Location: ZONE 2 LOWER ZONE

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
3-Hydroxycarbofuran	< 1.0000	09/12/95	1.0000	U
Dicamba (Banvel)	< 0.1000	09/11/95	0.1000	U
UNREG.GROUP III	(62-550.415) ug/L			
Extraction Date: 09/12/95	EPA 625			
Isophorone	< 1.0000	09/26/95	1.0000	U
2,4-dinitrotoluene	< 1.0000	09/26/95	1.0000	U
Dimethylphthalate	< 1.0000	09/26/95	1.0000	U
Diethylphthalate	< 2.0000	09/26/95	2.0000	U
Di-n-butylphthalate	< 1.0000	09/26/95	1.0000	U
Butyl benzyl phthalate	< 1.0000	09/26/95	1.0000	U
Di-n-octyl phthalate	< 1.0000	09/26/95	1.0000	U
2-chlorophenol	< 1.0000	09/26/95	1.0000	U
2-methyl-4,6-dinitrophenol	< 1.0000	09/26/95	1.0000	U
Phenol	< 1.0000	09/26/95	1.0000	U
2,4,6-trichlorophenol	< 1.0000	09/26/95	1.0000	U
ORGANOCHLORINE PESTICIDES	ug/L			
Extraction Date: 09/12/95	EPA 625			
a-BHC	< 1.0000	09/26/95	1.0000	U
b-BHC	< 1.0000	09/26/95	1.0000	U
d-BHC	< 1.0000	09/26/95	1.0000	U
Endosulfan I	< 1.0000	09/26/95	1.0000	U
Endosulfan II	< 1.0000	09/26/95	1.0000	U
Endosulfan Sulfate	< 1.0000	09/26/95	1.0000	U
4,4'-DDE	< 1.0000	09/26/95	1.0000	U
4,4'-DDD	< 1.0000	09/26/95	1.0000	U
4,4'-DDT	< 1.0000	09/26/95	1.0000	U
Endrin Aldehyde	< 1.0000	09/26/95	1.0000	U
Endrin	< 1.0000	09/26/95	1.0000	U
Lindane (gamma-BHC)	< 1.0000	09/26/95	0.1000	U
Toxaphene	< 10.0000	09/26/95	0.1000	U
Heptachlor	< 1.0000	09/26/95	0.5000	U
Heptachlor Epoxide	< 1.0000	09/26/95	0.1000	U
Aldrin	< 1.0000	09/26/95	0.1000	U
				U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL, PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Page#: 13
Report Date: 10/06/95

Sample Date: 09/07/95 Sample No.: 6894 E.Q.Lab ID: 95/1322/13694
Sample Code: Cust. Proj.: BURNT STORE UTILITIES
Sample Location: ZONE 2 LOWER ZONE

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
Dieldrin	< 1.0000	09/26/95		U
PCB-1016	< 10.0000	09/26/95	10.0000	U
PCB-1221	< 10.0000	09/26/95	10.0000	U
PCB-1232	< 50.0000	09/26/95	50.0000	U
PCB-1242	< 10.0000	09/26/95	10.0000	U
PCB-1248	< 10.0000	09/26/95	10.0000	U
PCB-1254	< 10.0000	09/26/95	10.0000	U
PCB-1260	< 10.0000	09/26/95	10.0000	U
Chlordane	< 1.0000	09/26/95	0.1000	U

PURGEABLE AROMATICS/HALOCARBONS ug/L
Extraction Date: N/A EPA 624

Chloromethane	< 0.5000	09/08/95	0.5000	U
Dichlorodifluoromethane	< 0.5000	09/08/95	0.5000	U
Bromomethane	< 0.5000	09/08/95	0.5000	U
Chloroethane	< 0.5000	09/08/95	0.5000	U
Trichlorofluoromethane	< 0.5000	09/08/95	0.5000	U
trans-1,3-dichloropropene	< 0.5000	09/08/95	0.5000	U
cis-1,3-dichloropropene	< 0.5000	09/08/95	0.5000	U
Chloroform	< 0.5000	09/08/95	0.5000	U
Bromoform	< 0.5000	09/08/95	0.0005	U
Bromodichloromethane	< 0.5000	09/08/95	0.0005	U
Dibromochloromethane	< 0.5000	09/08/95	0.0005	U
p-xylene	< 0.5000	09/08/95	0.0005	U
Dichloromethane	< 0.5000	09/08/95	0.5000	U
m-dichlorobenzene	< 0.5000	09/08/95	0.5000	U
o-dichlorobenzene	< 0.5000	09/08/95	0.5000	U
Para-dichlorobenzene	< 0.5000	09/08/95	0.5000	U
Vinyl Chloride	< 0.5000	09/08/95	0.5000	U
1,1,-dichloroethylene	< 0.5000	09/08/95	0.5000	U
1,1-dichloroethane	< 0.5000	09/08/95	0.5000	U
tr-1,2-dichloroethylene	< 0.5000	09/08/95	0.5000	U
1,2-dichloroethane	< 0.5000	09/08/95	0.5000	U
1,1,1-trichloroethane	< 0.5000	09/08/95	0.5000	U
Carbon tetrachloride	< 0.5000	09/08/95	0.5000	U
1,2-dichloropropane	< 0.5000	09/08/95	0.5000	U

OTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL, PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Report Date: 10/06/95

Sample Date: 09/07/95 Sample No.: 6894 E.Q.Lab ID: 95/1322/13694
Sample Code: Cust. Proj.: BURNT STORE UTILITIES
Sample Location: ZONE 2 LOWER ZONE

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
Trichloroethylene	< 0.5000	09/08/95	0.5000	U
1,1,2-trichloroethane	< 0.5000	09/08/95	0.5000	U
Tetrachloroethylene	< 0.5000	09/08/95	0.5000	U
1,1,2,2-tetrachloroethane	< 0.5000	09/08/95	0.5000	U
Monochlorobenzene	< 0.5000	09/08/95	0.5000	U
Benzene	< 0.5000	09/08/95	0.5000	U
Toluene	< 0.5000	09/08/95	0.5000	U
Ethylbenzene	< 0.5000	09/08/95	0.5000	U
m-xylene	< 0.5000	09/08/95	0.5000	U
o-xylene	< 0.5000	09/08/95	0.5000	U
2-Chloroethylvinyl ether	< 10.0000	09/08/95	10.0000	U
Acrolein	< 10.0000	09/08/95	10.0000	U
Acrylonitrile	< 10.0000	09/08/95	10.0000	U
BASE/NEUTRAL/ACIDS		ug/L		
Extraction Date: 09/12/95		EPA 625		
Di(2-ethylhexyl)phthalate	9.0000	09/26/95	0.1000	V*
Hexachlorocyclopentadiene	< 1.0000	09/26/95	0.1000	U
Isophorone	< 1.0000	09/26/95	1.0000	U
2,4-dinitrotoluene	< 1.0000	09/26/95	1.0000	U
Hexachlorobenzene	< 1.0000	09/26/95	0.1000	U
Dimethylphthalate	< 1.0000	09/26/95	1.0000	U
Diethylphthalate	< 2.0000	09/26/95	2.0000	U
Di-n-butylphthalate	1.9000	09/26/95	1.0000	
Butyl benzyl phthalate	< 1.0000	09/26/95	1.0000	U
Benzo(a)pyrene	< 1.0000	09/26/95	0.1000	U
Pentachlorophenol	< 1.0000	09/26/95	0.0400	U
Hexachlorobutadiene	< 1.0000	09/26/95	1.0000	U
Naphthalene	< 1.0000	09/26/95	1.0000	U
1,2,4-trichlorobenzene	< 1.0000	09/26/95	0.5000	U
m-dichlorobenzene	< 1.0000	09/26/95	0.5000	U
o-dichlorobenzene	< 1.0000	09/26/95	0.5000	U
Para-dichlorobenzene	< 1.0000	09/26/95	0.5000	U
Acenaphthene	< 1.0000	09/26/95	1.0000	U
Acenaphthylene	< 1.0000	09/26/95	1.0000	U
Benzidine	< 4.0000	09/26/95	4.0000	U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes
* V: Method Blank 1.1 µg/L

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL, PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137
FX 813-629-7447

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Page#: 15
Report Date: 10/06/95

Sample Date: 09/07/95 Sample No.: 6894 E.Q.Lab ID: 95/1322/13694
Sample Code: Cust. Proj.: BURNT STORE UTILITIES
Sample Location: ZONE 2 LOWER ZONE

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
Benzo(a)anthracene	< 1.0000	09/26/95	1.0000	U
Benzo(b)fluoranthene	< 1.0000	09/26/95	1.0000	U
Benzo(ghi)perylene	< 1.0000	09/26/95	1.0000	U
Benzo(k)fluoranthene	< 1.0000	09/26/95	1.0000	U
Bis(2-chloroethoxy)methane	< 1.0000	09/26/95	1.0000	U
Bis(2-chloroethyl)ether	< 1.0000	09/26/95	1.0000	U
Bis(2-chloroisopropyl)ether	< 1.0000	09/26/95	1.0000	U
4-Bromophenyl phenyl ether	< 1.0000	09/26/95	1.0000	U
2-Chloronaphthalene	< 1.0000	09/26/95	1.0000	U
4-Chlorophenyl phenyl ether	< 1.0000	09/26/95	1.0000	U
Chrysene	< 1.0000	09/26/95	1.0000	U
Dibenzo(a,h)anthracene	< 1.0000	09/26/95	1.0000	U
3,3-Dichlorobenzidine	< 3.0000	09/26/95	3.0000	U
2,6-Dinitrotoluene	< 1.0000	09/26/95	1.0000	U
1,2-Diphenylhydrazine	< 1.0000	09/26/95	1.0000	U
Fluoranthene	< 1.0000	09/26/95	1.0000	U
Fluorene	< 1.0000	09/26/95	1.0000	U
Hexachloroethane	< 1.0000	09/26/95	1.0000	U
Indeno(1,2,3-cd)pyrene	< 1.0000	09/26/95	1.0000	U
Nitrobenzene	< 1.0000	09/26/95	1.0000	U
N-nitrosodimethylamine	< 3.0000	09/26/95	3.0000	U
N-nitrosodi-n-propylamine	< 1.0000	09/26/95	1.0000	U
N-nitrosodiphenylamine	< 1.0000	09/26/95	1.0000	U
Pyrene	< 1.0000	09/26/95	1.0000	U
Anthracene	< 1.0000	09/26/95	1.0000	U
Phenanthrene	< 1.0000	09/26/95	1.0000	U
Di-n-octyl phthalate	< 1.0000	09/26/95	1.0000	U
2-chlorophenol	< 1.0000	09/26/95	1.0000	U
2,4-Dichlorophenol	< 1.0000	09/26/95	1.0000	U
2,4-Dimethylphenol	< 1.0000	09/26/95	1.0000	U
4,6-Dinitro-2-methyl phenol	< 1.0000	09/26/95	1.0000	U
2-methyl-4,6-dinitrophenol	< 1.0000	09/26/95	1.0000	U
2-Nitrophenol	< 1.0000	09/26/95	1.0000	U
4-Nitrophenol	< 1.0000	09/26/95	1.0000	U
Phenol	< 1.0000	09/26/95	1.0000	U
2,4,6-trichlorophenol	< 1.0000	09/26/95	1.0000	U
4-chloro-3-methyl phenol	< 1.0000	09/26/95	1.0000	U

OTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL, PORT CHARLOTTE, FLORIDA 33953
PH 813-625-3137

EQL

ORGANIC SAMPLE ANALYSIS

Customer: YOUNGQUIST BROTHERS

Page#: 16
Report Date: 10/06/95

Sample Date: 09/07/95 Sample No.: 6894 E.Q.Lab ID: 95/1322/13694
Sample Code: Cust. Proj.: BURNT STORE UTILITIES
Sample Location: ZONE 2 LOWER ZONE

Parameter Name	Analysis Result	Analysis Date	Det.Lt. Used	*DQ
2,4-dinitrophenol	< 1.0000	09/26/95	1.0000	U

NOTE: Reported Results not valid without accompanying signature page.
* See attached Data Qualifier Codes

Environmental Quality Laboratory, Inc.
1009 TAMIAMI TRAIL, PORT CHARLOTTE, FLORIDA 33953
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FX 813-629-7467

APPENDIX E

WATER QUALITY ANALYSES

1. WEEKLY ANALYSES FOR SHALLOW PAD MONITORING WELLS
2. REVERSE AIR WATER QUALITY FOR INJECTION WELL
3. PACKER TESTS
4. INJECTION ZONE PRIMARY AND SECONDARY DRINKING WATER
5. MONITORING ZONES PRIMARY AND SECONDARY DRINKING WATER

VIROGROUP, INC.

PERIMETER MONITOR WELLS (WATER TABLE)

Permit #UC08-247431
YOUNGQUIST BROS./SSU - BURNT STORE INJECTION WELL

Water Quality Sampling Results

WEEK ENDING THURSDAY, JUNE 22, 1995

WELL NUMBER	WATER LEVEL (BELOW TOC)	TOC (FT. ALS)	DISSOLVED CHLORIDES (mg/l)	CONDUCTIVITY (umhos/cm)	pH	TEMPERATURE
1 (CH-310)	5.40	2.10	34	448	7.7	25.8
2 (CH-311)	5.10	2.11	50	549	7.9	25.3
3 (CH-312)	4.48	2.00	50	592	6.2	26.5
4 (CH-313)	5.43	2.08	36	560	6.2	25.6

VIROGROUP, INC.

PERIMETER MONITOR WELLS (WATER TABLE)

Permit #UC08-247431
YOUNGQUIST BROS./SSU - BURNT STORE UTILITIES INJECTION WELL

Water Quality Sampling Results

WEEK ENDING TUURSDAY, JUNE 29, 1995

WELL NUMBER	WATER LEVEL (FT. BELOW TOC)	TD (FT. BELOW TOC)	TOC (FT. ABOVE LAND SFC.)	CHLORIDE (mg/l)	CONDUCTIVITY (umhos/cm)	pH (Su)	TEMPERATURE (°C)
1 (CH-310)	5.11	21.91	2.10	76	588	7.4	23.7
2 (CH-311)	4.97	21.90	2.11	44	562	7.3	23.9
3 (CH-312)	4.37	21.78	2.00	78	670	7.3	23.6
4 (CH-313)	5.36	19.92	2.08	36	517	7.4	23.3

VIROGROUP, INC.

PERIMETER MONITOR WELLS (WATER TABLE)

Permit # UC08-247431
YOUNGQUIST BROS./SSU - BURNT STORE INJECTION WELL

Water Quality Sampling Results

SAMPLED THURSDAY, JULY 6, 1995

WELL NUMBER	WATER LEVEL (FT. BELOW TOC)	TD (FT. BELOW TOC)	TOC (FT. ABOVE LAND SUR.)	CHLORIDE (mg/l)	CONDUCTIVITY (umhos/cm)	pH (SU)	TEMPERATURE (C°)
1 (CH-310)	5.31	21.91	2.10	130	676	7.1	24.0
2 (CH-311)	5.01	21.90	2.11	70	430	7.1	24.39
3 (CH-312)	4.58	21.78	2.00	100	665	7.6	24.9
4 (CH-313)	5.52	19.92	2.08	88	505	7.6	24.6

VIROGROUP, INC.

PERIMETER MONITOR WELLS (WATER TABLE)

Permit # UC08-247431
YOUNGQUIST BROS./SSU - BURNT STORE INJECTION WELL

Water Quality Sampling Results

SAMPLED THURSDAY, JULY 13, 1995

WELL NUMBER	WATER LEVEL (FT. BELOW TOC)	TD (FT. BELOW TOC)	TOC (FT. ABOVE LAND SUR.)	CHLORIDE (mg/l)	CONDUCTIVITY (umhos/cm)	pH (SU)	TEMPERATURE (C°)
1 (CH-310)	5.87	21.91	2.10	40	550	7.1	25.0
2 (CH-311)	6.13	21.90	2.11	84	770	7.1	25.0
3 (CH-312)	5.58	21.78	2.00	86	680	7.9	25.0
4 (CH-313)	6.38	19.92	2.08	56	562	7.5	25.3

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VIROGROUP, INC.

PERIMETER MONITOR WELLS (WATER TABLE)

Permit # UC08-247431
YOUNGQUIST BROS./SSU - BURNT STORE INJECTION WELL

Water Quality Sampling Results

SAMPLED THURSDAY, JULY 20, 1995

NOTE: HEAVY RAINS THIS WEEK, AREAL FLOODING, HIGH WATER TABLE

WELL NUMBER	WATER LEVEL (FT. BELOW TOC)	TD (FT. BELOW TOC)	TOC (FT. ABOVE LAND SUR.)	CHLORIDE (mg/l)	CONDUCTIVITY (umhos/cm)	pH (SU)	TEMPERATURE (C°)
1 (CH-310)	1.49	21.91	2.10	130	750	7.4	24
2 (CH-311)	1.87	21.90	2.11	120	700	7.3	24
3 (CH-312)	1.56	21788	2.00	90	800	6.9	24
4 (CH-313)	1.91	19.92	2.08	110	700	6.9	24

VIROGROUP, INC.

PERIMETER MONITOR WELLS (WATER TABLE)

Permit # UC08-247431
YOUNGQUIST BROS./SSU - BURNT STORE INJECTION WELL

Water Quality Sampling Results

SAMPLED THURSDAY, JULY 27, 1995

WELL NUMBER	WATER LEVEL (FT. BELOW TOC)	TD (FT. BELOW TOC)	TOC (FT. ABOVE LAND SUR.)	CHLORIDE (mg/l)	CONDUCTIVITY (umhos/cm)	pH (SU)	TEMPERATURE (C°)
1 (CH-310)	3.80	21.91	2.10	415	858	8.2	24.2
2 (CH-311)	4.01	21.90	2.11	125	734	8.1	21.2
3 (CH-312)	2.41	10.80 **	1.05 **	135	810	7.9	21.2
4 (CH-313)	4.36	19.92	2.08	100	734	7.9	21.2

** TOC and TD changed due to well casing being cut off.

VIROGROUP, INC.

PERIMETER MONITOR WELLS (WATER TABLE)

Permit # UC08-247431
YOUNGQUIST BROS./SSU - BURNT STORE INJECTION WELL

Water Quality Sampling Results

SAMPLED THURSDAY, AUGUST 3, 1995

WELL NUMBER	WATER LEVEL (FT. BELOW TOC)	TD (FT. BELOW TOC)	TOC (FT. ABOVE LAND SUR.)	CHLORIDE (mg/l)	CONDUCTIVITY (umhos/cm)	pH (SU)	TEMPERATURE (C°)
1 (CH-310)	4.48	21.91	2.10	425	1400	8.3	25
2 (CH-311)	4.62	21.90	2.11	340	1090	7.8	24
3 (CH-312)	3.02	10.80 **	1.05 **	150	740	7.4	24.2
4 (CH-313)	4.98	19.92	2.08	180	420	7.1	24.3

** TOC and TD changed due to well casing being cut off.

VIROGROUP, INC.

PERIMETER MONITOR WELLS (WATER TABLE)

Permit # UC08-247431
YOUNGQUIST BROS./SSU - BURNT STORE INJECTION WELL

Water Quality Sampling Results

SAMPLED THURSDAY, AUGUST 10, 1995

WELL NUMBER	WATER LEVEL (FT. BELOW TOC)	TD (FT. BELOW TOC)	TOC (FT. ABOVE LAND SUR.)	CHLORIDE (mg/l)	CONDUCTIVITY (umhos/cm)	pH (SU)	TEMPERATURE (C°)
1 (CH-310)	5.26	21.91	2.10	78	7930	7.4	24.6
2 (CH-311)	5.50	21.90	56	56	800	7.7	25.0
3 (CH-312)	3.85	20.80 **	1.05 **	84	933	7.4	23.6
4 (CH-313)	5.88	19.92	2.08	74	781	7.4	26.2

** TOC and TD changed due to well casing being cut off.

VIROGROUP, INC.

PERIMETER MONITOR WELLS (WATER TABLE)

Permit # UC08-247431
YOUNGQUIST BROS./SSU - BURNT STORE INJECTION WELL

Water Quality Sampling Results

SAMPLED THURSDAY, AUGUST 17, 1995

WELL NUMBER	WATER LEVEL (FT. BELOW TOC)	TD (FT. BELOW TOC)	TOC (FT. ABOVE LAND SUR.)	CHLORIDE (mg/l)	CONDUCTIVITY (umhos/cm)	pH (SU)	TEMPERATURE (C°)
1 (CH-310)	5.10	21.91	2.10	110	750	7.4	27
2 (CH-311)	5.27	21.90	2.11	50	700	7.7	27
3 (CH-312)	3.75	20.80 **	1.05 **	105	850	7.5	27
4 (CH-313)	5.76	19.92	2.08	70	800	7.4	27

** TOC and TD changed due to well casing being cut off.

03244FJS.J25

VIROGROUP, INC.

PERIMETER MONITOR WELLS (WATER TABLE)

Permit # UC08-247431
YOUNGQUIST BROS./SSU - BURNT STORE INJECTION WELL

Water Quality Sampling Results

SAMPLED THURSDAY, AUGUST 24, 1995

WELL NUMBER	WATER LEVEL (FT. BELOW TOC)	TD (FT. BELOW TOC)	TOC (FT. ABOVE LAND SUR.)	CHLORIDE (mg/l)	CONDUCTIVITY (umhos/cm)	pH (SU)	TEMPERATURE (C°)
1 (CH-310)	4.22	21.91	2.10	90	715	7.4	22.4
2 (CH-311)	4.43	21.90	2.11	40	638	7.1	22.7
3 (CH-312)	2.97	20.80 **	1.05 **	80	802	7.1	22.9
4 (CH-313)	4.95	19.92	2.08	48	738	7.2	22.3

** TOC and TD changed due to well casing being cut off.

VIROGROUP, INC.

PERIMETER MONITOR WELLS (WATER TABLE)

Permit # UC08-247431
YOUNGQUIST BROS./SSU - BURNT STORE INJECTION WELL

Water Quality Sampling Results

SAMPLED THURSDAY, AUGUST 31, 1995

WELL NUMBER	WATER LEVEL (FT. BELOW TOC)	TD (FT. BELOW TOC)	TOC (FT. ABOVE LAND SUR.)	CHLORIDE (mg/l)	CONDUCTIVITY (umhos/cm)	pH (SU)	TEMPERATURE (C°)
1 (CH-310)	4.44	21.91	2.10	110	720	7.2	24.5
2 (CH-311)	4.75	21.90	2.11	80	700	7.7	25
3 (CH-312)	3.21	20.80 **	1.05 **	396	1,000	7.6	24
4 (CH-313)	5.22	19.92	2.08	130	780	7.4	24

** TOC and TD changed due to well casing being cut off.

VIROGROUP, INC.

PERIMETER MONITOR WELLS (WATER TABLE)

Permit # UC08-247431
YOUNGQUIST BROS./SSU - BURNT STORE INJECTION WELL

Water Quality Sampling Results

SAMPLED THURSDAY, SEPTEMBER 7, 1995

WELL NUMBER	WATER LEVEL (FT. BELOW TOC)	TD (FT. BELOW TOC)	TOC (FT. ABOVE LAND SUR.)	CHLORIDE (mg/l)	CONDUCTIVITY (umhos/cm)	pH (SU)	TEMPERATURE (C°)
1 (CH-310)	4.69	21.91	2.10	100	736	7.3	23.2
2 (CH-311)	4.50	21.90	2.11	82	699	7.6	22.8
3 (CH-312)	3.10	20.80 **	1.05 **	152	79300	7.4	22.8
4 (CH-313)	5.05	19.92	2.08	120	747	7.4	22.4

** TOC and TD changed due to well casing being cut off.

VIROGROUP, INC.

PERIMETER MONITOR WELLS (WATER TABLE)

Permit # UC08-247431
YOUNGQUIST BROS./SSU - BURNT STORE INJECTION WELL

Water Quality Sampling Results

SAMPLED THURSDAY, SEPTEMBER 14, 1995

WELL NUMBER	WATER LEVEL (FT. BELOW TOC)	TD (FT. BELOW TOC)	TOC (FT. ABOVE LAND SUR.)	CHLORIDE (mg/l)	CONDUCTIVITY (umhos/cm)	pH (SU)	TEMPERATURE (C°)
1 (CH-310)	4.86	21.91	2.10	85	795	N/A	22
2 (CH-311)	5.11	21.90	2.11	75	714	N/A	24
3 (CH-312)	3.61	20.80 **	1.05 **	95	850	N/A	25
4 (CH-313)	5.52	19.92	2.08	70	800	N/A	25

** TOC and TD changed due to well casing being cut off.

No pH meter available.

03244FJS.J25

VIROGROUP, INC.

PERIMETER MONITOR WELLS (WATER TABLE)

Permit # UC08-247431
YOUNGQUIST BROS./SSU - BURNT STORE INJECTION WELL

Water Quality Sampling Results

SAMPLED THURSDAY, SEPTEMBER 21, 1995

WELL NUMBER	WATER LEVEL (FT. BELOW TOC)	TD (FT. BELOW TOC)	TOC (FT. ABOVE LAND SUR.)	CHLORIDE (mg/l)	CONDUCTIVITY (umhos/cm)	pH (SU)	TEMPERATURE (C°)
1 (CH-310)	5.07	21.91	2.10	78	704	7.6	24.0
2 (CH-311)	5.29	21.90	2.11	48	702	7.3	24.5
3 (CH-312)	3.79	20.80 **	1.05 **	82	706	7.2	24.2
4 (CH-313)	5.69	19.92	2.08	43	762	7.2	24.2

** TOC and TD changed due to well casing being cut off.

APPENDIX F

MILL CERTIFICATES FOR STEEL CASINGS

STANDARD CERTIFIED TEST REPORT
GEORGIA TUBULAR PRODUCTS, INC.

GTP

Customer Name: YOUNGQUIST BROTHERS INC

Address: 15465 PINE RIDGE ROAD

Town, State, Zip: FT MYERS FL 33908

Date: 6-16-95

Customer Order No.: VERBAL

G.T.P. Invoice No.: 1417

BURNT STORE UTILITY PLANT

Specification: SPIRALWELD STEEL PIPE ASTM A139 GR B "MADE IN USA"

Coil or Lot No.	Size O.D.	Wt./Ft. or Wall Thick.	Min. Hydro. Test Pres. P.S.I.	MECHANICAL PROPERTIES			CHEMICAL ANALYSIS (%)				
				Yield Strength P.S.I. Point	Tensile Strength P.S.I.	Elong in 2" %	C	Mn	P	S	Si
5882074	24"	.250W	440	50700	68400	43.2	.18	.89	.012	.015	
782105	✓	✓	✓	49400	70200	43.8	.17	.88	.016	.013	
49880	30"	.375W	525	49400	68300	42.5	.17	.81	.014	.016	

The undersigned hereby certifies that the above materials have been inspected and tested in accordance with the methods prescribed in the applicable specifications and the results of such inspection and tests shown above. In determining properties or characteristics for which no methods of inspecting or testing are prescribed by said specifications, the standard mill inspection and testing practices of Georgia Tubular Products, Inc. have been applied. Unless it appears otherwise in the results of such inspection and tests shown above, the undersigned believes that said materials conform to said specifications.

Sworn to and subscribed before me

this 16th day of Jun 19 95

Notary Public

Marvin M. Hendrix

MARVIN M. HENDRIX MFG MGR

Name & Title

GTP

Georgia Tubular Products, Inc. • 109 Dent Drive, Cartersville, GA 301[illegible]

(404) 386-9553

PAGE : 1/2

INSPECTION CERTIFICATE

부산파이프
PUSAN STEEL PIPE CORP.

SEOUL OFFICE 40-1 HANGANG-RO, YONGSAN-GU, SEOUL, KOREA
POHANG PLANT 14-1 JANGHEUNG-DONG, POHANG
SEOUL PLANT 188-15, GAEBONG-DONG, KURO-GU, SEOUL
CHANGWON PLANT 30, WOONGNAM-DONG, CHANGWON

서식번호 CERTIFICATE NO. :	E9503-0125-00076 (E9410007A)	발행일자 DATE OF ISSUE :	95/03/13
제품명 COMMODITY :	E.R.W STEEL PIPE	계약서번호 L/C No. (P/O No.) :	944-E308
제품규격 SPECIFICATION :	API 5LX42/5LB/ASTM A53B	수요가 CUSTOMER :	BARTOW STEEL
		주문자 SHIPPER :	DAEWOO CORP.

ITEM NO.	HEAT(LOT) NO.	형 단 TYPE	주문치수 ORDER SIZE	수량 QUANTITY 본수 PCS	총길이 TOTAL LENGTH	중량(M/T) WEIGHT	비고 REMARK
1	Y39973 Y45624	BBE	18" X 0.250" X 42'	18	756.000FT	16.254	THESE MILL TEST REPORTS APPLY TO YOUR P.O. # (Youngquist)
2	Y40157	BBE	20" X 0.250" X 42'	28	1176.000FT	28.130	BARTOW STEEL REF. # 15825
3	Y38566	BBE	20" X 0.375" X 42'	18	756.000FT	26.951	

ITEM NO.	HEAT(LOT) NO.	HYDROSTATIC TEST Psi	RESULT	N.D.T	VISUAL & DIMENSION	FLATTENING	WELD DUCTILITY	DESIG.	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	DIR.	TENSILE STRENGTH Psi	YIELD POINT Psi	EL %
1	Y39973	990.0	G	G	G	G	G	H	15	1	80	14	10	-	-	-	-	-				
								P	14	[illegible]	78	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	T	[illegible]	[illegible]	37
								P	-	-	-	-	-	-	-	-	-	-	W	[illegible]		
	Y45624	990.0	G	G	G	G	G	H	17	1	77	15	9	-	-	-	-	-				
								P	15	1	75	16	6	2	2	1	1	2	T	78994.0	51136.0	37
								P	-	-	-	-	-	-	-	-	-	-	W	82102.0		
2	Y40157	950.0	G	G	G	G	G	H	16	1	72	14	5	-	-	-	-	-				
								P	25	1	75	13	4	2	1	2	1	1	T	75300.0	54829.0	41
								P	-	-	-	-	-	-	-	-	-	-	W	79545.0		
3	Y38566	1400.0	G	G	G	G	G	H	20	1	77	13	9	-	-	-	-	-				
								P	17	1	75	12	9	2	12	2	1	1	T	74573.0	57954.0	37
								P	-	-	-	-	-	-	-	-	-	-	W	80397.0		

NOTES: *: REFER TO THE BACK SIDE

OTHERS

Surveyor :

본 제품은 관련 규격에 정한 시험 및 검사에 합격하였음을 증명합니다.
WE HEREBY CERTIFY THAT THE MATERIAL HEREIN HAS BEEN MADE AND TESTED IN ACCORDANCE WITH ABOVE SPECIFICATION AND THE RESULTS OF ALL TEST ARE ACCEPTABLE

Manager of Q.A Dept
J. H. Kim

PS-A-881-F1

NORTH STAR STEEL
Seamless Tubular Products

CERTIFIED TEST REPORT

HEAT NO.: SLN 150157

CUSTOMER : MITSUI TUBULAR PRODUCTS

NSSD MILL ORDER NO.: 0-0024198-0

PRODUCT DESCRIPTION :
9.625 OD 0.395 WALL 40.00 LBS/FT CSG R3
PE SEAMLESS HOT ROLLED
GRADE :API 5CT K55 UF REV. APRIL 1,1995

CUSTOMER ORDER NO.: 338494

NSSH W/O NO.:

CUSTOMER SPEC.:

NSSH LOT NO.:

MECHANICAL PROPERTIES: LONGITUDINAL

SPECIMEN CROSS SECTION			ACTUAL LOAD (KIPS)		STRENGTH (KSI)		ELONGATION	
WIDTH (IN)	THICK (IN)	AREA (SQIN)	YIELD	TENSILE	YIELD	TENSILE	GAGE LENGTH	% ELONG
1.438	0.397	0.5709	40.0	60.8	70.1	106.5	2.0	27.3

COMMENTS

CHEMICAL ANALYSIS: NS51 Electromagnetic inspected. Reference Standard was a test joint with 10% ID and OD Longitudinal and Transverse notches.

	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Sn	Cb	V	Al	Ca	B	Ti	N
HEAT	0.33	1.46	0.012	0.008	0.25	0.23	0.14	0.15	0.04	0.015	0.004	0.005	0.021	0.0031	<0.0005	0.019	0.0094
PRODUCT #1	0.34	1.43	0.012	0.008	0.25	0.22	0.14	0.16	0.04	0.013	0.005	0.005	0.017	0.0031	<0.0005	0.015	0.0103
PRODUCT #2	0.34	1.38	0.011	0.007	0.24	0.23	0.13	0.14	0.04	0.013	0.003	0.004	0.016	0.0027	<0.0005	0.016	

HYDROSTATIC TEST (psi): 3600 for 5 seconds minimum.

DRIFT PLUG SIZE : 8.750 INCHES

SUPPLEMENTAL REQUIREMENTS	YES	NO	REMARKS
HARDNESS			
CHARPY IMPCT TST			
FLATTENING TEST			
NACE TEST		X	
JOMINY HARDEN			
GRAIN SIZE			
OTHER			

RECEIVED MAY 19 1995

This material has been produced and tested in accordance with the requirements of applicable specifications unless otherwise noted below. We hereby certify that the above test results are representative of those contained in the records of the company. Any modification to this certification as provided by North Star Steel without the expressed written consent of North Star Steel negates the validity of the test report. North Star Steel is not responsible for the inability of this material to meet specific applications.

SIGNED: Jeff Schey

DATE: 5-16-95

APPROVAL:

SWORN AND SUBSCRIBED TO BEFORE ME

THIS _____ DAY _____

Notary Public

MY COMMISSION EXPIRES _____

THIS CERTIFICATE IS NOTORIZED ONLY WHEN REQUESTED

NORTH STAR STEEL Seamless Tubular Products CERT[illegible]D TEST REPORT 06/12/95

HEAT NO.: SLN I30015	CUSTOMER : CHAMPIONS PIPE	NSSO MILL ORDER NO.: 0-0023681
PRODUCT DESCRIPTION : 7.625 OD 0.500 WALL 38.05LBS/FT PE R3	CUSTOMER ORDER NO.: 338158	NSSH W/O NO.: D12914
GRADE :API 5CT P-110/NSS-95	CUSTOMER SPEC.:	NSSH LOT NO.: 95-1219

MECHANICAL PROPERTIES :

SPECIMEN CROSS SECTION			ACTUAL LOAD (KIPS)		STRENGTH (KSI)		ELONGATION		COMMENTS
WIDTH (IN)	THICK (IN)	AREA (SQIN)	YIELD	TENSILE	YIELD	TENSILE	GAGE LENGTH	% ELONG	
1.000	0.504	0.5040	60.3	65.6	119.3	130.2	2	26.0	

Chemical Analysis NS57.

	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Sn	Cb	V	Al	Ca	B	Ti	N
HEAT	0.24	1.04	0.008	0.006	0.30	0.18	0.12	0.37	0.05		0.000	0.003	0.018		0.0025	0.039	
PRODUCT #1	0.25	1.02	0.008	0.006	0.30	0.17	0.12	0.37	0.05		0.000	0.004	0.017		0.0023	0.041	
PRODUCT #2	0.25	1.02	0.008	0.006	0.30	0.17	0.12	0.38	0.05		0.000	0.004	0.017		0.0024	0.041	

OSTATIC TEST (PSI) : 10000 DRIFT PLUG SIZE : 6.500 INCHES

SUPPLEMENTAL

EQUIREMENTS	YES	NO	REMARKS
DNESS	X		277 BHN
RPY IMPCT TST			
LAPSE TEST	X		TESTED
ROHARDNESS			
TTENING TEST			
E TEST			
INY HARDEN			
IN SIZE			
ER			

This material has been produced and tested in accordance with the requirements of applicable specifications unless otherwise listed below. We hereby certify that the above test results are representative of those contained in the records of the company. Any modification to this certification as provided by North Star Steel without the expressed written consent of North Star Steel negates the validity of this test report
North Star Steel is not responsible for the inability of this material to meet specific applications.

Signed: [signature] Date: 6/12/95
Approval: ____________

SWORN AND SUBSCRIBED TO BEFORE ME
THIS ____________ DAY ____________

____
Notary Public

MY COMMISSION EXPIRES ____________
THIS CERTIFICATE IS NOTORIZED ONLY WHEN REQUESTED

KOPPEL DIVISION
AMBRIDGE DIVISION
PHONE: 412-843-7100
FAX: 412-847-4071

KOPPEL STEEL
A Subsidiary of NS Group Inc.

TUBULAR TEST REPORT

ORDER NO: T3160

SOLD TO:
CHAMPIONS PIPE & SUPPLY, INC.
ATTN: PURCHASING DEPARTMENT
950 ECHO LANE - SUITE 215
HOUSTON, TX 77024

SHIP TO:
MITSUI TUBULAR PRODUCTS
CHAMPIONS PIPE&SUPPLY C/O TSI
ZONE 22 TRACK 786 JACINTO PORT
HOUSTON, TX

CUST P.O
30-2193-

SPECIFICATION(S): APPLICABLE PARTS API 5CT GR KS-95

O.D.	WALL	WT/FT	GRADE	QUALITY
4.5000	.290	13.04	4125	SEAMLESS HOT FINISH

CONDITION (SPECIAL): QUENCH AND TEMPER

HEAT #		C	Mn	S	P	Si	Cr	Ni	Mo	Cu	Al	SN	CB	V	CA
415941	L	.24	1.25	.009	.011	.26	1.00	.07	.27	.22	.024			.002	
	P	.24	1.22	.010	.010	.26	.98	.07	.26	.21	.023			.002	
	P	.23	1.23	.010	.011	.25	.99	.07	.26	.21	.024			.002	

LOT #	SPECIMEN	YIELD KSI	TENSILE KSI	ELONG 2"	R\A	BHN	ROCK WELL	GRAIN SIZE	MAGNAFL F S
1N	.750 " STR	119.2	131.5	21					
1S		119.6	131.8	21			27-28 Rc		
LOT 2									
1N		118.4	130.4	20					
1S		117.8	129.6	19					

MATERIAL MELTED AND MANUFACTURED IN USA

OTHER

CUSTOMER WAIVES HYDRO TEST
COLLAPSE PRESSURE - 14,702 PSI

lb

10-28-94 Laurie Burnette
DATE QUALITY ASSURANC

MATERIAL WAS NOT EXPOSED TO MERCURY DURING PROCESSING.

NO WELDING OR WELD REPAIR PERFORMED ON THIS MATERIAL.

TEST REPORT

APPENDIX G

CEMENT RECORDS

1. INJECTION WELL (CH-314)
2. DUAL ZONE MONITORING WELL (CH-315)

FCI CEMENT STAGE REPORT

FLORIDA CEMENT INC.
[illegible] PINE RIDGE RD.
FORT MYERS, FLORIDA
33908 (813) [illegible]

CUSTOMER NAME: YOUNGQUIST BROTHERS INC.
CUSTOMER REP: TROY MOORE
ENGINEER: [illegible]
WELL NAME: IW-1

DATE: 7-10-95
JOB NUMBER: 00236
STAGE NUMBER: 2
FCI REP: JOHN GERO

HOLE SIZE / DEPTH	ANNULAR VOLUME [illegible]	CASING WEIGHT LBS FT	DIFFERENTIAL PRESSURE [illegible]	DIFFERENTIAL PRESSURE MULTIPLIER	[illegible] PRESSURE	TUBING SIZE / [illegible]	[illegible]
24" / 1350	1.24	47.59	1	.2184	125	2 3/8 / 601	1

TIME / EVENT	AVERAGE RATE	WEIGHT	SYSTEM CODE	STAGE VOLUME BBLS	TOTAL VOLUME
0630 START PREFLUSH	4	8.34	N/A	10	0
0633 SWITCH TO 12%	5	12.6	1	111	10
0655 SWITCH TO FLUSH	5	8.34	N/A	1	121
656 SHUT DOWN	-	-	-	-	123

SYSTEM CODE	SYSTEM COMPOSITION	YIELD CUFT/SACK	WEIGHT	WATER GAL/SACK	TOTAL SACKS	TOTAL [illegible]
1	ASTM C-150 Type II Regular w/12% Bentonite	2.2	12.6	12.38	283	623

TOTAL SACKS OF CEMENT	TOTAL LBS OF BENTONITE [illegible]	TOTAL LBS OTHERS
283	863 P.H.	N/A

REPORT BY: JOHN E. GERO

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/21/95
Customer Rep:	TROY MOORE	Job Number:	350
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	1
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	9.97	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	N/A	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2510.0	*FEET*	THIS STAGE WAS AN ATEMPT		
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.8	*BBLS*	TO ESTABLISH A PLUG ON TOP		
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*	OF NTHE PACKER.		

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/21/95 22:35:00	START PREFLUSH	5.0	10.0	8.34	N/A	2.0	10.0
08/21/95 22:40:00	SWITCH TO CEMENT	0.5	1.0	15.6	0	2.0	11.0
08/21/95 22:40:30	SWITCH TO FLUSH	4.9	9.8	8.34	N/A	2.0	20.8
08/21/95 22:45:25	SHUT DOWN	0.0	0.0			0.0	20.8
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	1	1.18	15.6	5.2	6	5
2	2% Bentonite	0	1.35	14.8	6.4	0	0
4	4% Bentonite	0	1.52	14.2	7.59	0	0
8	8% Bentonite	0	1.86	13.3	9.99	0	0
12	12% Bentonite	0	2.20	12.6	12.38	0	0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	5	447	6	0.22
BENTONIT	0	0	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/22/95
Customer Rep:	TROY MOORE	Job Number:	351
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	2
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	9.97	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	N/A	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2510.0	*FEET*	NO FILL ON PREVIOUS STAGE		
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.8	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/22/95 01:45:00	START PREFLUSH	5.0	10.0	8.34	N/A	2.0	10.0
08/22/95 01:50:00	SWITCH TO CEMENT	0.5	1.0	15.6	0	2.0	11.0
08/22/95 01:50:30	SWITCH TO FLUSH	5.0	9.8	8.34	N/A	2.0	20.8
08/22/95 01:55:28	SHUT DOWN	0.0	0.0			0.0	20.8
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	1	1.18	15.6	5.2	6	5
2	2% Bentonite	0	1.35	14.8	6.4	0	0
4	4% Bentonite	0	1.52	14.2	7.59	0	0
8	8% Bentonite	0	1.86	13.3	9.99	0	0
12	12% Bentonite	0	2.20	12.6	12.38	0	0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	5	447	6	0.22
BENTONIT	0	0	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/22/95
Customer Rep:	TROY MOORE	Job Number:	352
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	3
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	INCHES	CASING WT:	30.0	LBS/FT	FLUSH VOL:	9.97	BBLS
HOLE DEPTH:	2514.00	FEET	HEADER PRES:	0	PSI	PREV. TAG:	N/A	FBLS
CASING SIZE:	7.88	INCHES	TUBING I.D:	2.0	INCHES	NOTES:		
WALL THICKNESS:	0.38	INCHES	DEPTH:	2510.0	FEET	NO FILL ON PREVIOUS STAGE		
CSG. DEPTH:	2514.00	FEET	TUBING VOL:	9.8	BBLS			
ANNULAR VOL:	1.28	CUFT/FT	CSG VOL.	0.1	BBLS/FT			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/22/95 05:50:00	START PREFLUSH	5.0	10.0	8.34	N/A	2.0	10.0
08/22/95 05:55:00	SWITCH TO CEMENT	0.5	1.0	15.6	0	2.0	11.0
08/22/95 05:55:30	SWITCH TO FLUSH	5.0	9.8	8.34	N/A	2.0	20.8
08/22/95 06:00:28	SHUT DOWN	0.0	0.0			0.0	20.8
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	1	1.18	15.6	5.2	6	5
2	2% Bentonite	0	1.35	14.8	6.4	0	0
4	4% Bentonite	0	1.52	14.2	7.59	0	0
8	8% Bentonite	0	1.86	13.3	9.99	0	0
12	12% Bentonite	0	2.20	12.6	12.38	0	0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	5	447	6	0.22
BENTONIT	0	0	N/A	N/A

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/22/95
Customer Rep:	TROY MOORE	Job Number:	353
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	4
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	9.97	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	N/A	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2510.0	*FEET*	NO FILL ON PREVIOUS STAGE		
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.8	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/22/95 12:00:00	START PREFLUSH	5.0	10.0	8.34	N/A	2.0	10.0
08/22/95 12:05:00	SWITCH TO CEMENT	0.4	0.8	15.6	0	2.0	10.8
08/22/95 12:05:22	SWITCH TO FLUSH	4.8	9.8	8.34	N/A	2.0	20.6
08/22/95 12:10:10	SHUT DOWN	0.0	0.0			0.0	20.6
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0.75	1.18	15.6	5.2	4	4
2	2% Bentonite	0	1.35	14.8	6.4	0	0
4	4% Bentonite	0	1.52	14.2	7.59	0	0
8	8% Bentonite	0	1.86	13.3	9.99	0	0
12	12% Bentonite	0	2.20	12.6	12.38	0	0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	4	335	4	0.17
BENTONIT	0	0	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
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(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/22/95
Customer Rep:	TROY MOORE	Job Number:	354
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	5
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	9.97	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	N/A	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2510.0	*FEET*	NO FILL ON PREVIOUS STAGE		
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.8	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/22/95 16:30:00	START PREFLUSH	5.0	10.00	8.34	N/A	2.0	10.0
08/22/95 16:35:00	SWITCH TO 12% CMT	0.4	0.75	12.6	12	2.0	10.8
08/22/95 16:35:22	SWITCH TO NEAT CMT	0.4	0.75	15.6	0	2.0	11.5
08/22/95 16:35:44	SWITCH TO FLUSH	4.8	9.80	8.34	N/A	2.0	21.3
08/22/95 16:40:32	SHUT DOWN	0.0	0.00			0.0	21.3
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0.75	1.18	15.6	5.2	4	3.6
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	0.75	2.20	12.6	12.38	4	1.9

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	5	515	8	0.26
BENTONIT	0	6	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/22/95
Customer Rep:	TROY MOORE	Job Number:	355
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	6
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	9.97	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	N/A	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2510.0	*FEET*	NO FILL ON PREVIOUS STAGE		
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.8	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/22/95 20:25:00	START PREFLUSH	5.0	10.00	8.34	N/A	2.0	10.0
08/22/95 20:30:00	SWITCH TO 12% CMT	0.4	0.75	12.6	12	2.0	10.8
08/22/95 20:30:22	SWITCH TO NEAT CMT	0.4	0.75	15.6	0	2.0	11.5
08/22/95 20:30:44	SWITCH TO FLUSH	4.8	9.80	8.34	N/A	2.0	21.3
08/22/95 20:35:32	SHUT DOWN	0.0	0.00			0.0	21.3
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0.75	1.18	15.6	5.2	4	3.6
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	0.75	2.20	12.6	12.38	4	1.9

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	5	515	8	0.26
BENTONIT	0	6	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/22/95
Customer Rep:	TROY MOORE	Job Number:	356
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	7
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	9.97	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	N/A	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2510.0	*FEET*	NO FILL ON PREVIOUS STAGE		
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.8	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/22/95 23:05:00	START PREFLUSH	5.0	10.00	8.34	N/A	2.0	10.0
08/22/95 23:10:00	SWITCH TO 12% CMT	0.4	0.75	12.6	12	2.0	10.8
08/22/95 23:10:22	SWITCH TO NEAT CMT	0.4	0.75	15.6	0	2.0	11.5
08/22/95 23:10:44	SWITCH TO FLUSH	4.8	9.80	8.34	N/A	2.0	21.3
08/22/95 23:15:32	SHUT DOWN	0.0	0.00			0.0	21.3
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0.75	1.18	15.6	5.2	4	3.6
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	0.75	2.20	12.6	12.38	4	1.9

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	5	515	8	0.26
BENTONIT	0	6	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/23/95
Customer Rep:	TROY MOORE	Job Number:	357
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	8
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	9.97	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	N/A	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2510.0	*FEET*	NO FILL ON PREVIOUS STAGE		
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.8	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/23/95 03:50:00	START PREFLUSH	5.0	10.00	8.34	N/A	2.0	10.0
08/23/95 03:55:00	SWITCH TO 12% CMT	0.4	0.75	12.6	12	2.0	10.8
08/23/95 03:55:22	SWITCH TO NEAT CMT	0.4	0.75	15.6	0	2.0	11.5
08/23/95 03:55:44	SWITCH TO FLUSH	4.8	9.80	8.34	N/A	2.0	21.3
08/23/95 04:00:32	SHUT DOWN	0.0	0.00			0.0	21.3
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0.75	1.18	15.6	5.2	4	3.6
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	0.75	2.20	12.6	12.38	4	1.9

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	5	515	8	0.26
BENTONIT	0	6	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/23/95
Customer Rep:	TROY MOORE	Job Number:	358
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	9
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	9.97	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	N/A	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2510.0	*FEET*	NO FILL ON PREVIOUS STAGE		
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.8	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/23/95 08:30:00	START PREFLUSH	5.0	10.00	8.34	N/A	2.0	10.0
08/23/95 08:35:00	SWITCH TO 12% CMT	0.4	0.75	12.6	12	2.0	10.8
08/23/95 08:35:22	SWITCH TO NEAT CMT	0.4	0.75	15.6	0	2.0	11.5
08/23/95 08:35:44	SWITCH TO FLUSH	4.8	9.80	8.34	N/A	2.0	21.3
08/23/95 08:40:32	SHUT DOWN	0.0	0.00			0.0	21.3
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0.75	1.18	15.6	5.2	4	3.6
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	0.75	2.20	12.6	12.38	4	1.9

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	5	515	8	0.26
BENTONIT	0	6	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/23/95
Customer Rep:	TROY MOORE	Job Number:	359
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	10
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	9.97	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	N/A	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2510.0	*FEET*	NO FILL ON PREVIOUS STAGE		
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.8	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/23/95 13:35:00	START PREFLUSH	5.0	10.00	8.34	N/A	2.0	10.0
08/23/95 13:40:00	SWITCH TO 12% CMT	1.5	3.00	12.6	12	2.0	13.0
08/23/95 13:41:30	SWITCH TO FLUSH	4.8	9.80	8.34	N/A	2.0	22.8
08/23/95 13:46:18	SHUT DOWN	0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0	1.18	15.6	5.2	0	0.0
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	3	2.20	12.6	12.38	17	7.7

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	8	720	17	0.36
BENTONIT	0	23	*N/A*	*N/A*

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15465 Pine Ridge Road
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Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/23/95
Customer Rep:	TROY MOORE	Job Number:	360
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	11
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	9.97	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	N/A	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2510.0	*FEET*	NO FILL ON PREVIOUS STAGE		
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.8	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/23/95 19:15:00	START PREFLUSH	4.0	10.00	8.34	N/A	2.5	10.0
08/23/95 19:19:00	SWITCH TO NEAT CMT	4.0	10.00	15.6	0	2.5	20.0
08/23/95 19:23:00	SWITCH TO FLUSH	3.9	9.80	8.34	N/A	2.5	29.8
08/23/95 19:26:52	SHUT DOWN	0.0	0.00			0.0	29.8
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	10	1.18	15.6	5.2	56	47.6
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	0	2.20	12.6	12.38	0	0.0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	48	4473	56	2.24
BENTONIT	0	0	*N/A*	*N/A*

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Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/24/95
Customer Rep:	TROY MOORE	Job Number:	361
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	12
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	9.97	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	2530	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2510.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.8	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/24/95 08:30:00	START PREFLUSH	4.0	10.00	8.34	N/A	2.5	10.0
08/24/95 08:34:00	SWITCH TO 12% CMT	2.0	10.00	12.6	12	5.0	20.0
08/24/95 08:36:00	SWITCH TO NEAT CEMENT	8.0	40.00	15.6	0	5.0	60.0
08/24/95 08:44:00	SWITCH TO FLUSH	2.0	9.80	8.34	N/A	4.9	69.8
08/24/95 08:46:00	SHUT DOWN	0.0	0.00			0.0	69.8
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	40	1.18	15.6	5.2	225	190.3
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	10	2.20	12.6	12.38	56	25.5

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	216	20290	281	10.15
BENTONIT	1	78	*N/A*	*N/A*

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Florida Cement, Inc.
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Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/24/95
Customer Rep:	TROY MOORE	Job Number:	362
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	13
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	9.97	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	2525	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2510.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.8	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/24/95 15:00:00	START PREFLUSH	4.0	10.00	8.34	N/A	2.5	10.0
08/24/95 15:04:00	SWITCH TO NEAT CEMENT	10.0	50.00	15.6	0	5.0	60.0
08/24/95 15:14:00	SWITCH TO FLUSH	2.0	9.80	8.34	N/A	4.9	69.8
08/24/95 15:16:00	SHUT DOWN	0.0	0.00			0.0	69.8
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	50	1.18	15.6	5.2	281	237.9
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	0	2.20	12.6	12.38	0	0.0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	238	22364	281	11.18
BENTONIT	0	0	*N/A*	*N/A*

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Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/24/95
Customer Rep:	TROY MOORE	Job Number:	363
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	14
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	INCHES	CASING WT:	30.0	LBS/FT	FLUSH VOL:	9.97	BBLS
HOLE DEPTH:	2514.00	FEET	HEADER PRES:	0	PSI	PREV. TAG:	2516	FBLS
CASING SIZE:	7.88	INCHES	TUBING I.D:	2.0	INCHES	NOTES:		
WALL THICKNESS:	0.38	INCHES	DEPTH:	2510.0	FEET			
CSG. DEPTH:	2514.00	FEET	TUBING VOL:	9.8	BBLS			
ANNULAR VOL:	1.28	CUFT/FT	CSG VOL.	0.1	BBLS/FT			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/24/95 23:10:00	START PREFLUSH	4.0	10.00	8.34	N/A	2.5	10.0
08/24/95 23:14:00	SWITCH TO NEAT CEMENT	10.0	50.00	15.6	0	5.0	60.0
08/24/95 23:24:00	SWITCH TO FLUSH	2.0	9.80	8.34	N/A	4.9	69.8
08/24/95 23:26:00	SHUT DOWN	0.0	0.00			0.0	69.8
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield Cu Ft/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	50	1.18	15.6	5.2	281	237.9
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	0	2.20	12.6	12.38	0	0.0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	238	22364	281	11.18
BENTONIT	0	0	N/A	N/A

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
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(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/25/95
Customer Rep:	TROY MOORE	Job Number:	364
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	15
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	INCHES	CASING WT:	30.0	LBS/FT	FLUSH VOL:	12.20	BBLS
HOLE DEPTH:	2514.00	FEET	HEADER PRES:	0	PSI	PREV. TAG:	2468	FBLS
CASING SIZE:	7.88	INCHES	TUBING I.D:	2.0	INCHES	NOTES:		
WALL THICKNESS:	0.38	INCHES	DEPTH:	2466.0	FEET			
CSG. DEPTH:	2514.00	FEET	TUBING VOL:	9.6	BBLS			
ANNULAR VOL:	1.28	CUFT/FT	CSG VOL.	0.1	BBLS/FT			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/25/95 09:30:00	START PREFLUSH	2.0	10.00	8.34	N/A	5.0	10.0
08/25/95 09:32:00	SWITCH TO NEAT CEMENT	4.0	20.00	15.6	0	5.0	30.0
08/25/95 09:36:00	SWITCH TO FLUSH	1.9	9.60	8.34	N/A	5.0	39.6
08/25/95 09:37:55	SHUT DOWN	0.0	0.00			0.0	39.6
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	20	1.18	15.6	5.2	112	95.2
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	0	2.20	12.6	12.38	0	0.0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	95	8946	112	4.47
BENTONIT	0	0	N/A	N/A

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
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Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/25/95
Customer Rep:	TROY MOORE	Job Number:	365
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	16
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	13.12	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	2450	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2448.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.5	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/25/95 14:28:00	START PREFLUSH	2.0	10.00	8.34	N/A	5.0	10.0
08/25/95 14:30:00	SWITCH TO NEAT CEMENT	5.0	25.00	15.6	0	5.0	35.0
08/25/95 14:35:00	SWITCH TO FLUSH	1.9	9.50	8.34	N/A	5.0	44.5
08/25/95 14:36:54	SHUT DOWN	0.0	0.00			0.0	44.5
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	25	1.18	15.6	5.2	140	119.0
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	0	2.20	12.6	12.38	0	0.0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	119	11182	140	5.59
BENTONIT	0	0	*N/A*	*N/A*

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Florida Cement, Inc.
15465 Pine Ridge Road
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Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/25/95
Customer Rep:	TROY MOORE	Job Number:	366
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	17
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	14.29	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	2427	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2425.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.4	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/25/95 14:28:00	START PREFLUSH	2.0	10.00	8.34	N/A	5.0	10.0
08/25/95 14:30:00	SWITCH TO NEAT CEMENT	4.0	20.00	15.6	0	5.0	30.0
08/25/95 14:34:00	SWITCH TO FLUSH	1.9	9.50	8.34	N/A	5.0	39.5
08/25/95 14:35:54	SHUT DOWN	0.0	0.00			0.0	39.5
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	20	1.18	15.6	5.2	112	95.2
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	0	2.20	12.6	12.38	0	0.0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	95	8946	112	4.47
BENTONIT	0	0	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/25/95
Customer Rep:	TROY MOORE	Job Number:	367
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	18
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	15.91	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	2395	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2393.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.3	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/25/95 23:00:00	START PREFLUSH	2.0	10.00	8.34	N/A	5.0	10.0
08/25/95 23:02:00	SWITCH TO NEAT CEMENT	10.0	50.00	15.6	0	5.0	60.0
08/25/95 23:12:00	SWITCH TO FLUSH	1.9	9.30	8.34	N/A	5.0	69.3
08/25/95 23:13:52	SHUT DOWN	0.0	0.00			0.0	69.3
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	50	1.18	15.6	5.2	281	237.9
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	0	2.20	12.6	12.38	0	0.0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	238	22364	281	11.18
BENTONIT	0	0	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/26/95
Customer Rep:	TROY MOORE	Job Number:	368
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	19
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	17.33	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	2367	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2365.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.2	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/26/95 08:30:00	START PREFLUSH	2.0	10.00	8.34	N/A	5.0	10.0
08/26/95 08:32:00	SWITCH TO 12% CMT	20.0	100.00	12.6	12	5.0	110.0
08/26/95 08:52:00	SWITCH TO FLUSH	1.8	9.20	8.34	N/A	5.0	119.2
08/26/95 08:53:50	SHUT DOWN	0.0	0.00			0.0	119.2
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0	1.18	15.6	5.2	0	0.0
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	100	2.20	12.6	12.38	561	255.2

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	255	23991	561	12.00
BENTONIT	8	777	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/26/95
Customer Rep:	TROY MOORE	Job Number:	369
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	20
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	19.87	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	2317	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2315.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	9.0	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/26/95 17:58:00	START PREFLUSH	2.0	10.00	8.34	N/A	5.0	10.0
08/26/95 18:00:00	SWITCH TO NEAT CEMENT	20.0	100.00	12.6	12	5.0	110.0
08/26/95 18:20:00	SWITCH TO FLUSH	1.8	9.00	8.34	N/A	5.0	119.0
08/26/95 18:21:48	SHUT DOWN	0.0	0.00			0.0	119.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0	1.18	15.6	5.2	0	0.0
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	100	2.20	12.6	12.38	561	255.2

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	255	23991	561	12.00
BENTONIT	8	777	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/27/95
Customer Rep:	TROY MOORE	Job Number:	370
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	21
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	24.03	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	2235	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2233.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	8.7	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/27/95 01:00:00	START PREFLUSH	2.0	10.00	8.34	N/A	5.0	10.0
08/27/95 01:02:00	SWITCH TO NEAT CEMENT	20.0	100.00	12.6	12	5.0	110.0
08/27/95 01:22:00	SWITCH TO FLUSH	1.8	8.70	8.34	N/A	5.0	118.7
08/27/95 01:23:45	SHUT DOWN	0.0	0.00			0.0	118.7
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0	1.18	15.6	5.2	0	0.0
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	100	2.20	12.6	12.38	561	255.2

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	255	23991	561	12.00
BENTONIT	8	777	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/27/95
Customer Rep:	TROY MOORE	Job Number:	371
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	22
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	26.31	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	2190	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2188.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	8.5	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/27/95 07:35:00	START PREFLUSH	2.0	10.00	8.34	N/A	5.0	10.0
08/27/95 07:37:00	SWITCH TO NEAT CEMENT	39.0	200.00	12.6	12	5.1	210.0
08/27/95 08:16:00	SWITCH TO FLUSH	1.7	8.50	8.34	N/A	5.0	218.5
08/27/95 08:17:42	SHUT DOWN	0.0	0.00			0.0	218.5
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield Cuft/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0	1.18	15.6	5.2	0	0.0
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	200	2.20	12.6	12.38	1123	510.4

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	510	47981	1123	23.99
BENTONIT	16	1555	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/27/95
Customer Rep:	TROY MOORE	Job Number:	372
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	23
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	28.85	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	2140	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2138.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	8.3	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/27/95 15:28:00	START PREFLUSH	2.0	10.00	8.34	N/A	5.0	10.0
08/27/95 15:30:00	SWITCH TO NEAT CEMENT	20.0	100.00	12.6	12	5.0	110.0
08/27/95 15:50:00	SWITCH TO FLUSH	1.6	8.30	8.34	N/A	5.1	118.3
08/27/95 15:51:37	SHUT DOWN	0.0	0.00			0.0	118.3
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0	1.18	15.6	5.2	0	0.0
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	100	2.20	12.6	12.38	561	255.2

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	255	23991	561	12.00
BENTONIT	8	777	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/28/95
Customer Rep:	TROY MOORE	Job Number:	373
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	24
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	30.07	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	2116	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2114.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	8.2	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/28/95 00:28:00	START PREFLUSH	2.0	10.00	8.34	N/A	5.0	10.0
08/28/95 00:30:00	SWITCH TO NEAT CEMENT	10.0	50.00	12.6	12	5.0	60.0
08/28/95 00:40:00	SWITCH TO FLUSH	1.6	8.20	8.34	N/A	5.0	68.2
08/28/95 00:41:38	SHUT DOWN	0.0	0.00			0.0	68.2
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0	1.18	15.6	5.2	0	0.0
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	50	2.20	12.6	12.38	281	127.6

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	128	11995	281	6.00
BENTONIT	4	389	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/28/95
Customer Rep:	TROY MOORE	Job Number:	374
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	25
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	30.88	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	2100	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	2098.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	8.2	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/28/95 06:45:00	START PREFLUSH	2.0	10.00	8.34	N/A	5.0	10.0
08/28/95 08:47:00	SWITCH TO NEAT CEMENT	20.0	100.00	12.6	12	5.0	110.0
08/28/95 09:07:00	SWITCH TO FLUSH	1.6	8.20	8.34	N/A	5.0	118.2
08/28/95 09:08:38	SHUT DOWN	0.0	0.00			0.0	118.2
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0	1.18	15.6	5.2	0	0.0
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	100	2.20	12.6	12.38	561	255.2

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	255	23991	561	12.00
BENTONIT	8	777	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/28/95
Customer Rep:	TROY MOORE	Job Number:	375
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	26
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	43.32	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	1855	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	1853.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	7.2	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/28/95 18:30:00	START PREFLUSH	2.0	10.00	8.34	N/A	5.0	10.0
08/28/95 18:32:00	SWITCH TO NEAT CEMENT	20.0	100.00	12.6	12	5.0	110.0
08/28/95 18:52:00	SWITCH TO FLUSH	1.4	7.20	8.34	N/A	5.1	117.2
08/28/95 18:53:25	SHUT DOWN	0.0	0.00			0.0	117.2
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0	1.18	15.6	5.2	0	0.0
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	100	2.20	12.6	12.38	561	255.2

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	255	23991	561	12.00
BENTONIT	8	777	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/29/95
Customer Rep:	TROY MOORE	Job Number:	376
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	27
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	52.45	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	1675	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	1673.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	6.5	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/29/95 00:30:00	START PREFLUSH	2.0	10.00	8.34	N/A	5.0	10.0
08/29/95 00:32:00	SWITCH TO NEAT CEMENT	20.0	100.00	12.6	12	5.0	110.0
08/29/95 00:52:00	SWITCH TO FLUSH	1.3	6.50	8.34	N/A	4.9	116.5
08/29/95 00:53:20	SHUT DOWN	0.0	0.00			0.0	116.5
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0	1.18	15.6	5.2	0	0.0
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	100	2.20	12.6	12.38	561	255.2

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	255	23991	561	12.00
BENTONIT	8	777	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/29/95
Customer Rep:	TROY MOORE	Job Number:	377
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	28
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	58.64	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	1553	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	1551.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	6.0	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/29/95 07:30:00	START PREFLUSH	2.0	10.00	8.34	N/A	5.0	10.0
08/29/95 07:32:00	SWITCH TO NEAT CEMENT	27.0	150.00	12.6	12	5.6	160.0
08/29/95 07:59:00	SWITCH TO FLUSH	1.2	6.00	8.34	N/A	5.0	166.0
08/29/95 08:00:12	SHUT DOWN	0.0	0.00			0.0	166.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0	1.18	15.6	5.2	0	0.0
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	150	2.20	12.6	12.38	842	382.8

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	383	35986	842	17.99
BENTONIT	12	1166	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/29/95
Customer Rep:	TROY MOORE	Job Number:	378
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	29
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	67.93	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	1370	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	1368.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	5.3	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/29/95 14:40:00	START PREFLUSH	2.0	10.00	8.34	N/A	5.0	10.0
08/29/95 14:42:00	SWITCH TO NEAT CEMENT	20.0	100.00	12.6	12	5.0	110.0
08/29/95 15:02:00	SWITCH TO FLUSH	1.2	6.00	8.34	N/A	5.1	116.0
08/29/95 15:03:11	SHUT DOWN	0.0	0.00			0.0	116.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0	1.18	15.6	5.2	0	0.0
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	100	2.20	12.6	12.38	561	255.2

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	255	23991	561	12.00
BENTONIT	8	777	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/30/95
Customer Rep:	TROY MOORE	Job Number:	379
Engineering Firm:	VIRO GROUP	Casing Size	7 7/8
Engineer:	DAMON	Stage Number:	30
Well Name:	IW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	17.25	*INCHES*	CASING WT:	30.0	*LBS/FT*	FLUSH VOL:	89.35	BBLS
HOLE DEPTH:	2514.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	948	FBLS
CASING SIZE:	7.88	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.38	*INCHES*	DEPTH:	946.0	*FEET*			
CSG. DEPTH:	2514.00	*FEET*	TUBING VOL:	3.7	*BBLS*			
ANNULAR VOL:	1.28	*CUFT/FT*	CSG VOL.	0.1	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/30/95 09:00:00	START PREFLUSH	2.0	10.00	8.34	N/A	5.0	10.0
08/30/95 09:02:00	SWITCH TO NEAT CEMENT	40.0	200.00	12.6	12	5.0	210.0
08/30/95 09:42:00	SWITCH TO FLUSH	0.2	0.75	8.34	N/A	5.0	210.8
08/30/95 09:42:09	SHUT DOWN	0.0	0.00			0.0	210.8
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	0	1.18	15.6	5.2	0	0.0
2	2% Bentonite	0	1.35	14.8	6.4	0	0.0
4	4% Bentonite	0	1.52	14.2	7.59	0	0.0
8	8% Bentonite	0	1.86	13.3	9.99	0	0.0
12	12% Bentonite	200	2.20	12.6	12.38	1123	510.4

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	510	47981	1123	23.99
BENTONIT	16	1555	*N/A*	*N/A*

FCI CEMENT STAGE REPORT

FLORIDA CEMENTING CO.
15485 PINE RIDGE RD.
FORT MYERS, FLORIDA
34908 (813) 481-2411

CUSTOMER NAME: YOUNGQUIST BROTHERS INC.
CUSTOMER REP: Jay Swartzentruber
ENGINEERING FIRM: Used Group
ENGINEER: Cliff
WELL NAME: OMW-1

DATE: 7-17-95
JOB NUMBER: 00240
CASING SIZE: 24"
STAGE NUMBER: 1
FCI REP: John Gero

HOLE SIZE DEPTH	ANNULAR VOLUME CU FT	CASING WEIGHT LBS FT	DIFFERENTIAL PRESSURE MULTIPLIER	MAX HOLE PRESSURE		SHOE JOINT
36" 204'	3.927	63.41	1 .1768 2 .3328	51	2 3/8 185'	9

TIME / EVENT	AVERAGE RATE	WEIGHT	RETURN FLOW	STAGE VOLUME	TOTAL VOLUME
1514 START PRE FLUSH	3	8.34	n/a	10	0
1517 SWITCH TO 12% CMT	5.7	12.6	1	90	10
1533 SWITCH TO NEAT	5.5	15.6	2	85	100
1549 SWITCH TO FLUSH	6	8.34	n/a	8	185
1551 SHUT DOWN	—	—	—	—	193

SYSTEM CODE	SYSTEM COMPOSITION	YIELD CUFT SACK	WEIGHT	GAL WATER GAL SACK	MIX PSI	TOTAL CUFT
1	ASTM C-150 Type II Reg. W/12% BENTONITE	2.2	12.6	12.39	230	505
2	ASTM C-150 Type II Reg. NEAT	1.18	15.6	6.2	404	477

TOTAL SACKS OF CEMENT	TOTAL LBS OF BENTONITE USED	TOTAL LBS OTHER
634	700	n/a

REPORT BY JOHN E. GERO

CEMENT STAGE REPORT

FCI

FLORIDA CEMENT INC.
5465 PINE RIDGE RD.
FORT MYERS, FLORIDA
33908 (813) 489-4444

CUSTOMER NAME: YOUNGQUIST BROTHERS INC.
CUSTOMER REP: Jay Schwartman Tracker
ENGINEERING FIRM: Vero Group
ENGINEER: Damon
WELL NAME: CH 315

DATE: 7-20-95
JOB NUMBER: 00240
CASING SIZE: 18"
STAGE NUMBER: 1
FCI REP: John Gero

HOLE SIZE / DEPTH	ANNULAR VOLUME CUFT/FT	CASING WEIGHT LBS/FT	DIFFERENTIAL PRESSURE SYS CODE	DIFFERENTIAL PRESSURE MULTIPIER	MAX HEADER PRESSURE	TUBING SIZE / DEPTH	BBLS FLUSH
24 / 555	1.38	47	1	.182	135	2⅞	8
			2	.338		540	

TIME / EVENT	AVERAGE RATE BBL/MIN	WEIGHT LBS/GAL	SYSTEM CODE	STAGE VOLUME BBLS	TOTAL VOLUME BBLS
1801 Start Preflush	5	8.34	N/A	20	0
1805 Switch To 12%	6	12.6	1	105	20
1823 Switch To Neat	6	15.6	2	48	125
1831 Switch To Flush	4	8.34	N/A	8	173
1933 Shut Down	—	—	—	—	181

SYSTEM CODE	SYSTEM COMPOSITION	YIELD CUFT/SACK	WEIGHT LBS/GAL	MIX WATER GAL/SACK	TOTAL SACKS	TOTAL CUFT
1	ASTM C-150 Type II Reg w/ 12% Bentonite	2.2	12.6	12.38	268	590
2	ASTM C-150 Type II Reg Neat	1.18	15.6	5.2	228	270

TOTAL SACKS OF CEMENT	TOTAL LBS OF BENTONITE USED	TOTAL LBS OTHER:
296	816	N/A

REPORT BY John E. Gero

FCI

CEMENT STAGE REPORT

FLORIDA CEMENT INC.
5465 PINE RIDGE RD
FORT MYERS, FLORIDA
33908 (813) 489-4442

CUSTOMER NAME: YOUNGQUIST BROTHERS INC.
CUSTOMER REP: [illegible]
ENGINEERING FIRM: [illegible]
ENGINEER: [illegible]
WELL NAME: [illegible]

DATE: 7-28-95
JOB NUMBER: 0301
CASING SIZE: 9 5/8
STAGE NUMBER: 1
FCI REP: John Gero

HOLE SIZE / DEPTH	ANNULAR VOLUME CUFT/FT	CASING WEIGHT LBS/FT	DIFFERENTIAL PRESSURE SYS CODE	DIFFERENTIAL PRESSURE MULTIPIER	MAX HEADER PRESSURE	TUBING SIZE / DEPTH	BBLS FLUSH
17.5	1.1	48.7	12	.1872	250	2 3/8	8
1210'			0	.3474		1180'	

TIME / EVENT	AVERAGE RATE BBLS/MIN	WEIGHT LBS/GAL	SYSTEM CODE	STAGE VOLUME BBLS	TOTAL VOLUME BBLS
1837 Start Pre Flush	4	8.34	n/a	20	0
1837 Switch to Cement	5	12 [illegible]	12	180	20
2013 Switch to Neat	5	15 [illegible]	0	30	200
2019 Switch to Flush	5	8.34	n/a	8	230
2021 Shut Down					238

SYSTEM CODE	SYSTEM COMPOSITION	YIELD CUFT/SACK	WEIGHT LBS/GAL	MIX WATER GAL/SACK	TOTAL SACKS	TOTAL CUFT
12	ASTM [illegible] w/ 12% [illegible]		12.4	12.38	459	1011
0	ASTM [illegible] Neat	1.18	15.6	5.2	143	168

TOTAL SACKS OF CEMENT	TOTAL LBS OF BENTONITE USED	TOTAL LBS OTHER:
602	[illegible]	[illegible]

REPORT BY John E. Gero

FCI CEMENT STAGE REPORT

FLORIDA CEMENT INC
[illegible] PINE RIDGE RD
FORT MYERS, FLORIDA
33908 (813) 489-[illegible]

CUSTOMER NAME: YOUNGQUIST BROTHERS INC.
CUSTOMER REP: Troy [illegible]
ENGINEERING FIRM: [illegible] Group
ENGINEER: [illegible]
WELL NAME: [illegible]

DATE: 7-29-95
JOB NUMBER: 302
CASING SIZE: 9 5/8
STAGE NUMBER: 2
FCI REP: John Gero

HOLE SIZE / DEPTH	ANNULAR VOLUME CUFT/FT	CASING WEIGHT LBS/FT	DIFFERENTIAL PRESSURE FXS CODE	MULTIPIER	MAX HEADER PRESSURE	TUBING SIZE / DEPTH	BBLS FLUSH
17.5 / 220	1.1	48.7	12	.1892	100	2 3/8 / 610	.5

TIME / EVENT	AVERAGE RATE BBLS/MIN	WEIGHT LBS/GAL	SYSTEM CODE	STAGE VOLUME BBLS	TOTAL VOLUME BBLS
1530 Start Pre[illegible]	[illegible]	[illegible]	n/a	10	0
[illegible]35 Switch to [illegible]	[illegible]	14.[illegible]	12	107	10
[illegible]7 Switch to [illegible]	[illegible]	[illegible]	n/a	.5	117
[illegible]7 Shut Down				--	117.5

SYSTEM CODE	SYSTEM COMPOSITION	YIELD CUFT/SACK	WEIGHT LBS/GAL	MIX WATER GAL/SACK	TOTAL SACKS	TOTAL CUFT
12	ASTM [illegible] w/[illegible]	[illegible]	[illegible]	12.35	273	601

TOTAL SACKS OF CEMENT	TOTAL LBS OF BENTONITE USED	TOTAL LBS OTHER:
273	0	[illegible]

REPORT BY John E. Gero

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/12/95
Customer Rep:	TROY MOORE	Job Number:	301
Engineering Firm:	VIRO GROUP	Casing Size	4 1/2
Engineer:	DAMON	Stage Number:	1
Well Name:	MW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	8.50	*INCHES*	CASING WT:	13.0	*LBS/FT*	FLUSH VOL:	7.07	BBLS
HOLE DEPTH:	1850.00	*FEET*	HEADER PRES:	400	*PSI*	PREV. TAG:	N/A	FBLS
CASING SIZE:	4.50	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:	THIS STAGE	
WALL THICKNESS:	0.29	*INCHES*	DEPTH:	1820.0	*FEET*		PUMPED THROUGH TRIMMIE	
CSG. DEPTH:	1820.00	*FEET*	TUBING VOL:	7.1	*BBLS*		PIPE, ON THE OUTSIDE OF THE	
ANNULAR VOL:	0.28	*CUFT/FT*	CSG VOL	0.0	*BBLS/FT*		CASING.	

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/12/95 23:00:00	START PREFLUSH	2.0	3.0	8.34	N/A	1.5	3.0
08/12/95 23:02:00	SWITCH TO CEMENT	1.0	1.5	15.6	0	1.5	4.5
08/12/95 23:03:00	SWITCH TO FLUSH	2.0	7.8	8.34	N/A	3.9	12.3
08/12/95 23:05:00	SHUT DOWN	0.0	0.0			0.0	12.3
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	1.5	1.18	15.6	5.2	8	7
2	2% Bentonite	0	1.35	14.8	6.4	0	0
4	4% Bentonite	0	1.52	14.2	7.59	0	0
8	8% Bentonite	0	1.86	13.3	9.99	0	0
12	12% Bentonite	0	2.20	12.6	12.38	0	0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	7	671	8	0.34
BENTONITE	0	0	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS
Customer Rep:	TROY MOORE
Engineering Firm:	VIRO GROUP
Engineer:	DAMON
Well Name:	MW-1

Date:	8/13/95
Job Number:	302
Casing Size	4 1/2
Stage Number:	2
FCI Rep:	JOHN GERO

HOLE SIZE:	8.50	INCHES	CASING WT:	13.0	LBS/FT	FLUSH VOL:	7.07	BBLS
HOLE DEPTH:	1850.00	FEET	HEADER PRES:	0	PSI	PREV. TAG:	N/A	FBLS
CASING SIZE:	4.50	INCHES	TUBING I.D:	2.0	INCHES	NOTES:	NO FILL FROM FIRST	
WALL THICKNESS:	0.29	INCHES	DEPTH:	1820.0	FEET		STAGE, SAND WAS INSTALLED	
CSG. DEPTH:	1820.00	FEET	TUBING VOL:	7.1	BBLS		TO PROTECT LOWER FORMATION	
ANNULAR VOL:	0.28	CUFT/FT	CSG VOL.	0.0	BBLS/FT			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/13/95 21:30:00	START PREFLUSH	2.0	3.0	8.34	N/A	1.5	3.0
08/13/95 21:32:00	SWITCH TO CEMENT	1.0	1.5	15.6	0	1.5	4.5
08/13/95 21:33:00	SWITCH TO FLUSH	2.0	7.8	8.34	N/A	3.9	12.3
08/13/95 21:35:00	SHUT DOWN	0.0	0.0			0.0	12.3
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	1.5	1.18	15.6	5.2	8	7
2	2% Bentonite	0	1.35	14.8	6.4	0	0
4	4% Bentonite	0	1.52	14.2	7.59	0	0
8	8% Bentonite	0	1.86	13.3	9.99	0	0
12	12% Bentonite	0	2.20	12.6	12.38	0	0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	7	671	8	0.34
BENTONITE	0	0	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/14/95
Customer Rep:	TROY MOORE	Job Number:	303
Engineering Firm:	VIRO GROUP	Casing Size	4 1/2
Engineer:	GERRY	Stage Number:	3
Well Name:	MW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	8.50	*INCHES*	CASING WT:	13.0	*LBS/FT*	FLUSH VOL:	7.60	BBLS
HOLE DEPTH:	1850.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	1780	FBLS
CASING SIZE:	4.50	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.29	*INCHES*	DEPTH:	1780.0	*FEET*			
CSG. DEPTH:	1820.00	*FEET*	TUBING VOL:	6.9	*BBLS*			
ANNULAR VOL:	0.28	*CUFT/FT*	CSG VOL.	0.0	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/14/95 08:15:00	START PREFLUSH	2.0	3.0	8.34	N/A	1.5	3.0
08/14/95 08:17:00	SWITCH TO CEMENT	8.0	25.0	15.6	0	3.1	28.0
08/14/95 08:25:00	SWITCH TO FLUSH	2.0	7.0	8.34	N/A	3.5	35.0
08/14/95 08:27:00	SHUT DOWN	0.0	0.0			0.0	35.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	25	1.18	15.6	5.2	140	119
2	2% Bentonite	0	1.35	14.8	6.4	0	0
4	4% Bentonite	0	1.52	14.2	7.59	0	0
8	8% Bentonite	0	1.86	13.3	9.99	0	0
12	12% Bentonite	0	2.20	12.6	12.38	0	0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	119	11182	140	5.59
BENTONITE	0	0	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/14/95
Customer Rep:	TROY MOORE	Job Number:	304
Engineering Firm:	VIRO GROUP	Casing Size	4 1/2
Engineer:	GERRY	Stage Number:	4
Well Name:	MW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	8.50	INCHES	CASING WT:	13.0	LBS/FT	FLUSH VOL:	9.64	BBLS
HOLE DEPTH:	1850.00	FEET	HEADER PRES:	0	PSI	PREV. TAG:	1627	FBLS
CASING SIZE:	4.50	INCHES	TUBING I.D:	2.0	INCHES	NOTES:		
WALL THICKNESS:	0.29	INCHES	DEPTH:	1627.0	FEET			
CSG. DEPTH:	1820.00	FEET	TUBING VOL:	6.3	BBLS			
ANNULAR VOL:	0.28	CUFT/FT	CSG VOL.	0.0	BBLS/FT			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/14/95 15:30:00	START PREFLUSH	2.0	3.0	8.34	N/A	1.5	3.0
08/14/95 15:32:00	SWITCH TO CEMENT	8.0	25.0	15.6	0	3.1	28.0
08/14/95 15:40:00	SWITCH TO FLUSH	2.0	7.0	8.34	N/A	3.5	35.0
08/14/95 15:42:00	SHUT DOWN	0.0	0.0			0.0	35.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	25	1.18	15.6	5.2	140	119
2	2% Bentonite	0	1.35	14.8	6.4	0	0
4	4% Bentonite	0	1.52	14.2	7.59	0	0
8	8% Bentonite	0	1.86	13.3	9.99	0	0
12	12% Bentonite	0	2.20	12.6	12.38	0	0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	119	11182	140	5.59
BENTONITE	0	0	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/15/95
Customer Rep:	TROY MOORE	Job Number:	305
Engineering Firm:	VIRO GROUP	Casing Size	4 1/2
Engineer:	GERRY	Stage Number:	5
Well Name:	MW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	8.50	*INCHES*	CASING WT:	13.0	*LBS/FT*	FLUSH VOL:	10.64	BBLS
HOLE DEPTH:	1850.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	1552	FBLS
CASING SIZE:	4.50	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.29	*INCHES*	DEPTH:	1552.0	*FEET*			
CSG. DEPTH:	1820.00	*FEET*	TUBING VOL:	6.0	*BBLS*			
ANNULAR VOL:	0.28	*CUFT/FT*	CSG VOL.	0.0	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/15/95 09:30:00	START PREFLUSH	2.0	3.0	8.34	N/A	1.5	3.0
08/15/95 09:32:00	SWITCH TO CEMENT	8.0	25.0	15.6	0	3.1	28.0
08/15/95 09:40:00	SWITCH TO FLUSH	1.5	6.2	8.34	N/A	4.0	34.2
08/15/95 09:41:32	SHUT DOWN	0.0	0.0			0.0	34.2
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	25	1.18	15.6	5.2	140	119
2	2% Bentonite	0	1.35	14.8	6.4	0	0
4	4% Bentonite	0	1.52	14.2	7.59	0	0
8	8% Bentonite	0	1.86	13.3	9.99	0	0
12	12% Bentonite	0	2.20	12.6	12.38	0	0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	119	11182	140	5.59
BENTONITE	0	0	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/15/95
Customer Rep:	TROY MOORE	Job Number:	306
Engineering Firm:	VIRO GROUP	Casing Size	4 1/2
Engineer:	GERRY	Stage Number:	6
Well Name:	MW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	8.50	*INCHES*	CASING WT:	13.0	*LBS/FT*	FLUSH VOL:	11.11	BBLS
HOLE DEPTH:	1850.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	1517	FBLS
CASING SIZE:	4.50	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.29	*INCHES*	DEPTH:	1517.0	*FEET*			
CSG. DEPTH:	1820.00	*FEET*	TUBING VOL:	5.9	*BBLS*			
ANNULAR VOL:	0.28	*CUFT/FT*	CSG VOL.	0.0	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/15/95 16:30:00	START PREFLUSH	2.0	3.0	8.34	N/A	1.5	3.0
08/15/95 16:32:00	SWITCH TO CEMENT	7.0	35.0	15.6	0	5.0	38.0
08/15/95 16:39:00	SWITCH TO FLUSH	1.2	6.0	8.34	N/A	5.0	44.0
08/15/95 16:40:12	SHUT DOWN	0.0	0.0			0.0	44.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	35	1.18	15.6	5.2	197	167
2	2% Bentonite	0	1.35	14.8	6.4	0	0
4	4% Bentonite	0	1.52	14.2	7.59	0	0
8	8% Bentonite	0	1.86	13.3	9.99	0	0
12	12% Bentonite	0	2.20	12.6	12.38	0	0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	167	15655	197	7.83
BENTONITE	0	0	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/15/95
Customer Rep:	TROY MOORE	Job Number:	307
Engineering Firm:	VIRO GROUP	Casing Size	4 1/2
Engineer:	GERRY	Stage Number:	7
Well Name:	MW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	8.50	*INCHES*	CASING WT:	13.0	*LBS/FT*	FLUSH VOL:	11.36	BBLS
HOLE DEPTH:	1850.00	*FEET*	HEADER PRES:	0	*PSI*	PREV. TAG:	1498	FBLS
CASING SIZE:	4.50	*INCHES*	TUBING I.D:	2.0	*INCHES*	NOTES:		
WALL THICKNESS:	0.29	*INCHES*	DEPTH:	1498.0	*FEET*			
CSG. DEPTH:	1820.00	*FEET*	TUBING VOL:	5.8	*BBLS*			
ANNULAR VOL:	0.28	*CUFT/FT*	CSG VOL.	0.0	*BBLS/FT*			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/15/95 22:05:00	START PREFLUSH	2.0	3.0	8.34	N/A	1.5	3.0
08/15/95 22:07:00	SWITCH TO CEMENT	6.6	33.0	15.6	0	5.0	36.0
08/15/95 22:13:35	SWITCH TO FLUSH	1.2	6.0	8.34	N/A	5.0	42.0
08/15/95 22:14:47	SHUT DOWN	0.0	0.0			0.0	42.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	33	1.18	15.6	5.2	185	157
2	2% Bentonite	0	1.35	14.8	6.4	0	0
4	4% Bentonite	0	1.52	14.2	7.59	0	0
8	8% Bentonite	0	1.86	13.3	9.99	0	0
12	12% Bentonite	0	2.20	12.6	12.38	0	0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	157	14760	185	7.38
BENTONITE	0	0	*N/A*	*N/A*

FCI

Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

Cement Stage Report

Customer Name:	YOUNGQUIST BROTHERS	Date:	8/16/95
Customer Rep:	TROY MOORE	Job Number:	308
Engineering Firm:	VIRO GROUP	Casing Size	4 1/2
Engineer:	GERRY	Stage Number:	8
Well Name:	MW-1	FCI Rep:	JOHN GERO

HOLE SIZE:	8.50	INCHES	CASING WT:	13.0	LBS/FT	FLUSH VOL:	13.34	BBLS
HOLE DEPTH:	1850.00	FEET	HEADER PRES:	0	PSI	PREV. TAG:	1350	FBLS
CASING SIZE:	4.50	INCHES	TUBING I.D:	2.0	INCHES	NOTES:		
WALL THICKNESS:	0.29	INCHES	DEPTH:	1350.0	FEET			
CSG. DEPTH:	1820.00	FEET	TUBING VOL:	5.2	BBLS			
ANNULAR VOL:	0.28	CUFT/FT	CSG VOL.	0.0	BBLS/FT			

TIME	Event	Elapsed Time/Min	Stage Vol BBls	Weight Lbs/Gal	System Code	Average Bbls/Min	Running Total Bbls
08/16/95 08:23:00	START PREFLUSH	2.0	3.0	8.34	N/A	1.5	3.0
08/16/95 08:25:00	SWITCH TO CEMENT	1.0	1.5	15.6	0	1.5	4.5
08/16/95 08:26:00	SWITCH TO FLUSH	1.1	5.5	8.34	N/A	5.1	10.0
08/16/95 08:27:05	SHUT DOWN	0.0	0.0			0.0	10.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0
		0.0				0.0	0.0

Code	System Composition	Total Bbls	Yield CuFt/Sack	Weight Lbs/Gal	Mix WTR Gal/Sack	Total Cu Ft	Total Sacks
0	Neat Cement	1.5	1.18	15.6	5.2	8	7
2	2% Bentonite	0	1.35	14.8	6.4	0	0
4	4% Bentonite	0	1.52	14.2	7.59	0	0
8	8% Bentonite	0	1.86	13.3	9.99	0	0
12	12% Bentonite	0	2.20	12.6	12.38	0	0

STAGE TOTALS	Sacks	Lbs	Cu. Ft.	Tons
CEMENT:	7	671	8	0.34
BENTONITE	0	0	N/A	N/A

FCI

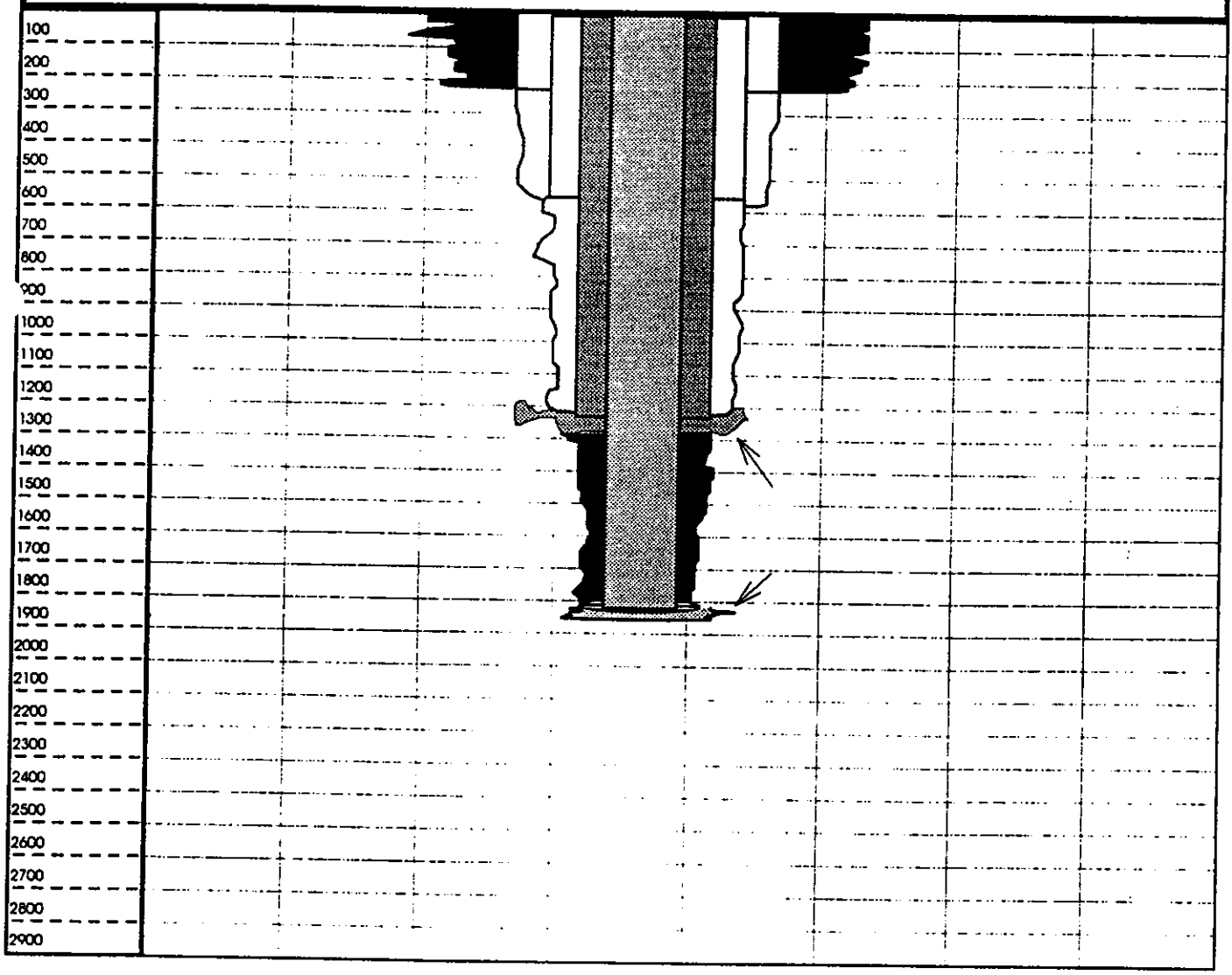
Florida Cement, Inc.
15465 Pine Ridge Road
Fort Myers, FL 33908
(813) 489-4444

CEMENT SUMARY

TOTAL CEMENT USED BY TYPE

UNITS	NEAT	2%	4%	6%	8%	12%	16%	20%
SACKS	702	0	0	0	0	0	0	0
BBLS	148	0	0	0	0	0	0	0
CUFT	828	0	0	0	0	0	0	0

WELL SKETCH



FCI CEMENT STAGE REPORT

FLORIDA CEMENT, INC.
15465 PINE RIDGE RD.
FORT MYERS, FLORIDA
33908 (813) 489-4444

CUSTOMER NAME: YOUNGQUIST BROTHERS INC.
CUSTOMER REP: TROY MOORE
ENGINEERING FIRM: VIAN GROUP
ENGINEER: DAMON
WELL NAME: CH 315

DATE: 8-16-95
JOB NUMBER:
CASING SIZE: 4.5"
STAGE NUMBER: 9
FCI REP: JOHN GERO

HOLE SIZE / DEPTH	ANNULAR VOLUME CUFT/FT	CASING WEIGHT LBS/FT	DIFFERENTIAL PRESSURE SYS CODE	DIFFERENTIAL PRESSURE MULTIPIER	MAX HEADER PRESSURE	TUBING SIZE / DEPTH	BBLS FLUSH
6 3/4 / 1980'	.30	23.5	0	.344	50	2 3/8 / 1323	5

TIME / EVENT	AVERAGE RATE BBL/MIN	WEIGHT LBS/GAL	SYSTEM CODE	STAGE VOLUME BBLS	TOTAL VOLUME BBLS
START PREFLUSH	2.5	8.34	n/a	10	0
SWITCH TO NEAT	2.5	15.6	0	9.3	10
SWITCH TO FLUSH	2.5	8.34	n/a	5	19.3
SHUT DOWN	-		-	-	24.3

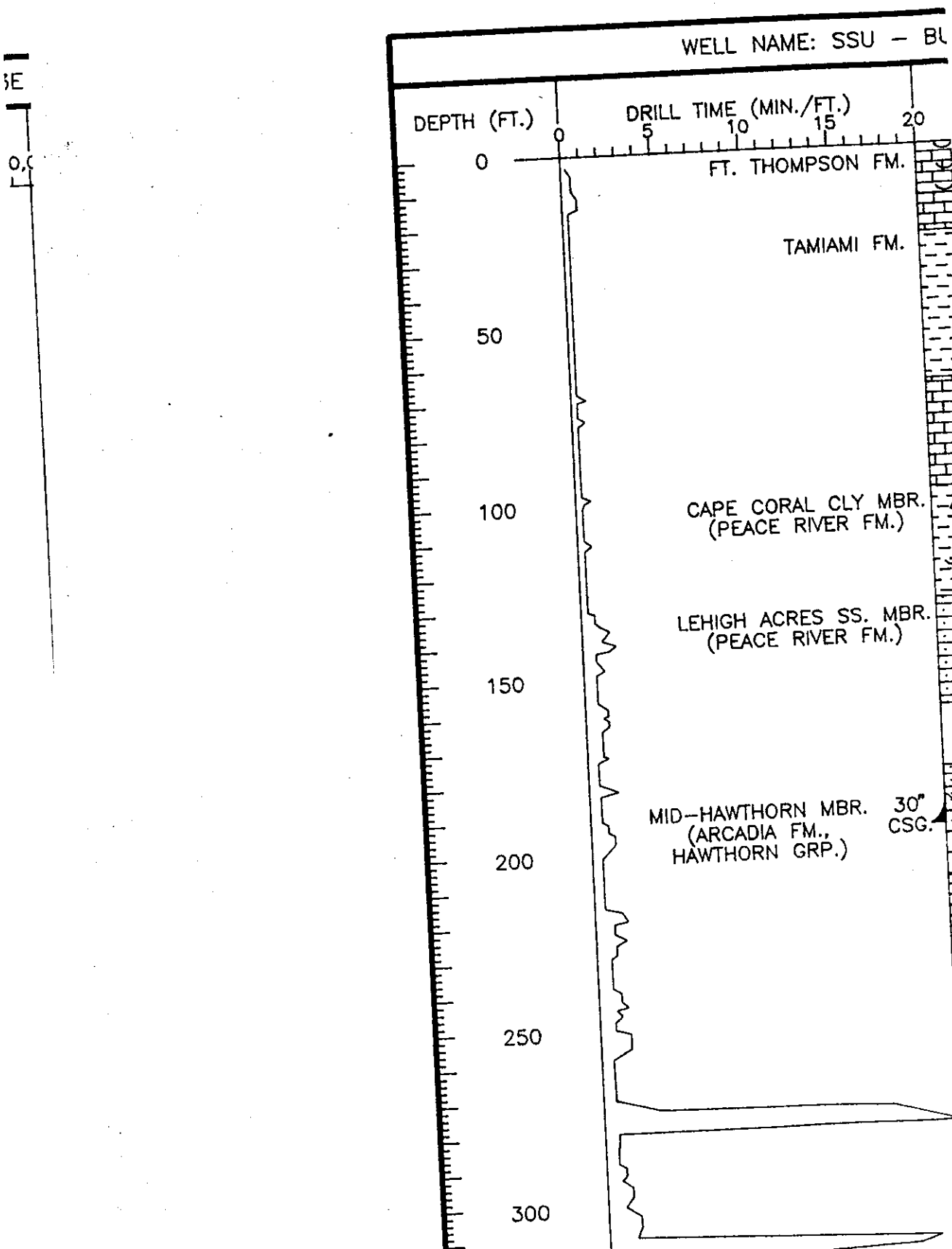
SYSTEM CODE	SYSTEM COMPOSITION	YIELD CUFT/SACK	WEIGHT LBS/GAL	MIX WATER GAL/SACK	TOTAL SACKS	TOTAL CUFT
0	ASTM C-150 Type 2 Reg NEAT	1.18	15.6	5.2	44	52

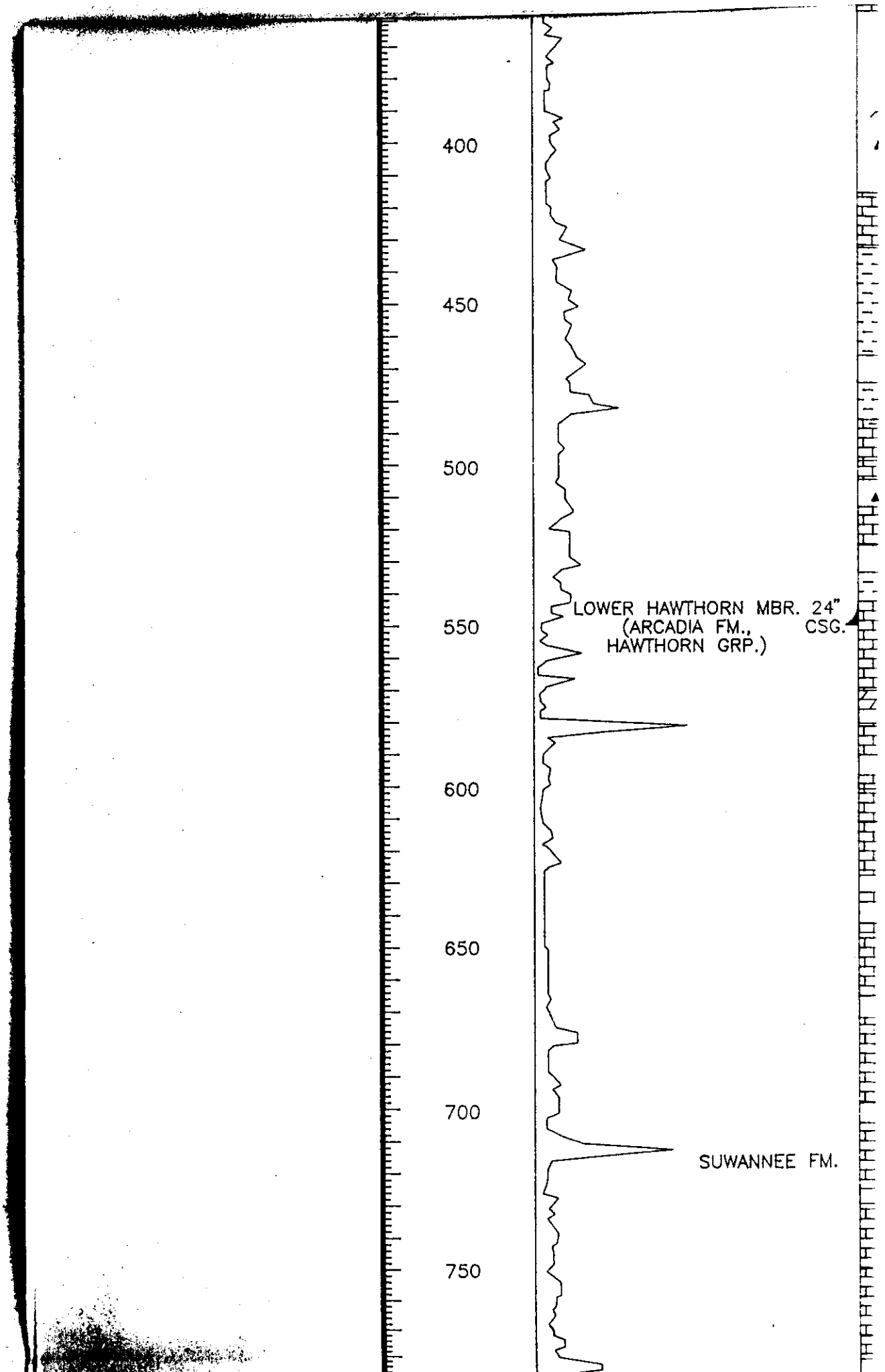
TOTAL SACKS OF CEMENT	TOTAL LBS OF BENTONITE USED	TOTAL LBS OTHER:
44	n/a	n/a

REPORT BY JOHN E. GERO

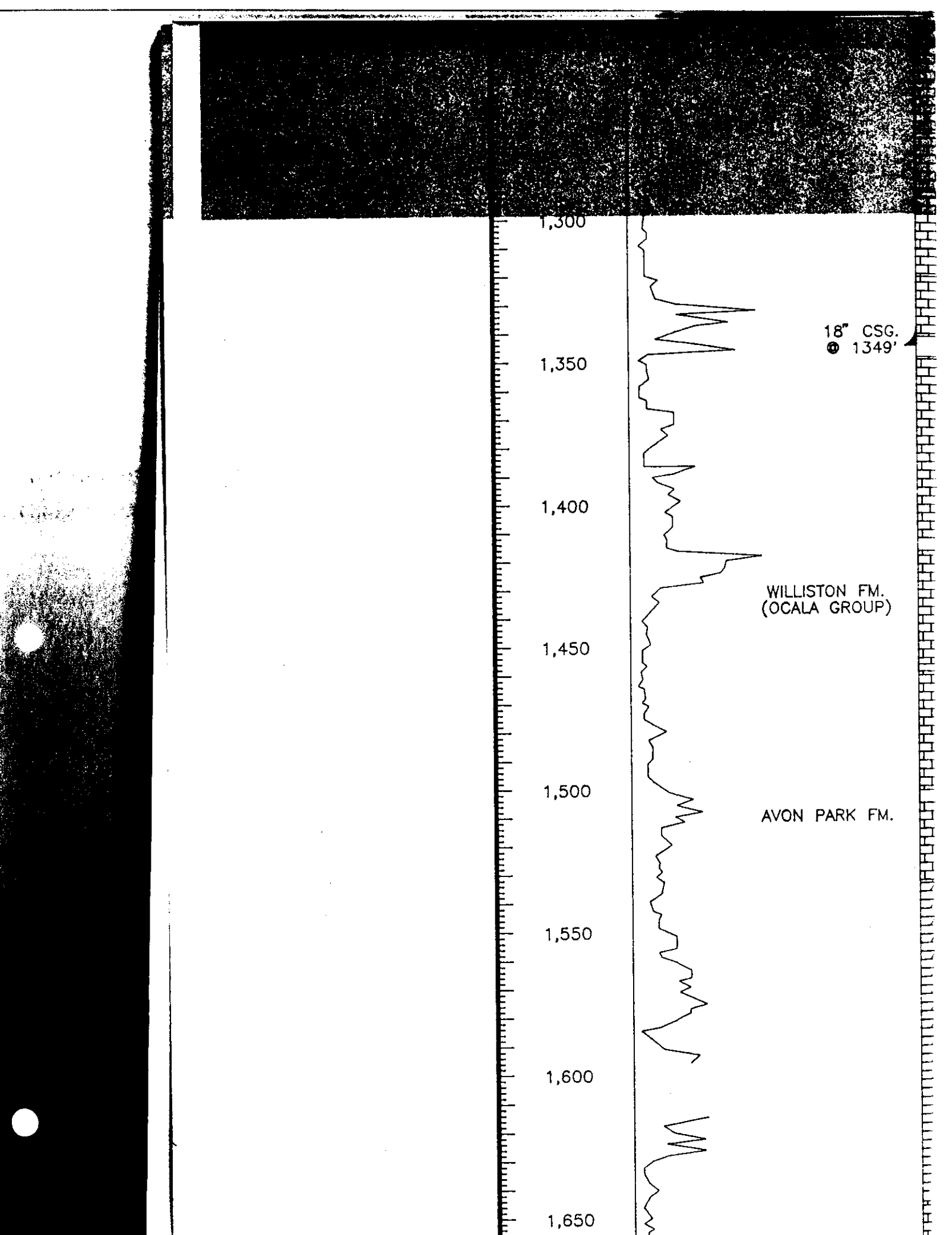
APPENDIX H

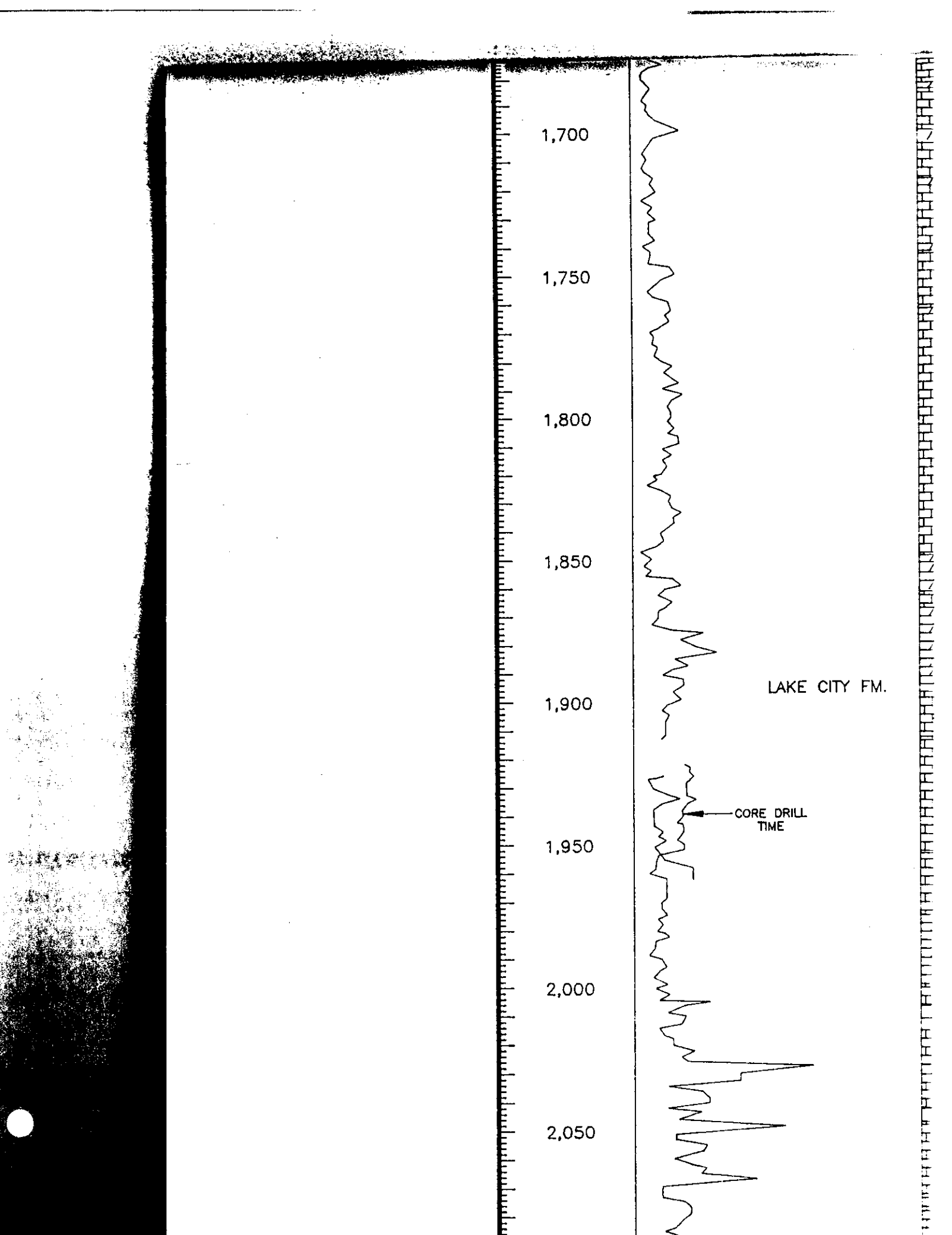
STRIP LOG FOR INJECTION WELL (CH-314)

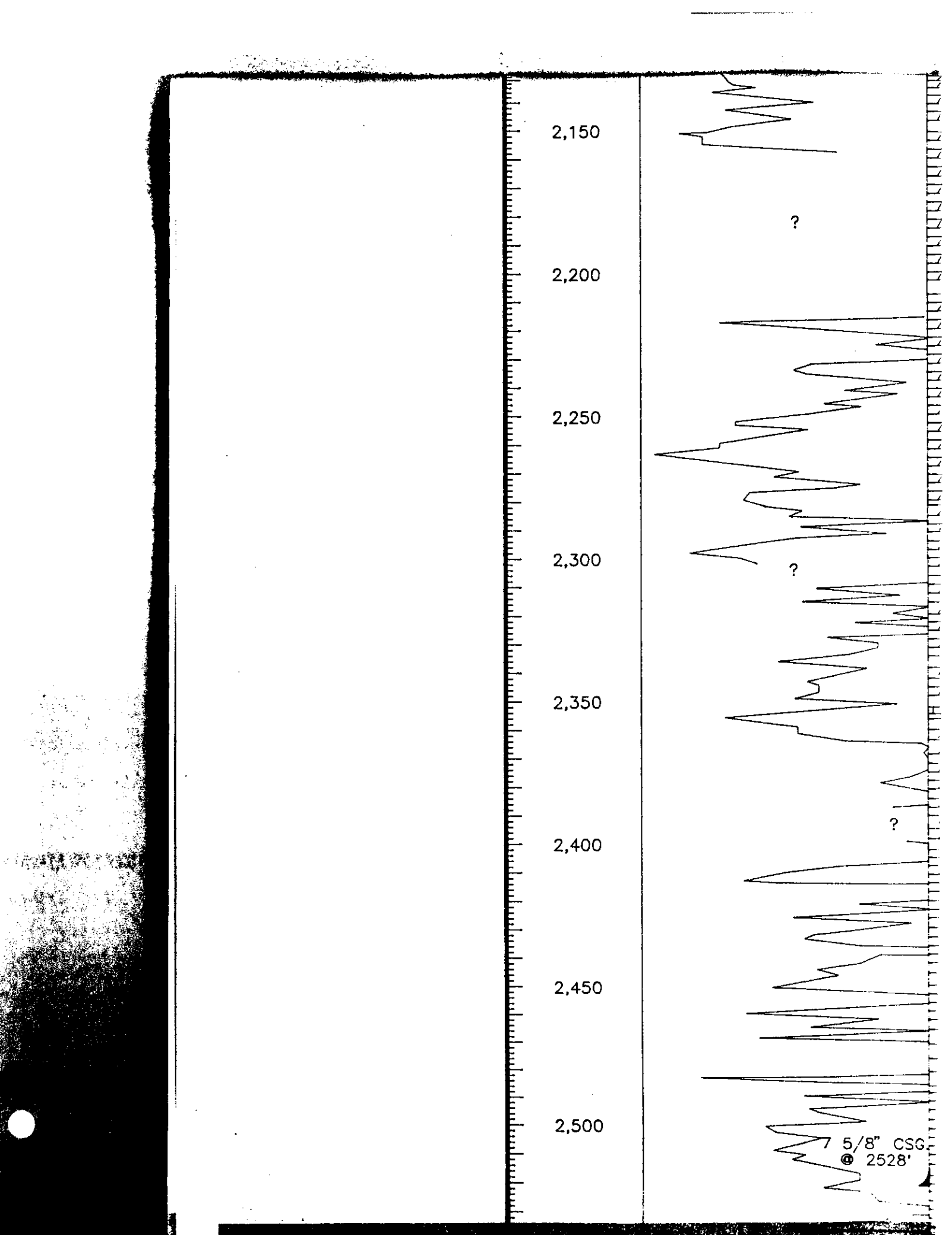

WELL NAME: SSU – BL
DEPTH (FT.)
DRILL TIME (MIN./FT.)
0
5
10
15
20
0
50
100
150
200
250
300
FT. THOMPSON FM.
TAMIAMI FM.
CAPE CORAL CLY MBR.
(PEACE RIVER FM.)
LEHIGH ACRES SS. MBR.
(PEACE RIVER FM.)
MID–HAWTHORN MBR.
(ARCADIA FM.,
HAWTHORN GRP.)
30"
CSG.

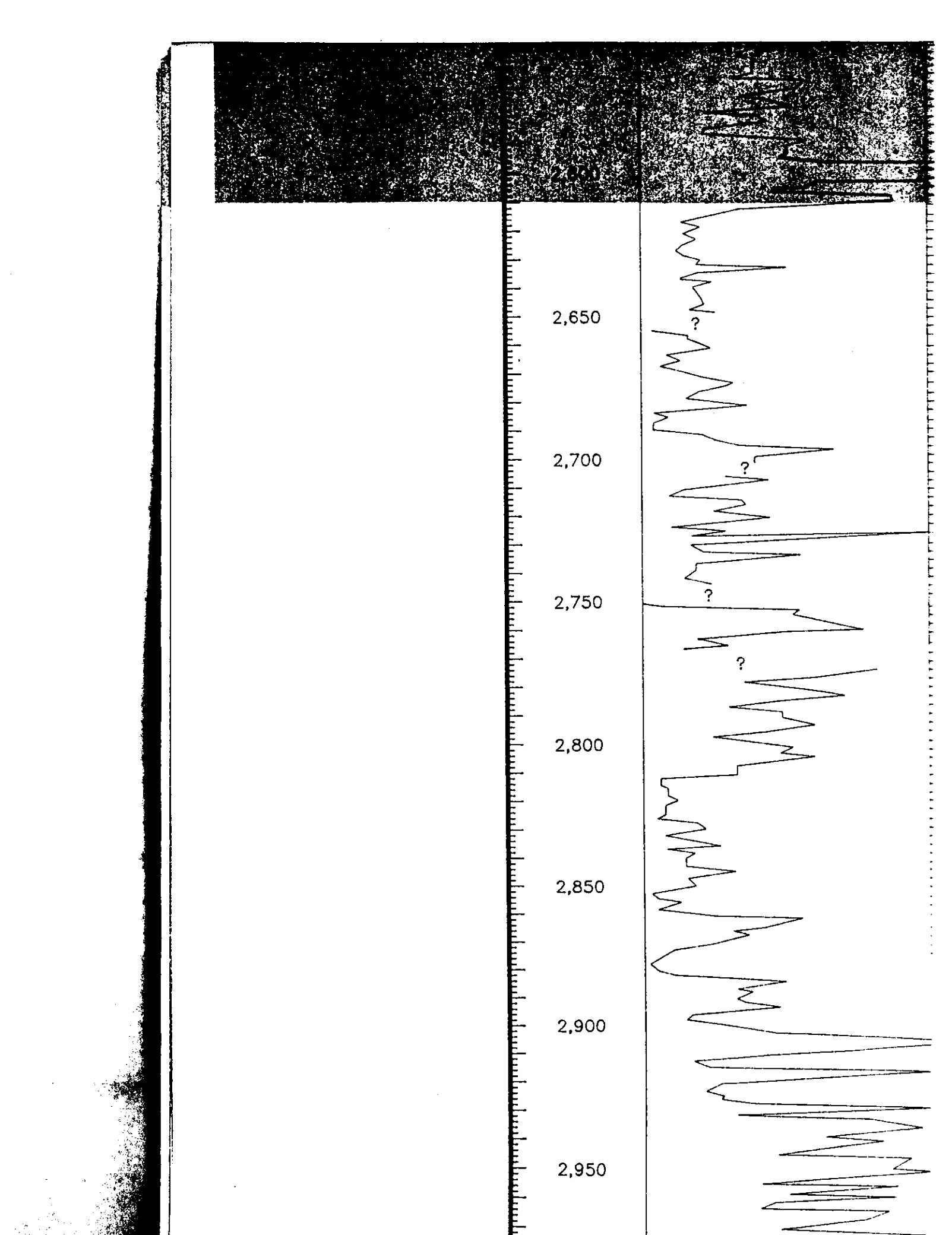

400
450
500
550
600
650
700
750
LOWER HAWTHORN MBR. 24"
(ARCADIA FM., CSG.
HAWTHORN GRP.)
SUWANNEE FM.

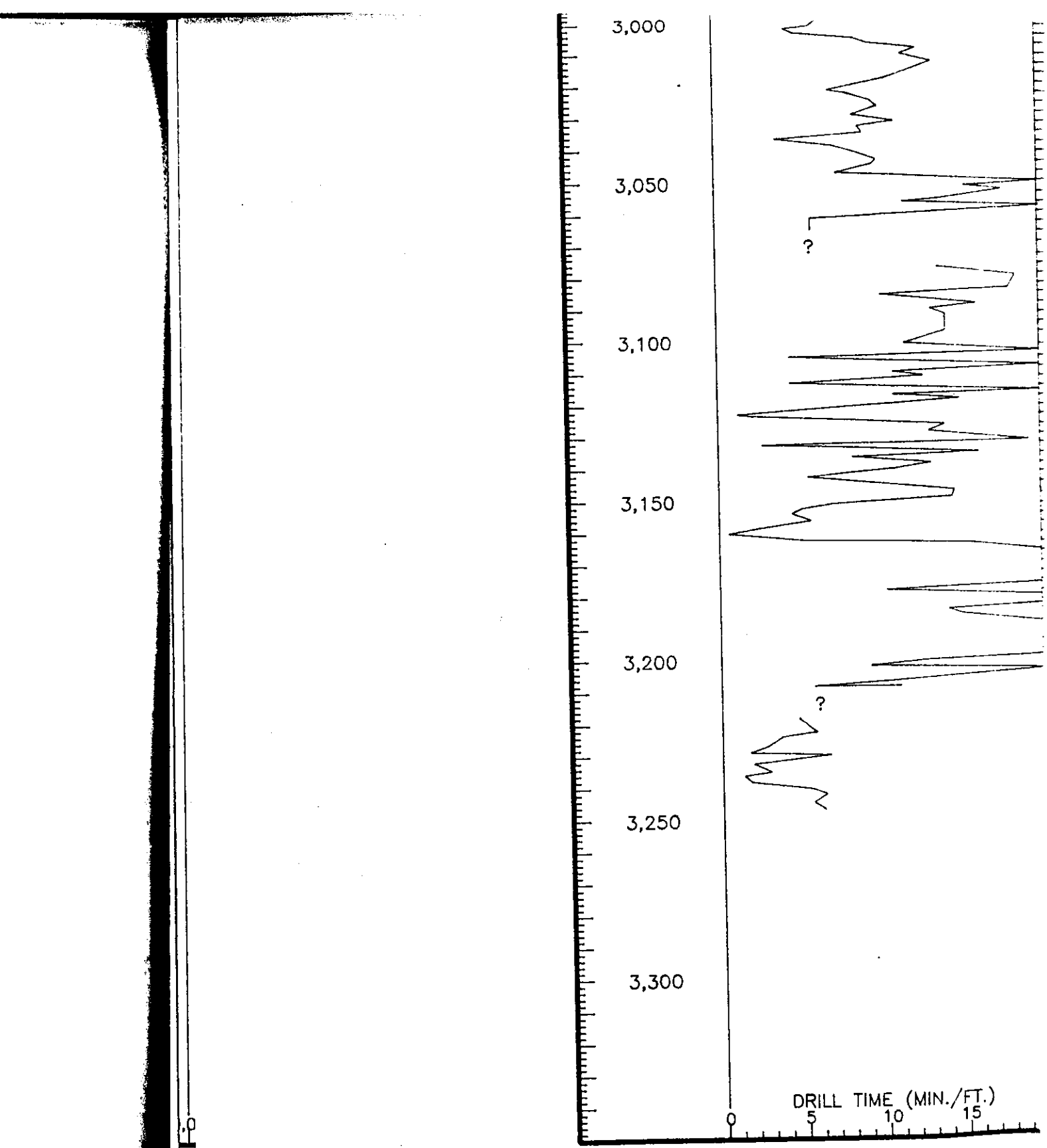
800
850
900
950
1,000
1,050
1,100
1,150
1,200
CRYSTAL RIVER FM.
(OCALA GRP.)


1,300
1,350
1,400
1,450
1,500
1,550
1,600
1,650
18" CSG.
@ 1349'
WILLISTON FM.
(OCALA GROUP)
AVON PARK FM.


1,700
1,750
1,800
1,850
1,900
1,950
2,000
2,050
LAKE CITY FM.
CORE DRILL TIME


2,150
2,200
2,250
2,300
2,350
2,400
2,450
2,500
?
?
?
7 5/8" CSG
@ 2528'


2,650
2,700
2,750
2,800
2,850
2,900
2,950
?
?
?
?


3,000
3,050
3,100
3,150
3,200
3,250
3,300
?
?
0
DRILL TIME (MIN./FT.)
0
5
10
15

APPENDIX J

CORE ANALYSES

BURNT STORE INJECTION WELL

CORE #1

INTERVAL: 1929-1959 FEET
RECOVERED 3 FEET

Date: July 12, 1995

DEPTH (FEET)	LITHOLOGY
1956 - 1958	Limestone, very pale orange (10YR 8/2), micritic to calcarenitic, poor solution and intercrystalline porosity, with minor clay, very pale orange (10YR 8/2), sticky, semi-cohesive.
1958 - 1959	Limestone, very pale orange (10YR 8/2) to pale moderate brown (10YR 6/2), micritic to calcarenitic, poor intercrystalline and solution porosity, with some interbedded rip-up clasts, granule to pebble sized.

LABORATORY ANALYSES

SAMPLE DEPTH	POROSITY (%)	HORIZONTAL PERMEABILITY		VERTICAL PERMEABILITY	
		(CM/SEC)	(MD)	(CM/SEC)	(Millidarcies)
1957				3.3×10^{-8}	0.05
1959				1.6×10^{-7}	0.20

BURNT STORE INJECTION WELL (CH - 314)

CORE #3

TERVAL: 2346-2368 FEET
RECOVERED 15 FEET

Date: July 20, 1995

DEPTH (FEET)	LITHOLOGY
2346 - 2353	No retrieval.
2353 - 2356	Limestone, yellowish gray (4Y 7/2) to light olive gray (5Y 5/2), dolomitic, micritic to calcilutitic, poor vugular porosity, laminated with trace carbonaceous material, black, (N1), common rip up clasts and scoured bedding surfaces at 2354 feet, trace interbedded dolosilt, light olive gray (5Y 5/2).
2356 - 2363	Dolomite, olive gray (5Y 4/1), microcrystalline to finely crystalline, microsucrosic to sucrosic, poor to fair vugular porosity, trace dolosilt, light olive gray (5Y 5/2), and minor carbonaceous material, black (N1).
2363 - 2368	Dolomite, dark yellowish brown (10YR 4/2) to olive gray (5Y 4/1), microcrystalline to finely crystalline, microsucrosic to sucrosic, fair to poor intercrystalline and vugular porosity, poor apparent permeability, with localized occasional fair permeability in recrystallized vugs and small vertical fractures.

LABORATORY ANALYSES

SAMPLE DEPTH	POROSITY (%)	HORIZONTAL PERMEABILITY		VERTICAL PERMEABILITY	
		(CM/SEC)	(MD)	(CM/SEC)	(Millidarcies)
2353				4.5×10^{-7}	0.5
2362				1.0×10^{-8}	0.01
2364				1.1×10^{-8}	0.01
2367				4.5×10^{-8}	0.05

BURNT STORE INJECTION WELL (CH - 314)

CORE #4

INTERVAL: 2407 - 2421 FEET
RECOVERED 14 FEET

Date: July 25, 1995

DEPTH (FEET)	LITHOLOGY
2407 - 2414	Dolomite, dark yellowish orange (10YR 6/6) to dark yellowish brown (10YR 4/2), finely crystalline, microsucrosic in part, common greyish black (N2) laminae, good vugular porosity, good apparent permeability.
2414 - 2419	Dolomite, moderate yellowish brown (10YR 5/4) to grayish orange (10YR 7/4), finely to coarsely crystalline, microsucrosic to sucrosic, poor to fair vugular porosity, remnants to rip-up clasts and laminae, fair apparent permeability.
2419 - 2421	Dolomite, dark yellowish orange (10YR 6/6), with black (N9) mottling, microcrystalline to finely crystalline, minor small vertical fractures, some large crystals infilling vugs, poor to fair vugular porosity, poor apparent porosity, trace lime mud, very light gray (N8), silty.

LABORATORY ANALYSES

SAMPLE DEPTH	POROSITY (%)	HORIZONTAL PERMEABILITY		VERTICAL PERMEABILITY	
		(CM/SEC)	(MD)	(CM/SEC)	(Millidarcies)
2408				2.0×10^{-8}	0.02
2418				2.0×10^{-8}	0.02

BURNT STORE INJECTION WELL

CORE #2

INTERVAL: 2049-2079 FEET
RECOVERED 14 FEET

Date: July 14, 1995

DEPTH (FEET)	LITHOLOGY
2049-2061	No recovery.
2061 - 2063.5	Limestone, very pale orange (10YR 8/22) to pale yellowish brown (10YR 6/2), calcilutitic to calcarenitic, highly fractured, large rip up clasts, minor carbonaceous layers, good vugular porosity, fair to good permeability.
2064.5 - 2065.5	Limestone, very pale orange (10YR 8/2), interlayered calcarenitic and calcilutitic, minor carbonaceous material, poor vugular porosity, small vertical fractures, minor styolites.
2065.5 - 2067	Limestone, grayish orange (10YR 7/4), biomicritic, vertical fractures, poor vugular porosity, fair permeability.
2067 - 2072	Limestone, grayish orange (10YR 7/4), biomicritic to calcilutitic, some calcarenitic layers, numerous styolites and small vertical fractures, minor carbonaceous material, good vugular porosity, granular to pebble-sized rip up clasts.
2072 - 2073.5	Dolomite, dark yellowish brown (10YR 2/2), fair vugular porosity, small vertical fractures, fair to good vugular porosity, dense, recrystallized.
2073.5 - 2075	Limestone, grayish orange (10YR 7/4), calcarenitic to calcilutitic, minor carbonaceous layers, good vugular porosity, small vertical fractures, minor styolites, some lime mud.

LABORATORY ANALYSES

SAMPLE DEPTH	POROSITY (%)	HORIZONTAL PERMEABILITY		VERTICAL PERMEABILITY	
		(CM/SEC)	(MD)	(CM/SEC)	(Millidarcies)
2064				1.9×10^{-7}	0.2
2068				1.3×10^{-7}	0.1
2069					
2074				6.5×10^{-7}	0.7

Ardaman & Associates, Inc.

Geotechnical, Environmental and
Materials Consultants

August 28, 1995
File Number 95-0528

Youngquist Brothers, Inc.
15485 Pine Ridge Road
Fort Myers, Florida 33908

Attention: Mr. Troy Moore
Drilling Superintendent

Subject: Laboratory Test Results on Rock Core Specimens, City of Burnt Store Injection Well IW-1

Gentlemen:

As requested, permeability tests have been completed on 11 rock core samples provided by your firm from the City of Burnt Store Injection Well IW-1. In accordance with your instructions, vertical and horizontal permeability tests were performed when the sample was large enough to provide both specimens. The visual description and porosity of each sample, as requested, is also provided.

The samples were received in three batches on July 9, July 27 and August 8, 1995. The depths of the samples received in each shipment are listed below.

Batch No.	Date Received	Sample Depth (feet)
1	07/09/95	1956, 1957, 1959, 2064, 2068, 2069 and 2074
2	07/27/95	2353, 2362, 2364, 2367, 2406 and 2418
3	08/08/95	1957 and 1959

All of the samples were tested except for the first batch samples from the depths of 1956, 1957, 1959 and 2069 feet. These samples were too small and too irregularly shaped for permeability testing.

Permeability Tests

The permeability tests were performed in general accordance with ASTM Standard D 5084 "Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible-Wall Permeameter". The permeability test results are presented in Table 1.

The rock core samples provided for testing were too irregularly shaped and too short to obtain separate vertically and horizontally oriented specimens. Most of the samples were also too irregularly shaped to test at the as-received diameter, except for the samples from the depths of 2353 and 2364 feet which were large enough to maintain the vertical permeability test specimens at the as-received diameter of 10 cm. The other 9 vertical permeability test specimens were obtained by coring 3.28 or 5.10 cm diameter cylinders from the as-received cores. Horizontal permeability tests were performed on only two samples from the depths of 2353 and 2364 feet. These test specimens were obtained by coring 3.27 cm diameter horizontally oriented cylinders

from the 10 cm diameter vertical permeability test specimens. As the core samples provided were often relatively short, the lengths of some test specimens were relatively short and specimens lengths as little as 2.88 cm were necessary to perform the tests.

Each permeability test specimen was placed within a latex membrane and mounted in a triaxial-type permeameter. The specimens were then confined using average isotropic effective confining stresses of 10 to 30 lb/in^2 and permeated with deaired water under backpressures of 134 to 179 lb/in^2. Satisfactory saturation was verified by a B-factor in excess of 95%. The inflow to and outflow from each specimen were monitored with time, and the coefficient of permeability was calculated for each recorded flow increment. The tests were continued until steady-state flow conditions were obtained, as evidenced by an inflow/outflow ratio between 0.75 and 1.25, and until stable values of the coefficient of permeability were measured. The final degree of saturation of each specimen was calculated upon completion of testing using the final dry mass, moisture content and volume, and an assumed specific gravity. Although the calculated final degrees of saturation of some of the specimens using the assumed specific gravities are low, the B-factors indicate satisfactory saturation.

Porosity

The porosity of each permeability test specimen was calculated using the measured dry density and the assumed specific gravity. The calculated porosities are presented in Table 1.

Visual Description

The descriptions of the rock cores are tabulated below.

Sample Depth (feet)	Batch No.	Description
1957-1959	3	Yellow brown and light brown, fine-grained, fossiliferous (foraminifera, pellets, lumps), slightly carbonaceous limestone
2064-2074	1	Light brown to brown, fine-grained, fragmental, fossiliferous (foraminifera, molds and casts), slightly carbonaceous, quartz sandy and cherty limestone
2353	2	Light brown, fine-grained, calcareous dolomite with thin laminae and veinlets intercalated with dark brown to brown-black carbonaceous dolomite
2362-2418	2	Brown to dark brown, fine to medium-grained, saccharoidal, carbonaceous, crystalline dolomite

If you have any questions or require any additional testing services, please contact us.

Very truly yours,
ARDAMAN & ASSOCIATES, INC.

Shawkat Ali, Ph.D.
Corporate Laboratory Manager

Thomas S. Ingra, P.E.
Senior Project Engineer
Florida Registration No. 31987

SA/jcw

Table 1

PERMEABILITY TEST RESULTS
CITY OF BURNT STORE INJECTION WELL IW-1

Batch No.	Sample No.	Core No.	Sample Depth (feet)	Test Specimen Orientation	Assumed Specific Gravity	Initial Conditions					$\bar{\sigma}_c$ (lb/in^2)	u_b (lb/in^2)	B-Factor	Range of Hydraulic Gradient	Final Conditions			Coefficient of Permeability (cm/sec)
						Length (cm)	Diameter (cm)	w_o (%)	γ_d (lb/ft^3)	n					w_c (%)	γ_d (lb/ft^3)	S (%)	
1	1-1	---	2064	Vertical	2.70	6.86	3.28	11.5	127.5	0.24	10	179	95	7-21	11.6	127.6	98	1.9×10^{-7}
	1-2	---	2068	Vertical	2.70	7.72	3.28	8.7	135.5	0.20	10	179	98	7-25	9.1	134.3	97	1.3×10^{-7}
	1-3	---	2074	Vertical	2.70	6.34	3.28	9.0	134.3	0.20	10	179	100	9-31	9.4	134.2	99	6.5×10^{-7}
2	2-1	3	2353	Vertical	2.81	11.32	10.11	0.7	168.6	0.04	10	178	96	6-23	0.9*	168.7	66	2.4×10^{-7}
				Horizontal		7.27	3.27	—	---	---	20	154	95	290-300	0.9	170.8	97	2.0×10^{-6}
	2-2	3	2362	Vertical	2.81	6.55	3.28	0.5	171.4	0.02	12	170	97	122-175	0.6	171.3	100	1.3×10^{-6}
	2-3	3	2364	Vertical	2.82	9.33	10.03	0.7	171.0	0.03	10	176	100	11-52	0.9*	170.6	81	1.1×10^{-6}
				Horizontal		7.76	3.27	---	—	—	30	134	99	71-72	0.9	171.2	92	9.6×10^{-6}
	2-4	3	2367	Vertical	2.77	9.65	5.10	0.4	170.1	0.02	30	134	98	365-375	0.7	169.4	95	9.6×10^{-10}
	2-5	---	2406	Vertical	2.76	4.72	3.28	0.2	168.7	0.02	30	134	95	170-785	0.5	169.8	99	2.0×10^{-9}
	2-6	---	2416	Vertical	2.82	5.39	3.28	0.6	169.9	0.03	12	170	96	90-211	1.0	171.1	97	4.2×10^{-6}
3	3-1	1	1957	Vertical	2.70	3.77	3.28	8.9	132.8	0.21	10	179	96	34-40	9.4	133.4	97	3.3×10^{-6}
	3-2	1	1959	Vertical	2.70	2.88	3.29	8.5	133.2	0.21	10	179	99	6-43	8.1	134.0	85	1.8×10^{-7}

Where: w_c = Moisture content; γ_d = Dry density; n = Porosity calculated from equation $n = 1-(\gamma_d/G_s\gamma_w)$ where G_s = Assumed specific gravity and γ_w = Unit weight of water; $\bar{\sigma}_c$ = Average isotropic effective confining stress; u_b = Backpressure; and S = Calculated degree of saturation using assumed specific gravity.

* Final moisture content assumed to be the same as measured on the horizontal permeability test specimen.

APPENDIX K

DEVIATION SURVEYS

1. INJECTION WELL (CH-314)
2. DUAL ZONE MONITORING WELL (CH-315)

INCLINATION SURVEYS

Burnt Store Utilities
Injection Well (CH-314)

DATE	BORE HOLE DIAMETER (IN.)	DEPTH BELOW PAD (FT.)	INCLINATION (DEGREES)
6/28/95	12-1/4	90	0.250
6/28/95	12-1/4	180	0.200
6/28/95	12-1/4	270	0.250
6/28/95	12-1/4	360	0.250
6/28/95	12-1/4	450	0.250
6/28/95	28-1/2	270	0.300
6/28/95	28-1/2	360	0.200
6/29/95	28-1/2	450	0.250

INCLINATION SURVEYS

Burnt Store Utilities
Injection Well (CH-314)

DATE	BORE HOLE DIAMETER (IN.)	DEPTH BELOW PAD (FT.)	INCLINATION (DEGREES)
7/1/95	12-1/4	630	0.125
7/1/95	12-1/4	720	0.125
7/2/95	12-1/4	810	0.250
7/2/95	12-1/4	900	0.125
7/2/95	12-1/4	990	0.250
7/2/95	12-1/4	1080	0.375
7/2/95	12-1/4	1170	0.000
7/2/95	12-1/4	1260	0.000
7/3/95	12-1/4	1350	0.125

INCLINATION SURVEYS

Burnt Store Utilities
Injection Well (CH-314)

DATE	BORE HOLE DIAMETER (IN.)	DEPTH BELOW PAD (FT.)	INCLINATION (DEGREES)
7/7/95	22 1/2	810	0.250
7/7/95	22 1/2	900	0.250
7/7/95	22 1/2	990	0.250
7/7/95	22 1/2	810	0.250
7/7/95	22 1/2	900	0.250
7/7/95	22 1/2	990	0.250
7/8/95	22 1/2	1080	0.357
7/8/95	22 1/2	1170	0.225
7/8/95	22 1/2	1260	0.250
7/8/95	22 1/2	1350	0.125
7/11/95	12 1/4	1530	0.200
7/11/95	12 1/4	1620	0.175
7/11/95	12 1/4	1710	0.125
7/12/95	12 1/4	1810	0.250
7/13/95	12 1/4	1890	0.125
7/13/95	12 1/4	1980	0.125

INCLINATION SURVEYS

Burnt Store Utilities
Injection Well (CH-314)

DATE	BORE HOLE DIAMETER (IN.)	DEPTH BELOW PAD (FT.)	INCLINATION (DEGREES)
7/14/95	12 1/4	2070	0.125
7/17/95	12 1/4	2160	0.250
7/18/95	12 1/4	2250	0.250

INCLINATION SURVEYS

Burnt Store Utilities
Injection Well (CH-314)

DATE	BORE HOLE DIAMETER (IN.)	DEPTH BELOW PAD (FT.)	INCLINATION (DEGREES)
7/22/95	12 1/4	2340	0.125
7/26/95	12 1/4	2430	0.125
7/27/95	12 1/4	2520	0.250

INCLINATION SURVEYS

Burnt Store Utilities
Injection Well (CH-314)

DATE	BORE HOLE DIAMETER (IN.)	DEPTH BELOW PAD (FT.)	INCLINATION (DEGREES)
7-28-95	12 1/4	2610	0.250
7-29-95	12 1/4	2700	0.250
7-30-95	12 1/4	2790	0.250
7-30-95	12 1/4	2880	0.125
8-03-95	12 1/4	2970	0.125
8-03-95	12 1/4	3060	0.250
8-03-95	12 1/4	3150	0.250

INCLINATION SURVEYS

Burnt Store Utilities
Injection Well (CH-314)

DATE	BORE HOLE DIAMETER (IN.)	DEPTH BELOW PAD (FT.)	INCLINATION (DEGREES)
8/09/95	16 1/2	1440	0.125
8/09/95	16 1/2	1530	0.250
8/09/95	16 1/2	1620	0.125
8/09/95	16 1/2	1710	0.250
8/09/95	16 1/2	1800	0.250
8/09/95	16 1/2	1890	0.125
8/10/95	16 1/2	1980	0.250
8/10/95	16 1/2	2070	0.125
8/10/95	16 1/2	2160	0.125
8/11/95	16 1/2	2250	0.250
8/12/95	16 1/2	2340	0.250

INCLINATION SURVEYS

Burnt Store Utilities
Dual Zone Monitoring Well (CH-315)

DATE	BORE HOLE DIAMETER (IN.)	DEPTH BELOW PAD (FT.)	INCLINATION (DEGREES)
7/16/95	29 1/4	90	0.275
7/16/95	29 1/4	180	0.250
7/19/95	22 1/2	270	0.250
7/19/95	22 1/2	360	0.275
7/19/95	22 1/2	450	0.275
7/19/95	22 1/2	550	0.250

INCLINATION SURVEYS

Burnt Store Utilities
Dual Zone Monitoring Well (CH-315)

DATE	BORE HOLE DIAMETER (IN.)	DEPTH BELOW PAD (FT.)	INCLINATION (DEGREES)
7/27/95	16	640	0.200

INCLINATION SURVEYS

Burnt Store Utilities
Dual Zone Monitoring Well (CH-315)

DATE	BORE HOLE DIAMETER (IN.)	DEPTH BELOW PAD (FT.)	INCLINATION (DEGREES)
8/4/95	16	1360	0.125
8/9/95	16	1450	
8/9/95	16	1530	0.375
8/10/95	16	1620	.250

INCLINATION SURVEYS

Burnt Store Utilities
Dual Zone Monitoring Well (CH-315)

DATE	BORE HOLE DIAMETER (IN.)	DEPTH BELOW PAD (FT.)	INCLINATION (DEGREES)
8/10/95	8 3/4	1620	0.250
8/10/95	8 3/4	1720	0.250
8/10/95	8 3/4	1800	0.250

APPENDIX L

PRESSURE TEST DATA

1. INJECTION WELL 7 5/8-INCH OD INJECTION CASING
2. INJECTION WELL ANNULAR TEST (BETWEEN 7 5/8-INCH OD CASING AND 3 1/2-INCH OD TUBING)
3. DUAL ZONE MONITORING WELL 9 5/8-INCH OD UPPER MONITORING ZONE CASING
4. DUAL ZONE MONITORING WELL 4 1/2-INCH OD LOWER MONITORING ZONE CASING

SSU BURNT STORE INJECTION WELL CH-31S
PRESSURE TEST OF 7 7/8" DIAMETER INJECTION CASING
CONDUCTED 9-6-95

INITIAL PRESSURE = 120.4 psi START TIME = 1130 hrs.

TIME	ELAPSED TIME	PRESSURE	PERCENT CHANGE +/-
1135	5	120.4	0
1140	10	120.4	0
1145	15	120.4	0
1150	20	120.4	0
1155	25	120.4	0
1200	30	120.4	0
1205	35	120.4	0
1210	40	120.4	0
1215	45	120.4	0
1220	50	120.4	0
1225	55	120.4	0
1230	60	120.4	0
1235	FINAL	120.4	0

CERTIFIED BY:

Richard Orth
Florida Department of Environmental Protection

Gary Susdorf
ViroGroup, Inc.

Troy Moore
Youngquist Brothers Inc.

INJECTION WELL DW-314
ANNULAR PRESSURE TEST BETWEEN 7 5/8" INJECTION CASING AND 3 1/2" DIAMETER INJECTION TUBING
CONDUCTED 9-12-95

INITIAL PRESSURE = 100 psi   START TIME = 1313 hrs.

TIME	ELAPSED TIME	PRESSURE	PERCENT CHANGE +/-
1318	5	100 psi	0
1323	10	100 psi	0
1328	15	100 psi	0
1333	20	100 psi	0
1338	25	100 psi	0
1343	30	100 psi	0
1348	35	100 psi	0
1353	40	100 psi	0
1358	45	100 psi	0
1403	50	100 psi	0
1408	55	100 psi	0
1413	60	100 psi	0

CERTIFIED BY:

Richard Orth
Florida Department of Environmental Protection

Damon Watson
ViroGroup, Inc.

Mike Hallis
Youngquist Brothers Inc.

DUAL ZONE MONITOR WELL CH-315
PRESSURE TEST OF 9 5/8" DIAMETER CASING
CONDUCTED 7-31-95

INITIAL PRESSURE = 99.0 psi START TIME = 0230 hrs.

TIME	ELAPSED TIME	PRESSURE	PERCENT CHANGE +/-
0235	5	99.0	0.0
0240	10	99.0	0.0
0245	15	99.0	0.0
0250	20	98.5	-0.45
0255	25	98.5	-0.45
0300	30	98.0	-0.99
0305	35	98.0	-0.99
0310	40	98.0	-0.99
0315	45	97.5	-1.48
0320	50	97.5	-1.48
0325	55	97.5	-1.48
0330	60	97.0	-1.98

CERTIFIED BY:

FDEP WAIVED OPTION OF WITNESSING TEST
Jack Meyers
Florida Department of Environmental Protection

Todd Nowland
ViroGroup, Inc.

Troy Moore
Youngquist Brothers Inc.

SSU BURNT STORE UTILITIES
DUAL ZONE MONITOR WELL CH-315
PRESSURE TEST OF 4 1/2" DIAMETER CASING
CONDUCTED 9-19-95

INITIAL PRESSURE = 101.8 psi START TIME = 1010 hrs.

TIME	ELAPSED TIME	PRESSURE	PERCENT CHANGE +/-
1015	5	102.0	+0.2
1020	10	102.0	+0.2
1025	15	101.8	0
1030	20	102.0	+0.2
1035	25	102.0	+0.2
1040	30	102.0	+0.2
1045	35	102.0	+0.2
1050	40	102.0	+0.2
1055	45	102.0	+0.2
1100	50	101.8	0
1105	55	101.8	0
1110	60	101.0	-0.8
1115	FINAL	100.5	-1.3

CERTIFIED BY:

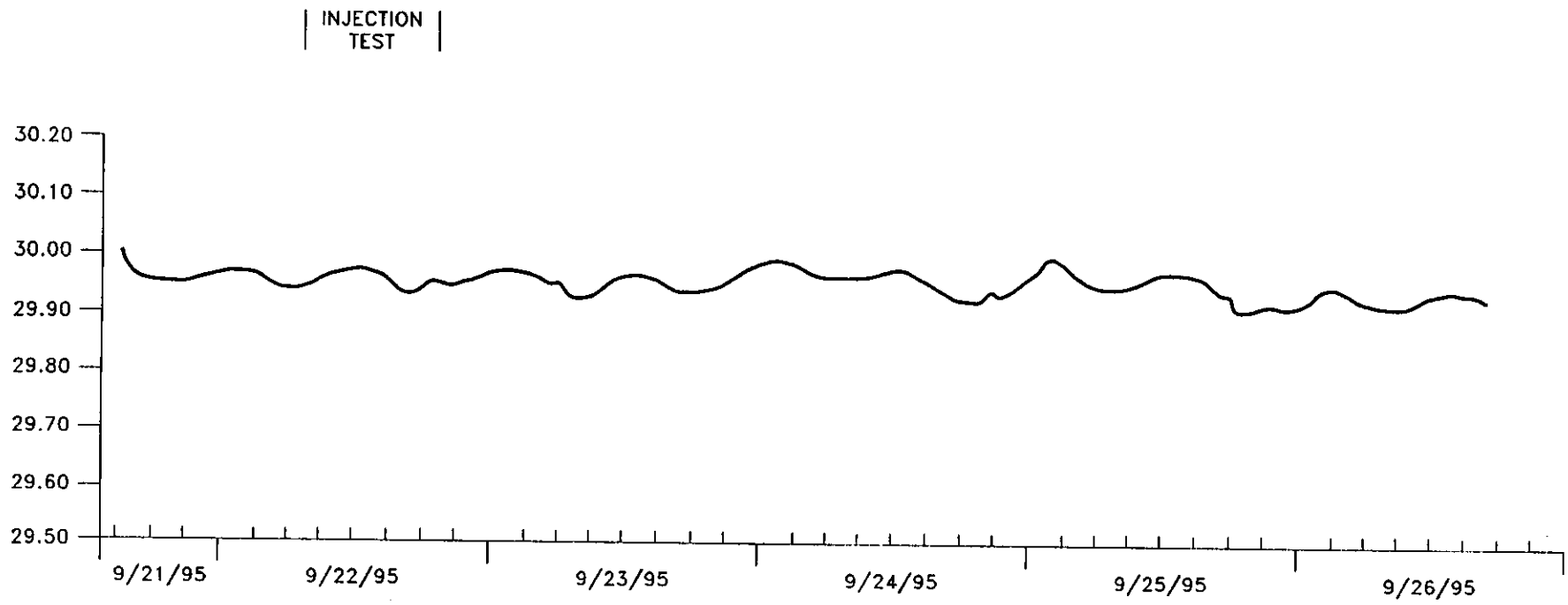
Richard Orth
Florida Department of Environmental Protection

Gary Sudorf
ViroGroup, Inc.

Dave Moore
Youngquist Brothers Inc.

APPENDIX M

INJECTION TEST DATA



ViroGroup

AIR • WATER • SOIL TECHNOLOGY

DRN. BY: CAM DWG. NO. A-013244BC-3 DATE: 10/26/95

PROJECT NAME: BURNT STOR IW PROJECT NUMBER: 01-03244.00

FIGURE M-1. BAROMETRIC PRESSURE PRIOR TO, DURING, AND AFTER THE INJECTION TEST.

TABLE M-1

INJECTION TEST DATA

Start Test: 7:24:58
Static Water Level: 1125.89 psi

DATE	TIME	ELAPSED TIME (min)	WATER LEVEL (psi)	PRESSURE RISE (psi)
9/22/95	7:25:05	.07	1125.93	.04
9/22/95	7:25:09	.18	1125.95	.06
9/22/95	7:25:16	.30	1126.01	.12
9/22/95	7:25:;27	.48	1126.14	.25
9/22/95	7:25:34	.60	1126.20	.31
9/22/95	7:25:41	.72	1126.40	.51
9/22/95	7:25:48	.83	1126.66	.77
9/22/95	7:25:59	1.02	1126.47	.58
9/22/95	7:26:57	1.98	1125.22	-0.67
9/22/95	7:27:58	3.00	1124.61	-1.28
9/22/95	7:28:55	3.95	1124.99	-0.90
9/22/95	7:29:57	4.98	1125.50	-0.39
9/22/95	7:30:58	6.00	1126.87	.98
9/22/95	7:31:59	7.02	1127.06	1.17
9/22/95	7:33:00	8.04	1126.82	.93
9/22/95	7:33:58	9.00	1126.61	.72
9/22/95	7:34:59	10.02	1126.50	.61
9/22/95	7:44:57	19.98	1126.36	.47
9/22/95	7:54:58	30.00	1126.37	.48
9/22/95	8:04:55	39.95	1126.37	.48
9/22/95	8:14:57	49.98	1126.37	.48
9/22/95	8:24:58	60.00	1126.37	.48

TABLE M-1
Continued

INJECTION TEST DATA

Start Test: 7:24:58
Static Water Level: 1125.89 psi

DATE	TIME	ELAPSED TIME (min)	WATER LEVEL (psi)	PRESSURE RISE (psi)
9/22/95	8:34:59	70.02	1126.38	.49
9/22/95	8:45:00	80.04	1126.38	.49
9/22/95	8:45:58	90.00	1126.39	.50
9/22/95	9:04:59	100.02	1126.40	.51
9/22/95	9:54:18	149.33	1126.41	.52
9/22/95	10:42:18	198.33	1126.41	.52
9/22/95	12:18:18	293.33	1126.47	.58
9/22/95	13:24:18	359.33	1126.48	.59
9/22/95	14:04:45	399.78	1126.48	.59
9/22/95	15:44:57	499.98	1126.48	.59
9/22/95	17:24:58	600.00	1126.47	.58
9/22/95	19:04:59	700.02	1126.46	.57

TABLE M-2

INJECTION TEST RECOVERY DATA

Start Recovery At: 19:28:45
Water Level (psi) 1126.45

DATE	TIME	ELAPSED TIME (min)	WATER LEVEL (psi)	PRESSURE RISE (psi)	T/T^1
9/22/95	19:28:48	.05	1126.41	.04	.00007
9/22/95	19:28:55	.12	1126.42	.03	.00017
9/22/95	19:29:03	.30	1126.44	.01	.00041
9/22/95	19:29:10	.42	1126.42	.03	.00058
9/22/95	19:29:17	.53	1126.42	.03	.00073
9/22/95	19:29:24	.65	1126.40	.05	.00090
9/22/95	19:29:31	.77	1126.42	.03	.00106
9/22/95	19:29:39	.90	1126.43	.02	.00124
9/22/95	19:29:46	1.02	1126.42	.03	.00141
9/22/95	19:30:43	1.96	1126.41	.04	.00271
9/22/95	19:31:45	3.00	1126.41	.04	.00414
9/22/95	19:32:46	4.02	1126.41	.04	.00555
9/22/95	19:33:43	4.96	1126.40	.05	.00685
9/22/95	19:34:48	6.05	1126.39	.06	.00836
9/22/95	19:35:46	7.02	1126.39	.06	.00970
9/22/95	19:36:43	7.96	1126.39	.06	.01099
9/22/95	19:37:45	9.00	1126.39	.06	.012
9/22/95	19:38:42	10.02	1126.39	.06	0.14
9/22/95	19:48:43	19.96	1126.39	.06	.028
9/22/95	19:58:45	30.00	1126.39	.06	.041
9/22/95	20:08:46	40.02	1126.39	.06	.055
9/22/95	20:18:42	49.96	1126.38	.07	.069

TABLE M-2
Continued

INJECTION TEST RECOVERY DATA

Start Recovery At: 19:28:45
Water Level (psi) 1126.45

DATE	TIME	ELAPSED TIME (min)	WATER LEVEL (psi)	PRESSURE RISE (psi)	T/T[1]
9/22/95	20:28:48	60.05	1126.38	.07	.083
9/22/95	20:38:46	70.02	1126.36	.09	0.97
9/22/95	20:48:47	80.04	1126.36	.09	.111
9/22/95	20:58:45	90.00	1126.35	.10	.124
9/22/95	21:08:46	100.02	1126.35	.10	.138
9/22/95	21:54:18	145.55	1126.33	.12	.201
9/22/95	22:52:18	203.55	1126.29	.16	.281
9/23/95	00:36:18	307.55	11126.28	.17	.425
9/23/95	02:18:18	409:55	1126.28	.17	.566
9/23/95	03:54:18	507.55	1126.26	.19	.701
9/23/95	05:30:18	603.55	1126.25	.20	.834
9/23/95	07:06:18	699.55	1126.21	.24	.966
9/23/95	08:42:18	795.55	1126.18	.27	1.099
9/23/95	10:30:18	903.55	1126.19	.26	1.248
9/23/95	12:06:18	999.55	1126.19	.26	1.381
9/23/95	13:48:18	1101.55	1126.21	.24	1.521
9/23/95	15:30:18	1203.55	1126.21	.24	1.662
9/23/95	17:06:18	1299.55	126.20	.23	1.795

TABLE M-3

INJECTION TEST WELLHEAD DATA

DATE	TIME	INJECTION RATE (GPM)	FLOWMETER READING	WELLHEAD PRESSURE (psi)	BAROMETRIC PRESSURE (inches)
9/22/95	7:35	180	2900	110	29.93
9/22/95	8:35	175	13,400	114	29.96
9/22/95	9:35	175	23,600	114	29.97
9/22/95	10:43	178	35,300	114	29.98
9/22/95	11:35	178	44,400	114	29.98
9/22/95	12:35	175	53,800	114	29.95
9/22/95	13:35	175	64,900	114	29.95
9/22/95	14:51	175	77,600	114	29.90
9/22/95	15:35	178	84,700	114	29.90
9/22/95	16:30	180	94,200	114	29.90
9/22/95	17:35	175	105,300	114	29.89
9/22/95	18:35	175	115,600	114	29.89 (rain)
9/22/95	19:15	175	123,000	114	29.91
	AVG:	176.5			