Upper Floridan Aquifer Hydrogeologic Investigation
Phase 3 – Completion Report
Latt Maxcy Property
Osceola County, Florida
ENTRIX Project No.: 09034001.05 W840

July 2008

Prepared for:

Latt Maxcy Corporation
21299 U.S. Highway 27
Lake Wales, Florida 33859

Maxcy Development Group
3434 Colwell Drive, Suite 120
Tampa, Florida 33614

Prepared by:

3905 Crescent Park Drive
Riverview, Florida 33578

Gregg W. Jones, P.G.
Principal Hydrogeologist

Brandon N. Ashby
Project Hydrogeologist

TABLE OF CONTENTS

FIGURES

TABLES

UPPER FLORIDAN AQUIFER HYDROGEOLOGIC INVESTIGATION
PHASE 3 – COMPLETION REPORT
LATT MAXCY PROPERTY
OSCEOLA COUNTY, FLORIDA
ENTRIX PROJECT NO.: 09034001.05 W840

1.0 INTRODUCTION

1.1 Purpose

The purpose of this assessment was to gain an understanding of the geology of the Latt Maxcy property. This was undertaken by gathering data while advancing a continuous core (exploratory borehole) from approximately 290 to 900 feet below land surface (bls), and completing the construction of two agricultural production wells according to project specifications. ENTRIX has collected, reviewed, and interpreted site-specific lithologic and water quality data. This will assist in ENTRIX's understanding of site hydrogeology, and provide preliminary data to be used in future consumptive use permitting, onsite and regional water supply planning, and a study of the feasibility of aquifer storage and recovery (ASR) application onsite. A discussion which identifies potential water producing strata and zones of confinement within the cored interval will be presented in the ASR Feasibility Study (Task IV of Phase 4).

The South Florida Water Management District's (SFWMD) identification number for the exploratory well is B-6, which corresponds to ENTRIX's in-house well identification number P-1. Similarly, the District's well identification number for the second production well is B-7, which corresponds to ENTRIX's well P-2. These two wells are referred to as P-1 and P-2 throughout this report, and presented graphically on the site location map (Figure 1.1).

1.2 Scope of Services

Phase 3 of the Scope of Services consists of four major tasks; field supervision and documentation of all well construction and testing activities to include drilling (both mud-rotary and reverse-air circulation methods), wireline coring, cementing, and reaming operations; collection, preparation, and storage of drill cuttings and core samples; examination of drill cuttings and core samples and preparation of lithologic logs; and report preparation. ENTRIX is following a "phased" project approach, in which authorization for one or more phases of the overall Scope of Services is requested from Latt Maxcy Corporation at a time. This allows for refinements in the overall design of the Scope based upon regulatory feedback, data collected during active phases, or changing field conditions before the next phase or set of phases is approved. The following phases are currently completed or in-progress:

- Phase 1 - Hydrogeologic Data Review (complete)
- Phase 2 - Assessment of Existing Wells (complete)
- Phase 3 - Aquifer Performance Test Plan & Production Well Construction Oversight (complete)

Phases 4 and 5 are the next steps pursuant to the Scope of Services, and will consist of the following tasks:

Phase 4- Construction of Monitoring Wells & ASR Feasibility Study (in-progress)

- Task I - Well Construction Design
- Task II - Monitoring Well Installations
- Task III - Wellhead Survey
- Task IV - Written Report/ASR Feasibility Study

Phase 5- Aquifer Performance Testing (in-progress)

- Task I - Field APT Testing
- Task II - Written Report

2.0 WELL CONSTRUCTION AND TESTING PROGRAM

The drilling and construction of each well was performed by Ken Whatley Well Drilling (Whatley), a Florida-licensed water well drilling contractor (#9294) who was contracted directly by the Latt Maxcy Corporation. All drilling, reaming, and well construction operations performed by Whatley were accomplished using a single truck-mounted top-head-driven rotary drilling rig (Versa Drill V-100NG) equipped with a rotating carousel and 3.5-inch-diameter, 20-foot-long sections of steel drill pipe. Osceola County well construction permits for wells P-1 and P-2 were secured by Whatley, and copies of each permit are presented as Appendix 2-1 and Appendix 2-2, respectively.

The coring of the exploratory well P-1 was performed by Huss Drilling Inc. (Huss), a Florida-licensed drilling contractor (#2879) who was subcontracted directly by Whatley. All coring operations performed by Huss were accomplished using a single Failing model 1500 rig mounted on a tandem axle 1997 international truck. The rig was equipped with a 47-foot-long derrick, 27-foot-long, 2 7/8-inch-diameter kelly, 5" x 6.25" mud pump, Moyno grout pump, Weldon diaphragm pump, air compressor, and mechanical breakout table. Longyear HQ series, 3.75-inch O.D. wireline coring rod was employed. The bit used was a 2.5-inch I.D., surface set diamond face discharge bit.

Earthen mud pits were constructed before initiating drilling at both well sites. Fresh water was provided by the grove by flooding irrigation ditches adjacent to each well site. Drill cuttings were continuously collected and described in the field at each well site (see lithologic logs for P-1 and P-2 in Appendix 3-1 and Appendix 3-2, respectively) by ENTRIX personnel. Additionally, ENTRIX provided on-site supervision and documentation of all field activities. Daily operations were recorded in field notebooks. Weekly summary reports prepared from these field notes for wells P-1 and P-2 are presented in Appendix 2-3 and Appendix 2-4, respectively.

Theoretical cement fill volumes were estimated in the field before initiating each cementing event, however, geophysical logging (caliper) was not conducted in the reamed boreholes, and therefore accurate annular borehole volumes could not be determined.

Open-hole sections in the exploratory well P-1 and the second production well P-2 were completed in the Avon Park Formation of the Upper Floridan Aquifer at 844 and 829 feet bls, respectively. Coring operations were limited to the exploratory well.

2.1 Well Locations

The well sites lie along the Kissimmee River floodplain in southwestern Osceola County directly south of State Road 60, and directly west of Peavine Trail, a historic railroad grade that forms the boundary of the SFWMD and St. Johns River Water Management Districts (SJRWMD). Both wells, P-1 and P-2, are located in Section 31, Township 31 South, Range 33 East.

A comprehensive professional survey of the finished wellheads of each newly-constructed well on the project site will be performed after the Floridan monitoring well MW-1UF is completed during Phase 4.

2.1.1 Location of P-1 Well Site

The approximate coordinates for well P-1 are latitude 27°44'26.758" north and longitude 81°3'44.91" west.

2.1.2 Location of P-2 Well Site

The approximate coordinates for well P-2 are latitude 27°44'1.703" north and longitude 81°3'53.488" west.

2.2 P-1 Well Construction

Well construction at P-1 commenced on March 6, 2008. The drilling rig was moved off the well by Whatley on March 17, 2008, to allow for the mobilization of the coring rig. The coring rig, owned and operated by Huss, completed mobilization to P-1 on March 18th. On March 31st, Huss completed demobilization at P-1. Whatley mobilized to P-1 for a second time, for the purpose of drilling the open-hole section of the well, on April 29, 2008. On May 7, 2008, Whatley completed demobilization at P-1.

2.2.1 Pit Casing Installation

On March 6, 2008, a nominal 24-inch-diameter borehole was advanced to approximately 21 feet bls by mud-rotary circulation using a reaming bit (hole opener) staged with a lead bit. A single section of 22-inch O.D., 0.5-inch wall steel casing measuring 19.66 feet in length was set in the borehole at a depth of 19.33 feet bls. The pit casing was cemented in-place using 20 bags of "Holcim" hydraulic cement.

On March 7, 2008, the cement plug inside the pit casing was drilled out by mud-rotary circulation using a nominal 19.5-inch-diameter drill bit.

2.2.2 Surface Casing Installation

On March 10, 2008, a nominal 19.5-inch-diameter tri-cone roller bit was used to advance the pilot hole, by mud-rotary circulation, to a depth of 124 feet bls. Drill cuttings were collected continuously at the surface and described in the field by ENTRIX personnel. Immediately after reaching the termination depth, a 16-inch O.D., 0.25-inch wall steel surface casing was installed in the mudded borehole at 124 feet bls. Drilling mud was pumped down through the newly-installed casing string to establish good fluid circulation around the casing and up the annulus. The casing string, consisting of six joints totaling 125.96 feet in length, was constructed by welding individual joints together at the rig floor. Appendix 2-5 provides a tally of the surface casing string installed. Mill certificates for the surface casing are presented in Appendix 2-6.

On March 11, 2008, the surface casing string was cemented in the mudded borehole by pressure grouting from the surface. A single cement stage consisting of 147 sacks (approximately 174 cubic feet) of neat cement (Portland mixed with water) was pumped down the center of the casing string and chased with approximately 1,200 gallons of fresh water. Cement returns were observed at the surface while pumping displacement water. A representative of Osceola County was on-site to witness this cementing event.

On March 12, 2008, the cement plug inside the surface casing was drilled out by mud-rotary circulation using a nominal 15.4-inch-diameter drill bit.

2.2.3 Longstring Casing Installation

On March 13, 2008, a nominal 15.4-inch-diameter drill bit was used to advance the pilot hole, by mud-rotary circulation, to a depth of 289 feet bls. Drill cuttings were collected continuously at the surface and described in the field by ENTRIX personnel. Immediately after reaching the termination depth, a 12.75-inch O.D., 0.375-inch wall mild steel longstring casing was installed in the mudded borehole at 289 feet bls. Drilling mud was pumped down through the newly-installed casing string to establish good fluid circulation around the casing and up the annulus. The casing string, consisting of fourteen joints totaling 294.21 feet in length, was constructed by welding individual joints together at the rig floor. Appendix 2-7 provides a tally of the longstring casing string installed. Mill certificates for the longstring casing are presented in Appendix 2-8.

On March 14, 2008, the longstring casing string was cemented in the mudded borehole by pressure grouting from the surface. A single cement stage consisting of 168 sacks (approximately 198 cubic feet) of neat cement (Portland mixed with water) was pumped down the center of the casing string and chased with approximately 1,700 gallons of fresh water. Cement returns were observed at the surface while pumping displacement water. A representative of Osceola County was on-site to witness this cementing event.

On March 18, 2008, Huss tagged the cement plug inside the longstring casing at 282 feet bls. On March 19, 2008, the cement plug was penetrated (but not drilled out), by mud-rotary circulation, using a coring bit.

2.2.4 Wireline Coring

Huss performed coring of the exploratory well P-1 by employing a single Failing model 1500 truck-mounted drilling rig equipped with 3.75-inch-diameter steel coring rod. Wireline coring was accomplished using a 13.5-foot-long, 3.75-inch O.D. core barrel and a 2.5-inch I.D., diamond face coring bit with removable self-engaging inner core barrel designed for cutting 10-foot-long, 2.37-inch-diameter cores. The inner core barrel was allowed to free-fall through the coring string and lock into the outer core barrel on contact. The outer core barrel, with engaged inner core barrel, rotates as the coring pipe string is rotated. Once a 10-foot-long coring interval is completed, a slotted steel retriever attached to a wireline and spool, is lowered down through the coring pipe string connecting, on contact, with the top end of the inner core barrel, and winched to the surface for collection. In this manner, a continuous core hole was advanced without tripping the coring pipe string in and out of the borehole.

Recovered core samples were carefully removed from the inner core barrel and placed in cardboard core boxes by Huss personnel. Each core section was oriented in descending depth order before being placed in the core box. Once sufficiently dry, ENTRIX personnel marked each core section with parallel lines of red and black ink to prevent inverting the samples. The core samples were temporarily stored on-site in labeled core boxes. Once transported to ENTRIX's office, each 2.37-inch-diameter core was measured and photographed. The individual core samples were then described according to Dunham's classification of carbonate rocks.

On March 19, 2008, wireline coring operations began from a depth of 289 feet bls. From March 19th to 21st, 2008, the test core boring (pilot hole) was advanced from 289 to 540 feet bls. On March 24, 2008, the core hole was reamed, by mud-rotary circulation using a nominal 6-inch-diameter drill bit, from 282 (depth of cement plug) to 540 feet bls. A string of 4-inch-diameter steel core tubing was set in the mudded core hole to approximately 540 feet bls. The purpose of this temporary casing was to provide a sealed annulus for the coring string as cuttings in the open annulus caused binding of the outer core barrel, limiting the advancement of the core hole to 540 feet bls.

From March 25th to March 28, 2008, the test core boring was advanced from 540 to 900 feet bls, the termination depth of the pilot hole. On March 27, 2008, additional joints of 4-inch-diameter temporary casing were driven into the formation (to a depth of 568 feet bls), using the rig's hammer, to facilitate coring operations. On March 31, 2008, Huss demobilized their rig and equipment from the well site.

An overall core recovery percentage of approximately 94% was achieved during wireline coring operations in the interval from 289 to 900 feet bls. Flowing

conditions in the pilot hole were never encountered during coring operations. Appendix 2-9, the core drilling log, provides a chronology of core sample recovery by depth. A lithologic description of the core samples collected during wireline coring is provided in Appendix 3-1. Appendix 2-10 consists of a compact disk containing digital photographs of each recovered core sample.

2.2.5 Open-Hole Construction

From April 29th to May 6, 2008, the test-core-boring section of the well was over-drilled by reverse-air circulation from 289 to 844 feet bls, using an 11 7/8-inch-diameter button drill bit. The contractor, Whatley, terminated the open hole at 844 feet bls as efforts to increase the drilling penetration rate and advance the open-hole section failed. Flowing conditions in the borehole were never encountered during drilling, coring or reaming operations. ENTRIX personnel were onsite to witness the reaming operations.

2.2.6 Wellhead and Pad Completion

Well P-1 is developed with a cement pad to accommodate a turbine pump and motor that is approximately four inches thick, 10 feet wide, and 20 feet long. The wellhead is situated on the southeast portion of the pad, approximately four feet away from the edge. A 20-inch steel collar was set in the cement surrounding the wellhead. An additional concrete pad, six feet wide by 11 feet long was installed next to the original pad to accommodate a diesel fuel tank.

2.3 P-2 Well Construction

Whatley mobilized to P-2 on March 17, 2008. Well construction at P-2 commenced on March 20, 2008. On April 29, 2008, Whatley completed demobilization at P-2.

Pit casing was not needed and never installed at P-2.

2.3.1 Surface Casing Installation

On March 20, 2008, a nominal 19.5-inch-diameter tri-cone roller bit was used to advance the pilot hole, by mud-rotary circulation, to a depth of 100.5 feet bls. Drill cuttings were collected continuously at the surface and described in the field by ENTRIX personnel. Immediately after reaching the termination depth, a 16-inch O.D., 0.25-inch wall steel surface casing was lowered in the mudded borehole to 100.5 feet bls. Drilling mud was pumped down through the newly-installed casing string to establish good fluid circulation around the casing and up the annulus. The casing string, consisting of five joints totaling 104.43 feet in length, was constructed by welding individual joints together at the rig floor. Appendix 2-11 provides a tally of the surface casing string installed. Mill certificates for the surface casing are presented in Appendix 2-12.

On March 21, 2008, the surface casing string was cemented in the mudded borehole by pressure grouting from the surface. A single cement stage consisting of 95 sacks

(approximately 112 cubic feet) of neat cement (Portland mixed with water) was pumped down the center of the casing string and chased with approximately 1,000 gallons of fresh water. Cement returns were observed at the surface while pumping displacement water. A representative of Osceola County was onsite to witness this cementing event.

On March 24, 2008, Whatley tagged the cement plug inside the surface casing at 75 feet bls, and drilled out the plug by mud-rotary circulation using a nominal 15.5-inch-diameter drill bit.

2.3.2 Longstring Casing Installation

On March 26, 2008, a nominal 15.5-inch-diameter tri-cone roller bit was used to advance the pilot hole, by mud-rotary circulation, to a depth of 305 feet bls. Drill cuttings were collected continuously at the surface and described in the field by ENTRIX personnel. Immediately after reaching the termination depth, a 12.75-inch O.D., 0.375-inch wall mild steel longstring casing was lowered in the mudded borehole to approximately 305 feet bls. While re-positioning the casing string in the borehole, a weld between the 13th and 14th casing joint failed causing the casing string to separate. From March 26th to March 28th, 2008, fishing operations to retrieve the 273 feet of casing lost downhole were performed. On March 28, 2008, the casing string was raised to the surface using the sand locking method, employing 6/14-grade silica sand. On March 31, 2008, drilling mud was circulated at the bottom of the re-reamed borehole (308.5 feet bls) and up the length of the borehole walls to clean out the sand from the fishing operation and re-condition the borehole. On April 1, 2008, the original 14th and 15th joints of casing were welded to the downhole string and re-set in the borehole at 308.5 feet bls. The casing string, consisting of fifteen joints totaling 310.07 feet in length, was constructed by welding individual joints together at the rig floor. Appendix 2-13 provides a tally of the longstring casing string installed. Mill certificates for the longstring casing are presented in Appendix 2-14.

On April 1, 2008, the longstring casing string was cemented in the mudded borehole by pressure grouting from the surface. A single cement stage consisting of 150 sacks (approximately 177 cubic feet) of neat cement (Portland mixed with water) was pumped down the center of the casing string and chased with approximately 1,800 gallons of fresh water. Cement returns were not observed at the surface while pumping displacement water. A representative of Osceola County was on-site to witness the cementing, but arrived late, soon after the fresh water chase event.

On April 2, 2008, Whatley tagged the cement plug inside the longstring casing at 275 feet bls, and drilled out the plug by mud-rotary circulation using an 11 7/8-inch-diameter reaming bit.

2.3.3 Open-Hole Construction

From April 3rd to April 22, 2008, the open-hole section of the well was advanced by reverse-air circulation from 308.5 to 827.5 feet bls, using an 11 7/8-inch-diameter

button drill bit. Drill cuttings were collected continuously at the surface and described in the field by ENTRIX personnel while advancing the pilot hole by reverse-air circulation. On April 23, 2008, in an effort to improve circulation and increase the drilling penetration rate, the borehole was stepped using a nominal 6-inch-diameter button drill bit, and the open-hole section advanced to 829 feet bls. The contractor terminated the open hole at 829 feet bls as efforts to advance the open-hole section failed. Flowing conditions in the borehole were never encountered during drilling or reaming operations.

2.3.4 Wellhead and Pad Completion

Well P-2 is situated on a cement pad that is approximately four inches thick, 10 feet wide, and 18 feet long. The wellhead sits on the northeast portion of the pad, approximately 3.25 feet away from the northern edge. A 20-inch steel plate with a two inch centrally-located coupling is set atop the wellhead. An additional concrete pad, six feet wide by approximately 10 feet long was installed southeast of the original pad to accommodate a diesel fuel tank.

3.0 CORE EVALUATION AND WATER QUALITY PROFILE

3.1 Stratigraphic Picks

A description of the geology at the project site, according to Dunham's classification of carbonate rocks, is based on field analyses of drill cuttings and core samples (continuous core from 289 to 900 feet bls) collected while advancing the exploratory wellbore P-1.

The core boring was terminated within the Avon Park Formation at 900 feet bls. Stratigraphic descriptions of the sediments encountered in the exploratory well and the basis for the formation top picks are summarized below. A lithologic log prepared for P-1 is provided in Appendix 3-1. A second lithologic log, based solely on drill cuttings collected while drilling well P-2 and described in the field, is presented as Appendix 3-2. A hydrostratigraphic column for the exploratory well P-1 is illustrated on Figure 3.1.

The geologic formations penetrated during the drilling and coring operations range in age from Holocene (approximately 8,000 years ago to present) to middle Eocene (approximately 41 million years ago). They consist of undifferentiated Quaternary deposits, the Peace River and Arcadia formations of the Hawthorn Group, Suwannee Limestone equivalent, Ocala Limestone, and the Avon Park Formation.

<u>Undifferentiated Quaternary Deposits</u>
Drill cuttings indicate that the Undifferentiated sediments of Pliocene to Holocene age are approximately 45 feet thick at P-1. These surficial deposits consist mainly of fine to medium coarse quartz sand, silt, and clays with variable amounts of shell and organics.

Peace River Formation (Hawthorn Group)
The Peace River Formation of the Hawthorn Group, Miocene to Pliocene in age, was encountered in P-1 from approximately 45 to 260 feet bls. This unit is composed of olive gray to olive brown clays and clay-rich phosphatic deposits.

Arcadia Formation (Hawthorn Group)
The Arcadia Formation of the Hawthorn Group, Miocene in age, was encountered in P-1 from approximately 260 to 318 feet bls. This unit from approximately 260 to 300 feet bls is a carbonate dominated sequence typically phosphatic above the first appearance of Lepidocyclina. The sediments from approximately 300 to 318 feet bls may represent initial deposits of the Arcadia Formation but appear atypical and possibly terrestrial in origin.

Suwannee Limestone Equivalent
A thin, dolomitized, open marine deposit, encountered in P-1 from approximately 318 to 322 feet bls, is apparently not associated with the overlying Arcadia Formation or underlying Ocala Limestone. This sequence is in the stratigraphic position of the Suwannee Limestone.

Ocala Limestone
The Ocala Limestone, Eocene in age, was encountered in P-1 from approximately 322 to 392 feet bls. This carbonate unit generally consists of a packstone composed largely of Lepidocyclina in a lime mud matrix.

Avon Park Formation
The Avon Park Formation, Eocene in age, was encountered in P-1 from approximately 392 feet bls to the termination depth of the core boring (900 feet bls). The upper part of this unit consists of variable sequences of packstone, wackestone, and mudstone typically containing Dictyoconus and Neolaganum dalli. The lower part of the unit consists of finely crystalline to microcrystalline dolostone with common Neolaganum dalli.

3.2 Formation Water Quality

Groundwater samples were collected at 10-foot depth intervals (at the end of a given coring interval) during reverse-air drilling of the 3.75-inch diameter core boring from 430 to 900 feet bls. Grab samples of water were collected from the return stream at the point of discharge after the coring rod was fully advanced and several minutes of circulating at the bottom of the borehole had passed. Each sample was laboratory-tested for chloride, sulfate, and total dissolved solids (TDS) concentrations, for the purpose of providing a preliminary profile of the variation in salinity (and general water quality) with depth. It should be noted that the chemical characteristics of the return water were not necessarily representative of the actual formation water at depth, since a number of flow zones may have been open, and make-up water was sometimes circulated into the borehole if natural flow levels were insufficient to maintain the water level (minimum critical level) inside the well casing.

Results of the water quality analysis indicate a gradual and steady increase in salinity with depth. There occurred no sudden increase (spike) in chloride concentrations through the test interval. An increase in sulfate concentration of approximately 100-percent, from 89 mg/l to 180 mg/l, was reported in samples collected in the intervals 590 to 600 feet bls and 640 to

650 feet bls, respectively. However, chloride and TDS concentrations did not increase significantly through these intervals. An abrupt change in groundwater salinity through the cored interval could indicate a distinct flow zone. Since no major fluctuations in water quality were observed, the delineation of flow zones based upon variations in salinity was not possible.

Groundwater samples were analyzed on April 12th through April 16, 2008, by ELAB Inc.. Photocopies of the laboratory report and associated chain-of-custody record are presented in Appendix 3-3. A summary of the reverse-air discharge water quality results with associated depths and sampling dates is provided in Table 3.1.

4.0 RECOMMENDATIONS AND CONCLUSIONS

Based on data collected during the drilling, coring, and groundwater sampling of the exploratory well P-1, ENTRIX has concluded the following:

- A continuous core advanced from 289 to 900 feet bls, recovered at an overall core recovery percentage of 94%, was examined and a detailed lithologic log was prepared. A review of the core sample descriptions allowed for the stratigraphic picks of regional formation tops at the site of P-1.

- Groundwater samples were collected at the surface discharge point at intermittent 10-foot depth intervals during reverse-air drilling of the core boring from 430 to 900 feet bls. Results of the water quality analysis indicate a gradual and steady decline in water quality with depth. An increase in chloride concentration of approximately 200-percent, from 49 mg/l to 150 mg/l, was reported in samples collected in the intervals 480 to 900 feet bls. Based on this preliminary water quality profile, a raw water source suitable for irrigation and public water supply applications does exist at the site of P-1.

- The limited data collected during this assessment does not allow for the delineation of potential flow zones through the cored interval.

Wells designated P-1 and P-2 were drilled and constructed according to project specifications, however, the open-hole sections of wells P-1 and P-2 were terminated short of the planned total depth (900 feet bls) at 844 and 829 feet bls, respectively.

APPENDIX 2-1

OSCEOLA COUNTY WELL CONSTRUCTION PERMIT FOR P-1

SOUTH Well

STATE OF FLORIDA PERMIT APPLICATION TO CONSTRUCT, REPAIR, MODIFY, OR ABANDON A WELL

☐ Southwest
☐ Northwest
☐ St. Johns River
☐ South Florida
☐ Suwannee River

CHECK BOX FOR APPROPRIATE DISTRICT. ADDRESS ON BACK OF PERMIT FORM.

THIS FORM MUST BE FILLED OUT COMPLETELY.
The water well contractor is responsible for completing this form and forwarding the permit to the appropriate delegated county where applicable.

Permit No. _____
Florida Unique I.D. _____
Permit Stipulations Required (See attached) _____
62-524 well ☐
CUP/WUP Application No. _____
ABOVE THIS LINE FOR OFFICIAL USE ONLY

1. LOT Mark Corp. PO BOX 3737 Lake Wales FL 33859 863-635-3399
Owner, Legal Name of Entity if Corporation — Mailing Address — City — Zip — Telephone Number

2. EAST 60 Island Pond Grove
Well Location — Address, Road Name or Number, City

3. GARRETT Whatley 9294 863-439-1852
Well Drilling Contractor — License No. — Telephone No.

PO BOX 430
Address

LK HAMILTON FL 33851
City — State — Zip

4. ____ 1/4 of ____ 1/4 of Section 33 (Indicate Well on Chart)
(Enclose) (Circle)

5. Township 32 Range 32

6. Osceola
County — Subdivision Name — Lot — Block — Unit

NW NE SW SE

Fold all this line in order that address is visible through envelope window

7. Number of proposed wells 1 Check the use of well: (See back of permit for additional choices) ____ Domestic Monitor (type) _____
____ Irrigation (type) (See Back) Public Water Supply (type) X (See Back) List Other _____
Distance from septic system _____ ft. Description of facility _____ Estimated start of construction date _____

8. Application for: X New Construction ____ Repair/Modify ____ Abandonment _____ (Reason for Abandonment)

Date Stamp

9. Estimated: Well Depth 950 Casing Depth 250 Screen Interval from ____ to ____
Casing Material: Blk-Steel / Gal / PVC Casing Diameter 12" Seal Material GROUT

10. If applicable: Proposed Grouting Interval From ____ to ____ Seal Material _____
From ____ to ____ Seal Material _____
From ____ to ____ Seal Material _____

11. Telescope Casing ____ or Liner ____ (check one) Diameter ____
Blk-Steel / Galvanized / PVC Other (specify): _____

12. Method of Construction: X Rotary ____ Cable Tool ____ Combination
____ Auger ____ Other (specify:) _____

13. Indicate total No. of wells on site ____ List number of unused wells on site ____

14. Is this well or any other well or water withdrawal on the owner's contiguous property covered under a Consumptive/Water Use Permit (CUP/WUP) or CUP/WUP Application? ____ No X Yes
(If yes, complete the following) CUP/WUP No. 49-00102-W
District well I.D. No. B-7
Latitude 27° 44.01N Longitude 81° 03.88W
Date obtained from GPS X or map ____ or survey ____ (map datum NAD 27 ____ NAD 83 ____)

PERMIT CONDITIONS:
1) Well driller must call the office when drilling, abandoning, or repairing a well. Please call 407-343-2070 for inspections. Weekends or TRUE emergencias please call 407-319-6579.
2) Inspections must be called in at least 2 hours before grouting
3) Health Dept. employee must be onsite to inspect grouting.
*Failure to comply with above condition(s) may result in a citation.

15. I hereby certify that I will comply with the applicable rules of Title 40, Florida Administrative Code, and that a water use permit or artificial recharge permit, if needed, has been or will be obtained prior to commencement of well construction. I further certify that all information provided on this application is accurate and that I will obtain necessary approval from other federal, state, or local governments. If applicable, I agree to provide a well completion report to the District within 30 days after drilling or by permit expiration, whichever occurs first.

Signature of Contractor — License No. 9294

I certify that I am the owner of the property, that the information provided is accurate, and that I am aware of any responsibilities under Chapter 373, Florida Statutes, to maintain or properly abandon this well; or, I certify that I am the agent for the owner, that the information provided is accurate, and that I have informed the owner of his responsibilities as stated above. Owner consents to personnel of the WMD or a representative access to the well site.

Owner's or Agent's Signature — Date

DO NOT WRITE BELOW THIS LINE — FOR OFFICIAL USE ONLY

Approval Granted By: _____ Issue Date: _____ Payment Date _____

Owner Number: _____ Fee Received: $ _____ Receipt No.: _____ Check No.: _____

Enter numerical month, day and full, four-digit year.

THIS PERMIT NOT VALID UNTIL PROPERLY SIGNED BY AN AUTHORIZED OFFICER OR REPRESENTATIVE OF THE WMD. IT SHALL BE AVAILABLE AT THE WELL SITE DURING ALL DRILLING OPERATIONS. This permit is valid for 6 months from date of issue.
revised 10-31-07

Form 0123 Rev. 4/95

APPENDIX 2-2

OSCEOLA COUNTY WELL CONSTRUCTION PERMIT FOR P-2

Don't do site eval 3/4/08

#6929

A 00-432-2045

07116

STATE OF FLORIDA PERMIT APPLICATION TO CONSTRUCT, REPAIR, MODIFY, OR ABANDON A WELL

- ☐ Southwest
- ☐ Northwest
- ☒ St. Johns River
- ☐ South Florida
- ☐ Suwannee River

THIS FORM MUST BE FILLED OUT COMPLETELY. The water well contractor is responsible for completing this form and forwarding the permit to the appropriate delegated county where applicable.

CHECK BOX FOR APPROPRIATE DISTRICT. ADDRESS ON BACK OF PERMIT FORM.

7116

Permit No. 49-59-07116
Florida Unique I.D.
Permit Stipulations Required (See attached)
62-524 well ☐
CUP Application No.

1. Lott Realty Corp. PO Box 3737 - Lake Wales 33859
Owner, Legal Name of Entity if Corporation — Mailing Address — City — Zip — Telephone Number

2. East 60 Island Pond Grove Yeehaw Junction 34972.
Well Location — Address, Road Name or Number, City

3. Garrett Whatley 9294 863-439-1852
Well Drilling Contractor — License No. — Telephone No.

PO Box 430
Address

LK Hamilton Fl 33851
City — State — Zip

4. ___ 1/4 of ___ 1/4 of ___ 1/4 of Section 31 (Indicate Well on Chart)

5. Osceola
County

6. Township 32 Range 32

Subdivision Name — Lot — Block — Unit

7. Number of proposed wells 1 Check the use of well: (See back of permit for additional choices) ___ Domestic Monitor (type) ___
___ Irrigation (type) Public Water Supply (type) X
Distance from septic system ___ ft. Description of facility ___ List Other ___

8. Application for: X New Construction ___ Repair/Modify ___ Abandonment ___ (Reason for Abandonment)
Estimated start of construction date ___

9. Estimated: Well Depth 900 Casing Depth 250 Screen Interval from ___ to ___
Casing Material: Bk-Steel / Gal / PVC Casing Diameter 12 Seal Material GROUT

10. If applicable: Proposed Grouting Interval From ___ to ___ Seal Material ___
From ___ to ___ Seal Material ___
From ___ to ___ Seal Material ___

11. Telescope Casing ___ or Liner ___ (check one) Diameter ___
Bk-Steel / Galvanized / PVC Other (specify) ___

12. Method of Construction: X Rotary ___ Cable Tool ___ Combination ___ Auger ___ Other (specify) ___

13. Indicate total No. of wells on site ___ List number of unused wells on site ___

14. Is this well or any other well or water withdrawal on the owner's contiguous property covered under a Consumptive/Water Use Permit (CUP/WUP) or CUP/WUP Application? ___ No ___ Yes (If yes, complete the following) CUP/WUP No. 49-00102
District well I.D. No. B-6
Latitude 27° 46.48 N Longitude 80° 03.80 W (Northern)
Data obtained from GPS ___ or map ___ or survey ___ (map datum NAD 27 ___ NAD 83 ___)

Date Stamp

PERMIT CONDITIONS:
1) Well driller must call the office when drilling, abandoning, or repairing a well. Please call 407-343-2070 for inspections. Weekends or TRUE emergencies please call 407-319-6579.
2) Inspections must be called in at least 2 hours before grouting
3) Health Dept. employee must be onsite to inspect grouting.
*Failure to comply with above condition(s) may result in a citation.

15. [illegible]

Signature of Contractor — License No. — Signature of Agent/Signature — Date

DO NOT WRITE BELOW THIS LINE — FOR OFFICIAL USE ONLY

Approval Granted By: Jeffrey Smith Issue Date: 3-5-08
Owner Number ___ Fee Received $ ___ Receipt No. ___ Payment Date ___ Check No. ___

THIS PERMIT NOT VALID UNTIL PROPERLY SIGNED BY AN AUTHORIZED OFFICER OR REPRESENTATIVE OF THE WMD. IT SHALL BE AVAILABLE AT THE WELL SITE DURING ALL DRILLING OPERATIONS. This permit is valid for 6 months from date of issue.
revised 10-31-07
Form 0123 Rev. 4/95

APPENDIX 2-3

WEEKLY REPORTS FOR P-1

ENTRIX WATER SOLUTIONS

WEEKLY REPORT
LATT MAXCY UPPER FLORIDAN HYDROGEOLOGICAL INVESTIGATION
P-1

Project No. 1188106

Contractor: Ken Whatley Well Drilling

Prepared by: F. Procta **Date: 3/7/08** **Week #1**

Date	Description of Activities
Saturday 3/1/08	No site activity.
Sunday 3/2/08	No site activity.
Monday 3/3/08	No site activity.
Tuesday 3/4/08	No site activity.
Wednesday 3/5/08	No site activity.
Thursday 3/6/08	Drill nominal 20-inch borehole, by mud-rotary, to 20.75' bls, nominal 18-inch to 23.4' bls. Set 22-inch O.D., 0.5-inch steel pit casing to 19.33' bls (4" stick-up). Cement by tremie grouting using 20 bags of "Holcim" hydraulic cement. No cement returns to surface.
Friday 3/7/08	Drill out cement plug inside pit casing using a 19.5-inch drill bit by mud-rotary circulation. The drilling crew tool-up for next Monday's planned drilling.

ENTRIX WATER SOLUTIONS

WEEKLY REPORT
LATT MAXCY UPPER FLORIDAN HYDROGEOLOGICAL INVESTIGATION
P-1

Project No. 1188106 **Contractor: Ken Whatley Well Drilling**

Prepared by: A. McThenia **Date: 3/14/08** **Week #2**

Date	Description of Activities
Saturday 3/8/08	No site activity.
Sunday 3/9/08	No site activity.
Monday 3/10/08	Drill from 20 to 124 feet below land surface (bls) using 19.5-inch bit. Describe lithology and collect samples at ten foot intervals. Install 16-inch OD, ¼-inch wall thickness, 15.5-inch ID, mild steel plain end casing to 124 feet bls with 2 feet of casing sticking up above land surface. Establish circulation of drilling mud by pumping mud down through casing. Observe good fluid circulation around casing up annulus.
Tuesday 3/11/08	Pressure grout 16-inch casing in place using 147 sacks of neat Portland cement and water mix delivered by CEMEX truck. After cement is in place, pump 1200 gallons of water into casing for displacement of cement. Observe cement returns at surface during pumping of displacement. Keep casing under pressure for approximately 2 hours after cementing. Cut cement header off of top of casing.
Wednesday 3/12/08	Drill from 124 to 229 ft. bls using 15.375-inch bit. Describe lithology and collect samples at ten foot intervals Hit first hard layer of mainly phosphatic sand and gravel at 202 ft. bls. Remove cuttings from mud pit and spread around in field.
Thursday 3/13/08	Drill from 229 to 289 ft. bls using 15.375-inch bit. Describe lithology and collect samples at ten foot intervals. Hit moderately hard white limestone at 280 ft. bls. Install 12-inch ID, 0.375 inch wall thickness, 12.75-inch OD, mild steel plain end casing to 289 ft. bls.
Friday 3/14/08	Pressure grout 12-inch casing in place using 168 sacks of neat Portland cement and water mix delivered by CEMEX truck. After cement is in place, pump 1700 gallons of water into casing for displacement of cement. Observe cement returns at surface during pumping of displacement. Leave casing under pressure. Load up tools and equipment for move to P-2 site.

ENTRIX WATER SOLUTIONS

WEEKLY REPORT
LATT MAXCY UPPER FLORIDAN HYDROGEOLOGICAL INVESTIGATION
P-1

Project No. 1188106 **Contractor: Huss Well Drilling**

Prepared by: A. McThenia **Date: 3/21/08** **Week #3**

Date	Description of Activities
Saturday 3/15/08	No site activity.
Sunday 3/16/08	No site activity.
Monday 3/17/08	Contractor Ken Whatley Well Drilling mobilizes from P-1 to P-2 well site. No ENTRIX personnel onsite.
Tuesday 3/18/08	Contractor Huss Well Drilling completes mobilization to P-1. ENTRIX Don Lee onsite in AM to locate wells. Andy McThenia and Curtis Klug arrive at 5:00 PM and witness Huss Well Drilling tag inside casing cement in P-1 at 282 ft. bls. Garret Whatley and Ben Huss onsite. Whatley backhoe is broken down. Whatley set up on P-2.
Wednesday 3/19/08	Huss Well Drilling collects 2-inch cores from 289 to 450 ft. bls. Driller reports loss of circulation at 312 to 316 ft. and rapid coring string drop through this interval. Note: sand between 296 and 304 feet; evidenced by ~2 feet of sand in recovered core from 300 to 304 feet.
Thursday 3/20/08	Core collection proceeds from 450 to 530. Circulation of core cuttings is not possible due to drinking zone from 312 to 316. Drillers begin periodic collection of reverse air water samples. ENTRIX measures field specific conductance and performs chloride titration analyses. Rotation and lifting of outer barrel of coring string becomes increasingly difficult due to cuttings in annulus.
Friday 3/21/08	Core collection proceeds from 530 to 540. Problem of cuttings in annulus and binding of the outer barrel continues. Coring operations shut down for the weekend. Huss plans for Monday are to ream existing core hole using 6-inch bit to 530 feet then set 4-inch core tubing inside 12-inch casing and drive this pipe string into the formation at 530 feet to create a sealed annulus for the outer coring string (OD ~ 3.5 inches).

ENTRIX WATER SOLUTIONS

WEEKLY REPORT
LATT MAXCY UPPER FLORIDAN HYDROGEOLOGICAL INVESTIGATION
P-1

Project No. 1188106 **Contractor: Huss Well Drilling**

Prepared by: C. Klug **Date: 3/28/08** **Week #4**

Date	Description of Activities
Saturday 3/22/08	No site activity.
Sunday 3/23/08	No site activity.
Monday 3/24/08	Contractor Ben Huss Well Drilling reamed hole with 6" bit from 282' - 540' bls; 4" temporary casing set. No ENTRIX personnel onsite.
Tuesday 3/25/08	Curtis Klug on-site at 11:18; Contractor Ben Huss Drilling advanced 2" diameter core from 540' bls to 620' bls. Reverse-air water samples collected for: 540'-550'; 590'-600'; core string pulled up into casing.
Wednesday 3/26/08	Ben Huss Drilling advanced 2" diameter core from 620' bls to 770' bls; Reverse-air water samples collected for: 640'-650'; 690'-700'; 740'-750' bls; core string pulled up into casing
Thursday 3/27/08	Ben Huss Drilling drove additional 4" temporary casing to ~568' bls; frayed cable on rig replaced; advanced 2" diameter core from 770' bls to 800' bls; core string pulled up into casing
Friday 3/28/08	Ben Huss Drilling advanced 2" diameter core from 800' bls to 900' bls; Reverse-air water samples collected for: 790'-800'; 840'-850'; 850'-900' bls; core string pulled up into casing; Ben Huss Drilling to return 3/31/08 to demobilize.

ENTRIX WATER SOLUTIONS

WEEKLY REPORT
LATT MAXCY UPPER FLORIDAN HYDROGEOLOGICAL INVESTIGATION
P-1

Project No. 90340001

Contractor: Ken Whatley Well Drilling

Prepared by: J Yates and B Ely **Date: 5/02/08** **Week #9**

Date	Description of Activities
Saturday 4/26/08	No site activity.
Sunday 4/27/08	No site activity.
Monday 4/28/08	No Site Activity
Tuesday 4/29/08	Crew mobilized from P-2 to P-1, setup over hole. Crew is set to trip in with 11 7/8 drill bit, wire becomes frayed and all operations cease while a replacement wire is picked up.
Wednesday 4/30/08	Crew replaced broken cable. Ream hole using air-circulation method from 304 feet bls to 424 feet bls.
Thursday 5/01/08	Ream hole using air-circulation method from 424 feet bls to 464 feet bls. Trip out pipe and reset. Ream using reverse-air to depth of 584 feet bls.
Friday 5/02/08	Ream hole with reverse air circulation and drilled from a depth of 584 ft to 684 ft. The driller then tripped out 200 ft of drill rods and tripped in with 200 ft of rods located on side of drill rig. Driller drilled with reverse air from 664 ft to 704 ft.

ENTRIX WATER SOLUTIONS

WEEKLY REPORT
LATT MAXCY UPPER FLORIDAN HYDROGEOLOGICAL INVESTIGATION
P-1

Project No. 90340001

Contractor: Ken Whatley Well Drilling

Prepared by: B Ely **Date: 5/09/08** **Week #10**

Date	Description of Activities
Saturday 5/03/08	No site activity.
Sunday 5/04/08	No site activity.
Monday 5/05/08	Ream hole from 704 feet bls to 804 feet bls.
Tuesday 5/06/08	Begin reaming at 804 feet bls; at 844 feet, air-circulation tubing drops down hole. Trip out rods and reattach tubing. Start reaming at 844 feet bls, lose tubing again. Leave site. Note: Will retrieve tubing tomorrow morning.
Wednesday 5/07/08	Trip out rods to locate air-circulation tubing; reconnect tubing, run air through tubing to determine if it's clogged. Pipe blows from rig; will not unclog. Start tripping out rod to 224 feet bls. Develop well. Finish tripping out rods. Rig down, well complete. Will weld casing when drillers return
Thursday 5/08/08	No site activity.
Friday 5/09/08	No site activity.

ENTRIX WATER SOLUTIONS

WEEKLY REPORT
LATT MAXCY UPPER FLORIDAN HYDROGEOLOGICAL INVESTIGATION
P-1

Project No. 90340001

Contractor: Ken Whatley Well Drilling

Prepared by: B Ely **Date: 5/02/08** **Week #11**

Date	Description of Activities
Saturday 5/03/08	No site activity.
Sunday 5/04/08	No site activity.
Monday 5/05/08	No site activity. Grout surficial monitor well MW-5S to surface
Tuesday 5/06/08	No site activity.
Wednesday 5/07/08	No site activity.
Thursday 5/08/08	No site activity.
Friday 5/09/08	No site activity.

APPENDIX 2-4

WEEKLY REPORTS FOR P-2

ENTRIX WATER SOLUTIONS

WEEKLY REPORT
LATT MAXCY UPPER FLORIDAN HYDROGEOLOGICAL INVESTIGATION
P-2

Project No. 1188106 **Contractor: Ken Whatley Well Drilling**

Prepared by: A. McThenia **Date: 3/21/08** **Week #3**

Date	Description of Activities
Saturday 3/15/08	No site activity.
Sunday 3/16/08	No site activity.
Monday 3/17/08	Ken Whatley Well Drilling moves equipment from P-1 to P-2
Tuesday 3/18/08	Driller completes move of equipment. Mechanical problems with backhoe cause digging of mud pit to be delayed.
Wednesday 3/19/08	Driller uses rental backhoe to complete mud pit. Continue set up for drilling.
Thursday 3/20/08	Drill 19.5-inch borehole from 0 to 100.5 feet. Set 104.43 feet of 16-inch casing to 100.5 feet with 4 feet of stickup. (See casing tally form.) Weld 16-inch pressure grout header to top of casing. Establish circulation of drilling mud through casing.
Friday 3/21/08	Pressure grout 16-inch casing by pumping cement from top of casing using 95 sacks of neat cement delivered to site by CEMEX Inc. Pressure grout method used does not use tremie pipe inside casing during cementing. Returns of cement observed at surface after pumping of water displacement.

ENTRIX WATER SOLUTIONS

WEEKLY REPORT
LATT MAXCY UPPER FLORIDAN HYDROGEOLOGICAL INVESTIGATION
P-2

Project No. 1188106

Contractor: Ken Whatley Well Drilling

Prepared by: F. Procta, C. Klug **Date:** 3/28/08 **Week #4**

Date	Description of Activities
Saturday 3/22/08	No site activity.
Sunday 3/23/08	No site activity.
Monday 3/24/08	Cement inside 12-inch steel casing tagged at 75' bpl; cement in annulus tagged at 7.5' bpl; Drill by mud-rotary from 75 to 150 feet bpl using a 15.5-inch drill bit. Collect and describe drill cuttings.
Tuesday 3/25/08	Drill by mud-rotary from 150 to 290 feet bpl using a 15.5-inch drill bit. Collect and describe drill cuttings.
Wednesday 3/26/08	Drill by mud-rotary from 290 to 305 feet bpl (total depth) using 15.5-inch drill bit. Collect and describe drill cuttings. Set 12-inch steel longstring casing to 305 feet bpl. Cut 4.93 feet off last joint. Weld on cementing header to top of casing string. NOTE: Driller lifts casing string off bottom of hole when the casing string snaps at weld between the third last and second last casing joint in. The casing string (273 feet) remains in the hole. Cement truck arrives and has to abort as 7 cu yds of cement dumped in east-adjacent irrigation ditch. Driller fishes out ruptured casing (37.07 feet plus header). NOTE: Osceola Cty inspector turned back as cementing event is aborted.
Thursday 3/27/08	Trip in nominal 8-inch drill bit and circulate, by mud-rotary circulation, at the bottom of the hole (305' bls) and up the hole to remove any cuttings or debris from the borehole. Attempt to snag the casing string using an overshot tool but fail to raise the casing string.
Friday 3/28/08	Contractor fishes for the casing string using the sand-locking method w/ 6/14 silica sand and rubber disk. By 8:00 PM, the casing string is raised to the surface and secured.

ENTRIX WATER SOLUTIONS

WEEKLY REPORT
LATT MAXCY UPPER FLORIDAN HYDROGEOLOGICAL INVESTIGATION
P-2

Project No. 1188106

Contractor: Ken Whatley Well Drilling

Prepared by: F. Procta **Date: 4/4/08** **Week #5**

Date	Description of Activities
Saturday 3/29/08	No site activity.
Sunday 3/30/08	No site activity.
Monday 3/31/08	Entrix staff travel to Latt Maxcy site. Contractor cleans out the sand from the fishing operation and generally circulates mud from total depth and up the hole. Weld the two last joints of casing (incl. cementing header) to casing string. Note: The drill rig (coring rig) has been demobilized from the P-1 well site this afternoon. The well P-1 remains open and unsecured.
Tuesday 4/1/08	Pressure grout, from the top, the 12-inch steel longstring casing pumping 150 sacks of neat cement or approx. 177 cubic feet, compared with 160 cubic feet approximate theoretical annular volume. Chase for 13 minutes with fresh water. Notes: Cement returns were not seen at the surface. The bottom of the casing string set at 308.5 feet bls (312 feet of casing set not including the 1-foot long cementing header). Original stick-up at 3.5 feet above land surface. Osceola Cty. inspector did not witness the cementing event but arrived at P-2 soon after the freshwater chase. Note: The well P-1 has been covered by welded steel panels but not sealed.
Wednesday 4/2/08	Trip-in 11 7/8-inch drill bit (hole-opener) and lead bit w/ two drill collars. Total BHA length at 45 feet. Tag the cement plug inside the 12-inch longstring casing at 275 feet bls. Circulate, by mud-rotary, residual cement out of the wellbore. Drill through cement plug and advance pilot hole to 319 feet bls, where circulation is lost. Trip-out all the drill pipe in the drill string. Note: Plan on switching over from mud-rotary to reverse-air circulation tomorrow after tripping out the drill bit and drill collars.
Thursday 4/3/08	Crew prepare for reverse-air drilling. Trip-in nominal 12-inch button drill bit and two drill collars. Total BHA length at 44 feet. Drill by reverse-air circulation from 308 to 320.5 feet bls. Entrix collects and decribes drill cuttings.

Friday 4/4/08	Advance 12-inch borehole, by reverse-air circulation, from 320.5 to 360.5 feet bls. Entrix collects and describes drill cuttings.

ENTRIX WATER SOLUTIONS

WEEKLY REPORT
LATT MAXCY UPPER FLORIDAN HYDROGEOLOGICAL INVESTIGATION
P-2

Project No. 1188106

Contractor: Ken Whatley Well Drilling

Prepared by: F. Procta **Date: 4/11/08** **Week #6**

Date	Description of Activities
Saturday 4/5/08	No site activity.
Sunday 4/6/08	No site activity.
Monday 4/7/08	Continue to drill a nominal 12-inch diameter borehole by reverse-air circulation from 360.5 feet bls. Entrix collects and describes drill cuttings.
Tuesday 4/8/08	Continue drilling by reverse-air circulation. Entrix collects and describes drill cuttings.
Wednesday 4/9/08	Continue to advance borehole to 580.5 feet bls by reverse-air circulation. Entrix collects and describes drill cuttings.
Thursday 4/10/08	Drill by reverse-air circulation from 580.5 to 650.0 feet bls. Entrix collects and describes drill cuttings.
Friday 4/11/08	Crew spends the day working on circulation problems with multiple airline trips in and out of the drill string. The entire drill string is tripped out of the hole and the drill bit and skirting examined.

ENTRIX WATER SOLUTIONS

WEEKLY REPORT
LATT MAXCY UPPER FLORIDAN HYDROGEOLOGICAL INVESTIGATION
P-2

Project No. 1188106

Contractor: Ken Whatley Well Drilling

Prepared by: F. Procta **Date: 4/18/08** **Week #7**

Date	Description of Activities
Saturday 4/12/08	No site activity.
Sunday 4/13/08	No site activity.
Monday 4/14/08	Crew trip-in the drill string and advance the borehole, by reverse-air circulation, from 650 to 740 feet bls. Entrix collects and describes drill cuttings.
Tuesday 4/15/08	Drill by reverse-air circulation from 740 to 760 feet bls. Note: Circulation problems continue as there is very little formation water in the drilled interval. Entrix collects and describes drill cuttings.
Wednesday 4/16/08	Drill by reverse-air circulation from 760 to 815 feet bls. Entrix collects and describes drill cuttings.
Thursday 4/17/08	Drill by reverse-air circulation from 815 to 816 feet bls. Note: Circulation problems continue as there is very little formation water in the drilled interval. Entrix collects and describes drill cuttings.
Friday 4/18/08	Crew attempt to unplug the drill bit as problems with circulation continue. Drilling operations end by mid-day at 816 feet bls. The well is shut-in.

ENTRIX WATER SOLUTIONS

WEEKLY REPORT
LATT MAXCY UPPER FLORIDAN HYDROGEOLOGICAL INVESTIGATION
P-2

Project No. 1188106

Contractor: Ken Whatley Well Drilling

Prepared by: F. Procta **Date: 4/25/08** **Week #8**

Date	Description of Activities
Saturday 4/19/08	No site activity.
Sunday 4/20/08	No site activity.
Monday 4/21/08	Drill by reverse-air circulation from 816 to 820.5 feet bls. Note: Drill pipe in the string is unscrewed, crew move to trip out drill pipe, replace, trip back in to the bottom of the hole. Driller collects representative drill cuttings today.
Tuesday 4/22/08	Drill by reverse-air circulation from 820.5 to 827.5 feet bls. Note: Driller continues to have circulation problems limiting the penetration rate. Entrix collects and decribes drill cuttings.
Wednesday 4/23/08	Crew trip-out 11 7/8-inch drill bit and trip-in nominal 6-inch button bit using a single drill collar. Total BHA length measured at 21.33 feet. Drill by reverse-air circulation from 827.5 to 829 feet bls. Note: Driller continues to have problems with plugging off limiting the penetration rate. Entrix collects and decribes drill cuttings.
Thursday 4/24/08	Crew trip-out nominal 6-inch drill bit and shut-in the well. Note: Drilling contractor decides to cut off the open-hole section of the well at 829 feet bls.
Friday 4/25/08	No site activity.

APPENDIX 2-5

16-INCH CASING TALLY FOR P-1

ENTRIX Water Solutions

Date: 10-Mar-2008
Project Name: Latt Maxcy Upper Floridan Hydrogeological Investigation
Prepared By: Andy McThenia
Well No.: P-1

16" Casing Tally

Casing Outer Diameter (inches): 16
Casing Wall Thickness (inches): 0.25

Joint No.	Joint Length (ft)	Total Length (ft)	Time Start Weld	Time Finish Weld	Time Weld Submerged	Comments
1	21.00	21.00	NA	NA	NA	Muleshoe cut bottom of casing
2	21.05	42.05	17:05	17:13	17:15	Weld 1 to 2
3	20.77	62.82	17:20	17:29	17:32	Weld 2 to 3
4	21.05	83.87	17:39	17:44	17:45	Weld 3 to 4
5	21.04	104.91	17:50	18:00	18:02	Weld 4 to 5
6	21.05	125.96	18:08	18:16	18:17	Weld 5 to 6

NOTE: Bottom of casing set at 124 feet bls with original stickup of approx. 2 ft.

APPENDIX 2-6

16-INCH CASING MILL CERTIFICATES FOR P-1

HYUNDAS - CANTON TRADER

(3)

YL-56-04-23	14	42.0'	0.500	16	16	672	21.974	48,444
YL-56-04-24	16	42.0'	0.250	80	80	3360	64.088	141,287
YL-56-04-25	16	42.0'	0.375	36	36	1512	42.92	94,621
YL-56-04-26	18	42.0'	0.250	48	48	2016	43.336	95,538
YL-56-04-27	18	42.0'	0.375	33	33	1386	44.379	97,837
YL-56-04-29	20	42.0'	0.375	22	22	924	32.943	72,626
TOTAL:				5,087	1,518	48,554	1,167.718	2,574,337

607658	16	18	36	12	13	8	10	24	3	4	455	350	38	ACCEPT	1500	ACCEPT	1-16
606243	11	15	32	14	11	7	4	15	2	11	425	345	45	ACCEPT	660	ACCEPT	1-80
060228	10	18	38	15	22	6	4	35	2	2	440	330	32	ACCEPT	660		
605934	11	14	33	15	10	6	6	19	6	2	455	355	35	ACCEPT	980	ACCEPT	1-36
060218	11	15	40	13	8	6	8	24	2	3	455	355	42		980		
620458	15	20	43	13	12	6	24	33	3	2	445	330	33	ACCEPT	580	ACCEPT	1-48
062076	13	16	33	7	11	6	24	33	3	2	435	340	36	ACCEPT	880	ACCEPT	1-33
060667	13	17	35	6	2	6	24	33	3	2	455	350	36	ACCEPT	790	ACCEPT	1-22
535446	14	22	47	14	12	6	24	33	3	2	435	315	30		790		

WE HEREBY CERTIFY THAT THE PRODUCTS HEREIN HAVE BEEN MADE AND TESTED IN ACCORDANCE WITH THE ABOVE SPECIFICATION AND ALSO WITH THE REQUIRMENTS CALLED FOR THE ORDER.

SIGNATURE
FOR AND ON BEHALF OF
JIANGSU YULONG STEEL PIPE CO.,LTD.
MANAGER, QUALITY CONTROL DEPT
Autherized signature

16 x .250 x 42'

Att: Dave

APPENDIX 2-7

12-INCH CASING TALLY FOR P-1

ENTRIX Water Solutions

Date: 13-Mar-2008
Project Name: Latt Maxcy Upper Floridan Hydrogeological Investigation
Prepared By: Andy McThenia
Well No.: P-1

12.75" Casing Tally

Casing Outer Diameter (inches): 12.75
Casing Wall Thickness (inches): 0.375

Joint No.	Joint Length (ft)	Total Length (ft)	Time Start Weld	Time Finish Weld	Time Weld Submerged	Comments
1	21.01	21.01	NA	NA	NA	Muleshoe cut bottom of casing
2	21.02	42.03	13:17	13:20	13:22	Weld 1 to 2
3	21.00	63.03	13:25	13:31	13:32	Weld 2 to 3
4	21.03	84.06	13:44	13:50	13:52	Weld 3 to 4
5	21.00	105.06	13:58	14:04	14:04	Weld 4 to 5
6	21.00	126.06	14:13	14:20	14:21	Weld 5 to 6
7	21.03	147.09	14:37	14:43	14:45	Weld 6 to 7
8	21.02	168.11	14:53	14:59	15:01	Weld 7 to 8
9	21.00	189.11	15:10	15:22	15:24	Weld 8 to 9
10	21.04	210.15	15:38	15:43	15:45	Weld 9 to 10
11	21.03	231.18	15:55	16:01	16:03	Weld 10 to 11
12	21.03	252.21	16:10	16:17	16:09	Weld 11 to 12
13	21.02	273.23	16:26	16:38	16:40	Weld 12 to 13
14	20.98	294.21	16:50	17:04	17:06	Weld 13 to 14

NOTE: Bottom of casing set at 289 feet bls with original stickup of approx. 5 ft.

APPENDIX 2-8

12-INCH CASING MILL CERTIFICATES FOR P-1

天津双forget钢管有限公司 PAGE NO.2

TIANJIN SHUANGJIE STEEL PIPE CO., LTD.

MILL TEST REPORT

编号 NO: INV06120730-0738 日期 DATE OF ISSUE: 2006/11/13

订单号码 P.O NO. 064-11826 商品名称 COMMODITY: E.R.W. STEEL PIPE AND TUBING 客户名称 CUSTOMER: PUSAN PIPE AMERICA, INC.

规类 SPECIFICATION: ASTM A53-B 发货人 SHIPPER: TIANJIN SHUANGJIE STEEL PIPE CO., LTD.

ASTM REVISION YEAR: 2002 COUNTRY OF ORIGIN: CHINA VESSEL NAME: CHRYSOULA S

INV NO.	HEAT NO.	TYPE	ORDER SIZE	QUANTITY PCS	QUANTITY TTL LENGTH	QUANTITY WEIGHT (M/T)	REMARK
0735	L614438	BBE	8"XSCH40X42'	42	1764 FT	22.844	THE NUMBER OF THIS
0736	L614438	BBE	8"XSCH40X21'	400	8400 FT	108.782	CREDIT. OIP051206000013
0737	6204448	BBE	10"XSCH40X42'	82	3444 FT	63.238	
→ 0738	DL0528016	BBE	12"X0.375"X21'	40	840 FT	18.884	←
	DL0527536	BBE	12"X0.375"X21'	6	126 FT	2.833	

7588B
2267B
2242B
159060

INV NO.	HEAT NO.	HYDROSTATIC TEST Psi	HYDROSTATIC TEST RESULT	N.D.T *2	VISUAL &DIMENSION	FLATTENING	BENDING	ZINC COATING TEST W.T. OF ZINC COATING g/ft²
0735		1,570	G	G	G	G		
0736		1,570	G	G	G	G		
0737		1,430	G	G	G	G		
→ 0738		1,240	G	G	G	G	←	
		1,240	G	G	G	G		

INV NO.	HEAT NO.	DE SI G *5	CHEMICAL COMPOSITION (%) C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	TENSILE TEST DI R *7	TENSILE STRENGTH Psi	YIELD STRENGTH Psi	E.L % *6
			2			3		2	2	2	2	3				
0735		H	19	26	44	12	30	-	-	-	-	-				
		P	19	26	46	11	26	1	1	3	2	1	L	73,225	51,475	38
0736		H	19	26	44	12	30	-	-	-	-	-				
		P	19	26	46	11	26	1	1	3	2	1	L	73,225	51,475	38
0737		H	11	14	44	17	27	-	-	-	-	-				
		P	11	14	46	16	23	1	1	2	2	2	L	62,350	46,400	35
0738		H	12	18	32	10	15	-	-	-	-	-				
		P	12	18	34	09	11	3	2	1	1	3	L	65,250	44,225	37
		H	14	15	37	12	28	-	-	-	-	-				
		P	14	15	39	11	24	3	3	1	1	3	L	62,350	43,500	32

NOTE *REFER TO THE BACK SIDE OTHER

Surveyor: WE HEREBY CERTIFY THAT THE MATERIAL HEREIN HAS BEEN MADE AND TESTED IN ACCORANCE WITH ABOVE SPECIFICATION AND THE RESULTS OF ALL TEST ARE ACCEPTABLE

Manager of Q.A Dept

天津双forget钢管有限公司 质量检验科

P51793

APPENDIX 2-9

CORE DRILLING LOG

APPENDIX 2-9

CORE DRILLING LOG

Date	Time Start	Time End	Start Depth (ft bls)	End Depth (ft bls)	Core Length (ft)	RPM	Rate of Penetration (min/ft)	Core Recovery (%)	Comments
3/19/2008		7:45	282	292	2.5			25	
3/19/2008	7:58	8:03	292	300	3.6		0.63	45	
3/19/2008	8:18	9:41	300	310	8.4		8.30	84	Two trips for interval
3/19/2008	9:52	11:07	310	320	7.8		7.50	78	Void 316' - 318'
3/19/2008	11:22	11:35	320	330	9.3		1.30	93	
3/19/2008	11:43	11:49	330	340	9.4		0.60	94	
3/19/2008	12:03	12:08	340	350	10.0		0.50	100	
3/19/2008	12:16	12:25	350	360	4.5		0.90	45	
3/19/2008	12:39	12:45	360	370	4.2		0.60	42	
3/19/2008	13:16	13:20	370	380	7.5	225	0.40	75	
3/19/2008	13:33	13:36	380	390	8.6	192	0.30	86	
3/19/2008	13:48	13:55	390	400	7.7	162	0.70	77	
3/19/2008	14:09	14:13	400	410	10.0	280	0.40	100	
3/19/2008	14:27	14:31	410	420	10.0	259	0.40	100	
3/19/2008	14:44	14:52	420	430	9.4	259	0.80	94	
3/19/2008	15:05	15:57	430	440	9.2	194	5.20	92	Two trips for interval
3/19/2008	16:11	16:19	440	450	10.0		0.80	100	
3/20/2008	8:40	8:47	450	460	10.0		0.70	100	
3/20/2008	9:07	9:32	460	470	10.0	152	2.50	100	
3/20/2008	9:45	9:51	470	480	10.0	143	0.60	100	
3/20/2008	10:05	10:10	480	490	10.0	199	0.50	100	
3/20/2008	10:28	10:33	490	500	10.0	168	0.50	100	Rig cable break
3/20/2008	14:06	14:13	500	510	9.0	159	0.70	90	
3/20/2008	14:37	14:42	510	520	10.0	134	0.50	100	
3/20/2008	14:58	15:06	520	530	8.2	171	0.80	82	
3/21/2008	7:55	7:58	530	540	8.6	140	0.30	86	
3/25/2008	13:09	13:20	540	550	9.3	180	1.10	93	
3/25/2008	14:10	14:14	550	560	10.0	197	0.40	100	
3/25/2008	14:28	14:34	560	570	10.0		0.60	100	
3/25/2008	14:55	15:01	570	580	10.0	151	0.60	100	
3/25/2008	15:16	15:21	580	590	10.0	177	0.50	100	
3/25/2008	15:36	15:50	590	600	10.0	294	1.40	100	
3/25/2008	16:26	16:34	600	610	10.0		0.80	100	
3/25/2008	16:47	16:53	610	620	10.0		0.60	100	
3/26/2008	7:44	7:55	620	630	9.6	251	1.10	96	
3/26/2008	8:11	8:19	630	640	10.0	226	0.80	100	
3/26/2008	8:33	8:48	640	650	10.0	129	1.50	100	
3/26/2008	9:36	9:43	650	660	10.0	242	0.70	100	
3/26/2008	9:57	10:06	660	670	10.0	255	0.90	100	
3/26/2008	10:19	10:26	670	680	10.0		0.70	100	
3/26/2008	10:40	10:47	680	690	10.0	245	0.70	100	
3/26/2008	11:04	11:11	690	700	10.0	240	0.70	100	
3/26/2008	11:51	12:14	700	710	9.8	211	2.30	98	Two trips for interval
3/26/2008	12:29	12:41	710	720	10.0		1.20	100	
3/26/2008	12:57	13:11	720	730	10.0	245	1.40	100	
3/26/2008	13:25	13:38	730	740	10.0		1.30	100	
3/26/2008	13:52	14:06	740	750	10.0	224	1.40	100	
3/26/2008	14:48	14:53	750	760	9.3	202	0.50	93	
3/26/2008	15:11	15:43	760	770	10.0	219	3.20	100	Two trips for interval
3/27/2008	13:36	13:45	770	780	10.0	195	0.90	100	
3/27/2008	14:56	15:18	780	790	10.0	211	2.20	100	
3/27/2008	15:41	16:02	790	800	10.0	207	2.10	100	
3/27/2008	16:22	16:45	800	810	10.0	216	2.30	100	
3/28/2008	9:00	9:16	810	820	9.0	215	1.60	90	
3/28/2008	9:33	10:15	820	830	9.3	200	4.20	93	Lost circulation at 825'
3/28/2008	10:45	11:13	830	840	9.3	208	2.80	93	Void 834' - 836'
3/28/2008	11:34	12:09	840	850	10.0	201	3.50	100	
3/28/2008	12:25	13:17	850	860	10.0	204	5.20	100	Two trips for interval
3/28/2008	14:02	14:33	860	870	9.6	191	3.10	96	
3/28/2008	14:45	15:05	870	880	9.8	194	2.00	98	Two trips for interval
3/28/2008	16:02	16:38	880	890	10.0	194	3.60	100	Two trips for interval
3/28/2008	16:57	17:00	890	900	10.0	192	0.30	100	

Definitions: RPM : Revolutions per minute (number of full rotations made by the coring string per minute). Rate of Penetration: Number of minutes needed to advance the coring string one foot without interruption in the coring process.

APPENDIX 2-10

DIGITAL PHOTOGRAPHS OF RETRIEVED CORE SAMPLES

APPENDIX 2-11

16-INCH CASING TALLY FOR P-2

ENTRIX Water Solutions

Date: 20-Mar-2008
Project Name: Latt Maxcy Upper Floridan Hydrogeological Investigation
Prepared By: Andy McThenia
Well No.: P-2

16" Casing Tally

Casing Outer Diameter (inches): 16
Casing Wall Thickness (inches): 0.25

Joint No.	Joint Length (ft)	Total Length (ft)	Time Start Weld	Time Finish Weld	Time Weld Submerged	Comments
1	20.80	20.80	NA	NA	NA	Muleshoe cut bottom of casing
2	21.00	41.80	15:18	15:31	15:34	Weld 1 to 2
3	20.79	62.59	15:42	15:50	15:54	Weld 2 to 3
4	20.92	83.51	16:00	16:10	16:10	Weld 3 to 4
5	20.92	104.43	16:21	16:29	16:35	Weld 4 to 5

NOTE: Bottom of casing set at 100.5 feet bls with original stickup of approx. 4 ft.

APPENDIX 2-12

16-INCH CASING MILL CERTIFICATES FOR P-2

HYUNDAS - CANTON TRADER

(3)

YL-56-04-23	14	42.0'	0.500	16	16	672	21.974	48,444	607658	16	18	36	12	13	8	10	24	3	4	455	350	38	ACCEPT	1500	ACCEPT	1-16
									606243	11	15	32	14	11	7	4	15	2	11	425	345	45	ACCEPT	660	ACCEPT	1-80
YL-56-04-24	16	42.0'	0.250	80	80	3360	64.088	141,287	060228	10	18	38	15	22	6	4	35	2	2	440	330	32	ACCEPT	660		
									605934	11	14	33	15	10	6	6	19	6	2	455	355	35	ACCEPT	980 980	ACCEPT	1-36
YL-56-04-25	16	42.0'	0.375	36	36	1512	42.92	94,621	060218	11	15	40	13	8	6	8	24	2	3	455	355	42	ACCEPT	580	ACCEPT	1-48
YL-56-04-26	18	42.0'	0.250	48	48	2016	43.336	95,538	620458	15	20	43	13	12	6	24	33	3	2	445	330	33	ACCEPT	880	ACCEPT	1-33
YL-56-04-27	18	42.0'	0.375	33	33	1386	44.379	97,837	062076	13	16	33	7	11	6	24	33	3	2	435	340	36		790		
									060667	13	17	35	6	2	6	24	33	3	2	455	350	36	ACCEPT	790	ACCEPT	1-22
YL-56-04-29	20	42.0'	0.375	22	22	924	32.943	72,626	535446	14	22	47	14	12	6	24	33	3	2	435	315	30				
TOTAL:				5,087	1,518	48,594	1,167.718	2,574,337																		

WE HEREBY CERTIFY THAT THE PRODUCTS HEREIN HAVE BEEN MADE AND TESTED IN ACCORDANCE WITH THE ABOVE SPECIFICATION AND ALSO WITH THE REQUIRMENTS CALLED FOR THE ORDER.

SIGNATURE
FOR AND ON BEHALF OF
JIANGSU YULONG STEEL PIPE CO.,LTD.
MANAGER, QUALITY CONTROL DEPT
Authorized signature

16 x .250 x 42

Att: Dave

APPENDIX 2-13

12-INCH CASING TALLY FOR P-2

ENTRIX Water Solutions

Date: 26-Mar-2008
Project Name: Latt Maxcy Upper Floridan Hydrogeological Investigation
Prepared By: Andy McThenia
Well No.: P-2

12.75" Casing Tally

Casing Outer Diameter (inches): 12.75
Casing Wall Thickness (inches): 0.375

Joint No.	Joint Length (ft)	Total Length (ft)	Time Start Weld	Time Finish Weld	Time Weld Submerged	Comments
1	21.00	21.00	NA	NA	NA	Muleshoe cut bottom of casing
2	21.00	42.00	10:10	10:17	10:18	Weld 1 to 2
3	21.00	63.00	10:22	10:28	10:29	Weld 2 to 3
4	21.00	84.00	10:34	10:40	10:44	Weld 3 to 4
5	21.00	105.00	10:48	10:54	10:56	Weld 4 to 5
6	21.00	126.00	11:05	11:14	11:15	Weld 5 to 6
7	21.00	147.00	11:27	11:34	11:35	Weld 6 to 7
8	21.00	168.00	11:41	11:47	11:49	Weld 7 to 8
9	21.00	189.00	11:54	12:00	12:01	Weld 8 to 9
10	21.00	210.00	12:11	12:17	12:19	Weld 9 to 10
11	21.00	231.00	12:26	12:34	12:38	Weld 10 to 11
12	21.00	252.00	12:49	12:58	13:01	Weld 11 to 12
13	21.00	273.00	13:05	13:15	13:17	Weld 12 to 13
14	21.00	294.00	13:25	13:33	13:35	Weld 13 to 14
15	16.07	310.07	13:52	14:01	14:02	Weld 14 to 15

NOTE: Bottom of casing originally set at 305 feet bls on March 26th when a break in the casing string (failed weld) occurred between Joint #13 and Joint #14. On April 1, 2008, Joints #14 and #15 were welded to the casing string and the bottom of the string re-set and cemented in the reamed hole at 308.5 feet bls, with 3.5 feet of stickup.

APPENDIX 2-14

12-INCH CASING MILL CERTIFICATES FOR P-2

天津双forget钢管有限公司
TIANJIN SHUANGJIE STEEL PIPE CO., LTD.

PAGE NO.2

MILL TEST REPORT

编号 NO: INV06120730-0738 日期 DATE OF ISSUE: 2008/11/13

订单号码 P.O NO.: 064-01826 商品名称 COMMODITY: E.R.W. STEEL PIPE AND TUBING 客户名称 CUSTOMER: PUSAN PIPE AMERICA, INC.

规格 SPECIFICATION: ASTM A53-B 发货人 SHIPPER: TIANJIN SHUANGJIE STEEL PIPE CO., LTD.

ASTM REVISION YEAR: 2002 COUNTRY OF ORIGIN: CHINA VESSEL NAME: CHRYSOULA S

INV NO.	HEAT NO.	TYPE	ORDER SIZE	QUANTITY PCS	QUANTITY TTL LENGTH	QUANTITY WEIGHT (M/T)	REMARK
0735	L614438	BBE	8"XSCH40X42'	42	1764 FT	22.844	THE NUMBER OF THIS
0736	L614438	BBE	8"XSCH40X21'	400	8400 FT	108.782	CREDIT. OIP051206000013
0737	6204448	BBE	10"XSCH40X42'	82	3444 FT	63.238	
0738	DL0528016	BBE	12"X0.375"X21'	40	840 FT	18.884	
	DL0527536	BBE	12"X0.375"X21'	6	126 FT	2.833	

7588/B
23678
2242/B
189060

INV NO.	HEAT NO.	HYDROSTATIC TEST Psi	HYDROSTATIC TEST RESULT	N.D.T *2	VISUAL &DIMENSION	FLATTENING	BENDING	ZINC COATING TEST W.T. OF ZINC COATING g/m²
0735		1,570	G	G	G	G		
0736		1,570	G	G	G	G		
0737		1,430	G	G	G	G		
0738		1,240	G	G	G	G		
		1,240	G	G	G	G		

INV NO.	HEAT NO.	DE SI G *5	CHEMICAL COMPOSITION (%) C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	DI R *7	TENSILE TEST TENSILE STRENGTH Psi	YIELD STRENGTH Psi	E.L % *6
0735		H	19	26	44	12	30	-	-	-	-	-				
		P	19	26	46	11	26	1	1	3	2	1	L	73,225	51,475	38
0736		H	19	26	44	12	30	-	-	-	-	-				
		P	19	26	46	11	26	1	1	3	2	1	L	73,225	51,475	38
0737		H	11	14	44	17	27	-	-	-	-	-				
		P	11	14	46	16	23	1	1	2	2	2	L	62,350	46,400	35
0738		H	12	18	32	10	15	-	-	-	-	-				
		P	12	18	34	09	11	3	2	1	1	3	L	65,250	44,225	37
		H	12	15	37	12	28	-	-	-	-	-				
		P	14	15	39	11	24	3	3	1	1	3	L	62,350	43,500	32

NOTE *REFER TO THE BACK SIDE OTHER

Surveyor: WE HEREBY CERTIFY THAT THE MATERIAL HEREIN HAS BEEN MADE AND TESTED IN ACCORANCE WITH ABOVE SPECIFICATION AND THE RESULTS OF ALL TEST ARE ACCEPTABLE

Manager of Q.A Dept

P51793

APPENDIX 3-1

EXPLORATORY WELL P-1 LITHOLOGIC LOG

ENTRIX WATER SOLUTIONS

EXPLORATORY WELL P-1
LITHOLOGIC LOG

Latt Maxcy Upper Floridan Hydrogeologic Investigation Project No. 09034001.05

Contractors: Ken Whatley Well Drilling
Huss Drilling

Prepared by: F. Procta, A. McThenia, C. Klug **Dates: 3/6-28/2008**

Depth	Lithology
0.0-5.0	Sand, gray-brown, fine quartz, sub-angular, unconsolidated, silty.
5.0-17.5	Sandstone, light olive gray (5Y 6/1) to moderate yellowish brown (10YR 5/4), poorly indurated, fine quartz, sub-angular, silty, clayey, trace of very fine phosphate.
17.5-21.0	Sandstone, moderate yellowish brown (10YR 5/4), poorly indurated, fine quartz, sub-angular, silty, trace of very fine phosphate.
21.0-28.0	Sandy clay, light olive gray, (5Y 6/1), soft, friable. Note: Sand is very fine quartz.
28.0-36.0	Sand, quartz, yellowish gray (5Y 7/2) to light olive gray (5Y 5/2), unconsolidated, very fine to medium, well rounded to sub rounded, common shells.
36.0-45.0	Shells and sand as above, shells very pale orange (10YR 8/2), unconsolidated, shells mostly paper thin razor clams.
45.0-56.0	Clay, greenish gray (5GY 6/1), sandy, soft, abundant shells, mainly bivalves, common gastropods (turitella).
56.0-64.0	Shells, yellowish gray (5Y 7/2), unconsolidated, mostly clam shells, common clay as above.
64.0-73.0	Clay ~60%, greenish gray (5GY 6/1), soft, ~ 40% shells, very pale orange (10YR 8/2).
73.0-85.0	Clay, dusky yellow green (5GY 5/2), stiff, sticky, common very fine black phosphatic sand, common shells as above.
85.0-93.0	Shells, very pale orange (10YR 8/2) to grayish orange (10YR 7/4), unconsolidated, friable, decreasing clay as above with depth.
93.0-102.0	Clay, greenish gray (5GY 6/1), soft, abundant shells as above, increasingly sandy with depth.
102.0-115.0	Sand ~50%, shells ~40%, clay ~10%, light brownish gray (5YR 6/1), mainly very fine to fine quartz, well rounded to sub-angular.
115.0-132.0	Clay, greenish gray (5GY 6/1), soft, sticky, phosphatic, abundant shells (~20%), mollusks and turitella, minor coral, abundant very fine phosphatic sand, common granular phosphatics.
132.0-134.0	Shell bed. Note: Cuttings returns delayed by watery mud.
134.0-158.0	Clay as above.

158.0-165.0	Clay as above, except firmer.
165.0-182.0	Sand, quartz ~ 90%, light brownish gray (5YR 6/1), very fine to medium, unconsolidated, rounded to sub-angular, loose, unconsolidated; phosphatic sand (~10%), dark gray (N3), very fine to granules, well-rounded to sub-rounded.
182.0-189.0	Sand as above, except softer.
189.0-202.0	Clay, greenish gray (5GY 6/1), stiff, abundant phosphatic sand and shells.
202.0-206.0	Sand to gravel, phosphate, dark gray (5GY 6/1), ~60%, quartz ~30% as above, shell ~ 10%, very well consolidated.
206.0-213.0	Clay, greenish gray (5GY 6/1), soft, abundant phosphatic sand and shells.
213.0-215.0	Hard phosphatic sand as above.
215.0-225.0	Clay, greenish gray (5GY 6/1), soft, abundant phosphatic sand and shells.
225.0-242.0	Dolosilt ~65%, light olive gray (5Y 5/2), quartz sand ~ 25%, phosphatic sand ~10%, soft to moderately stiff.
242.0-246.0	Phosphatic sand to gravel, well indurated, well consolidated.
246.0-260.0	Dolosilt, sand, phosphate mix as above, soft, unconsolidated.
260.0-265.0	Dolostone, light olive gray (5Y 5/2), microcrystalline, very well indurated, abundant phosphatic sand as above.
265.0-280.0	Dolosilt, sand, phosphatic sand mix as above.
280.0-289.0	Marly limestone, dolomitic, white (N7) to yellowish gray (5Y 8/1), mudstone, fair to good induration, abundant very fine to fine phosphatic sand in rock matrix, fair moldic porosity, poor to fair apparent permeability.
*289.0-300.0	Sandstone, yellowish gray (5Y8/1) to light olive gray (5Y 5/2), moderately soft (moderately friable), very calcitic, marly; abundant phosphate sand, generally fine to medium but rare granules, subrounded; common to abundant quartz sand, very fine to fine, subangular to subrounded; fossiliferous including common echinoids, common bivalves, calcitic shells preserved intact, aragonitic forms preserved as molds, poor to good moldic and intragranular porosity, poor apparent permeability; very thick bedded; contact with underlying unit unknown.
300.0-304.0	Silt, light olive gray (5Y 6/1), soft (very poorly indurated), clayey, slightly calcitic; abundant quartz, silt to very fine sand, abundant white (N9), subrounded to rounded, fine sand-sized grains that do not react with HCl and are very soft (very poorly indurated) possibly kaolinite; common to abundant subangular siltstone clasts, light olive gray (5Y 5/2); abundant plant? debris; trace intergranular porosity and trace apparent permeability; very thick bedded; contact with underlying unit unknown.
304.0-316.0	Limestone, hard (well indurated), conglomeratic, consisting of at least three limestone lithologies including: mudstone, light olive gray (5Y 6/1), hard (well indurated), occurring as rounded clasts to cobble size commonly exhibiting borings; wackestone, moderate yellowish brown (10YR 5/4), very sandy including abundant phosphate sand, fine to medium, subrounded; sheltered voids lined with drusy calcite common, this lithology also fills borings in above mudstone clasts; mudstone, yellowish gray (5Y 8/1), includes subrounded clasts of above yellowish brown wackestone as well as common subrounded phosphate sand to granules, occurs as filling of sheltered voids and fractures; common to abundant bivalves and gastropods preserved as molds below 307'

	bls; good intragranular and moldic porosity, fair to good apparent permeability; contact with underlying unit unknown.
316.0-318.0	Void, no recovery.
318.0-322.0	Dolostone, color between grayish orange (10YR 7/4) and pale yellowish orange (10YR 8/6), very finely crystalline, hard (well indurated); fossiliferous including abundant bivalves preserved as molds; good to excellent moldic and intercrystalline porosity and good apparent permeability; very thick bedded; contact with underlying unit unknown.
322.0-392.0	Limestone, wackestone to packstone, color between yellowish gray (5Y 8/1) and very pale orange (10 YR 8/2), soft (friable), very dolomitic; abundant Lepidocyclina ocalana, rare bivalves and gastropods from 340 – 347 and 380 – 390'; trace to poor fine vuggy porosity, trace apparent permeability; very thick bedded; contact with underlying unit unknown.
392.0-400.0	Limestone, grainstone, color between yellowish gray (5Y 8/1) and very pale orange (10 YR 8/2), moderately soft (friable) but locally hard (well indurated) where well-cemented with sparry calcite; grains dominated by miliolid forams; rare gastropods preserved as molds; good intergranular and moldic porosity and good apparent permeability; thin bedded to laminated; contact with underlying unit unknown.
400.0-430.5	Limestone, packstone, color between yellowish gray (5Y 8/1) and very pale orange (10YR 8/2), moderately soft (moderately friable); abundant forams, abundant peloids, rare echinoids (Neolaganum dalli 403-430.5'), rare bivalve and gastropod molds, rare crabs; fair intergranular porosity, fair apparent permeability, very thick-bedded, poor intergranular, intragranular, moldic and fine vuggy porosity; fair to good apparent permeability, contact with underlying unit gradational.
430.5-526.8	Limestone, packstone as above thinly interbedded with mudstone, yellowish gray (5Y 7/2), moderately soft (moderately friable), clayey, laminated and wackestone, color between yellowish gray (5Y 8/1) and very pale orange (10YR 8/2), soft (friable); several wavy carbonaceous laminae 488.4' – 489.2', 506.0' – 507.0'; near horizontal slickensides at 506.5'; abundant echinoids (primarily Neolaganum dalli 430.5-522.0'), abundant forams including Dictyoconus (at 443'), abundant bivalves and gastropods preserved as molds; good intergranular, intragranular and moldic porosity, poor to fair apparent permeability; contact with underlying unit gradational.
526.8-535.1	Limestone, packstone, color between yellowish gray (5Y 8/1) and very pale orange (10YR 8/2), moderately soft (moderately friable), dolomitic; thinly interbedded with wackestone, color between yellowish gray (5Y 8/1) and very pale orange (10YR 8/2), soft (friable), dolomitic; abundant intraclasts, limestone, mudstone, very pale orange (10YR 8/2); rare forams including Quinqueloculina?; trace to fair intergranular porosity and trace to fair apparent permeability; contact with underlying unit gradational.
535.1-536.0	Dolostone, very finely crystalline, color between yellowish gray (5Y 7/2) and pale yellowish brown (10YR 6/2), hard (well indurated), calcitic; abundant intraclasts, limestone, mudstone, very pale orange (10YR 8/2); wavy laminated from 535.3-536.0' with limestone, wackestone to packstone, color between

	yellowish gray (5Y 8/1) and very pale orange (10YR 8/2), moderately soft (moderately friable); trace to fair intergranular porosity and trace to fair apparent permeability; contact with underlying unit gradational.
536.0-537.5	Limestone, wackestone, color between yellowish gray (5Y 8/1) and very pale orange (10YR 8/2), moderately soft (moderately friable), dolomitic; thinly interbedded with mudstone, color between yellowish gray (5Y 8/1) and very pale orange (10YR 8/2), soft (friable), dolomitic; abundant intraclasts of limestone, mudstone, very pale orange (10YR 8/2); rare forams including Quinqueloculina?; trace to fair intergranular porosity and trace to fair apparent permeability; contact with underlying unit gradational.
537.5-545.1	Limestone, wackestone color between yellowish gray (5Y 8/1) and very pale orange (10YR 8/2), moderately soft (moderately friable), common gastropods (molds) and common calcitic bivalves from 541-542', rare forams; thick bedded; trace intergranular porosity and trace apparent permeability; contact with underlying unit gradational.
545.1-550.1	Limestone, packstone, color between yellowish gray (5Y 8/1) and very pale orange (10YR 8/2), very soft (very friable); common forams; thick bedded; fair to good intergranular porosity and fair apparent permeability; contact with underlying unit gradational.
550.1-557.8	Limestone, grainstone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), moderately hard (moderately indurated); abundant forams including Dictyoconus sp. and Spirolina coryensis; thick bedded; good to excellent intergranular porosity and good to excellent apparent permeability; contact with underlying unit gradational.
557.8-564.7	Limestone, grainstone to packstone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), moderately hard (moderately indurated); rare forams including Sorites? sp. thick bedded; fair to good intergranular porosity and fair to good apparent permeability; contact with underlying unit gradational.
564.7-572.5	Limestone, grainstone to packstone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), moderately hard (moderately indurated); abundant forams including Dictyoconus sp. and Spirolina coryensis; thick bedded; good to excellent intergranular porosity and good to excellent apparent permeability; contact with underlying unit sharp.
572.5-573.4	Limestone, wackestone, color between yellowish gray (5Y 8/1) and very pale orange (10YR 8/2), moderately soft (moderately friable), common forams; thin bedded; trace to fair intergranular porosity and trace apparent permeability; contact with underlying unit gradational.
573.4-587.5	Limestone, grainstone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), moderately hard (moderately indurated); abundant forams including Dictyoconus sp.; thick bedded; good to excellent intergranular porosity and good to excellent apparent permeability; contact with underlying unit gradational.
587.5-600.0	Limestone, packstone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), soft (friable); abundant forams including Dictyoconus sp.; thick bedded; fair intergranular porosity and fair apparent permeability; contact with underlying unit gradational.

600.0-601.3	Limestone, grainstone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), moderately hard (moderately indurated); abundant forams including Dictyoconus sp.; thick bedded; fair to good intergranular porosity and fair to good apparent permeability; contact with underlying unit gradational.
601.3-604.0	Limestone, packstone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), moderately hard (moderately indurated); abundant forams; thick bedded; fair intergranular porosity and fair apparent permeability; contact with underlying unit gradational.
604.0-607.9	Limestone, packstone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), moderately hard (moderately indurated), dolomitic; abundant echinoids, common forams; thick bedded; fair intergranular porosity and fair apparent permeability; contact with underlying unit sharp.
607.9-615.3	Limestone, wackestone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), moderately hard (moderately indurated); abundant echinoids (Neolaganum dalli), abundant forams including Dictyoconus sp.; thick bedded; poor to fair intergranular porosity and poor apparent permeability; contact with underlying unit sharp.
615.3-615.6	Limestone, packstone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), moderately hard (moderately indurated), abundant forams; thin bedded; fair intergranular porosity and fair apparent permeability; contact with underlying unit sharp.
615.6-618.0	Limestone, thinly interbedded wackestone and mudstone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), moderately soft (poorly indurated); abundant echinoids (Neolaganum dalli), abundant forams including Dictyoconus sp.; thin bedded; trace to poor intergranular porosity and trace to poor apparent permeability; contact with underlying unit sharp.
618.0-620.0	Limestone, packstone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), moderately hard (moderately indurated), abundant forams including Dictyoconus sp. and Archaias sp., abundant echinoids including Neolaganum dalli; thick bedded; poor to fair intergranular porosity and poor to fair apparent permeability; contact with underlying unit sharp.
620.0-622.0	Limestone, thinly interbedded wackestone and mudstone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), moderately soft (poorly indurated); thin bedded; trace intergranular porosity and trace apparent permeability; contact with underlying unit sharp.
622.0-624.8	Limestone, wackestone to packstone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), moderately hard (moderately indurated), abundant forams including Dictyoconus sp., abundant echinoids including Neolaganum dalli; thick bedded; poor to fair intergranular porosity and poor to fair apparent permeability; contact with underlying unit sharp.
624.8-629.8	Limestone, thinly interbedded wackestone and mudstone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), moderately hard (moderately well indurated); thin bedded; trace intergranular porosity and trace apparent permeability; contact with underlying unit sharp.
629.8-630.2	Limestone, packstone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), moderately hard (moderately indurated), abundant forams

	including Dictyoconus sp., abundant echinoids including Neolaganum dalli; thin bedded; fair intergranular porosity and fair apparent permeability; contact with underlying unit sharp.
630.2-634.8	Limestone, very thinly interbedded wackestone and packstone with rare intervals of mudstone, color between yellowish gray (5Y 7/2) and grayish yellow (5Y 8/4), moderately hard (moderately well indurated); very thin bedded; trace to fair intergranular porosity and trace to fair apparent permeability; contact with underlying unit sharp.
634.8-638.8	Limestone, interlaminated to very thinly bedded wackestone and mudstone, wackestone yellowish gray (5Y 8/1), mudstone yellowish gray (5Y 7/2), clayey; moderately hard (moderately well indurated); trace intergranular porosity and trace apparent permeability; contact with underlying unit sharp.
638.8-643.0	Limestone, wackestone, yellowish gray (5Y 8/1), hard (well indurated); thick bedded; fossiliferous including common forams including Dictyoconus sp., common echinoids (Neolaganum dalli), fair intergranular porosity and fair apparent permeability; contact with underlying unit sharp.
643.0-644.1	Limestone, interlaminated to very thinly bedded wackestone and mudstone, wackestone yellowish gray (5Y 8/1), mudstone yellowish gray (5Y 7/2), clayey; moderately hard (moderately well indurated); trace intergranular porosity and trace apparent permeability; contact with underlying unit gradational.
644.1-644.7	Clay, medium gray, firm, slightly calcitic; contact with underlying unit very sharp.
644.7-649.8	Limestone, interlaminated to very thinly bedded wackestone and mudstone, wackestone yellowish gray (5Y 8/1), mudstone yellowish gray (5Y 7/2), clayey; moderately hard (moderately well indurated); rare gastropods in wackestone preserved as molds, abundant streaks of carbonaceous (plant?) material; trace intergranular porosity and trace apparent permeability; contact with underlying unit gradational.
649.8-653.7	Limestone, wackestone, yellowish gray (5Y 8/1), hard (well indurated), dolomitic in part; rare gastropods preserved as molds, external molds often lined with drusy calcite; abundant streaks of carbonaceous (plant?) material, abundant miliolid forams, common echinoids (Neolaganum dalli); good moldic porosity and fair to good apparent permeability; contact with underlying unit gradational.
653.7-656.9	Limestone, wackestone, yellowish gray (5Y 8/1), hard (well indurated), dolomitic in part; abundant mollusks preserved as molds, external molds often lined with drusy calcite; common streaks of carbonaceous (plant?) material, abundant forams including Archaias and miliolids, common echinoids (Neolaganum dalli); good moldic porosity and fair to good apparent permeability; contact with underlying unit gradational.
656.9-657.6	Limestone, thinly interbedded wackestone and mudstone, wackestone yellowish gray (5Y 8/1), mudstone yellowish gray (5Y 7/2), clayey; moderately soft (moderately poorly indurated); trace intergranular porosity and trace apparent permeability; contact with underlying unit sharp.
657.6-660.0	Limestone, thinly interbedded wackestone and packstone, yellowish gray (5Y

	8/1), hard (well indurated), common echinoids (Neolaganum dalli); fair to good intergranular and fracture porosity and fair to good apparent permeability; contact with underlying unit sharp.
660.0-665.8	Limestone, thinly interbedded wackestone, packstone, grainstone, and mudstone, yellowish gray (5Y 8/1), moderately hard (moderately well indurated); carbonaceous partings abundant from 664.4-665.7'; common forams including Dictyoconus cookei; grainstone with good intergranular porosity and good apparent permeability; contact with underlying unit sharp.
665.8-668.6	Limestone, wackestone to packstone, yellowish gray (5Y 8/1), hard (well indurated), common forams including Dictyoconus sp. and Archaias sp; fair intergranular porosity and fair apparent permeability; contact with underlying unit sharp.
668.6-671.0	Limestone, thinly interbedded wackestone, packstone, and mudstone, yellowish gray (5Y 8/1), moderately hard (moderately well indurated); common forams including Dictyoconus sp.; trace to fair intergranular porosity and trace to fair apparent permeability; contact with underlying unit sharp.
671.0-678.4	Limestone, thinly interbedded wackestone and mudstone, wackestone yellowish gray (5Y 8/1); moderately soft (moderately poorly indurated); common echinoids (Neolaganum dalli); common forams including Archaias sp., common carbonaceous (plant?) material, common narrow (< 2mm. diam.) open vertical burrows often lined with fine, drusy calcite; poor inter- and intragranular porosity and poor apparent permeability; contact with underlying unit gradational.
678.4-680.6	Limestone, wackestone, yellowish gray (5Y 8/1), hard (well indurated), dolomitic; common forams including miliolids and orbitolinids; rare crystal-lined fractures; abundant sand to granule-sized limestone intraclasts; fair fracture porosity and fair apparent permeability; thick bedded; contact with underlying unit sharp.
680.6-682.5	Limestone, mudstone to wackestone, yellowish gray (5Y 8/1) with abundant olive gray (5Y 4/1) wavy laminae, moderately soft (moderately friable); rare crystal-lined fractures; fair fracture porosity and fair apparent permeability; contact with underlying unit sharp.
682.5-683.4	Limestone, packstone to grainstone, yellowish gray (5Y 8/1) with some olive gray (5Y 4/1) wavy laminae, hard (well indurated), dolomitic; common forams including Dictyoconus sp., rare echinoids (Neolaganum dalli); fair to good intergranular porosity and fair apparent permeability; contact with underlying unit sharp.
683.4-685.5	Limestone, mudstone to wackestone, yellowish gray (5Y 8/1) with abundant olive gray (5Y 4/1) wavy laminae, moderately soft (moderately friable); common forams (miliolids), rare crystal-lined fractures, rare gastropod molds; fair fracture porosity and fair apparent permeability; contact with underlying unit gradational.
685.5-694.0	Limestone, primarily wackestone to mudstone with rare, thin packstone stringers, yellowish gray (5Y 8/1) to yellowish gray (5Y 7/2), hard (well indurated), very dolomitic; abundant carbonaceous wavy laminae; rare crystal-lined fractures; common forams including Dictyoconus sp. and miliolids, rare

	echinoids (Neolaganum dalli), abundant gastropods preserved as molds; fair moldic and fracture porosity and fair apparent permeability; generally thick bedded, contact with underlying unit gradational.
694.0-698.0	Limestone, primarily packstone to grainstone, yellowish gray (5Y 8/1) with some olive gray (5Y 4/1) wavy laminae, very poorly indurated (very friable), slightly dolomitic; good intergranular porosity and good apparent permeability; contact with underlying unit gradational.
698.0-707.1	Limestone, wackestone, yellowish gray (5Y 8/1), hard (well indurated), dolomitic; common gastropods preserved as molds, rare echinoids (Neolaganum dalli); fair to good moldic porosity and fair apparent permeability; contact with underlying unit sharp.
707.1-716.9	Limestone, primarily wackestone to mudstone with rare, thin packstone to grainstone stringers, yellowish gray (5Y 8/1) to yellowish gray (5Y 7/2), moderately hard (moderately well indurated), dolomitic (especially below 714'), abundant carbonaceous wavy laminae; common forams including Archaias sp., common echinoids (Neolaganum dalli), poor moldic and intergranular porosity and trace to poor apparent permeability; generally thick bedded; contact with underlying unit gradational.
716.9-722.9	Dolostone, color between pale yellowish orange (10YR 8/6) and very pale orange (10YR 8/2), very finely to finely crystalline, hard (well indurated), vuggy with vugs up to 2.5" in diameter, fossiliferous including echinoids (Neolaganum dalli) preserved as molds; dolomite psuedomorphs apparently after selenite at 717.7'; good to excellent vuggy and moldic porosity, good apparent permeability; thick bedded; contact with underlying unit gradational.
722.9-726.2	Limestone, wackestone, yellowish gray (5Y 8/1) to yellowish gray (5Y 7/2), moderately soft (moderately friable), very dolomitic (especially above 724'), common carbonaceous wavy laminae; rare small bivalves preserved as molds, most fossil debris very fine to fine sand-size, poor moldic and intergranular porosity and trace to poor apparent permeability; thick bedded; contact with underlying unit sharp.
726.2-728.1	Intraformational breccia: matrix limestone, wackestone, color between dark yellowish brown (10YR 4/2) and moderate yellowish brown (10YR 5/4), color due to abundant carbonaceous (plant?) material, moderately hard (moderately well indurated); abundant intraclasts of limestone, wackestone to mudstone, yellowish gray (5Y 8/1); trace intergranular porosity and trace apparent permeability; thick bedded; contact with underlying unit sharp.
728.1-730.0	Limestone, mudstone, yellowish gray (5Y 8/1), moderately hard (moderately well indurated), common carbonaceous (plant material?) wavy laminae; trace intergranular porosity and trace apparent permeability; generally thick bedded with bedding planes steeply inclined up to 55°, (Note: May be very large clasts in breccia.); contact with underlying unit sharp.
730.0-731.9	Intraformational breccia: matrix limestone, packstone, yellowish gray (5Y 8/1), hard (well indurated), dolomitic, fossiliferous including rare echinoids (Neolaganum dalli?); abundant intraclasts (to 6.5"+ in diameter) of limestone, mudstone, yellowish gray (5Y 8/1); rare intraclasts of lignite? (to 1.25" in diameter); trace intergranular porosity and trace apparent permeability; thick

	bedded; contact with underlying unit gradational.
731.9-734.0	Limestone, wackestone, yellowish gray (5Y 8/1), hard (well indurated); fossiliferous including abundant forams including miliolids and Archaias, trace intergranular porosity and trace apparent permeability; generally thick bedded; contact with underlying unit gradational.
734.0-739.5	Limestone, wackestone to packstone, yellowish gray (5Y 8/1), moderately hard (moderately well indurated) near top but soft (friable) near base; abundant intraclasts of medium to coarse sand-size yellowish gray (5Y 8/1) wackestone to mudstone; fossiliferous including forams including Bulimina, rare echinoids (Neolaganum dalli); thin bedded; trace to fair intergranular porosity and trace apparent permeability; contact with underlying unit gradational.
739.5-750.0	Limestone, packstone to grainstone, yellowish gray (5Y 8/1), soft (friable); fossiliferous including forams including Bulimina, thick bedded; good intergranular porosity and good apparent permeability; contact with underlying unit gradational.
750.0-763.4	Limestone, packstone to grainstone, color between very pale orange (10YR 8/2) and grayish orange (10YR 7/4), moderately hard (moderately well indurated); fossiliferous including forams including Bulimina sp. and Dictyoconus sp.; thick bedded; good intergranular porosity and good apparent permeability; contact with underlying unit gradational.
763.4-782.0	Limestone, thinly interbedded mudstone, wackestone, packstone, and grainstone apparently arranged in fining upward packets, mudstone and wackestone becoming more prominent with depth, color between very pale orange (10YR 8/2) and grayish orange (10YR 7/4), moderately hard (moderately well indurated); rounded small (< .5") mudstone intraclasts common in grainstones; thin bedded; fossiliferous including abundant thin-shelled calcitic bivalves, common forams including Dictyoconus sp. and Lituonella sp., rare echinoids (Neolaganum dalli); generally poor porosity and poor apparent permeability as mudstone and wackestone tend to be the predominant lithology; contact with underlying unit gradational.
782.0-782.5	Limestone, packstone to grainstone, color between very pale orange (10YR 8/2) and grayish orange (10YR 7/4), very soft (very poorly indurated); peloidal; thin bedded; good to excellent intergranular porosity and good apparent permeability; contact with underlying unit sharp.
782.5-787.2	Limestone, wackestone, color between very pale orange (10YR 8/2) and grayish orange (10YR 7/4), hard (well indurated); peloidal; fossiliferous including abundant gastropods and bivalves preserved as molds, abundant forams including Sorites?, rare solitary coral; thick bedded; fair to good intergranular and moldic porosity and fair to good apparent permeability; contact with underlying unit gradational.
787.2-790.0	Limestone, primarily mudstone with minor amounts of wackestone, color between very pale orange (10YR 8/2) and grayish orange (10YR 7/4), moderately hard (moderately well indurated); laminated; abundant rounded rip-up intraclasts at 789.8'; trace intergranular porosity and trace apparent permeability; contact with underlying unit sharp.
790.0-798.8	Limestone, predominantly wackestone with minor packstone and mudstone,

	color between very pale orange (10YR 8/2) and grayish orange (10YR 7/4), dolomitic, hard (well indurated); fossiliferous including abundant bivalves and gastropods preserved as molds, abundant forams including miliolids and Sorites?, rare solitary coral; thick bedded; poor intergranular and moldic porosity and poor apparent permeability; contact with underlying unit gradational.
798.8-800.0	Limestone, predominantly mudstone with minor wackestone and packstone, laminated, very pale orange (10YR 8/2) to yellowish gray (5Y 7/2), dolomitic, moderately hard (moderately well indurated); fossiliferous including common miliolids; trace intergranular porosity and trace apparent permeability; contact with underlying unit sharp.
800.0-808.0	Dolostone, yellowish gray (5Y 8/1), calcitic, hard (well indurated); fossiliferous including abundant small gastropods and bivalves preserved as molds, abundant forams including miliolids, orbitolinids, and Dictyoconus sp., rare echinoids (Neolaganum dalli?), rare solitary coral; fair to good moldic porosity and fair to good apparent permeability; contact with underlying unit unknown.
808.0-810.0	Intraformational breccia; matrix limestone, color between very pale orange (10YR 8/2) and pale yellowish brown (10YR 6/2), hard (well indurated); intraclasts mudstone, yellowish gray (5Y 8/1), up to 1.5" in diameter; fossiliferous including abundant forams including miliolids; poor to fair intergranular porosity poor to fair apparent permeability; contact with underlying unit unknown.
810.0-814.7	Limestone, predominantly wackestone with minor mudstone and packstone, yellowish gray (5Y 8/1), moderately hard (moderately well indurated); poorly fossiliferous with rare, small gastropods preserved as molds and rare forams (miliolids); poor intergranular porosity and poor apparent permeability; base with irregular slickenside surface, contact with underlying unit sharp.
814.7-818.0	Dolostone, grayish yellow (5Y 8/4) to pale yellowish brown (10 YR 6/2), very finely crystalline, calcitic, very hard (very well indurated); fossiliferous including rare echinoids, rare bivalves, fossils preserved as molds; poor fine-vuggy and moldic porosity, poor apparent permeability; contact with underlying unit gradational.
818.0-824.7	Dolostone, grayish yellow (5Y 8/4) to pale yellowish brown (10 YR 6/2), very finely crystalline, slightly calcitic, very hard (very well indurated); fossiliferous including rare echinoids, fossils preserved as molds; abundant vugs up to 1.5" in diameter, common diagonal fractures 8"+ long, vugs, fractures, and molds typically lined with fine drusy dolomite; fair to good vuggy, fracture, and moldic porosity, fair to good apparent permeability; contact with underlying unit gradational.
824.7-826.9	Limestone, predominantly wackestone and mudstone, yellowish gray (5Y 8/1), moderately hard (moderately well indurated) in upper part but soft (friable) at base; fossiliferous with abundant forams including miliolids; trace to poor intergranular porosity and trace to poor apparent permeability; contact with underlying unit sharp.
826.9-828.0	Intraformational breccia, matrix limestone, wackestone, light olive gray (5Y 5/2), moderately hard (moderately well indurated), intraclasts limestone,

	mudstone to wackestone, yellowish gray (5Y 7/2), generally less than .5" diameter to fine sand size, angular to subangular; trace to poor intergranular porosity and trace apparent permeability; contact with underlying unit unknown.
828.0-830.4	Limestone, wackestone, light olive gray (5Y 5/2), dolomitic, very soft (generally unconsolidated) but moderately hard at base (moderately well indurated), trace to poor intergranular porosity and trace apparent permeability; contact with underlying unit sharp.
830.4-832.6	Dolostone, color between yellowish gray (5Y 7/2) and light olive gray (5Y 5/2); very finely crystalline, slightly calcitic, very hard (very well indurated); abundant vugs up to 2.5" in diameter but generally much smaller, common diagonal fractures; fair to good vuggy, fracture, and intercrystalline porosity, fair to good apparent permeability; thick bedded; contact with underlying unit sharp.
832.6-836.5	Dolostone, color between yellowish gray (5Y 7/2) and light olive gray (5Y 5/2); very finely crystalline, slightly calcitic, very hard (very well indurated); abundant carbonaceous debris; abundant small isolated vugs (<.5" in diameter), common diagonal fractures; poor to fair vuggy, fracture, and intercrystalline porosity, poor to fair apparent permeability; thick bedded; contact with underlying unit sharp.
836.5-837.5	Dolostone as 832.6-836.5 but highly fractured; excellent apparent permeability.
837.5-838.3	Dolostone, very pale orange (10YR 8/2); very finely crystalline, very slightly calcitic, very hard (very well indurated); abundant small isolated vugs (<.5" in diameter), common diagonal fractures; poor to fair vuggy, fracture, and intercrystalline porosity, poor to fair apparent permeability; thin bedded; contact with underlying unit sharp.
838.3-840.5	Dolostone, light olive gray (5Y 7/2); very finely crystalline, very slightly calcitic, very hard (very well indurated); abundant small isolated vugs (<.5" in diameter), common diagonal fractures; poor to fair vuggy, fracture, and intercrystalline porosity, poor to fair apparent permeability; thick bedded; contact with underlying unit gradational.
840.5-842.0	Dolostone as 838.3-840.5 but good to excellent vuggy and fracture porosity and good to excellent apparent permeability; contact with underlying unit gradational.
842.0-846.2	Dolostone, light olive gray (5Y 7/2); very finely crystalline, very slightly calcitic, very hard (very well indurated); abundant small isolated vugs (< 1" in diameter), common diagonal fractures; good vuggy and fracture porosity, good apparent permeability; thick bedded; contact with underlying unit sharp.
846.2-848.0	Dolostone, color between yellowish gray (5Y 7/2) and moderate yellow (5Y 7/6), very finely crystalline, very slightly calcitic, very hard (very well indurated); abundant small isolated vugs (< 1" in diameter), abundant fractures; excellent vuggy and fracture porosity, excellent apparent permeability; thick bedded; contact with underlying unit gradational.
848.0-849.4	Dolostone, color between yellowish gray (5Y 7/2) and moderate yellow (5Y 7/6), very finely crystalline, very slightly calcitic, very hard (very well indurated); common small isolated vugs (< 1" in diameter), common fractures;

	good vuggy and fracture porosity, good apparent permeability; thick bedded; contact with underlying unit sharp.
849.4-851.2	Dolostone, alternating laminae of yellowish gray (5Y 7/2) and light olive gray (5Y 5/2), very finely to finely crystalline, very slightly calcitic, very hard (very well indurated); possible salt casts at 850.5'; common isolated vugs (< 1" in diameter); fair vuggy porosity, fair apparent permeability; laminated; contact with underlying unit sharp.
851.2-852.7	Dolostone, yellowish gray (5Y 7/2), very finely crystalline, very slightly calcitic, very hard (very well indurated); common small isolated vugs (< 0.1" in diameter), common fractures; poor to fair vuggy and fracture porosity, poor to fair apparent permeability; thick bedded; contact with underlying unit gradational.
852.7-855.2	Dolostone, alternating very thin beds to laminae of yellowish gray (5Y 8/1) to yellowish gray (5Y 7/2), very finely crystalline, slightly calcitic, very hard (very well indurated); rare small isolated vugs (< 0.1" in diameter), rare fractures; poor vuggy and fracture porosity, poor apparent permeability; thin bedded to laminated; contact with underlying unit sharp.
855.2-855.9	Intraformational breccia composed almost entirely of clasts of angular to subangular dolostone, yellowish gray (5Y 7/2), very finely crystalline, very slightly calcitic, very hard (very well indurated); common small (< 0.5" diameter) isolated vugs; abundant small isolated fractures, common large vertical fractures; poor to fair vuggy and fracture porosity, poor to fair apparent permeability; contact with underlying unit sharp.
855.9-856.7	Dolostone, yellowish gray (5Y 7/2) to dusky yellow (5Y 6/4), very finely to finely crystalline, very hard (very well indurated); abundant small interconnected vugs (< 0.25" in diameter) aligned parallel to bedding; fair to good vuggy porosity, fair to good apparent permeability; laminated to very thin bedded; contact with underlying unit sharp.
856.7-857.6	Dolostone, alternating very thin beds to laminae of yellowish gray (5Y 8/1) to yellowish gray (5Y 7/2), very finely crystalline, slightly calcitic, very hard (very well indurated); rare small isolated vugs (< 0.1" in diameter); trace to poor vuggy porosity, trace apparent permeability; thin bedded to laminated; contact with underlying unit sharp.
857.6-858.0	Dolostone, alternating very thin beds to wavy laminae of yellowish gray (5Y 8/1) to light olive gray (5Y 5/2), light olive gray portions clayey, very finely crystalline, very hard (very well indurated); rare small isolated vugs (< 0.1" in diameter); trace vuggy porosity, trace apparent permeability; thin bedded to laminated; contact with underlying unit gradational.
858.0-862.3	Dolostone, alternating very thin beds to laminae of yellowish gray (5Y 8/1) to yellowish gray (5Y 7/2), very finely crystalline, slightly calcitic, very hard (very well indurated); rare small isolated vugs (< 0.1" in diameter); trace to poor vuggy porosity, trace apparent permeability; thin bedded to laminated; contact with underlying unit sharp.
862.3-863.9	Dolostone, alternating very thin beds to wavy laminae of yellowish gray (5Y 8/1) to light olive gray (5Y 5/2), light olive gray portions clayey, very finely crystalline, very hard (very well indurated); rare small isolated vugs (< 0.1" in

	diameter); trace vuggy porosity, trace apparent permeability; thin bedded to laminated; contact with underlying unit sharp.
863.9-867.2	Dolostone, moderate yellowish brown (10YR 5/4), very finely crystalline, very hard (very well indurated); abundant small isolated vugs (< 1" in diameter); good vuggy porosity, good apparent permeability; thick bedded; contact with underlying unit sharp.
867.2-874.6	Limestone, mudstone to wackestone, very pale orange (10YR 8/2) to yellowish gray (5Y 7/2), dolomitic, moderately hard (moderately well indurated), poorly fossiliferous including rare, thin-shelled calcitic bivalves; trace intergranular porosity and trace apparent permeability; thick bedded; contact with underlying unit sharp.
874.6-875.6	Dolostone, yellowish gray (5Y 7/2), very finely crystalline, very hard (very well indurated); common small isolated vugs (< 1" in diameter), common vertical fractures; fair to good vuggy and fracture porosity, fair to good apparent permeability; thick bedded; contact with underlying unit sharp.
875.6-878.2	Limestone, generally mudstone to wackestone but thin interval of packstone to grainstone at 876.6-876.8', very pale orange (10YR 8/2) to yellowish gray (5Y 7/2), dolomitic, moderately hard (moderately well indurated), fair intergranular porosity and fair apparent permeability; thick bedded; contact with underlying unit sharp.
878.2-882.0	Dolostone, yellowish gray (5Y 7/2), very finely crystalline to microcrystalline, very hard (very well indurated); common small isolated vugs (< 1" in diameter), common vertical fractures; fair to good vuggy and fracture porosity, fair to good apparent permeability; thick bedded; contact with underlying unit sharp.
882.0-883.0	Dolostone, thin bedded to laminated with layers yellowish gray (5Y 7/2) to dark yellowish brown (10YR 4/2), very finely crystalline, hard (well indurated); possible casts (salt?) at 882.7'; common short vertical fractures; good fracture porosity, good apparent permeability; thin bedded to laminated; contact with underlying unit gradational.
883.0-886.8	Limestone, mudstone to wackestone, yellowish gray (5Y 7/2), dolomitic, moderately soft (poorly indurated), trace intergranular porosity and trace apparent permeability; thick bedded; contact with underlying unit gradational.
886.8-889.0	Dolostone, yellowish gray (5Y 7/2), very finely crystalline, moderately hard (moderately well indurated) alternating with limestone as above; common short vertical fractures to vugs; poor fracture porosity, poor apparent permeability; thin bedded to laminated; contact with underlying unit sharp.
889.0-890.0	Dolostone, color between yellowish gray (5Y 7/2) and moderate yellow (5Y 7/6), very finely crystalline, hard (well indurated) alternating with limestone as above; common short vertical fractures to vugs; poor fracture porosity, poor apparent permeability; thin bedded to laminated; contact with underlying unit unknown.
890.0-893.3	Limestone, mudstone to wackestone, alternating very thin beds to laminae of yellowish gray (5Y 7/2) and pale yellowish brown (10YR 6/2), dolomitic especially in pale yellowish brown layers, hard (well indurated), abundant wavy carbonaceous laminae; poor intergranular and fracture porosity and poor

	apparent permeability; laminated to very thin bedded; contact with underlying unit sharp.
893.3-896.4	Limestone, thinly alternating mudstone, wackestone, and packstone, very pale orange (10YR 8/2), dolomitic, moderately hard (moderately well indurated), fossiliferous including abundant miliolids; poor intergranular porosity and poor apparent permeability; thin bedded; contact with underlying unit sharp.
896.4-897.6	Limestone, packstone to grainstone, very pale orange (10YR 8/2), moderately hard (moderately well indurated), fossiliferous including abundant forams including miliolids, Sorites?, and Dictyoconus; common bivalve fragments, abundant limestone intraclasts; good intergranular porosity and good apparent permeability; thin bedded; contact with underlying unit sharp.
897.6-900.0 (TD)	Limestone, mudstone, wackestone, and packstone, very pale orange (10YR 8/2), dolomitic, moderately hard (moderately well indurated), fossiliferous including common bivalve molds; poor intergranular and moldic porosity and poor apparent permeability; thin bedded; contact with underlying unit unknown.

*Note: Sediments described for samples collected from land surface to 289 feet bls represent drill cuttings. Descriptions of sediments collected from 289 to 900 feet bls represent core samples.

APPENDIX 3-2

PRODUCTION WELL P-2 LITHOLOGIC LOG

ENTRIX WATER SOLUTIONS

PRODUCTION WELL P-2
LITHOLOGIC LOG

Latt Maxcy Upper Floridan Hydrogeologic Investigation **Project No. 09034001.05**

Contractor: Ken Whatley Well Drilling

Prepared by: F. Procta, A. McThenia, C. Klug **Dates: 3/20/08 - 4/24/08**

Depth	Lithology
0-1	Silty sand, dusky brown, (5YR 2/2), ~60% quartz sand, very fine to fine, angular to subrounded, ~40% organics.
1-8	Sandy clay, moderate brown, (5YR 3/4), soft, very fine to fine quartz sand.
8-25	Sandy clay, moderate yellowish brown, (10YR 5/4), soft, quartz sand very fine to medium.
25-37	Sandy clay, dark yellowish brown (10YR 4/2), soft, quartz sand very fine to coarse, rounded to subrounded.
37-53	Clay, dusky yellow green (5GY 5/2), soft, abundant shells, very pale orange, (10YR 8/2), shell fragments are very thin and friable.
53-94	Shells and quartz sand, very pale orange (10YR 8/2), loose, 20 to 30% quartz sand, very fine to medium, rounded to sub-angular.
94-100	Clay, greenish gray, (5GY 6/1), stiff, sticky, abundant phosphatic sand, common quartz sand, abundant shell fragments.
100-113	Clay, moderate olive brown (5Y 4/4); abundant quartz sand, very fine to coarse, subangular; abundant aragonitic mollusk shell fragments, rare echinoid spines, rare bryozoans.
113-135	Sand, clayey, moderate olive brown (5Y 4/4), quartz sand very fine to coarse, subangular to subrounded; common phosphate sand, very fine to granules, subrounded; abundant aragonitic and calcitic mollusk shell, rare crabs, rare barnacles, rare echinoids; poor to fair intergranular porosity.
135-150	Clay, moderate olive brown (5Y 4/4), soft, sticky; abundant quartz sand, very fine to coarse, subangular to subrounded; abundant phosphate granules at 148' bls; abundant calcitic mollusk shell fragments.
150-153	Siltstone, light olive gray (5Y 5/2), hard (well indurated) clayey, sandy with abundant quartz sand, very fine to fine, subangular; abundant aragonitic and calcitic mollusk shell, common barnacles, common fish bone, common echinoid spines; poor intergranular porosity.
153-193	Clay, moderate olive brown (5Y 4/4), soft; abundant quartz sand, very fine to coarse, subangular to subrounded; abundant phosphate granules at 181' bls; abundant calcitic and aragonitic mollusk shell fragments, abundant barnacles, common bryozoans, abundant forams including Buliminella elegantissima and Nonion sp..

193-209	Sand, light olive gray (5Y 5/2), clayey, abundant quartz sand, very fine to coarse, subangular to subrounded; abundant phosphate sand, fine to coarse, subangular to subrounded; abundant calcitic mollusk shell, rare echinoid spines; common forams including Nonion sp.; poor intergranular porosity.
209-220	Dolostone, olive gray, (5Y 4/6), very well indurated, microcrystalline, abundant phosphatic sand to gravel, abundant oyster shells.
220-225	Dolosilt, light olive gray, (5Y 5/2), soft, ~10% marl, yellowish gray (5Y 8/1), fine phosphatic sand abundant in marl.
225-245	Clay, greenish olive (10Y 4/2), stiff, abundant phosphatic sand to gravel, common shells, hard drilling.
245-249	Marl, (5Y 8/1), yellowish gray, soft sticky, abundant clasts of limestone, yellowish gray (5Y 8/1), fossil packstone, moderate induration.
249-250	Hard layer of phosphatic gravel.
250-260	Clay, greenish olive (10Y 4/2), soft, abundant phosphatic sand to gravel, common shells.
260-275	Marl, yellowish gray, (5Y 8/1), soft, sticky, abundant clasts of limestone, yellowish gray (5Y 8/1), fossil packstone, moderate induration.
275-277	Gravel and clay, greenish olive (10Y 4/2), stiff, abundant phosphatic sand to gravel, common shells, hard drilling.
277-288	Clay, greenish olive (10Y 4/2), soft, abundant phosphatic sand to gravel, common shells.
288-290	Marly limestone, yellowish gray, (5Y 7/2), poor induration, mudstone to wackestone, abundant fine phosphatic sand in matrix, minor moldic porosity.
290-295	Clay, grayish olive, (10Y 4/2), stiff, abundant phosphatic sand to gravel, common marl, yellowish gray, (5Y 8/1).
295-314	Marly limestone, yellowish gray, (5Y 7/2), poor induration, mudstone to wackestone, abundant fine phosphatic sand in matrix, minor moldic porosity.
314-316.5	Limestone, white (N9) to yellowish gray (5Y 8/1), wackestone, moderately to well indurated, variably chalky, variably dolomitized, trace of very fine phosphate, poor porosity, poor apparent permeability, with common seams of dolostone, grayish olive (10Y 4/2), microcrystalline, well indurated, vuggy, variably moldic, commonly phosphatic (fine to medium coarse), commonly fine quartz sandy, good to fair moldic porosity, good apparent permeability.
316.5-318.5	Clay, dark greenish gray (5GY 4/1), soft to firm, silty, very fine quartz sandy, very finely phosphatic, poor apparent permeability.
318.5-321	Siltstone, greenish gray (5GY 6/1), moderately to poorly indurated, clayey, very fine quartz sandy, very finely phosphatic, poor porosity, poor apparent permeability.
321-324	Limestone, white (N9) to yellowish gray (5Y 8/1), grainstone, moderately indurated to friable, moldic, highly phosphatic (fine to medium coarse), fine quartz sandy, good interparticle and moldic porosity, good to fair apparent permeability, common shell fragments.
324-327	Siltstone, greenish gray (5GY 6/1), moderately to poorly indurated, clayey, very fine quartz sandy, very finely phosphatic, poor porosity, poor apparent

	permeability, common shell fragments.
327-328	Clay, dark greenish gray (5GY 4/1), soft to firm, silty, very fine quartz sandy, very finely phosphatic, poor apparent permeability, common shell fragments.
328-329.5	Siltstone, greenish gray (5GY 6/1), moderately to poorly indurated, clayey, very fine quartz sandy, very finely phosphatic, poor porosity, poor apparent permeability, common shell fragments.
329.5-331.5	Shell bed, yellowish gray (5Y 7/2), unconsolidated, with abundant fine to very coarse phosphate, very good interparticle porosity, very good apparent permeability.
331.5-332.5	Limestone, light gray (N7), mudstone, well indurated, fine quartz sandy, finely phosphatic, poor porosity, poor apparent permeability.
332.5-337	Limestone, yellowish gray (5Y 7/2) to light gray (N7), wackestone, well indurated, pin-point vuggy, highly phosphatic (very fine to medium coarse), scantly very fine quartz sandy, poor porosity, poor apparent permeability, with common medium to very coarse phosphate, some shell fragments.
337-342.5	Limestone, light gray (N7) to yellowish gray (5Y 8/1), wackestone, moderately indurated, chalky, variably marly, some fine molds, finely phosphatic, trace of very fine quartz sand, poor porosity, poor apparent permeability.
342.5-346.5	Clay, light olive gray (5Y 6/1), soft to firm, silty, sticky, very fine quartz sandy, highly phosphatic (very fine to medium coarse), poor apparent permeability, with abundant medium coarse to very coarse phosphate, common shell fragments, common seams of siltstone, as above.
346.5-350	Limestone, light gray (N7) to yellowish gray (5Y 8/1), wackestone, moderately indurated, chalky, variably marly, some fine molds, finely phosphatic, trace of very fine quartz sand, poor porosity, poor apparent permeability, abundant phosphate (fine to very coarse), common shell.
350-356	Limestone, very pale orange (10YR 8/2), grainstone, moderately to poorly indurated, fine grained, some very fine molds, fair porosity, fair to poor apparent permeability, common phosphate, common shell fragments.
356-360.5	Shell bed, yellowish gray (5Y 7/2), unconsolidated, with common medium to very coarse phosphate, very good interparticle porosity, very good apparent permeability.
360.5-398	Limestone, packstone, color between very pale orange (10YR 8/2) and yellowish gray (5Y 7/2), soft (poorly indurated), dolomitic; fossiliferous including abundant Lepidocyclina, rare calcitic bivalves (pectinids).
398-400	Limestone, packstone, color between very pale orange (10YR 8/2) and yellowish gray (5Y 7/2), soft (poorly indurated), dolomitic; fossiliferous including abundant forams including abundant Lepidocyclina and Nummulites, rare calcitic bivalves (pectinids), rare bryozoans, rare echinoids.
400-411	Limestone, packstone, color between very pale orange (10YR 8/2) and yellowish gray (5Y 7/2), soft (poorly indurated), dolomitic; fossiliferous including abundant Lepidocyclina, abundant Nummulites.
411-412	Limestone, packstone, color between very pale orange (10YR 8/2) and yellowish gray (5Y 7/2), moderately hard (moderately well indurated), dolomitic; fossiliferous including abundant Lepidocyclina, abundant Nummulites, common bryozoans, rare echinoids.

412-438	Limestone, packstone, color between very pale orange (10YR 8/2) and yellowish gray (5Y 7/2), soft (poorly indurated), fossiliferous including rare Lepidocyclina, abundant Nummulites, rare bryozoans, rare echinoids.
438-441	Limestone, packstone, color between very pale orange (10YR 8/2) and yellowish gray (5Y 7/2), soft (poorly indurated), fossiliferous including abundant Lepidocyclina, abundant Nummulites, rare Dictyoconus, common Neolaganum dalli, rare bryozoans.
441-465	Limestone, grainstone, color between very pale orange (10YR 8/2) and yellowish gray (5Y 7/2), moderately hard (moderately well indurated), fossiliferous including abundant Lepidocyclina, abundant Nummulites, rare bryozoans, common gastropod molds, rare ostracodes, good moldic and intergranular porosity.
465-480.5	Limestone, grainstone to packstone, color between very pale orange (10YR 8/2) and yellowish gray (5Y 7/2), hard (well indurated), fossiliferous including abundant Lepidocyclina, abundant Nummulites, common Dictyoconus cookei, rare gastropod molds, fair to good moldic and intergranular porosity.
480.5-500	Limestone, yellowish gray (5Y 8/1), fossil packstone, moderately to well indurated, chalky, variably moldic, common shell fragments, common Neolagunum Dalli, trace of very fine quartz and phosphatic sand, fair to poor moldic porosity, poor apparent permeability.
500-510	Limestone, yellowish gray (5Y 8/1), fossil packstone, moderately indurated, fine grained, chalky, finely moldic, common shell fragments, common Neolagunum Dalli, fair to poor moldic porosity, poor apparent permeability.
510-540	Limestone, yellowish gray (5Y 8/1), wackestone, moderately to poorly indurated, fine grained, chalky, few fine molds, common shell fragments, poor porosity, poor apparent permeability.
540-553	Limestone as above, but with common interbeds of mudstone, yellowish gray (5Y 8/1), moderately to poorly indurated, poor porosity, poor apparent permeability.
553-557.5	Limestone, yellowish gray (5Y 8/1), mudstone, moderately to poorly indurated, poor porosity, poor apparent permeability, common shell fragments, with common seams of lime mud.
557.5-580	Limestone, yellowish gray (5Y 8/1), wackestone, moderately indurated, fine grained, chalky, some fine molds, common shell fragments, poor porosity, poor apparent permeability.
580-600	Limestone, yellowish gray (5Y 8/1), mudstone, moderately to poorly indurated, chalky, common shell fragments, poor porosity, poor apparent permeability, with common seams of lime mud.
600-612	Limestone, yellowish gray (5Y 8/1), grainstone, poorly indurated, medium to fine grained, good interparticle porosity, good apparent permeability.
612-634	Limestone, yellowish gray (5Y 8/1), packstone, moderately to poorly indurated, fine grained, trace of very fine phosphate, poor porosity, poor apparent permeability.
634-644	Limestone, yellowish gray (5Y 8/1), wackestone, moderately to well indurated, moldic, fair to poor moldic porosity, poor apparent permeability.
644-647	Limestone, yellowish gray (5Y 8/1), wackestone, moderately to poorly

	indurated, chalky, some molds, trace of very fine phosphate, poor porosity, poor apparent permeability.
647-652	Limestone, packstone, color between very pale orange (10YR 8/2) and pale yellowish brown (10YR 6/2), moderately hard (moderately well indurated), fossiliferous including abundant forams including abundant miliolids and rare Dictyoconus cookei, rare ostracodes, rare gastropod molds, fair to good moldic and intergranular porosity.
652-654	Dolostone, olive gray (5Y 4/1), very finely crystalline, very hard (very well indurated); no visible porosity but possible fracture porosity as water production appeared to increase somewhat.
654-663	Limestone, grainstone, color between very pale orange (10YR 8/2) and pale yellowish brown (10YR 6/2), soft (friable), fossiliferous including abundant forams including common Dictyoconus cookei, common bivalves, rare bryozoans, fair to good moldic and intergranular porosity.
663-672	Limestone, packstone, color between very pale orange (10YR 8/2) and pale yellowish brown (10YR 6/2), moderately hard (moderately well indurated), fossiliferous including abundant forams including common Dictyoconus cookei, abundant echinoids (Neolaganum dalli); fair intergranular porosity.
672-737	Limestone, grainstone, color between very pale orange (10YR 8/2) and grayish orange (10YR 7/4), moderately hard (moderately well indurated), dolomitic; thin firm, sticky dark bluish gray clay at 695'; peloidal, fossiliferous including common forams including Dictyoconus cookei and Archaias, rare gastropod molds, rare echinoids (Neolaganum dalli); fair to good intergranular and moldic porosity but pores typically lined with fine drusy calcite.
737-750	Dolostone, moderate yellowish brown (10YR 5/4), very finely crystalline, hard (well indurated), poor to fair fine vuggy and intercrystalline porosity.
750-751	Limestone, grainstone, color between very pale orange (10YR 8/2) and grayish orange (10YR 7/4), moderately hard (moderately well indurated), dolomitic; fair to good intergranular and moldic porosity but pores typically lined with fine drusy calcite.
751-754	Dolostone, moderate yellowish brown (10YR 5/4), very finely crystalline, hard (well indurated), poor to fair fine vuggy and intercrystalline porosity.
754-756	Limestone, grainstone, color between very pale orange (10YR 8/2) and grayish orange (10YR 7/4), moderately hard (moderately well indurated), dolomitic; fair to good intergranular and moldic porosity but pores typically lined with fine drusy calcite.
756-763	Dolostone, moderate yellowish brown (10YR 5/4), very finely crystalline, hard (well indurated), poor to fair fine vuggy and intercrystalline porosity.
763-772	Dolostone, pale yellowish brown (10YR 5/4), very finely crystalline, very hard (very well indurated), fair to good fine vuggy and intercrystalline porosity.
772-785	Limestone, packstone to wackestone, very pale orange (10YR 8/2), moderately hard (moderately well indurated); fossiliferous including common echinoids (Neolaganum dalli); fair to good intergranular porosity.
785-787	Dolostone, dark yellowish brown (10YR 4/2), very finely crystalline, very hard (very well indurated), fair to good fine vuggy porosity.
787-797	Limestone, packstone to wackestone, very pale orange (10YR 8/2), moderately

	hard (moderately well indurated); composed largely of fine sand sized unidentified fossil? debris; fair to good intergranular porosity.
797-798	Dolostone, pale yellowish brown (10YR 5/4), very finely crystalline, hard (well indurated), fair to good fine vuggy and intercrystalline porosity.
798-810	Limestone, packstone to wackestone, very pale orange (10YR 8/2), moderately hard (moderately well indurated); composed largely of fine sand sized unidentified fossil? debris but some forams including *Sorites*? sp.; fair to good intergranular porosity.
810-813	Dolostone, moderate yellowish brown (10YR 5/4), very finely crystalline, hard (well indurated), fair to good fine vuggy porosity.
813-816	Limestone, packstone to wackestone, very pale orange (10YR 8/2), moderately hard (moderately well indurated); peloidal, abundant echinoids (Neolaganum dalli); fair to good intergranular porosity.
816-818	Dolostone, light olive gray (5Y 5/2), finely crystalline, well indurated, hard, vuggy, good to fair vuggy porosity, fair apparent permeability.
818-822	Limestone, yellowish gray (5Y 8/1), wackestone, moderately to poorly indurated, fine grained, chalky, trace of very fine phosphate, poor porosity, poor apparent permeability.
822-822.5	Clay, medium light gray (N6), carbonate, soft to firm, very finely phosphatic.
822.5-825.5	Dolostone, pale olive (10Y 6/2), microcrystalline, well indurated, hard, moldic, pin-point vuggy, trace of very fine phosphate, good to fair vuggy/moldic porosity, good to fair apparent permeability.
825.5-826	Limestone, yellowish gray (5Y 8/1), wackestone, moderately indurated, fine grained, variably chalky, trace of very fine phosphate, poor porosity, poor apparent permeability.
826-829 (TD)	Dolostone, pale olive (10Y 6/2), microcrystalline, well indurated, hard, vuggy, moldic, good overall porosity, good to fair apparent permeability. Note: Evidence of secondary crystal growth inside vugs and molds indicating possible fractures.

APPENDIX 3-3

LABORATORY REPORT

April 22, 2008

Mr. Brandon Ashby
Entrix Water Solutions*
3905 Crescent Park Drive
Riverview, FL 33578-3625

RE: 093040001/Latt Maxcy

Order No.: F08040489

Dear Mr. Brandon Ashby:

ELAB, Inc. received 10 samples on 04/10/08 11:20:00 for the analyses presented in the following report.
Analyses are performed with method-required calibration and QA/QC samples whenever applicable. Method performance, which is based on the calibration and QA/QC samples, establishes the validity and certainty of the reported sample results. This data is provided along with the sample results when requested.

Thank you for this opportunity to be of service. If you have any questions regarding this data, please feel free to call me at (386) 672-5668, extension 310.

Sincerely,
Vincent "Bo" Garcia

Project Manager
ELAB, Inc.
P.O. Box 468
Ormond Beach, FL 32175-0468

THIS DOCUMENT MEETS NELAC
STANDARDS NELAC Certification #E83079

The following acronyms may be utilized within this report:

%REC	Percent Recovery
A	Absent
ABLK	Analytical Method Blank
CG	Confluent Growth
CGB	Confluent Growth Without Coliforms
CGC	Confluent Growth With Coliforms
DUP	Sample Duplicate
LCS	Laboratory Control Spike (may also be appended with an abbreviation indicating spiking level)
MBLK	Preparation Method Blank
MDL	Laboratory Method Detection Limit
MS	Matrix Spike (may also be appended with an abbreviation indicating spiking level)
MSD	Matrix Spike Duplicate (may also be appended with an abbreviation indicating spiking level)
P	Present
PQL	Practical Quantitation Limit
QCS	Alternate source Calibration Verification Standard (may also be reported as analytical LCS in some
RL	Reporting Limit
RPD	Relative Percent Difference
SPK	Spike
TIC	Tentatively Identified Compound
TNTC	Too Numerous To Count

The following notes may apply to analytical results within this report:

Residue (solids) analysis may employ a single, heated drying process of at least 12 hours duration in lieu of employing short, repeated drying cycles, which represents a deviation from the methodology.

Because the EPA-recommended holding time for pH, residual chlorine, chloramines and chlorine dioxide is 15 minutes from time of collection, these analyses are routinely performed outside of their EPA-recommended holding time when performed in the laboratory.

Analytical results for ammonia analysis, or calculated analytical results depending on ammonia analysis, do not include a sample distillation procedure. A study comparing distilled versus non-distilled analytical results has been performed to document the validity of the analysis without prior distillation, and represents equivalent results for the represented project matrices.

Since N-nitrosodiphenylamine decomposes in the GC inlet and cannot be chromatographically resolved from diphenylamine, these compounds are reported as a single analyte in the report.

Since m-cresol and p-cresol cannot be chromatographically resolved, these compounds are reported as a single analyte in the report.

The following certifications may apply to analytical results within this report:

Alabama	DEM	41320
Arizona	DHS	AZ0640
Colorado	DPHE	FL NELAC Reciprocity
Connecticut	DPH	PH-0216
Florida	DOH	E83079
Georgia	DNR	955
Kentucky	DEP	90050
Maine	LCP	2006032
Massachusetts	DEP	M-FL020
Michigan	DEQ	9911
Mississippi	DOH	FL NELAC Reciprocity
Nevada	EP	ELAB FL-00020
New Hampshire	DES	295805
New Jersey	DEP	FL765
New York	DOH	11608
Pennsylvania	DEP	68-00547
Puerto Rico	DOH	FL 00020
South Carolina	DHEC	96027001
Tennessee	DOH	02974
Texas	CEQ	T104704184-05-TX

Case Narrative

CLIENT: Entrix Water Solutions*
Project: 093040001/Latt Maxcy
Lab Order: F08040489

I. SAMPLE RECEIVING/ CUSTODY

The samples were received and processed by the Sample Custody section of the laboratory. There were no significant logistics or quality problems unless noted below. The sample containers for the TDS analysis were received beyond the seven (7) day hold criteria.

II. ANALYTICAL DATA

The samples were analyzed according to ELAB Standard Operating Procedures for the methodologies requested. There were no significant logistics or quality problems unless noted below or in the text of the report.

III. QUALITY CONTROL

There were no significant quality control problems unless noted below or in the text of the report.

EPA 300.0:The MS and MSD recovered low for chloride and sulfate; however, the LCS was within acceptable criteria. Sample P1 430-450 was used in the preparation of the batch matrix spikes and may be biased low for these compounds.
The MS and MSD recovered low for chloride and sulfate; however, the LCS was within acceptable criteria. Sample P1 890-900 was used in the preparation of the batch matrix spikes and may be biased low for these compounds.

Analytical Report

CLIENT:	Entrix Water Solutions*	**Client Sample ID:**	P1 430-450
Lab Order:	F08040489	**Collection Date:**	03/20/08 08:32:00
Project:	093040001/Latt Maxcy	**Sample Description:**	GW
Lab ID:	F08040489-001	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	PQL	Units	DF	Date Analyzed	Batch ID
ANIONS BY ION CHROMATOGRAPHY		**E300.0**	PrepDate:				Analyst: **ACO**	
Chloride	70		0.060	0.50	mg/L	1	04/12/08 04:39	R67268c
Sulfate	67		0.085	0.50	mg/L	1	04/12/08 04:39	R67268c
SOLIDS, TOTAL DISSOLVED		**SM2540 C**	PrepDate:	**04/16/08**			Analyst: **SAM**	
Solids, Total Dissolved	280		5.0	5.0	mg/L	1	04/16/08 09:20	52246

Data Qualifier Code Key: x Value exceeds Maximum Contaminant Level

Analytical Report

CLIENT:	Entrix Water Solutions*	**Client Sample ID:**	P1 430-500
Lab Order:	F08040489	**Collection Date:**	03/20/08 14:01:00
Project:	093040001/Latt Maxcy	**Sample Description:**	GW
Lab ID:	F08040489-002	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	PQL	Units	DF	Date Analyzed	Batch ID
ANIONS BY ION CHROMATOGRAPHY		**E300.0**	PrepDate:				Analyst: **ACO**	
Chloride	49		0.060	0.50	mg/L	1	04/14/08 21:43	R67276A
Sulfate	36		0.085	0.50	mg/L	1	04/14/08 21:43	R67276A
SOLIDS, TOTAL DISSOLVED		**SM2540 C**	PrepDate:	**04/16/08**			Analyst: **SAM**	
Solids, Total Dissolved	200		5.0	5.0	mg/L	1	04/16/08 09:21	52246

Data Qualifier Code Key: x Value exceeds Maximum Contaminant Level

Analytical Report

CLIENT:	Entrix Water Solutions*	**Client Sample ID:**	PI 520-530
Lab Order:	F08040489	**Collection Date:**	03/20/08 16:46:00
Project:	093040001/Latt Maxcy	**Sample Description:**	GW
Lab ID:	F08040489-003	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	PQL	Units	DF	Date Analyzed	Batch ID
ANIONS BY ION CHROMATOGRAPHY		**E300.0**	PrepDate:				Analyst: **ACO**	
Chloride	58		0.060	0.50	mg/L	1	04/14/08 21:59	R67276A
Sulfate	46		0.085	0.50	mg/L	1	04/14/08 21:59	R67276A
SOLIDS, TOTAL DISSOLVED		**SM2540 C**	PrepDate: **04/16/08**				Analyst: **SAM**	
Solids, Total Dissolved	220		5.0	5.0	mg/L	1	04/16/08 09:23	52246

Data Qualifier Code Key: x Value exceeds Maximum Contaminant Level

Analytical Report

CLIENT:	Entrix Water Solutions*	**Client Sample ID:**	P1 530-600
Lab Order:	F08040489	**Collection Date:**	03/25/08 16:17:00
Project:	093040001/Latt Maxcy	**Sample Description:**	GW
Lab ID:	F08040489-004	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	PQL	Units	DF	Date Analyzed	Batch ID
ANIONS BY ION CHROMATOGRAPHY		**E300.0**	PrepDate:				Analyst: **ACO**	
Chloride	110		0.060	0.50	mg/L	1	04/14/08 22:14	R67276A
Sulfate	89		0.085	0.50	mg/L	1	04/14/08 22:14	R67276A
SOLIDS, TOTAL DISSOLVED		**SM2540 C**	PrepDate:	**04/16/08**			Analyst: **SAM**	
Solids, Total Dissolved	430		5.0	5.0	mg/L	1	04/16/08 09:24	52246

Data Qualifier Code Key: x Value exceeds Maximum Contaminant Level

Analytical Report

CLIENT:	Entrix Water Solutions*	**Client Sample ID:**	PI 690-700
Lab Order:	F08040489	**Collection Date:**	03/26/08 11:44:00
Project:	093040001/Latt Maxcy	**Sample Description:**	GW
Lab ID:	F08040489-006	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	PQL	Units	DF	Date Analyzed	Batch ID
ANIONS BY ION CHROMATOGRAPHY		**E300.0**	PrepDate:				Analyst: **ACO**	
Chloride	110		0.060	0.50	mg/L	1	04/14/08 23:48	R67276B
Sulfate	97		0.085	0.50	mg/L	1	04/14/08 23:48	R67276B
SOLIDS, TOTAL DISSOLVED		**SM2540 C**	PrepDate:	**04/16/08**			Analyst: **SAM**	
Solids, Total Dissolved	400		5.0	5.0	mg/L	1	04/16/08 09:27	52246

Data Qualifier Code Key: x Value exceeds Maximum Contaminant Level

Analytical Report

CLIENT:	Entrix Water Solutions*	**Client Sample ID:**	P1 640-650
Lab Order:	F08040489	**Collection Date:**	03/26/08 09:31:00
Project:	093040001/Latt Maxcy	**Sample Description:**	GW
Lab ID:	F08040489-005	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	PQL	Units	DF	Date Analyzed	Batch ID
ANIONS BY ION CHROMATOGRAPHY		**E300.0**	PrepDate:				Analyst: **ACO**	
Chloride	120		0.060	0.50	mg/L	1	04/14/08 22:30	R67276A
Sulfate	180		0.43	2.5	mg/L	5	04/15/08 13:28	R67316a
SOLIDS, TOTAL DISSOLVED		**SM2540 C**	PrepDate:	**04/16/08**			Analyst: **SAM**	
Solids, Total Dissolved	530	x	5.0	5.0	mg/L	1	04/16/08 09:25	52246

Data Qualifier Code Key: x Value exceeds Maximum Contaminant Level

Analytical Report

CLIENT:	Entrix Water Solutions*	**Client Sample ID:**	P1 740-750
Lab Order:	F08040489	**Collection Date:**	03/26/08 14:40:00
Project:	093040001/Latt Maxcy	**Sample Description:**	GW
Lab ID:	F08040489-007	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	PQL	Units	DF	Date Analyzed	Batch ID
ANIONS BY ION CHROMATOGRAPHY		**E300.0**	PrepDate:				Analyst: **ACO**	
Chloride	100		0.060	0.50	mg/L	1	04/15/08 00:04	R67276B
Sulfate	98		0.085	0.50	mg/L	1	04/15/08 00:04	R67276B
SOLIDS, TOTAL DISSOLVED		**SM2540 C**	PrepDate:	**04/16/08**			Analyst: **SAM**	
Solids, Total Dissolved	420		5.0	5.0	mg/L	1	04/16/08 09:28	52246

Data Qualifier Code Key: x Value exceeds Maximum Contaminant Level

Analytical Report

CLIENT:	Entrix Water Solutions*	**Client Sample ID:**	P1 790-800
Lab Order:	F08040489	**Collection Date:**	03/28/08 08:54:00
Project:	093040001/Latt Maxcy	**Sample Description:**	GW
Lab ID:	F08040489-008	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	PQL	Units	DF	Date Analyzed	Batch ID
ANIONS BY ION CHROMATOGRAPHY		**E300.0**	PrepDate:				Analyst: **ACO**	
Chloride	120		0.060	0.50	mg/L	1	04/15/08 00:20	R67276B
Sulfate	120		0.085	0.50	mg/L	1	04/15/08 00:20	R67276B
SOLIDS, TOTAL DISSOLVED		**SM2540 C**	PrepDate:	**04/16/08**			Analyst: **SAM**	
Solids, Total Dissolved	490		5.0	5.0	mg/L	1	04/16/08 09:30	52246

Data Qualifier Code Key: x Value exceeds Maximum Contaminant Level

Analytical Report

CLIENT:	Entrix Water Solutions*	**Client Sample ID:**	P1 840-850
Lab Order:	F08040489	**Collection Date:**	03/28/08 13:45:00
Project:	093040001/Latt Maxcy	**Sample Description:**	GW
Lab ID:	F08040489-009	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	PQL	Units	DF	Date Analyzed	Batch ID
ANIONS BY ION CHROMATOGRAPHY		**E300.0**	PrepDate:				Analyst: **ACO**	
Chloride	130		0.060	0.50	mg/L	1	04/15/08 00:35	R67276B
Sulfate	89		0.085	0.50	mg/L	1	04/15/08 00:35	R67276B
SOLIDS, TOTAL DISSOLVED		**SM2540 C**	PrepDate:	**04/16/08**			Analyst: **SAM**	
Solids, Total Dissolved	470		5.0	5.0	mg/L	1	04/16/08 09:31	52246

Data Qualifier Code Key: x Value exceeds Maximum Contaminant Level

Analytical Report

CLIENT:	Entrix Water Solutions*	**Client Sample ID:**	PI 890-900
Lab Order:	F08040489	**Collection Date:**	03/28/08 17:45:00
Project:	093040001/Latt Maxcy	**Sample Description:**	GW
Lab ID:	F08040489-010	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	PQL	Units	DF	Date Analyzed	Batch ID
ANIONS BY ION CHROMATOGRAPHY		**E300.0**	PrepDate:				Analyst: **ACO**	
Chloride	150		0.060	0.50	mg/L	1	04/15/08 00:51	R67276B
Sulfate	92		0.085	0.50	mg/L	1	04/15/08 00:51	R67276B
SOLIDS, TOTAL DISSOLVED		**SM2540 C**	PrepDate:	**04/16/08**			Analyst: **SAM**	
Solids, Total Dissolved	490		5.0	5.0	mg/L	1	04/16/08 09:37	52247

Data Qualifier Code Key: x Value exceeds Maximum Contaminant Level

CLIENT: Entrix Water Solutions*
Work Order: F08040489
Project: 093040001/Latt Maxcy

ANALYTICAL QC SUMMARY REPORT

TestCode: IC300_W

Sample ID	MB	SampType:	MBLK	TestCode:	IC300_W	Units:	mg/L	Prep Date:		RunNo:	67268
Client ID:	MB	Batch ID:	R67268c	TestNo:	E300.0			Analysis Date:	04/12/08	SeqNo:	1948497

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	0.060	U	0.060								
Sulfate	0.085	U	0.085								

Sample ID	LCS	SampType:	LCS	TestCode:	IC300_W	Units:	mg/L	Prep Date:		RunNo:	67268
Client ID:	LCS	Batch ID:	R67268c	TestNo:	E300.0			Analysis Date:	04/12/08	SeqNo:	1948498

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	5.1		0.060	5.0	0	102	90	110			
Sulfate	5.0		0.085	5.0	0	101	90	110			

Sample ID	F08040489-001AMS	SampType:	MS	TestCode:	IC300_W	Units:	mg/L	Prep Date:		RunNo:	67268
Client ID:	P1 430-450 MS	Batch ID:	R67268c	TestNo:	E300.0			Analysis Date:	04/12/08	SeqNo:	1948509

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	78	S	0.060	10	70	**83.3**	90	110			
Sulfate	75	S	0.085	10	67	**80.0**	90	110			

Sample ID	F08040489-001AMSD	SampType:	MSD	TestCode:	IC300_W	Units:	mg/L	Prep Date:		RunNo:	67268
Client ID:	P1 430-450 MSD	Batch ID:	R67268c	TestNo:	E300.0			Analysis Date:	04/12/08	SeqNo:	1948510

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	78	S	0.060	10	70	**84.3**	90	110	78	0.132	20
Sulfate	75	S	0.085	10	67	**81.1**	90	110	75	0.148	20

Data Qualifier Code Key:

I Analyte detected below quantitation limits
U Not Detected Above the MDL
S Spike Recovery outside accepted recovery limits

CLIENT: Entrix Water Solutions*
Work Order: F08040489
Project: 093040001/Latt Maxcy

ANALYTICAL QC SUMMARY REPORT

TestCode: IC300_W

Sample ID	MB	SampType:	MBLK	TestCode:	IC300_W	Units:	mg/L	Prep Date:		RunNo:	67276
Client ID:	MB	Batch ID:	R67276A	TestNo:	E300.0			Analysis Date:	04/14/08	SeqNo:	1948750

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	0.060	U	0.060								
Sulfate	0.085	U	0.085								

Sample ID	LCS	SampType:	LCS	TestCode:	IC300_W	Units:	mg/L	Prep Date:		RunNo:	67276
Client ID:	LCS	Batch ID:	R67276A	TestNo:	E300.0			Analysis Date:	04/14/08	SeqNo:	1948752

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	5.0		0.060	5.0	0	100	90	110			
Sulfate	4.9		0.085	5.0	0	98.7	90	110			

Sample ID	F08040628-001LMS	SampType:	MS	TestCode:	IC300_W	Units:	mg/L	Prep Date:		RunNo:	67276
		Batch ID:	R67276A	TestNo:	E300.0			Analysis Date:	04/14/08	SeqNo:	1948756

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	9.3	S	0.060	10	0.37	89.2	90	110			
Sulfate	9.3		0.085	10	0.21	91.1	90	110			

Sample ID	F08040478-001FMS	SampType:	MS	TestCode:	IC300_W	Units:	mg/L	Prep Date:		RunNo:	67276
		Batch ID:	R67276A	TestNo:	E300.0			Analysis Date:	04/14/08	SeqNo:	1948786

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	23		0.060	10	13	96.4	90	110			
Sulfate	27		0.085	10	18	93.0	90	110			

Data Qualifier Code Key:

J	Analyte detected below quantitation limits
U	Not Detected Above the MDL
S	Spike Recovery outside accepted recovery limits

CLIENT: Entrix Water Solutions*
Work Order: F08040489
Project: 093040001/Latt Maxcy

ANALYTICAL QC SUMMARY REPORT

TestCode: IC300_W

Sample ID F08040628-001LMSD	SampType: MSD	TestCode: IC300_W	Units: mg/L	Prep Date:	RunNo: 67276
	Batch ID: R67276A	TestNo: E300.0		Analysis Date: 04/14/08	SeqNo: 1948758

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	9.3	S	0.060	10	0.37	**89.5**	90	110	9.3	0.319	20
Sulfate	9.4		0.085	10	0.21	91.5	90	110	9.3	0.474	20

Sample ID F08040478-001FMSD	SampType: MSD	TestCode: IC300_W	Units: mg/L	Prep Date:	RunNo: 67276
	Batch ID: R67276A	TestNo: E300.0		Analysis Date: 04/14/08	SeqNo: 1948788

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	23		0.060	10	13	98.9	90	110	23	1.09	20
Sulfate	27		0.085	10	18	95.1	90	110	27	0.751	20

Sample ID MB	SampType: MBLK	TestCode: IC300_W	Units: mg/L	Prep Date:	RunNo: 67276
Client ID: MB	Batch ID: R67276B	TestNo: E300.0		Analysis Date: 04/14/08	SeqNo: 1948802

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	0.060	U	0.060								
Sulfate	0.085	U	0.085								

Sample ID LCS	SampType: LCS	TestCode: IC300_W	Units: mg/L	Prep Date:	RunNo: 67276
Client ID: LCS	Batch ID: R67276B	TestNo: E300.0		Analysis Date: 04/14/08	SeqNo: 1948804

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	5.0		0.060	5.0	0	101	90	110			
Sulfate	5.0		0.085	5.0	0	100	90	110			

Data Qualifier Code Key:

I Analyte detected below quantitation limits
U Not Detected Above the MDL
S Spike Recovery outside accepted recovery limits

CLIENT: Entrix Water Solutions*
Work Order: F08040489
Project: 093040001/Latt Maxcy

ANALYTICAL QC SUMMARY REPORT

TestCode: IC300_W

Sample ID	F08040489-010AMS	SampType:	MS	TestCode:	IC300_W	Units:	mg/L	Prep Date:		RunNo:	67276
Client ID:	P1 890-900 MS	Batch ID:	R67276B	TestNo:	E300.0			Analysis Date:	04/15/08	SeqNo:	1948816

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	150	S	0.060	10	150	**60.1**	90	110			
Sulfate	100	S	0.085	10	92	**75.3**	90	110			

Sample ID	F08040619-003AMS	SampType:	MS	TestCode:	IC300_W	Units:	mg/L	Prep Date:		RunNo:	67276
		Batch ID:	R67276B	TestNo:	E300.0			Analysis Date:	04/15/08	SeqNo:	1948832

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	5000		6.0	1000	4100	91.1	90	110			
Sulfate	1400		8.5	1000	470	91.4	90	110			

Sample ID	F08040489-010AMSD	SampType:	MSD	TestCode:	IC300_W	Units:	mg/L	Prep Date:		RunNo:	67276
Client ID:	P1 890-900 MSD	Batch ID:	R67276B	TestNo:	E300.0			Analysis Date:	04/15/08	SeqNo:	1948818

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	150	S	0.060	10	150	**63.5**	90	110	150	0.220	20
Sulfate	100	S	0.085	10	92	**79.1**	90	110	100	0.386	20

Sample ID	F08040619-003AMSD	SampType:	MSD	TestCode:	IC300_W	Units:	mg/L	Prep Date:		RunNo:	67276
		Batch ID:	R67276B	TestNo:	E300.0			Analysis Date:	04/15/08	SeqNo:	1948834

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	5000		6.0	1000	4100	91.0	90	110	6.0 U	0.0318	20
Sulfate	1400		8.5	1000	470	92.2	90	110	8.5 U	0.559	20

Data Qualifier Code Key:

J	Analyte detected below quantitation limits	S	Spike Recovery outside accepted recovery limits
U	Not Detected Above the MDL		

CLIENT: Entrix Water Solutions*
Work Order: F08040489
Project: 093040001/Latt Maxcy

ANALYTICAL QC SUMMARY REPORT

TestCode: IC300_W

Sample ID MB	SampType: MBLK	TestCode: IC300_W	Units: mg/L	Prep Date:	RunNo: 67316
Client ID: MB	Batch ID: R67316a	TestNo: E300.0		Analysis Date: 04/15/08	SeqNo: 1950612

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	0.060	U	0.060								
Sulfate	0.085	U	0.085								

Sample ID LCS	SampType: LCS	TestCode: IC300_W	Units: mg/L	Prep Date:	RunNo: 67316
Client ID: LCS	Batch ID: R67316a	TestNo: E300.0		Analysis Date: 04/15/08	SeqNo: 1950613

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	5.0		0.060	5.0	0	101	90	110			
Sulfate	5.0		0.085	5.0	0	99.8	90	110			

Sample ID F08040662-001LMS	SampType: MS	TestCode: IC300_W	Units: mg/L	Prep Date:	RunNo: 67316
	Batch ID: R67316a	TestNo: E300.0		Analysis Date: 04/15/08	SeqNo: 1950618

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	19		0.060	10	8.9	95.8	90	110			
Sulfate	23		0.085	10	13	97.0	90	110			

Sample ID F08040672-012CMS	SampType: MS	TestCode: IC300_W	Units: mg/L	Prep Date:	RunNo: 67316
	Batch ID: R67316a	TestNo: E300.0		Analysis Date: 04/15/08	SeqNo: 1950636

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	84	S	0.060	10	76	87.1	90	110			
Sulfate	32		0.085	10	23	93.7	90	110			

Data Qualifier Code Key:
I Analyte detected below quantitation limits
U Not Detected Above the MDL
S Spike Recovery outside accepted recovery limits

CLIENT: Entrix Water Solutions*
Work Order: F08040489
Project: 093040001/Latt Maxey

ANALYTICAL QC SUMMARY REPORT

TestCode: IC300_W

Sample ID	F08040662-001LMSD	SampType:	MSD	TestCode:	IC300_W	Units:	mg/L	Prep Date:		RunNo:	67316
		Batch ID:	R67316a	TestNo:	E300.0			Analysis Date:	04/15/08	SeqNo:	1950619

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	19		0.060	10	8.9	96.7	90	110	19	0.481	20
Sulfate	23		0.085	10	13	97.3	90	110	23	0.154	20

Sample ID	F08040672-012CMSD	SampType:	MSD	TestCode:	IC300_W	Units:	mg/L	Prep Date:		RunNo:	67316
		Batch ID:	R67316a	TestNo:	E300.0			Analysis Date:	04/15/08	SeqNo:	1950637

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride	84	S	0.060	10	76	**87.3**	90	110	84	0.0243	20
Sulfate	32		0.085	10	23	94.1	90	110	32	0.118	20

Data Qualifier Code Key:

I Analyte detected below quantitation limits
U Not Detected Above the MDL
S Spike Recovery outside accepted recovery limits

ELAB, Inc.

Date: *22-Apr-08*

CLIENT: Entrix Water Solutions*
Work Order: F08040489
Project: 093040001/Latt Maxcy

ANALYTICAL QC SUMMARY REPORT

TestCode: SOLIDS-TDS

Sample ID	MB-52246	SampType:	MBLK	TestCode:	SOLIDS-TDS	Units:	mg/L	Prep Date:	04/16/08	RunNo:	67315
Client ID:	MB-52246	Batch ID:	52246	TestNo:	SM2540 C	SM2540 C		Analysis Date:	04/16/08	SeqNo:	1956314

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Solids, Total Dissolved	5.0	U	5.0								

Sample ID	LCS-52246	SampType:	LCS	TestCode:	SOLIDS-TDS	Units:	mg/L	Prep Date:	04/16/08	RunNo:	67315
Client ID:	LCS-52246	Batch ID:	52246	TestNo:	SM2540 C	SM2540 C		Analysis Date:	04/16/08	SeqNo:	1956315

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Solids, Total Dissolved	310		5.0	300	0	103	90	110			

Sample ID	F08040427-001KDUP	SampType:	DUP	TestCode:	SOLIDS-TDS	Units:	mg/L	Prep Date:	04/16/08	RunNo:	67315
		Batch ID:	52246	TestNo:	SM2540 C	SM2540 C		Analysis Date:	04/16/08	SeqNo:	1956317

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Solids, Total Dissolved	240		5.0						5.0 U	4.26	20

Sample ID	F08040489-009ADUP	SampType:	DUP	TestCode:	SOLIDS-TDS	Units:	mg/L	Prep Date:	04/16/08	RunNo:	67315
Client ID:	P1 840-850 DUP	Batch ID:	52246	TestNo:	SM2540 C	SM2540 C		Analysis Date:	04/16/08	SeqNo:	1956337

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Solids, Total Dissolved	470		5.0						5.0 U	0	20

Sample ID	MB-52247	SampType:	MBLK	TestCode:	SOLIDS-TDS	Units:	mg/L	Prep Date:	04/16/08	RunNo:	67315
Client ID:	MB-52247	Batch ID:	52247	TestNo:	SM2540 C	SM2540 C		Analysis Date:	04/16/08	SeqNo:	1956338

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Solids, Total Dissolved	5.0	U	5.0								

Data Qualifier Code Key:

J	Analyte detected below quantitation limits
U	Not Detected Above the MDL
S	Spike Recovery outside accepted recovery limits

CLIENT: Entrix Water Solutions*
Work Order: F08040489
Project: 093040001/Latt Maxcy

ANALYTICAL QC SUMMARY REPORT

TestCode: SOLIDS-TDS

Sample ID	LCS-52247	SampType:	LCS	TestCode:	SOLIDS-TDS	Units:	mg/L	Prep Date:	04/16/08	RunNo:	67315
Client ID:	LCS-52247	Batch ID:	52247	TestNo:	SM2540 C		SM2540 C	Analysis Date:	04/16/08	SeqNo:	1956339

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Solids, Total Dissolved	300		5.0	300	0	100	90	110			

Sample ID	F08040489-010ADUP	SampType:	DUP	TestCode:	SOLIDS-TDS	Units:	mg/L	Prep Date:	04/16/08	RunNo:	67315
Client ID:	P1 890-900 DUP	Batch ID:	52247	TestNo:	SM2540 C		SM2540 C	Analysis Date:	04/16/08	SeqNo:	1956341

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Solids, Total Dissolved	500		5.0						5.0 U	2.02	20

Sample ID	F08040553-007CDUP	SampType:	DUP	TestCode:	SOLIDS-TDS	Units:	mg/L	Prep Date:	04/16/08	RunNo:	67315
		Batch ID:	52247	TestNo:	SM2540 C		SM2540 C	Analysis Date:	04/16/08	SeqNo:	1956361

Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Solids, Total Dissolved	270		5.0						5.0 U	0	20

Data Qualifier Code Key:

I	Analyte detected below quantitation limits	S	Spike Recovery outside accepted recovery limits
U	Not Detected Above the MDL		

Elab, Inc.
8 East Tower Circle
Ormond Beach, FL 32174
(386)672-5668 ● FAX (386)673-4001

CHAIN OF CUSTODY RECORD

No. E

Page 1 of 2

FOR LAB USE ONLY
Condition of Contents: F08040489
Temp. of Contents: R01 °C (or Received on Ice, ROI)
Condition of Seals:

FOR LAB USE ONLY
Submission No.

1. Client: (Company or Individual) Brandon Ashby, Entrix Water Solutions
Address: 3905 Crescent Park Dr
City Riverview State FL Zip Code 33578
Phone: (813) 664-8501
Fax: (813) 664-0440

18. Report Type:
- Routine
- With QC

2. Report to: (if different from above)
Address:
City State Zip Code
Phone: ( )
Fax: ( )

19. Turnaround Time
- Standard
- Rush : / /

3. Client Project Name: Latt Maxcy
4. Client Project No.: 093040001
5. P.O. No.: (Ref: 08-0157)
6. Custody Seal No.:
7. Sampled By: C. Klug
8. Shipping Method:

Water Sample Codes (for Item 13)	Container Codes (for Item 16)
DW = Drinking Water	V = VOA vial
GW = Ground Water	G = glass
SW = Surface Water	P = plastic
PW = Processed Water	M = micro bag/cup
WW = Waste Water	O = other

Preservative Codes (for Item 15)
C = Cool Only
H = Hydrochloric Acid
M = Monochloroacetic Acid
N = Nitric Acid
OH = Sodium Hydroxide
S = Sulfuric Acid
T = Sodium Thiosulfate

Item	9. Sample ID or No.	10. Sample Description	11. Date	11. Time	12. Comp.	12. Grab	13. Water (Codes)	13. Air	13. Soil	13. Sludge	13. Other	14. 15. Preservatives	14. 16. Containers	17. Cl-	17. SO4	17. TDS	20. REMARK	LAB USE ONLY LAB SAMPLE NO.
												C	P					
1	PI 430-450	GW	3/20/08	0832			GW							X	X	X		
2	PI 480-500	GW	3/20/08	1401			GW											
3	PI 520-530	GW	3/20/08	1646			GW											
4	PI 530-600	GW	3/25/08	1617			GW											
5	PI 640-650	GW	3/26/08	0931			GW											
6	PI 690-700	GW	3/26/08	1144			GW											
7	PI 740-750	GW	3/26/08	1440			GW											
8	PI 790-800	GW	3/28/08	0854			GW											
9	PI 840-850	GW	3/28/08	1345			GW											
10	PI 890-900	GW	3/28/08	1745			GW							↓	↓	↓		

21. RELINQUISHED BY	DATE	TIME	22. RECEIVED BY	DATE	TIME
1			Jackie Hensdale	4/9/08	16:00
2	4/9/08	16:00			
3 Jackie Hensdale	4.10.08	09:00	Marcia A. Fuhrman	04/10/08	11:20 AM
4					

FOR LAB USE ONLY
Sampling Fee: _____ Hrs.
Equipment Rental Fee: _____
Profile No.: Quote No.:

DISTRIBUTION: White with report; Blue, Green, Yellow to labs; Gold to submitter

Revised: 1/99

ENTRIX WATER SOLUTIONS
3905 Crescent Park Dr. Riverview, FL 33578
P- 813.664.8501 F- 813.664.0440

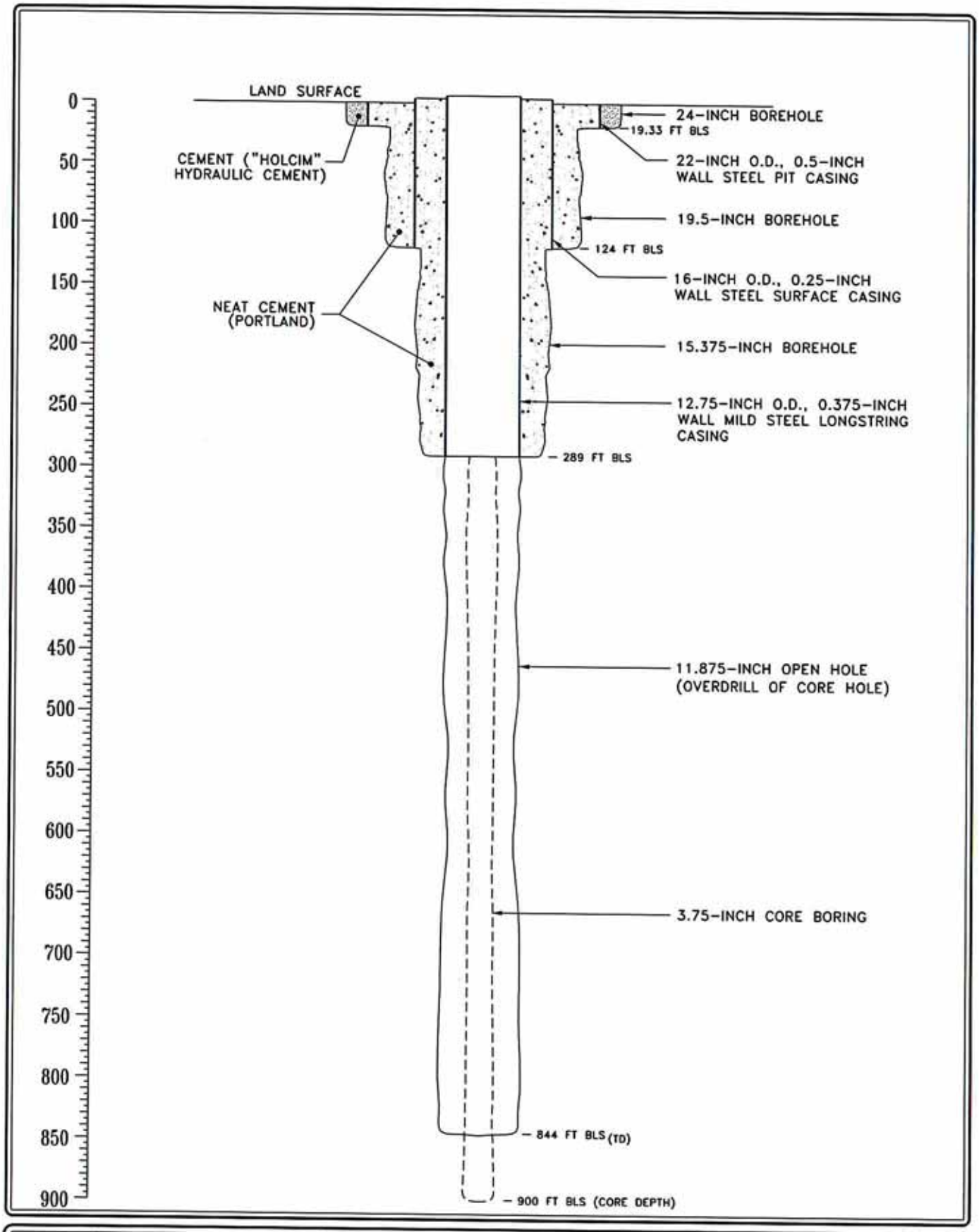
Site Location Map
Latt Maxcy Corporation-Upper Floridan Aquifer Hydrogeologic Investigation
Osceola County, FL

FIGURE 1.1

DATE: JULY 2008

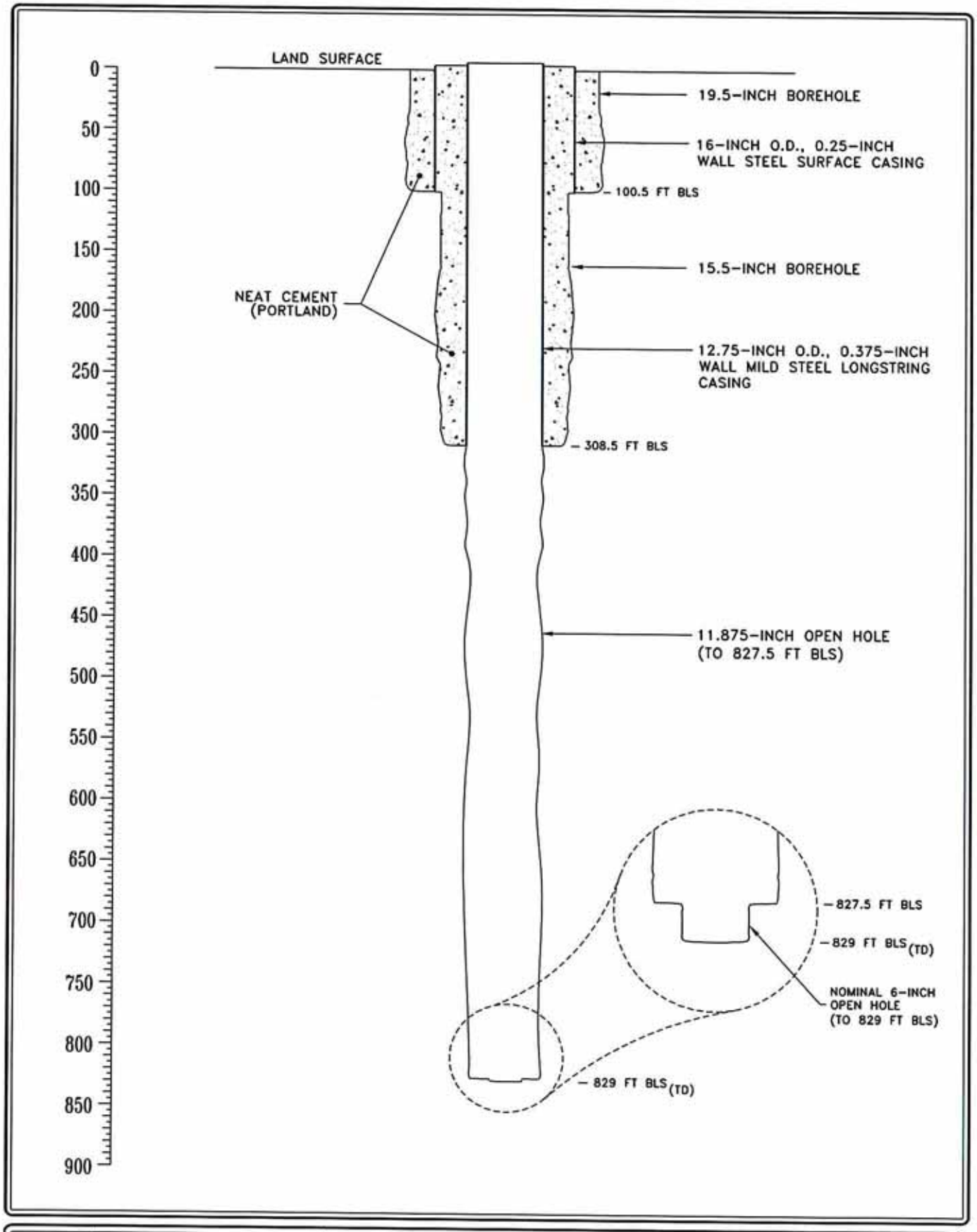
MAP SCALE: 1" = 1000'

BASE MAP: 2004 USGS Orthophoto



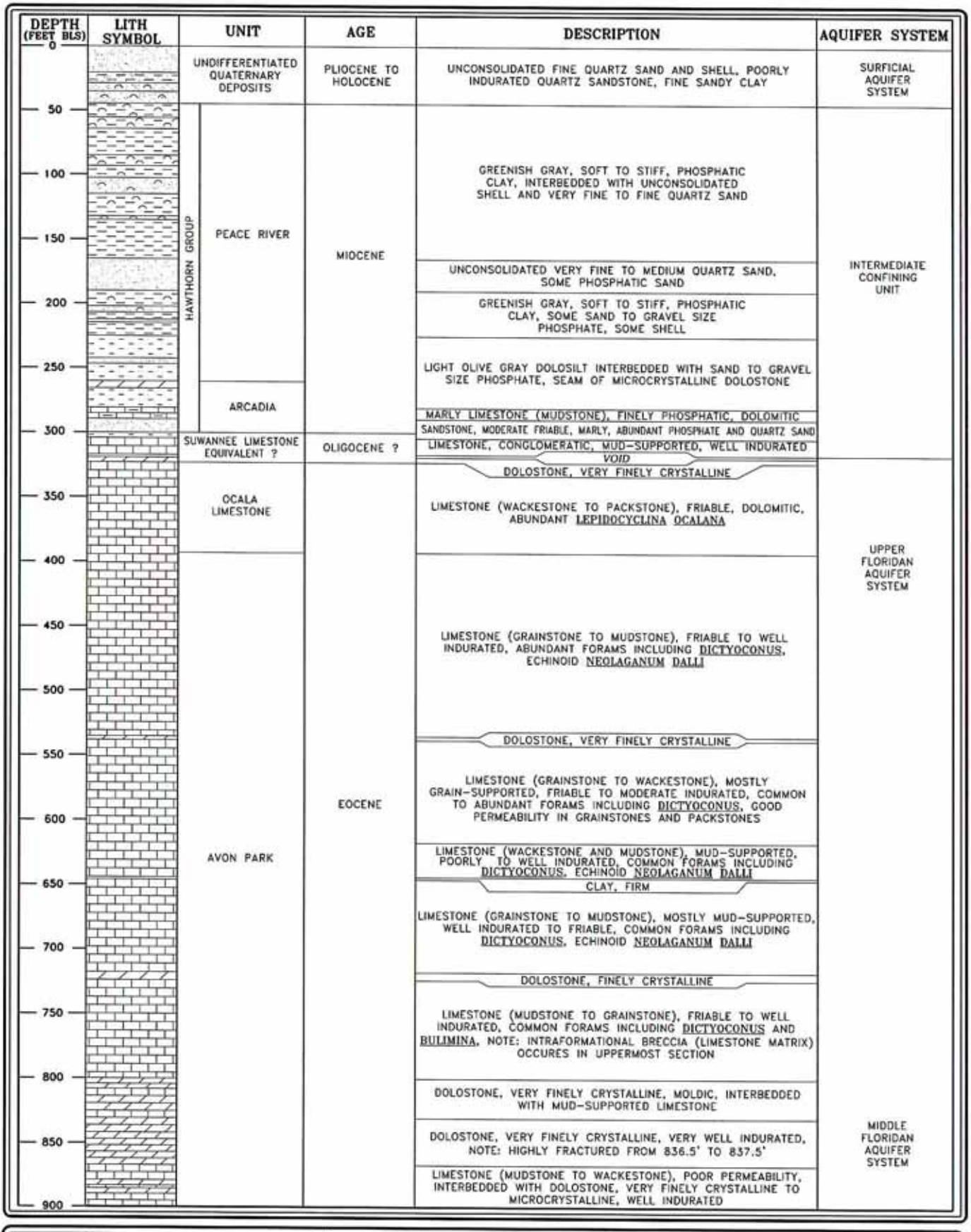
ENTRIX WATER SOLUTIONS	PROJECT NAME: LATT-MAXCY DEVELOPMENT	DWG. NUMBER: 1188106am1
	PROJECT NUMBER: 1188106	DATE: 06/04/08

FIGURE 2.1. P-1 WELL CONSTRUCTION DETAILS.



BRT-IX WATER SOLUTIONS	PROJECT NAME: LATT-MAXCY DEVELOPMENT	DWG. NUMBER: 1188106am1
	PROJECT NUMBER: 1188106	DATE: 06/04/08

FIGURE 2.2. P-2 WELL CONSTRUCTION DETAILS.



ENTRIX WATER SOLUTIONS	PROJECT NAME: LATT MAXCY	DWG. NUMBER: 09034001fp1
	PROJECT NUMBER: 09034001	DATE: 06/04/08

FIGURE 3.1. HYDROSTRATIGRAPHIC COLUMN AT P-1.

TABLE 3.1

WELL P-1
REVERSE-AIR DISCHARGE
WATER QUALITY WITH DEPTH

Sample ID	Collection Date	Sampling Depth Interval (feet bls)	Chloride Concentration (mg/L)	Sulfate Concentration (mg/L)	Total Dissolved Solids (mg/L)
P1 430 - 450	20-Mar-2008	430 - 450	70	67	280
P1 480 - 500	20-Mar-2008	480 - 500	49	36	200
P1 520 - 530	20-Mar-2008	520 - 530	58	46	220
P1 590 - 600	25-Mar-2008	590 - 600	110	89	430
P1 640 - 650	26-Mar-2008	640 - 650	120	180	530
P1 690 - 700	26-Mar-2008	690 - 700	110	97	400
P1 740 -750	26-Mar-2008	740 -750	100	98	420
P1 790 - 800	28-Mar-2008	790 - 800	120	120	490
P1 840 - 850	28-Mar-2008	840 - 850	130	89	470
P1 890 - 900	28-Mar-2008	890 - 900	150	92	490