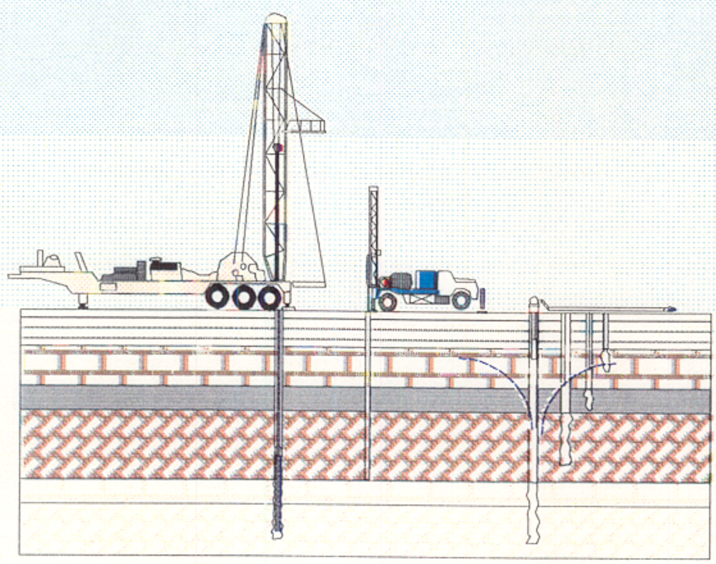
ROMP TR SA-1 (PAYNE TERMINAL)
DRILLING AND TESTING REPORT
SALTWATER INTERFACE MONITOR-WELLSITE
SARASOTA COUNTY, FLORIDA



Geohydrologic Data Section
Resource Data Department
Southwest Florida Water Management District

March 1998

THE AMERICANS WITH DISABILITIES ACT INFORMATION

The Southwest Florida Water Management District (District) does not discriminate upon the basis of any individual's disability status. This non-discrimination policy involves every aspect of the District's functions including one's access to, participation, employment, or treatment in its programs or activities. Anyone requiring reasonable accommodations as provided for in The Americans With Disabilities Act should contact Della L. Haberle at (904) 796-7211 or 1-800-423-1476 (FLORIDA), extension 4222; TDD ONLY 1-800-231-6103 (FLORIDA); FAX (904)754-6885 / Suncom 663-6885.

ROMP TR SA-1 (PAYNE TERMINAL)
DRILLING AND TESTING REPORT
SALTWATER INTERFACE MONITOR-WELLSITE
SARASOTA COUNTY, FLORIDA

March 1998

The geological evaluations and interpretations contained in the *ROMP TR SA-1 Drilling and Testing Report* have been prepared by or approved by a Certified Professional Geologist in the State of Florida, in accordance with Chapter 492, Florida Statues.

Richard A. Lee
Professional Geologist
License No. PG 0000956

Date: ____________

ROMP TR SA-1 (PAYNE TERMINAL)
DRILLING AND TESTING REPORT
SALTWATER INTERFACE MONITOR-WELLSITE
SARASOTA COUNTY, FLORIDA

By R. A. Lee

Southwest Florida Water Management District

Resource Data Department
Timothy De Foe, Director

Geohydrologic Data Section
S. Greg McQuown, Manager

Southwest Florida Water Management District
2379 Broad Street
Brooksville, Florida 34609-6899
March 1998

printed on
recycled paper

ROMP TR SA-1 (PAYNE TERMINAL)
DRILLING AND TESTING REPORT
SALTWATER INTERFACE MONITOR-WELLSITE
SARASOTA COUNTY, FLORIDA

March 1998

The geological evaluations and interpretations contained in the *ROMP TR SA-1 Drilling and Testing Report* have been prepared by or approved by a Certified Professional Geologist in the State of Florida, in accordance with Chapter 492, Florida Statues.

Richard A Lee P.G.
Richard A. Lee
Professional Geologist
License No. PG 0000956

Date: 4/24/98

Table of Contents

TABLE OF CONTENTS

TABLES

FIGURES

APPENDIX

ROMP TR SA-1

1.0 PROJECT DESCRIPTION

The Southwest Florida Water Management District (District) obtained the Regional Observation Monitor-Well Program (ROMP) TR SA-1 wellsite in August, 1994, for the construction of a coastal ground water monitoring wellsite in Sarasota County. The TR SA-1 site is one of three wellsites (TR SA-1, City of Sarasota Injection Monitor-Well 2, TR SA-3), within a transect extending approximately two miles, east-west through the City of Sarasota, Florida. These transect wells will provide meaningful water quality data to the Coastal Ground-Water Quality Monitoring Network (CGWQMN). The District created the CGWQMN to locate and monitor the freshwater/saltwater interface in the coastal regions of the District.

The TR SA-1 site contains three wells for monitoring the vertical movement of the fresh/saltwater interface within the Upper Floridan aquifer. Two four-inch polyvinyl-chloride (PVC) screened wells, were designed to collect water samples from the 1,000 milligrams per Liter (mg/L) chloride zone (Suwannee and Avon Park wells), and a three-inch PVC cased well was designed to monitor the interface using a borehole geophysical induction tool (deep Induction well). The borehole induction tool, measures bulk electrical conductivity of the rock formation and pore fluids through the PVC well casing. A pronounced high conductivity response is measured at the fresh/saltwater interface.

In addition to the fresh/saltwater interface monitor wells, the TR SA-1 wellsite also contains a surficial aquifer monitor well and an intermediate aquifer monitor well. The intermediate and Upper Floridan aquifers at TR SA-1 are confined artesian systems, and wells monitoring these aquifers, depending on the season, generally flow from hydrostatic pressure, at land surface. The TR SA-1 wellsite was completed in September, 1995.

2.0 SITE LOCATION

The TR SA-1 wellsite is located approximately one block from Sarasota Bay in the City of Sarasota (Figure 1), within the District's Manasota Basin. The physiographic region is known as the Gulf Coastal Lowlands, which is part of the Mid-Peninsular Zone of the Floridan Peninsula (White, 1970). The Gulf Coastal Lowlands, a broad marine plain with numerous sloughs and swamps, extends from just south of Charlotte Harbor northward to the Panhandle, sloping seaward at a very low gradient from the uplands associated with central Florida.

3.0 METHODS

3.1 DRILLING

Preliminary water quality and geologic data collection, was performed by the District's CME 75 rotary drill rig. The CME 75 is primarily utilized for augering, rotary drilling small diameter holes, and wireline coring with mud or water. The surficial deposits were augered and collected with a hollow-stem auger to a depth of 29.5 feet below land surface (ft bls). Below 29.5 ft, wireline core was collected through the augers, to a depth of 95 ft bls. The corehole was then reamed 18-inches in diameter to 98 ft bls. Ten-inch surface casing was installed and grouted to land surface. Coring continued to a depth of 504 ft bls. The hole was reamed with a 5 5/8-inch bit and temporary four-inch HW casing was set to 501 ft bls. Coring resumed and was completed at a depth of 1,184 ft bls. Three cuttings samples were collected from core terminus to the total depth of 1,208 ft bls. Drilling discharge was measured for conductivity and temperature at five-foot intervals during coring. Discreet water samples were collected at less frequent intervals and coring terminated when water quality degraded to seawater conditions (45,000 umhos/cm). The 1.8-inch core was collected continuously for lithologic description and stratigraphic correlation (Figure 2) and is stored at the Florida Geological Survey facility in Tallahassee.

A Gardner-Denver 2000 rotary drill rig, owned and operated by Layne Drilling, Inc. was contracted to construct the remaining monitor-wells. The existing corehole was reamed to 9 7/8-inches to a depth of 307 ft bls, then reamed to a total depth of 1,208 ft bls using a 9 ½-inch bit. From 1,187 to 1,204 ft bls a large solution cavity was encountered. The reamed corehole was completed as a three-inch PVC cased Induction well, from land surface to a depth of 1,204 ft bls. A two-inch PVC intermediate monitor was placed in the Induction well annulus with a screened interval from 328 ft to 388 ft bls. The well construction details are presented in Section 7.0.

Another borehole (26-inch) was drilled to 100 ft bls and 20-inch welded steel surface casing installed and grouted. A 20-inch nominal borehole was then drilled to a depth of 325 ft bls to accommodate 14-inch welded steel casing. Drilling continued to a depth of 1,016 ft bls. Two four-inch PVC cased monitor-wells were then emplaced within the 14-inch borehole. The deeper interval (995 - 1,015 ft bls) monitors a 1,000 mg/L fresh/saltwater interface, which was located just below the Ocala/Avon Park Formation boundary. The second interval (708 - 738 ft bls) monitors the bottom of the Suwannee Limestone. Each dual-monitor is gravel-packed around the screened interval and casing grouted in place.

3.2 GROUND-WATER SAMPLING

During the CME 75 coring process, drilling discharge water was sampled at five-ft intervals to monitor water quality for changes. Otherwise ground-water samples were taken at 30-ft intervals or when a significant change in conductivity/temperature or lithology occurred. The latter samples were collected in accordance with the District's ROMP Water Quality Sampling Protocol. Each water sample was split, with one split sample being analyzed in the field for conductivity (specific conductance), temperature, chlorides, sulfates, pH, and density, and the other sample being sent to the District's Environmental Chemistry Laboratory for standard complete analyses. The standard complete analysis reevaluated parameters measured in the field in addition to several other parameters. Chain-of-custody forms were used to track the samples. Initially, samples were collected as a composite of all water contributed from the open-hole interval, which extended from the last casing seat to the bottom of the hole. A core barrel packer was developed and utilized from 649 to 1,184 ft bls, which enabled discreet water quality samples to be collected from the interval extending from the core bit (packer) to the bottom of the hole. Vertical placement of the drill bit determined the length of the open hole interval. Results of the laboratory analyses are presented in Section 6.0. Table 1 presents the temperature and specific conductance of discharge water measured during the coring process.

Three water sampling methods were utilized while coring at TR SA-1; reverse-air discharge, point-source bailer and packer tests. The primary method entailed monitoring the drilling discharge water at five-ft intervals for changes in conductivity and temperature. If a notable change occurred, either in water quality or lithology, the point-source bailer method was utilized. The hole was purged by air lift until conductivity/temperature readings stabilized and then the drill rods were raised 20 ft and purged for ten minutes longer. This process induced water into the borehole from the lower unit instead of from the up-hole interval. A one-inch diameter, 15 ft stainless steel bailer, was then lowered by wireline through the drill rods and bit to the sampling interval. All bailer samples were filtered through a 0.45 micron membrane.

The third method entailed use of a newly designed wireline corehole packer, first tested at the TR SA-1 wellsite (Figure 3). Use of the packer was initiated as before when water quality changes or a significant change in lithology occurred. The drill rods were raised to place the bit just above the top of the interval to be sampled. The packer was then lowered down the drill rods through the open end of the core bit, with the landing ring seated inside the drill rods. Water pumped down the rods inflated one element inside the core rods, and one element outside of the rods against the formation. Pump pressure was increased slowly above 250 psi to shear the setting pins. The packer seals up-hole annular water from entering the drill rods and opened a passage through the packer to the open-hole interval below. The open-hole interval being sampled extended from approximately 1.5 ft below the bit to the bottom of the hole. The well was then purged by air lifting a minimum of one and a half the volume of the drill rods. The packer would allow for internal flow of a maximum of 18 gallons per minute (gpm), when properly seated. Discharge rates that exceeded 18 gpm, indicated the packer was not properly seated. At that point the packer would be retrieved for inspection. To remove the packer, the wireline overshot would be lowered to grapple the spear point on the packer. The packer was jarred several times to shear the release shear pins, which allowed deflation of the elements (approximately ten minutes), and hoisting of the packer. Water samples collected this way represent the most accurate results, as the interval sampled was isolated and hydraulically stressed. The corehole packer operation data results are presented as Table 2.

3.3 GEOPHYSICAL LOGGING

Caliper, Natural Gamma [GAM(NAT)], Spontaneous Potential (SP), Single Point Resistance [RES(OHM)], Long-Short-Normal Resistance (RES 64N, RES 16N, Lateral), Fluid Resistivity [RES(FL)], Specific Conductance (SP COND), Temperature (TEMP), Sonic Porosity [POR(SON)], Borehole flow, and Induction logs were run at TR SA-1 during various stages of construction. The logs were generally run in the reamed corehole to help delineate geologic formations, determine water quality changes, and help in the design of the discreet monitor wells. Figures 4, 5 and 6 graphically demonstrate the fluid and resistivity logs for the entire hole.

4.0 <u>GEOLOGY</u>

The upper most geologic unit at TR SA-1, undifferentiated surficial deposits of Holocene to Pleistocene age, consists of brown stained quartz sand, clay, organics and shell fragments. These deposits are 29 ft thick of which 20 ft are calcareous clay. This calcareous clay, yellowish gray in color, forms the base of the surficial aquifer.

The Hawthorn Group primarily consists of the undifferentiated Arcadia and the Tampa Member of the Arcadia in the wellsite vicinity, and ranges in age from Early Miocene to Early Pliocene (Scott, 1988). The Peace River Formation appears to be absent in the vicinity of TR SA-1. The undifferentiated Arcadia consists of alternating beds of limestone, dolostone, quartz sand, clay, chert and phosphate, and extends from 29 ft bls to 367 ft bls, and then from 484 ft bls to 498 ft bls. Clays, containing varying amounts of very fine to fine sand and phosphate, make up slightly less than two-thirds of the undifferentiated Arcadia Formation at the TR SA-1 wellsite. Upper clays vary in color from light green and gray to yellow, while lower clays appear darker green. Limestone and dolostone are present as thin units in the undifferentiated Arcadia, with the limestone being much more persistent. The undifferentiated Arcadia extends to the top of the Tampa Member of the Arcadia Formation, which occurs at 367 ft bls.

The Tampa Member at TR SA-1 consists primarily of interbedded limestones with thin units of clay, minor amounts of dolostone and chert and continues for 117 ft to a depth of 484 ft bls. The transition into the Tampa Member of the Arcadia, is marked by an increase in quartz sand and an increase in moldic porosity. Increased porosity due to formational differences are common at contacts. Below the Tampa Member, undifferentiated Arcadia appears to be present for another 14 ft.

The Suwannee Limestone, an Oligocene age formation, lies unconformably below the Arcadia. It represents the top of the Upper Floridan aquifer system (FAS), and extends from the base of the undifferentiated Arcadia at 498 ft bls to a depth of 739 ft bls. The Suwannee Limestone is primarily composed of a limestone that is yellowish-gray, microcrystalline to coarse grained, and fossiliferous with common foraminifera and mollusc casts and molds (Campbell, 1984). Interbedded with the limestone, are units of dolostone, clay, chert, and fine quartz sand.

The Ocala Limestone, late Eocene in age, has an unconformable contact with the overlying Suwannee Limestone. At the TR SA-1 wellsite, the Ocala Limestone is encountered at 739 ft bls and extends to a depth of 984 ft bls. It is a chalky, calcarenite with abundant shallow marine macro fossils. Thick units of altered limestone and crystalline dolostone were also present. Fossil assemblages include Pelecypods, gastropods (*Turritella*), milliolids, echinoids (*Neolaganum durhami* and *Weisbordella cubae*), and foraminifera (*Lepidocyclina sp.*, *Nummulites sp.*) (Decker, 1990).

The transition into the middle Eocene age Avon Park Formation is marked by an organic layer, echinoids (*Neolaganum dalli*) and a noticeable increase in porosity of the crystalline dolostone. Avon Park rocks also include fossiliferous limestone, dolomitic limestone, and fractured crystalline dolostone. Drilling terminated four ft below a cavity encountered from 1,187 to 1,204 ft bls.

5.0 HYDROGEOLOGY

5.1 SURFICIAL AQUIFER SYSTEM

The surficial aquifer system (SAS) at TR SA-1 is essentially delineated as the Undifferentiated Surficial Deposits, and extends from land surface to the bottom of the first clay units at 29 ft bls. This upper most water bearing unit at TR SA-1 is composed of marine and non-marine quartz sands, clay, shell and abundant organics. Water levels are perched on top of the clays and range from near surface to several feet below land surface. Rainfall provides the primary recharge, however, localized water table levels are probably recharged adjacent to the nearby discharge creek for the county's Reverse Osmosis Plant.

5.2 INTERMEDIATE AQUIFER SYSTEM

The intermediate aquifer system/ intermediate confining unit (IAS/ICU), at the TR SA-1 wellsite, extends from 29 ft bls to 498 ft bls, and includes the undifferentiated Arcadia Formation and the Tampa Member of the Arcadia Formation. Figure 2 illustrates the hydrogeologic relationship between the SAS, IAS/ICU and Upper FAS. Within the Tampa Member, potentiometric water levels undergo a gradual transition from intermediate head levels to Floridan conditions. The upper part of the IAS/ICU consists largely of clay units with beds of limestone, dolostone, chert, quartz and phosphatic sand. The Tampa Member becomes a limestone dominated unit, containing large percentages of quartz sand and minor amounts of phosphatic sand and organics.

Water quality samples collected during coring, indicate fresh water located in the permeable zones were separated vertically by impermeable clay beds. An old City of Sarasota production well now used as a water level monitor is located approximately 80 ft away from the TR SA-1 wellsite. This well has an open-hole interval from 43 ft bls to 479 ft bls, cross-connecting the entire IAS/ICU, and essentially making all potentiometric water levels at these depths the same.

Potentiometric water levels, upon initial penetration into IAS/ICU limestone, were 4.0 ft above land surface (als). As coring proceeded from 29.5 ft bls to 504 ft bls, potentiometric water levels rose by less than 0.2 ft. At a depth of 504 ft bls, water levels rose to 4.9 ft als. The corehole was then reamed and temporary casing set to 501 ft bls. Water levels were 5.4 ft als when coring resumed two weeks later. Water levels declined slightly to 4.5 ft als, as coring reached the bottom of the Tampa Member (484 ft bls). The intermediate monitor constructed on-site

(328'-388') had a water level of 5.19 ft als (11.69 ft NGVD) on October 31, 1995. Potentiometric water levels measured during coring of TR SA-1 were referenced to land surface datum, which is 6.5 ft above the National Geodetic Vertical Datum (NGVD).

5.3 UPPER FLORIDAN AQUIFER

The top of the Upper Floridan aquifer is typically considered to be coincident with the top of the Suwannee Limestone, (498 ft bls at TR SA-1). Hydrologically, Upper Floridan potentiometric levels at the TR SA-1 site began within the Tampa Member of the Arcadia Formation. The Upper Floridan aquifer in descending order, consists of the Suwannee Limestone, Ocala Limestone, and the Avon Park Formation and terminates at the Middle Floridan confining unit (Ryder, 1985). The Ocala Limestone is considered to be a semi-confining unit, separating the permeable beds of the Suwannee Limestone and Avon Park Formation. Drilling at the TR SA-1 wellsite did not extend below the Avon Park Formation to the Middle Floridan confining unit.

The Suwannee Limestone at TR SA-1 is characterized by light orange permeable calcarenite beds separated by beds of calcilutite, clays, and minor dolostone. The more transmissive beds are located near the top of the Suwannee Limestone at TR SA-1. The first fresh/saltwater interface (chlorides exceeding 1,000 mg/L) was encountered at 609 ft bls, while coring the Suwannee Limestone. Chloride concentrations decreased while still within the Suwannee Limestone below 609 ft bls and into the Ocala Limestone. As coring proceeded from 504 ft to 689 ft bls, potentiometric water levels gradually decreased from 5.4 ft to 4.3 ft als. The coring operation was halted and when coring resumed a month later at 689 ft bls water levels measured 5.6 ft als. Fluctuations may be attributed to elevated dissolved solids suppressing head levels. Stratification occurred during the month of no operation, which allowed head levels to be restored.

The Ocala Limestone at TR SA-1 is composed of two distinct low-permeability sections. The upper Ocala is primarily fossiliferous, low-permeability, fine-grained, light orange calcarenites and clays, while the lower Ocala consists primarily of fossiliferous, low-permeability, brown dolostone. Fossils are primarily foraminifera tests and molds. The calcarenites tend to have more fossil tests, while the dolostone tests are dissolved creating voids. Water quality remained fairly fresh (generally less than 750 mg/L chloride concentration) throughout coring of the Ocala Limestone. As a result, potentiometric water levels rose only slightly during drilling of the Ocala Limestone. Water levels rose from 5.7 ft als at 759 ft bls to 6.2 ft als at 994 ft bls.

The transition into the Avon Park Formation is marked by a thin organic bed, a highly transmissive dolostone unit and the presence of echinoids (*Neolaganum dalli*). The Avon Park lithology generally consisted of either dolostone or calcarenite at the TR SA-1 site. The dolostone encountered was typically more permeable, due partly to an increase in secondary porosity, such as fracturing and dissolution of fossil tests. Conductivity readings (chlorides) were also generally higher in the dolostone, relative to the less permeable calcarenites. Chlorides rose above and then back below 1,000 mg/L several times with depth above 1,144 ft bls. This layering of higher chloride water with fresher water, lends itself to a multi-layered fresh/saltwater transition zone, where the more permeable layers were allowing saltwater intrusion at a faster rate than the less permeable zones. The fresher zones will become saltier with time.

Potentiometric water levels rose sharply upon encountering the first Avon Park permeable zone. Water levels near the top of the Avon Park Formation (1,009 ft bls) were 6.2 ft als, and rose to 10.9 ft als at 1,014 ft bls and then 12.1 ft als at 1,019 ft bls. As drilling proceeded within the Avon Park, saltier, denser water was encountered below 1,184 ft bls. As the borehole filled with the denser water, levels started to drop significantly. When seawater conditions (total dissolved solids - 35,000 mg/L) were finally achieved in the cavity encountered at 1,187 ft bls, water levels had dropped nearly 20 ft to 7.8 ft bls.

6.0 GROUND-WATER QUALITY

Ground-water quality sampling was conducted throughout most of the coring of TR SA-1. This provided a ground-water profile and precise identification of the fresh/saltwater interfaces. Ground-water samples were collected at five to 30-ft intervals, depending on changes in lithology and quality of the drilling discharge water. Prior to use of the corehole packer, water samples were collected with the stainless steel wireline sampler, which was lower through the drill rods and out the bit into the open hole interval. When the corehole packer was employed, the purge was generally a volume greater than 1.5 - two well volumes. Again, water samples were collected using the wireline sampler, which remained in the drill rods above the packer. Two samples were retrieved each time to check for consistency. If the conductivity readings were 10% different, another sample was retrieved. Similar samples were then blended and filtered through 0.45 um paper into three-500 ml bottles (one acidified with nitric acid) for laboratory analyses. On-site water quality analyses included tests for temperature, conductivity, pH, chlorides, sulfates and specific gravity. Field chloride readings were generally similar to laboratory results when samples measured with Hach kits were properly diluted to allow for a more accurate determination of the chloride concentration (Figure 7). Sulfate field kits, however, proved to be less sensitive and resulted in a higher deviation between field and laboratory samples. Table 3 presents the laboratory results of the ground-water samples collected during the coring process, and Figures 4, 6 and 8 present water quality changes with depth. Chloride analyses, indicated that 1,000 mg/L was exceeded several times during the coring operation. The first 1,000 mg/L interface was in the Suwannee Limestone, with several more in the Avon Park Formation. The water sample collected in the Suwannee Limestone was actually a composite water sample, from where the temporary casing was set at 501 ft bls to 609 ft bls. The other samples collected in the Avon Park Formation utilized the corehole packer and a much smaller interval was sampled. Three distinct permeable zones were encountered with chlorides levels exceeding 1,000 mg/L within the Avon Park Formation, which were separated by thinner, tighter calcarenite zones. Within the lower zone, chlorides decreased slightly and then increased to seawater conditions at 1,184 ft bls. Sulfates rose early, within the Tampa Member of the Arcadia Formation, and generally remained high throughout the water profile, however values doubled when seawater conditions were encountered. Total dissolved solids, as expected, responded similarly to chloride concentrations. A conductivity log, run in the Induction well, indicates several peaks corresponding to high chloride zones (but not all) located during coring (Figure 4). The transition into seawater conditions, at the bottom of the hole, is very evident on the conductivity and resistivity logs (Figures 4 and 5). Table 4 presents water quality values for samples collected from each finished monitor well.

7.0 WELL CONSTRUCTION

The TR SA-1 wellsite has five completed monitor wells on-site; a surficial, intermediate, Suwannee Limestone, Avon Park and deep Induction. They were completed as one single-zone and two dual-zone monitor wells. The first completed dual zone, pairs the Induction monitor well with the intermediate monitor well in the reamed corehole. The second dual zone, pairs the Avon Park and Suwannee monitor wells. The surficial monitor well was completed as a single-zone well.

The four-inch, 30-ft Tri-Loc PVC surficial monitor well was completed in a ten-inch augered borehole (Figure 9) and consists of ten ft of casing and 20 ft of 0.020-inch slot screen. Silica sand (6-20) extends from 30 ft to five ft bls; a foot of bentonite was placed above the sand. Cement grout caps the bentonite and seats the steel wellhead protection.

The three-inch corehole was drilled by the District's CME 75 drill rig to 1,184 ft bls, and then reamed to a 9 5/8-inch nominal borehole to a depth of 1,208 ft bls by the contract rig (Layne

Drilling, Inc.). At 1,187 ft bls a 17-foot, vertical solution cavity was encountered in the Avon Park Formation. Drilling was terminated at 1,208 ft bls. The corehole was converted into a dual-zone monitor, consisting of two wells, an intermediate aquifer and deep Induction (Figure 10). A 1,204-ft string of three-inch PVC (fastened with stainless steel screws and glue) with two 3x10-inch shale packers, was placed into the hole, with the packers positioned 20 ft above bottom. Twenty-five ft (1,160 - 1,185 ft bls) of bentonite chips were placed above the shale packers, and cement grout emplaced from 1,160 ft to 433 ft bls. Forty-one ft of bentonite chips were placed above the grout from 433 ft to 392 ft bls, to prevent degradation of the intermediate monitor's water quality by cement contamination. The intermediate aquifer monitor well consists of two-inch Tri-Loc PVC casing extending from three ft als to 328 ft bls. Sixty ft of two-inch Tri-Loc PVC 0.030-inch slot screen, extends from 328 ft bls to 388 ft bls. Silica pea gravel surrounds the screen. A five-ft layer of bentonite chips caps off the gravel. Cement grout extends from the top of the bentonite layer to land surface. Since the intermediate aquifer monitor well will frequently be under flowing artesian conditions, a ball valve and threaded cap have been installed on top of the well for sampling and accessing the well. This well pair is also covered by a steel wellhead protective casing.

The primary freshwater/saltwater interface well (1,000 mg/L chlorides), monitors the Ocala/Avon Park Formation boundary. It is paired in a wellbore with the Suwannee Limestone monitor, which may also be used as a shallower freshwater/saltwater interface monitor well. This well set has 20-inch steel surface casing to 100 ft bls, and 14-inch steel surface casing to 325 ft bls, both grouted to surface (Figure 11). The Avon Park water quality monitor is four-inch PVC with 0.030-inch slot screen from 995 - 1,015 ft bls, and silica pea gravel from 968 - 1,016 ft bls. The gravel is capped by one ft of silica sand (968 ft - 967 ft bls) and five ft of bentonite pellets (962 ft - 967 ft bls). Cement grout extends from the bentonite up to 745 ft bls. The Suwannee Limestone monitor is a four-inch PVC well, with 0.030-inch slot screen from 708 - 738 ft bls. Silica pea gravel extends from 705 - 745 ft bls, and is capped by one ft of silica sand (704 ft - 705 ft bls). Cement grout extends from the top of the sand pack to land surface. Both wells are typically under flowing artesian conditions, and both have release ball valves and threaded caps for water quality monitoring access. Wellhead protection consists of steel casing, welded to the steel surface casing, with a lockable hinged lid.

8.0 SUMMARY

The TR SA-1 wellsite is the most seaward (western) of three wellsites of the northern Sarasota coastal transect. The wellsite contains four water quality monitor wells, two of which are freshwater/saltwater monitors and one geophysical Induction well. The wells monitor water quality and water levels in the surficial, intermediate, and Upper Floridan aquifers (Suwannee Limestone and Avon Park Formation). The Induction well is fully cased to 1,204 ft bls.

Water quality from the surficial monitor is being tested and logged into the Ambient Ground-Water Quality Monitoring Program's database. The intermediate aquifer monitor well has a discreet 60-ft open hole interval, however, influence from cross-connection of the entire intermediate aquifer at a nearby City of Sarasota monitor well, currently overrides any individual intermediate potentiometric head differences. The completed Suwannee Limestone monitor well has a 30-ft open hole interval with chlorides measured at just under 1,000 mg/L (951 mg/L, 11/95). Water quality measured during drilling, indicated a reduction in chloride values below the Suwannee monitored interval. The Avon Park monitor was designed to be the primary freshwater/saltwater interface well, however the Suwannee monitor will also serve as an interface monitor well. The Avon Park monitor well has a 20-ft open hole interval, with chloride concentrations just below 500 mg/L (484 mg/L, 11/95) in the finished well. Chloride concentrations, less than 15 ft below this interval, measured just below 2,000 mg/L during drilling. This is the primary water quality monitor well designed to track movement of the freshwater/saltwater interface (1,000 mg/L). Should water quality degrade over time, it would be a result of either up-coning or transgression of the interface. The Induction monitor well is also designed to monitor the interface. The Induction geophysical logging tool can measure changes in Natural Gamma emissions, Resistivity, and Conductivity of the formations and formation water. If ground-water quality degrades over time, conductivity will increase, indicating saltwater intrusion.

9.0 REFERENCES

Barr, G. L., 1996, Hydrogeology of the Surficial and Intermediate Aquifer Systems in Sarasota and Adjacent Counties, Florida: U. S. Geological Survey Water-Resources Investigations Report 96-4063.

Campbell, K. M., 1985, Geology of Sarasota County, Florida: Florida Geological Survey Open-File Report 10.

Decker, J. L., 1990, ROMP TR9-2 Apollo Beach, Hillsborough County, WRAP #1, Executive Summary: Southwest Florida Water Management District, unpublished report.

Ryder, P. D., 1985, Hydrology of the Floridan Aquifer System in West-Central Florida: U. S. Geological Survey Professional Paper 1403-F.

Scott, T. M., 1988, The Lithostratigraphy of the Hawthorn Group (Miocene) of Florida: Florida Geological Survey Bulletin 59.

White, W. A., 1970, Geomorphology of the Florida Peninsula: Florida Bureau of Geology Bulletin 51.

Tables

TABLE 1. FIELD RESULTS OF WATER QUALITY DURING CORING PROCESS: DISCHARGE AND BAILER SAMPLES

DATE (M/D/Y)	HOLE DEPTH (ft bls)	% CORE RECOVERY	DEPTH 4" HW CASING (ft bls)	FLUID TEMP. (deg. C)	FLUID CONDUCT. (umhos/cm)	pH	SPECIFIC GRAVITY (g/cm^3)	CHLORIDE (mg/L)	SULFATE (mg/L)
09/12/94	4/ A	75	0	n/a	n/a	n/a	n/a	n/a	n/a
	9	20	0	n/a	n/a	n/a	n/a	n/a	n/a
	11.5	88	0	n/a	n/a	n/a	n/a	n/a	n/a
	14	76	0	n/a	n/a	n/a	n/a	n/a	n/a
	19	100	0	n/a	n/a	n/a	n/a	n/a	n/a
	21.5	100	0	n/a	n/a	n/a	n/a	n/a	n/a
	24	100	0	n/a	n/a	n/a	n/a	n/a	n/a
09/13/94	26.5	100	0	n/a	n/a	n/a	n/a	n/a	n/a
	27.5/ C	100	0	n/a	n/a	n/a	n/a	n/a	n/a
	29	10	0	n/a	n/a	n/a	n/a	n/a	n/a
	34	40	0	n/a	n/a	n/a	n/a	n/a	n/a
	39	76	0	n/a	n/a	n/a	n/a	n/a	n/a
	44	100	0	n/a	n/a	n/a	n/a	n/a	n/a
	49	70	0	n/a	n/a	n/a	n/a	n/a	n/a
09/14/94	54	64	0	n/a	n/a	n/a	n/a	n/a	n/a
	59	50	0	n/a	n/a	n/a	n/a	n/a	n/a
	64	50	0	n/a	n/a	n/a	n/a	n/a	n/a
	69	100	0	n/a	n/a	n/a	n/a	n/a	n/a
	74	80	0	n/a	n/a	n/a	n/a	n/a	n/a
	79	90	0	n/a	n/a	n/a	n/a	n/a	n/a
	84	70	0	n/a	n/a	n/a	n/a	n/a	n/a
	89	64	0	n/a	n/a	n/a	n/a	n/a	n/a
	94	88	0	n/a	n/a	n/a	n/a	n/a	n/a
	99	80	0	n/a	n/a	n/a	n/a	n/a	n/a
10/24/94	104	64	97	n/a	n/a	n/a	n/a	n/a	n/a
	109	52	97	n/a	n/a	n/a	n/a	n/a	n/a
	114	83	97	n/a	n/a	n/a	n/a	n/a	n/a
	119	98	97	n/a	n/a	n/a	n/a	n/a	n/a
10/25/94	124	93	97	n/a	n/a	n/a	n/a	n/a	n/a
	129	80	97	n/a	n/a	n/a	n/a	n/a	n/a
	134	74	97	n/a	n/a	n/a	n/a	n/a	n/a
	139	0	97	n/a	n/a	n/a	n/a	n/a	n/a
	144	50	97	n/a	n/a	n/a	n/a	n/a	n/a
	149	84	97	n/a	n/a	n/a	n/a	n/a	n/a
	154	70	97	n/a	n/a	n/a	n/a	n/a	n/a
	159	100	97	n/a	n/a	n/a	n/a	n/a	n/a
	164	92	97	n/a	n/a	n/a	n/a	n/a	n/a
	169	100	97	n/a	n/a	n/a	n/a	n/a	n/a
	174	94	97	n/a	n/a	n/a	n/a	n/a	n/a
10/26/94	179	80	97	n/a	n/a	n/a	n/a	n/a	n/a
	184	86	97	n/a	n/a	n/a	n/a	n/a	n/a
	189	100	97	n/a	1500	8.5	1.001	180	>200
	194	80	97	n/a	n/a	n/a	n/a	n/a	n/a
	199	50	97	n/a	n/a	n/a	n/a	n/a	n/a
	204	78	97	n/a	n/a	n/a	n/a	n/a	n/a
	209	96	97	n/a	n/a	n/a	n/a	n/a	n/a
	214	97	97	n/a	n/a	n/a	n/a	n/a	n/a
10/27/94	219	100	97	n/a	n/a	n/a	n/a	n/a	n/a
	224	100	97	n/a	n/a	n/a	n/a	n/a	n/a
	229	96	97	n/a	n/a	n/a	n/a	n/a	n/a
	234	46	97	n/a	n/a	n/a	n/a	n/a	n/a

TABLE 1. FIELD RESULTS OF WATER QUALITY DURING CORING PROCESS: DISCHARGE AND BAILER SAMPLES

DATE (M/D/Y)	HOLE DEPTH (ft bls)	% CORE RECOVERY	DEPTH 4" HW CASING (ft bls)	FLUID TEMP. (deg. C)	FLUID CONDUCT. (umhos/cm)	pH	SPECIFIC GRAVITY (g/cm^3)	CHLORIDE (mg/L)	SULFATE (mg/L)
	239	98	97	n/a	n/a	n/a	n/a	n/a	n/a
	244	100	97	n/a	n/a	n/a	n/a	n/a	n/a
	249	91	97	n/a	n/a	n/a	n/a	n/a	n/a
	254	86	97	n/a	n/a	n/a	n/a	n/a	n/a
	259	81	97	n/a	n/a	n/a	n/a	n/a	n/a
	264	100	97	n/a	n/a	n/a	n/a	n/a	n/a
	269	97	97	n/a	n/a	n/a	n/a	n/a	n/a
10/31/94	274	81	97	25.5	1507	n/a	n/a	n/a	n/a
	279	100	97	25.8	1488	n/a	n/a	n/a	n/a
	284	86	97	25.8	1443	n/a	n/a	n/a	n/a
	289	56	97	25.9	1412	n/a	n/a	n/a	n/a
	294	96	97	25.2	1273	7.79	1.0005	180	>200
11/01/94	299	98	97	25.4	1701	n/a	n/a	n/a	n/a
	304	100	97	25.6	1672	n/a	n/a	n/a	n/a
	309	90	97	25.9	1664	n/a	n/a	n/a	n/a
	314	96	97	26.4	1634	n/a	n/a	n/a	n/a
	319	100	97	26.1/25.5	1622/1309	7.94	1	200	>200
	324	42	97	27.1	1468	n/a	n/a	n/a	n/a
11/02/94	329	78	97	22.8	1483	n/a	n/a	n/a	n/a
	334	90	97	23.7	1464	n/a	n/a	n/a	n/a
	339	46	97	24.6	1413	n/a	n/a	n/a	n/a
	344	84	97	25.6	1650	n/a	n/a	n/a	n/a
	349	24	97	26.4	1545	n/a	n/a	n/a	n/a
	354	96	97	27.5	1618	n/a	n/a	n/a	n/a
	359	50	97	27.2	1542	n/a	n/a	n/a	n/a
	364	50	97	26.9	1550	n/a	n/a	n/a	n/a
	369	70	97	26.5	1542	n/a	n/a	n/a	n/a
	374	26	97	26.3	1545	n/a	n/a	n/a	n/a
11/03/94	374		97	25.6/25.4	1627/1679	7.8	1.0008	260	>200
	379	50	97	25.8	1625	n/a	n/a	n/a	n/a
	384	26	97	25.9	1688	n/a	n/a	n/a	n/a
	389	72	97	26.5	1628	n/a	n/a	n/a	n/a
	394	30	97	27.7	1622	n/a	n/a	n/a	n/a
	399	82	97	27.9	1555	n/a	n/a	n/a	n/a
	404	30	97	28.5	1607	n/a	n/a	n/a	n/a
11/07/94	409	28	97	n/a	n/a	n/a	n/a	n/a	n/a
	414	18	97	n/a	n/a	n/a	n/a	n/a	n/a
	419	40	97	n/a	n/a	n/a	n/a	n/a	n/a
	424	40	97	27.4	1640	n/a	n/a	n/a	n/a
	429	36	97	27	1562	n/a	n/a	n/a	n/a
	434	82	97	26.1	2730	7.36	1.001	460	>200
11/08/94	439	76	97	23.7	1911	n/a	n/a	n/a	n/a
	444	50	97	24.3	1883	n/a	n/a	n/a	n/a
	449	30	97	23	1904	n/a	n/a	n/a	n/a
	454	72	97	26.3	3310	7.29	1.001	650	>200
	459	86	97	29.5	2010	n/a	n/a	n/a	n/a
	464	66	97	29.7	1987	n/a	n/a	n/a	n/a
	469	30	97	29.9	1997	n/a	n/a	n/a	n/a
	474	31	97	26.2	2980	7.36	1.0015	625	>200
11/09/94	479	83	97	26.5	2130	n/a	n/a	n/a	n/a
	484	26	97	26.9	2200	n/a	n/a	n/a	n/a

TABLE 1. FIELD RESULTS OF WATER QUALITY DURING CORING PROCESS: DISCHARGE AND BAILER SAMPLES

DATE (M/D/Y)	HOLE DEPTH (ft bls)	% CORE RECOVERY	DEPTH 4" HW CASING (ft bls)	FLUID TEMP. (deg. C)	FLUID CONDUCT. (umhos/cm)	pH	SPECIFIC GRAVITY (g/cm^3)	CHLORIDE (mg/L)	SULFATE (mg/L)
	489	62	97	27.2	2180	n/a	n/a	n/a	n/a
	494	22	97	28.3	2180	n/a	n/a	n/a	n/a
	499	26	97	28.7	2195	n/a	n/a	n/a	n/a
	504	82	97	28.8	2190	n/a	n/a	n/a	n/a
11/14/94	504		97	26.5	2840	7.23	1.0013	420	>200
11/29/94	509	30	501	24	1996	n/a	n/a	n/a	n/a
	514	0	501	24.1	2000	n/a	n/a	n/a	n/a
	519	3	501	24.1	1946	n/a	n/a	n/a	n/a
	524	0	501	24.5	1937	n/a	n/a	n/a	n/a
	529	4	501	25.5/26.9	1946/2800	7.34	1.0013	380	>200
11/30/94	534	48	501	26.6	2640	n/a	n/a	n/a	n/a
	539	96	501	26.6	2610	n/a	n/a	n/a	n/a
	544	24	501	27	2620	n/a	n/a	n/a	n/a
	549	36	501	28	2790	n/a	n/a	n/a	n/a
	554	40	501	28.1	2680	n/a	n/a	n/a	n/a
	559	22	501	28.2	2760	n/a	n/a	n/a	n/a
	564	34	501	28.1	2780	n/a	n/a	n/a	n/a
	569	0	501	28.2/27.3	2750/2970	7.21	1.0025	440	>500
12/07/94	574	16	501	27	2860	n/a	n/a	n/a	n/a
	579	10	501	27.1	2810	n/a	n/a	n/a	n/a
	584	34	501	27.4	2790	n/a	n/a	n/a	n/a
	589	14	501	27.7	2820	n/a	n/a	n/a	n/a
	594	32	501	27.4	2830	n/a	n/a	n/a	n/a
	604	40	501	27.1	2850	n/a	n/a	n/a	n/a
	609	12	501	26.8/26.7	2890/3050	7.19	1.002	1250	>500
12/08/94	614	40	501	27	2850	n/a	n/a	n/a	n/a
	619	72	501	27.1	2920	n/a	n/a	n/a	n/a
	624	38	501	27.4	2920	n/a	n/a	n/a	n/a
	629	46	501	27.9/27.2	2930/4660	7.17	1.0015	1000	>550
12/13/94	629		501	26.7	4030	7.19	1.0025	720	>520
12/19/94	634	70	501	21.1	2920	n/a	n/a	n/a	n/a
	639	100	501	20.8	2820	n/a	n/a	n/a	n/a
	644	50	501	21.7	2860	n/a	n/a	n/a	n/a
	649/ P	60	501	22/25.6	2860/3400	7.41	1.0023	560	>500
12/20/94	654	60	501	21.6	2840	n/a	n/a	n/a	n/a
	659	32	501	21.8	2870	n/a	n/a	n/a	n/a
	664	32	501	22	2860	n/a	n/a	n/a	n/a
	669	38	501	22.3	2900	n/a	n/a	n/a	n/a
	674	70	501	22.3	2910	n/a	n/a	n/a	n/a
	679	58	501	22.4	2890	n/a	n/a	n/a	n/a
	684	98	501	22.7	2920	n/a	n/a	n/a	n/a
	689	76	501	22.6	2920	n/a	n/a	n/a	n/a
01/17/95	689		501	26.1	3990	7.18	1.0018	720	>550
	694	40	501	26.3	3960	n/a	n/a	n/a	n/a
	699	88	501	26.7	3870	n/a	n/a	n/a	n/a
	704	54	501	27.1	3750	n/a	n/a	n/a	n/a
	709	58	501	27.6	3680	7.3	1.0018	<750	>500
	714	18	501	n/a	n/a	n/a	n/a	n/a	n/a
01/19/95	719	50	501	26.5	3580	n/a	n/a	n/a	n/a
	724	92	501	26.8	3510	n/a	n/a	n/a	n/a
	729	72	501	27.2	3440	7.31	1.0016	<750	>550

TABLE 1. FIELD RESULTS OF WATER QUALITY DURING CORING PROCESS: DISCHARGE AND BAILER SAMPLES

DATE (M/D/Y)	HOLE DEPTH (ft bls)	% CORE RECOVERY	DEPTH 4" HW CASING (ft bls)	FLUID TEMP. (deg. C)	FLUID CONDUCT. (umhos/cm)	pH	SPECIFIC GRAVITY (g/cm^3)	CHLORIDE (mg/L)	SULFATE (mg/L)
01/24/95	734	80	501	19.7	3320	n/a	n/a	n/a	n/a
	739	48	501	19.9/27.1	3090/4530	7.24	1.003	1000	>500
	744	50	501	26.3	3030	n/a	n/a	n/a	n/a
	749	48	501	25.9	2950	n/a	n/a	n/a	n/a
	754	90	501	25.5	2940	n/a	n/a	n/a	n/a
	759	78	501	26.4	3170	7.31	1.0027	500	>450
01/25/95	764	92	501	24.7	2950	n/a	n/a	n/a	n/a
	769	70	501	24.1	2920	n/a	n/a	n/a	n/a
	774	54	501	23.5	2900	n/a	n/a	n/a	n/a
	779	50	501	26.5	2870	n/a	n/a	n/a	n/a
	784	56	501	26.1	2890	n/a	n/a	n/a	n/a
	789	96	501	25.6	3040	n/a	n/a	n/a	n/a
	794	100	501	25.8	2910	n/a	n/a	n/a	n/a
	799	60	501	25.4/27	2890/3630	7.35	1.0028	<750	>500
01/26/95	804	100	501	24.3	3060	n/a	n/a	n/a	n/a
	809	100	501	24.3	3080	n/a	n/a	n/a	n/a
	814	100	501	26	3080	n/a	n/a	n/a	n/a
	824	98	501	26.6	2950	n/a	n/a	n/a	n/a
	829	100	501	26.5	2870	n/a	n/a	n/a	n/a
	834	100	501	26.3	2930	n/a	n/a	n/a	n/a
	839	100	501	25.9	2880	n/a	n/a	n/a	n/a
01/30/95	844	96	501	25.3/27.5	3210/3240	7.31	1.0023	500	>520
	849	84	501	25.3	3160	n/a	n/a	n/a	n/a
	854	100	501	25	2970	n/a	n/a	n/a	n/a
	859	88	501	25.1	2950	n/a	n/a	n/a	n/a
01/31/95	864	100	501	19.5	3700	n/a	n/a	n/a	n/a
	869	100	501	23.3	3520	n/a	n/a	n/a	n/a
	874	100	501	25.7	3310	n/a	n/a	n/a	n/a
	879	100	501	26.3/26.9	3030/3320	7.42	1.0025	600	>500
	884	100	501	26.6	3070	n/a	n/a	n/a	n/a
	889	100	501	26.4	2930	n/a	n/a	n/a	n/a
	894	96	501	26.4	2930	n/a	n/a	n/a	n/a
	899	100	501	26	2950	n/a	n/a	n/a	n/a
	904	85	501	26	2960	n/a	n/a	n/a	n/a
	909	100	501	25.8	2930	n/a	n/a	n/a	n/a
	914	100	501	25.8	2900	n/a	n/a	n/a	n/a
	919	84	501	25.6/27.5	2960/3260	7.38	1.0025	500	840
02/01/95	924	100	501	27.3	3540	n/a	n/a	n/a	n/a
	929	100	501	27.1	3460	n/a	n/a	n/a	n/a
	934	89	501	26.4	2970	n/a	n/a	n/a	n/a
	939	100	501	26.9	2910	n/a	n/a	n/a	n/a
	944	98	501	26.2	2970	n/a	n/a	n/a	n/a
	949	94	501	25.9	2920	n/a	n/a	n/a	n/a
02/02/95	954	100	501	20.1/27.3	3350/3240	7.4	1.0015	500	800
	959	100	501	26.4	3290	n/a	n/a	n/a	n/a
	964	100	501	27.1	3050	n/a	n/a	n/a	n/a
02/06/95	964		501	27.5	3010	7.3	1.0022	500	1000
	969	100	501	24.9	3140	n/a	n/a	n/a	n/a
	974	100	501	24.4	3110	n/a	n/a	n/a	n/a
02/07/95	979	100	501	16.9	3090	n/a	n/a	n/a	n/a
	984	100	501	20.7/28	3010/2980	7.33	1.0018	300	900

TABLE 1. FIELD RESULTS OF WATER QUALITY DURING CORING PROCESS: DISCHARGE AND BAILER SAMPLES

DATE (M/D/Y)	HOLE DEPTH (ft bls)	% CORE RECOVERY	DEPTH 4" HW CASING (ft bls)	FLUID TEMP. (deg. C)	FLUID CONDUCT. (umhos/cm)	pH	SPECIFIC GRAVITY (g/cm^3)	CHLORIDE (mg/L)	SULFATE (mg/L)
	989	100	501	26.7	3210	n/a	n/a	n/a	n/a
	994	100	501	25.7	3000	n/a	n/a	n/a	n/a
02/08/95	999	100	501	n/a	n/a	n/a	n/a	n/a	n/a
	1004/ P	100	501	28	3120	7.4	1.0032	380	840
	1009	100	501	25	3320	n/a	n/a	n/a	n/a
	1014	100	501	23.7	2980	n/a	n/a	n/a	n/a
02/09/95	1019/ P	96	501	19.3/28.8	3120/3440	7.28	1.0018	500	900
02/13/95	1024	98	501	24.9	3870	n/a	n/a	n/a	n/a
	1029/ P	68	501	26.6/29.5	3950/7670	7.28	1.0038	1800	900
02/14/95	1034	100	501	23.7	5550	n/a	n/a	n/a	n/a
	1039	98	501	23.5	5650	n/a	n/a	n/a	n/a
	1044	95	501	26.3	5180	n/a	n/a	n/a	n/a
	1049/ P	100	501	26.2/29.5	5490/3740	7.3	1.0018	750	1040
02/20/95	1054	92	501	23.5	10280	n/a	n/a	n/a	n/a
	1059	79	501	23.6	10770	n/a	n/a	n/a	n/a
	1064	84	501	23.5	10460	n/a	n/a	n/a	n/a
02/21/95	1064/ P		501	29.6	12610	7.77	1.0053	32500	1000
	1069	90	501	28.5	7880	n/a	n/a	n/a	n/a
	1074	96	501	28.7	9840	n/a	n/a	n/a	n/a
	1079	92	501	28.9	10960	n/a	n/a	n/a	n/a
	1084	80	501	28.6	9380	n/a	n/a	n/a	n/a
02/22/95	1084/ P		501	29.2	10640	7.37	1.0049	2750	1200
	1089	86	501	29.1	6300	n/a	n/a	n/a	n/a
	1094	100	501	29.4	8530	n/a	n/a	n/a	n/a
	1099	92	501	28.9	6870	n/a	n/a	n/a	n/a
	1104/ P	100	501	28.7/29	6150/2540	7.48	1.0013	340	1000
02/27/95	1109	96	501	27.2	12800	n/a	n/a	n/a	n/a
	1114	100	501	27.4	12400	n/a	n/a	n/a	n/a
	1119	100	501	27.8	12200	n/a	n/a	n/a	n/a
	1124	91	501	28.4	12400	n/a	n/a	n/a	n/a
	1129	94	501	28.9	12810	n/a	n/a	n/a	n/a
	1134	92	501	28.4	12350	n/a	n/a	n/a	n/a
	1139	100	501	28.1	12120	n/a	n/a	n/a	n/a
02/28/95	1144/ P	110	501	26.9/30.1	9310/14680	7.16	1.0051	4250	1600
	1149	100	501	29.6	7870	n/a	n/a	n/a	n/a
	1154	100	501	29.5	9250	n/a	n/a	n/a	n/a
	1159	100	501	29.2	9230	n/a	n/a	n/a	n/a
03/01/95	1164	100	501	27	7500	n/a	n/a	n/a	n/a
	1169	100	501	27.3	6150	n/a	n/a	n/a	n/a
	1174/ P	100	501	26.7/29.5	6830/13050	7.24	1.0054	3750	2000
03/02/95	1179	100	501	23.6	12990	n/a	n/a	n/a	n/a
	1184/ P	98	501	23.5/28.8	8850/45500	7.03	1.0227	15000	4000

n/a = reading not available

C:\TRSA-1\FLUIDCOR.WB2

NOTE 1: AN "A" IN THE DEPTH COLUMN INDICATES FIRST AUGER SAMPLE, "C" INDICATES FIRST CORE AND "P" INDICATES PACKER TEST WATER QUALITY SAMPLE

NOTE 2: FIRST TEMP/COND READINGS FROM PAIRED VALUES ARE FROM DRILLING DISCHARGE AS ARE ALL SINGLE READINGS; SECOND VALUES AND EXTRA READINGS ARE FROM BAILER SAMPLE SENT TO LAB

TABLE 2. CORE RIG PACKER OPERATIONAL DATA

DATE (M/D/Y)	HOLE DEPTH (ft bls)	BIT DEPTH (ft bls)	AIRLINE LENGTH (ft)	TOP SHEAR PIN STRENGTH (psi)	BOTTOM SHEAR PIN STRENGTH (psi)	CALC. PUMP PRESS. (psi)	ACTUAL SHEAR PRESS. (psi)	INITIAL COND./ TEMP. (umhos/C)	FINAL COND./ TEMP. (umhos/C)	AIRLIFT (gpm)	CALC. ROD VOLUME (gal)	1-ROD VACATE TIME (min)	AIRLIFT TIME (min)	TOTAL GALS. AIRLIFTED	# HITS ON JARS	DEFLATE TIME (min)
12/19/94	649'	634'	100'	3000	680	405	275	3090 25.6	3340 26.4	15	149	10	50	750	3	3
12/20/94	689'	674'	100'	3000	680	388	300	3170 26	3520 27.6	32	158	5	65	2000	0	0
1/17/95	689'	674'	100'	3000	680	388	280	1000 24.7	4000 27.1	37.5	158	4	10	aborted	n/a	n/a
1/18/95	689'	674'	60'	3000	680	388	410	1080 24.8	3890 27.3	21	158	8	25	525	aborted	n/a
1/29/95	729'	714'	60'	3000	680	371	325	n/a	n/a	19.6	aborted	n/a	n/a	n/a	n/a	n/a
2/7/95	984'	964'	100'	3000	680	263	190	aborted	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2/7/95	984'	964'	100'	3000	1020	603	aborted	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2/8/95	1004'	984'	100'	3000	680	254	120	aborted	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2/8/95	1004'	984'	100'	1500	765	339	240	2990 26.6	3110 27.9	18	231	13	45	810	16	4
2/9/95	1019'	1004'	100'	3000	765	330	220	3010 27.6	3370 28.5	11.8	234	20	30	354	12	4
2/13/95	1029'	1014'	100'	3000	850	411	290	5180 28.2	7640 29	11.4	237	21	50	570	12	4
2/14/95	1049'	1024'	100'	3000	850	407	300	5610 28.3	3650 29.3	3.8	241	63	90	340	8	5

TABLE 2. CORE RIG PACKER OPERATIONAL DATA

DATE (M/D/Y)	HOLE DEPTH (ft bls)	BIT DEPTH (ft bls)	AIRLINE LENGTH (ft)	TOP SHEAR PIN STRENGTH (psi)	BOTTOM SHEAR PIN STRENGTH (psi)	CALC. PUMP PRESS. (psi)	ACTUAL SHEAR PRESS. (psi)	INITIAL COND./ TEMP. (umhos/C)	FINAL COND./ TEMP. (umhos/C)	AIRLIFT (gpm)	CALC. ROD VOLUME (gal)	1-ROD VACATE TIME (min)	AIRLIFT TIME (min)	TOTAL GALS. AIRLIFTED	# HITS ON JARS	DEFLATE TIME (min)
2/16/95	1049'	1024'	120'	3000	850	407	290	14230 29.7	7120 29.6	4.4	241	63	120	530	6	5
2/21/95	1064'	1049'	120'	3000	850	396	240	9870 26.9	10300 29.4	6.1	245	40	130	793	8	05/10
2/22/95	1084'	1064'	120'	3000	850	389	285	10140 26.7	16440 29	2.4	249	103	150	542	8	05/10
2/23/95	1104'	1084'	120'	3000	850	380	180	9830 28.1	2520 28.9	4.6	254	56	80	368	8	05/10
2/28/95	1144'	1104'	120'	3000	850	372	390	10560 29.3	12220 30	16	262	16	40	660	22/did not shear	10
3/1/95	1174'	1138'	120'	1500	850	358	170	11150 28.3	13210 29.6	12.5	270	22	45	563	5	05/10
3/2/95	1184'	1179'	120'	1500	850	340	220	2740 27.9	45300 29.4	14	272	20	135	1890	3	05/10

n/a = reading not available

C:\TRSA-1\TABLES\PACKER.WB2

TABLE 3. WATER QUALITY RESULTS FROM BOTTOM WATER SAMPLED DURING CORING (LABORATORY PROCESSED)

DATE (M/D/Y)	DEPTH (ft bls)	FIELD TEMP. (deg. C)	SPECIFIC CONDUCT. (umhos/cm)	WATER DENSITY (g/cm^3)	pH	TOTAL DISSOLVED SOLIDS (mg/L)	CHLORIDE (mg/L)	SULFATE (mg/L)	TOTAL ALKALINITY (CaCO3) (mg/L)	BROMIDE (mg/L)	ION BALANCE (%)	CALCIUM (mg/L)	MAGNESIUM (mg/L)	SODIUM (mg/L)	POTASSIUM (mg/L)	IRON (mg/L)	SILICA (mg/L)	TOTAL HARDNESS (as CaCO3)
10/26/94	189	25.6	1570	1.001	8.5	1070	183	422	151	0.6	0.13	106	83	93	33	0.046	23.51	606
10/31/94	294	25.2	1271	1.0008	7.6	842	146	295	176	0.4	1.14	77	60	96	18	0.128	15.12	439
11/01/94	319	26.1	1673	1.001	7.5	1155	195	443	164	0.7	1.23	126	89	99	13	0.465	16.84	681
11/03/94	374	25.4	1301	1.0008	7.8	866	138	285	187	0.4	0.39	76	61	98	15	0.11	22.04	441
11/07/94	434	26.1	2670	1.0019	7.4	1976	380	910	133	1.3	0.82	255	144	169	12	0.741	15.49	1230
11/08/94	454	26.3	3240	1.0022	7.2	2139	560	1030	136	1.8	2.87	304	144	234	12	0.765	25.18	1352
11/09/94	474	26.2	3220	1.0022	7.2	2115	550	1030	145	1.7	2.41	309	145	238	11	0.904	16.3	1369
11/14/94	504	26.5	2780	1.0021	7.4	2186	345	1100	136	1.1	1.5	306	134	181	5.7	0.264	11.4	1316
11/29/94	529	26.9	2860	1.002	7.4	2115	330	1040	133	1.1	1.06	303	129	162	5.2	1.344	15.89	1288
11/30/94	569	27.3	3130	1.0022	7.4	2246	385	1100	136	1.2	0.12	334	139	187	5.6	0.461	12.05	1406
12/08/94	609	26.7	5010	1.003	7.2	3398	1030	1170	141	4.6	1.6	387	169	482	11	0.294	6.84	1662
12/08/94	629	27.2	4810	1.0028	7.4	3330	880	1140	143	5.2	0.69	372	161	428	11	0.387	6.72	1592
12/14/94	629	26.7	3910	1.0025	6.4	2898	690	1146	136	1.8	1.9	340	160	340	8.4	0.433	11.14	1467
12/19/94	649	25.6	3340	1.0023	6.8	2472	512	1122	133	1.5	3.67	326	138	226	7.4	3.079	9.46	1380
01/18/95	689	26.1	3850	1.0026	6.8	2858	681	1149	133	2.3	0.07	365	164	336	8.9	0.516	5.97	1546
01/18/95	709	27.6	3540	1.0024	7	2704	581	1118	135	2.2	0.3	351	150	289	7.9	2.249	5.33	1494
01/18/95	729	27.2	3330	1.0023	7	2445	510	1095	134	1.8	0.47	343	146	251	7.2	2.084	6.42	1458
01/24/95	739	27.1	4440	1.0028	7	2981	916	1165	136	2.7	3.31	363	168	414	11	0.648	11.04	1567
01/26/95	759	26.4	3010	1.0021	7.2	2220	470	927	140	2.3	1.44	314	130	226	7.7	0.465	10.26	1319
01/26/95	799	27	3540	1.0025	7.4	2580	565	1046	134	2.2	7.63	400	162	311	8.6	2.185	9.92	1666
01/30/95	844	27.5	3350	1.0021	7.7	2282	483	992	135	1.8	1.81	294	132	229	6.9	1.266	9.75	1278
01/31/95	879	26.9	3330	1.0022	7.4	2384	490	1035	130	1.7	1.13	306	141	232	6.7	3.212	9.5	1345
02/01/95	919	27.5	3260	1.0021	7.5	2396	466	1038	132	1.6	1.2	304	140	222	6.4	2.758	10.33	1336
02/02/95	954	27.3	3220	1.0022	7.5	2411	457	1054	133	1.7	1.51	305	141	216	6.3	3.133	10.09	1342
02/06/95	964	27.5	2970	1.0021	7.2	2280	314	1087	123	1.3	1.31	324	136	169	5.6	10.19	7.08	1369
02/07/95	984	28	2930	1.0021	7.6	2239	332	1146	137	1.2	1.52	326	138	166	6.6	3.132	9	1380
02/08/95	1004	28	3080	1.0022	7.5	2351	390	1097	130	1.5	0.34	324	141	190	6.6	3.314	8.98	1390
02/09/95	1019	28.8	3440	1.0023	7.6	2665	525	1092	140	2	0.61	326	157	262	7	0.852	9.4	1461
02/16/95	1029	29.5	7550	1.004	7.6	5062	1862	1187	140	6.6	1.38	389	206	939	25	2.239	8.47	1820
02/16/95	1049	29.5	3670	1.0021	7.5	2611	595	883	129	2.4	1.74	267	141	320	9.2	3.378	8.21	1247
02/21/95	1064	29.6	12290	1.0062	7.4	7483	3525	1293	145	15	0.67	459	292	1900	56	2.743	9.07	2349
02/22/95	1084	29.2	10480	1.0053	7.4	6740	2915	1215	140	11	0.23	410	260	1560	44	3.155	9.54	2094
02/23/95	1104	29	2500	1.0018	7.5	1930	311	888	132	1.2	0.84	229	140	145	5.8	2.629	10.02	1148
02/28/95	1144	30.1	14690	1.0072	7.8	9450	4350	1405	146	18	0.73	527	323	2258	60	1.977	11.44	2646
03/01/95	1174	29.5	13100	1.0066	7.4	7930	3760	1383	130	16	0.11	573	329	1846	47	4.98	10.96	2786
03/02/95	1184	28.8	46600	1.0233	7	30100	17645	2738	170	58	6.41	1163	837	8220	250	10.293	8.36	6351
04/19/95	1190	N/A	55890	1.0274	7.5	35740	19410	3066	240	66	-0.55	1355	1056	10270	320	3.358	7.66	7732

C:\TRSA-1\TABLES\SA1WQSH2.WB2

TABLE 4. WATER QUALITY RESULTS FROM FINISHED MONITOR-WELLS

DATE (M/D/Y)	DEPTH (ft bls)	FIELD TEMP. (deg. C)	SPECIFIC CONDUCT. (umhos/cm)	WATER DENSITY (g/cm^3)	pH	TOTAL DISSOLVED SOLIDS (mg/L)	CHLORIDE (mg/L)	SULFATE (mg/L)	TOTAL ALKALINITY (CaCO3) (mg/L)	BROMIDE (mg/L)	ION BALANCE (%)	CALCIUM (mg/L)	MAGNESIUM (mg/L)	SODIUM (mg/L)	POTASSIUM (mg/L)	IRON (mg/L)	SILICA (mg/L)	TOTAL HARDNESS (as CaCO3)
12/13/95	28	N/A	3210	1.0019	7.2	2023	633	303	536	2.5	0.46	180	103	399	9.6	2.703	16.24	874
11/20/95	388	N/A	1916	1.0012	7.8	1306	235	636	143	0.8	0.64	144	96	121	12	0.126	19.12	751
11/20/95	738	N/A	4570	1.0027	7.6	3156	951	1086	129	3.2	-3.5	339	143	437	14	0.07	13.44	1435
11/20/95	1015	N/A	3300	1.0023	7.6	2535	484	1108	134	1.7	-1.4	316	146	227	6.5	0.668	13.74	1390

C:\TRSA-1\TABLES\SA1WQSH2.WB2

Figures

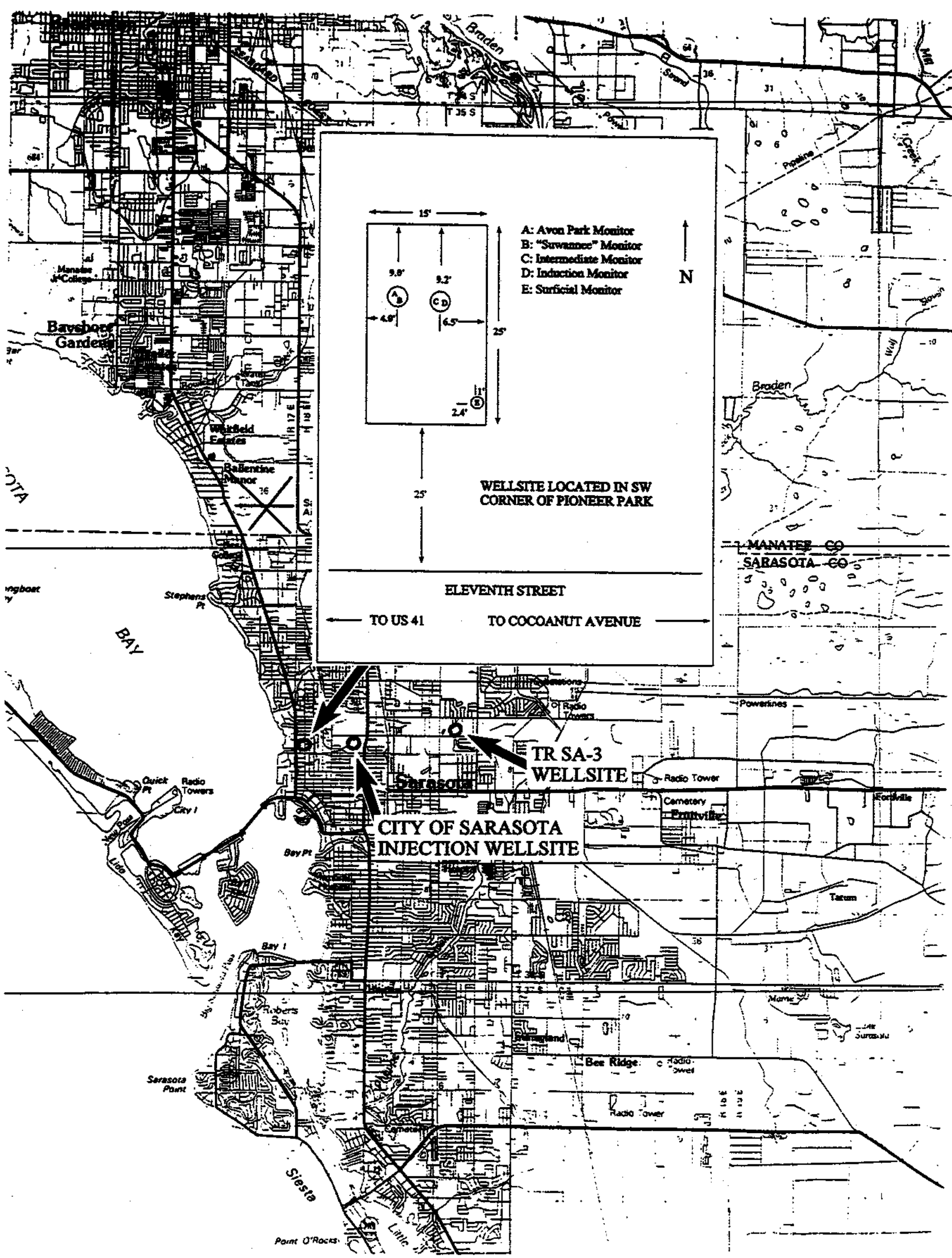


FIGURE 1. TR SA-1 (PAYNE TERMINAL)

WELLSITE LOCATION

C:\trsa-1\sitepg.fig

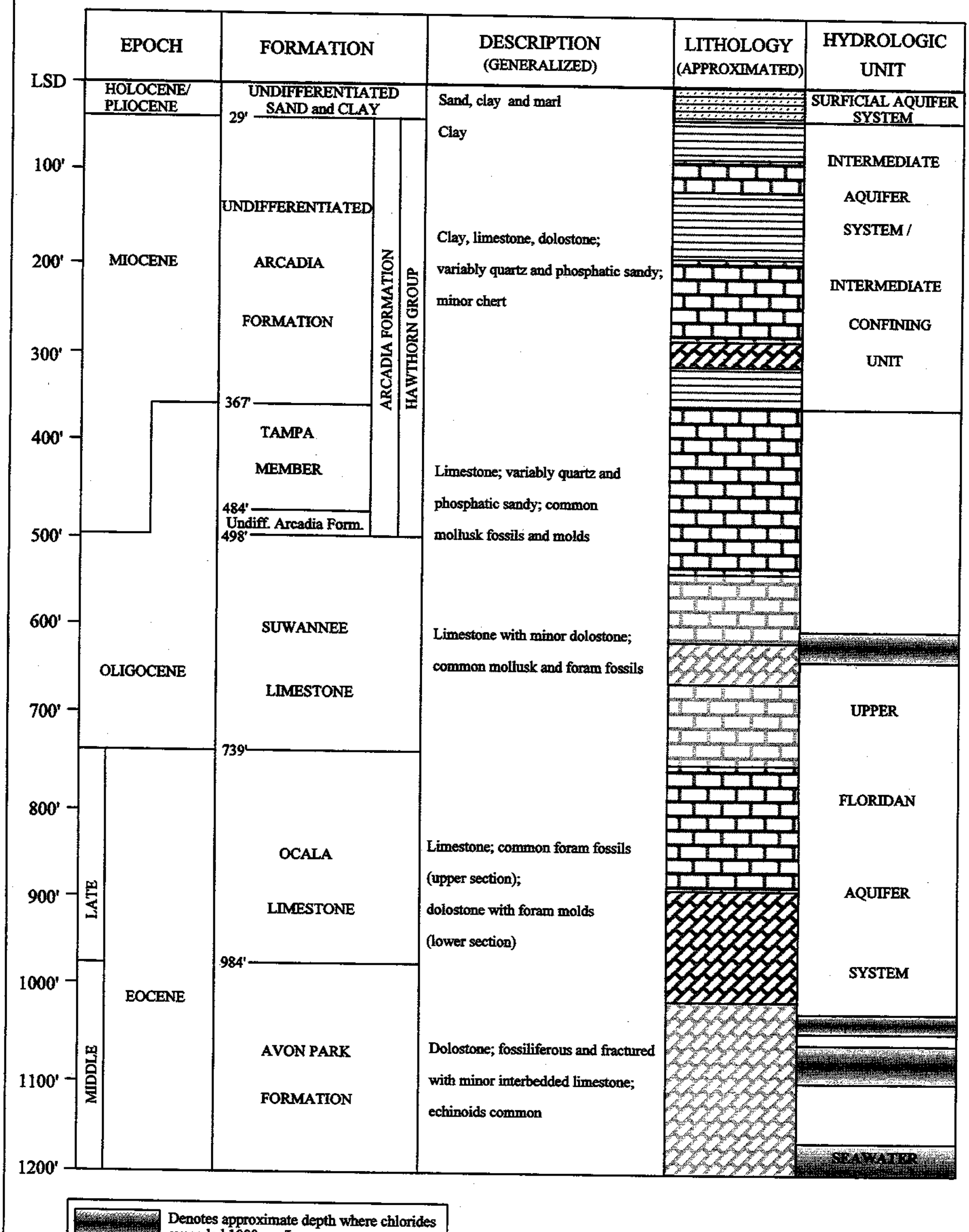


FIGURE 2. TR SA-1 (PAYNE TERMINAL)

HYDROGEOLOGY

C:\TR SA-1\HYDSTRAT.FIG

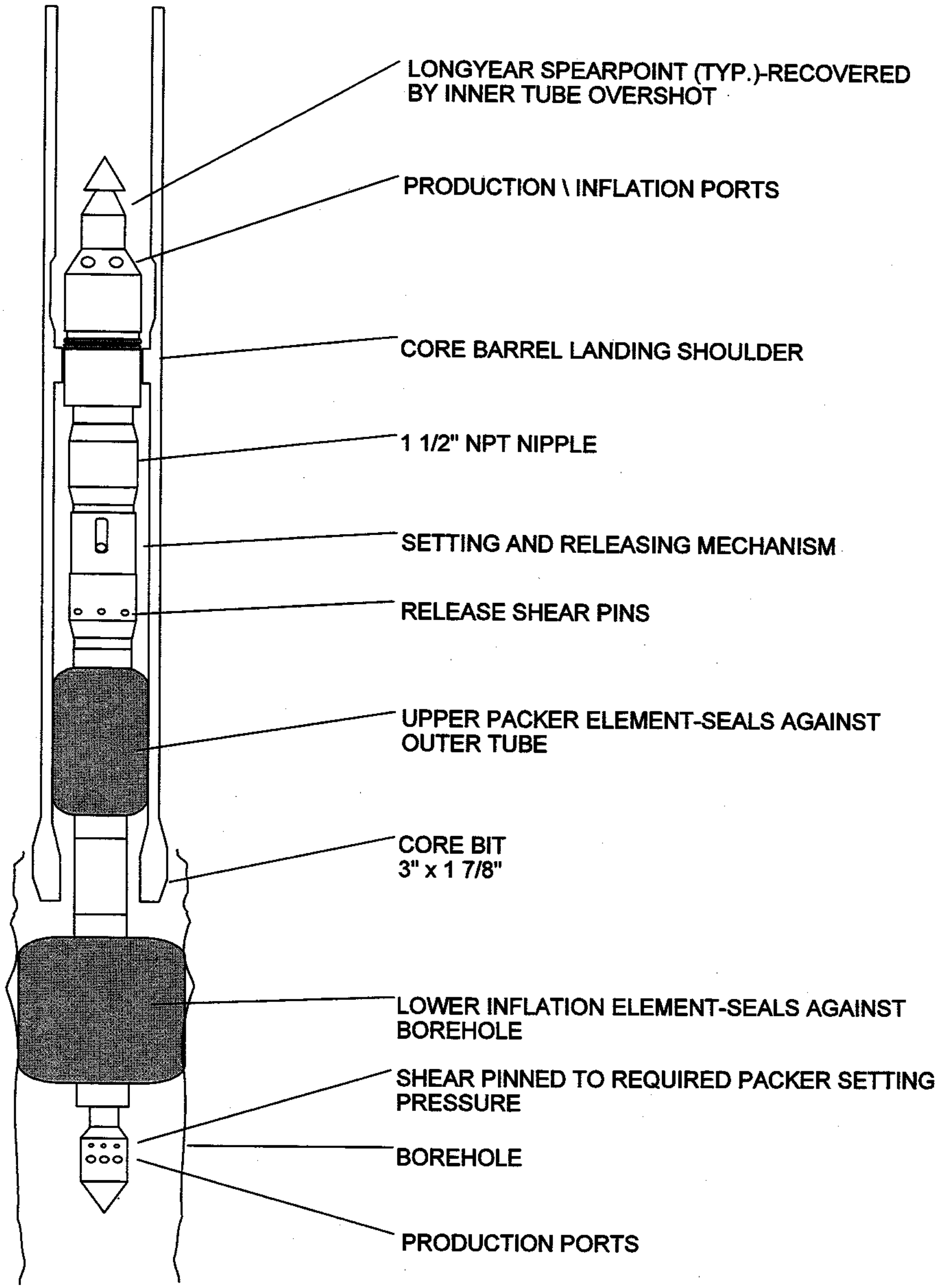


FIGURE 3. TR SA-1 (PAYNE TERMINAL)

DEPLOYED COREHOLE PACKER FOR 3"x 1 7/8" CORE BIT DEVELOPED BY TAM INTERNATIONAL, INC.

C:\trsa-1\corpkr.fig

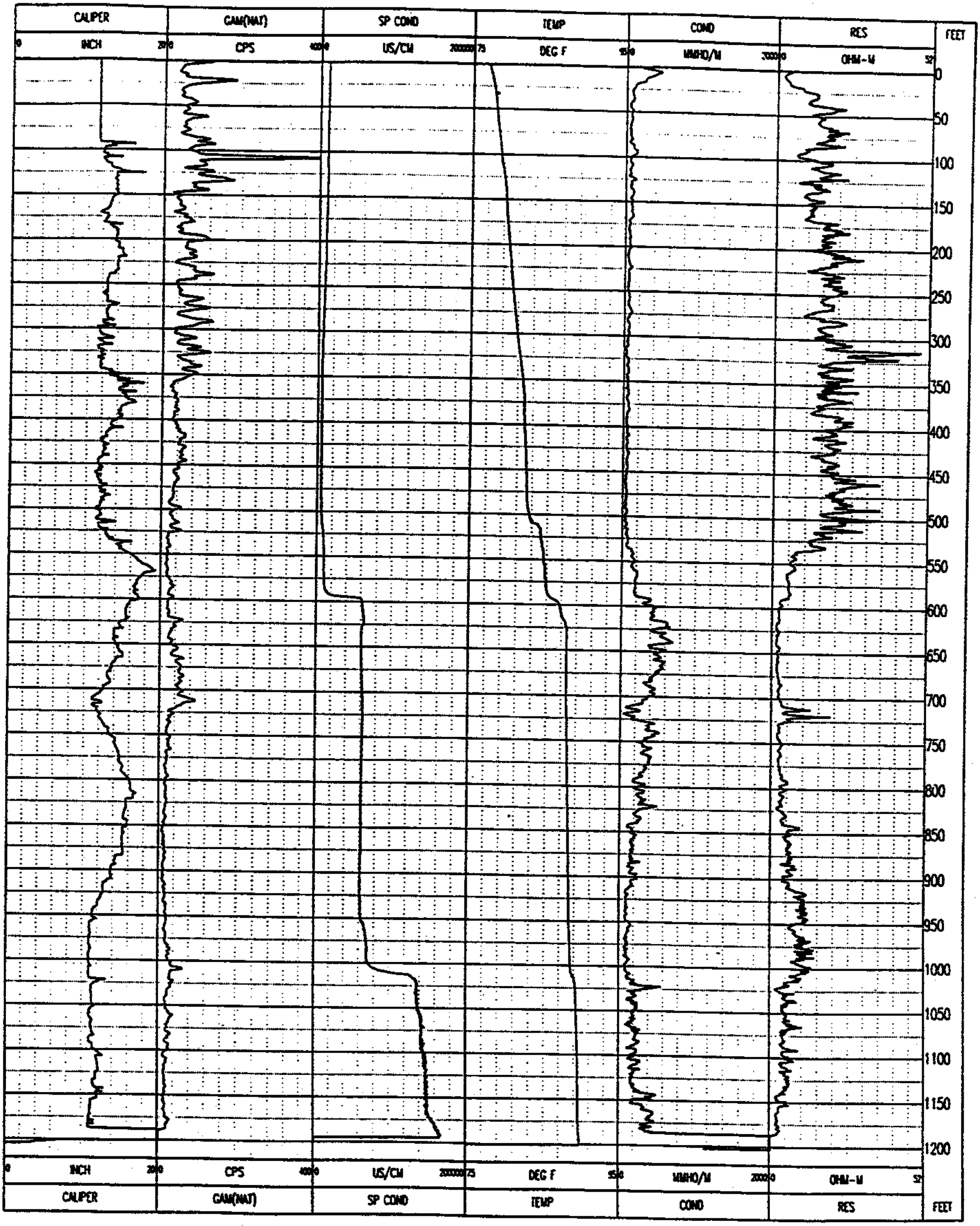
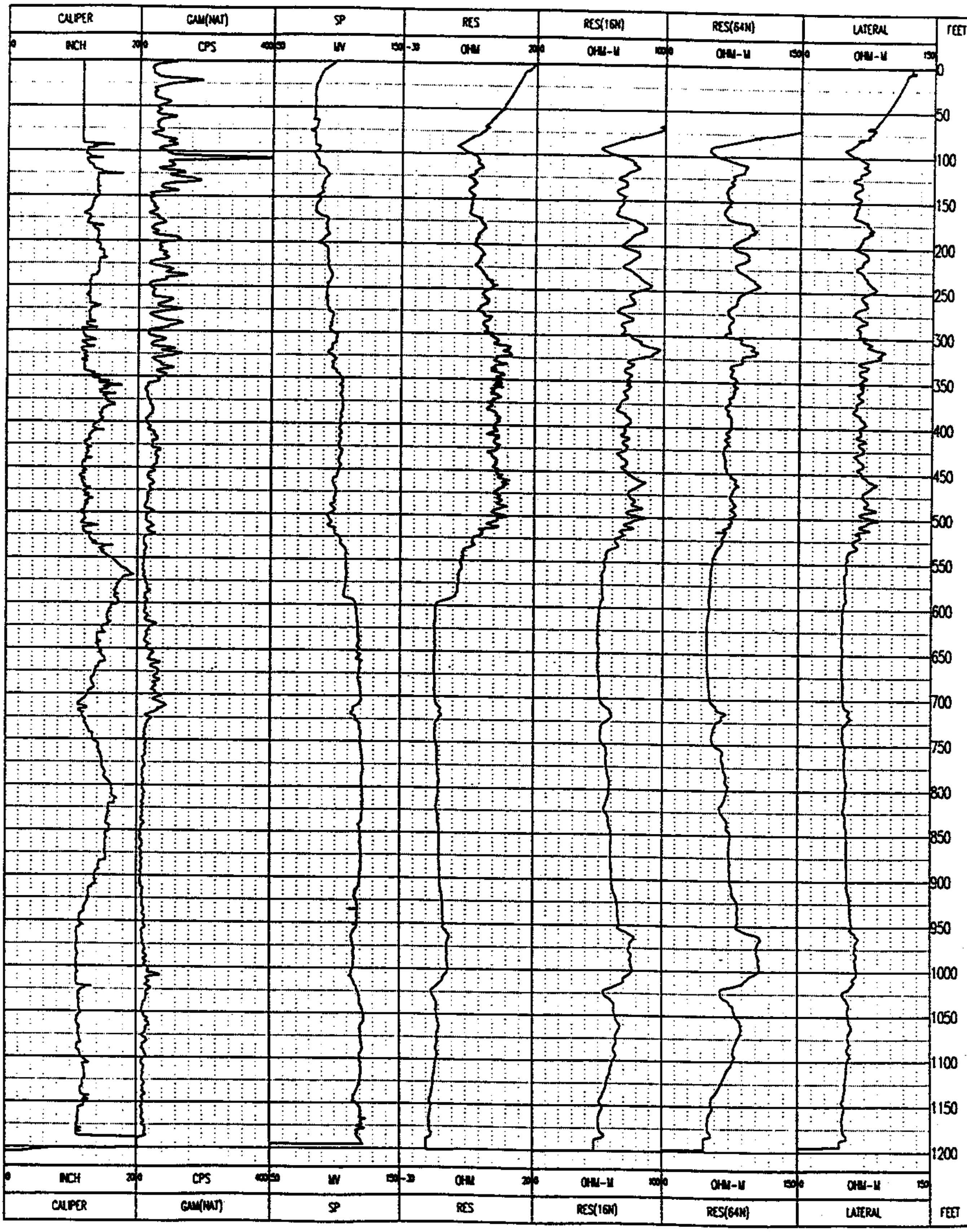


FIGURE 4. TR SA-1 (PAYNE TERMINAL)

GEOPHYSICAL FLUID LOGS OF COREHOLE

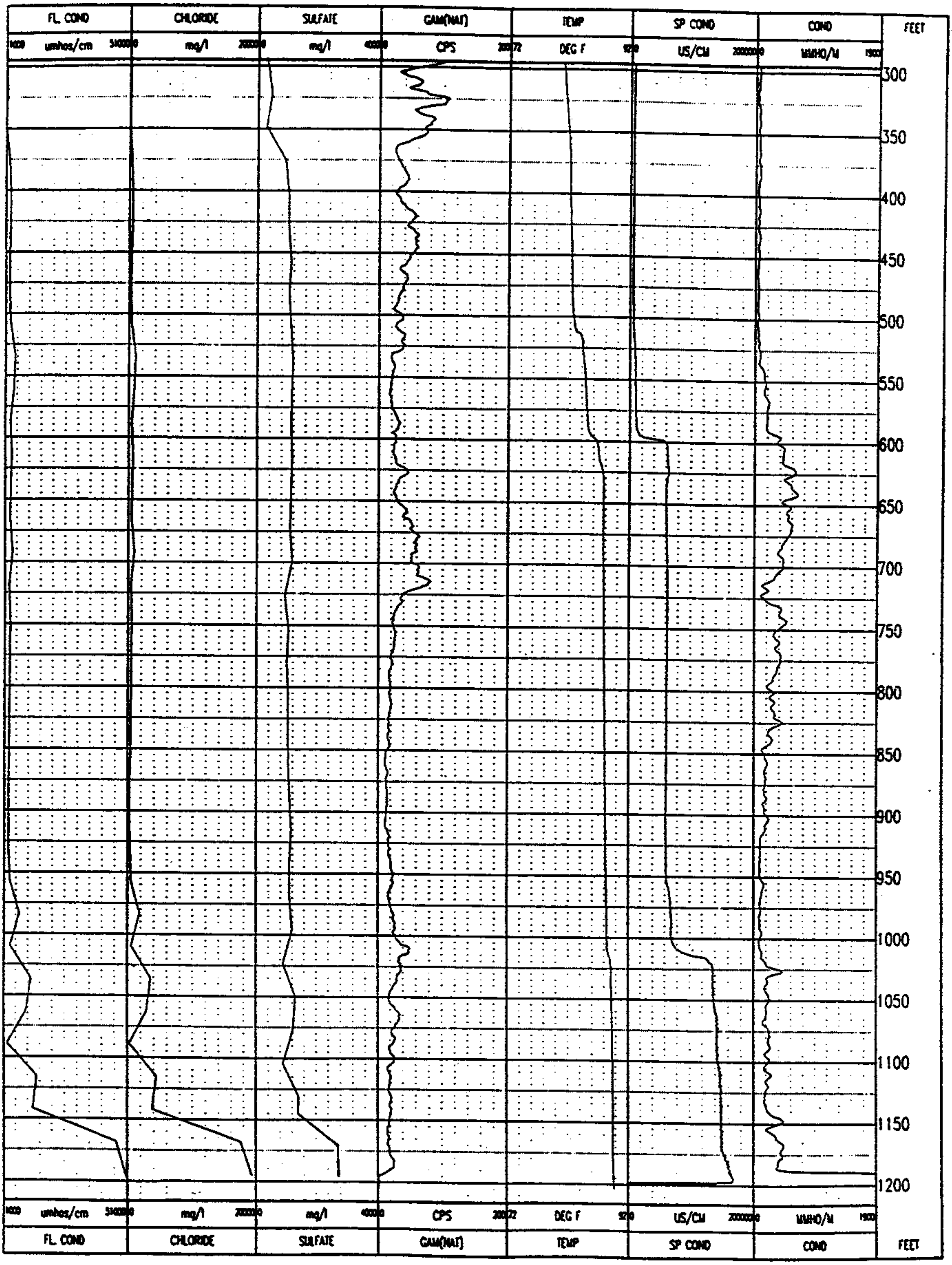
C:\trsa-1\geofluid.fig



C:\trsa-1\geoelec.fig

FIGURE 5. TR SA-1 (PAYNE TERMINAL)

GEOPHYSICAL ELECTRIC LOGS OF COREHOLE



C:\trsa-1\wqlogs.fig

FIGURE 6. TR SA-1 (PAYNE TERMINAL)

WATER QUALITY AND SELECTED LOGS

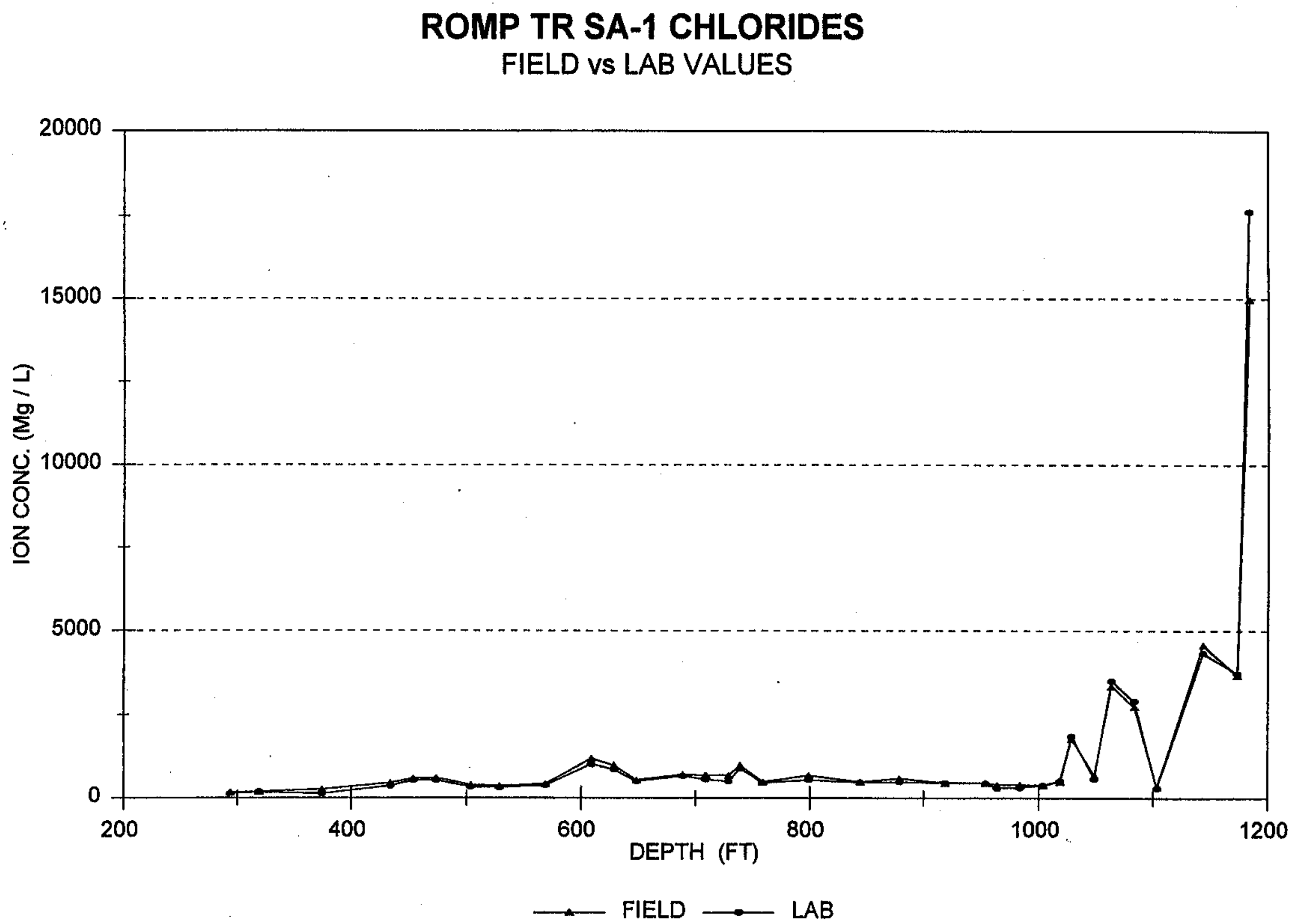


FIGURE 7. TR SA-1 (PAYNE TERMINAL)

COMPARISON OF CHLORIDE FIELD AND LAB VALUES

C:\TRSA-1\TRSA1.WB2:CHLLABFLD

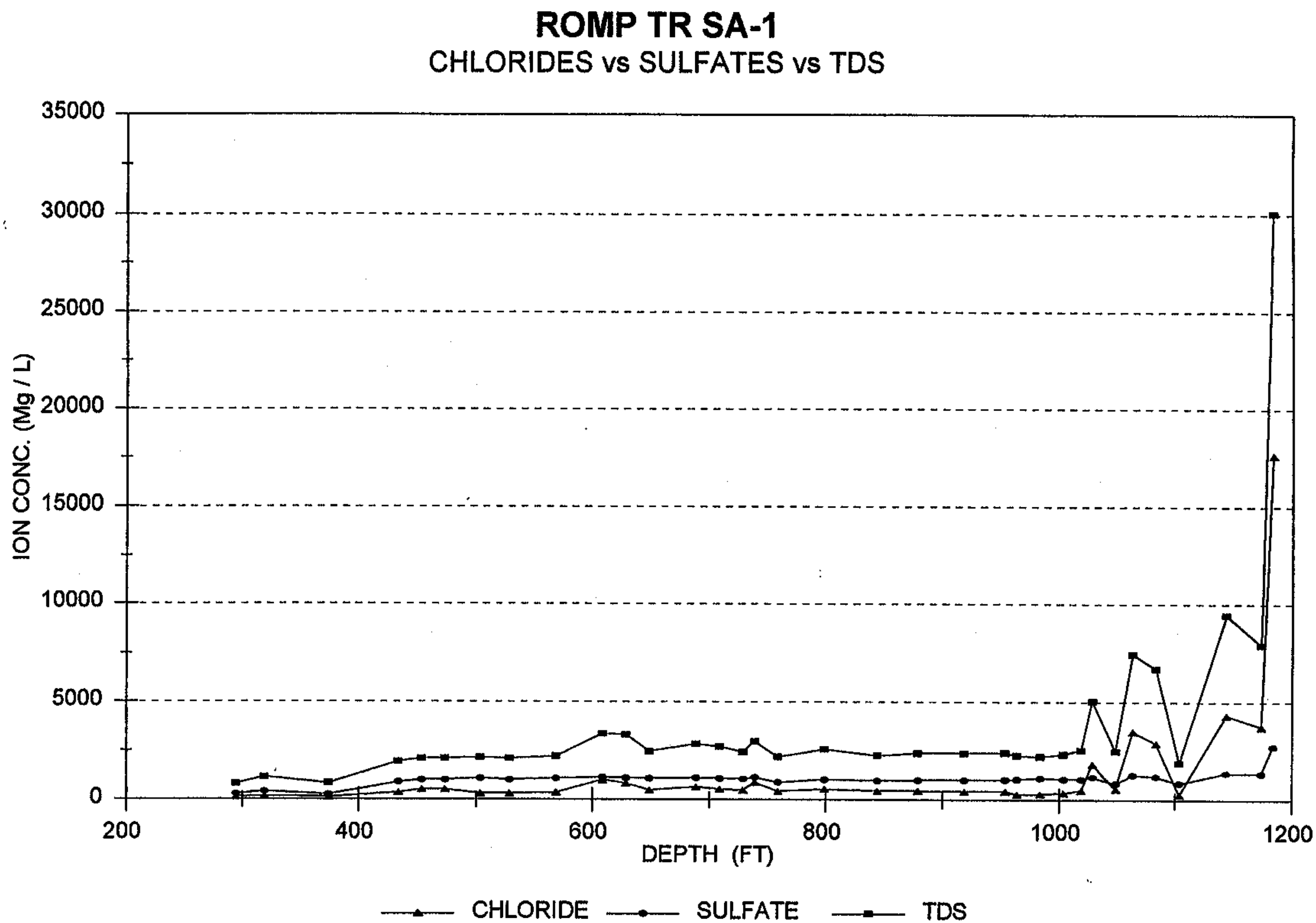


FIGURE 8. TR SA-1 (PAYNE TERMINAL)

COMPARISON OF CHLORIDE, SULFATE AND TDS VALUES

C:\TRSA-1\TRSA1.WB2;TDSCHLSO4

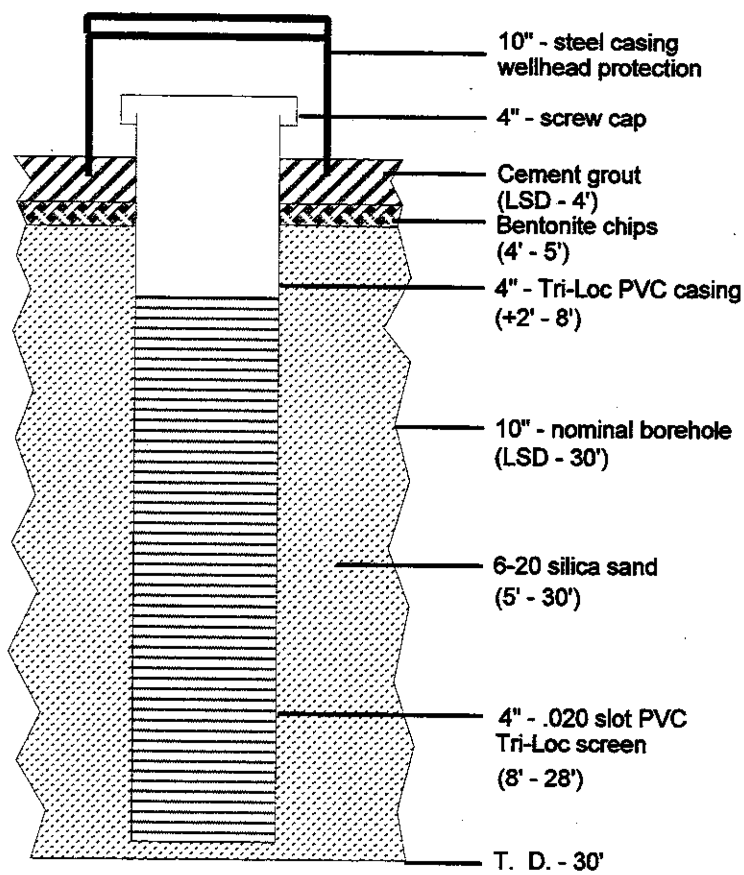


FIGURE 9. TR SA-1 (PAYNE TERMINAL)

SURFICIAL MONITOR-WELL
AS - BUILT

C:\trsa-1\sa1surf2.fig

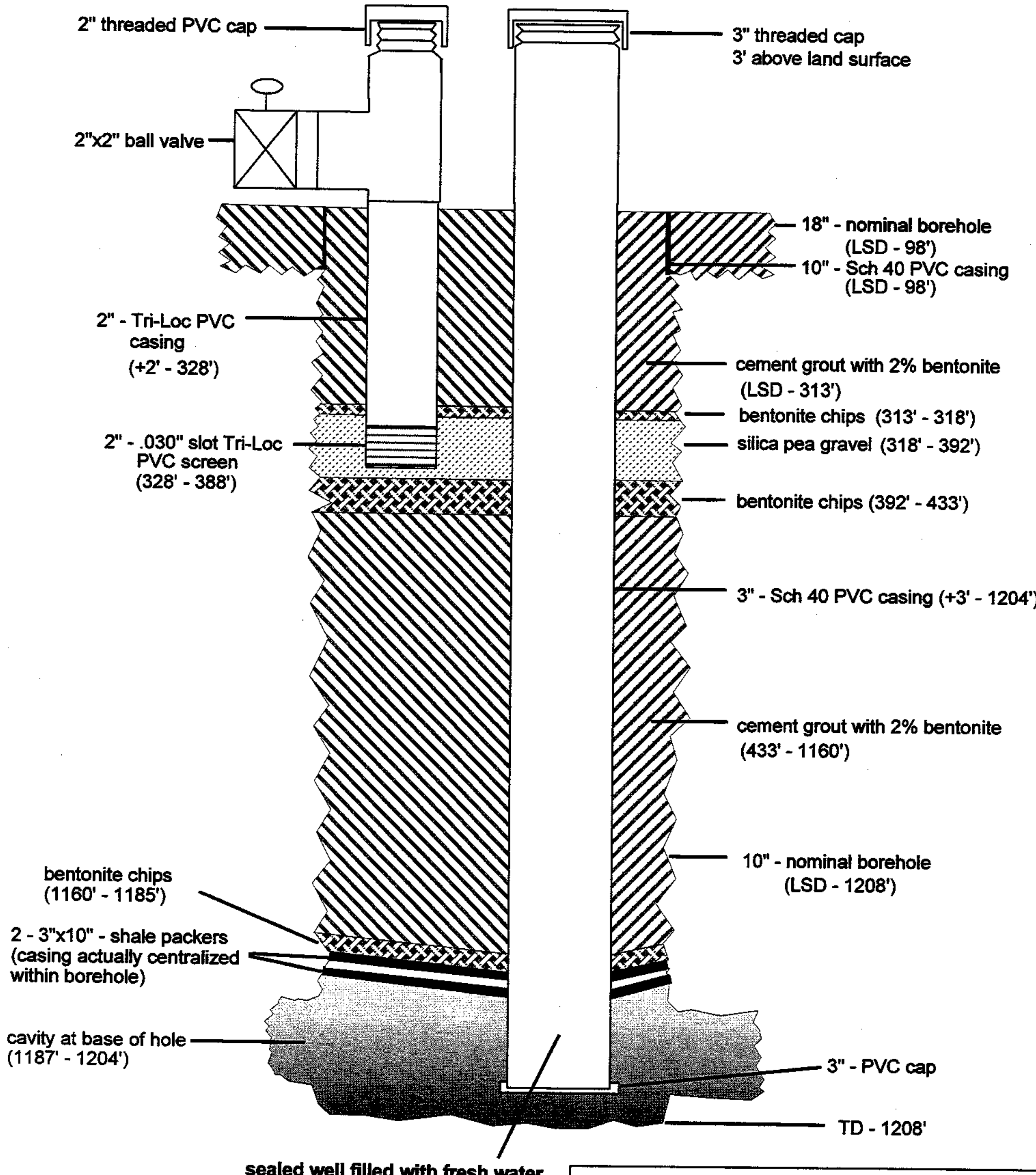


FIGURE 10. TR SA-1 (PAYNE TERMINAL)

INTERMEDIATE and DEEP INDUCTION
MONITOR-WELLS
AS - BUILT

C:\trsa-1\induct2.fig

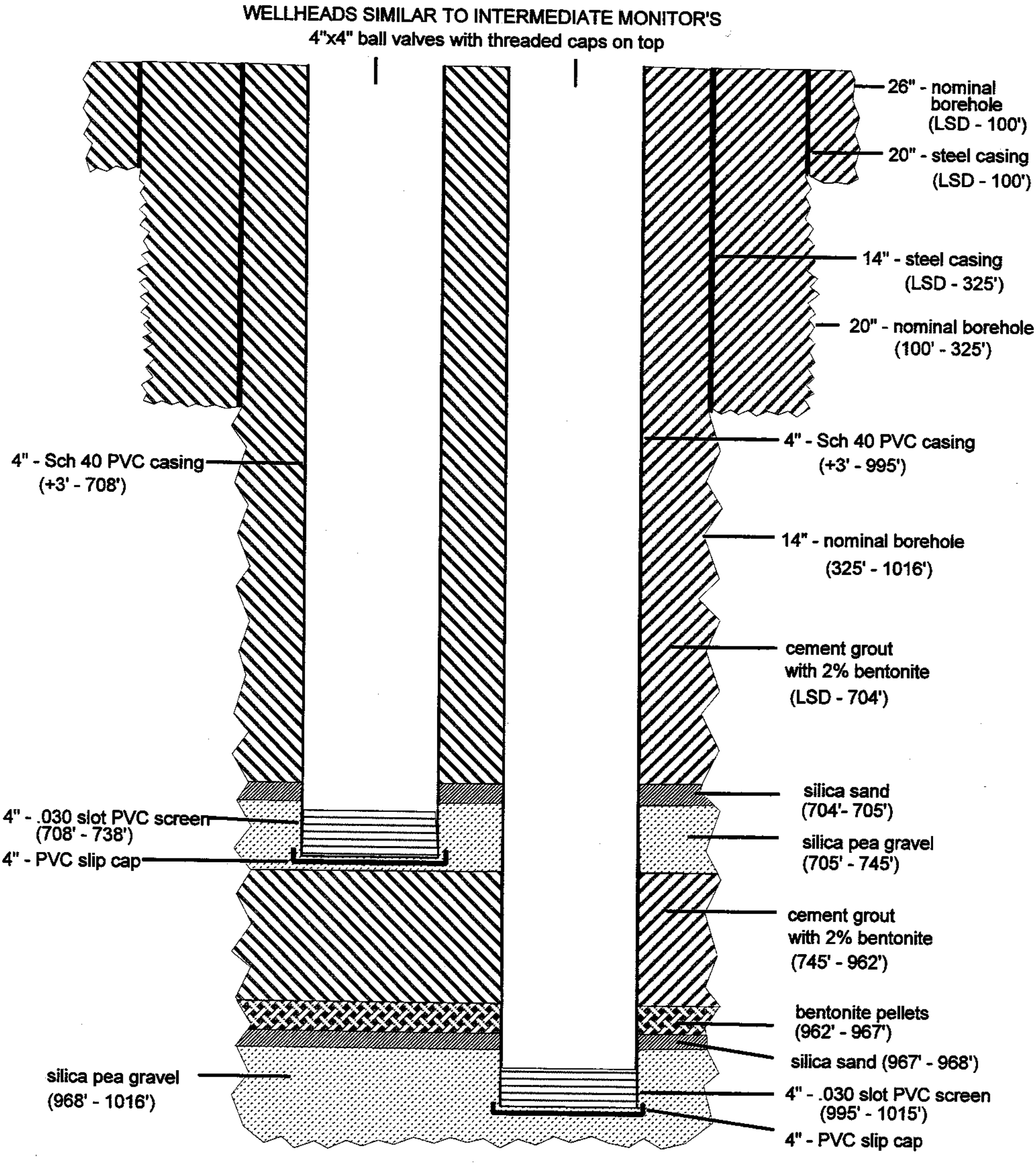


FIGURE 11. TR SA-1 (PAYNE TERMINAL)
SUWANNEE and AVON PARK WATER QUALITY MONITOR-WELLS
AS-BUILT

C:\trsa-1\surwap.fig

Appendix A

Appendix A

LITHOLOGIC WELL LOG PRINTOUT SOURCE - FGS

WELL NUMBER: W-17452 COUNTY - SARASOTA
TOTAL DEPTH: 1210 FT. LOCATION: T.36S R.18E S.18 CC
SAMPLES - NONE LAT = 27D 20M 49S
LON = 82D 32M 45S
COMPLETION DATE: 04/20/95 ELEVATION: 8 FT
OTHER TYPES OF LOGS AVAILABLE - FLUID VELOCITY, CALIPER, GAMMA, ELECTRIC, INDUCTION, SONIC

OWNER/DRILLER:SWFWMD ROMP TR SA-1 PAYNE TERMINAL (SARASOTA)
J. PAT MEADORS, DRILLER

WORKED BY:RICHARD A. LEE, SWFWMD GEOLOGIST
HOLLOW STEM AUGER SAMPLES, 0-26.5 FT.
NQ WIRELINE CORE SAMPLES, 26.5 FT. - 1184 FT.
REVERSE-AIR DRILL CUTTINGS, 1184 FT. - 1200 FT.
CORE DRILLING CONDUCTED WITH MUNICIPAL SUPPLY WATER AND FRESH WATER FROM INTERMEDIATE AQUIFER. ROUTINE POTENTIOMETRIC AND WATER QUALITY PROFILING CONDUCTED DURING CORE DRILLING. DETAILED TEST DATA AVAILABLE FROM SWFWMD GEOHYDRO. DATA SECTION. POSSIBLE VENICE CLAY FROM 40-45' BLS
FGS PICKS (ARTHUR, LLOYD, WERNER, WILLIAMS) ARE:

0.0 -	29.	090UDSC	UNDIFFERENTIATED SAND AND CLAY
29. -	484.	122HTRN	HAWTHORN GROUP
29. -	484.	122ARCA	ARCADIA FM.
367. -	484.	122TAMP	TAMPA MEMBER OF ARCADIA FM.
484. -	739.	123SWNN	SUWANNEE LIMESTONE
739. -	984.	124OCAL	OCALA GROUP
984. -	.	124AVPK	AVON PARK FM.

0 - 3 SAND; GRAYISH BROWN TO DARK YELLOWISH BROWN
15% POROSITY: INTERGRANULAR
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE
ROUNDNESS: SUB-ANGULAR TO SUB-ROUNDED; LOW SPHERICITY
UNCONSOLIDATED
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: PEAT-05%
OTHER FEATURES: VARIEGATED
ORGANIC SAND, @1.5' BLS. PLANT DEBRIS (ROOTS).

3 - 4 SAND; DARK YELLOWISH BROWN TO DARK YELLOWISH BROWN
POROSITY: INTERGRANULAR
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE; LOW SPHERICITY
UNCONSOLIDATED
SEDIMENTARY STRUCTURES: LAMINATED, BEDDED
ACCESSORY MINERALS: IRON STAIN-10%, CLAY-20%
OTHER FEATURES: MUDDY

4 - 9.5 SAND; OLIVE GRAY
05% POROSITY: INTERGRANULAR, LOW PERMEABILITY
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE
ROUNDNESS: SUB-ANGULAR TO SUB-ROUNDED; LOW SPHERICITY
UNCONSOLIDATED
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: SILT-10%, ORGANICS-10%
OTHER FEATURES: MUDDY
TRACE PLANT REMAINS @4.0' BLS.

9.5- 11.5 SAND; GRAYISH BROWN
POROSITY: INTRAGRANULAR, LOW PERMEABILITY
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
HIGH SPHERICITY
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: GLAUCONITE-02%
OTHER FEATURES: CALCAREOUS
CLAYEY MARL.

11.5- 26.5 CLAY; YELLOWISH GRAY
POROSITY: LOW PERMEABILITY
SEDIMENTARY STRUCTURES: STREAKED
ACCESSORY MINERALS: IRON STAIN-40%
TRACE PLANT REMAINS. CLAYEY MARL WITH IRREGULAR LIMESTONE CLASTS.

26.5- 29 CALCILUTITE; YELLOWISH GRAY
POROSITY: NOT OBSERVED
GRAIN SIZE: MEDIUM; RANGE: MEDIUM TO CRYPTOCRYSTALLINE
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BEDDED, BIOTURBATED
ACCESSORY MINERALS: CLAY-02%
OTHER FEATURES: CALCAREOUS, WEATHERED
FOSSILS: FOSSIL FRAGMENTS, FOSSIL MOLDS, BRACHIOPOD
MOLLUSKS

29 - 31 CLAY; YELLOWISH GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED; POOR INDURATION SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: PHOSPHATIC GRAVEL-02%

31 - 34.8 LIMESTONE; YELLOWISH GRAY
GRAIN TYPE: BIOGENIC
GRAIN SIZE: COARSE; RANGE: MEDIUM TO COARSE
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BEDDED, BIOTURBATED
OTHER FEATURES: CHALKY, SPECKLED

34.8- 39 CALCILUTITE; VERY LIGHT ORANGE
POROSITY: LOW PERMEABILITY, NOT OBSERVED
GRAIN SIZE: MICROCRYSTALLINE
RANGE: MICROCRYSTALLINE TO CRYPTOCRYSTALLINE
POOR INDURATION
SEDIMENTARY STRUCTURES: BEDDED, BIOTURBATED
ACCESSORY MINERALS: PHOSPHATIC SAND-05%, GLAUCONITE-02%
FRACTURE INFILLED W/PHOSPHATIC SAND AND GRAVEL.

39 - 40.5 CALCILUTITE; YELLOWISH GRAY TO LIGHT GREENISH YELLOW
POROSITY: LOW PERMEABILITY, NOT OBSERVED
GRAIN SIZE: MICROCRYSTALLINE
RANGE: MICROCRYSTALLINE TO CRYPTOCRYSTALLINE
POOR INDURATION
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: PHOSPHATIC SAND-01%
OTHER FEATURES: SPECKLED

40.5- 44 CALCILUTITE; YELLOWISH GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED
GRAIN SIZE: MICROCRYSTALLINE
RANGE: MICROCRYSTALLINE TO CRYPTOCRYSTALLINE
MODERATE INDURATION
SEDIMENTARY STRUCTURES: BEDDED
OTHER FEATURES: SPECKLED

44 - 45.2 CLAY; LIGHT OLIVE GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED
MODERATE INDURATION
SEDIMENTARY STRUCTURES: BEDDED

45.2- 47.4 LIMESTONE; VERY LIGHT ORANGE
POROSITY: PIN POINT VUGS, LOW PERMEABILITY
GRAIN TYPE: CALCILUTITE
GRAIN SIZE: MEDIUM; RANGE: MEDIUM TO CRYPTOCRYSTALLINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: CLAY-10%
OTHER FEATURES: WEATHERED
FOSSILS: WORM TRACES

47.4- 50.1 CALCILUTITE; VERY LIGHT ORANGE
POROSITY: PIN POINT VUGS, NOT OBSERVED
GRAIN SIZE: MICROCRYSTALLINE
RANGE: MICROCRYSTALLINE TO CRYPTOCRYSTALLINE
MODERATE INDURATION
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: PHOSPHATIC SAND-02%
PHOSPHATIC GRAVEL-01%
OTHER FEATURES: SPECKLED, CHALKY
FOSSILS: CORAL, BRACHIOPOD

50.1- 54 LIMESTONE; VERY LIGHT ORANGE
POROSITY: VUGULAR, MOLDIC
GRAIN TYPE: CALCILUTITE
GRAIN SIZE: MEDIUM; RANGE: MEDIUM TO MICROCRYSTALLINE
POOR INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BEDDED, MOTTLED
ACCESSORY MINERALS: PHOSPHATIC SAND-02%
OTHER FEATURES: CALCAREOUS
FOSSILS: FOSSIL MOLDS, BRACHIOPOD, WORM TRACES

54 - 54.3	CHERT; DARK GRAY
54.3- 59	LIMESTONE; VERY LIGHT ORANGE TO GRAYISH BROWN POROSITY: VUGULAR, MOLDIC, POSSIBLY HIGH PERMEABILITY GRAIN TYPE: BIOGENIC GRAIN SIZE: MEDIUM; RANGE: MEDIUM TO MICROCRYSTALLINE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: BEDDED, BIOTURBATED ACCESSORY MINERALS: PHOSPHATIC SAND-02% OTHER FEATURES: SPECKLED, CHALKY FOSSILS: WORM TRACES, BRACHIOPOD, FOSSIL MOLDS CLAY BED 54.3 TO 54.5.
59 - 67	CALCILUTITE; VERY LIGHT ORANGE POROSITY: LOW PERMEABILITY, NOT OBSERVED GRAIN SIZE: MICROCRYSTALLINE RANGE: MICROCRYSTALLINE TO CRYPTOCRYSTALLINE MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: BEDDED, MOTTLED ACCESSORY MINERALS: PHOSPHATIC SAND-05% PHOSPHATIC GRAVEL-01% OTHER FEATURES: SPECKLED, CHALKY
67 - 70.3	CLAY; GRAYISH BROWN POROSITY: LOW PERMEABILITY, NOT OBSERVED MODERATE INDURATION SEDIMENTARY STRUCTURES: BEDDED ACCESSORY MINERALS: PHOSPHATIC SAND-15% PHOSPHATIC GRAVEL-05% OTHER FEATURES: SPECKLED, PLASTIC PHOSPHATE GRAVEL BED @66.0-69.0.
70.3- 74	LIMESTONE; VERY LIGHT ORANGE POROSITY: VUGULAR, PIN POINT VUGS GRAIN TYPE: BIOGENIC GRAIN SIZE: MEDIUM; RANGE: MEDIUM TO MICROCRYSTALLINE MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: BEDDED ACCESSORY MINERALS: PHOSPHATIC SAND-05%, CLAY-02%

OTHER FEATURES: SPECKLED
FOSSILS: WORM TRACES, FOSSIL MOLDS

74 - 79 CALCILUTITE; VERY LIGHT ORANGE
POROSITY: INTERGRANULAR, VUGULAR
GRAIN TYPE: CALCILUTITE
GRAIN SIZE: MICROCRYSTALLINE
RANGE: MICROCRYSTALLINE TO CRYPTOCRYSTALLINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: PHOSPHATIC SAND-15%, CLAY-05%
OTHER FEATURES: SPECKLED, CHALKY
PHOSPHATIC CLAY BED @76.9-77.1.

79 - 81.5 CLAY; GRAYISH BROWN
POROSITY: LOW PERMEABILITY, NOT OBSERVED; POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: PHOSPHATIC SAND-20%
OTHER FEATURES: SPECKLED

81.5- 83.1 CLAY; VERY LIGHT ORANGE
POROSITY: LOW PERMEABILITY, NOT OBSERVED; POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: PHOSPHATIC SAND-20%
OTHER FEATURES: SPECKLED

83.1- 91.1 LIMESTONE; VERY LIGHT ORANGE
POROSITY: PIN POINT VUGS, LOW PERMEABILITY
GRAIN TYPE: CALCILUTITE
GRAIN SIZE: MEDIUM; RANGE: MEDIUM TO MICROCRYSTALLINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: BEDDED, MOTTLED, LAMINATED
ACCESSORY MINERALS: PHOSPHATIC SAND-10%, CLAY-05%
OTHER FEATURES: SPECKLED
FOSSILS: WORM TRACES
CLAY/CALCILUTITE INTERBEDS, HIGH PERCENTAGE PHOSPHATE.

91.1- 98 LIMESTONE; GRAYISH BROWN
POROSITY: PIN POINT VUGS, LOW PERMEABILITY
GRAIN TYPE: CALCILUTITE
GRAIN SIZE: MEDIUM; RANGE: MEDIUM TO MICROCRYSTALLINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: MOTTLED, LAMINATED, BEDDED

ACCESSORY MINERALS: PHOSPHATIC SAND-05%, CLAY-15%
OTHER FEATURES: SPECKLED, CHALKY
FOSSILS: WORM TRACES

98 - 106.5 LIMESTONE; GRAYISH ORANGE PINK
POROSITY: MOLDIC, LOW PERMEABILITY
GRAIN TYPE: BIOGENIC, CALCILUTITE
GRAIN SIZE: FINE; RANGE: MEDIUM TO FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: PHOSPHATIC SAND-10%
PHOSPHATIC GRAVEL-05%
OTHER FEATURES: SPECKLED, WEATHERED
FOSSILS: FOSSIL FRAGMENTS, FOSSIL MOLDS

106.5- 109.8 LIMESTONE; GRAYISH ORANGE PINK
POROSITY: PIN POINT VUGS, VUGULAR
GRAIN TYPE: CALCILUTITE
GRAIN SIZE: FINE; RANGE: MEDIUM TO FINE
MODERATE INDURATION
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: PHOSPHATIC SAND-15%, CLAY-05%
OTHER FEATURES: SPECKLED, PARTINGS
FOSSILS: NO FOSSILS

109.8- 115.5 LIMESTONE; GRAYISH ORANGE PINK
POROSITY: PIN POINT VUGS, VUGULAR
GRAIN TYPE: CALCILUTITE
GRAIN SIZE: FINE; RANGE: MEDIUM TO FINE
MODERATE INDURATION
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: PHOSPHATIC SAND-10%, CLAY-15%
OTHER FEATURES: SPECKLED

115.5- 116.2 CLAY; YELLOWISH GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED; POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
ACCESSORY MINERALS: PHOSPHATIC SAND-15%
PHOSPHATIC GRAVEL-05%
OTHER FEATURES: SPECKLED
FOSSILS: NO FOSSILS

116.2- 119.5 LIMESTONE; YELLOWISH GRAY TO DARK GRAYISH YELLOW
POROSITY: LOW PERMEABILITY, MOLDIC, PIN POINT VUGS
GRAIN TYPE: BIOGENIC, INTRACLASTS
GRAIN SIZE: FINE; RANGE: MEDIUM TO FINE
MODERATE INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BEDDED, BRECCIATED
ACCESSORY MINERALS: PHOSPHATIC SAND-05%, CHERT-02%
OTHER FEATURES: SPECKLED
FOSSILS: MOLLUSKS, FOSSIL FRAGMENTS, FOSSIL MOLDS, CORAL

119.5- 124.5 CALCILUTITE; YELLOWISH GRAY
POROSITY: LOW PERMEABILITY, MOLDIC, PIN POINT VUGS
GRAIN TYPE: CALCILUTITE
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: BEDDED, MOTTLED
ACCESSORY MINERALS: QUARTZ SAND-05%, PHOSPHATIC SAND-10%
PHOSPHATIC GRAVEL-05%
OTHER FEATURES: SPECKLED, VARIEGATED
FOSSILS: MOLLUSKS, WORM TRACES

124.5- 139 NO SAMPLES

139 - 144 CLAY; VERY LIGHT ORANGE
POROSITY: LOW PERMEABILITY, NOT OBSERVED; POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX
ACCESSORY MINERALS: QUARTZ SAND-10%, PHOSPHATIC SAND-10%
OTHER FEATURES: SPECKLED, CHALKY
FOSSILS: NO FOSSILS

144 - 145.1 CLAY; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED, VUGULAR
MODERATE INDURATION
CEMENT TYPE(S): CLAY MATRIX
SEDIMENTARY STRUCTURES: BEDDED, NODULAR
ACCESSORY MINERALS: PHOSPHATIC SAND-10%
PHOSPHATIC GRAVEL-05%, QUARTZ SAND-05%
OTHER FEATURES: WEATHERED, SPECKLED
FOSSILS: NO FOSSILS

145.1- 146.7 CLAY; YELLOWISH GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED, VUGULAR
MODERATE INDURATION
CEMENT TYPE(S): CLAY MATRIX
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: PHOSPHATIC SAND-05%, QUARTZ SAND-10%
PHOSPHATIC GRAVEL-05%
OTHER FEATURES: CHALKY
FOSSILS: NO FOSSILS

146.7- 154.5 CLAY; LIGHT OLIVE

POROSITY: LOW PERMEABILITY, NOT OBSERVED, VUGULAR
MODERATE INDURATION
CEMENT TYPE(S): CLAY MATRIX
SEDIMENTARY STRUCTURES: BEDDED
FOSSILS: NO FOSSILS

154.5- 155.6 CLAY; LIGHT OLIVE
POROSITY: LOW PERMEABILITY, NOT OBSERVED; POOR INDURATION
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: PHOSPHATIC SAND-15%
PHOSPHATIC GRAVEL-05%, QUARTZ SAND-05%, LIMESTONE-15%
FOSSILS: WORM TRACES
LT. GREEN ABUNDANT IRREGULAR LIMESTONE CLASTS.

155.6- 156.5 LIMESTONE; VERY LIGHT ORANGE
POROSITY: LOW PERMEABILITY, PIN POINT VUGS
GRAIN TYPE: CALCILUTITE
GRAIN SIZE: FINE; RANGE: VERY FINE TO FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: PHOSPHATIC SAND-02%
FOSSILS: WORM TRACES

156.5- 160.2 CLAY; VERY LIGHT ORANGE
POROSITY: LOW PERMEABILITY, NOT OBSERVED
MODERATE INDURATION
CEMENT TYPE(S): CLAY MATRIX
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: LIMESTONE-02%, QUARTZ SAND-02%
OTHER FEATURES: CALCAREOUS
FOSSILS: PLANT REMAINS

160.2- 160.9 CLAY; LIGHT OLIVE GRAY TO LIGHT OLIVE
POROSITY: LOW PERMEABILITY, NOT OBSERVED
MODERATE INDURATION
CEMENT TYPE(S): CLAY MATRIX
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: LIMESTONE-10%, QUARTZ SAND-02%
OTHER FEATURES: CALCAREOUS

160.9- 163 CLAY; YELLOWISH GRAY TO LIGHT GREENISH YELLOW
POROSITY: LOW PERMEABILITY, NOT OBSERVED
MODERATE INDURATION
CEMENT TYPE(S): CLAY MATRIX
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: LIMESTONE-10%, QUARTZ SAND-02%
PHOSPHATIC SAND-02%

OTHER FEATURES: CALCAREOUS
FOSSILS: NO FOSSILS

163 - 180.7 CLAY; YELLOWISH GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED
MODERATE INDURATION
CEMENT TYPE(S): CLAY MATRIX
SEDIMENTARY STRUCTURES: BEDDED
OTHER FEATURES: CALCAREOUS
FOSSILS: NO FOSSILS

180.7- 181.2 CLAY; MODERATE DARK GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BEDDED, NODULAR
ACCESSORY MINERALS: DOLOMITE-08%, PHOSPHATIC SAND-05%
OTHER FEATURES: CALCAREOUS
FOSSILS: OOLITES

181.2- 188 CLAY; VERY LIGHT ORANGE TO GRAYISH BROWN
POROSITY: LOW PERMEABILITY, NOT OBSERVED
MODERATE INDURATION
CEMENT TYPE(S): CLAY MATRIX
SEDIMENTARY STRUCTURES: BEDDED, MOTTLED, FISSILE
ACCESSORY MINERALS: LIMESTONE-15%, PHOSPHATIC SAND-05%
QUARTZ SAND-10%
OTHER FEATURES: CALCAREOUS, SPECKLED, SPLINTERY
FOSSILS: FOSSIL FRAGMENTS, CORAL

188 - 189 SAND; YELLOWISH GRAY TO GRAYISH BROWN
02% POROSITY: LOW PERMEABILITY, NOT OBSERVED
GRAIN SIZE: MEDIUM; RANGE: FINE TO VERY COARSE
ROUNDNESS: SUB-ANGULAR TO ANGULAR; LOW SPHERICITY
MODERATE INDURATION
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: INTERBEDDED
ACCESSORY MINERALS: CLAY-10%, PHOSPHATIC SAND-10%
PHOSPHATIC GRAVEL-05%, CALCILUTITE-02%
OTHER FEATURES: CALCAREOUS, SPECKLED, PLATY
FOSSILS: SHARKS TEETH, FOSSIL FRAGMENTS

189 - 190.4 CALCILUTITE; YELLOWISH GRAY TO LIGHT OLIVE GRAY
02% POROSITY: LOW PERMEABILITY, NOT OBSERVED
GRAIN TYPE: CALCILUTITE, CRYSTALS
GRAIN SIZE: MICROCRYSTALLINE
RANGE: MICROCRYSTALLINE TO VERY FINE
CEMENT TYPE(S): CLAY MATRIX

SEDIMENTARY STRUCTURES: INTERBEDDED
ACCESSORY MINERALS: CLAY-05%, PHOSPHATIC GRAVEL-02%
QUARTZ SAND-02%
OTHER FEATURES: FROSTED, GRANULAR, SPECKLED
FOSSILS: CORAL

190.4- 190.8 CLAY; LIGHT OLIVE GRAY TO YELLOWISH GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED; POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: INTERBEDDED
ACCESSORY MINERALS: CALCILUTITE-01%, QUARTZ SAND-05%
PHOSPHATIC GRAVEL-02%, PHOSPHATIC SAND-03%
OTHER FEATURES: CALCAREOUS, SPECKLED

190.8- 191.1 DOLOSTONE; LIGHT OLIVE GRAY TO DARK GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED; 10-50% ALTERED
SUBHEDRAL
GRAIN SIZE: CRYPTOCRYSTALLINE
RANGE: CRYPTOCRYSTALLINE TO CRYPTOCRYSTALLINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT, CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE

191.1- 193.7 CALCILUTITE; YELLOWISH GRAY
POROSITY: LOW PERMEABILITY, FRACTURE
GRAIN TYPE: CRYSTALS, CALCILUTITE
GRAIN SIZE: MICROCRYSTALLINE
RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: INTERBEDDED
ACCESSORY MINERALS: QUARTZ SAND-03%, PHOSPHATIC SAND-03%
CLAY-01%
OTHER FEATURES: PARTINGS

193.7- 194.2 DOLOSTONE; LIGHT OLIVE GRAY TO DARK GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED; 10-50% ALTERED
SUBHEDRAL
GRAIN SIZE: CRYPTOCRYSTALLINE
RANGE: CRYPTOCRYSTALLINE TO CRYPTOCRYSTALLINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MASSIVE

194.2- 198.1 CALCILUTITE; YELLOWISH GRAY TO YELLOWISH GRAY
04% POROSITY: LOW PERMEABILITY, FRACTURE
GRAIN TYPE: CRYSTALS, CALCILUTITE
GRAIN SIZE: MICROCRYSTALLINE
RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION

CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: INTERBEDDED
ACCESSORY MINERALS: QUARTZ SAND-05%, PHOSPHATIC SAND-03%
PHOSPHATIC GRAVEL-01%, CLAY-01%
OTHER FEATURES: PARTINGS, SPECKLED

198.1- 208.1 CLAY; YELLOWISH GRAY TO LIGHT OLIVE GRAY
02% POROSITY: LOW PERMEABILITY, INTERGRANULAR
POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: INTERBEDDED, MOTTLED
ACCESSORY MINERALS: QUARTZ SAND-05%, PHOSPHATIC SAND-05%
PHOSPHATIC GRAVEL-02%, CALCILUTITE-01%
OTHER FEATURES: CALCAREOUS
FOSSILS: PLANKTONIC FORAMINIFERA

208.1- 209.1 CLAY; YELLOWISH GRAY TO LIGHT OLIVE GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED; POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX
SEDIMENTARY STRUCTURES: MOTTLED
OTHER FEATURES: MUDDY
FOSSILS: CONES

209.1- 213.1 CLAY; YELLOWISH GRAY TO LIGHT OLIVE GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED; POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX
SEDIMENTARY STRUCTURES: BEDDED
ACCESSORY MINERALS: QUARTZ SAND-02%, PHOSPHATIC SAND-03%
OTHER FEATURES: CALCAREOUS
FOSSILS: CONES

213.1- 214.5 CLAY; DARK GREENISH GRAY TO DARK GREENISH GRAY
01% POROSITY: LOW PERMEABILITY, INTERGRANULAR
POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: INTERBEDDED
ACCESSORY MINERALS: QUARTZ SAND-10%, PHOSPHATIC SAND-10%
CALCILUTITE-03%
OTHER FEATURES: CALCAREOUS, GRANULAR, SPECKLED
FOSSILS: DIATOMS, FOSSIL MOLDS

214.5- 219.2 CLAY; YELLOWISH GRAY TO LIGHT OLIVE GRAY
01% POROSITY: LOW PERMEABILITY, INTERGRANULAR
MODERATE INDURATION
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: INTERBEDDED
ACCESSORY MINERALS: QUARTZ SAND-10%, PHOSPHATIC SAND-12%
CALCILUTITE-01%

OTHER FEATURES: CALCAREOUS, GRANULAR, SPECKLED
FOSSILS: SHARKS TEETH, FOSSIL MOLDS

219.2- 229.2 CLAY; YELLOWISH GRAY TO LIGHT GREENISH GRAY
01% POROSITY: LOW PERMEABILITY, INTERGRANULAR
MODERATE INDURATION
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: INTERBEDDED
ACCESSORY MINERALS: QUARTZ SAND-05%, PHOSPHATIC SAND-05%
CALCILUTITE-01%
OTHER FEATURES: CALCAREOUS, GRANULAR, SPECKLED
CLAY, INTERBEDDED QTZ SAND, SMALL TEETH.

229.2- 229.8 CALCILUTITE; YELLOWISH GRAY
04% POROSITY: INTERGRANULAR, PIN POINT VUGS
GRAIN TYPE: BIOGENIC, CALCILUTITE, SKELETAL CAST
GRAIN SIZE: MICROCRYSTALLINE
RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: INTERBEDDED
ACCESSORY MINERALS: QUARTZ SAND-01%
FOSSILS: FOSSIL MOLDS

229.8- 233 CLAY; MODERATE GRAY TO MODERATE DARK GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED; POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX
FOSSILS: CONES

233 - 234 CLAY; YELLOWISH GRAY TO LIGHT OLIVE GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED; POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX
SEDIMENTARY STRUCTURES: BANDED
OTHER FEATURES: PLASTIC
FOSSILS: CONES

234 - 236 CLAY; YELLOWISH GRAY TO LIGHT OLIVE GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED; POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX
ACCESSORY MINERALS: PHOSPHATIC SAND-01%
OTHER FEATURES: PLASTIC, SPECKLED
FOSSILS: CONES

236 - 237 CLAY; YELLOWISH GRAY TO LIGHT OLIVE GRAY
POROSITY: LOW PERMEABILITY, NOT OBSERVED; POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX
ACCESSORY MINERALS: PHOSPHATIC SAND-05%
OTHER FEATURES: PLASTIC, SPECKLED
FOSSILS: CONES

237 - 238.8 CLAY; YELLOWISH GRAY TO LIGHT OLIVE GRAY
01% POROSITY: LOW PERMEABILITY, INTERGRANULAR
POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
ACCESSORY MINERALS: QUARTZ SAND-03%, PHOSPHATIC SAND-05%
PHOSPHATIC GRAVEL-02%
OTHER FEATURES: SPECKLED
FOSSILS: SHARKS TEETH

238.8- 244 CLAY; YELLOWISH GRAY TO LIGHT OLIVE GRAY
02% POROSITY: INTERGRANULAR, LOW PERMEABILITY
POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
ACCESSORY MINERALS: QUARTZ SAND-03%, PHOSPHATIC SAND-07%
CALCILUTITE-02%, PHOSPHATIC GRAVEL-03%
OTHER FEATURES: GRANULAR, SPECKLED
FOSSILS: SHARKS TEETH

244 - 245.6 CLAY; LIGHT OLIVE GRAY TO GREENISH GRAY
02% POROSITY: LOW PERMEABILITY, INTERGRANULAR
POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
ACCESSORY MINERALS: QUARTZ SAND-02%, PHOSPHATIC SAND-07%
PHOSPHATIC GRAVEL-03%, CALCILUTITE-01%
FOSSILS: SHARKS TEETH
CLAY, INTERBEDDED W/NUMEROUS PIECES OF PHOSPHATIC SAND & GRAVEL.

245.6- 249.2 CALCILUTITE; VERY LIGHT ORANGE TO YELLOWISH GRAY
04% POROSITY: INTERGRANULAR, FRACTURE
GRAIN TYPE: CALCILUTITE, BIOGENIC
GRAIN SIZE: MICROCRYSTALLINE
RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: INTERBEDDED
ACCESSORY MINERALS: QUARTZ SAND-02%, PHOSPHATIC SAND-03%
PHOSPHATIC GRAVEL-02%
OTHER FEATURES: SPECKLED, CALCAREOUS
FOSSILS: FOSSIL MOLDS

249.2- 252.6 CLAY; VERY LIGHT ORANGE TO YELLOWISH GRAY
03% POROSITY: INTERGRANULAR; POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
ACCESSORY MINERALS: QUARTZ SAND-04%, PHOSPHATIC SAND-03%
PHOSPHATIC GRAVEL-01%
OTHER FEATURES: SPECKLED, CALCAREOUS

252.6- 254 CALCILUTITE; YELLOWISH GRAY TO LIGHT OLIVE GRAY

02% POROSITY: INTERGRANULAR, FRACTURE
GRAIN TYPE: CALCILUTITE, BIOGENIC
GRAIN SIZE: MICROCRYSTALLINE
RANGE: MICROCRYSTALLINE TO VERY FINE; POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: INTERBEDDED
ACCESSORY MINERALS: CLAY-05%, QUARTZ SAND-02%
PHOSPHATIC SAND-02%, PHOSPHATIC GRAVEL-01%
OTHER FEATURES: SPECKLED
FOSSILS: PLANKTONIC FORAMINIFERA

254 - 255 CALCILUTITE; YELLOWISH GRAY
02% POROSITY: INTERGRANULAR, FRACTURE
GRAIN TYPE: CALCILUTITE, BIOGENIC
GRAIN SIZE: LITHOGRAPHIC
RANGE: LITHOGRAPHIC TO VERY COARSE; GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: INTERBEDDED
ACCESSORY MINERALS: QUARTZ SAND-15%, PHOSPHATIC SAND-10%
CALCITE-02%
OTHER FEATURES: SPECKLED

255 - 257.1 CALCILUTITE; VERY LIGHT GRAY
05% POROSITY: INTERGRANULAR, PIN POINT VUGS, MOLDIC
GRAIN TYPE: CALCILUTITE, BIOGENIC
30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: LITHOGRAPHIC; RANGE: LITHOGRAPHIC TO COARSE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED, NODULAR
ACCESSORY MINERALS: PHOSPHATIC SAND- 02%, QUARTZ- 01%
CHERT- 02%
OTHER FEATURES: LOW RECRYSTALLIZATION, CHALKY
FOSSILS: FOSSIL MOLDS

257.1- 257.6 CALCILUTITE; VERY LIGHT GRAY
05% POROSITY: INTERGRANULAR, PIN POINT VUGS, MOLDIC
GRAIN TYPE: CALCILUTITE, BIOGENIC
20% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE, LAMINATED, BIOTURBATED
ACCESSORY MINERALS: PHOSPHATIC SAND- 05%, QUARTZ- 01%
OTHER FEATURES: MUDDY, CHALKY
FOSSILS: FOSSIL MOLDS

257.6- 259 CALCILUTITE; VERY LIGHT GRAY

02% POROSITY: NOT OBSERVED, MOLDIC
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE, STREAKED
ACCESSORY MINERALS: PHOSPHATIC SAND- 02%
OTHER FEATURES: VARIEGATED
FOSSILS: FOSSIL MOLDS

259 - 263.9 CALCILUTITE; LIGHT GRAY
02% POROSITY: INTERGRANULAR
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MOTTLED, MASSIVE
ACCESSORY MINERALS: PHOSPHATIC SAND- 01%
SMALL BLACK BANDED LAYER, LITTLE MORE PHOS.

263.9- 265.5 CLAY; LIGHT OLIVE GRAY
05% POROSITY: INTERGRANULAR; MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE, BANDED
ACCESSORY MINERALS: PHOSPHATIC SAND- 01%, SHELL-%
SMALL WELL INDURATED DOLOMITE BED.

265.5- 266 CALCILUTITE; LIGHT OLIVE GRAY
05% POROSITY: INTERGRANULAR
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE, MOTTLED
ACCESSORY MINERALS: PHOSPHATIC SAND- 02%

266 - 269 CLAY; LIGHT OLIVE GRAY
05% POROSITY: INTERGRANULAR; MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: PHOSPHATIC SAND-02%, QUARTZ-01%
SOME SMALL POCKETS OF FINE PHOS & QUARTZ-PHOS-20% QTZ-15%.

269 - 269.2 SAME AS ABOVE BUT WELL INDURATED.

269.2- 270 SANDSTONE; LIGHT OLIVE GRAY
05% POROSITY: INTERGRANULAR
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO VERY FINE
MEDIUM SPHERICITY; MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MOTTLED, BEDDED
ACCESSORY MINERALS: PHOSPHATIC SAND-20%, QUARTZ-10%
OTHER FEATURES: SPECKLED
HIGH PHOS & QTZ WITH POCKETS OF CLAY.

270 - 274	CALCILUTITE; LIGHT OLIVE GRAY TO YELLOWISH GRAY 05% POROSITY: INTERGRANULAR MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, DOLOMITE CEMENT SEDIMENTARY STRUCTURES: BEDDED, MOTTLED ACCESSORY MINERALS: PHOSPHATIC SAND-10%, QUARTZ- 05% MAY BE DOLOMITE SILT - NO HCL FIZZ. ALSO SMALL LAYERS OF WELL INDURATED DOLOMITE.
274 - 279	SANDSTONE; MODERATE GRAY 05% POROSITY: INTERGRANULAR GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO MEDIUM HIGH SPHERICITY; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE ACCESSORY MINERALS: PHOSPHATIC SAND-25%, QUARTZ-15% OTHER FEATURES: SPECKLED
279 - 282.5	CLAY; LIGHT OLIVE GRAY 05% POROSITY: INTERGRANULAR; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE ACCESSORY MINERALS: PHOSPHATIC SAND- 05% OTHER FEATURES: PLASTIC, PARTINGS
282.5- 284.2	CLAY; YELLOWISH GRAY TO LIGHT OLIVE GRAY 05% POROSITY: INTERGRANULAR; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE, LAMINATED ACCESSORY MINERALS: PHOSPHATIC SAND- 05% OTHER FEATURES: PARTINGS
284.2- 288	SANDSTONE; GRAYISH OLIVE 05% POROSITY: INTERGRANULAR GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO VERY COARSE MEDIUM SPHERICITY; POOR INDURATION CEMENT TYPE(S): CLAY MATRIX SEDIMENTARY STRUCTURES: MASSIVE, STREAKED ACCESSORY MINERALS: PHOSPHATIC SAND-20%, QUARTZ-10%
288 - 295	SILT; VERY LIGHT GRAY 05% POROSITY: INTERGRANULAR; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE ACCESSORY MINERALS: PHOSPHATIC SAND- 05%, QUARTZ- 02% OTHER FEATURES: CALCAREOUS GENERALLY POOR CONSOLIDATION-SOME WELL CONSOLIDATED THIN LAYERS.

295 - 298.5	SILT; LIGHT OLIVE GRAY TO OLIVE GRAY 05% POROSITY: INTERGRANULAR; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE, MOTTLED, BIOTURBATED ACCESSORY MINERALS: PHOSPHATIC SAND- 05% OTHER FEATURES: PARTINGS, VARIEGATED FOSSILS: WORM TRACES
298.5- 299	LIMESTONE; VERY LIGHT GRAY 20% POROSITY: VUGULAR, MOLDIC GRAIN TYPE: CALCILUTITE; 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: MICROCRYSTALLINE RANGE: MICROCRYSTALLINE TO VERY FINE; MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: BIOTURBATED ACCESSORY MINERALS: PHOSPHATIC SAND- 05% FOSSILS: MOLLUSKS, WORM TRACES
299 - 300.5	SILT; OLIVE GRAY 05% POROSITY: INTERGRANULAR; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE, MOTTLED, BIOTURBATED ACCESSORY MINERALS: PHOSPHATIC SAND- 05%
300.5- 302.4	SILT; YELLOWISH GRAY TO LIGHT OLIVE GRAY 05% POROSITY: INTERGRANULAR; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MOTTLED ACCESSORY MINERALS: PHOSPHATIC SAND-05%, LIMESTONE-05% SILTY WITH GRANULES OF PHOS AND LS.
302.4- 303.5	SILT; OLIVE GRAY TO LIGHT OLIVE GRAY 05% POROSITY: INTERGRANULAR; POOR INDURATION CEMENT TYPE(S): CLAY MATRIX SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED ACCESSORY MINERALS: PHOSPHATIC SAND-05% OTHER FEATURES: VARIEGATED
303.5- 304.1	SAME AS ABOVE BUT WELL INDURATED & SOME BIGGER PHOS GRANULES.
304.1- 308	SILT; LIGHT OLIVE GRAY 05% POROSITY: INTERGRANULAR; POOR INDURATION CEMENT TYPE(S): CLAY MATRIX SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED ACCESSORY MINERALS: PHOSPHATIC SAND-05% OTHER FEATURES: PLASTIC

308 - 309 CHERT; BLACK
GOOD INDURATION
CEMENT TYPE(S): SILICIC CEMENT
SEDIMENTARY STRUCTURES: MASSIVE

309 - 310.6 SILT; DARK YELLOWISH BROWN
05% POROSITY: INTERGRANULAR; MODERATE INDURATION
CEMENT TYPE(S): CLAY MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: PEAT-%

310.6- 311.7 CLAY; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR; POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE, LAMINATED
ACCESSORY MINERALS: PHOSPHATIC SAND- 01%

311.7- 312.9 LIMESTONE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR, PIN POINT VUGS
GRAIN TYPE: CALCILUTITE; 10% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO VERY FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: PHOSPHATIC SAND- 01%
OTHER FEATURES: GRANULAR
312.9 UNIT SIMILAR TO UNIT ABOVE & BELOW EXCEPT FOR
CLUMPING BITS.

312.9- 316 LIMESTONE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR, PIN POINT VUGS
GRAIN TYPE: CALCILUTITE, CRYSTALS
05% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO VERY FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: PHOSPHATIC SAND-01%

316 - 316.9 DOLOSTONE; DARK YELLOWISH BROWN TO GRAYISH BROWN
05% POROSITY: PIN POINT VUGS; 50-90% ALTERED; SUBHEDRAL
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO GRANULE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: INTERBEDDED
ACCESSORY MINERALS: QUARTZ-15%, PHOSPHATIC SAND-05%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION

316.9- 318	LIMESTONE; VERY LIGHT ORANGE 05% POROSITY: PIN POINT VUGS GRAIN TYPE: CALCILUTITE, CRYSTALS 05% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO VERY FINE MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX SEDIMENTARY STRUCTURES: MASSIVE ACCESSORY MINERALS: PHOSPHATIC SAND-01%
318 - 319	SAND; DARK YELLOWISH BROWN 05% POROSITY: INTERGRANULAR GRAIN SIZE: FINE; RANGE: VERY FINE TO GRANULE ROUNDNESS: SUB-ROUNDED TO ROUNDED; MEDIUM SPHERICITY POOR INDURATION CEMENT TYPE(S): CLAY MATRIX SEDIMENTARY STRUCTURES: MASSIVE, MOTTLED ACCESSORY MINERALS: QUARTZ-50%, PHOSPHATIC SAND-05% OTHER FEATURES: MUDDY SS ABOVE & DOLO ABOVE SEEM VERY SIMILAR EXCEPT FOR INDURATION.
319 - 319.1	SMALL BLACK CHERT UNIT.
319.1- 326.4	LIMESTONE; YELLOWISH GRAY 05% POROSITY: INTERGRANULAR, FRACTURE, MOLDIC GRAIN TYPE: CALCILUTITE; 10% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE GOOD INDURATION CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE, INTERBEDDED ACCESSORY MINERALS: PHOSPHATIC SAND-05%, QUARTZ-05% OTHER FEATURES: LOW RECRYSTALLIZATION FOSSILS: FOSSIL MOLDS
326.4- 327.6	LIMESTONE; GRAYISH BROWN 05% POROSITY: INTERGRANULAR, PIN POINT VUGS GRAIN TYPE: CALCILUTITE; 05% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO VERY FINE GOOD INDURATION CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE ACCESSORY MINERALS: PHOSPHATIC SAND-05% OTHER FEATURES: HIGH RECRYSTALLIZATION, CRYSTALLINE
327.6- 327.8	BLACK CHERT NODULE.
327.8- 328	CLAY; VERY LIGHT ORANGE

05% POROSITY: INTERGRANULAR; POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: PLASTIC, MUDDY

328 - 329.5 SANDSTONE; YELLOWISH GRAY
05% POROSITY: INTERGRANULAR
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: QUARTZ-40%, PHOSPHATIC SAND-10%
OTHER FEATURES: SPECKLED

329.5- 330.2 SILT-SIZE DOLOMITE; YELLOWISH GRAY
05% POROSITY: INTERGRANULAR, PIN POINT VUGS
MODERATE INDURATION

330.2- 330.5 SAND; DARK BROWN
05% POROSITY: INTERGRANULAR
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
MEDIUM SPHERICITY; POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: MOTTLED, MASSIVE
ACCESSORY MINERALS: QUARTZ-15%, PHOSPHATIC SAND-10%
CLAY-20%, ORGANICS-10%
OTHER FEATURES: PLASTIC, MUDDY

330.5- 333.7 DOLOSTONE; PINKISH GRAY
05% POROSITY: MOLDIC; 0-10% ALTERED; ANHEDRAL
GRAIN SIZE: LITHOGRAPHIC
RANGE: LITHOGRAPHIC TO LITHOGRAPHIC; GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: PHOSPHATIC SAND-01%

333.7- 336 LIMESTONE; PINKISH GRAY
08% POROSITY: INTERGRANULAR
GRAIN TYPE: CALCILUTITE; 50% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: LITHOGRAPHIC; RANGE: LITHOGRAPHIC TO COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: PHOSPHATIC SAND-10%, QUARTZ-10%
OTHER FEATURES: SPECKLED

336 - 339 LIMESTONE; VERY LIGHT ORANGE TO YELLOWISH GRAY
10% POROSITY: MOLDIC, INTERGRANULAR

GRAIN TYPE: CALCILUTITE; 60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: LITHOGRAPHIC; RANGE: LITHOGRAPHIC TO MEDIUM
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MOTTLED
ACCESSORY MINERALS: PHOSPHATIC SAND-05%, QUARTZ-05%
CHERT-05%
FOSSILS: MOLLUSKS, FOSSIL MOLDS
<1 FOOT RECOVERY FOR 3 FEET SECTION-BROKEN CHUNKS.

339 - 341 CALCARENITE; GRAYISH ORANGE
20% POROSITY: MOLDIC, VUGULAR, INTERGRANULAR
GRAIN TYPE: CALCILUTITE, SKELETAL
10% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: LITHOGRAPHIC; RANGE: LITHOGRAPHIC TO VERY FINE
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: PHOSPHATIC SAND-05%, QUARTZ-05%
OTHER FEATURES: DOLOMITIC
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL MOLDS

341 - 343.7 CALCILUTITE; YELLOWISH GRAY
05% POROSITY: MOLDIC, PIN POINT VUGS
GRAIN TYPE: CALCILUTITE; 05% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: LITHOGRAPHIC; RANGE: LITHOGRAPHIC TO VERY FINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: PHOSPHATIC SAND-05%, QUARTZ-05%
OTHER FEATURES: DOLOMITIC, LOW RECRYSTALLIZATION
FOSSILS: MOLLUSKS, FOSSIL MOLDS

343.7- 348.8 SAND; YELLOWISH GRAY
05% POROSITY: INTERGRANULAR
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO MEDIUM
ROUNDNESS: SUB-ROUNDED TO ROUNDED; MEDIUM SPHERICITY
POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: QUARTZ SAND-70%, PHOSPHATIC SAND-05%
OTHER FEATURES: MUDDY
ONLY 1.5 FEET OF SAMPLE FOR 5 FEET OF SECTION.

348.8- 350.4 DOLOSTONE; VERY LIGHT GRAY
02% POROSITY: INTERGRANULAR; 0-10% ALTERED; ANHEDRAL
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX

SEDIMENTARY STRUCTURES: MOTTLED, MASSIVE
ACCESSORY MINERALS: PHOSPHATIC SAND-05%

350.4- 351.2 DOLOSTONE; LIGHT OLIVE GRAY TO YELLOWISH GRAY
05% POROSITY: INTERGRANULAR; 10-50% ALTERED; ANHEDRAL
GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO MEDIUM
POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX
SEDIMENTARY STRUCTURES: MOTTLED, STREAKED
ACCESSORY MINERALS: QUARTZ SAND-20%, PHOSPHATIC SAND-05%
ORGANICS-02%
OTHER FEATURES: DOLOMITIC

351.2- 351.5 CLAY; PINKISH GRAY
02% POROSITY: INTERGRANULAR; POOR INDURATION
CEMENT TYPE(S): CLAY MATRIX, CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: PHOSPHATIC SAND-05%, ORGANICS-02%
OTHER FEATURES: CHALKY

351.5- 352.2 CALCARENITE; YELLOWISH GRAY TO LIGHT OLIVE GRAY
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS; 60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MOTTLED
ACCESSORY MINERALS: PHOSPHATIC SAND-15%, QUARTZ SAND-10%
SHELL-05%, CLAY-10%
OTHER FEATURES: CHALKY
FOSSILS: MOLLUSKS, FOSSIL MOLDS

352.2- 352.5 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: INTRACLASTS; 30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: PHOSPHATIC SAND-03%, QUARTZ SAND-02%
FOSSILS: MOLLUSKS, FOSSIL MOLDS

352.5- 354.2 CALCARENITE; YELLOWISH GRAY
05% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: INTRACLASTS; 50% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO MEDIUM
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX

SEDIMENTARY STRUCTURES: MASSIVE, MOTTLED
ACCESSORY MINERALS: PHOSPHATIC SAND-10%, QUARTZ SAND-04%
OTHER FEATURES: SPECKLED
FOSSILS: MOLLUSKS, FOSSIL MOLDS

354.2- 361 CALCARENITE; YELLOWISH GRAY
25% POROSITY: MOLDIC, INTERGRANULAR
GRAIN TYPE: INTRACLASTS, SKELETAL CAST
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BIOTURBATED, MASSIVE
ACCESSORY MINERALS: PHOSPHATIC SAND-10%, QUARTZ SAND-10%
CHERT-02%
OTHER FEATURES: FOSSILIFEROUS
FOSSILS: MOLLUSKS, FOSSIL MOLDS

361 - 362 CALCARENITE; YELLOWISH GRAY
05% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: INTRACLASTS; 50% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE, MOTTLED
ACCESSORY MINERALS: QUARTZ SAND-30%, PHOSPHATIC SAND-05%
OTHER FEATURES: SPECKLED
FOSSILS: MOLLUSKS, FOSSIL MOLDS

362 - 365 CALCARENITE; YELLOWISH GRAY
15% POROSITY: MOLDIC, INTERGRANULAR
GRAIN TYPE: INTRACLASTS, SKELETAL CAST
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BIOTURBATED, MASSIVE
ACCESSORY MINERALS: PHOSPHATIC SAND-10%, QUARTZ SAND-10%
OTHER FEATURES: FOSSILIFEROUS
FOSSILS: MOLLUSKS, FOSSIL MOLDS

365 - 368 CALCARENITE; YELLOWISH GRAY
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS; 40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE
UNCONSOLIDATED
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: MASSIVE

ACCESSORY MINERALS: PHOSPHATIC SAND-02%, ORGANICS-05%
QUARTZ SAND-40%
OTHER FEATURES: SPECKLED, GRANULAR
FOSSILS: SPICULES

368 - 391 CALCARENITE; VERY LIGHT ORANGE TO GRAYISH ORANGE
30% POROSITY: MOLDIC, INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE, SKELETAL CAST
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BIOTURBATED, MOTTLED
ACCESSORY MINERALS: CALCITE-10%, QUARTZ SAND-05%
ORGANICS-02%
OTHER FEATURES: FOSSILIFEROUS
FOSSILS: MOLLUSKS, CORAL, FOSSIL MOLDS
BAG OF FINE QTZ, PHOS & CALCARENITE SAND 369'-374'.

391 - 402.5 CALCARENITE; WHITE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: QUARTZ SAND-50%, PHOSPHATIC SAND-02%
OTHER FEATURES: GRANULAR, SUCROSIC

402.5- 404.5 CALCARENITE; PINKISH GRAY TO VERY LIGHT GRAY
15% POROSITY: MOLDIC, INTERGRANULAR
GRAIN TYPE: INTRACLASTS, SKELETAL CAST, CALCILUTITE
40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BIOTURBATED
ACCESSORY MINERALS: QUARTZ SAND-30%, PHOSPHATIC SAND-02%
CALCITE-05%
OTHER FEATURES: FOSSILIFEROUS
FOSSILS: MOLLUSKS, CORAL, FOSSIL MOLDS

404.5- 419.2 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY
05% POROSITY: MOLDIC, INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE

MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MOTTLED
ACCESSORY MINERALS: QUARTZ SAND-05%, PHOSPHATIC SAND-02%
CALCITE-05%
FOSSILS: CORAL, MOLLUSKS, FOSSIL MOLDS
BAG OF FINE QTZ, PHOS & CALCARENITE SAND 404'-409'
87-COLOR.

419.2- 419.4 CALCARENITE; LIGHT GRAYISH GREEN
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, SKELETAL CAST
50% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: GLAUCONITE-30%, QUARTZ SAND-20%
OTHER FEATURES: PLASTIC

419.4- 430.7 CALCARENITE; VERY LIGHT ORANGE
15% POROSITY: MOLDIC, INTERGRANULAR
GRAIN TYPE: INTRACLASTS, SKELETAL CAST, CALCILUTITE
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BIOTURBATED
ACCESSORY MINERALS: QUARTZ SAND-25%, PHOSPHATIC SAND-02%
OTHER FEATURES: FOSSILIFEROUS
FOSSILS: MOLLUSKS, FOSSIL MOLDS, BENTHIC FORAMINIFERA
PELLETS, SORITES.

430.7- 431.4 CALCARENITE; VERY LIGHT ORANGE TO PINKISH GRAY
05% POROSITY: MOLDIC
GRAIN TYPE: INTRACLASTS, CALCILUTITE
40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MOTTLED, NODULAR, BIOTURBATED
BRECCIATED
ACCESSORY MINERALS: QUARTZ SAND-10%, CALCILUTITE-60%
CALCITE-02%
FOSSILS: MOLLUSKS, FOSSIL MOLDS
ABOVE MOLDIC LS WAS INJECTED W/ WHITE CALCILUTITE.

431.4- 434.9 CALCARENITE; VERY LIGHT GRAY TO PINKISH GRAY
05% POROSITY: MOLDIC, FRACTURE

GRAIN TYPE: INTRACLASTS; 50% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: INTERBEDDED, MOTTLED, BIOTURBATED
ACCESSORY MINERALS: CALCITE-05%, QUARTZ SAND-15%
PHOSPHATIC SAND-02%
FOSSILS: MOLLUSKS, FOSSIL MOLDS
INTERBEDDED CLASTS + SOME XLS IN FLOW ZONES.

434.9- 436 CALCARENITE; VERY LIGHT GRAY TO PINKISH GRAY
20% POROSITY: MOLDIC
GRAIN TYPE: INTRACLASTS, BIOGENIC, SKELETAL CAST
50% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BIOTURBATED
ACCESSORY MINERALS: QUARTZ SAND-05%, PHOSPHATIC SAND-02%
CALCITE-05%
OTHER FEATURES: FOSSILIFEROUS
FOSSILS: MOLLUSKS, WORM TRACES, BRYOZOA, FOSSIL MOLDS

436 - 437 CALCARENITE; PINKISH GRAY
05% POROSITY: MOLDIC, INTERGRANULAR
GRAIN TYPE: INTRACLASTS; 40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED, NODULAR
ACCESSORY MINERALS: QUARTZ SAND-15%, PHOSPHATIC SAND-02%
FOSSILS: MOLLUSKS, FOSSIL MOLDS

437 - 438.8 CALCARENITE; VERY LIGHT GRAY TO PINKISH GRAY
15% POROSITY: MOLDIC, INTERGRANULAR
GRAIN TYPE: INTRACLASTS, BIOGENIC, SKELETAL CAST
70% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BIOTURBATED, NODULAR
ACCESSORY MINERALS: QUARTZ SAND-05%, CALCITE-05%
OTHER FEATURES: FOSSILIFEROUS
FOSSILS: MOLLUSKS, FOSSIL MOLDS
SORITES.

438.8- 443 CALCARENITE; PINKISH GRAY TO YELLOWISH GRAY
05% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: INTRACLASTS; 60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO COARSE

POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
ACCESSORY MINERALS: QUARTZ SAND-20%, PHOSPHATIC SAND-02%
OTHER FEATURES: POOR SAMPLE
FOSSILS: MOLLUSKS, FOSSIL MOLDS
RUBBLE FROM 439'-454' & MISSING 2/3 OF CORE.

443 - 444 CALCARENITE; PINKISH GRAY TO VERY LIGHT ORANGE
05% POROSITY: MOLDIC, INTERGRANULAR, FRACTURE
GRAIN TYPE: INTRACLASTS, SKELETAL CAST
70% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MOTTLED
ACCESSORY MINERALS: QUARTZ SAND-10%, PHOSPHATIC SAND-02%
CALCITE-02%
FOSSILS: MOLLUSKS, FOSSIL MOLDS
DEFORMATION W/ INFILLING OF FINE LS BY WHITER LARGER
GRAINED LS.

444 - 454 CALCARENITE; VERY LIGHT ORANGE
10% POROSITY: MOLDIC, INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MOTTLED, NODULAR
ACCESSORY MINERALS: QUARTZ SAND-15%, PHOSPHATIC SAND-02%
CALCITE-03%
OTHER FEATURES: FOSSILIFEROUS
FOSSILS: MOLLUSKS, FOSSIL MOLDS

454 - 462.5 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: MOLDIC, INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE, BEDDED
ACCESSORY MINERALS: QUARTZ SAND-20%, PHOSPHATIC SAND-02%
FOSSILS: MOLLUSKS, FOSSIL MOLDS

462.5- 463.8 CALCARENITE; VERY LIGHT ORANGE
10% POROSITY: MOLDIC, INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
50% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM

MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MOTTLED, BIOTURBATED
ACCESSORY MINERALS: QUARTZ SAND-10%, PHOSPHATIC SAND-02%
CALCITE-02%
FOSSILS: MOLLUSKS, FOSSIL MOLDS

463.8- 469.4	CALCARENITE; VERY LIGHT ORANGE TO DARK YELLOWISH BROWN 05% POROSITY: INTERGRANULAR GRAIN TYPE: INTRACLASTS; 30% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MOTTLED, NODULAR ACCESSORY MINERALS: CHERT-40% OTHER FEATURES: POOR SAMPLE TWO BAG SAMPLES OF FINE CALCARENITE, QTZ + PHOS SAND-CHERT IS IRREGULAR + MORE VERTICAL.
469.4- 475.2	CALCARENITE; VERY LIGHT ORANGE 25% POROSITY: MOLDIC, INTERGRANULAR GRAIN TYPE: INTRACLASTS; 60% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM GOOD INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: BIOTURBATED ACCESSORY MINERALS: QUARTZ SAND-10%, PHOSPHATIC SAND-05% OTHER FEATURES: FOSSILIFEROUS FOSSILS: MOLLUSKS, FOSSIL MOLDS, CORAL
475.2- 476.8	CALCARENITE; YELLOWISH GRAY 02% POROSITY: INTERGRANULAR GRAIN TYPE: CALCILUTITE, INTRACLASTS 40% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE GOOD INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE, LAMINATED ACCESSORY MINERALS: QUARTZ SAND-15%, PHOSPHATIC SAND-01% FOSSILS: MOLLUSKS, FOSSIL MOLDS
476.8- 482	CALCARENITE; YELLOWISH GRAY 08% POROSITY: MOLDIC, INTERGRANULAR GRAIN TYPE: INTRACLASTS, CALCILUTITE 70% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: BIOTURBATED

ACCESSORY MINERALS: QUARTZ SAND-20%, PHOSPHATIC SAND-03%
OTHER FEATURES: FOSSILIFEROUS, POOR SAMPLE
FOSSILS: MOLLUSKS, FOSSIL MOLDS
BAG OF LS, QTZ + PHOS MEDIUM SAND.

482 - 486 CALCARENITE; YELLOWISH GRAY
05% POROSITY: INTERGRANULAR, MOLDIC, FRACTURE
GRAIN TYPE: CALCILUTITE, INTRACLASTS
40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BRECCIATED, MOTTLED
ACCESSORY MINERALS: QUARTZ SAND-05%, PHOSPHATIC SAND-01%
FOSSILS: MOLLUSKS, FOSSIL MOLDS

486 - 489 CALCARENITE; YELLOWISH GRAY
05% POROSITY: INTERGRANULAR
GRAIN TYPE: CALCILUTITE, INTRACLASTS
30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: QUARTZ SAND-05%
OTHER FEATURES: POOR SAMPLE

489 - 495 CALCARENITE; PINKISH GRAY
05% POROSITY: INTERGRANULAR, FRACTURE
GRAIN TYPE: CALCILUTITE, INTRACLASTS
30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: QUARTZ SAND-05%, PHOSPHATIC SAND-01%
OTHER FEATURES: POOR SAMPLE, LOW RECRYSTALLIZATION
BAG OF FINE LS, QTZ + PHOS SAND.

495 - 499.5 CALCARENITE; MODERATE YELLOWISH BROWN TO PINKISH GRAY
05% POROSITY: INTERGRANULAR, PIN POINT VUGS
GRAIN TYPE: INTRACLASTS, SKELETAL
40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BRECCIATED, MOTTLED
ACCESSORY MINERALS: QUARTZ SAND-05%
OTHER FEATURES: POOR SAMPLE, LOW RECRYSTALLIZATION

FOSSILS: BENTHIC FORAMINIFERA
BAG OF FINE LS, QTZ + PHOS SAND.

499.5- 503	CALCARENITE; VERY LIGHT ORANGE 05% POROSITY: INTERGRANULAR, MOLDIC, FRACTURE GRAIN TYPE: CALCILUTITE, SKELETAL, INTRACLASTS 50% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO MEDIUM MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX SEDIMENTARY STRUCTURES: MASSIVE ACCESSORY MINERALS: CALCITE-02% OTHER FEATURES: GRANULAR, MEDIUM RECRYSTALLIZATION FOSSILS: MOLLUSKS, FOSSIL MOLDS
503 - 505.3	CALCILUTITE; VERY LIGHT ORANGE TO YELLOWISH GRAY 05% POROSITY: MOLDIC GRAIN TYPE: CALCILUTITE, PELLET 40% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE GOOD INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MOTTLED, BIOTURBATED, MASSIVE ACCESSORY MINERALS: QUARTZ-02% OTHER FEATURES: DOLOMITIC, HIGH RECRYSTALLIZATION FOSSILS: MOLLUSKS, FOSSIL MOLDS MOTTLED AND ZONED GRAY DOLOSTONE BLEBS ONLY 30% RECOVERY-SANDBAG 505.3-524 SAND BAGS-VERY FINE SAND W/ FLECKS OF ORGANICS COLOR-29.
505.3- 529	524-529 FINE SAND COLOR-29 SAME AS ABOVE. HARD PIECES FROM ~504- 509' BROUGHT UP AND HAVE BEEN GRINDING UP SAND ABOVE .7' THICK.
529 - 534	CALCARENITE; VERY LIGHT ORANGE 10% POROSITY: MOLDIC, INTERGRANULAR GRAIN TYPE: CALCILUTITE, SKELETAL 60% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE OTHER FEATURES: MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS SORITES.
534 - 540.2	CALCILUTITE; VERY LIGHT ORANGE TO PINKISH GRAY 15% POROSITY: MOLDIC GRAIN TYPE: CALCILUTITE, SKELETAL CAST

20% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BIOTURBATED
OTHER FEATURES: MEDIUM RECRYSTALLIZATION, FOSSILIFEROUS
FOSSILS: MOLLUSKS, FOSSIL MOLDS
SORITES.

540.2- 609.5 CALCARENITE; VERY LIGHT ORANGE TO PINKISH GRAY
10% POROSITY: INTERGRANULAR, POSSIBLY HIGH PERMEABILITY
GRAIN TYPE: CALCILUTITE; 70% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO COARSE
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: CALCILUTITE-20%, QUARTZ SAND-02%
OTHER FEATURES: SUCROSIC, GRANULAR
FOSSILS: MOLLUSKS, FOSSIL MOLDS
ALL SIMILAR BUT DIFFERENT INDURATION-SOME JUST SANDY-SOME MODERATE

609.5- 614 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: CALCILUTITE; 70% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO MEDIUM
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: CALCILUTITE-20%

614 - 644 CALCARENITE; VERY LIGHT ORANGE
10% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: CALCILUTITE, PELLET
80% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO MEDIUM
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED
ACCESSORY MINERALS: CALCILUTITE-10%
OTHER FEATURES: LOW RECRYSTALLIZATION
FOSSILS: MOLLUSKS, FOSSIL MOLDS
SOME SMALL ZONES OF FOSSILS OR HIGH RECRYSTALLIZATION ALSO
CHERT AT 629 BUT PROBABLY FILL IN.
CELESTITE XLS AT 629

644 - 649 CALCARENITE; WHITE TO VERY LIGHT GRAY
08% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: BIOGENIC, INTRACLASTS, SKELETAL

60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO VERY COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: BIOTURBATED, MASSIVE
ACCESSORY MINERALS: CALCITE-20%
OTHER FEATURES: CHALKY
FOSSILS: MOLLUSKS, BENTHIC FORAMINIFERA, FOSSIL MOLDS
SAMPLE IS MISSING ~3' OF RUBBLE ~1' IS MODERATELY
INDURATED.

649 - 659 CALCARENITE; VERY LIGHT ORANGE TO PINKISH GRAY
05% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: BIOGENIC, INTRACLASTS
70% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: BIOTURBATED, MASSIVE
OTHER FEATURES: GRANULAR
FOSSILS: MOLLUSKS, ECHINOID, BENTHIC FORAMINIFERA
FOSSIL MOLDS
SIMILAR TO ABOVE- A LOT OF MISSING SAMPLE-GROUND UP SOME IS
VERY LS SANDY WHITE SOME IS MODERATELY INDURATED.

659 - 674.5 CALCARENITE; WHITE TO VERY LIGHT GRAY
10% POROSITY: MOLDIC, INTERGRANULAR
GRAIN TYPE: INTRACLASTS, BIOGENIC, SKELETAL
80% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO VERY COARSE
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: BIOTURBATED, MASSIVE
ACCESSORY MINERALS: SHELL-05%
OTHER FEATURES: GRANULAR, CHALKY
FOSSILS: MOLLUSKS, FOSSIL MOLDS

674.5- 675 CLAY; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR; POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, CLAY MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: PLASTIC

675 - 679 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS; 60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO MEDIUM
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE

679 - 679.5	AS ABOVE EXCEPT MODERATE INDURATION.
679.5- 685	CALCARENITE; VERY LIGHT ORANGE TO WHITE 15% POROSITY: MOLDIC, INTERGRANULAR GRAIN TYPE: INTRACLASTS, BIOGENIC, SKELETAL 70% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO COARSE MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: BIOTURBATED, MASSIVE ACCESSORY MINERALS: CALCITE-05% OTHER FEATURES: FOSSILIFEROUS, GRANULAR FOSSILS: MOLLUSKS, FOSSIL MOLDS
685 - 689.5	CALCARENITE; VERY LIGHT ORANGE TO PINKISH GRAY 05% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: CALCILUTITE, PELLET, SKELETAL CAST 70% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO GRANULE MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE OTHER FEATURES: GRANULAR, MEDIUM RECRYSTALLIZATION FOSSILS: MOLLUSKS, FOSSIL MOLDS
689.5- 703.8	CALCARENITE; VERY LIGHT ORANGE 10% POROSITY: INTERGRANULAR, MOLDIC GRAIN TYPE: INTRACLASTS, CALCILUTITE 70% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO COARSE MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED ACCESSORY MINERALS: CALCITE-02%, SHELL-02% FOSSILS: MOLLUSKS, FOSSIL MOLDS
703.8- 707.5	CALCARENITE; VERY LIGHT ORANGE 15% POROSITY: MOLDIC, INTERGRANULAR GRAIN TYPE: INTRACLASTS, BIOGENIC, SKELETAL CAST 80% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO VERY COARSE POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: BIOTURBATED ACCESSORY MINERALS: SHELL-02%, CALCITE-05% OTHER FEATURES: CHALKY, FOSSILIFEROUS FOSSILS: MOLLUSKS, CORAL, BENTHIC FORAMINIFERA FOSSIL MOLDS

707.5 - 709.3 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR, PIN POINT VUGS
GRAIN TYPE: INTRACLASTS; 60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MOTTLED

709.3- 713.6 BAG SAMPLE OF MEDIUM LS SAND-BLACK SPECKS MAY BE DUST
29-COLOR

713.6- 714 DOLOSTONE; GRAYISH ORANGE
05% POROSITY: MOLDIC; 50-90% ALTERED; SUBHEDRAL
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO LITHOGRAPHIC
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MOTTLED, NODULAR
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: MOLLUSKS, FOSSIL MOLDS

714 - 715.6 DOLOSTONE; GRAYISH ORANGE TO MODERATE YELLOWISH BROWN
01% POROSITY: PIN POINT VUGS, NOT OBSERVED; 50-90% ALTERED
SUBHEDRAL
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO LITHOGRAPHIC
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MASSIVE

715.6- 716.4 CALCARENITE; PINKISH GRAY
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS; 20% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO LITHOGRAPHIC
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: CROSS-BEDDED, MASSIVE
ACCESSORY MINERALS: QUARTZ SAND-05%
OTHER FEATURES: GRANULAR, SPECKLED

716.4- 719 BAG SAMPLE OF MEDIUM CALCARENITE SAND-BLACK SPECS PRESENT
29-COLOR

719 - 719.6 CALCARENITE; VERY LIGHT ORANGE TO PINKISH GRAY
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS; 20% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO LITHOGRAPHIC
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: CROSS-BEDDED, MASSIVE

ACCESSORY MINERALS: QUARTZ SAND-05%
OTHER FEATURES: GRANULAR, SPECKLED

719.6- 723 DOLOSTONE; GRAYISH BROWN
05% POROSITY: INTERGRANULAR, NOT OBSERVED; 50-90% ALTERED
SUBHEDRAL
GRAIN SIZE: VERY FINE; RANGE: VERY FINE TO LITHOGRAPHIC
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT, CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: ORGANICS-05%

723 - 727.5 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR, NOT OBSERVED
GRAIN TYPE: INTRACLASTS; 70% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: MEDIUM TO LITHOGRAPHIC
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE, GRADED BEDDING
ACCESSORY MINERALS: QUARTZ SAND-05%
OTHER FEATURES: SPECKLED
FOSSILS: MOLLUSKS, FOSSIL MOLDS

727.5- 729 CLAY COLOR-89 W/ VERY FINE SAND

729 - 748.5 CALCARENITE; VERY LIGHT ORANGE TO GRAYISH BROWN
07% POROSITY: INTERGRANULAR, MOLDIC, VUGULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE, SKELETAL CAST
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE, GRADED BEDDING
ACCESSORY MINERALS: CHERT-03%, CALCITE-05%
FOSSILS: MOLLUSKS, FOSSIL MOLDS

748.5- 755 CALCARENITE; VERY LIGHT ORANGE TO GRAYISH BROWN
15% POROSITY: MOLDIC, INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE, SKELETAL CAST
50% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BIOTURBATED, MASSIVE
ACCESSORY MINERALS: CALCITE-05%
FOSSILS: MOLLUSKS, PLANKTONIC FORAMINIFERA, FOSSIL MOLDS

755 - 767 CALCARENITE; VERY LIGHT ORANGE

05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS; 40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO MEDIUM
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: CALCITE-05%, SHELL-05%
FOSSILS: MOLLUSKS, FOSSIL MOLDS

767 - 768	CLAY; VERY LIGHT ORANGE 01% POROSITY: INTERGRANULAR; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE OTHER FEATURES: PLASTIC
768 - 772	CALCARENITE; VERY LIGHT ORANGE 05% POROSITY: INTERGRANULAR GRAIN TYPE: INTRACLASTS; 40% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO MEDIUM MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE ACCESSORY MINERALS: CALCITE-05%, QUARTZ SAND-05% FOSSILS: MOLLUSKS, FOSSIL MOLDS
772 - 774	CLAY; VERY LIGHT ORANGE 01% POROSITY: INTERGRANULAR; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE OTHER FEATURES: PLASTIC
774 - 775.5	CALCARENITE; VERY LIGHT ORANGE 05% POROSITY: INTERGRANULAR, PIN POINT VUGS GRAIN TYPE: INTRACLASTS; 30% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE ACCESSORY MINERALS: CALCITE-05%, QUARTZ SAND-05%
775.5- 779	CLAY; VERY LIGHT ORANGE 01% POROSITY: INTERGRANULAR; POOR INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE OTHER FEATURES: PLASTIC
779 - 780	CALCARENITE; VERY LIGHT ORANGE 05% POROSITY: INTERGRANULAR, PIN POINT VUGS

GRAIN TYPE: INTRACLASTS; 30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: CALCITE-05%, QUARTZ SAND-05%
FOSSILS: MOLLUSKS, FOSSIL MOLDS

780 - 784 CLAY; VERY LIGHT ORANGE
01% POROSITY: INTERGRANULAR; POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: PLASTIC
FOSSILS: BENTHIC FORAMINIFERA

784 - 785.1 C CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: INTRACLASTS, CALCILUTITE
30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: SHELL-01%, ORGANICS-01%, CALCITE-02%
OTHER FEATURES: FOSSILIFEROUS
FOSSILS: BENTHIC FORAMINIFERA
NUMMULITES STARTING IN CLAY AND GETTING MORE NUMEROUS W/
DEPTH

785.1- 790.8 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, SKELETAL
30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO VERY COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: ORGANICS-05%, CALCITE-02%
OTHER FEATURES: FOSSILIFEROUS
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL MOLDS
NUMMULITES VERY ABUNDANT BECOMING LESS SO W/ DEPTH.

790.8- 795.2 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS; 30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX

SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: ORGANICS-05%
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL MOLDS
NUMMULITES PRESENT BUT MUCH LESS ABUNDANT

795.2- 795.5 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: ORGANICS-02%
OTHER FEATURES: FOSSILIFEROUS
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL MOLDS
NUMMULITES

795.5- 816.8 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: ORGANICS-05%, CALCITE-05%
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL MOLDS
NUMS-FEW

816.8- 819 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: INTRACLASTS; 40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED
ACCESSORY MINERALS: CALCITE-02%
OTHER FEATURES: FOSSILIFEROUS
FOSSILS: ECHINOID, BENTHIC FORAMINIFERA, MOLLUSKS
FOSSIL MOLDS
LEPS, NUMS

819 - 822.5 CALCILUTITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
10% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: LITHOGRAPHIC; RANGE: VERY FINE TO LITHOGRAPHIC

MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: CALCITE-02%
OTHER FEATURES: CHALKY
FOSSILS: BENTHIC FORAMINIFERA

822.5- 825.7 CALCARENITE; VERY LIGHT ORANGE
20% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: INTRACLASTS, BIOGENIC, SKELETAL
70% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: COARSE; RANGE: LITHOGRAPHIC TO VERY COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BIOTURBATED
ACCESSORY MINERALS: CALCITE-05%
OTHER FEATURES: FOSSILIFEROUS
FOSSILS: MOLLUSKS, FOSSIL MOLDS, BENTHIC FORAMINIFERA
LEPS, NUMS

825.7- 829 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: CALCITE-02%
FOSSILS: BENTHIC FORAMINIFERA
LEPS, NUMS

829 - 829.7 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, BIOGENIC
75% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: COARSE; RANGE: LITHOGRAPHIC TO VERY COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BIOTURBATED
ACCESSORY MINERALS: CALCITE-02%
OTHER FEATURES: FOSSILIFEROUS
FOSSILS: BENTHIC FORAMINIFERA
NUMS, LEPS

829.7- 843.3 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE

30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: CALCITE-02%
FOSSILS: BENTHIC FORAMINIFERA
NUMS

843.3- 844.4 CALCILUTITE; VERY LIGHT ORANGE TO LIGHT OLIVE GRAY
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
15% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: LITHOGRAPHIC; RANGE: FINE TO LITHOGRAPHIC
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: PARTINGS, PLATY
FOSSILS: BENTHIC FORAMINIFERA
NUMS

844.4- 851 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
20% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: CALCITE-02%
FOSSILS: BENTHIC FORAMINIFERA
NUMS, LEPS

851 - 853 CALCILUTITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
10% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: LITHOGRAPHIC; RANGE: VERY FINE TO LITHOGRAPHIC
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: CHALKY
FOSSILS: BENTHIC FORAMINIFERA
FEW NUMS

853 - 856.5 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE

20% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: QUARTZ SAND-05%, ORGANICS-02%
CALCITE-02%
OTHER FEATURES: CHALKY
FOSSILS: BENTHIC FORAMINIFERA
NUMS, LEPS

856.5- 858 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, SKELETAL
70% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BIOTURBATED
ACCESSORY MINERALS: QUARTZ SAND-05%, CALCITE-15%
ORGANICS-02%
OTHER FEATURES: FOSSILIFEROUS
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS
NUMS, LEPS. ABUNDANT SHELL FRAGMENTS 854-LARGE MOLLUSK

858 - 909.2 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
25% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE, GRADED BEDDING
ACCESSORY MINERALS: QUARTZ SAND-05%, ORGANICS-02%
CALCITE-05%
FOSSILS: BENTHIC FORAMINIFERA
NUMS, LEPS

909.2- 910.8 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, SKELETAL
70% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BIOTURBATED, MASSIVE
ACCESSORY MINERALS: QUARTZ SAND-02%, CALCITE-05%
OTHER FEATURES: FOSSILIFEROUS

FOSSILS: BENTHIC FORAMINIFERA
LEPS, NUMS

910.8- 922.5 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: QUARTZ SAND-05%, CALCITE-02%
ORGANICS-02%
FOSSILS: BENTHIC FORAMINIFERA
LEPS, NUMS

922.5- 923.1 CALCILUTITE; VERY LIGHT ORANGE TO YELLOWISH GRAY
05% POROSITY: INTERGRANULAR
GRAIN TYPE: CALCILUTITE, INTRACLASTS
10% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: LITHOGRAPHIC; RANGE: LITHOGRAPHIC TO VERY FINE
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: INTERBEDDED
ACCESSORY MINERALS: ORGANICS-05%
OTHER FEATURES: PARTINGS
FOSSILS: BENTHIC FORAMINIFERA

923.1- 934.1 CALCARENITE; YELLOWISH GRAY TO VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: ORGANICS-05%, QUARTZ SAND-05%
CALCITE-02%
FOSSILS: BENTHIC FORAMINIFERA
LEPS, NUMS

934.1- 934.9 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO COARSE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX

ACCESSORY MINERALS: ORGANICS-02%, QUARTZ SAND-05%
OTHER FEATURES: GRANULAR
FOSSILS: BENTHIC FORAMINIFERA

934.9- 947.1	CALCARENITE; VERY LIGHT ORANGE 05% POROSITY: INTERGRANULAR GRAIN TYPE: INTRACLASTS, CALCILUTITE 25% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM MODERATE INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE ACCESSORY MINERALS: ORGANICS-01% FOSSILS: BENTHIC FORAMINIFERA RAISED CENTER FORAM-OPERCV. MOST COMMON-LEPS. TURNING BROWN W/ MORE RECRYSTALLIZATION W/ DEPTH, WHITE LEPS CONTRAST
947.1- 952	CALCARENITE; GRAYISH ORANGE TO LIGHT OLIVE BROWN 05% POROSITY: INTERGRANULAR, PIN POINT VUGS GRAIN TYPE: INTRACLASTS; 80% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE GOOD INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX, DOLOMITE CEMENT SEDIMENTARY STRUCTURES: MASSIVE ACCESSORY MINERALS: ORGANICS-02% OTHER FEATURES: MEDIUM RECRYSTALLIZATION, GRANULAR DOLOMITIC FOSSILS: BENTHIC FORAMINIFERA LEPS
952 - 953.5	DOLOSTONE; MODERATE YELLOWISH BROWN TO GRAYISH BROWN 10% POROSITY: MOLDIC, INTERCRYSTALLINE; 50-90% ALTERED SUBHEDRAL GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO MEDIUM GOOD INDURATION CEMENT TYPE(S): DOLOMITE CEMENT SEDIMENTARY STRUCTURES: MOTTLED ACCESSORY MINERALS: ORGANICS-02% OTHER FEATURES: GRANULAR, MEDIUM RECRYSTALLIZATION FOSSILS: BENTHIC FORAMINIFERA, FOSSIL MOLDS LEPS THAT WERE PRESENT ABOVE NOW VOIDS
953.5- 955.9	DOLOSTONE; MODERATE YELLOWISH BROWN TO LIGHT OLIVE BROWN 05% POROSITY: INTERCRYSTALLINE, PIN POINT VUGS 50-90% ALTERED; SUBHEDRAL GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE MODERATE INDURATION CEMENT TYPE(S): DOLOMITE CEMENT

SEDIMENTARY STRUCTURES: MOTTLED
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
FOSSILS: NO FOSSILS

955.9- 961 DOLOSTONE; MODERATE YELLOWISH BROWN TO LIGHT OLIVE BROWN
30% POROSITY: MOLDIC, PIN POINT VUGS, INTERCRYSTALLINE
50-90% ALTERED; EUHEDRAL
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED, BIOTURBATED
OTHER FEATURES: HIGH RECRYSTALLIZATION
FOSSILS: BENTHIC FORAMINIFERA, FOSSIL MOLDS
PREDOMINATELY LEP MOLDS W/ SOME NUM MOLDS

961 - 967.5 DOLOSTONE; MODERATE YELLOWISH BROWN TO LIGHT OLIVE BROWN
20% POROSITY: MOLDIC, FRACTURE, PIN POINT VUGS
50-90% ALTERED; EUHEDRAL
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED
ACCESSORY MINERALS: ORGANICS-02%
OTHER FEATURES: HIGH RECRYSTALLIZATION
FOSSILS: BENTHIC FORAMINIFERA, FOSSIL MOLDS
POROSITY LOWER DUE TO LESS LEPS AND MORE NUMS

967.5- 969 DOLOSTONE; MODERATE YELLOWISH BROWN TO LIGHT OLIVE BROWN
25% POROSITY: MOLDIC, PIN POINT VUGS, INTERCRYSTALLINE
50-90% ALTERED; EUHEDRAL
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED
ACCESSORY MINERALS: ORGANICS-08%
OTHER FEATURES: HIGH RECRYSTALLIZATION
FOSSILS: BENTHIC FORAMINIFERA, FOSSIL MOLDS
ALMOST ALL NUMS AND NOT MANY LEPS

969 - 971.3 DOLOSTONE; MODERATE YELLOWISH BROWN TO LIGHT OLIVE BROWN
20% POROSITY: MOLDIC, PIN POINT VUGS, FRACTURE
50-90% ALTERED; EUHEDRAL
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED, BIOTURBATED
ACCESSORY MINERALS: ORGANICS-05%
OTHER FEATURES: HIGH RECRYSTALLIZATION

FOSSILS: BENTHIC FORAMINIFERA, FOSSIL MOLDS
MORE LEPS BUT DIMINISHING W/ DEPTH.

971.3- 972.2 DOLOSTONE; MODERATE YELLOWISH BROWN TO GRAYISH ORANGE
05% POROSITY: MOLDIC, PIN POINT VUGS, INTERCRYSTALLINE
50-90% ALTERED; SUBHEDRAL
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED, MASSIVE
ACCESSORY MINERALS: ORGANICS-02%
OTHER FEATURES: HIGH RECRYSTALLIZATION, GRANULAR
FOSSILS: BENTHIC FORAMINIFERA, FOSSIL MOLDS
LEPS

972.2- 976.2 DOLOSTONE; MODERATE YELLOWISH BROWN TO DARK YELLOWISH BROWN
25% POROSITY: MOLDIC, PIN POINT VUGS; 50-90% ALTERED
EUHEDRAL
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: BIOTURBATED, MOTTLED
ACCESSORY MINERALS: ORGANICS-02%, CALCARENITE-02%
OTHER FEATURES: HIGH RECRYSTALLIZATION, FOSSILIFEROUS
FOSSILS: BENTHIC FORAMINIFERA, FOSSIL MOLDS
LEPS, NUMS

976.2- 979.6 DOLOSTONE; MODERATE YELLOWISH BROWN TO LIGHT OLIVE BROWN
05% POROSITY: MOLDIC, PIN POINT VUGS; 50-90% ALTERED
EUHEDRAL
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED, BIOTURBATED
ACCESSORY MINERALS: ORGANICS-02%, CALCARENITE-02%
OTHER FEATURES: HIGH RECRYSTALLIZATION
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL MOLDS
LEPS FADING, BEING REPLACED W/ ONLY NUMS

979.6- 981.5 DOLOSTONE; MODERATE YELLOWISH BROWN TO GRAYISH ORANGE
05% POROSITY: MOLDIC, FRACTURE, PIN POINT VUGS
50-90% ALTERED; EUHEDRAL
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: BIOTURBATED, MOTTLED
ACCESSORY MINERALS: ORGANICS-03%
OTHER FEATURES: HIGH RECRYSTALLIZATION, GRANULAR

FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL MOLDS
NUMS

981.5- 988 DOLOSTONE; MODERATE YELLOWISH BROWN
20% POROSITY: MOLDIC, FRACTURE; 50-90% ALTERED; EUHEDRAL
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED
ACCESSORY MINERALS: ORGANICS-02%
OTHER FEATURES: HIGH RECRYSTALLIZATION, FOSSILIFEROUS
FOSSILS: BENTHIC FORAMINIFERA, MOLLUSKS, FOSSIL MOLDS
NUMEROUS NUMS MOLDS

988 - 989.4 DOLOSTONE; MODERATE OLIVE BROWN TO GRAYISH BROWN
01% POROSITY: NOT OBSERVED; 50-90% ALTERED; SUBHEDRAL
GRAIN SIZE: VERY FINE
RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED, MASSIVE
ACCESSORY MINERALS: ORGANICS-02%
OTHER FEATURES: HIGH RECRYSTALLIZATION
FOSSILS: NO FOSSILS

989.4- 989.9 DOLOSTONE; MODERATE YELLOWISH BROWN
01% POROSITY: MOLDIC, NOT OBSERVED; 50-90% ALTERED
SUBHEDRAL
GRAIN SIZE: VERY FINE
RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: CHALKY
FOSSILS: BENTHIC FORAMINIFERA, FOSSIL MOLDS

989.9- 999.9 DOLOSTONE; MODERATE YELLOWISH BROWN TO GRAYISH ORANGE
05% POROSITY: MOLDIC; 50-90% ALTERED; SUBHEDRAL
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED
ACCESSORY MINERALS: ORGANICS-02%, CALCARENITE-03%
OTHER FEATURES: VARIEGATED
FOSSILS: BENTHIC FORAMINIFERA, FOSSIL MOLDS, MOLLUSKS
NUMS

999.9- 1002.5 DOLOSTONE; MODERATE YELLOWISH BROWN TO GRAYISH BROWN
01% POROSITY: MOLDIC; 50-90% ALTERED; SUBHEDRAL
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE

GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED, MASSIVE
ACCESSORY MINERALS: ORGANICS-03%, CALCARENITE-03%
OTHER FEATURES: HIGH RECRYSTALLIZATION
FOSSILS: BENTHIC FORAMINIFERA, FOSSIL MOLDS
NUMS

1002.5- 1002.9 DOLOSTONE; GRAYISH BROWN TO DARK YELLOWISH BROWN
01% POROSITY: NOT OBSERVED; 50-90% ALTERED; SUBHEDRAL
GRAIN SIZE: VERY FINE
RANGE: MICROCRYSTALLINE TO VERY FINE; GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED, BEDDED, LAMINATED
ACCESSORY MINERALS: ORGANICS-02%
OTHER FEATURES: HIGH RECRYSTALLIZATION
FOSSILS: NO FOSSILS
THIN UNIT W/OUT FOSSILS BETWEEN SIMILAR UNITS

1002.9- 1008.7 DOLOSTONE; DARK YELLOWISH BROWN TO GRAYISH BROWN
15% POROSITY: MOLDIC, FRACTURE; 50-90% ALTERED; SUBHEDRAL
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED, BIOTURBATED
ACCESSORY MINERALS: ORGANICS-02%, CALCARENITE-02%
OTHER FEATURES: HIGH RECRYSTALLIZATION, FOSSILIFEROUS
FOSSILS: BENTHIC FORAMINIFERA, ECHINOID
VARYING DENSITIES OF NUMMULITES

1008.7- 1008.9 DOLOSTONE; MODERATE YELLOWISH BROWN TO GRAYISH ORANGE
03% POROSITY: PIN POINT VUGS; 50-90% ALTERED; SUBHEDRAL
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED
ACCESSORY MINERALS: ORGANICS-05%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION
AVON PARK TOP

1008.9- 1009.3 SILT-SIZE DOLOMITE; DARK YELLOWISH BROWN TO DARK BROWN
05% POROSITY: PIN POINT VUGS, INTERGRANULAR
POOR INDURATION
CEMENT TYPE(S): ORGANIC MATRIX
SEDIMENTARY STRUCTURES: BEDDED, LAMINATED, MOTTLED
ACCESSORY MINERALS: ORGANICS-30%

1009.3- 1010.1 DOLOSTONE; MODERATE YELLOWISH BROWN TO GRAYISH ORANGE

03% POROSITY: PIN POINT VUGS; 50-90% ALTERED; SUBHEDRAL
GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED
ACCESSORY MINERALS: ORGANICS-05%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION

1010.1- 1010.6 DOLOSTONE; GRAYISH BROWN
40% POROSITY: MOLDIC; 50-90% ALTERED; SUBHEDRAL
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED, BIOTURBATED
ACCESSORY MINERALS: CALCARENITE-10%
OTHER FEATURES: FOSSILIFEROUS, HIGH RECRYSTALLIZATION
FOSSILS: ECHINOID
NEO NOIDS. ECHINOID TESTS CALCAREOUS

1010.6- 1015.1 DOLOSTONE; GRAYISH BROWN TO YELLOWISH GRAY
05% POROSITY: MOLDIC, PIN POINT VUGS, FRACTURE
50-90% ALTERED; EUHEDRAL
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED, BIOTURBATED, BEDDED
CROSS-BEDDED
ACCESSORY MINERALS: ORGANICS-05%, CALCARENITE-05%
OTHER FEATURES: HIGH RECRYSTALLIZATION
FOSSILS: ECHINOID
NEO

1015.1- 1016.2 DOLOSTONE; GRAYISH ORANGE TO GRAYISH BROWN
25% POROSITY: MOLDIC, FRACTURE; 50-90% ALTERED; EUHEDRAL
GRAIN SIZE: MEDIUM; RANGE: VERY FINE TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED, BIOTURBATED
ACCESSORY MINERALS: ORGANICS-02%
OTHER FEATURES: GRANULAR, HIGH RECRYSTALLIZATION
FOSSILS: ECHINOID
NEO

1016.2- 1017.7 DOLOSTONE; GRAYISH BROWN TO YELLOWISH GRAY
10% POROSITY: MOLDIC, FRACTURE; 50-90% ALTERED; EUHEDRAL
GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT

SEDIMENTARY STRUCTURES: MOTTLED, BIOTURBATED
ACCESSORY MINERALS: ORGANICS-02%
OTHER FEATURES: VARIEGATED
FOSSILS: ECHINOID

1017.7- 1019.8	DOLOSTONE; GRAYISH BROWN TO DARK GRAYISH YELLOW 05% POROSITY: FRACTURE, MOLDIC; 50-90% ALTERED; EUHEDRAL GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO FINE GOOD INDURATION CEMENT TYPE(S): DOLOMITE CEMENT SEDIMENTARY STRUCTURES: BANDED, BEDDED ACCESSORY MINERALS: ORGANICS-10% FOSSILS: ECHINOID
1019.8- 1023.7	DOLOSTONE; GRAYISH BROWN TO LIGHT GRAYISH BROWN 05% POROSITY: FRACTURE, MOLDIC; 50-90% ALTERED; EUHEDRAL GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO FINE GOOD INDURATION CEMENT TYPE(S): DOLOMITE CEMENT SEDIMENTARY STRUCTURES: MOTTLED, BIOTURBATED, MASSIVE ACCESSORY MINERALS: ORGANICS-03% OTHER FEATURES: FOSSILIFEROUS, HIGH RECRYSTALLIZATION FOSSILS: ECHINOID NEO
1023.7- 1025	DOLOSTONE; MODERATE YELLOWISH BROWN TO LIGHT OLIVE BROWN 05% POROSITY: FRACTURE, MOLDIC, INTERGRANULAR 50-90% ALTERED; EUHEDRAL GRAIN SIZE: FINE; RANGE: VERY FINE TO MEDIUM GOOD INDURATION CEMENT TYPE(S): DOLOMITE CEMENT SEDIMENTARY STRUCTURES: BANDED, BEDDED ACCESSORY MINERALS: ORGANICS-02% OTHER FEATURES: GRANULAR, HIGH RECRYSTALLIZATION END OF DS-FADES INTO LS
1025 - 1036	CALCARENITE; VERY LIGHT ORANGE TO PINKISH GRAY 05% POROSITY: MOLDIC, INTERGRANULAR GRAIN TYPE: INTRACLASTS, CALCILUTITE 60% ALLOCHEMICAL CONSTITUENTS GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM GOOD INDURATION CEMENT TYPE(S): CALCILUTITE MATRIX SEDIMENTARY STRUCTURES: MASSIVE, BIOTURBATED ACCESSORY MINERALS: ORGANICS-03%, CALCITE-02% OTHER FEATURES: CHALKY, FOSSILIFEROUS FOSSILS: ECHINOID NEO

1036 - 1036.6 CALCILUTITE; VERY LIGHT ORANGE
01% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
15% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: LITHOGRAPHIC; RANGE: LITHOGRAPHIC TO VERY FINE
MODERATE INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: CHALKY

1036.6- 1040.8 CALCARENITE; GRAYISH BROWN TO YELLOWISH GRAY
05% POROSITY: INTERGRANULAR, PIN POINT VUGS, MOLDIC
GRAIN TYPE: INTRACLASTS; 70% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED, BIOTURBATED, MASSIVE
ACCESSORY MINERALS: ORGANICS-05%
OTHER FEATURES: LOW RECRYSTALLIZATION, DOLOMITIC
FOSSILS: ECHINOID, MOLLUSKS
ABOVE INTERVAL GRADES IN + OUT OF DOLOMITIC LS

1040.8- 1042.5 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY
05% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: INTRACLASTS, CALCILUTITE
40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ACCESSORY MINERALS: QUARTZ SAND-02%
OTHER FEATURES: CHALKY
FOSSILS: ECHINOID

1042.5- 1043.1 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY
20% POROSITY: MOLDIC, INTERGRANULAR
GRAIN TYPE: INTRACLASTS, SKELETAL, BIOGENIC
80% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, SPARRY CALCITE CEMENT
SEDIMENTARY STRUCTURES: BIOTURBATED
ACCESSORY MINERALS: CALCITE-05%
OTHER FEATURES: FOSSILIFEROUS
FOSSILS: ECHINOID, MOLLUSKS
NEO

1043.1- 1054.3 CALCARENITE; VERY LIGHT ORANGE TO GRAYISH ORANGE

02% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: INTRACLASTS, CALCILUTITE
25% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BEDDED, LAMINATED, MASSIVE
OTHER FEATURES: CHALKY
FOSSILS: ECHINOID
SOME CALCILUTITE + ISOLATED ECHINOIDS

1054.3- 1057.6 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY
05% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: INTRACLASTS, CALCILUTITE
40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BEDDED, LAMINATED
OTHER FEATURES: PLATY

1057.6- 1059.5 DOLOSTONE; GRAYISH BROWN TO MODERATE YELLOWISH BROWN
02% POROSITY: INTERCRYSTALLINE; 10-50% ALTERED; ANHEDRAL
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT, CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BEDDED, LAMINATED
ACCESSORY MINERALS: ORGANICS-05%
OTHER FEATURES: LOW RECRYSTALLIZATION

1059.5- 1059.9 CALCILUTITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: CALCILUTITE, INTRACLASTS
10% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: CHALKY

1059.9- 1065.1 DOLOSTONE; GRAYISH BROWN TO MODERATE BROWN
05% POROSITY: MOLDIC; 50-90% ALTERED; SUBHEDRAL
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: BEDDED, LAMINATED
ACCESSORY MINERALS: ORGANICS-05%
OTHER FEATURES: MEDIUM RECRYSTALLIZATION, VARIEGATED

1065.1- 1067.6 DOLOSTONE; GRAYISH BROWN TO MODERATE YELLOWISH BROWN
10% POROSITY: MOLDIC; 50-90% ALTERED; EUHEDRAL
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: BEDDED, MOTTLED
ACCESSORY MINERALS: ORGANICS-05%
OTHER FEATURES: HIGH RECRYSTALLIZATION, VARIEGATED

1067.6- 1068.8 CALCARENITE; GRAYISH ORANGE TO VERY LIGHT ORANGE
02% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BEDDED, LAMINATED
ACCESSORY MINERALS: ORGANICS-10%
OTHER FEATURES: VARIEGATED

1068.8- 1069.6 CALCARENITE; VERY LIGHT ORANGE
02% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: CHALKY

1069.6- 1070.3 CALCILUTITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: CALCILUTITE; 10% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO VERY FINE
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: CHALKY

1070.3- 1082.9 CALCARENITE; VERY LIGHT ORANGE
02% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
20% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: CHALKY

1082.9- 1084.2 CALCARENITE; YELLOWISH GRAY TO VERY LIGHT ORANGE
02% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BEDDED, LAMINATED, CROSS-BEDDED
ACCESSORY MINERALS: ORGANICS-05%

1084.2- 1090 CALCARENITE; VERY LIGHT ORANGE
02% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
20% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: CHALKY

1090 - 1092.4 CALCARENITE; VERY LIGHT ORANGE TO YELLOWISH GRAY
02% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
30% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO FINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BEDDED, LAMINATED, MASSIVE
ACCESSORY MINERALS: CALCILUTITE-05%
OTHER FEATURES: CHALKY
GRADES INTO DS

1092.4- 1093.9 DOLOSTONE; GRAYISH BROWN TO MODERATE YELLOWISH BROWN
03% POROSITY: MOLDIC, FRACTURE; 50-90% ALTERED; EUHEDRAL
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: MOTTLED, INTERBEDDED
FOSSILS: ECHINOID

1093.9- 1100.3 CALCARENITE; GRAYISH ORANGE TO GRAYISH BROWN
02% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: BEDDED, INTERBEDDED, LAMINATED

ACCESSORY MINERALS: CALCILUTITE-20%
OTHER FEATURES: DOLOMITIC
GRADES INTO LS W/ DEFORMATION OF SEDIMENTS

1100.3- 1102.8 CALCARENITE; VERY LIGHT ORANGE
02% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: CHALKY

1102.8- 1105.5 CALCARENITE; VERY LIGHT ORANGE
04% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
80% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: GRANULAR

1105.5- 1109 CALCARENITE; VERY LIGHT ORANGE
03% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
70% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: MEDIUM; RANGE: LITHOGRAPHIC TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: GRANULAR

1109 - 1109.5 CALCARENITE; VERY LIGHT ORANGE
07% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: INTRACLASTS, CALCILUTITE
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
FOSSILS: MOLLUSKS

1109.5- 1141 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR, MOLDIC
GRAIN TYPE: INTRACLASTS, CALCILUTITE
40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM

GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: CHALKY
FOSSILS: ECHINOID, MOLLUSKS
NEO. LARGE SECTION OF LS W/ ISOLATED ECHINOIDS + GASTROPODS

1141 - 1142 DOLOSTONE; GRAYISH ORANGE TO YELLOWISH GRAY
02% POROSITY: INTERGRANULAR; 10-50% ALTERED; SUBHEDRAL
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT, CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MOTTLED
OTHER FEATURES: CALCAREOUS

1142 - 1148 CALCARENITE; VERY LIGHT ORANGE
10% POROSITY: FRACTURE
GRAIN TYPE: INTRACLASTS, CALCILUTITE
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: CHALKY
MAJOR VERTICAL FRACTURES

1148 - 1148.7 CALCILUTITE; VERY LIGHT ORANGE TO GRAYISH BROWN
02% POROSITY: INTERGRANULAR
GRAIN TYPE: CALCILUTITE; 15% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: VERY FINE; RANGE: LITHOGRAPHIC TO VERY FINE
POOR INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
OTHER FEATURES: PLATY, PLASTIC, MUDDY

1148.7- 1170.2 CALCARENITE; VERY LIGHT ORANGE
02% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: GRANULAR
FOSSILS: ECHINOID
ABOVE UNIT HAD ISOLATED ECHINOIDS

1170.2- 1170.5 CALCARENITE; VERY LIGHT ORANGE
10% POROSITY: MOLDIC, INTERGRANULAR

GRAIN TYPE: INTRACLASTS, CALCILUTITE
40% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MOTTLED
FOSSILS: MOLLUSKS

1170.5- 1171.2 CALCARENITE; VERY LIGHT ORANGE
02% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
OTHER FEATURES: GRANULAR

1171.2- 1173.2 CALCARENITE; GRAYISH BROWN TO VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR
GRAIN TYPE: INTRACLASTS, CALCILUTITE
60% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO MEDIUM
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX, DOLOMITE CEMENT
SEDIMENTARY STRUCTURES: BANDED, BEDDED, LAMINATED, MOTTLED
ACCESSORY MINERALS: DOLOMITE-25%
OTHER FEATURES: DOLOMITIC, LOW RECRYSTALLIZATION
VARIEGATED
DOLOMITIC BANDED W/ LS-DEFORMED

1173.2- 1177.3 CALCARENITE; VERY LIGHT ORANGE
05% POROSITY: INTERGRANULAR, FRACTURE
GRAIN TYPE: INTRACLASTS, CALCILUTITE
50% ALLOCHEMICAL CONSTITUENTS
GRAIN SIZE: FINE; RANGE: LITHOGRAPHIC TO FINE
GOOD INDURATION
CEMENT TYPE(S): CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: MASSIVE
ONE MAJOR VERTICAL FRACTURE.

1177.3- 1180.7 DOLOSTONE; DARK YELLOWISH BROWN TO YELLOWISH GRAY
05% POROSITY: INTERCRYSTALLINE, INTERGRANULAR
10-50% ALTERED; ANHEDRAL
GRAIN SIZE: FINE; RANGE: MICROCRYSTALLINE TO FINE
GOOD INDURATION
CEMENT TYPE(S): DOLOMITE CEMENT, CALCILUTITE MATRIX
SEDIMENTARY STRUCTURES: BANDED, BEDDED, INTERBEDDED

LAMINATED
ACCESSORY MINERALS: CALCILUTITE-40%
OTHER FEATURES: CALCAREOUS, MEDIUM RECRYSTALLIZATION
VARIEGATED
LS + DS INTERBEDDED

1180.7- 1184	DOLOSTONE; GRAYISH BROWN TO DARK YELLOWISH BROWN 05% POROSITY: INTERCRYSTALLINE, FRACTURE; 90-100% ALTERED EUHEDRAL GRAIN SIZE: VERY FINE; RANGE: MICROCRYSTALLINE TO FINE GOOD INDURATION CEMENT TYPE(S): DOLOMITE CEMENT SEDIMENTARY STRUCTURES: MASSIVE, MOTTLED ACCESSORY MINERALS: ORGANICS-02% OTHER FEATURES: HIGH RECRYSTALLIZATION
1184 - 1204	NO SAMPLES CAVITY TO TD AT 1204.
1204	TOTAL DEPTH

Appendix B

Appendix B

Appendix B

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pert Meadows Ben Tomlinson		

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	8/31/94	Don Thompson

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
			8/31/94

ROMP SITE NAME/NUMBER: TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Kuhlman. Tom used the back-hoe for a sh[illegible]
			time then we loaded it up ~~[illegible]~~
0800	1100	3	Pulled back-hoe to TR-SA.
1100	1230	1 1/2	Met Don on site.
1230	1300	1/2	Lunch.
1300	1400	1	Got time cards ready and discussed site a
			little more.
1400	[illegible]	2	Dug pit.
[illegible]	1745	1 1/4	Loaded back-hoe and moved it to [illegible]
			[illegible] and knocked off.
			Pickup's right door was damaged
			window - [illegible] [illegible] [illegible]. B[illegible]
			a police report and [illegible] was noti[illegible]

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadors Ben Tomlinson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	2B	9/1/94	Jon Thompson

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
			8/31/94

ROMP SITE NAME/NUMBER: TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Cleaned broken glass out of pickup and
			repaired door so window could be [illegible]
[illegible]			[illegible] and drove to site
0900	0930	1/2	Hooked up rig and hooked air compressor
0930	1000	1/2	Started to Sarasota. Got to SR 31 the
			rig had [illegible] broken and the radiator was
			leaking. Took rig back to site and loaded
			[illegible] truck
1000	1200	2	Drove to Sarasota.
1200	1230	1/2	Lunch
1230	1300	1/2	Got a [illegible] and mud pit.
1300	1500	2	Drove to Tampa and [illegible]
			[illegible]

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Meadows Ben Tomlinson		
PROGRESS	TASK: CR	DATE: 9/6/94	SITE HYDROLOGIST: Don Thompson
DEPTH	PROPOSED TOTAL DEPTH: 900'	FORMATION/AQUIFER	DATE MOVED ON SITE: 8/31/94

ROMP SITE NAME/NUMBER: Sarasota / TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Tampa. Truck #400 is not ready, transfer tools to truck #444. Called in.
0800	0930	1 ½	Drove to Sarasota.
0930	1030	1	Went by site, everything is ok. Arranged to get a key for SWP (Sarasota Water Plant) Compound.
1030	1200	1 ½	Drove to ROMP #13 to meet Dave.
1200	1300	1	Dave was on site working on rig, we help some then got ready to transport another load.
1300	1430	1 ½	Started out with water truck, equipment trailer and pipe trailer. Befor we got to SR-31 the truck a O-ring in Hi-Lo shifter blew out and bled the air out of the system. A tire on the pipe trailer came apart. Dave had rig ready so we left the water truck, equipment trailer and pipe trailer for Dave to fix.
1430	1730	3	Transported rig and air compressor to SWP Compound and Secured for the day.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME: CME	CREW: Pat Meadors, Ben Tomlinson		REPORT NO.
PROGRESS	TASK: CR	DATE: 9/7/94	SITE HYDROLOGIST: Don Thompson
DEPTH	PROPOSED TOTAL DEPTH: 900'	FORMATION/AQUIFER	DATE MOVED ON SITE: 8/31/94

ROMP SITE NAME/NUMBER: Sarasota / TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0900	2	Drove from SWP to ROMP #13
0900	0930	½	Called in, hooked up to pipe trailer. Pipe trailer w[ill] have to be pulled slow, all the tires have dryrotted!
0930	1230	3	Mobilized water truck, equipment trailer and pipe trailer to SWP.
1230	1300	½	Lunch
1300	1500	2	Drove to Sarasota to ROMP #13.
1500	1730	2 ½	Mobilized casing trailer to SWP and done for the day

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
CME	Pat Meadors Ben Tomlinson			
PROGRESS		TASK CR	DATE 9/8/94	SITE HYDROLOGIST Don Thompson
DEPTH	PROPOSED TOTAL DEPTH 900'		FORMATION/AQUIFER	DATE MOVED ON SITE 8/31/94

ROMP SITE NAME/NUMBER: Sarasota / TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0900	2	SWP, loaded all the tools and equipment th
			we needed then moved rig to site.
0900	0930	½	Got our paper work read for Don to pick up
0930	1130	2	Set rig up and set up to auger.
1130	1200	½	Lunch.
1200	1300	1	Don came by for paper work and we discuss
			site plans.
1300	1500	2	Had some problems getting the auger rig
			working, we worked on it the rest of the a
			noon.
1500	1600	1	Broke rig down and moved it to SWP
1600	1730	1 ½	Drove to Tampa and knocked off.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Meadors Ben Tomlinson		

PROGRESS	TASK	DATE	SITE HYDROLOGIST
24'	CR	9/12/94	Don Thompson

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
24'	900'		8/31/94

ROMP SITE NAME/NUMBER: Sarasota / TR-SA-1

MILITARY TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Tampa. I went by Brooksville and picked up truck #290 on the way to Tampa.
0800	0930	1 ½	Drove to SWP.
0930	1000	½	Checked all the equipment good. All the gas had ben taken out of the water truck.
1000	1100	1	Move rig from SWP to site and set rig up. Nothing on site has been bothered.
1100	1530	4 ½	Hollow stem augered 24'. 0'-4' = 75%, 4'-9' = 20%, 9'-11½' = 88%, 11½'-14' = 76%, 14'-19' = 100, 19'-21½' = 100%, 21½'-24' = 100%.
1530	1730	2	Thunder ~~storms~~ storms. Rig had to be broke down in the storm. Secured for the day.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Ben Tomlinson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
24½'	C R	9/13/94	Don Thompson

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
49'	900		8/31/94

ROMP SITE NAME/NUMBER: Sarasota / TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	SWP. Checked all equipment and moved to site. Set up rig.
0800	0900	1	Hollow stem augered 2½', 24-21½ = 100%. Adjusted inner barrel. Hit rock at 24½. stopped augering.
0900	1230	3 ½	Went to SWP for water truck and pipe trailer Changed over to NQ. Lunch.
1230	1330	1	Started coring. 24½'. 26½ to 27½ = 100%, 27½ to 29 = 10% 29-34 = 40%. NQ sub wore out.
1330	1430	1	Went to SWP pick up ~~sub~~ sub and replace old sub.
1430	1630	2	Coring 34-39 = 76%, 39-44 = 100%, 44-49 = 70%
1630	1730	1	Moved all equipment back to SWP and secu

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME: CME	CREW: Pat Measters, Ben Tomlinson		REPORT NO.
PROGRESS: 50'	TASK: CR	DATE: 9/14/94	SITE HYDROLOGIST: Tom Thompson
DEPTH: 99'	PROPOSED TOTAL DEPTH: 900'	FORMATION/AQUIFER:	DATE MOVED ON SITE: 8/31/94

ROMP SITE NAME/NUMBER: Sarasota / TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0830	1 ½	SWF. Brok 5's down so water truck and p
			trailer will not have to be moved. SWF's
			compound is getting soft from the rain.
			Moved rig to site and set up.
0830	1400	5 ½	~~And~~ Cored 50'.
			49-54=64%, 59=50%, 64=50%, 69=100%, 74=80%
			79=90%, 84=70%, 89=64%, 94=88%, 99=80%
1400	1500	1	Pulled rods and broke 5's out. Left augers in h
1500	1530	½	Went to SWF for mud mixer.
1530	1700	1 ½	Started mixing mud.
1700	1730	½	Secured site

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadors Ben Tomlinson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	9/15/94	Don Thompson

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
99'	900'		8/31/94

ROMP SITE NAME/NUMBER: Sarasota / TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	SWP. Replaced one tire on the pipe traile
			Moved water truck and air compresser to sit
0800	0930	1 ½	Started mixing mud, hooked Wilden up had
			work on it to get it going. Worked on dril
			reports.
0930	1000	½	Tried to pull augers they are stuck.
1000	1100	1	Went to SWP to get tool box, gas for rig an
			fuel air compresser.
1100	1200	1	Changed over to hollow stem adapter, lunc
1200	1430	2 ½	Storm moved in, we got augers brake free. a
			is raining to hard to work and left a
			in hole to secure it -
1430	1530	1	We broke down in the rain and a
			equipment to SWP.
1530	1730	2	Drove to Tampa, ~~[illegible]~~
			had to go on to Brooksville.

Problems we have had this week.
1. Transporting all equipment morning and afternoon.
2. Equipment trailer not on site
3. Our pick up (#400) with diesel and gas tanks in in shop
4. Storms.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Meaders Ben Tomlinson		

PROGRESS	TASK	DATE	SITE HYDROLOGIST
23'	CR	9/19/94	Don Thompson

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
23'	98'		8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR-SA-1-

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0600	0700	1	Brooksville. Filled out forms for M/L and IA/L, an
			with copies of orders. Picked up VMD#290, gas +
			and talked to Don.
0700	1030	3 ½	Started to Sarasota. Discovered equipment keys
			came off my clip board went back and got them
1030	1230	2	SWP. Moved all equipment to site and setup.
1230	1300	½	Lunch
1300	1400	1	Tried stirring the pit with no success, mixe
			more mud.
1400	1500	1	Pulled augers out and changed over to MI
1500	1600	1	Drilled 23, mostly clay.
1600	1730	1 ½	Thunder storm. Secured site.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Meadors Ben Tomlinson		
PROGRESS 74'	TASK CR	DATE 9/20/94	SITE HYDROLOGIST Don Thompson
DEPTH 97'	PROPOSED TOTAL DEPTH 250	FORMATION/AQUIFER	DATE MOVED ON SITE 8/31/94

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER Pinecrest Park / TR-SA-1 DETAILS OF OPERATIONS
0700	0830	1 ½	Fueled rig. Lowered rods, 5' of fallin, mixed m
			and circulated hole clean. Started adding
			collars and hyd. line on clutch burst.
0830	1200 ~~0900~~	4 ½	Removed clutch hyd. line and had another
			one made up. Was able to drill until
~~1200~~	~~1230~~	~~½~~	~~Dave same.~~
1200	1230	½	Dave repaired brake line, winch
1230	1400	1 ½	Added 2 more collars. Drilling clay and
~~[illegible]~~			is slow.
1400	1500	1	Weld broke on brake-out wrench, Dan got
			it repaired. Had to take compressor for f
1500	1600		Compressor started acting up, but were
			able to T.D. at 97'
1600	1730		Circulated hole clean when secured
			site
			Drilled 74'

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Ben Tomlinson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	9/21/94	Don Thompson

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
97'			8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Lowered rods and circulated hole, figured grout amounts (240 gts)
0800	1000	2	Pulled string out, filled water truck, made up pressure head and moved 90 bags of cement over to the rig.
1000	1200	2	Ran 6" pvc in (100'), ran 90'x1" trimmie inside 6" and connected pressure grout head
1200	1230	½	lunch.
1230	1430	2	Mixed 250 gals of grout (5 barrels), cement 50 bags (47 lb bags), 25 lbs. bentonite
1430	1500	½	Pumped grout.
1500	1730	2 ½	Cleaned up, cleaned up site, broke ~~rig~~ out and paper work. Secured site.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Meadows Ben Tomlinson		
PROGRESS 33'	TASK CR	DATE 9/22/94	SITE HYDROLOGIST Don Thompson
DEPTH 123'	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE 8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Good grout job, pulled grout head off and set up to drill. Grout is 3' down on outsi of casing. mixed 2 bags cement to bri it to surface.
0800	0900	1	Ran 3 collars on string. Tagged grout at 90'.
0900	1000	1	Dave and Bob serviced compresser. We continued to drill with mono pump bu it is not working very good.
1000	1130	1 ½	Shut rig for service, lunch
1130	1300	1 ½	Drilled a total of 33' today. Artesian 103'.
1300	1330	½	Hooked up directair for 10 mins. and cle hole. It took 1 hr. 5 mins for well to recove
1330	1530	2	Broke down and mobilized to SWP.
1530	1730	2	Drove to Brooksville, dropped compres off at Tampa. Secured

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Masters Ben Tomlinson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	9/26/94	Don Thompson

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
123			8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Tampa. Fueled up, water, ice, called in and
			loaded all our equipment on #400.
0800	1000	2	Drove to SWP. (Storming)
1000	1100	1	Storming
1100	1300	2	Mobilized to site and set up.
1300	1430	1 ½	Storm.
1430	1530	1	Rig won't start, worked on it with no
			success. Called in.
1530	1630	1	Done paper work, went over well plans
			with Ben.
1630	1730	1	Got rig started and ran the string
			Secured ~~at~~ site.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CMF	Ben Tomlinson Mark Pike	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	9-28-94	Don Thompson

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
327'			8-31-94

ROMP SITE NAME/NUMBER: Pioneer Park / TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	1130	4½	Arrived on site begin drilling
1130	1230	1	Stop drilling at 302' and started pump test a
			took lunch. well was producing 5 gpm w/ 16' draw dow
1230	1600	3½	started drilling at 302' stop at 327'
1600	1730	1½	started pump test at 327' 5 gals p m
			16.5' draw down

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	~~Ben Tomlinson~~ Mark Pike		
PROGRESS	TASK: CR	DATE: 9-29-94	SITE HYDROLOGIST: Don Thompson
DEPTH: 337'	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE: 8-31-94

ROMP SITE NAME/NUMBER: Pioneer Park IR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	1/2	Arrive on site - work on 2 x 2 pump
0730	0800	1/2	Start pump test producing 5 gpm 15' draw down
0800	0830	1/2	Direct air down the well
0830	0900	1/2	Let well recover from 107' to 3 1/2'
0900	1000	1	Start pump test - w/ 40' of drop pipe 5-6 gpm
			22-24' draw down
1000	100	3	Start drilling at 327', replace air hose unload
			supplies from Murphy. Took lunch
1300	1400	1	Start direct air
1400	1600	2	Broke down drill rods and move equipment
			to water tanks.
1600	1730	1 1/2	Drive to Tampa office.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME: CME	CREW: Ben Tomlinson, Mark Pike		REPORT NO.
PROGRESS	TASK: CR	DATE: 10-3-94	SITE HYDROLOGIST: Don Thompson
DEPTH: 15'	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE: 8-31-94

ROMP SITE NAME/NUMBER: Pioneer Park TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	7:30	1/2	fuel pickup, Ice coolers, call in
7:30	9:00	1 1/2	Drove to Sarasota
9:30	12:30	3 1/2	Move equipment to core hole and set up
1230	1300	1/2	Storming took lunch
1300	1400	1	Break bit off drill collar mix pit
1400	1600	2	Begin to drill
1600	1630	1/2	Rig shut down overheating
1630	1730	1	Resume drilling drilled to 15', leave site

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CMF	Ben Tomlinson Mark Pike		

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	10-4-94	Don Thompson

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
40'	---		8-31-94

ROMP SITE NAME/NUMBER: Pioneer Park TR-SA 1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700			Arrive on site check oil and water on Rig. Called Dave
			and tell him about the ~~ove~~ Rig overheating. Greg
			called me and said to develop the water supply we
			Took out thermostat out of Rig and see if it st
	0800	1	is overheating.
0800			Begin developing water supply well Bob is on his way
			to Repair rig. Put thermostat in Rig still is overheating.
	1200	4	Bob cleaned raidater vent. Rig run a little bit cooler
1200			start to drill at 15', shut down wilden pump on
	1800	6	water supply well
1800	1830		Rig Shuts off overheating again. Finally got r
			to start. Runs Rough pulled up 20ft. Put tools aw
			leaving site.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME: CME	CREW: Dan Tomlinson, Nick Lee		REPORT NO.
PROGRESS	TASK: CR	DATE: 10-5-94	SITE HYDROLOGIST: Don Thopmson
DEPTH: 48'	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE: 8-31-94

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER: Pioneer Park DETAILS OF OPERATIONS
0700	0830	1½	Arrived on site. start to pump out pit.
0830	1400	5½	went to Sebring to pick up backhoe.
1400			Bob replace raidator and water pump start to dril
	1500	1	to see if it overheats runs fine
1500			Dig pits out got backhoe unstuck move
	1830	3½	equipment to compound leave site

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
PROGRESS		TASK	DATE 10-10-94	SITE HYDROLOGIST
DEPTH	PROPOSED TOTAL DEPTH		FORMATION/AQUIFER	DATE MOVED ON SITE

MILITARY TIME TIME LOG		ELAPSED TIME	ROMP SITE NAME/NUMBER
			DETAILS OF OPERATIONS
FROM	TO		
0700	1730		Work at Oaknoll

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
PROGRESS		TASK	DATE 10-11-94	SITE HYDROLOGIST
DEPTH	PROPOSED TOTAL DEPTH		FORMATION/AQUIFER	DATE MOVED ON SITE

MILITARY TIME TIME LOG		ELAPSED TIME	ROMP SITE NAME/NUMBER
FROM	TO		DETAILS OF OPERATIONS
0700	1730		work at oak knoll

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Ben Tomlinson Robert Parker	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	10-12-94	Don Tompson

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
97'			8-31-94

ROMP SITE NAME/NUMBER

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Arrive on site, move equipment on site
0800			went to fuel A/C but the pump on truck was
			not working So I took A/C to gas station and
	0900	1	fuel it up
0900	0930	1/2	Flush out hole Rig running rough
0930	1000	1/2	Took plugs out and clean them.
1000	1700	7	Rig runs fine. Start to drill at 48' to 97'
1700	1730	1/2	wilden pump broke down
			trying to fix air leak.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CMF	Ben Tomlinson Robert Parker	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
		10-13-94	Don Thompson

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
99'			8-31-94

ROMP SITE NAME/NUMBER

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700			Drilled one foot, let hole clean up, working
	0900	2	on wilden pump
0900	0930	1/2	Bob is putting plugs and wires on rig motor
0930	1030	1	Start to pull rods out
1030	1230	2	started to lighting
1230	1330	1	~~Set~~ casing Greg and his sidekikk Tab ~~[illegible]~~ shows
1330	1500	1 1/2	Muph shows up with grout drum, start to G[illegible]
1500	1730	2 1/2	Finish grouting clean up drive home.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Ben Tomlinson Kyle Champion		
PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	Oct 17, 1994	Don Thompson
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
98'			Aug 31, 1994

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER DETAILS OF OPERATIONS
0700	0730	1/2	Arrived in Tampa, call in, load Generator, ice coolers.
0730	0900	1 1/2	Leave to go to Sarasota
0900			Arrived on site. Take A/C to gas station and
	0930	1/2	fuel up.
0930			Run trimmie on the outside of 12" casing and tag
	1000	1/2	cement. Cement is at 64'
1000			Rig up to grout thru the Wilden pump. Go Get l
			of water. Took battery out of rig truck motor and
	1130	1 1/2	put it in water truck. Battery from water was stolen
1130	1200	1/2	Lunch
1200	1500	3	Mix 90 bags of grout and pumped down outside of
1500	1800	3	Set 4" steel casing to 97'. Leaving site.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Ben Tomlinson Pat Meadors	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
25'	CR	10-24-94	Don Thompson

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
119'			8-31-94

ROMP SITE NAME/NUMBER: Pioneer Park TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	1/2	Arrived in Tampa & call in
0730			Drive to Sarasota, go get A/C and take it to gas station &
	0900	1 1/2	fuel it up
0900	1130	2 1/2	Set up water supply well. to the water truck
1130	1400	2 1/2	Add NQ Rods to core & take lunch
1400	1730	3 1/2	Begin coring at 94' to 119'. Leave Site
			Depths Ft %
			94 – 99 30%
			99 - 104 64%
			104-109 52%
			109 - 114 83%
			114'-119 98%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Ben Tomlinson Pat Meadors	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
55'	CR	10-25-94	Don Thompson

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
174'			8-31-94

ROMP SITE NAME/NUMBER: Pioneer Park TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0900	2	Arrived on site begin coring at 119'
0900	0930	1/2	Stop coring at 129' begin to airlift well
0930	1130	2	Stop airlifting and begin coring at 129'
1130	1200	1/2	stop coring at 149' Take lunch
1200	1300	1	let water truck fill up
1300			Start coring at 149'. Take A/C to gas station
	1600	3	fill up.
1600	1630	1/2	Stop coring at 169' Let water ~~fill up~~ truck fill up.
1630	1700	1/2	Begin coring at 169'
1700	1730	1/2	stop coring at 174' Let water truck fill up.
1730			leave site

Depths ft	%	Depth ft	%
119-124	93%	149-154	70%
124-129	80%	154-159	100%
129-134	74%	159-164	92%
134-139	0%	164-169	100%
139-144	50%	169-174	94%
144-149	84%		

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CMF	Ben Tomlinson Pat Meadors	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
40'		10-26-94	Don Thompson

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
214'			8-31-94

ROMP SITE NAME/NUMBER: Pioneer Park

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	½	Arrived on site let water truck fill up.
0730	1130	4	Begin coring at 174'
1130			Stop coring at 194' Flush hole out to take
	1200	½	water sample.
1200	1400	2	Begin to airlift. Take lunch. Take water sample
1400	1630	2½	Start coring at 194'
1630			Stop coring at 214' Let water truck fill up w
	1730	1	water and let lighting pass us by.
1730			leave site.
			Depths Ft %
			174-179 80%
			179-184 86%
			184-189 100%
			189-194 80% Water Sample.
			194-199 50%
			199-204 78%
			204-209 96%

209-214 97%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Ben Tomlinson Pat Meadors	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
55'		10-27-94	Ted Gates

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
269'			8-31-94

ROMP SITE NAME/NUMBER: Pioneer Park TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700			Arrived on site. Take A/C to gas station and f
	0800	1	it up. fuel up Rig
0800	1130	3½	Begin coring at 214'
1130	1200	½	Stop coring at 249' Take Lunch
1200	1500	3	Begin coring at 249'
1500			Stop coring at 269'. Take A/C to compoun
	1530	½	put tools away. clean up site.
1530			Drive to Tampa

Depths Ft	%	Depths ft	%
214-219	100%	244-249	91%
219-224	100%	249-254	86%
224-229	96%	254-259	81%
229-234	46%	259-264	100%
234-239	98%	264-269	97%
239-244	100%		

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Ben Tomlinson Pat Meadors		

PROGRESS	TASK	DATE	SITE HYDROLOGIST
25'	CR	10-31-94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
294'			8-31-94

ROMP SITE NAME/NUMBER: Pioneer Park TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700			Arried in Tampa, Call in, Fuel truck, ice coole
	0800	1	and wash pick up.
0800	0930	1½	Drive to Sarasota.
0930			Arrived in Sarasota. Go to compound and pick
			up A/C set up to take water level reading o
	1130	2	core hole. let water truck fill up.
1130	1200		Lunch
1200	1630	4½	Begin coring at 269'. At 287' coring real
1630	1730	1	Stop coring at 294'. Start airlifting
1730			leave site
			Depths %
			269 - 274 81
			274 - 279 100
			279 - 284 86
			284 - 289 56
			289 - 294 96

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Ben Tomlinson Pat Meadors	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
30'	CR	11-1-94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
324'			8-31-94

ROMP SITE NAME/NUMBER: Pioneer Park TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	1/2	Arrived on site. Take water sample at 294'
0730			Begin Coring at 294'. Loss 100% circ at 295' coring
	1200	4 1/2	slows at 307'
1200	1430	2 1/2	Stop coring at 319'. Begin to airlift well. Take lun
1430	1500	1/2	Stop airlifting. Take water sample at 310'
1500			Begin coring at 319'. Had trouble with cuttings j
			the inner barrel. Pull barrel back out. Clean barrel n
			back down hole. Resume coring at 319'. coring is
	1700	2	slow
1700	1730	1/2	Stop coring at 324'. Begin to airlift.
1730			Leave site.
			Depths %
			294 - 300 48
			299 - 304 17
			304 - 309 90
			309 - 314 0
			314 - 319 15
			319 - 324 42

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Ben Tomlinson Pat Meadors	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
50'		11-2-94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
374'			8-31-94

ROMP SITE NAME/NUMBER: Pioneer Park TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	1/2	Arrived on site. Fuel rig.
0730	0800	1/2	Got water level. Water level is at 2'3" inside of 4"
0800	1300	5	Begin coring at 324'
1300	1330	1/2	Stop coring at 349. Take lunch
1330			Pull rods out. Replace bits w/ new one, landing ring, a
	1530	2	centeralizer ring. Run rods back in.
1530	1730		Begin coring at 349'
1730			Stop coring at 374. Leave site.
			Depths % Depths %
			324-329 78 354-359 50
			329-334 90 359-364 50
			334-339 46 364-369 70
			339-344 84 369-374 26
			344-349 24
			349-354 96

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Ben Tomlinson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
30'	CR	11/7/94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
434	1000'	Hawthorn	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR 8A-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0945	2 3/4	Tampa: Hearing evaluation and respiratory protection testing.
0945	1115	1 1/2	Drove to site.
1115	1130	1/4	On site. Water level + 4.10'.
1130	1200	1/2	Lunch
1200	1230	1/2	8' of fall in, circulated hole clean.
1230	1600	3 1/2	Coring. amount cored 30'
1600	1730	1 1/2	Air lift and sample. Secure site.
			409' = 28% and bag sample / 424' = 40%
			414 = 18% " " " / 429 = 36%
			419 = 40% / 434 = 82%

SMFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Ben Tomlinson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
40'	CR	11/8/94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
474	1000'	Hawthorn	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-7

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Water level +4.15. filled pickup with gas and diesel & fueled everything up
0800	1100	3	Cored 20'
1100	1230	1 1/2	Air lift and sampled.
1230	1530	2	Cored 20'
1530	1630	1	Air lift. Secured site
1630	1730	1	Adm./L, to ~~site~~ note
			Recoveries 439' = 76% ; 459' = 86%
			444' = 50% ; 464' = 66%
			449' = 30% ; 469' = 30%
			454' = 72% ; 474' = 31%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Ben Tomlinson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
30'	CR	11/9/94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
504	1000'	Hawthorn	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0930	2 1/2	Fueled up; Water level +4.12, Air lifted and sampled. 25 gpm
0930	1430	5	Cored 30'. Having problems with recovery formation is like 1" crushed stone and will not stay in inner barrel.
1430	1600	1 1/2	Air lifted hole clean and set up for a water level Monday. Secured site and to air compresser to S.W.P.
1600	1730	1 1/2	Drove to Tampa and secured for the weekend
			Recovery: 479 = 83%
			484 = 29% and bag
			489 = 62%
			494 = 22% and bag
			499 = 26% and bag
			504 = 82%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Ben Tomlinson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Ø	CR	11/14/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
	Reaming 498'		8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Tampa. Fueled up ice, water and called in
0800	0930	1 ½	Drove to site. Picked up air compressor a
			SWP
0930	1130	2	Water level + 4.9, air lifted for final sam
			at this depth and sampled. 32 gpm
1130	1400	2 ½	Tripped NQ out and broke all 5"s out. (50
1400	1730	3 ½	Set for rig. Broke HW casing and tr
			95' out. Broke sub off collar, tripped 3
			collars in with 5 7/8 bit and set Widden
			for drill pump.
			Capped well and secured.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Ben Tomlinson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
170'	CR	11/15/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
260'	498'		8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Storming.
0800	1600	8	Reamed 170'. (depth 260')
1600	1700	8 ½	Storm moved in. Circulated hole clean, pulled up 40', capped well and secured.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Ben Tomlinson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
180'	CR	11/16/94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
440'	498'		8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Storming.
0800	1200	4	Reamed on water till cuttings became
			a problem then started reaming on
			mud.
1200	1645	4 3/4	Reamed the rest of the day without problem
			on mud.
1645	1730	3/4	Circulated hole clean, pulled up 40' and
			secured.
			Reamed 180', Depth 440

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Ben Tomlinson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
58'	CR	11/17/04	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
498	498' TD		8/31/04

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Fueled up, done time cards and travel to...
0800	1230	4 ½	Reamed to TD 498', circulated hole clea[n]
			Nut on head ram came off, we repaired it
1230	1530	3	Tripped rods and collars out.
1530	1600	½	Put a stand pipe ~~on~~ well and secured.
1600	1730	1 ½	Dropped air compressor off at 6410 and
			drove to Tampa. Secured
			Reamed 58', Depth 498'

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Minestore Ben Tomlinson		

PROGRESS	TASK	DATE	SITE HYDROLOGIST
5'	CR	11/28/94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
509'	1000'		8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	½	Tampa. Fueled up, ice, water and called in
0730	0900	1 ½	Drove to site.
0900	1300	4	Set up to trip 504' of HW casing in. Fueled
			and air compressor up.
			HW casing was set at 501'
1300	1600	3	Switched over to NQ, readjusted inner barrel
			hooked up water supply, moved casing trailer
			out of the way and moved rod trailer in
			position to ~~trip~~ trip 504' of NQ in.
1600	1730	1 ½	Cored 5'. 509' = 30% + bag. Had some
			problems with core blockage. Circulated
			hole clean and set up for a water level
			in the morning. Secured site.
			Rick came by and picked up 2 X 2
			adaptors 2" x 1½, 2 - 2" hoses, 2 barrels and
			1 - 18" pipe wrench

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Ban Tomlinson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
20'	CR	11/29/94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
529'	1000'	Suwannee	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	1/2	Water leve +5.4, fueled up.
0730	1100	4 1/2	Cored 20'. Having a lot of problems wit
			core blockage. 514' = 0% bag, 519' = 3% ba
			524' = 0% bag, 529' = 4% bag.
1100	1530	4 1/2	Chain coupling on Mono pump broke, ca
			Dave. Rebuilt water swivel. Air lifted f
			sample, the cond. wouldnt stabilize.
			Took sample. Cond. 2870
1530	1730	2	Pulled rods to check outer barrel.
			Dave has nt called me back about chain
			coupling. Secured site.
			Outer barrel had blockage (chirt)

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Ben Tomlinson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
40'	C R	11/30/94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
569'	1000'	Suwannee	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0900	2	Water level + 4.9'. Cleaned water truck out a filled it for Kevin. he need to borrow it for a well rehab.
0900	1100	2	Tripped NQ rods in and circulated hole.
1100	1200	1	Cored 20'.
1200	1330	1 ½	Dave replaced the mono pumpdrive chain coupling.
1330	1530	2	Cored 20'.
1530	1730	2.	Air lifted and sampled. During air lift and for the rest of the afternoon we prepare rig to move to L.WRY. Secured.
			Recovery 534' = 48%
			539 = 96%
			544 = 24%
			549 = 36%
			554 = 40%
			559 = 22%
			564 = 34%
			569 = 0% bag

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadors Ben Tomlinson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	12/1/94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
	—		12/1/94

ROMP SITE NAME/NUMBER: LWRY

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0900	2	Battery cable ends were stolen, parts house
			opened at 0800.
0900	1000	1	Fueled rig and drove to Riverview.
1000	1700	7	Set up to 1" pvc. 1" would only go to 50'. We
			in with 1/2" pvc and worked it to 520.
1700	1900	2.	Cement truck came and pumped grout til
			1900. (5 yds.)
1900	2000	1	Trimmie plugged off. (~~[illegible]~~ pumped all but
			20 gals.). Cleared plug out of trimmie
			cleaned up and drove to Tampa.
			Secured
			2 1/2 O.T.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME: CME	CREW: Pat Meadows, Ben Tomlinson	REPORT NO.
PROGRESS	TASK: CR / DATE: 12/05/94	SITE HYDROLOGIST: Rick Lee
DEPTH / PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE: 12/1/94

ROMP SITE NAME/NUMBER: LWRY

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	½	Tampa. Called in, ice and water
0730	0800	½	Drove to LWRY
0800	1030	2 ½	Started working ½ tremie in but coul
			get passed 80'.
1030	1200	1 ½	Cement truck on site. Pumped 5 yds, no ret
			Cleaned up and ordered another truck for
			tomorrow morning.
1200	1500	3	Ran overshot down well to 700'. No grav
			Went to Sarasota and picked up air comp
1500	1730	2 ½	Started developing well.
			Secured site.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows, Ben Tomlinson, Travis ~~[illegible]~~ Lowe	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	12/6/94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
			12/1/94

ROMP SITE NAME/NUMBER: LWRV

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0830	1 1/2	Set to pump grout.
0830	1030	2	Cement truck on site. Pumped 5 yds of grout down
			hole. Cement grout came to surface.
1030	1130	1	Cleaned up
1130	1200	1/2	Lunch
1200	1500	3	Started developing well. Tagged grout a
			16'; 15 bags brought grout to the surface.
			Load all pvc, equipment used on site and tra
1500	1730	2 1/2	Transported water truck, air compressor a
			pick to Sarasota. Rig is being used to hol
			tention on 4" pvc casing.
			Secured.
			Tomorrow site clean up will be completed
			and rig transported to Sarasota.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadors Ben Tomlinson Marvin Love	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
40'	CR	12/07/94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
609'	1000'		8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0900	2	LWRV. Finished cleaning up site and brake rig do
0900	1000	1	Drove to Sarasota.
1000	1300	3	Set rig up, got water level +5.4' and filled pit
			with water. Lunch.
1300	1430	1 1/2	Cored 20'.
1430	1500	1/2	Air lifted cuttings out.
1500	1630	1 1/2	Cored 20'.
1630	1730	1 1/2	Air lifted but didn't sample, we will sam
			in the morning.
			Secured.
			Recoveries 574 = 16%
			579 = 10%
			584 = 34%
			589 = 14%
			594 = 32%
			599 = 40%
			604 = 40%
			609 = 12%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Ben Tomlinson Travis Love	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	12/08/94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
	1000'		8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR 8A-1

MILITARY TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	1100	4	Fueled up. Calibrated and air lifted. Cond. would
			not stabilize between 3100 and 5000. Air
			lifting was causing too much mixture. We
			have to air lift the proper volume out then
			wait for artesian to clear one volume of
			the rods. Cond. 5080
1100	1230	1 1/2	Cored 20'
1230	1530	3	Air lifted cuttings and lunch. Cond. would
			stabilize. Sampled and secured site.
1530	1730	2	Drove to Brooksville to turn paper work
			in. Secured.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Meadows Travis Love		
PROGRESS	TASK CR	DATE 12/12/94	SITE HYDROLOGIST Rick Lee
DEPTH 629'	PROPOSED TOTAL DEPTH 1000'	FORMATION/AQUIFER	DATE MOVED ON SITE 8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	½	Tampa. Fueled up, called in and ice water.
0730	0900	1 ½	Drove to site, picked up air compressor at SWP.
0900	1000	1	Water level + 4.05, ran sampler temp 25.4°C.
			cond. 2980. let artesian flow. Worked around
			site and started reorganizing equipment
			trailer.
1000	1230	2 ½	Ran sampler again temp. 26.6, cond 3440.
			Continued working in equipment trailer. Lun
1230	1600	3 ½	Rep from TAM dist. came to demonstrate a new
			NQ wire line packer. Greg and Lloyd were
			on site for demonstration.
1600	1730	1 ½	Had to postpone part of the demonstration
			because the packer wouldn't pass through
			a squeeze where the head jaws grip
			core rods. Secured site.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meusters Travis Lore	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	12/13/94	Rich Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
629'	1000'		8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0900	2	Fabricated an adaptor so the packer could
			tripped in.
0900	1230	3 ½	Inflated packer 3 times above ground and
			reset it make sure it was working prope
			before it was tripped in.
1230	1300	½	Lunch
1300	1730	4 ½	Tripped packer in, it hungup at 480'.
			Tripped packer out, Tripped 480' of rods out
			replaced lead rod and made sure packer w
			go to bottom. Tripped rods in when tripp
			packer in
			Packer wouldn't inflate. We tried sever
			things but worked. Tripped packer o
			completely broke it down and found m
			flakes from the rods had plugged the
			inflating ports.
			Secured.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Travis Love	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
40'	CR	12/20/94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
684'	1000'		8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0830	1 1/2	Water level + 4.13. Went to hardware store
			and bought allen wrenches and pushers for
			packer
0830	1130	3	Cored 30'
1130	1300	1 1/2	Air lifted cuttings, adjusted core barrel and lunch
1300	1500	2	Cored 25'
1500	1730	2 1/2	Air lifted for sample. Packer deflated during
			air lift. Broke packer down and found cut.
			We will sample after the holidays.
			644 = 60%
			659 = 32%
			664 = 32%
			669 = 35%
			674 = 70%
			679 = 58%
			684 = 95%
			689 = 76%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows, Thomas Lore	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Ø	CR	12/15/04	Ricks Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
624	1000'		8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	1300	6	Brooksville. Paper work, discussion on the use
			of the new wire line packer and program.
			Lunch.
1300	1730	4 1/2	Utility Service Meeting.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows, Travis Lore	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
20'	CR	12/19/94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
640'	1000		8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Hampa. Dead battery in pickup, had the shop check it out. Called in fuel, ice and water
0800	0930	1 1/2	Drove to site, picked up air compressor at SWO.
0930	1030	1	Water level +4.13, fueled everything on site and set up to core.
1030	1230	2	Cored 20'
1230	1600	3 1/2	Air lifting, ~~sample~~ cuttings, set packer and air lifted till cond stable when sampled.
1600	1730	1 1/2	Pulled packer and broke it down completely. Secured.
			634 = 70%
			639 = 100%
			644 = 50%
			649 = 60%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Travis Lore	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
40'	CR	12/20/94	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
684'	1000'		8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0830	1 ½	Water level + 4.13. Went to hardware store
			and bought allen wrenches and pushers for
ø			packer
0830	1130	3	Cored 20'
1130	1300	1 ½	Air lifted cuttings, adjusted core barrel and lunch
1300	1500	2	Cored 20'
1500	1730	2 ½	Air lifted for sample. Packer deflated during
			air lift. Broke packer down and hammered it
			We will sample after the holidays.
			649 = 60%
			654 = 32%
			664 = 32%
			669 = 38%
			674 = 70%
			679 = 58%
			684 = 98%
			689 = 76%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadors Travis Love	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
0	CR	12/21/94	Kirk Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
684'	1000'		

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	1730	10 ½	Transported rig, water truck, & welders pick-up to Brooksville for maintenance. Scoured.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Meadows Travis Lore		

PROGRESS	TASK	DATE 12/21/94 thru. 1/10/95	SITE HYDROLOGIST Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			Rig will be at Brooksville for maintenance
			for the following dates 12/21/94 to
			01/10/95

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME: CME	CREW: Pat Meadows, Travis Lore		REPORT NO.
PROGRESS	TASK: CR	DATE: 1/17/95	SITE HYDROLOGIST: Rick Lee
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE: 8/31/04

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Brooksville. Picked up #400, ice, water
			and fuel. Discussed packer problems.
0800	1030	2 1/2	Drove to site.
1030	1230	2	Water level. [illegible] loaded [illegible] has gone
			for more packer test and cut some packer
			parts.
1230	1300	1/2	Lunch
1300	1730	4 1/2	Tested packer above ground, we found the
			band checks weren't seating properly. Installed
			packer down hole and inflated, packer
			deflated. Pulled it and broke it down, found
			nothing under the band check. We will
			try it again tomorrow. Secured.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Meadows Travis Lore		
PROGRESS	**TASK**	**DATE**	**SITE HYDROLOGIST**
	CR	1/11/95	Rick Lee
DEPTH	**PROPOSED TOTAL DEPTH**	**FORMATION/AQUIFER**	**DATE MOVED ON SITE**

MILITARY TIME TIME LOG		ELAPSED TIME	ROMP SITE NAME/NUMBER Pioneer Park / TR SA-1
FROM	TO		DETAILS OF OPERATIONS
0700	1730	10 1/2	Transported rig, water truck, welder
			flat bed trailer and pick up to Sarasota
			from Brooksville (2 trips)

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Meadows Travis Love		
PROGRESS	TASK CR	DATE 1/12/95	SITE HYDROLOGIST Rick Lee
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE 8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	1300	6	Set up rig and equipment for coring
			water level +4.4. Built a brace to support
			the break out wrench. Lunch
1300	1500	2	Set packer. Packer deflated. Pulled
			packer out and started running some
			test on it to try and determine what
			is causing it to deflate.
1500	1730	2 1/2	Drove to Brooksville and serviced.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
CME	Pat Meadows Travis Lore			
PROGRESS 25'		TASK CR	DATE 1/18/95	SITE HYDROLOGIST Rick Lee
DEPTH 714'	PROPOSED TOTAL DEPTH 1000'		FORMATION/AQUIFER Suwannee	DATE MOVED ON SITE 8/31/95

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER: Pioneer Park / TR SR-1 DETAILS OF OPERATIONS
0700	1030	3 1/2	had some vandalism, had to replace 1/2" pvc
			air line. Air lifted hole clean, set packer and
			got sample. Packer didn't stay inflated. B
			packer down and found some cutting under
			sand check. Set up to core.
1030	1300	2 1/2	Cored 20'
1300	1500	2	Air lifted hole, lunch, worked on packer an
			inflated it down hole. Packer deflated. W
			took a water sample and worked on pa
1500	1730	2 1/2	Cored 5'.
			Barrel didn't latch, spent the rest of
			the afternoon cleaning core out of rod
			Secured
			695 = 40%
			699 = 88%
			704 = 54%
			709 = 58%
			714 = 18% + bag

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Travis Lore	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
15	CR	1/19/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
729'	1000'	Suwannee	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0830	1 ½	Fueled up, water level +5.93, work on packer and set up to core.
0830	1200	3 ½	Cored 15'. Cored into some hard fractured dolomite ~~[illegible]~~ that caused problems with core blockage.
1200	1430	2 ½	Air lift and sample. Secured site.
1430	1530	3	Went to TR SA-3 to see what type s[illegible] proof will be required. Drove to [illegible] to drop #400 off and pick Speed-stars time cards then drove to Brooksville and secured.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME: CME	CREW: Pat Meadows, Travis Lore		REPORT NO.
PROGRESS: Ø	TASK: CR	DATE: 1/23/95	SITE HYDROLOGIST: Rick Lee
DEPTH: 729'	PROPOSED TOTAL DEPTH: 1000'	FORMATION/AQUIFER: Ocala	DATE MOVED ON SITE: 8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	½	Tampa. Fueled up water, ice and called in.
0730	0900	1 ½	Drove to site.
0900	1000	1	Water level + 5.90. Cleaned up the Port-a-let,
			reattached wiring to trailer lights (shutters)
			Both had some vandalism.
1000	1815		Two factory reps from Baum that came solve
			packer problems. We tested packer the rest
			of the day.
			Secured site.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Travis Lore	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
30'	CR	1/24/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
759'	1000'	Ocala	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0930	2 ½	Broke packer completely down. Factory rep
			feel that the head check area is the problem
			and are going to take it back with them
			for redesign
0930	1100	1 ½	Set up to core and lowered ~~[illegible]~~ rods.
			Cored 10'. Had a change in cond.
1100	1300	2	Air lifted till cond stabilized. Sampled.
			gpm 30, Cond. 4540, temp 27.1
1300	1330	½	Lunch
1330	1600	2 ½	Cored 20'.
1600	1730	1 ½	Air lifted but cond. has not stabilized, we
			will sample in the morning.
			Secured.
			734 = 80%
	A.L., Sam		→ 739 = 48% } high T
			744 = 50%
			749 = 48%
			754 = 90%
			759 = 73%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows / Travis Lovel	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
40'	CR	1/25/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
799'	1000'	Ocala	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0930	2 1/2	Water level + 5.65, fueled up and air lifted till
			and stabilized. Sampled
0930	1130	2	Cored 20'
1130	1200	1/2	Air lifted cuttings and lunch.
1200	1300	1	Cored 20'
1300	1530	2 1/2	Air lifted. Wire line is starting to part, we
			removed old wire line and replaced with
			1100' of new.
			Secured site.
			764 = 92%
			769 = 90%
			774 = 54%
			779 = 50%
			784 = 56%
			789 = 100%
			794 = 100%
			799 = 60%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME: CME	CREW: Pat Meadors, Travis Lore		REPORT NO.
PROGRESS	TASK: CR	DATE: 1/21/05	SITE HYDROLOGIST: Rick Lee
DEPTH	PROPOSED TOTAL DEPTH: 1000'	FORMATION/AQUIFER: Ocala	DATE MOVED ON SITE: 8/31/04

ROMP SITE NAME/NUMBER: Pioneer Park / TRAS-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0930	2 ½ hr.	Water level +5.52, air lifted till cond. stabiliz
			and sampled.
0930	1030	1	Cored 10'.
1030	1200	1 ½	Broke the mast over to do a temporary
			repair on wire line pulley - Lunch
1200	1300	1	Cored 10'
1300	1330	½	Air lift cuttings.
1330	1530	2	Cored 20'.
1530	1600	½	Air lifted cuttings and secured site.
1600	1730	1 ½	Drove to Tampa and secured for the weekend
			804 = 100%
			809 = 100%
			814 = 100%
			819 = 100%
			824 = 98%
			829 = 100%
			834 = 100%
			839 = 100%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Travis Lore	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
20'	CR	1/30/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
859'	1000'	Ocala	8/31/95

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Brooksville, picked up veh #290, fuel, ice and water. Talked to Dave Fancher about rig repair
0800	1030	2 ½	Went by Tampa to pick up tools on the way to site.
1030	1430	4	Water level +5.8. Raining hard, air lifted for sample. Rick will be a little late because of meeting in Brooksville.
1430	1630	2	Cored 20'
1630	1730	1	Airlifted cuttings and secured site.
			844 = 96%
			849 = 34%
			854 = 100%
			859 = 88%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Travis Lore	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
60'	CR	1/31/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
919'	1000'	Ocala	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	½	Water level +5.67
0730	1030	3	Cored 20'
1030	1230	2	Air lifted sampled
1030	1500	2 ½	Cored 20'
1500	1530	½	Air lifted cutting
1530	1700	1 ½	Cored 20'
1700	1730	½	Air lifted cutting and secured. We are at a sample point, we well sample the morning
			864 = 100 %
			869 = 100
			874 = 100
			879 = 100
			884 = 100
			889 = 100
			894 = 96
			899 = 100
			904 = 85
			909 = 100
			914 = 100
			919 = 82

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
CME	Pat Meadors Travis Lore			
PROGRESS 30'		TASK CR	DATE 2/1/95	SITE HYDROLOGIST Rick Lee
DEPTH 949	PROPOSED TOTAL DEPTH 1000'		FORMATION/AQUIFER Ocala	DATE MOVED ON SITE 8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR 3A-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	1030	3 ½	Water level +5.74. Air lifted and sampled
			while Dave worked on rig.
1030	1300	2 ½	Dave finished with rig and serviced
			air compressor.
			Cored 5'. Dave ran in to problems
			with the air compressor's electoral
			system. He made a temporary repair
~~1300~~	~~1400~~		so we could core.
1300	1400	1	Transfer pump for fuel on #290 went out
			We siphoned fuel to fill rig.
1400	1530	1 ½	Cored 15'
1530	1600	½	Air lifted cuttings
1600	1700	1	Cored 10'
1700	1730	½	Air lifted cuttings and secured.
			924 = 100% 939 = 100%
			929 = 100% 944 = 98%
			934 = 89% 949 = 100%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Meadors Travis Lore		
PROGRESS 15'	TASK CR	DATE 2/2/95	SITE HYDROLOGIST Rick Lee
DEPTH 964'	PROPOSED TOTAL DEPTH 1000'	FORMATION/AQUIFER Ocala	DATE MOVED ON SITE 8/31/94

ROMP SITE NAME/NUMBER Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	½	Water level +5.66
0730	0800	½	Cored 5'. Formation change, we need to sample.
0800	1000	2	Dave works on compressor but it is a problem. We will have to take it by dealer.
1000	1130	1 ½	Air lifted and sampled.
1130	1300	1 ½	Cored 10'
1300	1400	1	Air lifted cuttings, we will sample Monday
1400	1630	2 ½	Went by TR SA-3 to start planning site layout. Then took our air compressor to the dealer's shop in Tampa and dropped it off.
1630	1730	1	Drove from Tampa to Brooksville and took #290 in. Secured.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadors, Travis Lane	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
10'	CR	02/06/95	Ruth Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
994'	1000'	Ocala	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park

FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0830	1 ½	Travis started in Brooksville so he could flag
			a truck down if needed. I went to survey
			for some help in locating the markers on
			TR SR-3. Travis had to bring a truck down
0830	1100	2 ½	Went by Air Centers of Florida and picked up
			our compressor, then drove to site.
1100	1330	2 ½	Water level +5.72. Rig cab was broke into.
			The wing window was broken but nothing
			seems to be missing.
1330	1430	1	Rick on site, took a water sample and
			finished police report. (case #95-007899)
1430	1630	2	Cored 10' hard dolomite. 969 = 100 % 974 = 100 %
1630	1730	1	Rods bound. Cored into a small area of sand.
			We were able to air lift hole clean. Sand

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Meadows Travis Lore		
PROGRESS 20'	TASK CR	DATE 2/7/95	SITE HYDROLOGIST Rick Lee
DEPTH 994'	PROPOSED TOTAL DEPTH 1000'	FORMATION/AQUIFER Ocala	DATE MOVED ON SITE 8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0830	1 1/2	Water level +6.05. Fueled rig by siphoning gas
			out of #090's aux. tank.
0830	1100	2 1/2	Cored 10'. Very hard dolomite.
1100	1500	4	Air lifted. Assembled packer, ran it and
			redressed it 2 times we are still having
			same problem. Took regular sample.
1500	1700	2	Cored 10'.
1700	1730	1/2	Air lifted cuttings. Secured

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Travis Lore	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	2/8/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
	1000	Avon Park	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Water level +6.22 Set up to core.
0800	1000	2	Cored 10'. Very hard dolomite.
1000	1530	5 ½	Air lifted. Ran packer 5 times with success,
			Called in. We spent most of the time r[illegible]
			and deflation problems but I think we
			have the problem solved.
1530	1700	1 ½	Cored 10'.
1700	1730	½	Air lifted cuttings and secured.
			999 = 100%
			1004 = 100%
			1009 = 100%
			1014 = 100%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Masters Travis Lore		

PROGRESS	TASK	DATE	SITE HYDROLOGIST
5'	CR	2/9/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1019'	1000'	Avon Park	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	1030	3 1/2	W.L. + 10.88. Set up manometer and set
			solmate. Went for fuel in #90, transferred to
			rig by siphoning.
1030	1130	1	Cored 5'. 1019' = 96%. Change in formation.
1130	1500	4 1/2	Hydrologist needs to sample. Air lifted cutt
			Tested packer for about 3 hrs. Packer functi
			properly. Sampled. Water level + 12.08
1500	1730	2 1/2	Secured site and drove to Brooksville.
			Secured.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Travis Love	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
10'	CR	7/13/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1029'	1000'	Avon Park	8/31/94

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1 DETAILS OF OPERATIONS
0700	0745	3/4	Tampa. Truck #400 is ready. Fueled up. ice, water and called in.
0745	0930	1 3/4	Drove to site
0930	1030	1	water level + 11.05. Reloaded tools and other items that belonged on pick up. Fueled every thing up.
1030	1100	1/2	Took 2 water samples
1100	1200	1	Cored 5'. Had to fill water supply.
1200	1430	2 1/2	Took water sample. Started to core, and rod bound up. Worked them free and cleaned hole good. No more problems.
1430	1530	1	Cored 5', Cond. increased to 9100. Necessary to do a packer sample.
1530	1830	3	Air lift cuttings, run packer and started air lifting for sample when thunder storms move in. Took sample removed packer and secur[ed] 1 hr O.T.

1024 = 98%
1029 = 68%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
CME	Pat Meadows Travis Love			
PROGRESS		TASK CR	DATE 2/14/95	SITE HYDROLOGIST Rick Lee
DEPTH	PROPOSED TOTAL DEPTH 1000'		FORMATION/AQUIFER Avon Park	DATE MOVED ON SITE 8/31/95

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Raining hard.
0800	0830	½	Water sample and water level + 9.80
0830	1000	1 ½	Cored 10'.
1000	1100	1	Air lift cuttings and sample
1100	1230	1 ½	Cored 10'
1230	1600	3 ½	Air lift cuttings, 25 gpm, set packer and s...
			Cond. 3650. Rick called in, it was
			decided to resample.
1600	1830	2 ½	Sampled and water level.
			OT 1 hr

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Meadows Travis Love		-
PROGRESS 0	TASK CR	DATE 2/15/96	SITE HYDROLOGIST Rick Lee
DEPTH 1049'	PROPOSED TOTAL DEPTH 1000'	FORMATION/AQUIFER Avon Park	DATE MOVED ON SITE 8/31/95

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Water level +8.16, Fueled up and set up to break
			5's out.
0800	1130	4 ½	Broke 600' of 5's out.
1130	1200	½	Lunch.
1230	1500	2 ½	Checked and cleaned roots out of rods & ran
			back to bottom. Air lifted hole and rods
			clean.
1500	1530	½	Packer is hanging up in rods.
1530	1730	2	Pulled rods out that packer hung in and
			cleaned rod the rest of the afternoon.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Travis Lore	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
0	CR	2/~~[illegible]~~ 16/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1049	1000'	Avon Park	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	½	Water level +4.83.
0730	0830	1	Tripped rods back to bottom.
0830	0900	½	Tripped packer in and inflated it but it
			was plugged off.
0900	1000	1	Tripped overshot in to retrieve packer, see
			overshot malfunctioned. Pulled overshot
			out and got it to working properly.
			Retrieved packer.
1000	1130	1 ½	Completely redressed packer. Air lifted
~~1130~~			while packer was being redressed.
1130	1200	½	Lunch
1200	1230	½	Inflated packer
1230	1330	1	Air lift
1330	1400	½	Sample and secured site
1400	1530	1 ½	Drove to Tampa and secured.
			Used 2 hrs OT, (1 hr Monday and
			1 hr Tuesday)

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Travis Lore	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
15'	CR	2/20/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1064'	1000'	Avon Park	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	1/2	Tampa. Fueled up, ice, water and called in.
0730	0900	1 1/2	Drove to site.
0900	1400	5	Heavy rain.
1400	1430	1/2	Sample, water level
1430	1645	2 1/4	Cored 15'. Rods are binding some and hydrologist
			is calling for a packer sample.
1645	1730	3/4	Air ~~lif~~ lift cuttings and secure site.
			1054 = 92%
			1059 = 76%
			1064 = 84%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Travis Lose	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
20'	CR	2/21/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1084'	1000'	Avon Park	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR 8A-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0815	1 1/4	Water level, fueled rig & air compressor and got a bottom hole sample.
0815	0845	1/2	Set packer
0845	1115	2 1/2	air lift for sample, gpm 6.1.
1115	1145	1/2	Retrieved packer.
1145	1215	1/2	Lowered rods and took 1 thief sample.
1215	1430	2 1/4	Cored 16'. 75% of the core dropped out of core barrel.
1430	1600	1 1/2	Was able to retrieve core and core an 5'. Sample point.
1600	1730	1 1/2	Air lift cuttings. We will be ready sample in the morning. Secured
			1069 = 90% 1094 = 96% 1099 = 92% 1084 = 80%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Meadows Travis Lowe		
PROGRESS 20'	TASK CR	DATE 2/22/95	SITE HYDROLOGIST Rick Lee
DEPTH 1104'	PROPOSED TOTAL DEPTH 1000'	FORMATION/AQUIFER Avon Park	DATE MOVED ON SITE 8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Water level +7.1, fueled up and took a thief samp
0800	0830	½	Set packer. Time brake down for each phase of
			setting packer. Trip packer in 12 mins, releasi
			overshot 7 mins, inflating packer 8 mins and
			hooking air head up 4 mins. = 31 mins.
0830	1115	2 ¾	Air lift for sample. gpm 2.4 later increased to 4.(
			Cond. started at 11,000 then to 3,000 and back up
			to 16,000. Stabilized.
1115	1145	½	Water level +6.04
1145	1215	½	3 thief samples. Each thief sample takes 10 mins
1215	1245	½	Retrieve packer. Time brake down for each phas
			of retrieving packer. Trip over shot in 4 m
			8 blows with overshot jars and wait 5 mins, i
			packer has started deflating. wait 10 mins
			packer to complete deflate. Retrieve packer i
			=29 mins. At this depth packer operation
			sample it take 1½ hrs. This is not co

air lift time.

over

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Travis Lore	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	2/23/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
	1000'	Avon Park	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TA SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	1/2	Fueled air compressor and rig. Checked fluid lev
0730	0830	1	Finished air lift.
0830	0900	1/2	Set packer.
0900	1030	1 1/2	Air lifted for sample. 4.7 gpm. Cond went up t
			18,000 when down to 2,500 and stabilized.
1030	1215	1 3/4	Water level 13.95. Water level has come up
			slow.
1215	1245	1/2	Sample. 2 thief samples.
1245	1345	1	Retrieved packer. We are having problems
			with the overshot staying connected to
			packer spearpoint.
1345	1600	2 1/4	Worked on packer and solved problem.
			The material that the spearpoint is
			constructed out of is too soft and is
			allowing the spearpoint to mushroom
			Reported findings to Greg and gave us
			permission work on problem with manuf

HAM will send us a new spearpoint in 5 working days. We try to dress the old one up and use it till the new one gets here.

1600 1730 1 1/2 Drove to Tampa and secured.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows, Travis Lore	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
35'	CR	2/28/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1139	1000'	Avon Park	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0745	3/4	Tampa. Fuel, ice, water and call in time
0745	0930	1 3/4	Drove to site.
0930	1030	1	Water level +4.73. Had some vandalism, 4 or 5
			of sand broke, all of the ... pieces of ...
			were thrown in a ditch or in the woods.
			Built up.
1030	1130		Dressed spear point up on picker, filled pit,
			took one thick sample. temp 24.4, Cond. 2
1130	1200		Tripped rods back to bottom. Lunch.
1200	1445	2 3/4	Cored 20'.
1445	1515	1/2	Air lift cuttings.
1515	1700	1 3/4	Cored 15'.
1700	1730	1/2	Air lift cuttings.
			1109 = 96 %
			1114 = 100 %
			1119 = 100 %
			1124 = 91 %
			1129 = 94 %
			1134 = 92 %
			1139 = 10 %

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meaders / Travis Lore	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
20'	CR	2/28/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1159'	1000'	Avon Park	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	1/2	~~[illegible]~~ Air lift cuttings.
0730	0830	1	Cored 5'
0830	0930	1	Air lift cutting. 30 gpm.
0930	1000	1/2	Set packer.
1000	1030	1/2	Air lift. 16. gpm
1030	1045	1/4	1 thief sample.
1045	1100	1/4	Air lift.
1100	1130	1/2	2 Thief samples
1130	1400	2 1/2	Water level +6.74. Replaced sand line.
1400	1500	1	Retrieved packer. Had same problems shear
			packer pins.
1500	1700	2	Cored 15'.
1700	1730	1/2	Air lift cuttings.
			1144 = 100%
			1149 = 100%
			1154 = 100%
			1159 = 100%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadors Travis Lore	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CA	3/1/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
	1000	Avon Park	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0900	2	Air lift. Raining.
0900	1100	2	Cored 15'.
1100	1215	1 1/4	Air lift cuttings. Lunch
1215	1315	1	Run packer in, fall in hung it up but
			was able to work it free. Retrieved it, no
			damage but pins were sheared.
1315	1345	1/2	Pulled rods up 5', and redressed packer.
1345	1415	1/2	Ran packer in and set it, ~~no~~ problems.
1415	1500	3/4	Air lift.
1500	1530	1/2	2 thief samples.
1530	1700	2 1/2	Water level +9.2. Slow recovery. We pulle
			cap off of 4" H.W. to check packer for leaks
			or conection, there was none water level
			stayed at +9.2.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	P.T. Meadows / Travis Love	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
10'	CR	3/2/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
T.D. 1184'	1000'	avon park	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	½	Water level +5.72. Lowered rods to bottom.
0730	1000	2 ½	Cored 10'. Very hard dolomite.
1000	1030 ~~1100~~	~~1~~ ½	Air lift cutting.
1030 ~~1100~~	1100	½	Set Packer.
1100	1400	3	Air lift. 14 gpm, cond. 45,000, water level -7
1400	1430	½	Took a thief sample.
1430	1500		Secured site.
1500	1630	1 ½	Drove to Tampa.
1630	1730	1	Tampa. Travis cleaned up #400, I went to
			Brooksville office and secured.
			1179' = 100%
			1184 = 98%

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Travis Love	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
TD	CR	3/6/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1184	1000'	avon Park	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TP SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0745	3/4	Tampa. Fuel, ice, water, and call in.
0745	0915	1 1/2	Drove to site
0915	1000	3/4	Water level -8.35, 1 thief sample, cond. 45,000, Te
1000	1130	1 1/2	Set up and started tripping NQ out. (1184'
1130	1200	1/2	Lunch
1200	1600	4	Tripped all NQ out.
1600	1730	1 1/2	Broke HW casing loose and tripped 80' out.
			Secured site.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Travis Love	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	3/7/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1184	1000'	avon Park	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	1/2	Fueled up.
0730	1030	5	Tripped 500' of H.W. casing out.
1030	1330	1	Pulled casing trailer to Casperson Beach.
1330	1600	2 1/2	Dropped casing trailer and unloaded everything
			that we could by hand.
1600	1700	1	Drove to TRSA-1
1700	1800	1 1/2	Unloaded all heavy items. (Collars, bits and
			rods)
			1/2 O.T.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows, Travis Lore	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	3/8/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1184'	1000'	avon Park	8/31/94

ROMP SITE NAME/NUMBER: Pinsoen Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0900	2	Storm.
0900	1000	1	Hooked ~~everything~~ trailer to water truck, made sure everything was working. Getting ready for driver test, (CDL)
1000	1130	1 1/2	Drove to Tampa office.
1130	1215	3/4	Hooked up and checked everything out again
1215	1300	3/4	Drove to CDL test center.
1300	1500	2	CDL test. Travis passed every, but he could not take the road test. The examiner said one tire was bad.
1500	1600		Went to ~~T~~ Tampa office and tried to find a tire, no luck. Dropped trailer off.
1600	1730	1 1/2	Drove back to site and secured.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Travis Lee	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	3/9/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1134'	1500	Avon Park	8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0830	1 ½	Glued 260' of 1" pvc together and tagged lin
			in the water supply well at 255.
0830	1030	2	Mixed 50 gals of grout.
			12 - 47 lb. bags of cement and 10 lbs of bento
			Pumped it down hole and cleaned up
1030	1300	2 ½	Moved Equipment trailer, then move rig o
			to install a surficial. Changed rig ov
			to auger. Allen screws were all tight and t
			heads were remy out. It took 2 hrs to g
			them.
1300	1330	½	Lunch
1330	1500	1 ½	Good Year came and changed tire on water tr
			Set up to mix grout. Tagged 215'. Ric
			ask us to hold upon grout and start aug
1500	1600	1	Augered 10' and secured site.
1600	1730	1 ½	Drove to Tampa and secured.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
OME	Pat Meadows Travis Lore		
PROGRESS	TASK: GR	DATE: 3/13/95	SITE HYDROLOGIST: Rick Lee
DEPTH: 1184	PROPOSED TOTAL DEPTH: 1000	FORMATION/AQUIFER: Avon Park	DATE MOVED ON SITE: 8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0730	1/2	Tampa Fueled, water, ice and called in.
0730	0900	1 1/2	Drive to site.
0900	1200	3	Tagged grout in water supply well at 2.15'.
			Augered 20', TD 30'. Set up to grout.
1200	1230	1/2	Lunch
1230	1330	1	Mixed 50 gal. grout. 12-47 lb. bags cement;
			10 lbs. bentonite. pumped grout in water supply
			cleaned up.
1330	1630		Tripped 28' of tri lock in, 20 of screen on the bo
			(4"). Plug wouldn't tap out of the augers. Pull
			4" tri lock out. Tripped 35' of 2 7/8" IF rod in a
			beat plug out.
1630	1800	1 1/2	Mixed 50 gls. of grout. 12-47 lb. bags cement, 10 l
			bentonite. Started pumping it down hole an
			rig stoped running. Work on it and got i
			going before grout set up. Finished pumping
			grout and cleaned up. Secured

1/2 hr O.T.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Meadors Travis Lore		
PROGRESS	TASK CR	DATE 3/14/95	SITE HYDROLOGIST Rick Lee
DEPTH 1184	PROPOSED TOTAL DEPTH 1000'	FORMATION/AQUIFER Avon Park	DATE MOVED ON SITE 8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0800	1	Tagged grout in water supply at 142'. Moved 24 bags
			of cement to mixing ~~ar~~ area. Called in talked to H
			Doug and Dave Faucher.
0800	1000	2	Mixed 100 ~~gl~~ of grout. 24-47 lb. bags of cement,
			of bentonite. Pumped it and cleaned up.
1000	1400	4	Tripped 28' of 4" tri lock back in augers. 20' of scre
			on bottom. Sanded well up to 5', 23-50 lb. ba
			of 6/20 sand. 1 bag of hole plug. Mixed ~~ee~~
			20 gals grout. 5-47 lb bags cement. 5 lbs of bent
			Well is complete.
1400	1730	3 1/2	Mixed 100 gals of grout. (tagged water supply at
			24-bags of cement, 10 lbs of bentonite, pumpe
			grout. Grout came to surface. Cleaned up
			cleaned up trash around site. Secured

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CME	Pat Meadows Travis Lore		
PROGRESS	TASK: CR	DATE: 3/15/95	SITE HYDROLOGIST: Rick Lee
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE: 8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park / TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	0830	1 ½	Repaired winch cable on water truck (power cable
0830	1130	3	Called in. Moved equipment around on site and
			started loading equipment up to transport.
			Started developing surficial well.
1130	1200	½	Lunch
1200	1430	2 ½	Continued load out.
1430	1700	2 ½	Took rig to North Port for Dave to work on
			tomorrow and returned to site.
1700	1730	½	Cut up old pvc. and secured site.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CME	Pat Meadows Travis Love	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	CR	3/16/95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
			8/31/94

ROMP SITE NAME/NUMBER: Pioneer Park /TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	1130	4 ½	Finished loading up, completly cleaned site &
			covered any supplies left on site. Develop
			~~for~~ surficial all morning, its making 7 to
1130	1200	½	Went to SWP and loaded some thing we had
			there.
1200	1500	3	Transported all equipment to North Port exce
			air compressor.
1500	1700	2	Fueled up and drove to Tampa. Secured
			Used ½ hr. OT.
			Fueled truck.

Appendix C

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton, Gerry Horn	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Moving	C-2	Fri 3-31-95	None

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: North Port Romp #9 / Payne Terminal TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
9:30	6:30	9	Load Kelly, Mats, Rig Floor, Bits
			move mats & ~~Bi~~ Bits to Sarasota
			Put Rig on mats
			*
			I was not on Site, I was unaware
			of Driller being onsite. Driller (Frank Singleton)
			Moved + Loaded equipment without
			Authorization from myself or Swiftmud.
			I Told Driller after talking to Greg McGuan
			Not to work without authorization or
			a Swiftmud Representative on site again.
			If so all work would Be consider N.P.T.
			Bob Mase

Paid Time ~ 9 hrs.
Non Paid Time - 0 hrs.
Total Time - 9 hrs.

Bobbie Mase Jr.
4-3-95

[signature]
4-31-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
GD 2000	F. Singleton, R. Parkerson, D. Wyckoff		
PROGRESS	TASK C-2	DATE mon 4-3-95	SITE HYDROLOGIST
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0400	0700	3	load up equipment drive to Port Charlotte
0700	1700	10	move equipment from old site (Port Charlotte) drive
			to new site (Sarasota) unload set up rig
			& equipment clean up the old site in
			Port Charlotte
			1 1/4 No pay for tires hitch ball, lunch

Pay Time - 11 3/4
No Pay - 1 1/4
Total Time - 13

Frank Singleton
4-3-95
Bob Mare Jr
4-3-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Ray Parkerson, Dave W.	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Moving	C-2	Mon. 4-3-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: North Port Romp #9 / Payne Terminal TRSA-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
	7:00	9:30	2 1/2	Load Trucks to move to Sarasota
NPT	9:30	10:00	1/2	Flat Tire on Mack Truck went into Town to get
				air in tire & Rebead Tire
	10:00	11:30	1 1/2	Travel To SaraSota
	11:30	12:00	1/2	unLoad Materials
	12:00	1:00	1	Travel to NorthPort
NPT	1:00	1:45	3/4	Lunch
	1:45	3:00	1 1/4	Bring Grout Pump to Sarasota
	3:00	4:00	1	Travel to NorthPort
NPT	4:00	4:30	1/2	Go into town to get correct size hitch Ball to pull
				Dog House trailer to Sarasota
	4:30	5:45	1 1/4	Travel to Sarasota
	5:45	6:00	1/4	unLoad Hoses
	6:00	8:00	2	Back Rig over well Raise Derrick, Unload Floor
				Put Floor in Place, Align Rod Trailer up to Rig Floor
				Flag off Area.

Paid Time — 11 3/4 hrs.
Non Paid Time — 1 1/4 hrs.
Total Time — 13 hrs.

Bobbie Marse K.
4-3-95

Frank Singleton
4-3-95

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT C-2

RIG NO/NAME	CREW F. Singleton R. Parkerson D. wykoff	REPORT NO.
PROGRESS	TASK C-2 / DATE Tues 4-4-95	SITE HYDROLOGIST Bob Marse
DEPTH / PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER Payne Terminal Romp # TRGA 1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	500	10	finish setting up equipment at new site. dig new run off trench secure site put up caution tape. leave old site for new site cut up old PVC take water tank trailer to new site drop off trailer secure rig equipment and site

Pay Time - 9 1/2
No Pay - 0
Total Time - 9 1/2

Finell E Singleton
4-4-95
Bobbie Marse
4-4-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton Ray Parkerson Dave W.			
PROGRESS: Moving & Rigging up	TASK: C-2	DATE: Tues 4-4-95		SITE HYDROLOGIST: Bob Marse
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER		DATE MOVED ON SITE: 4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp # TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	7:15	1/4	Inventory Bits
7:15	8:15	1	Move Air compressor & Hook up for Reverse Air
8:15	9:15	1	Take head pipe off Well, Put Safety Rails & Flange on
9:15	1:15	4	Dig Ditch by hand from Retension Pond to Creek with
			Pick & Shovels
1:15	2:15	1	Travel to North Port to get Watertank trailer and
			finish Cleaning Site
2:15	3:30	1 1/4	Clean North Port Romp #9
3:30	3:45	1/4	Hook up Water tank Trailer
3:45	4:30	3/4	Travel to Sarasota Unhook Trailer

Paid Time - 9 1/2
Non Paid Time - 0
Total Time - 9 1/2

Frank E Singleton
4-4-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME: GD 2000	CREW: F. Singleton, R Parkerson, D Wykoff		REPORT NO.
PROGRESS	TASK: C-2	DATE: Wed 4-5-95	SITE HYDROLOGIST: Bob Marse
DEPTH: 765'	PROPOSED TOTAL DEPTH: 1200'	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	800	1	rig up chain & snatch block to run in
			wireline down hole tag 98' unload trime
			pipe off of Drill pipe trailer
800	845	3/4	start running in hole
845	900	1/4	went to call about blowline found some on
			trimmie pipe trailer
900	1045	9 3/4	make up blowline start back in hole
			and drill to 245.5
			1110 - circulate 2nd DC 530 Add DC 7 drill
			1120 Add DC 3 to 245.5
			215 - circulate 620 circulate
			220 Add DC 4 645 pull up DC
			310 circulate put on PVC s
			320 Add DC 5 pipe for Arte
			425 circulate seurce site
			435 Add DC 6
			515 circulate

Pay Time - 11 1/2
No Pay - 1/4
Total Time - 11 3/4

Singleton
4-5-95

Bob Marse
4-5-95

Page 1 of 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

C-2

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Ray Perkerson Dave Wycoff	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
90' BLS to 244' 5" BLS	C-2	Wed 4-5-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
244'	1250' BLS		4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp # TRSA-1 (Deep Induction)

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	7:15	1/4	unload 1½ Steel Tremmie off Rod Trailer
7:15	7:30	1/4	Run Survey Line down well Tag 1017' BLS
7:30	8:45	1 1/4	Trip DC's # 1,2,3 in Well 9 7/8" Drill Bit
NPT 8:45	9:00	1/4	check on Blow Line
9:00	9:15	1/4	Assemble 3/4" Blow Line
9:15	9:30	1/4	Pull one DC Kelly Bushing would Not go in table
9:30	10:00	1/2	Try Reverse Air + Adjust
10:00	10:15	1/4	Adjust Air Hose on Compressor
10:15	11:00	3/4	Drill to 95' 1"
11:00	11:15	1/4	Connection D.C. #3 30' 3"
11:15	2:15	2	Drill 95' 1" to 125' 4"
2:15	2:30	1/4	Circulate Hole
2:30	2:45	1/4	Connection D.C. #4 29' 7"
2:45	3:00	1/4	Drill 125' 4" to 154' 11"
3:00	3:15	1/4	Circulate Hole
3:15	3:30	1/4	Connection D.C. #5 29' 3"
3:30	4:15	3/4	Drill 154' 11" to 184' 2"

Paid Time - 11½

Non Paid Time - 1/4

Total Time - 11 3/4

4-5-95 Bob Marse by

Frank Singleton

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton Ray Parkerson Dave Wycoff			
PROGRESS: 90' BLS to 244'5" BLS	TASK: C-2	DATE: Wed 4-5-95		SITE HYDROLOGIST: Bob Marse
DEPTH: 244'5"	PROPOSED TOTAL DEPTH: 1250' BLS	FORMATION/AQUIFER:		DATE MOVED ON SITE: 4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp # TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
4:15	4:30	1/4	Circulate Hole
4:30	4:45	1/4	Connection D.C. #6 31'
4:45	5:15	1/2	Drill 184'2" to 215'2"
5:15	5:30	1/4	Circulate (Check on Ditch & Creek)
5:30	5:45	1/4	Connection D.C. #7 29'3"
5:45	6:15	1/2	Drill 215'2" to 244'5"
6:15	6:30	1/4	Circulate Hole
6:30	6:45	1/4	Put Head Pipe on Well

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GB 2000	F. Singleton, R Parkerson D Wykoff	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Thurs 4-6-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal Romp #TRSA

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	730	1/2	service rig let build Air glue Airline together
			put on DR 1
730	1230	5	kept getting ~~t~~ clog. begin pulling out of
			hole to put (weld) skirts on bit. weld skirt
			on bit Begin tripping back in hole
1230	100	1/2	lunch
100	730	6 1/2	resume drilling circulate DR 1 add
			DR 2 begin drilling Airline broke, pull out
			2 rods fix airline (15min) finish drilling dr
			down circulate secure site head for
			Orlando

Pay Time — 11 3/4
No Pay — 3/4
Total Time — 12 1/2

Farrell Singleton
4-6-95

Bob Marse
4-6-95

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

C-2

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton Ray Packerson Dave Wycoff			
PROGRESS 61'	TASK C-2	DATE Thur 4-6-95		SITE HYDROLOGIST Bob Marse
DEPTH 306'	PROPOSED TOTAL DEPTH 1250' BLS	FORMATION/AQUIFER		DATE MOVED ON SITE 4-4-95

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER Payne Terminal Romp# TPSA-1 (Induction Well) DETAILS OF OPERATIONS
7:00	7:30	1/2	Connection D.R.#1 30' 10"
7:30	8:15	3/4	Drill 244' 5" to 275' 3" *
8:15	9:00	3/4	Plug Rods did not finish Drilling Kelly
9:00	10:00	1	Trip out of Hole
10:00	11:00	1	Weld Skirts on Drill Bit
11:00	12:00	1	Trip in Hole
NPT 12:00	12:45	3/4	Lunch
12:45	1:45	1	Resume Drilling 244' 5" to 275' 3"
1:45	2:30	3/4	Ajust Air Compressor
2:30	3:00	1/2	Resume Drilling 244' 5" to 275' 3"
3:00	3:15	1/4	Circulate Hole
3:15	3:30	1/4	Connection D.R.#2 31' 4" *(Left site at 4:00pm BMG
3:30	7:00	3 1/2	Drill 275' 3" to 306' 7"
7:00	7:30	1/2	Circulate hole Pull one Rod up in Derrick
			* Told Drillers to Take Slips into Orlando to repair
			replace the dies' (Safety factor)

Paid Time — 11 3/4 hr
NonPaid Time — 3/4 hr.
Total Time — 12 1/2 hr.

4-6-95 Bob Marse Jr.

Frank Singleton
4-6-95

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

C-2

RIG NO/NAME	CREW	REPORT NO.
GD 2090	F. Singleton R. Parkerson D. wykoff	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	mon 4-10-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
326	1250		4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp. # TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
1015	430	6 1/4	Drill to 336 finish DR 3 unplugged rods
430	545	1 3/4	unload casing off trailer
545	630	3/4	Dig out pits put up fence move pipe

Paid Time - 8 3/4
No pay - 0
Total Time - 8 3/4

Frank E. Singleton
4-10-95

Bob Marse
4-10-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Ray Parkerson Dave Wycoff	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
20'	C-2	Mon 4-10-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
326'	1250'		4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp TRSR-1 (Induction Well)

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
10:15	4:30	6 1/4	Drill 306' 7" to 336' 11" Did not finish Ro
			Trouble with Returns Plugged Rods Tripout
			to unplug Rods Drilled Aprox. 20'
			*I Left Job Site at 10:00 AM to get Backho
			at Coleman Site Return at 4:30 pm
4:30	5:45	1 3/4	Unload Steel Casing off Tractor trailer
5:45	6:30	3/4	Dig out pit & arrange pipe

Paid Time - 8 1/4 hr.
Non Paid Time - 0 hr.
Total Time - 8 1/4 hr.

4-10-95 Bob Marse fr.

Frank Singleton
4-10-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD2000	F. Singleton R. Parkerson D. Wykoff	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Tues. 4-11-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
367	1250		

ROMP SITE NAME/NUMBER: Payne Terminal Romp # TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0645	800	1 1/4	Service rig finishing running back in hole
800	1030	2 1/2	Add DR 3 start drilling let circulate
1030	1200	1 1/2	pull out of hole to change bit
1200	130	1 1/2	run back in hole
130	200	1/2	circulate
200	500	3	dig new pits put fence around them
500	630	1 1/2	Add DR 4 begin drilling to 367 01
630	815	1 3/4	stop getting returns. Airline came apart
			pull out 5 Rods repair Airline start running
			back in hole.

Pay Time - 11 1/2
No Pay - 1 3/4
Total Time - 13 1/4

[signature]
4-11-95

Bob Marse
4-11-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Ray Parkerson, Dave Wycoff	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
34'	C-2	Tues 4-11-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
360'	1250' BLS		4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp TRSA-1 Induction Well

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
	7:00	7:45	3/4	Trip Rods in hole
	7:45	8:15	1/2	Ajust Air Compressor
	8:15	10:30	2 1/4	Resume Drilling DC#3 306'7" to 336'11"
	10:30	10:45	1/4	Plug Rods Pull Blowline
	10:45	12:30	1 3/4	Trip out of Hole to change Bit 9½"
	12:30	1:30	1	Resume Drilling 306'7" to 336'11"
	1:30	2:00	1/2	Circulate hole
	2:00	5:00	3	Stop Drilling Dig Pit & Clean out old pit dig ditch
				Put up fence around newly dug pit
	5:00	5:30	1/2	Connection DR#4 31'2"
	5:30	6:30	1	Drill 336'11 to 367'1" *Did not finish Rod
NPT	6:30	8:15	1 3/4	Blow Line Came Apart fell in Rods Trip out to
				Retrieve Air Line Tripped most of Rods in Hole

Paid Time — 11½
Non Paid Time — 1¾
Total Time — 13¼ hr

4-11-95 Bob Marse

Frank E Singleton
4-11-95

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

C-2

RIG NO/NAME	CREW	REPORT NO.
GD2000	F. Singleton, R. Parkerson, D. Wykoff	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Wed 4-12-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
	1250		

ROMP SITE NAME/NUMBER: Payne Terminal Romp #TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
645	800	1 1/4	service rig repair airline Add 4 joints DP
			take off check value
800	1000	2	begin drilling DR #4
1000	1215	2 1/4	leave to get more airline
1215	1230	1/4	glue pvc together
1230	300	2 1/2	Add DR #5 drill. circulate clean
300	515	2 1/4	Add DR #6 drill circulate clean
515	745	2 1/2	Add DR #7 drill. circulate clean. stand DR 8
			secure site

Pay Time - 9
No Pay - 3 3/4
Total Time - 12 3/4

Frank Singleton
4-12-95
Bob Marse
4-12-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton Ray Parkerson Dave Wycoff		
PROGRESS 100'	TASK C-2	DATE Wed 4-12-95	SITE HYDROLOGIST Bob Marse
DEPTH 460 BLS	PROPOSED TOTAL DEPTH 1250' BLS	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Termina Romp TRSA-1 (Induction Well)

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
NPT	7:00	8:00	1	Trip Rods in Hole
	8:00	10:00	2	Resume Drilling DR#4 336'11" to 367'1"
NPT	10:00	12:45	2 3/4	Need More Blow Line None on Site Driller Left
				to go Buy more Blow Line (Gary on site 10:45-12:45
	12:45	1:00	1/4	Connection DR#5 31'5"
	1:00	2:30	1 1/2	Drill 367'1" to 398'4"
	2:30	3:00	1/2	Circulate Hole
	3:00	3:15	1/4	Connection DR#6 31'3"
	3:15	5:00	1 3/4	Drill 398'4" to 429'7"
	5:00	5:15	1/4	Circulate Hole
	5:15	5:30	1/4	Connection DR#7 31'3"
	5:30	7:15	1 3/4	Drill 429'7" to 460'10"
	7:15	7:30	1/4	Circulate Hole
	7:30	7:45	1/4	Connection DR#8 31'2"

Paid Time — 9 hr.
NonPaid Time — 3 3/4 hr.
Total Time — 12 3/4 hr.

4-12-95 Bob Marse

Frank Singleton
4-12-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD 2000	F Singleton, Ray Parkerson D Wykoff	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Thurs. 4-13-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Romp #TRSA-1 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	1000	3	Drill + circulate DR #9
1000	1200	2	~~add~~ DR 10 drill + circulate
1200	130	1 1/2	Add DR 11 drill + circulate
130	245	1 1/4	Add DR 12 drill + circulate
245	345	1	Add DR 13 drill + circulate
345	600	2 1/4	Add DR 14 drill + circulate +
			pull off bottom

Pay Time - 11
No Pay - 0
Total Time - 11

Frank Singleton
4-13-95

Bob Marse
4-13-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Ray Perkerson Dave Wycoff	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
219'	C-2	Thur. 4-13-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
679'	1250		4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp #TRSA-1 Induction We

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	9:45	2 3/4	Drill 460' 10" to 492'
9:45	10:00	1/4	Circulate Connection DR#9 30' 10"
10:00	11:45	1 3/4	Drill 492' to 522' 10"
11:45	12:00	1/4	Circulate
12:00	12:15	1/4	Connection DR#10 31' 1"
12:15	1:00	3/4	Drill 522' 10" to 553' 11"
1:00	1:15	1/4	Circulate
1:15	1:30	1/4	Connection DR#11 31' 5"
1:30	2:15	3/4	Drill 553' 11" to 585' 4"
2:15	2:30	1/4	Circulate
2:30	2:45	1/4	Connection DR#12 31' 4"
2:45	3:15	1/2	Drill 585' 4" to 616' 8"
3:15	3:30	1/4	Circulate
3:30	3:45	1/4	Connection DR#13 31'
3:45	4:30	3/4	Drill 616' 8" to 647' 8"
4:30	4:45	1/4	Circulate
4:45	5:00	1/4	Connection DR#14
5:00	5:45	3/4	Drill ~~647~~ '8" to 678' 11"
5:45	6:00	1/4	Circulate Pull up off Bottom

Paid — 11
NonPaid — 0
Total — 11

4-13-95 Bob Marse

4-13-95

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

C-2

RIG NO/NAME	CREW	REPORT NO.
GD2000	F. Singleton, A Parkerson D. Wykoff	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	mon 4-17-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
709	1250'		

ROMP SITE NAME/NUMBER: Romp # TRSA-2 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
730	800	1/2	Circulate DR 14
800	945	1 3/4	Add DR 15 drill down circulate
945	1245	3	Add DR 16, Add 100' more curline drill
			down let circulate
1245	145	1	ream hole finish circulating
145	245	1	Add DR 18 ream down circulate
245	345	1	Add DR 19 circulate
345	530	1 3/4	Add DR 20 Circulate
530	630	1	Add DR 21 Circulate
630	700	1/2	pull up rods lock down + secure
			site

Pay Time - 11
No Pay - 1/2
Total Time - 11 1/2

[signature]
4-17-95

Bob Marse
4-17-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton Ray Parkerson Dave Wycoff		
PROGRESS 217'	TASK C-2	DATE Mon 4-17-95	SITE HYDROLOGIST Bob Marse
DEPTH 896'	PROPOSED TOTAL DEPTH 1250' BLS	FORMATION/AQUIFER	DATE MOVED ON SITE 4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp # TRSA-1 Induction Well

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:30	8:00	1/2	Circulate
8:00	8:15	1/4	Connection DR# 15 30'11"
8:15	9:15	1/2	Drill 678'11" to 709'10"
9:15	9:30	1/4	Circulate
9:30	9:45	1/4	Connection DR# 16 31'7"
9:45	12:30	2 3/4	Drill 709'10" to 741'5"
12:30	12:45	1/4	Circulate
12:45	1:00	1/4	Connection DR# 17 31'4"
1:00	1:30	1/2	Drill 741'5" to 772'9"
1:30	1:45	1/4	Circulate
1:45	2:00	1/4	Connection DR# 18 30'8"
2:00	2:30	1/2	Drill 772'9" to 803'5"
2:30	2:45	1/4	Circulate
2:45	3:00	1/4	Connection DR# 19 31'1"
3:00	3:45	3/4	Drill 803'5" to 834'6"
3:45	4:00	1/4	Circulate
4:00	4:15	1/4	Connection DR#20 30'11"

Paid — 11
NonPaid — 1/2
Total — 11 1/2

4-17-95 Bob Marse fr.
Frank E Singleton
4-17-95

(2)

C-2

Page 2 of 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton, Ray Parkerson, Dave Wycoff			
PROGRESS 217'	TASK C-2	DATE Mon 4-17-95		SITE HYDROLOGIST Bob Maise
DEPTH 896 BLS	PROPOSED TOTAL DEPTH 1250' BLS	FORMATION/AQUIFER		DATE MOVED ON SITE 4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp #TRSA-1 Induction Well

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
4:15	4:45	1/2	Drill 834' 6" to 865' 5"
4:45	5:00	1/4	Circulate
5:00	5:15	1/4	Add 100' Blow line total 300' Blow line
5:15	5:30	1/4	Connection DR#21 31'
5:30	6:15	3/4	Drill 865' 5" to 896' 5"
6:15	6:30	1/4	Circulate Pull up of Bottom
NPT 6:30	7:00	1/2	secure Site

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD2000	F. Singleton R. Parkerson D. Wykoff	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Tues 4-18-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1053	1250		

ROMP SITE NAME/NUMBER: Romp # TRSA-2 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0645	0700	1/4	Service rig build AIR
700	715	1/4	Circulate well
715	800	3/4	Add DR 22 load up 30 joints tremmie
			pipe clean out pit
800	830	1/2	begin drilling DR # 22
830	900	1/2	ream & circulate hole
900	1045	1 3/4	Add DR # 23 ream & circulate
1045	115	2 1/2	Add DR # 24 ream & circulate
115	515	4	Add DR # 25 ream & circulate (real hard)
			glue 3" Pvc together stack next to trailer
515	745	2 1/2	Add DR 26 ream & circulate (hard)

Pay Time - 12 3/4
No Pay - 1/4
Total Time - 13

[signature]
4-18-95

Bob Marse Jr.
4-18-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton Ray Parkerson Dave Wyeoff		
PROGRESS 157'	TASK C-2	DATE Tues 4-18-95	SITE HYDROLOGIST Bob Maise
DEPTH 1053'	PROPOSED TOTAL DEPTH 1250' BLS	FORMATION/AQUIFER	DATE MOVED ON SITE 4-4-95

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER Payne Terminal Romp# TR5A-1 Induction Well — DETAILS OF OPERATIONS
7:00	7:15	1/4	Connection DR#22 30'6"
7:15	8:00	3/4	Load 1½" Steel Tremmie for C-1 Dig out Pits While Load
8:00	8:30	1/2	Drill 896'5" to 926'11"
8:30	9:00	1/2	Circulate
9:00	9:15	1/4	Connection DR#23 32'2"
9:15	10:15	1	Drill 926'11" to 959'1"
10:15	10:45	1/2	Circulate
10:45	11:00	1/4	Connection DR#24 32'2"
11:00	12:30	1½	Drill 959'1" to 991'3"
12:30	1:00	½	Circulate
1:00	1:15	1/4	Connection DR#25 31'
1:15	4:45	3½	Drill 991'3" to 1022'3"
4:45	5:15	1/2	Circulate
5:15	5:30	1/4	Connection DR#26 31'3" *Slip would not Hold
5:30	7:30	2	Drill 1022'3" to 1053'6"
7:30	7:45	1/4	Circulate pull up off Bottom

Paid — 12 3/4
Non Paid — 0
Total Time - 12 3/4

4-18-95 Bob Maise

Frank Singleton
4-18-95

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

C-2

RIG NO/NAME	CREW	REPORT NO.
GD 2000	F. Singleton, R Parkerson, D. Wykoff	n

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Wed 4-19-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1208	1250		

ROMP SITE NAME/NUMBER: Romp # TRSA-1 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	715	1/4	Circulate # 26
715	945	2 1/2	Add DR #27 ream & circulate
945	1130	1 3/4	Add DR #28 ream & circulate
1130	1245	1 1/4	Add DR #29 ream & circulate
1245	145	1	Add DR #30 drill
145	415	2 1/2	Airline broke trip out of hole make up
			new airline trip back in hole
415	530	1 1/4	restart drilling DR #30 ream & circulate
530	815	2 3/4	Add drill Rod #31 drill 1180 Geo to take
			samples every 5' hit cavern take
			slack out of line 17' drop hole (cavern)

L -- 2 1/2

Pay Time - 10 3/4
No Pay - 2 1/2
Total Time - 13 1/4

Frank Singleton
4-19-95
Bob Marse
4-19-95

C-2

1 of 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton Ray Parkerson [illegible]			
PROGRESS		TASK C-2	DATE Wed. 4-19-95	SITE HYDROLOGIST Bob Marse & Rick Lee
DEPTH	PROPOSED TOTAL DEPTH 1250' BLS		FORMATION/AQUIFER	DATE MOVED ON SITE 4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp #TRSA-1 Induction Well

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	7:15	1/4	Circulate
7:15	7:30	1/4	Connection D.R. #27 31'3"
7:30	9:30	2	Drill 1053'6" to 1084'9"
9:30	9:45	1/4	Circulate
9:45	10:00	1/4	Connection DR#28 31'9"
10:00	11:15	1 1/4	Drill 1084'9" to 1116'6"
11:15	11:30	1/4	circulate
11:30	11:45	1/4	Connection DR# 29 30'8"
11:45	12:30	3/4	Drill 1116'6" to 1147'2"
12:30	12:45	1/4	Circulate
12:45	1:00	1/4	* Connection DR# 30 30'4"
1:00	1:45	3/4	* Drill 1147'2" to 1177'6" Did not finish Rod
NPT 1:45	4:15	2 1/2	Blow line Parted 20' from Kelly Trip in hole to Retrieve
4:15	5:00	3/4	Resume Drilling DR# 30 1147'2" to 1177'6"
5:00	5:15	1/4	Circulate
5:15	5:30	1/4	Connection DR# 31 31'
5:30	7:00	1 1/2	Drill 1177'6" to 1208'6" Began Samples 1185'

Paid — 10 3/4
NonPaid — 2 1/2
Total — 13 1/4

4-19-95 Bob Marse

Frank Singleton
4-19-95

(2)

C-2

Page 2 of 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton Roy Parkerson Dave WyCoff		
PROGRESS 155'	TASK C-2	DATE Wed 4-19-95	SITE HYDROLOGIST Rick Lee
DEPTH TS 1208'6"	PROPOSED TOTAL DEPTH 1250' BLS	FORMATION/AQUIFER	DATE MOVED ON SITE 4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp # TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	7:30	1/2	Hit open Hole 1187' to 1204'
			Rewind Cable & Circulate
7:30	8:15	3/4	Resume Drilling DR#31 to 1208'6"

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT C-2

RIG NO/NAME	CREW	REPORT NO.
GD 2000	F. Singleton, Ray Parkerson, D. Wykoff	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Thur. 4-20-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1208'	1250		

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER: Romp # TRSA-1 Payne Terminal — DETAILS OF OPERATIONS
0700	0800	1	ream out hole and circulate
800	230	6 1/2	trip out of hole 1208' had to heat
			each joint to break couldn't break sub
			off of bit, had to load it up and take
			back to Orlando to break

Pay Time - 7 1/2
No Pay - 0
Total Time - 7 1/2

[signature] 4-20-95
Bob Marse 4-20-95

C-2

SMFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton, Ray Parkerson, Dave Wyckoff		
PROGRESS	TASK C-2	DATE Thur 4-20-95	SITE HYDROLOGIST Rick Lee
DEPTH 1208	PROPOSED TOTAL DEPTH 1208 BLS	FORMATION/AQUIFER	DATE MOVED ON SITE 4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp TR SA-1 Induction

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	8:00	1	Circulate Hole
8:00	2:30	6½	Trip out of Hole *(Had to Heat Every Tool Jo[int]
			to Break it Loose

Paid Time — 7½
Non Paid Time — 0
Total Time — 7½

Bob Maus Jr.
4-20-95
Frank Singleton
4-20-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD 2000	F. Singleton, R Parkerson, Dave Wikoff	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	mon 4-24-95	Bob Marsh

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Romp # TRSA-1 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	1200	5	unload trimmie pipe tighten coupling + put in 40' sections load on trailer to run in hole After making sure they are clear p[illegible] 2" pvc together load on trailer clean s[illegible] glue 6' tailpiece w/cap on last Join[illegible] of well casing
NFT 1200	1230	1/2	lunch
1230	430	4	standby, finish check to see if pipe is clear move pvc for truck to dump grav[illegible] cut slots in last piece of trimmie pi[illegible] to pump cement thru, clean up trash on site

Pay Time — 9
No Pay — 1/2
Total Time — 9 1/2

[signature]
4-24-95
Bob Marsh [signature]
4-24-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Ray Parkerson Dave Wolf	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Mon. 4-24-95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1208			4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp TR SA-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
	7:00	11:00	4	Put together New Tremmie Pipe
	11:00	12:00	1	Prepare 3" sch40 PVC & Check & clean Water Me
NPT	12:00	12:30	1/2	Lunch
	12:30	1:00	1/2	Make sure old Tremmie clear & open
	1:00	1:30	1/2	Screw 2" PVC Together
	1:30	2:00	1/2	Put Cap on Bottom of Tremmie to Tag Wi
				Cut Hole in Tremmie to cement With
	2:00	2:45	3/4	Load Tremmie on Rod Trailer
	2:45	3:00	1/4	Check out Water pump to ensure operation
	3:00	4:30	1 1/2	On Stand By Waiting on Log Working on Packe

Paid Time — 9
Non Paid Time — 1/2
Total Time — 9 1/2

Bob Mase Jr.
4-24-95
Frank Singleton

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
GD 2000	F. Singleton, A. Parkerson, D. Wykoff			
PROGRESS		TASK C-2	DATE Tues 4-25-95	SITE HYDROLOGIST Bob Marse
DEPTH	PROPOSED TOTAL DEPTH		FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Romp # TR5A-1 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	230	7 1/2	loggers still logging. Bob went to Port Charlotte to pick up 6x10 rubber packers. put packers together. standby
230	645	4 1/4	~~put~~ start setting 3" well. let sit 10 min between each joint. fill with fresh clean water.
645	700	1/4	load last 10 joints of pvc on trailer

Pay Time - 11 3/4
No Pay - 0
Total Time - 11 3/4

[signature]
4-25-95
Bob Marse [signature]
4-25-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Ray Parkerson, Dave Wycoff	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Tues. 4-25-95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1208	1208 BLS		4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp TR SA-1 Induction

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	8:30	1 1/2	Waiting on Log
8:30	9:45	1 1/4	Able to get water from fire hydrant Flush ou
			water tank
9:45	10:00	1/4	Fill Water Tank.
10:00	1:45	3 3/4	Work on Packers & Reset Packers 20' off Bot
1:45	2:15	1/2	Put Shorter Stand Pipe on Well
2:15	6:45	4 1/2	Begin Setting 3" SCH 40 PVC

Paid Time — 11 3/4
Non Paid Time — 0
Total Time — 11 3/4

Bob Mace Jr.
4-25-95

[signature]
4-25-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD 2000	F. Singleton, Ray Parkerson, Dave Wykoff	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Wed 4-26-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1208	1250		

ROMP SITE NAME/NUMBER: Romp # TRSA-1 Payne Termin

MILITARY TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	1145	4 3/4	finish setting well casing.
1145	115	1 1/2	Bob to call SWFMD to find out where
			to set the packer. then finish setting
			well, pour in 20 bags holeplug.
115	330	2 1/4	set 1 1/2 trimmie pipe 1155'

Pay Time - 8 1/2
No Pay - 0
Total Time - 8 1/2

Frank Singleton
4-26-95
Bob Marse
4-26-95

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
	Frank Singleton, Ray Parkerson, Dave Wycoff			
PROGRESS		TASK C-2	DATE Wed 4-26-95	SITE HYDROLOGIST Bob Merse
DEPTH 1208	PROPOSED TOTAL DEPTH 1208 BLS		FORMATION/AQUIFER	DATE MOVED ON SITE 4-4-95

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER Payne Terminal Romp # TR SA-1 Induction Well — DETAILS OF OPERATIONS
7:00	7:30	1/2	Resume Setting 3" sch 40 PVC
7:30	8:00	1/2	Fill Water Tank * Told Driller to get new nipple and
			valve to fix leak.
8:00	11:15	3 1/4	Resume Setting 3" sch 40 PVC to 1204.5 * ou
11:15	11:30	1/4	Pull Tension on 3" sch 40 PVC pipe
11:30	1:15	1 3/4	Pour 19 Bags Enviro Plug on top of packers
			2 min Per Bag 5 bags wait 10 min 5 more
1:15	3:30	2 1/4	Set 1 1/2 Steel Tremmie * Only 1,134' onsite
			Shut down for the Day
			no Grout Pump on site NPT
			Grout Pump at other Rig

Paid Time — 8 1/2
Non Paid Time — 0
Total Time — 8 1/2

Bob Merse Jr.
4-26-95
Frank Singleton
4-26-95

C-2.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD 2900	F. Singleton, Dave Wykoff, R Parkerson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Thurs 4-27-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Romp # 9 RSA-7 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	1015	3 1/4	pour 7 5gal buckets gravel down hole
			wait to settle then tag tag at 1166 set
			up cement tub & hoses. mix up 3 50lbs bag
			bentonite fill up water tank. pump water
			down trimmie pipe. pipe is open
1015	~~1800~~ 100	2 3/4	shut down waiting on cement pump
100	600	5	Arrived onsite with pump hook up hoses
			pump to circulate wait on cement truck
			pump cement down hole pull out to dou
			pump rest of cement down hole finish
			pulling out rest of trimmie pipe clean
			out pump pump water down trimmie
			pipe to clean clean and secure site

Pay Time - 8 1/4
No Pay - 2 3/4
Total Time - 11

Farrell E Singleton
4-27-95

Bob Marse
4-27-95

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton, Dave Wycoff Wilson D.	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Pump Slurry	C-2	Thur 4-27-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1208'	1208' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal Romp TRSA-1 Induction Wel

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
	7:00	7:15	1/4	Pour 7-5 gal Buckets of Pea Gravel
	7:15	7:30	1/4	Move Grout Tub & Hopper into Place for cementing
	7:30	8:00	1/2	Fill water tank
	8:00	8:30	1/2	Tag Hole Plug & Gravel w/tremmie 1166' BLS / 18'
				Talked to Greg McQuon "Pump Big Batch"
	8:30	9:15	3/4	Bring tremmie + 1155' BLS / Pump Water down Tremmie to get return
				fill 3" sch 40 pvc w/water
	9:15	10:00	3/4	300 gal water mix 3 Bags gel
	10:00	10:15	1/4	Top off water Tank
NPT	10:15	1:00	2 3/4	Grout Pump not on Site / Waiting for Grout Pump
	1:15	2:30	1 1/4	wait on Cement truck (clean Site)
	2:30	2:45	1/4	Cement Truck on site Pump 300 gal mud into Truck mix 10 min Rap
	2:45	3:00	1/4	pump 1/2 of cement down Tremmie 2.5 cu. yds.
	3:00	3:15	1/4	Pull 168' Tremmie
	3:15	3:30	1/4	pump Rest of Cement down Tremmie 2.5 cu. yds.
				flush pump, pump 100 gal water down Tremmie
	3:30	4:15	3/4	Pull 462' Tremmie

Paid — 8 1/4
Non Paid — 2 3/4
Total Time — 11

Bob Marse
4-27-95

Frank Singleton
4-27-95

C-2

Page 2 of 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Dave Wycoff Wilson	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Pump Slurry	C-2	Thur. 4-27-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal Romp TR SA-1 Induction Well

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
4:15	4:30	1/4	Flush 1000gal water to clean tremmie
4:30	4:45	1/4	Stand 42' Tremmie in Derrick Secure Rig
4:45	5:30	3/4	Clean Grout Pump
5:30	6:00	1/2	Clean & Secure Site pick up tools, Pump, Tan

C-2.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD 2000	F. Singleton D Wykoff W Oakst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Mon 5-1-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal Romp # TR5A-

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
745	4 45	6	pour bag of sand down hole run in
			with trimmie pipe to tag cement tag
			cement at 946. wait on cement truck
			cement truck Arrived pump in half
			batch pull out 4 stands pump in
			other batch. pull out 12 more
			stands of trimmie pipe flush with
			900 gallons water clean cement pu
			& hoses secure site
145	430	2 3/4	drive to Port Charlotte to pick up
			pressure heads and steel for lifting
			eyes on casing

Pay Time - 6
No Pay - 2 3/4
Total Time - 8 3/4

Farrell Singleton
5-1-95
Bob Marse
5-1-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton Dave Wycoff Wilson			
PROGRESS: Dump Slurry		TASK: C-2	DATE: Mon 5-1-95	SITE HYDROLOGIST: Bob Marse
DEPTH: 1208'	PROPOSED TOTAL DEPTH: 1208' BLS		FORMATION/AQUIFER	DATE MOVED ON SITE: 4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp #TRSA-1 Induction Well

FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:45	8:15	1/2	Pour One Bag Sand / Let Settle
8:15	9:30	1 1/4	Trip in w/Tremmie to tag Cement Tag 937' BLS
9:30	9:45	1/4	Pull up to within 7' of cement 930 BLS
9:45	10:15	1/2	Fill Water tank
10:15	10:30	1/4	Circulate Tremmie
10:30	11:00	1/2	250 gals water in tub mix 2 1/2 Bags gel
11:00	11:15	1/4	wait on Cement Truck
11:15	11:30	1/4	Truck on site pum 250 gal mud in Truck Mix Rapidly 10 min
11:30	11:45	1/4	Pump 2.5 cu. yds cement
11:45	12:00	1/4	Pull 168' Tremmie
12:00	12:15	1/4	Pump 2.5 cu. yds cement
12:15	1:00	3/4	Flush Grout Pump / Pump 100 gal fresh Water down
			1 1/2 Tremmie Pull 504' of Tremmie
1:00	1:45	3/4	Clean Grout Pump
NPT* 1:45	4:30		Hook, Dave & Wilson went to North Port to check for
			Well Head & Steel for tabs on Casing
			No Steel on Site to weld to Casing for next well

Paid — 6
NonPaid — 2 3/4
Total Time — 8 3/4

Bob Marse
5-1-95

Frank Singleton
5-1-95

C-2.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW F. Singleton D wykoff w. Oaksf		REPORT NO.
PROGRESS	TASK C-2	DATE Tues 5-2-95	SITE HYDROLOGIST Bob Marse
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER TRSA-7 Romp # Payne Termin DETAILS OF OPERATIONS
700	300	8	pour bag cement down hole tag cement
			with tremmie pipe tag at 814 came u
			123 ft. (935) cement truck arrived start
			pumping cement pull out 16 stands of
			tremmie pipe clean out tremmie with
			900 gals water. clean cement pump
			and hoses out & weld lifting eyes
			on casing clean & secure site.

Pay Time - 7 1/2
No Pay - 1/2
Total Time - 8

Farell Singleton
5-2-95
Bob Marse
5-2-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton, Dave Wycoff, Wilson			
PROGRESS: Pump Slurry		TASK: C-2	DATE: Tues 5-2-95	SITE HYDROLOGIST: Bob Merse
DEPTH: 1208'	PROPOSED TOTAL DEPTH: 1208' BLS		FORMATION/AQUIFER	DATE MOVED ON SITE: 4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp # TR SA-1 Induction Well

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	7:15	1/4	Pour One Bag Sand on top of Cement to tag
7:15	8:00	3/4	Trip in with 1½ Steel Tremmie Tag cement 814
8:00	8:15	1/4	Circulate Tremmie
8:15	8:30	1/4	200 gal Water Mix 2 Bags. Gel for Cementing.
8:30	9:00	1/2	Fill Water Tank
9:00	9:30	1/2	Weld Tabs on casing for next Well
9:30	9:45	1/4	Cement Truck on Site Pump 200 gal gel mix
			Rapidly In Truck 10 min.
9:45	10:00	1/4	Pump 2.5 cu. yds Cement
10:00	10:15	1/4	Pull 168' 1½ Steel Tremmie
10:15	10:30	1/4	Pump 2.5 cu. yds cement
10:30	11:15	3/4	Pull 504' 1½ Steel Tremmie
11:15	11:30	1/4	Flush 1000 gal Down Tremmie
11:30	12:00	1/2	Clean Grout Pump
12:00	1:15	1¼	Weld Tabs on casing for next well
NPT 1:15	1:45	1/2	Lunch
1:45	3:00	1¼	Weld Tabs on Casing for next Well

Paid — 7½

NonPaid — ½

Total Time — 8

* 3:00 Hook Took Grout Pump to Venice

Bob Merse
5-2-95

Frank Singleton
5-2-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CD 2000	F. Singleton D. Wykoff W. Onkst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Wed 5-3-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Romp # TRSA-7 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	1200	5	Pour bag ~~cem~~ sand down hole to tag cement tag at 601. pump water down hole to check circulation (1015) cement truck arrived mix bentonite w/cement start pumping down hole clean cement pump/hose flush out tremmie pipe after pulling out 12 joints

Pay Time - 5
No Pay - 0
Total Time - 5

Farrell Singleton
5-3-95
Bob Marse
5-3-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Dave Wycoff Wilcomb	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Pump Slurry	C-2	Wed. 5-3-95	Bob Morse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1208 BLS	1208' BLS		4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp # TR SA-1 Induction Well

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	7:30	1/2	Pour one bag Sand. / Fill water tank
7:30	8:30	1	Trip in w/ Tremmie Tag 601' BLS (cement
8:30	8:45	1/4	Pull off Bottom 11' to 590'
8:45	9:15	1/2	Mix 200 gal water w/ 2 Bags Gel
9:15	10:15	1	Wait on Cement Truck
10:15	10:30	1/4	Truck on site Pump 200 gal mud in Truck mix 10 mi
10:30	10:45	1/4	Pump 4 cu. yds Slurry
10:45	11:00	1/4	Flush Grout Pump / Pump 125 water Down Tremmie
11:00	11:30	1/2	Pull 420' Tremmie / pump 500 gal Water down Tre
11:30	12:00	1/2	Clean Grout Pump
			* Took Grout Pump to Walbridge

Paid — 5
Nonpaid — 0
Total Time — 5

Bob Morse
5-3-95
[signature]
5-3-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
6D2000	F. Singleton D. Wykoff W. Onkst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Thurs 5-4-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Romp # TRSA-7 Payne Termin

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0700	1145	4 3/4	mix up bentonite with 221 gals water
			341bs mud. tag cement after pouring 1
			bag sand tag cement at 483 mix
			64 bags cement 295 gals water pump do
			hole pull out 8 doubles flush with clea
			water clean cement pump & hoses

Pay Time - 4 3/4
No Pay - 0
Total Time - 4 3/4

[signature] 5-4-95
Bob Marse 5-4-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Dave Wycoff Wilson O.	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Pump Slurry	C-2	Thur. 5-4-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1208 BLS	1208 BLS		4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp #TRSA-1 Induction We[ll]

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	7:15	1/4	Pour one Bag Sand
7:15	7:30	1/4	Measure Tremmie w/Tape to Check accuracy
7:30	8:30	1	Trip in w/Tremmie to tag Cement Tag 483' BL[S]
8:30	8:45	1/4	Pull up 8' off Tremmie Circulate Tremmie
8:45	9:00	1/4	221 gal. Water mix 34 lbs gel
9:00	9:45	1/4	Mix 54 Bag #47 portland Total gal. 295.966
			Cement thickened Rapidly suppose to hav[e]
			64-#47 portland
9:45	10:00	1/4	Pump Cement Down Tremmie
10:00	10:15	1/4	Flush Grout Pump
10:15	11:00	3/4	Pull 7 Stands Tremmie 294'
11:00	11:15	1/4	Flush Tremmie w/500 gal water
11:15	11:45	1/2	Break down & Clean out Grout Pump
			* Hook had to take Grout Pump to Another Job for [...]

Paid — 4 3/4

NonPaid — 0

Total Time — 4 3/4

Bob Marse
5-4-95

Frank E Singleton
5-4-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD 2000	F. Singleton D. Wykoff W. Oakst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Mon 5-8-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal Romp # TRSA-

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
200	300	1	tag cement after pouring 1 bag of san
			down well with trimmie pipe

Pay Time - 1
No Pay - 0
Total Time - 1

Frank Singleton
5-8-95
Bob Marse
5-8-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton Dave Wycoff Wilson Oxest			
PROGRESS: Tag Cement	TASK: C-2	DATE: Mon 5-8-95		SITE HYDROLOGIST: Bob Marse
DEPTH: 1208	PROPOSED TOTAL DEPTH: 1208' BLS	FORMATION/AQUIFER		DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal Romp# TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
		*	Layne Safety Meeting Crew onsite 2:00pm
2:00	2:15	1/4	Pour One Bag Sand ontop of Cement
2:15	2:30	1/4	Run Tape down 1½ Steel Trem mie to
			confirm depth.
2:30	3:00	1/2	Trip Tremmie in hole Tag Cement 433' BLS
			* No Grout Pump on site Layne's Crew
			went to Venice

Paid — 1
NonPaid — 0
Total Time — 1

5-8-95 Bob Marse

Frank E Singleton
5-8-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD2000	F. Singleton D. Wykoff W. Onkst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Tues 5-9-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1208	1208 BLS		

ROMP SITE NAME/NUMBER: Payne Terminal Romp #TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
630	700	1/2	fill water ~~line~~ tank hook up to
			pump
700	530	10 1/2	set 390' 2" pvc well casing fill with
			hole plug pour bag of sand and tag with
			trimmie pipe 300' BLS

Pay Time - 11
No Pay - 0
Total Time - 11

Frank Singleton
5-9-95

Bobby Marse Jr
5-9-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton, Dave Wycoff, Wilson Dryst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Tues 5-9-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1208'	1208' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal Romp #TRSA-1 Induction Well

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
6:30	7:00	1/2	Fill Water Tank
7:00	7:30	1/2	Pour 5- 5/gal Buckets Hole Plug
7:30	7:45	1/4	Load 2" PVC & Screen on Trailer to go in Well
7:45	8:15	1/2	Pour 5- 5/gal Buckets Hole Plug
8:15	8:45	1/2	Let Settle to Bottom (Hole Plug)
8:45	9:15	1/2	Pour 5- 5/gal Buckets Hole Plug
9:15	9:45	1/2	Let Hole Plug Settle to Bottom
9:45	10:00	1/4	Pour 1- Bag Sand
10:00	10:15	1/4	Tag Hole Plug 402' BLS
10:15	10:45	1/2	Pull up Tremmie measure w/tape to Confirm tag
			Go Back down w/Tremmie Tag 401' BLS
10:45	11:00	1/4	Pour 4- 5/gal. Buckets Hole Plug
11:00	11:30	1/2	Let Hole Plug Settle
11:30	12:00	1/2	Pour 1- Bag Sand Let Settle for Tag: 397' BLS.
12:00	12:15	1/4	Pour 4 5/gal Buckets Hole Plug Let Settle
12:15	1:00	1/4	Pour 1 Bag Sand Tag * 392' BLS
			115 gals Hole Plug 23- 5/gal Buckets

C-2

Page 2 of 2.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Dave Wycoff Wilton Oxnst.	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Set Screen Gravel Pack	C-2	Tues. 5-9-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1208'	1208' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal Romp # TR SA-1 Induction W

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
1:00	1:30	1/2	Set 60' 0.30 Trilock Screen, 328' 2" Trilock PVC
130	2:30	1	Pour 38- 5/gal. Buckets Gravel
2:30	2:45	1/4	Tag Gravel 356' BLS
2:45	3:00	1/4	Pour 20- 5/gal. Buckets Gravel
3:00	3:15	1/4	Tag Gravel 333' BLS
3:15	3:30	1/4	Pour 5- 5/gal. Buckets Gravel Tag 324' BLS
3:30	3:45	1/4	Pour 3- 5/gal. Buckets Gravel Tag *320' BLS.
			* 66- 5/gal Bucket Gravel Total
			330 gals Gravel Total
3:45	4:00	1/4	pour 5- 5/gal Buckets Hole Plug Let Settle
4:00	5:00	1	pour 5- 5/gal Buckets Hole Plug Let Settle
5:00	5:15	1/4	Pour 1- Bag Sand Let Settle
5:15	5:30	1/4	Tag Hole Plug *300' BLS

Paid — 11

Non Paid — 0

Total Time — 11

5-9-95 Bob Marse

[signature] 5-9-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
6D 2000	F. Singleton D. Wykoff W. Onkst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Wed 5-10-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1208	1208		

ROMP SITE NAME/NUMBER: Payne Terminal Romp # TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	1030	3 1/2	Tag hole plug After pouring 1 bag of sand down well. fill water tank Mix 250 gal water 2 bags bentonite mix with 5 yds cement pump down hole. flush trimmie pipe clean cement pump + hoses. pull out trimmie pipe.
NPT 1030	700	8 1/2	pull transmission out of rig to change throw out bearing

Pay Time - 3 1/2
No Pay - 8 1/2
Total Time - 12

[signature]
5-10-95

[signature]
5-10-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton, Dave Wycoff, Wilson Oxnard			
PROGRESS		TASK C-2	DATE Wed 5-10-95	SITE HYDROLOGIST Bob Morse
DEPTH 1208	PROPOSED TOTAL DEPTH 1208' BLS		FORMATION/AQUIFER	DATE MOVED ON SITE

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER Payne Terminal Romp # TRSA-1 DETAILS OF OPERATIONS
7:00	7:30	½	Tag Hole Plug
7:30	8:00	½	Clean Site Stack PVC
8:00	8:30	½	Fill Water Tank
8:30	8:45	¼	Mix 250 gal water w/ 2 Bags gel
8:45	9:00	¼	Pump 250 gal gel into Cement Truck mix 10 min Rapidly
9:00	9:15	¼	Pump 5 cu. yds Cement (Portland)
9:15	9:30	¼	Flush 100 gal Water to Clean Pump, Lines, Tremmie
9:30	9:45	¼	Pull Tremmie Completely out of well
9:45	10:00	¼	Tear Down Grout Pump & Clean
10:00	10:15	¼	Center Casing in Well Add Tension
10:15	10:30	¼	Clean Site / Prepare to Move
NPT 10:30	7:00	8½	* Pull Transmission out of Rig Throw out Bearing

Paid ~~[illegible]~~ — 3½
NonPaid — 8½
Total — 12

5-10-95 Bob Morse Jr.

[signature]
5-10-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
6D2000	F Singleton D. Wykoff W. Oakst		
PROGRESS	TASK C-2	DATE Thur 5-11-95	SITE HYDROLOGIST Bob marse.
DEPTH 1208	PROPOSED TOTAL DEPTH 1208	FORMATION/AQUIFER	DATE MOVED ON SITE

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER DETAILS OF OPERATIONS
700	1000	3	pour 1 bag sand down well tag cement
			26' mix 76gals water w/ 23 bags cement
			10lbs gel pump down well with full return
			clean pump & hoses clean site move
			air compressor
1000	730	9 1/2	work on rig put in new throw out
			Bearing

Pay Time - 3
No Pay - 9 1/2
Total Time - 12 1/2

[signature]
5-11-95

5-11-95 Bob Marse

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton Dave Wycliff Wilbur Oxstrt			
PROGRESS: Pump Slurry Finish Well	TASK: C-2	DATE: Thur 5-11-95		SITE HYDROLOGIST: Bob Marse
DEPTH: 1208	PROPOSED TOTAL DEPTH: 1208 BLS	FORMATION/AQUIFER		DATE MOVED ON SITE: 4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal Romp #TRSA-1 Induction Well

MILITARY TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	7:15	1/4	Pour One Bag Sand Tag Cement 26' BLS w/Tre
7:15	7:30	1/4	75 gal water #10 gel (mix)
7:30	7:45	1/4	Mix 23 bags #47 portland
7:45	8:00	1/4	Pump Cement to Surface
8:00	8:15	1/4	Flush Grout Pump pull Tremmie out of Wel
8:15	8:45	1/2	Tear Down Grout Pump & Clean
8:45	10:00	1 1/4	Began Moving Equipment (Air Compressor, Groutp
NPT 12:00	7:30	9 1/2	Work on Rig Put New Throw out Bearing in

Paid — 3
NonPaid — 9 1/2
Total Time — 12 1/2

5-11-95 Bob Marse

[signature]
5-11-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
GD 2000	F Singleton D. Wykoff W. Onkst		
PROGRESS	TASK C-2	DATE mon 5-15-95	SITE HYDROLOGIST Bob Marse
DEPTH	PROPOSED TOTAL DEPTH 1015	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Romp # TRSA-7 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
900	530	8 1/2	move rig to new well location
			with pads & set up unload trimmie
			pipe. Dig pits put up fence around
			pit.
1030	100	2 1/2	wait on mack to move pipe trailer.

Pay Time - 5 3/4
No Pay - 2 1/2
Total Time - 8 1/4

5-15-95

5-15-95 Bob Marse Jr.

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton Dave Wycoff, Wilson Oneist		
PROGRESS: Move & Set up	TASK: C-2	DATE: Mon 5-15-95	SITE HYDROLOGIST: Bob Marse
DEPTH	PROPOSED TOTAL DEPTH: 1015' BLS	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal Romp TRSM-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
9:15	10:30	1 1/4	Crew on Site Lower Derrick move off Well
			Move Floor away from Well
NPT 10:30	1:00	2 1/2	Mack Truck not on Site to move Rod Trailer
1:00	2:15	1 1/4	Back Rig over New Well Site Set floor in Place Back Rod Trailer w Mack
2:15	3:00	3/4	Unload Tremmie off Rod Trailer / Move Drill Bits
3:00	4:15	1 1/4	Dig Pit w/Backhoe
4:15	5:30	3/4	Put fence up around Pit Put Goose in Place

Paid —— 5 3/4
NonPaid —— 2 1/2
Total Time —— 8 1/4

5-15-95 Bob Marse

[signature]
5-15-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD 2000	F. Singleton D. Wykoff W. Onkst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Tues. 5-16-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Romp # TRSA-1 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	1800	11	Clear site w/ Backhoe for grout pump
			move pallets cement/sand move welder, 20"
			casing to rig fill water tank mud up go
			dig out pits load up dump truck weld tabs
			on casing cut lugs for 14" steel
			Break sub off of bit.

Pay Time – 7 3/4
No Pay – 3 1/4
Total Time – 11

[signature] 5-16-95
5-16-95 Bob Marse

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton Dave Wycoff Wilson Ornst		
PROGRESS: Move/Setup	TASK: C-2	DATE: Tues 5-16-95	SITE HYDROLOGIST: Bob Marse
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE: 4-4-95

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
	7:00	10:30	3 1/2	Clear Brush to make Room for Grout Pump
				Move Pallets Cement / Move Pallet Mud & Hole Plug
				Move Welder, Move 20" Casing, Move Air Com
	10:30	11:00	1/2	Fill Water Tank
	11:00	11:30	1/2	Mud up Goose
	11:30	12:15	3/4	Dig out Pit Load in Dump Truck
NPT	12:15	12:45	1/2	Lunch
	12:45	1:15	1/2	Finish Welding Tabs on 20" Steel
	1:15	2:15	1	Cut Tabs for 14" Steel
	2:15	3:15	1	Load Dump Truck (Clean out Pit)
NPT	3:15	6:00	2 3/4	Try to Break Sub off 9 1/2" Drill Bit
				No Bit Breaker for 9 1/2" Bit Had to use
				chain Tong & 48" pipe Wrench to Break wit
				Back Hoe * Told Driller to get all chai
				Tongs Repaired (New Chains, Jaws)

Paid — 7 3/4
Non Paid — 3 1/4
Total Time — 11

5-16-95 Bob Marse

[signature]
5-16-95

C-7

SMFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD2000	F. Singleton D. Wykoff W. Ontst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-7	Wed 5-17-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Romp # TRSA-7 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	900	14	put on 26" hole opener on 17 tricone
			Bit start drilling. clean off clay on bits
			fill water tank.
			drill 0-71'

Pay Time - 14
No Pay - 0
Total Time - 14

5-17-95

5-17-95 Bob Marse

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Dave Wycoff Wilson Orast	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
71' BLS	C-2	Wed 5-17-95	Bob Maise

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
71'	1015' BLS		4-4-95 5

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	7:45	3/4	Put 17" TriCone Bit on 26" Hole opener 6'4"
7:45	8:45	1	Dig Hole for Bit to go in so Kelly Bushings will go in Rotary Table
8:45	10:15	1 1/2	Drill Kelly 38'2" Sub#1 - 1'3" Sub#2 1'3"
10:15	10:45	1/2	Bit Balled up in Clay Clean Bit Thin Mud
10:45	11:30	3/4	Drill Kelly
11:30	12:00	1/2	Bit Balled up in Clay Clean Bit Thin Mud
12:00	1:15	1 1/4	Drill Kelly
1:15	1:30	1/4	Thin Mud
1:30	4:45	3 1/4	Drill Kelly / Ream Hole / Thin mud / Circulate
4:45	5:00	1/4	Break Bit off Kelly
5:00	5:15	1/4	Pickup DC #1 30'
5:15	6:00	3/4	Attach DC#1 to 26" Hole opener / Connection DC#1
6:00	8:30	2 1/2	Drill DC#1
8:30	9:00	1/2	Circulate Hole Clean / Cover Hole

Paid —— 14
Non Paid —— 0
Total Time —— 14

5-17-95 Bob Maise

Frank Singleton
5-17-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton, Dave Wycoff, Wilson Oxnet	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Drill to 105' BLS.	C-2	Thur. 5-18-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
105' BLS	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp # TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	7:30	1/2	Fill Water Tank
7:30	8:00	1/2	Ream Hole & Circulate
8:00	8:30	1/2	Connection D.C. #2 (6")
8:30	11:00	2 1/2	Drill DC #2
11:00	11:30	1/2	Ream Hole & Circulate
11:30	11:45	1/4	Circulate / Thin Mud
11:45	12:00	1/4	Connection D.C. #3 (6")
12:00	1:00	1	Drill D.C. #3 - 5' & Ream
1:00	1:30	1/2	Circulate Hole Clean
1:30	2:15	3/4	Trip out of Hole
2:15	2:30	1/4	Clean Site & Secure Hole

Paid — 7 1/2
Non Paid — 0
Total Time — 7 1/2

5-18-95 Bob Marse

[signature] 5-18-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME GD2000	CREW F. Singleton D. Wykoff W. Onkst		REPORT NO.
PROGRESS	TASK C-2	DATE Thurs 5-18-95	SITE HYDROLOGIST Bob Marse
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER Romp #: TRSA-1 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0645	1115	4 1/2	fill water tank circulate well, ream wel
			had dc 1 drill to 101' Add DC 2 drill to
			105'
1100	230	3 1/2	ream & circulate hole circulate to
			thin connect DC 3 8" Drill 5' Ream
			hole circulate clean trip out of hole
			clean & secure site

Pay Time - 7 1/2
No Pay - 0
Total Time - 7 1/2

F. Singleton
5-18-95

Bob Marse
5-18-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME: GD2000	CREW: F. Singleton D. wykoff W. Onkst		REPORT NO.
PROGRESS	TASK: C-7	DATE: Mon 5-22-95	SITE HYDROLOGIST: Bob Marse
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal Romp #TRSA 1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
	700	800 ~~815~~	1	Trip in hole w/ 8" DC
NPT	800	930	1 1/2	went to find another fire hose Grout pump not on site
	930	1015	3/4	Trip DC in hole mix mud circulate
NPT	1015	1115	1	~~hose~~ belts broke on goose go to parts store to get new hoses repair goose
	1115	145	2 1/2	circulate hole clean Trip DC's out of hole break off 26" hole opener
NPT	145	215	1/2	Lunch
	215	530	6 1/4	weld 20" casing together run in 105' 1 1/2" trimmie pipe get circulation mix cement 118 bags 59 lbs gel pump down hole pull trimmie pipe lower casing down hole clean pump + site secure site

Pay Time - 10 1/2
No Pay - 3
Total Time - 13 1/2

Frankl C Singleton
5-22-95

Bob Marse
5-22-95

C-2

Page 1 of 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton Dave Wycoff Wilson Ovast			

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Set 20" Steel Cement Bottom	C-2	Mon. 5-22-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
105'	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp # TRSA-1 Suwannee Avon Park Monitor-We

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
	7:00	8:00	1	Trip D.C.'s in Hole [redacted]
NPT	8:00	9:30	1 ½	No fire hose, Hose was not put in dog house over the weeke
				and was Stolen; Dave Hook Left site to find Hose, Grout pu
				not on site told Driller Thursday to have it today
	9:30	9:45	¼	Trip one D.C. in Hole to get to Bottom 105' BLS
	9:45	10:00	¼	Mix fresh Mud
	10:00	10:15	¼	Circulate Hole
NPT	10:15	11:15	1	Belts Broke on Goose (Drive Belts from Engine) 10:30 Grout Pum
	11:15	11:45	½	Circulate Hole Clean
	11:45	12:45	1	Trip D.C.'s 6" out of Hole
	12:45	1:30	¾	Break off & Remove 26" Hole opener Bit
	1:30	1:45	¼	Set 42' of 20" Steel casing Tackweld Next R. 84'
NPT	1:45	2:15	½	Lunch
	2:15	3:30	1 ¼	Weld Casing together
	3:30	3:45	¼	Stand 21' of 20" steel
	3:45	5:00	1 ¼	Weld Casing together
	5:00	5:15	¼	Prime Grout Pump

Paid —— 10 ½
Non Paid —— 3
Total Time —— 13 ½

5-22-95 Bob Marse

Frank Singleton
5-22-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton, Dave Wycoff, Wilson Oxnst.	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Set 20" Steel Cement Bottom		Mon. 5-22-95	Bob Morse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
105'	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp # TR SK-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
5:15	5:45	1/2	Run 105' 1½ Steel Tremmie / Get Circulation
5:45	6:15	1/2	Mix Batch #1 Cement 204 Gal water, 31# gel 40 Bags Portland
			Batch Called for 62 Bags, But cement Thickened Rapidly
6:15	6:30	1/4	Pump Cement threw 1½ Tremmie
6:30	7:00	1/2	Mix Batch #2 cement 182 gal water 28# gel 52 Bgs Portland
			Batche Called for 56 Bags, But Cement got to thick
7:00	7:15	1/4	Put threw Tremmie / Pull Tremmie
7:15	7:30	1/4	Lower Caseing 20' (Twice) Set Casing 102' BLS
7:30	8:00	1/2	Clean Grout Pump
8:00	8:30	1/2	Clean up Site Secure top of 20" Steel Casing

Paid ______

NonPaid ______ on Page 1

Total Time ______

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
G2000	F Singleton D. Wykoff W. Orkst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Tues 5-23-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Romp #TRSA-1 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	230	7 1/2	tag cement 92' inside casing
			88' outside casing
			hook up hoses check circulation tru
			trimmie pipe wait on cement truck
			(930) Cement truck arrive pump 250 gals
			Bentonite mix in truck start pumping
			down hole take rig pump apart to
			clean. start welding lifting eyes on 14"
			steel casing clean and securesite.

Pay Time - 5 1/2

No Pay - 5

Total Time - 10 1/2 - Based on 10 hour day

[signature] 5-23-95

Bob Marse 5-23-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

~~Page 1 of 2~~

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton, Dave Wycoff, Wilson (Asst.)	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Grout Surface Casing	C-2	Tues 5-23-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
105 BLS	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1 Suwannee Avon Park

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
	7:00	7:15	1/4	Pour one Bag Sand to tag / Move Grout Tub, Hopper, Tag 92' TO 88'
	7:15	7:30	1/4	Run 84' 1½ Steel Tremmie down anulus
	7:30	7:45	1/4	Circulate Tremmie
	7:45	8:00	1/4	250 gal water in mixing tub
	8:00	8:15	1/4	Mix 75# gel in tub 1½ Bags
IT	8:15	9:30	1¼	Talked to Greg McQuon "Run 8" D.C.'s"
				Only one in running condition other D.C.'s are plugged
				Told Hook & Gary 4-12-95 to get them cleaned
				Try Cleaning 8" D.C.
	9:30	9:45	1/4	Cement Truck on Site / Pump 250 gal Mud in truck mix 10 min fa
	9:45	10:00	1/4	Pump 4 cu. yds 6:1 Slurry Threw 1½ Tremmie / Cement to Ground Le
*				* Mud Pump on Rig not Staying engaged, Sometime will not dis
				Told Hook to get it fixed Before it gets worse
	10:00	10:15	1/4	Pull Tremmie out
	10:15	11:15	1	Tear Down Rig Pump & Clean Cement out of it
	11:15	11:30	1/4	Clean Cement out of Flow Ditch
	11:30	1:45	2 1/4	Cut & Weld Ears on 14" steel / Pump 2" well off
NPT*	1:45	5:30	3 3/4	Hook Took Dave & Wilson to motel, Left Site to get Drill Collar

Did not Return By 5:30

Paid — 5½
Non Paid — 5
Total Time — 10½

5-23-95 Bob Marse

Frank Singleton
5-23-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD2000	F. Singleton D. Wykoff W. Onkst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Wed 5-24-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Romp # TRSA-2 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
645	730	12 3/4	cut 20' casing down to ground level
			for mud drilling run in hole with 1st
			8" DC circulate after putting on 14" bit
			and 20" hole opener get load of wate
			tag cement with bit 86.3 get water
			begin drilling out cement plug circulate
			Add DC 3 drill to 126.1 circulate
NPT 130	200	1/2	repair throttle linkage
			circulate well Add DC I 4" drill to
			156.1
345	415	1/2	replace fuel filter
			drill #I 4" DC down 156.1 circulate
			clean & secure site

Pay Time - 10 3/4
No Pay - 1 3/4
Total Time - 12 1/2

[signature]

5-24-95 Bob Marse

C-2

Page 1 of 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton, Dave Wycoff, Wilson Oxast.			
PROGRESS		TASK C-2	DATE Wed 5-24-95	SITE HYDROLOGIST Bob Marse
DEPTH	PROPOSED TOTAL DEPTH 1015		FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal /Romp TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	7:30	1/2	Cut 20" Steel Casing Ground Level
7:30	800	1/2	Attach 14" Bit on Bottom of 19" Hole opener Bit - (8')
8:00	8:30	1/2	Set Hole opener in Casing
8:30	9:00	1/2	Trip in hole with one D.C. 30' & Kelly 38'2" Circulate old mud out
9:00	9:15	1/4	Fill water Tank
9:15	9:30	1/4	Thin mud
9:30	10:00	1/2	Connection D.C #2 29'4"
10:00	10:15	1/4	Circulate /Fill water Tank
10:15	10:45	1/2	Drill Cement out of Casing * Talked to Hook Assigned [redacted] one Person for (Dave)
10:45	11:00	1/4	Circulate At 99' 6"
11:00	11:30	1/2	Connection D.C. #3 26'7" * use hammer to get tong on
11:30	1:15	1 3/4	Drill 99'6" to 126'1"
1:15	1:30	1/4	Circulate Hole Clean
NPT 1:30	2:00	1/2	Throttle on Rig ~~[illegible]~~ not operating properly
			will not increase or decrease at times
2:00	2:15	1/4	Ream Hole
2:15	2:45	1/2	Circulate Hole

Paid — 10 3/4
NonPaid — 1 3/4
Total Time — 12 1/2

5-24-95 Bob Marse

Frank Singleton
5-24-95

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton, Dave WyCoff, Wilson Orest			
PROGRESS 92' to 156' BLS	TASK C-2	DATE Wed 5-24-95		SITE HYDROLOGIST Bob Marse
DEPTH 156'	PROPOSED TOTAL DEPTH 1015' BLS	FORMATION/AQUIFER		DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
NPT	2:45	3:00	1/4	Try To make Connection Tong Pin Broke * Talked
				to Hook about To much time to make Connec
				Because of Tongs, Tongs Need Repaired for safety
				to ensure proper operation
	3:00	3:15	1/4	Connection 4" D.C. #1 30'
	3:15	3:30	1/4	Drill 4" D.C #1 126' 1" to 156' 1"
	3:30	3:45	1/4	Circulate Hole Did not finish Kelly
NPT	3:45	4:45	1	Fuel Filters Stopped up Replace w/new ones
	4:45	5:00	1/4	Resume Drilling 4" D.C #1
	5:00	5:15	1/4	Thin Mud
	5:15	7:00	1 3/4	Resume Drilling 4" D.C #1 126' 1" to 156'
	7:00	7:30	1/2	Circulate Hole / Secure Site

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD2000	F. Singleton D. Wykoff W. Onkst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Thurs 5-25-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Romp # TRSA-2 Peyro Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
0645	1000	3 1/4	get a load of water fill goose to thin mud. Add 4" DC # 2 drill to 185.5 get another load of water circulate hole. Add 4" DC # 3 begin drilling
1000	1015	1/4	Adjust mud pump clutch
1015	1215	2	start back drilling get another load of water ream & circulate hole. Add 4" DC # 4 Begin drilling to 245.3 Clutch start smoking real bad shut down rig. get anoth load of water for goose

Pay Time - 5
No Pay - 1/2
Total Time - 5 1/2

[signature] 5-25-95

Bob Marse Jr. 5-25-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton Dave Wycoff Wilso Onxst		
PROGRESS: Drill from 156' to 245'	TASK: C-2	DATE: Thur 5-25-95	SITE HYDROLOGIST: Bob Marse
DEPTH: 245'	PROPOSED TOTAL DEPTH: 1815 BLS	FORMATION/AQUIFER	DATE MOVED ON SITE

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1 M.W. — DETAILS OF OPERATIONS
7:00	7:15	1/4	Fill Water Tank
7:15	7:30	1/4	Thin Mud
7:30	7:45	1/4	Connection 4" D.C. # 2 29'4"
7:45	8:15	1/2	Drill 156'1" to 185'5"
8:15	8:30	1/4	Thin Mud
8:30	9:45		Resume drilling to 185'5" circulate 10.
			* Told Hook to get mud gauge repaired
			& To Have Contract Welder & Grout pump
			Ready to Run Casing next week
9:45	10:00	1/4	Connection 4" D.C. #3 30'3"
NPT 10:00	10:30	1/2	Work on Throttle & Clutch
10:30	11:15	3/4	Drill 185'5" to 215'8" Ream & Circulat
11:15	11:30	1/4	Connection 4" D.C. # 4 29.7
11:30	12:30	1	Drill 215'8" to 245'3"
12:30	NPT		Clutch caught on fire going to Mud
			Lack 5' of Completing Kelly
			Left to go to ORLANDO

5-25-95 Bob Marse Jr.

Paid — 5
Non Paid — 1/2
Total Time — 5 1/2

[signature]
5-25-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD 2000	F. Singleton, D Wykoff W. Onkst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Mon 5-29-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: TRSA-1 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			Holiday off Duty

Frank Singleton
5-29-95
Bob Marse Jr
5-29-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton, Dave Wycoff, Wilson Durst			
PROGRESS	TASK	DATE		SITE HYDROLOGIST
—	C-2	Mon, 5-29-95		Bob Morse
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER		DATE MOVED ON SITE
245	1015 BLS			

MILITARY TIME TIME LOG		ELAPSED TIME	ROMP SITE NAME/NUMBER: Payne Terminal Romp TRSA-1
FROM	TO		DETAILS OF OPERATIONS
			Holiday

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD2000	F Singleton, D. Wykoff W OnkST	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Tues 5-30-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER Payne Terminal Romp # TRSA-

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
845	215	5 1/2	Clean pits move steel casing over
			to rig load & unload backhoe Add
			4" DC # 5 start drilling Vacuum
			truck arrived to clean out pits
130	145	1/4	shut down rig because clutch sta
			burning call shop
			while calling shop get a load of wa
			for Vaccum truck man wait on
			Vacuum truck to arrived clean & Secu
			site

Pay Time - 5 1/4
No Pay - 1/2
Total Time - 5 3/4

[signature]
5-30-95

[signature]
5-30-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Dave Wycoff Wilson Tim [illegible]	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Drill from 245' to 276'	C-2	Tues. 5-30-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
276	1015 BLS		

ROMP SITE NAME/NUMBER: Payne Terminal Romp TR SA-1 M.W.

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
8:45	9:30	3/4	(Had a flat Tire) Late / Stir Pits
9:30	10:45	1 1/4	Move Air Compressor, welder, Casing
			*10:45 I Left Site to take Backhoe to C-
			Returned 4:15
10:45	11:30	3/4	Resume Drilling 4" D.C. #4 & Circulate
11:30	11:45	1/4	Connection 4" D.C. #5 31'
11:45	1:30	1 3/4	Drill 245'3" to 276'3"
1:30	2:00	1/2	Fill Water Tank Clutch on Pump Caught on fire
NP 2:00	4:00	2	Wait on Septic Truck; * Did not weld
			Lift eyes on Casing while waiting

Paid — 5 1/4
Not Paid — 2
Total Time — 7 1/4

5-30-95 Bob Marse Jr.

[signature]
5-30-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CD2000	F. Singleton D Wykoff W. OnkST	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Wed 5-31-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal Romp #TRSA-7

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
645	700	1/4	warm up rig + goose
700	745	3/4	finish drilling DC #5 + circulate
745	800	1/4	Add 4" DC #6
800	930	1 1/2	drill 4" DC #6 circulate get load
			of water
930	1145	2 1/4	Add 4" DC #7 circulate to thin
			mud get load of water circulate
			rig up catline to pull out of hole
			drill a extra 3'
1145	1245	1	pull out of hole
1245	100	1/4	pick up tools + secure site
100	130	1/2	Lunch
130	515	3 3/4	finish moving casing over to rig
			weld lifting eyes on casing get a
			load of water for pits clean and
			secure site

Pay Time - 9 3/4
No Pay - 1/2
Total Time - 10 1/4

[signature] 5-31-95

Bob Marse Jr. 5-31-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Dave Wycoff Wilson Ornst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Drill From 276 to 328.	C-2	Wed 5-31-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
328'	1015 BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp # TRSA-1 M.W.

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	7:30	1/2	Resume Drilling 4" D.C. #5 to 276' 1" & Circ
7:30	7:45	1/4	Connection "4 D.C. # 6 29' 3"
7:45	9:30	1 3/4	Drill 276' 3" to 305' 6" Ream & Circulate
9:30	9:45	1/4	Connection "4 D.C # 7 29' 3"
9:45	11:30	1 3/4	Drill 305' 6" to 328
11:30	12:00	1/2	Circulate Hole Clean
12:00	1:00	1	Trip D.C. up into 20" Steel Casing
NP 1:00	1:30	1/2	Lunch
1:30	5:15	3 3/4	Weld Loft eyes on 14" steel Casing
			move Casing in Place with Cat Line,
			Fill water tank

Paid — 9 3/4
Non Paid — 1/2
Total Time — 10 1/4

5-31-95 Bob Marse Jr.

Frank Singleton
5-31-95

Page 1 of 2 C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton, Dave Wycoff, Wilson Orant	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Set 325' 14" Steel & Grout	C-2	Thur. 6-1-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
328' BLS	1015 BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1 M.W.

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
6:15	6:30	1/4	Fill goose /w water
6:30	7:45	1 1/4	Trip in Hole 3 D.C.'s to Bottom 325' BLS
7:45	8:30	3/4	Circulate Hole Clean to Set Steel Casing 14" Weldor on site 9:15
8:30	10:30	2	Trip out of Hole to set 14" Steel Casing
10:30	1:30	3	Set 325' 14" Steel Casing, Gary Akers on site 1:00 w/ Pressure Hea
1:30	2:00	1/2	Weld Pressure Head on 14" steel
2:00	2:45	3/4	Run 282' 1 1/2 Tremmie Bottom 40' PVC
2:45	3:30	3/4	*Do not Have 20' of 2" Tremmie, Setup 8" 2" nipple to
			seal Packer on Pressure Head (Will not Be able to Pull Tre
			20' after Grouting * Keep them on the Clock
3:30	3:45	1/4	Circulate Threw 14" Steel Casing * (Grout Pump on site 3:45
3:45	4:15	1/2	Set up Grout Pump
4:15	4:30	1/4	Mix 300 gal. Water w/ 3 Bags Mud
4:30	4:45	1/4	Wait on Cement Truck (Still Circulating 14" Steel)
4:45	5:00	1/4	Cement Truck #1 on Site Pump mud in Truck
5:00	5:15	1/4	Mix 300 gal Water w/ 3 Bags mud
5:15	5:30	1/4	Cement Truck #2 on Site Pump mud in truck

Paid — 14
Non Paid — 0
Total Time — 14

6-1-95 Bob Marse

[signature]
6-1-95

C-2

Page 2 of 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton, Dave Wycoff, Wilson Oxnst			
PROGRESS: Set 325' 14" Steel & Grout	TASK: C-2	DATE: Thur. 6-1-95		SITE HYDROLOGIST: Bob Morse
DEPTH: 328 BLS	PROPOSED TOTAL DEPTH: 1015 BLS	FORMATION/AQUIFER:		DATE MOVED ON SITE:

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
5:30	6:00	½	Pump 14 Cu. yds Cement (slurry) + Flush Tremmie 27
6:00	6:30	½	Break down Grout Pump & Clean
6:30	7:00	½	Move Pump (Talk to Grey Lost Pressure on 14" steel
7:00	7:45	¾	Pull 1½ Steel Tremmie* Cement on tremmie at 265'
7:45	8:15	½	Put Packer on top of Steel to Seal Casing

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD2000	F. Singleton, D. Wykoff, W. Onkst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Thurs 6-1-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal Romp #TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
615	630	1/4	fill goose & water tank
630	830	2	trip in hole to 325'
			circulate clean to set casing
830	1030	2	trip out of hole
1030	130	3	set 325' 14 steel Casing
130	200	1/2	weld Pressure head
200	~~815~~ 815	6 1/4	run 282' 1 1/2 trimmie pipe 40' PVC on
			bottom, circulate thru trimmie pipe (ope
			set up cement pump, mix 300 gal water
			with 3 bags bentonite pump in cement
			truck pump down hole 14 yds, break dow
			pump & clean. lost pressure in hole
			pull trimmie pipe reset packer on
			14" steel casing

Pay Time - 14
No Pay - 0
Total Time 14

[signature]
6-1-95
Bob Marse
6-1-95

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
6D2000	F. Singleton, D. WyKoff, W. OrKst		
PROGRESS	TASK C-2	DATE Mon 6-5-95	SITE HYDROLOGIST Bob Marse
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal Romp # TRSA I

	MILITARY TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
	730	800	1/2	service Rig
	800	830	1/2	tag cement inside/outside of casing
	830	900	1/2	cut top of 14" steel casing
	900	700	10	break 13 7/8 bit off of hole opener lay
				on ground. Trip in hole w/ 13 7/8 bit
				tag cement ~~top~~ tag at 256'
NPT	1230	130	1	Lunch
				Add DC #6 get water drill to 298'
				Add DC #7 drill 298 6" 327 circulate
				Add DR #1 drill to 358.7 "
				Add DR #2 drill to 389.11 "
				Add DR #3 drill to 426.'3" "
				Add DR #4 drill to 451'5" "
				thin mud get wate mix hexaphas

Pay ~~xx~~ Time - 10
No Pay - 1 1/2
Total Time - 11 1/2

Frank Singleton
6-5-95
Bob Marse
6-5-95

C-2

Page 1 of 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton, Dave Wycoff, Wilson Oxast			
PROGRESS: Drill to 451' BLS	TASK: C-2	DATE: Mon 6-5-95		SITE HYDROLOGIST: Bob Merse
DEPTH: 451' BLS	PROPOSED TOTAL DEPTH: 1015 BLS.	FORMATION/AQUIFER		DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
NPT	7:30	8:00	1/2	Service Rig
	8:00	8:30	1/2	Try to tag Cement w/tape
	8:30	9:00	1/2	Cut Top of 14" Steel Casing Ground Level
	9:00	9:30	1/2	Break 13 3/8 Bit off Hole opener
	9:30	9:45	1/4	Lay 19" Hole opener on the Ground
	9:45	12:15	2 1/2	Trip in Hole With 13 3/8" Bit & D.C.'s to tag Cement
				washing out Heavy Mud while going in Hole Tag'd 25[illegible]
	12:15	12:30	1/4	Drill 256' to 269' 3" & Circulate
NPT	12:30	1:30	1	Lunch
	1:30	1:45	1/4	Conn. DC #6 29' 3" Get load Water
	1:45	2:00	1/4	Drill 269' 3" to 298' 6" No Cement from 274' to 29[illegible]
	2:00	2:15	1/4	Conn. D.C. #7 29' 3"
	2:15	2:30	1/4	Drill Cement 298' 6" to 327' 9"
	2:30	2:45	1/4	Conn. D.R. #1 30' 10"
	2:45	3:45	1	Drill 327' 9" to 358' 7" String Wt. 23,250) 85/19,[illegible]
	3:45	4:00	1/4	Conn. D.R. #2 31' 4"
	4:00	4:45	3/4	Drill 358' 7" to 389' 11"
	4:45	5:00	1/4	Conn D.R. #3 30' 4"

Paid — 10
Non Paid — 1 1/2
Total Time — 11 1/2

6-5-95 Bob Merse Jr.

Frank Singleton
6-5-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton, Dave Woolf, Wilson Orast.		
PROGRESS: Drill to 451' BLS	TASK: C-2.	DATE: Mon 6-5-95	SITE HYDROLOGIST: Bob Marse
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSH-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
5:00	5:30	1/2	Drill 389' 11" to 420' 3"
5:30	5:45	1/4	Conn D.R #4 31' 2"
5:45	6:30	3/4	Drill 420' 3 to 451' 5"
6:30	7:00	1/2	Thin Mud, Get Load of Water, Mix Hexaphos
			Air Hose Blewout for Reverse Air
			* Storm Surge from Hurricane Flood Loc
			Bottom stacks of pallets got wet water
			mark was 16"

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
GD-2000	F. Singleton; D. Wykoff W. Oakst			
PROGRESS		TASK C-2	DATE Tues 6-6-95	SITE HYDROLOGIST Bob Marse
DEPTH	PROPOSED TOTAL DEPTH		FORMATION/AQUIFER	DATE MOVED ON SITE

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER Romp # TRSA-1 Payne Terminal — DETAILS OF OPERATIONS
700	800	1	rig up for reverse air
800	1015	2 1/4	move & glue 800' 4" sch 40 PVC
1015	1045	1/2	Fix and replace silt screens
1045	1100	1/4	glue blow line together
1100	1230	1 1/2	load & move and glue 4" sch 40 PVC (900)
			into 40' joints
1230	1245	1/4	lunch
1245	745	7	Put 200' 3/4" blowline in hole start
			reverse Air. thin mud get load of water
			Air line got bridged trip out of hole
			4 DR's & 2 DC's flush drill string w/
			air trip back in hole

Pay Time - 12 1/2
No Pay - 1/4
Total Time - 12 3/4

Farrell Singleton
6-6-95
Bob Marse
6-6-95

C-2

Page 1 of 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton, Dave Dycoff, Wilson Oxest			
PROGRESS: None		TASK: C-2	DATE: 6-6-95	SITE HYDROLOGIST: Bob Merse
DEPTH: 452	PROPOSED TOTAL DEPTH: 1015' BLS		FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	8:00	1	Prepare for Reverse Air., Move Compressor
8:00	10:15	2 1/4	Move & Glue together 800' 4" SCH 40 PVC. into 4
10:15	10:45	1/2	Fix + Replace Silt Screens in ditch Leading to Cr
10:45	11:00	1/4	Glue Blow line Together *Rest of Log from Driller
11:00	12:30	1 1/2	Load & Move, Glue 4" SCH 40 PVC. 900' into 40' Length
			*I Left site 11:30, Gave Driller List of Duties an
			Phone Number where I Could Be reached in case
			of Trouble or Questions, Gary Akers was Present.
			*Kept lane on Paid Time while Wait on ~~Hose~~ By Glu
			PVC Together.
NPT 12:30	12:45	1/4	Lunch
12:45	1:30	3/4	Put 200' 3/4" Blowline in Hole Start Reverse Air
1:30	2:00	1/2	Thin Mud and Cuttings
2:00	3:30	1 1/2	Get Load of Water, Thin Mud
3:30	4:15	3/4	Get Load of Water
4:15	4:45	1/4	Airline Got Bridged
4:45	5:30	3/4	Trip out of Hole 4 D.R's + 2 D.C's

Paid — 12 1/2
Non Paid — 1/4
Total Time — 12 3/4

6-6-95 Bob Merse Jr.

[signature]
6-6-95

Page 2 of 2

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton, Dave Wycoff, Wilson Oxnst		
PROGRESS None	**TASK** C-2	**DATE** Tues 6-6-95	**SITE HYDROLOGIST** Bob Marse
DEPTH 458' BLS / **PROPOSED TOTAL DEPTH** 1015' BLS		**FORMATION/AQUIFER**	**DATE MOVED ON SITE**

ROMP SITE NAME/NUMBER Payne Terminal / Romp TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
5:30	6:00	1/2	Flush Drill String w/ water & Air
6:00	6:45	3/4	Trip Back in Hole
6:45	7:45	1	Plugged Rods, Blow line stuck
7:45	X		Rotory Table making noise Shut Down for the day

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

C-2

RIG NO/NAME	CREW		REPORT NO.
GD 2000	F. Singleton D. Wykoff W. OnEST		
PROGRESS	TASK C-2	DATE 6-7-95 Wed	SITE HYDROLOGIST Bob Marse
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER Payne Terminal Romp #TR8A-7

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	915	2 1/4	Air line stuck in hole trip out to
			unstick blowline, trip one DC back
			in hole
915			off clock Rotary table went out
			wait on mechanic to be repaired
			or taken out to take to Orland

Pay Time - 2 1/4
No Pay - 0
Total Time - 2 1/4

[signature]
6-7-95
Bob Marse Jr.
6-7-95

C-2

SMFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton, Dave Wycoff, Wilson Durst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Wed 6-7-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
451'	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	9:00		Air Line Stuck in Rods from yesterday, Trip out
			to unstick Blow line *(Slips Still Not Repaired)
			Slips not Biting on "D.R.'s" or D.C.'s
			*Told Driller (Frank S.) That the time for 6-6-95
			when I was not Present and he had Trouble Trying
			to get Reverse Air to work & did not Call me was
			Paid Time. Told him he should have called me or
			Somebody (Greg or Lloyd) From Swiftmud. Next time it
			happens we will Request for another Driller one
			with more ~~[illegible]~~ Responsibility
9:00	9:15		Trip One D.C. in Hole
9:15	X		Rotary Table Messed up (GEAR or Bear went Down
			Mechanic on site 10:15

NPT

Paid — 2 1/4
Non Paid —
Total Time — 2 1/4

6-7-95 Bob Marse

Frank Singleton
6-7-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME GD-2000	CREW F. Singleton, D. Wykoff, W. OnKST		REPORT NO.
PROGRESS	TASK C-2	DATE Thurs. 6-8-95	SITE HYDROLOGIST Bob Marse
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER Payne Terminal Romp #TRSA-1 — DETAILS OF OPERATIONS
			No Work Working on
			Rotary Table.

Pay Time — 0
No Pay - 0
Total Time - 0

Farrell Singleton
6-8-95

Bob Marse
6-8-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton, Dave Wycoff, Wilso Quest		
PROGRESS: NONE	TASK: C-2	DATE: Thur 6-8-95	SITE HYDROLOGIST: Bob Marse
DEPTH: 451' BLS	PROPOSED TOTAL DEPTH: 1015' BLS	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1 M.W.

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			Rotary Table Taken to Orlando for Repairs
			I Worked at Romp #28

Paid - 0
Non Paid - 0
Total - 0

6-8-95 Bob Marse Jr.
Frank Singleton

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton Dave Wurcoff Wilson Craft		39

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	mon 6-12-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
451'	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			Rotary Table Taken in to
			Orlando No one From Layne
			on site NPT
			*I worked on SS40 Romp #5
			8 hr. NPT

NPT

Paid Time - 0
~~Paid~~ NPT Time - 8

6-12-95 Bob Marse

Frank Singleton
6-12-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Dave Wycoff, Wilson Crost	day 40

PROGRESS	TASK	DATE	SITE HYDROLOGIST
NONE	C-2	Tues 6-13-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
451'	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp #TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			Rotary Table Still Being Repair? Getting Rotary Table out of Georgia
			I Worked on Romp #5 5540
			8 hr. NPT

NPT

Paid Time - 0
~~Std~~ NPT Time - 8 hr.

6-13-95 Bob Marse

Frank Singleton

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME: Layne	CREW: Frank Singleton Jerry Horan		REPORT NO. day 41
PROGRESS: None	TASK: C-2	DATE: Wed 6-14-95	SITE HYDROLOGIST: Bob Marse
DEPTH: 451'	PROPOSED TOTAL DEPTH: 1015' BLS	FORMATION/AQUIFER:	DATE MOVED ON SITE:

ROMP SITE NAME/NUMBER: Payne Terminal Romp TRSA-1

NPT

MILITARY TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
11:00	2:00		Frank & Jerry on site 11:00 with rotary
			Installed table
2:00	7:30		Frank left to get 3rd. Man did not
			return till late
			8 hr. NPT

Paid Time - 0
NPT Time 8 hr.

6-14-95 Bob Marse

[signature]
6-14-95

700-945- Service rig & air 6/15
Compressor Change oil
2 945-1145 - trip in hole glue 3/4"
pvc Airline together 360'
½ 1145-1215 - Lunch
1215-500 - circulate hole Clean out - after finishing tripping in hole 451'
after getting plugged clean site secure
site.

3 - 8" Coilers
7 - 4" Collers
5 - 3" Drill Rod

Pay Time - 6 3/4

No Pay - 3 1/4

Total Time - 10

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
6D2000	F. Singleton, D Wykoff Jerry Horan ~~W. Oakst~~	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Thur. 6-15-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
451	1015		

ROMP SITE NAME/NUMBER: Payne Terminal Romp #TRSA-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
NP–	700	945	2 3/4	change oil in Rig + Air Compressor
	945	1130	1 3/4	Trip in hole
	1130	1145	1/4	Glue 360' 3/4" PVC together (Airline)
NP –	1145	1215	1/2	Lunch
	1215	500	4 3/4	Regulate air Add DR circulate Add DR
				circulate circulate unplug rods

Pay Time - 6 3/4
No Pay - 3 1/4
Total Time - 10

6-15-95

6-15-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton, Wilson Dunst. Jerry H.		42
PROGRESS	TASK C-2	DATE Thur 6-15-95	SITE HYDROLOGIST Bob Marse
DEPTH 451	PROPOSED TOTAL DEPTH 1015'	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
NPT	7:00	9:45	2 3/4	Change Oil in Rig + Air Compressor, weld
				Bracket on Rotary Table
	9:45	11:30	1 3/4	Trip in hole all But 60' + Kelly
NPT	11:30	11:45	1/4	Glue 360' 3/4" SCH 40 PVC Blowline together
NPT	11:45	12:15	1/2	Lunch
	12:15	1:15	1	Regulate Air for Best Returns on Reverse Air
	1:15	1:30	1/4	Add DR.
	1:30	2:15	3/4	Circulate Rod Down
	2:15	2:30	1/4	Add D.R.
	2:30	3:15	3/4	Circulate down to Bottom of Hole
	3:15	5:00	1 3/4	Plugged Rods

Paid Time — 6 1/2
Non Paid Time — 3 1/2
Total Time — 10 hr.

6-15-95 Bob Marse

Frank Singleton
6-15-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
6D2000	F. Singleton, D. wycoff, W. Onkst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Mon 6-19-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
513	1015		

ROMP SITE NAME/NUMBER: Payne Terminal Romp # TRSA-1

MILITARY TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	830	1 1/2	Try Reverse Air, would not work switch back to mud Rotary
830	845	1/4	get water
845	900	1/4	add water to goose
NPT 900	945	3/4	goose fuel full of water had to drain and fill back up plus add new fuel filter
945	1045	1	flush mud out of goose, get a load of water and pump in goose circulate Kelly down
1045	1200	1 1/4	mix 2 bags mud Circulate, Talley pipe Add DR #5 Drill to 462.. get water
1200	145	1 3/4	finish drilling DR #5 down circulate
145	215	1/2	Lunch
215	500	2 3/4	Add DR #6 Drill to 513 get water, circul Add DR #7. ~~[illegible]~~
500	545	3/4	slip dye fell out try to fix, secure site.

Pay Time - 8 3/4
No Pay - 1 3/4
Total Time - 10 1/2

Frank Singleton
6-19-95
Bob Marse
6-19-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Wilson Oxnst Dave Wycoff	43

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Drill 451 to 513'	C-2	Mon 6-19-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
513'	1015'		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
	7:00	7:30	1/2	Try Reverse Air
	7:30	8:30	1	Switch Back over to mud Rotary
	8:30	8:45	1/4	Get Load of Water
	8:45	9:00	1/4	Add Fresh Water To goose
NPT	9:00	9:45	3/4	Goose will not Start Fuel Filters Plugged (wat
	9:45	10:15	1/2	Flush Mud out of Goose w/Fresh Water.
	10:15	10:30	1/4	Get Load Water
	10:30	10:45	1/4	Circulate Kelly Down
	10:45	11:15	1/2	Mix 2 Bg mud + Circulate; Talley Pipe
	11:15	11:30	1/4	Conn D.R#5 31.3"
	11:30	11:45	1/4	Drill 451.5" to 462. Out of Water
	11:45	12:00	1/4	Get Load of Water
	12:00	1:30	1 1/2	Resume Drilling 451.5" to 482.8"
	1:30	1:45	1/4	Circulate
NPT	1:45	2:15	1/2	Lunch
	2:15	2:30	1/4	Conn. DR.#6 31.3"
	2:30	4:30	2	Drill 482.8" to 513.11" And get 2 Loads Wat

Paid Time — 8 3/4
Non Paid Time — 1 3/4
Total Time — 10 1/2

6-19-95 Bob Marse

[signature]
6-19-95

C-2

Page 2 of 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME: Layne	CREW: Frank Singleton, Wilson Durst, Dave Wycoff		REPORT NO. 43
PROGRESS: Drill 451' to 513'	TASK: C-2	DATE: mon 6-14-95	SITE HYDROLOGIST: Bob Marsc
DEPTH: 513'	PROPOSED TOTAL DEPTH: 1015'	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
4:30	4:45	1/4	Circulate
4:45	5:00	1/4	Conn D.R. #7 31.2
NPT 5:00	5:30	1/2	While Making Conn. new slip Die fell out of Slips went Down Well size 1"x3" Dies Will not Stay in Slips; Slips wore ou[t] where Dies slide in.

Page 1

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT C-2

RIG NO/NAME: GD2000	CREW: F. Singleton, D Wykoff, W. Onkst		REPORT NO.
PROGRESS	TASK: C-2	DATE: Tues 6-20-95.	SITE HYDROLOGIST: Bob Marse
DEPTH	PROPOSED TOTAL DEPTH: 1015	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal Romp #TRSA-2

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	830	1 1/2	Change back to reverse Air from mud Rotary.
830	1200	3 1/2	Add DR # 7 put in hole but hole is filled with cuttings wouldn't go all the way to botton pull DR 7 back up and layed down put Kelly on to try and clean hole replace 2" value stop getting return filled Dp with water 6 times to try and blow out pull out one rod and boost Air Comp. up to 215 PSI. blew out plug, and let circulate
1200	1230	1/2	circulete
1230	600	5 1/2	readded DR 9 rotate down slowly to clean hole became plugged (Rick) said to drop Jeck pipe airline came apart begin tripping out of hole reached Airline reglued start circulatie readded DR #6 circulate & Clean down.

Pay Time - 11
No Pay - 2 1/2
Total Time - 13 1/2

Farrell C. Singleton
6-20-95

Page 2

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME 6D02000	CREW F. Singleton, D. WyKoff W. Oakst			REPORT NO.
PROGRESS		TASK C-2	DATE Tues 6-20-95	SITE HYDROLOGIST Bob Marse
DEPTH	PROPOSED TOTAL DEPTH		FORMATION/AQUIFER	DATE MOVED ON SITE

MILITARY TIME TIME LOG		ELAPSED TIME	ROMP SITE NAME/NUMBER
FROM	TO		DETAILS OF OPERATIONS
600	830	2 1/2	measure trouble spot 455.5. pickup kelly
			3' circulate clean + secure site

Pay Time

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Wilson Durst Dave Wyatt	44

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None -30	C-2	Tues 6-20-95	Rick Lee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
	1015		

ROMP SITE NAME/NUMBER: Payne Terminal Romp TRSA-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
	7:00	8:30	1½	I Left Site to go to C-1 for Lloyd J. 7:00 Return
				Switch over from mud to R. Air. Rick L. onsite
	9:00	9:45	¾	Circulate w/ Reverse Air
	9:45	12:00	2¼	Plugged Bit
	12:00	1:00	1	Circulate w/ Reverse Air
NPT	1:00	1:30	½	Lunch
	1:30	3:45	2¼	* Slips for Drill Rod not in working Condition;
				using Drill Collar Slips on Tool Joints of Rods
				Circulate /w Reverse Air.
NPT	3:45	5:30	1¾	Reverse Air Quit; Blowline Came unscrewed:
				Kelly Trip in Hole to Retreive Blow Line
	5:30	6:00	½	(* Back on Site 6pm) Circulate w/ Reverse Air
NPT	6:00	6:15	¼	Replace Blow Line Female Adaptor at Kelly
	6:15	6:30	¼	Conn. D.R #6
	6:30	8:30	2	Circulate to 485.5" Would not clean up
				pickup 3' clean Hole in 5-10 min Go Back down
				to 485.5 Larger Amount of Cuttings will not Clean up

Paid Time 11

Non Paid Time 2½

Total Time 13½

6-20-95 Bob Marsh

[signature]

6-20-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GQ-2000	F. Singleton, D. wykoff, W. Onkst	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Wed 6-21-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal Romp TS5A-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	800	1	warm up rig Try Reverse Air would not work right
800	900	1	Switch over to mud
900	1015	1 1/4	mix mud & circulate get water circulate to bottom of hole get water
1015	1215	2	Add DR#7 Drill down to 545.1 mix 14 bags mud
1215	1245	1/2	Add DR#8 drill no mud on site wait on bobby to return with mud
1245	815	7 1/2	finish drilling DR 8 to bottom circulate, Add DR# drill to 607. ~~[illegible]~~ Circulate Added DR#10 drill to 638'5 circulate Add DR#11 drill to 669.9 circul Add DR#12 drill to 700.9 circulate, clean Pull Kelly + 2 Rods off bottom Pick up tools + equipment + secure site

Pay Time - 13
No Pay - 1/4
Total Time - 13 3/4

[signature]
6-21-95

[signature]
6-21-95

C-2

Page 1 of 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Wilson Oxnst Dave Wycoff	45

PROGRESS	TASK	DATE	SITE HYDROLOGIST
249'	G2	Wed 6-21-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
700'	1015 BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TBSA-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
NPT	7:00	7:15	1/4	Service Rig
	7:15	8:00	3/4	Try Reverse Air * Talk to Greg
	8:00	9:00	1	Switch over to mud
	9:00	9:30	1/2	Mix Mud & Circulate; Get Load of Water
	9:30	10:15	3/4	Circulate to Bottom of hole 513.11'; Get Load of Wat
	10:15	10:30	1/4	Conn D.R#7 31.2"
	10:30	12:15	1 3/4	Drill 513.11" to 545.1" mix 14 Bg Mud
	12:15	12:30	1/4	Conn D.R#8 * Could not Get Back to Bottom
	12:30	12:45	1/4	Circulate * Waiting on Mud
*	12:45	1:30	3/4	* 10:45 pm I Left to get Mud in Venice Returned 12:45
				Driller not on Site Driller Returned 1:30 (Driller went to call …
	1:30	2:15	3/4	Back on Bottom Resume Drilling D.R.#8
				Drill 545.1 to 575.11
				* I am Left to get Backhoe at Myakka City from …
				Returned 4:30
	2:15	2:30	1/4	Conn D.R#9 31.1'
	2:30	4:00	1 1/2	Drill 575.11 to 607

Paid Time — 13
Non Paid Time — 1/4
Total Time — 13 1/4

6-21-95 Bob Marse

[signature]
6-21-95

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton, Wilson Ornst Dave W	45

PROGRESS	TASK	DATE	SITE HYDROLOGIST
249'	C-2	Wed 6-20-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
700'	1015 BLS		

ROMP SITE NAME/NUMBER: Payne Terminal Romp TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
4:00	4:15	1/4	Conn. DR#10 31.5
4:15	4:45	3/4	Drill DR#10 607 to 638.5
4:45	5:00	1/4	Conn DR#11 31.4
5:00	5:45	3/4	Drill DR#11 638.5 to 669.9
5:45	6:00	1/4	Conn DR#12 31.0
6:00	7:30	1 1/2	Drill DR#12 669.9 to 700.9
7:30	7:45	1/4	Circulate * Bm. Come By Site to check on drilling
7:45	8:00	1/4	Pull Kelly + 2 D.R's off Bottom
8:00	8:15	1/4	Pick up tools Secure Site

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW F. Singleton, W. Onkst, D. Wykoff	REPORT NO.
PROGRESS	TASK C-2 / DATE Thur 6-22-95	SITE HYDROLOGIST Bob Marse
DEPTH / PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal Romp # TRSA-7

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	745	3/4	Trip 2 DR's in hole circulate well
745	800	1/4	weight indicator not working add fluid
800	1200	4	DR down 700.9 to 732.1 thin mud
1200	1245	3/4	I left site to make phone call loaded up
			Bushings Slips other materals to go to shop
1245	145	1	Dig pits after taking down fences
145	245	1	Bachoe overheated try and work on it
245	345	1	move and restack Pvc clutch on Pump
			start smoking pick up rods off botton
			and secure well

NPT

Pay Time - 7 1/2
No Pay - 1 1/4
Total Time - 8 3/4

[signature]
6-22-95

Bob Marse 6-22-95

C-2

Page 1 of 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton, Wilson Oknst Dave Wi		46
PROGRESS 32'	TASK C-2	DATE Thur. 6-22-95	SITE HYDROLOGIST Bob Marse
DEPTH 732.1	PROPOSED TOTAL DEPTH 1015 BLS	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TR SA-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
	7:00	7:45	3/4	Trip 2 D.R.'s Circulate Kelly to Bottom ma
				conn D.R# 13 31.3
NPT	7:45	8:00	1/4	Weight indicator not working; Add Fluid
				Bleed Line
	8:00	11:00	3	Drill DR.# 13 700.9 to 732.1 Begin Thinning
				mud Half Way down on kelly Talked to Greg
				Stay on mud.
	11:00	12:00	1	Circulate while Clearing place to dig out
				Pits (Pit Over Flowing) *Back Hoe Over heated
NPT	12:00	12:15	~~1/4~~	Driller Left Site to make Phone Call.
NPT	12:00	12:45	3/4	Gary A. Called about NPT; Because of Blowh
				Driller Loaded Bushings, Slips, & Other Materials t
				go to Orlando; Driller Said "I'm Going to Orlando
	12:45	1:45	1	Remove Fence & Dig Retension Pits
	1:45	2:45	1	Back Hoe Overheated; work on Backhoe ch
				Coolant & Oil Levels, Fan Belt, & Water Pump
	2:45	3:15	1/2	Move PVC & Restack; For Mowing in Park

Paid Time — 7 1/2
Non Paid — 1 1/4
Total — 8 3/4 hr.

Bob Marsef. 6-22-95

x [signature]
6-22-95

C 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Wilson Oxist Dave Wycoff	46

PROGRESS	TASK	DATE	SITE HYDROLOGIST
32'	C-2	Thur 6-22-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
732.1	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
3:15	3:45	1/2	Pick Rod up off Bottom ; Secure well for
			Weekend to keep Kids? from throwing thing
			Down the well

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
GD2000	F. Singleton, W. OnkST, J. Webster	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	Mon 6-26-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: TR5A-1 Romp Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
200	530	3½	Dig out pits & repair fence trip one rod
			in hole. circulate to reach bottom Add
			*14. mud clutch still slipping too hot to work
			on said let it cool down
345	445	1	Adjust clutch on mud pump

Pay Time - 2½
No Pay - 8
Total Time - 10½

Frank Singleton
6-26-95
Bob Marse
6-26-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Wilson Okrist, John Webster	47

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Mon 6-26-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
732.1	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TR SA-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
NPT	7:00	2:00	7	Layne's Crew not onsite; Called Orlando talked
				to Gary A. Crew having Truck trouble
	2:00	3:30	1½	Dig out Pits & Repair fence
	3:30	3:45	¼	Trip one Rod in Hole
NPT	3:45	4:45	1	work on Clutch to Mud Pump Clutch Slippin
				Hard to engage + disengage
	4:45	5:00	¼	Circulate Kelly to Bottom
	5:00	5:15	¼	Conn D.R # 14 30.11
				* Crew Still using D.C Slips on tool Joint
				D.R.
	5:15	5:30	¼	Mud Pump Clutch Still Slipping to Hot to wo
				on it, Trip one Rod up Secure well. Call
				a day is what the Driller Said.

Paid Time — 2½
NonPaid — 8
Total Time — 10½

Bob Marse Jr. 6-26-95

[signature]
6-26-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW F. Singleton, W Onkst J. Webster		REPORT NO.
PROGRESS	TASK C-2	DATE Tues 6-27-95	SITE HYDROLOGIST Bob Marse
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER Romp # TRSA-1 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	730	1/2	Adjust clutch on pump
730	115	5 1/4	trip & Rod in hole circulate to bottom
			Add DR # 14 drill to 762.11
			circulate
			Add DR # 15 drill to 794.6 circulate
			Add DR # 16 drill to 825.10 circulate
			Add DR # 17 drill to 856.8 circulate get wa
			Add DR # 18 drill to 887.9 circulate
			Add DR # 19 drill to 918.7 circulate get wa
530			Add DR # 20 drill to 949.1 but clutch wen
			out would not move shut down rig left
			site to get mechanic

Pay Time - 5 3/4
No Pay - 4 3/4
Total Time - 10 1/2

F. Singleton
6-27-95
Bob Marse
6-27-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton, Wiken Oknst, Dave Wycoff	48

PROGRESS	TASK	DATE	SITE HYDROLOGIST
186'	C-2	Tues 6-27-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
918.7	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TR SA-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
NPT	7:00	7:30	1/2	Work on Mud Pump Clutch & Measure Derrick
	7:30	7:45	1/4	Trip one rod in hole to bottom conn. kelly
	7:45	8:15	1/2	Drill D.R. #14 732.0 to 762.11
	8:15	8:30	1/4	Circulate
	8:30	8:45	1/4	conn. D.R. #15 31.7
	8:45	9:15	1/4	Drill D.R #15 762.11 to 794.6
	9:15	9:30	1/4	conn D.R #16 31.4
	9:30	9:45	1/2	Drill D.R. #16 794.6 to 825.10
	9:45	10:00	1/4	conn D.R. #17 30.10
	10:00	10:45	3/4	Drill D.R #17 825.10 to 856.8
	10:45	11:00	1/4	conn D.R. # 18 31.1
	11:00	11:30	1/2	Drill D.R. #18 856.8 to 887.9
	11:30	11:45	1/4	conn D.R. #19 30.10
	11:45	12:30	3/4	Drill D.R. #19 887.9 to 918.7
	12:30	1:00	1/2	circulate ; Get Load of Water
	1:00	1:15	1/4	conn. D.R. #20
NPT	1:15	5:30	4 1/4	Mud Pump Clutch will not engage; Driller Left site to get

Paid Time — 5 3/4
NonPaid Time — 4 3/4
Total Time — 10 1/2

Bob Marse 6-27-95

[signature] 6-27-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
GD2000	F. Singleton, W. Onkst, J. Horan		
PROGRESS	TASK C-2	DATE Wed 6-28-95	SITE HYDROLOGIST Bob Marse
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Romp # TRSA-2 Payne Terminal

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	945	2 3/4	mechanic on site working on clutch
			to mud pump. would not disengage
945	1000	1/4	get load of water
1000	1015	1/4	Add kelly to DR#20
1015	1030	1/4	fix suction on goose
1030	1100	1/2	Drill DR # 20 down
1100	215	3 1/4	clutch on mud pump started smoking &
			slipping try to fix & adjust didn't
			work
215	415	2	trip rods out of hole for holiday

Pay Time - 3
No Pay - 6 1/4
Total Time - 9 1/4

Frank E. Singleton
6-28-95
Bob Marse
6-28-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO. 49
Layne	Frank Singleton, Wilson Oost, Jerry Hoyen		
PROGRESS 7'	TASK C-2	DATE Wed 6-28-95	SITE HYDROLOGIST Bob Morse
DEPTH 925'	PROPOSED TOTAL DEPTH 1015' BLS	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TR SA-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
NPT	7:00	9:45	2 3/4	Work on mud Pump Clutch; Throw out Bearing
				assembly broken; Pump won't disengage Contractor
				elected to continue drilling. I warned the driller
				of the possible Hazzards; Not being able to dise
				clutch at drilling console
	9:45	10:00	1/4	Get load of Water
	10:00	10:15	1/4	Lower D.R.#20 31.0' Conn. Kelly
NPT	10:15	10:30	1/4	Goose suction not operating (Free up shaft)
	10:30	11:00	1/2	Drill D.R. 20 918.7 to 949.7 drilled to 925'
NPT	11:00	2:15	3 1/4	Clutch on mud pump started Smoking & Slipping
	2:15	4:15	2	Trip Rods up into casing 325' BLS for the Holiday

Paid — 3
Non Paid — 6 1/4
Total Time — 9 1/4

6-28-95 [signature]

[signature]
6-28-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton, Wilson Onst, Jerry Horan	50

PROGRESS	TASK	DATE	SITE, HYDROLOGIST
None	C-2	Thur 6-29-95	Bob Manse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
925'	1015' - B-8		

ROMP SITE NAME/NUMBER: Kayne Terminal / Romp TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
~~7:00~~			Rig Broke Down
			→ Mud Pump Clutch getting Hot &
			smoking
			NPT All Day

Paid Time - 0
Non Paid All Day
Total Time - 0

6-27-95. Bob Manse Jr.

Frank Singleton
6-29-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton Jerry Horan Wilson Oat		51
PROGRESS None	TASK C-2	DATE Mon. 7-3-95	SITE HYDROLOGIST Bob Morse
DEPTH 925'	PROPOSED TOTAL DEPTH 1015' BLS	FORMATION/AQUIFER	DATE MOVED ON SITE

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER Payne Terminal Romp TR SA-1 DETAILS OF OPERATIONS
			Rig Broke Down
			Mud Pump Clutch.

Paid - C
Worked 4 hr Day
Std Time - O

Bob Morse
7-3-95

[illegible signature]
7-3-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton Wilson Cost- [illegible] Moran		52
PROGRESS None	TASK C-2	DATE Tues 7-4-95	SITE HYDROLOGIST Bob Marso
DEPTH 925	PROPOSED TOTAL DEPTH 1015	FORMATION/AQUIFER	DATE MOVED ON SITE

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER Layne Terminal / Romp TR SA-1 — DETAILS OF OPERATIONS
			Holiday
			Rig Broke Down
			Mud Pump Clutch
			N/T Bill Day

Paid - 0
Non Paid - Bill Day
Total Time - 0

7-4-95 Bob Marso for
[illegible signature]
7-4-95

C 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Wilson Cost Jerry Horan	53

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Wed 7-5-95	Bob Mierse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
925	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			I worked on SS40
			Laynes:
			Rig Broke Down
			Mud Pump Clutch
			NPT All Day

Paid - 0
Non Paid All Day
Trip time - 0

7-5-95 Bob Mierse
[signature]
7-5-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton, Wilson Dist., Jerry Ham	54

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Thur. 7-6-95	Bob Mance

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
925	1015 'BLS'		

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER: Payne Terminal Romp TRSP-1 — DETAILS OF OPERATIONS
			I worked on SS-40
			Layne's
			Rig Broke Down
			Mud Pump Clutch.
			RPT All Day

Mud - 0
Standby All Day
Site time - 0

7-6-95 Bob Mance

Frank S.
7-6-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Sinoto, Bo Wilson, Chuck, Dave Wescott	55

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Mon. 7-10-95	Bob Morse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
925	1015' BLS		

ROMP SITE NAME/NUMBER: Layne Terminal Romp TR SA-1

MILITARY TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7:00	12:30	5 ½	Safety Meet at Layne Crew not on site
12:30	5:00	4 ½	Layne Crew (Driller) Elected to go get Grout
			Pump at Kulman Site

NPT

Paid – 0
Non Paid – 10
Total – 10

7-10-95 Bob Morse

[signature] 7-10-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW F. Singleton, Wilson Onkst Dave Wyhoff	REPORT NO.
PROGRESS	TASK C-2	DATE Tues 7-11-95	SITE HYDROLOGIST Bob Marse
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER Romp # TRSA-7 Payne Ter

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
700	730	1/2	trip rods in hole
730	745	1/4	Work on Weight Indicator
745	800	1/4	trip in hole
800	815	1/4	work on weight Indicator
815	915	1	finish tripping in hole
915	930	1/4	hit Ledge ~~add~~ add kelly wash out
930	300	5 1/2	clutch on mud pump wont engage trip
			rods back out up into casing. take
			mud pump clutch apart

Pay Time - 2
No Pay - 6
Total Time - 8

[signature]
7-11-95

[signature]
7-11-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton, Wilson Dist., Dave Wycoff	56

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Tues 7-11-95	Bob Marsee

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
925'	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TR SH-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
	7:00	7:30	1/2	Trip Rods in Hole
NPT	7:30	7:45	1/4	Work on Weight indicator
	7:45	8:00	1/4	Resume Tripping in Hole
NPT	8:00	8:15	1/4	Work on Weight indicator / Bleed & Add Fluid
	8:15	9:15	1	Resume Tripping in Hole
	9:15	9:30	1/4	Hit Bridge at 780' Begin Washing Down Rods
NPT	9:30	10:00	1/2	Crack in 90° Elbow Above Swivel Weld Crack
NPT	10:00	11:30	1 1/2	Clutch going to mud pump will not engage
NPT	11:30	12:30	1	Trip Drill Rods up into casing; Because mud pump
				broke down to be safe
NPT	12:30	3:00	2 1/2	Take Clutch apart / Clutch Plate broken into
				pieces
				Laynes Crew left site 3:00 p.m.

Paid — 2
Non Paid — 6
Total Time — 8

7-11-95 Bobbie E. Marsee Jr.

Frank Singleton
7-11-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Wilson Ontst, Jerry Horan	57

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Wed. 7-12-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
925'	1015		

ROMP SITE NAME/NUMBER: Payne Terminal Romp TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			Rig Brokedown
			Clutch on Mud Pump
			NPT All Day

Paid — 0
Non Paid — All Day
Total Time — 0

7-12-95 Bob Marse
[signature]

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank Singleton Wilson Onkst Jerry Horan		58
PROGRESS None	TASK C-2	DATE Thur. 7-13-95	SITE HYDROLOGIST Bob Morse
DEPTH 925'	PROPOSED TOTAL DEPTH 1015' BLS	FORMATION/AQUIFER	DATE MOVED ON SITE

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER Payne Terminal / Romp TR SA-1 DETAILS OF OPERATIONS
			Rig Down
			Clutch going to Mud Pump
			Being Replaced.
			NPT All Day.

Paid 0
Non Paid All Day.
Total Time 0

7-13-95 Bob Ma[illegible]
Frank Singleton
7-13-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton, Wilson Onkst, Dave Wycoff	59

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Mon 7-17-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
925'	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
NPT	7:00	9:30	2 1/2	Laynes Crew on Site, Repaired mud pump
				Began Tripping D.R.'s in hole
				NPT until Drilling resumes becau
				of mud pump clutch
NPT	9:30	5:00	7 1/2	Blew hole in kelly Hose trip out of Hole
				to get it Repaired

Paid — 0
NonPaid — All Day 10
Total Time — 10

7-17-95 Bob Marse
[signature]
7-17-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton, Dave Wycoff Wilson Oakes	60

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Tues 7-18-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
925'	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / TRS A-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
NPT	7:00	9:00	2	Rig Broke Down (Kelly Hose) Storming
				No one from Layne on Site?
NPT	9:00	9:30	½	Driller & One Helper on site
				Left Because of Weather
NPT	9:30	1:30	4	No one from Layne on Site because
				of Weather
NPT	1:30	3:00	1½	Rain Stopped No one from Layne on Site
				Called Greg then Called Bary A.
NPT	3:00	5:00	2	Fix Kelly Hose trip Rods into Safer Zone
				Layne Shut Down for the day Driller's Choice

Paid — C
Non Paid — 10
Total Time — ~~X~~

7-18-95 Bob Marse

[signature]
7-18-95

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

C-2

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank Singleton Dave Wycoff Wilson Onkst	61

PROGRESS	TASK	DATE	SITE HYDROLOGIST
Drill 55'	C-2	Wed 7-14-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
980'10"	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal / TRSA-1

	MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
NPT	7:00	7:30	1/2	NPT for Layne until drilling resumes, Becau[se]
				they had to trip D.R.'s out of the hole to insta[ll]
				new kelly Hose, Then the fittings Leaked and had to
				replace Boss fittings on Kelly Hose
NPT	7:30	8:30	1	Trip D.R's in Hole
NPT	8:30	9:45	1 1/4	Started to Circulate last 2 D.R's to Bottom; Mud p[ump]
				Started Knocking, Checked out Mud Pump, Liner sliding [...]
				piston. * Pump will not Pump full Volume... Driller called Orla[ndo]
				Laynes driller decided after talking to Orlando to conti[nue]
				drilling. Washed down Last 2 D.R. to Bottom. * Greg on
	9:45	10:15	1/2	Resume drilling at 925 to 949.7"
	10:15	10:45	1/2	Circulate Hole
	10:45	11:00	1/4	Conn. D.R.#21 31'3"
	11:00	12:30	1 1/2	Drill D.R# 21 949.7 to 980.10"
				* I Left Site 11:00 with Greg M. to Show him S[...]
				I Returned at 11:50 12:00 to 12:30 I went to L[...]

Page 2 of 2

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne	Frank Singleton Dave Wycoff, Wilson Cotst.			61
PROGRESS	TASK	DATE		SITE HYDROLOGIST
Drill 55'	C-2	Wed 7-19-95		Bob Marse
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER		DATE MOVED ON SITE
980' 10"	1015 BLS			

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER Payne Terminal / TRSA-1 — DETAILS OF OPERATIONS
NPT 12:30	5:00	4½	Welder will not Start Laynes Crew trying to Start welder to weld fitting on kelly Hose next to the swivel on the Kelly; Got Welder Started 12:55 Driller welded fitting from 12:55 to 1:00 Driller Started Mud Pump up & kelly Hose Blew off at Swivel, Driller Started to Pickup D.R. off Bottom D.R's would not move or Rotate. Rods Stuck Hose Blew apart on draw works Driller left to get new Hose made for it.
			* Driller shut off Mud Pump while working on welder and Fittings with Kelly down Bit on Bottom

Paid 2 3/4
Non Paid 7 1/4
Total Time – 10 hr.

7-19-95 Bob Marse Jr.

7-19-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank S. Dave W. Wilson O.		62

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Thur 7-20-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
980.10	1015 BLS		

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER Payne Terminal TRSA-1 — DETAILS OF OPERATIONS
			NPT 10 hr
			No One On Site from Layne

7-20-95 Bob Marse

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank S. Wilson O. Dave W. John S.	63

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Mon 7-24-95	Bob Morse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
980'	1015 BLS		

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER: Payne Terminal TRSA-1 — DETAILS OF OPERATIONS
			NPT 10 hrs
			Rods Stuck in Well
			No one on site from Layne

7-24-95 Bob Morse

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank S. Dave W. Wilson O. John S.	64

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Tues 7-25-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
980	1015		

ROMP SITE NAME/NUMBER: Payne Terminal TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			NPT 10 hrs
			Rods stuck in Well

7-25-95 Bob Marse

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Dave W. Wilson O. John S.	65

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Wed 7-26-95	Bob Morse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
980	1015'		

ROMP SITE NAME/NUMBER: Payne Terminal TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			NPT 10hr.
			~~#~~ Rods Stuck in Well

7-26-95 Bob Morse

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW Franks, Wilson O. Dave W. John S. John, Jim		REPORT NO. 66.
PROGRESS None	TASK C-2	DATE Thur 7-27-95	SITE HYDROLOGIST Bob Marse
DEPTH 980	PROPOSED TOTAL DEPTH 1015 BLS	FORMATION/AQUIFER	DATE MOVED ON SITE

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER Payne Terminal TRSA-1 DETAILS OF OPERATIONS
			NPT 10 hr.
			Rods Hung in Well

7-27-95 Bob Marse

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank S. ??		67
PROGRESS None	TASK C-2	DATE Mon 7-31-95	SITE HYDROLOGIST Bob Maase Not on site
DEPTH 980'	PROPOSED TOTAL DEPTH 1015'	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			10 hr. NPT
			Rods Stuck in Well

Bob Maase 7-31-

Paid
Non Paid — 10 hr.
Total

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank S. ??	68

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Tue. 8-1-95	Bob Mase Not on Si

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
980	1015'		

ROMP SITE NAME/NUMBER: Payne Terminal TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			10 hr. NPT
			Rods Stuck in Well

Bob Mase 8-1-9

Paid
Non Paid — 10 hr.
Total

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank S.	69

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Wed 8-2-95	Bob Morse Not on site

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
980	1015		

ROMP SITE NAME/NUMBER: Layne Terminal TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			10 hr. NPT
			Rods Stuck in Hole
			Got Rods Out ????

Bob Morse 8-2-4

Paid —
Non Paid — 10 hr.
Total Time —

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME Layne	CREW Frank S.		REPORT NO. 70
PROGRESS None	TASK C-2	DATE Thur. 8-3-95	SITE HYDROLOGIST Bob Mause Not on Site
DEPTH 980	PROPOSED TOTAL DEPTH 1015	FORMATION/AQUIFER	DATE MOVED ON SITE

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER Payne Terminal TRSA-1 DETAILS OF OPERATIONS
			10 hr. NPT
			Rig Broke Down
			Mud Pump, Table Shieve, etc

Bob Mause 8-3-95

Paid
Non Paid 10 hrs
Total

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	Frank S.		71

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Mon 8-7-95	Bob Maue

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
980	1015		

ROMP SITE NAME/NUMBER: Payne Terminal TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			10 hr. WPT
			Rig Broke Down
			Mud Pump, Table, Swivel, Lines
			No one from Layne on Site
			Site had Flooded Plastic was
			off Cement when I arrived
			" Somebody take it off ???

Paid
Non Paid — 10 hr.
Total

8-7-95 Bob Maue

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank S.	72

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Tues. 8-8-95	Bob Mause not on site

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
980	1015'		

ROMP SITE NAME/NUMBER: Layne Terminal TR SA 1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			10 hrs. NPT
			Rig Broke Down
			Mud Pump, Swivel, Table,
			Lines Etc...

Bob Mause 8-8-95

Paid —
Non Paid — 10 hr.
Total —

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME Layne	CREW Frank S			REPORT NO. 73.
PROGRESS None		TASK C-2	DATE Wed 8-9-95	SITE HYDROLOGIST Bob Meuse Not on site
DEPTH 980	PROPOSED TOTAL DEPTH 1015'		FORMATION/AQUIFER	DATE MOVED ON SITE

MILITARY TIME TIME LOG		ELAPSED TIME	ROMP SITE NAME/NUMBER Payne Terminal TR 3A-1
FROM	TO		DETAILS OF OPERATIONS
			10 hr. NPT
			Rig Broke Down
			Mud Pump, Swivel, Table
			Line Etc.

Bob Meuse Jr. 8-9-9

Paid
Non Paid — 10 hrs.
Total —

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne	Frank S.	74

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Thur 8-10-95	Bob Mann

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
980	1015'		

ROMP SITE NAME/NUMBER: Payne Terminal TR-SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			10 hr. NPT
			Rig Broke Down
			Mud Pumps, Swivel, Table, Line, e

Bob Mann 8-10-

Paid —
Non Paid — 10 hr.
Total —

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne		75

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Mon 8-1495	Bob Morse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
980'	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			Rig Broke Down
			Called Gary A.
			Layne Still Waiting on Parts
			10 hr NPT

8-14-95 Bobbie Morse Jr.

Paid- 0

Non Paid- 10 hr.

Total - 0

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME: Layne	CREW:		REPORT NO. 76
PROGRESS: None	TASK: C-2	DATE: Tues 8-15-95	SITE HYDROLOGIST: Bob Marse
DEPTH: 980	PROPOSED TOTAL DEPTH: 1015 BLS.	FORMATION/AQUIFER:	DATE MOVED ON SITE:

ROMP SITE NAME/NUMBER: Payne Terminal TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			Rig Broke Down
			Called Joe from Layne
			Still waiting on Parts
			Talked to Layne's Mech. (Gary)
			Mech. coming from Pennsacola
			Monday with Parts.
			10 hr. NPT

8-15-95 Bobbie Marse

Paid ~ 0
NonPaid - 10
Total - 10

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME: Layne	CREW:		REPORT NO. 77
PROGRESS: None	TASK: C-2	DATE: Wed 8-16-95	SITE HYDROLOGIST: Bob Marse
DEPTH: 980	PROPOSED TOTAL DEPTH: 1015 BLS	FORMATION/AQUIFER:	DATE MOVED ON SITE:

ROMP SITE NAME/NUMBER: Payne Terminal TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			Rig Broke Down
			10 hr. NPT

8-16-95 Bobbie Marse Jr.

Paid ~ 0
Non Paid - 10 hr.
Total Time - 0

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne		78

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Thur 8-17-95	Bob Marse

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
980	1015' BLS		

ROMP SITE NAME/NUMBER: Payne Terminal TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			10 hr NPT
			Rig Broke Down

8-17-95 Bobbie Mar

Paid - 0
Non Paid - 10
Total - 10

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne		79

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Mon. 8-21-95	Bob Maue

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
980	1015 BLS		

ROMP SITE NAME/NUMBER: Layne Terminal TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			Rig Broke Down
			10 hr NPT

Paid - 0
Non Paid - 10
Total - 10

8-21-95
Bob Maue

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne		80

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Tues 8-22-95	Bob Moore

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
980	1015 Bls		

ROMP SITE NAME/NUMBER: Layne Terminal TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			Rig Broke Down
			10 hr. NPT

Paid - 0
Non Paid - 10
Total 10

8-22-95
Bob Moore

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne		81

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Wed. 8-23-95	Bob Mace

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
980	1015 bls.		

ROMP SITE NAME/NUMBER: Payne Terminal TBA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			Rig Broke Down
			10 hr. NPT

Paid — 0
Non Paid — 10
Total — 10

8-23-95
Bob Mace

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne			82
PROGRESS: None	TASK: C-2	DATE: 8-24-95	SITE HYDROLOGIST: Bob Mause
DEPTH: 980	PROPOSED TOTAL DEPTH: 1015 Bls	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Payne Terminal TR 3A-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			Rig Broke Down

Paid - 0
Non Paid - 10
Total - 10

Bob Mause 8-24-95

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne		83

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Mon 8-28-95	Bob Mace

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
	1015		

ROMP SITE NAME/NUMBER: Payne Terminal / Romp TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			10 hr. NPT
			No Driller

10 hr NonPaid

8-28-95 Bob Mace

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Layne				84
PROGRESS None	TASK C-2	DATE Tues. 8-29-95		SITE HYDROLOGIST Bob Maud
DEPTH	PROPOSED TOTAL DEPTH 1015 BLS	FORMATION/AQUIFER		DATE MOVED ON SITE

MILITARY TIME TIME LOG		ELAPSED TIME	ROMP SITE NAME/NUMBER Layne Terminal Romp TRS A-1
FROM	TO		DETAILS OF OPERATIONS
			10 hr. NPT
			No Driller.

Non Paid 10 hr.

8-29-95
Bob Maud Jr.

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Layne		85

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C2	Wed 8-30-95	Bob Maue

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
	1015		

ROMP SITE NAME/NUMBER: Layne Terminal TR3A1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			10 hr. NPT
			No Driller
			No Crew.

Non Paid 10 hr.

8-30-95 Bob Maue Jr.

C-2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
Payne		86

PROGRESS	TASK	DATE	SITE HYDROLOGIST
None	C-2	Thur. 8-31-95	Bob Maue

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
	1015 BLS		

ROMP SITE NAME/NUMBER: Payne Terminal (TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			10 hr. NPT
			No Driller
			No Crew

Non Paid 10 hr.

8-31-95 Bob Maue

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
CON 2	JAMES, RON, DAVE	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
0		9/6/95	RAL

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
983.51	1015	AV PK	

ROMP SITE NAME/NUMBER: TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			LAYNE CREW JUST HERE TO PUT PIPE
			BACK IN HOLE - CIRCULATE, AND TRIP BACK OU
			AND RUN A MAGNET DOWN HOLE TO COLLECT
			SUSPECTED METAL BITS. JAMES (RUNT) INFO
			ME THEY WILL NOT BE DRILLING UNTIL 9/11
			(MONDAY). TALKED TO ~~B~~ JAMES ABOUT THE
			AND THE NEED TO ACCURATELY MEASURE THE DEP
			IN TENTHS - 983.51' LEFT SITE @ 1500
			FOR B'VILLE
			ALL LAYNE TIME

James C Armstrong

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
CON 2	JAMES, RON, DAVE			
PROGRESS		**TASK**	**DATE**	**SITE HYDROLOGIST**
Ø			9/18/95	RAL
DEPTH	**PROPOSED TOTAL DEPTH**		**FORMATION/AQUIFER**	**DATE MOVED ON SITE**
983.5'	1015		AU PK	

ROMP SITE NAME/NUMBER: TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			SAME TYPE WORK AS 9/16/95 ALL ON
			LAYNE TIME

James Armstrong

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
Con 2	JAMES, RON, MICKY			
PROGRESS Ø		TASK	DATE 9/11/95	SITE HYDROLOGIST RAC
DEPTH 983.51	PROPOSED TOTAL DEPTH 1015		FORMATION/AQUIFER AV PK	DATE MOVED ON SITE

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER TR SA-1 DETAILS OF OPERATIONS
			LAYNE CREW ON-SITE 1630-1900
			SAFETY MEETING IN AM
			NEED PART FOR ROTARY TABLE - TO BE DELIVE[RED]
			9/12/95
			ALL LAYNE TIME
			James Armstrong

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
CON 2	JAMES, RON, MICKY		

PROGRESS	TASK	DATE	SITE HYDROLOGIST
		9/12/95	RAC

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
983.5	1015	AV PK	

ROMP SITE NAME/NUMBER: TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			PUT REST OF PIPE BACK IN HOLE BUT ST
			WAITING FOR A PART FOR THE ROTARY TABLE
			GOT THE PART AND THEN THE MUD PUMP
			CLUTCH WOULDN'T WORK - JAMES CALLED F
			A MECHANIC AND HE GOT ON SITE @ 1500 A
			REPLACED A BROKEN CLUTCH PLATE.
			BACK CIRCULATING @ 1730
			NEW PIPE IN HOLE @ 1745
			PROBLEMS @ 1800 BROKEN FITTING ON HOS
			DRILLING STOPPED BUT CIRCULATION TO CONTINUE
			30 MINS
			30 MINS PAID TIME THE REST LAYNE TIME
			James Armstrong

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Cow 2	JAMES, RON, MICKY		
PROGRESS	TASK	DATE 9/13/95	SITE HYDROLOGIST RAL
DEPTH 984	PROPOSED TOTAL DEPTH 1015	FORMATION/AQUIFER AV PK	DATE MOVED ON SITE

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER — DETAILS OF OPERATIONS
			0800 LAYNE ARRIVES w/ 2 SHORT HOSES — HAD TO G
			BACK TO GET A LONGER ONE
			0950 RIG FIRES UP DRILLING @ 1000
			1015 KELLY BACKSPINS + BREAKS THE SAME HOS
			AGAIN - SHUT DOWN - PROJECTED UNTIL 9/18/95
			15 MIN PAID TIME REST LAYNE TIME
			James Armstrong

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
LAYNE	JAMES, RON, ALPC	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C2	9/18/98	RAL

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1012'	1015'	AV PK	

ROMP SITE NAME/NUMBER: TR SA-1 PAYNE TERMINAL

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			LAYNE ON-SITE 0700 / 0730 DRILLING THRU DS
			3 BIG DRILL COLLARS, 7 LITTLE DRILL COLLARS
			~ 8000 LBS
			11 HRS DRILLING 0730 - 1830 / CIRCULATE CUTTINGS -
			3 FT LEFT TO GO (41 inches)
			11.5 HRS PRO TIME
			James Armsbury

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
LAYNE	JAMES, RON, ALPO			
PROGRESS	TASK C-2	DATE 9/19/95		SITE HYDROLOGIST RAL
DEPTH 1012'	PROPOSED TOTAL DEPTH 1015'	FORMATION/AQUIFER AV PK		DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: TR SA-1 PAYNE TERMINAL

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			LAYNE ON-SITE DRILLING 0700
			FINISHED DRILLING 0900 - CIRCULATE WITH C093
			MIX A TANK OF HEAVIER MUD TO FLUSH LARGER CUT
			OPENED INTERMEDIATE WELL ALLOWING IT TO FLOW 1030
			I NEED TO CHK W/ USGS REGARDING DROP IN WLIN THEIR MONITO
			STILL 30" FILL @ BOTTOM OF WELL - ANOTHER SLUG OF
			MUD TO CLEAN IT. CIRCULATE FRESH WATER
			TO CLEAN WELL 1230 - 1530 FLOWING CLEAN NOW
			TRIPPED OUT 1535
			PIPES IN TANKS BROKE @ 1645 RIG DOWN
			9.75 HRS PAID TIME
			James Armstrong

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
LAYNE	JAMES, RON, ALPO		
PROGRESS	TASK G-2	DATE 9/20/95	SITE HYDROLOGIST RAL
DEPTH	PROPOSED TOTAL DEPTH 1015	FORMATION/AQUIFER AVPK	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: TR SA-1 PAYNE TERMINAL

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			LAYNE IN ORLANDO 0700 FOR PINS (TONG)
			BACK ON SITE (TRSA-1) AND TRIPPING PIPE @
			1300 - DONE BY 1700
			DAVE DEWITT RAN CALIPER @ 1710 TO ?
			DEPTH OF 940' BLS - FILL IN TO 1015' (75'
			CALIPER CAME BACK TO SURFACE W/ HEAVY MU
			+ SMALL CUTTINGS ON THE TOP
			OFF SITE W/ DD 1900
			LAYNE CREW LOADING PIPE ON A TRAILER FOR A
			LAYNE CREW
			INTERMEDIATE WELL BEING PURGED ~ 2 HRS
			4 HRS PAID TIME
			James Armstrong

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
LAYNE	JAMES, RON, ALPO	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	9/21/95	RAL

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
	1015	AV PK	

ROMP SITE NAME/NUMBER: TR SA-1 PAYNE TERMINAL

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			0700 LAYNE CREW WAITING FOR OK FROM MARK WI[LSON]
			TO GO BACK IN HOLE W/ BIT TO FLUSH BOTTOM
			OF HOLE
			DEVELOPING INTERMEDIATE WELL AGAIN
			I LEAVE TO GO GET GRAVEL @ 1000 BACK
			1700 LLOYD ON-SITE @ 1430
			LAYNE CREW WENT BACK IN HOLE W/ BIT + MUD
			IT UP W/ 35 BAGS OF ~~[illegible]~~ DRILL MUD
			AND FLUSHED OUT THE CUTTINGS OFF BOTTOM
			James C Armstrong

C 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
Layne	James A. Ron	Donald S.	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C2	Thurs 9-21-95	2:30 PM L. Johnson

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1013			

ROMP SITE NAME/NUMBER: Romp # TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
2:30	3:45	1 1/4	recut rods down to bottom
3:45	5:30	1 3/4	Set rods set on bottom + circulate 2 vol. of hole
5:30	6:15	3/4	T.O.H w/ 400 ft. of DR's. Kept tu Topped off w/ mud then secure ai

Paid time 11 1/4 hrs
Non Paid 0
Total time 11 1/4 hrs.

Lloyd H Johnson Jr. 9/2
James C Armstrong

C 2

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME Wayne	CREW James A. Donald S. Ron		REPORT NO.
PROGRESS	TASK C2	DATE Fri 9-22-95	SITE HYDROLOGIST L. Johnson
DEPTH / PROPOSED TOTAL DEPTH		FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: Romp TR SA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7	10:15	3 1/4	T.I.H w/ 400 ft DK
10:15	12:30	2 1/4	circulate well from bottom added 15 bags gel
12:30	2	1 1/2	Pulled Kelly up + shut pump down had some fall in mixed 20 bags gel + circulate
2	5:30	3 1/2	T.O.H w/ all DK's + DC's + lay out on pipe trailer
5:30	8:30	3	started in well w/ 4 in PVC well screen 30/1000 1013 to 993 ft 20 ft then PVC 993 to surface + 6 ft above ground.
8:30	9:30	1	started pouring gravel in well poured 74 total, the secure site

Paid time 14 1/2 hrs
Non Paid 0
Total time 14 1/2 hrs

Lloyd H Johnson Jr. 9/22
James Armstrong

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME Layne	CREW James H, Donald S., Ron		REPORT NO. 1 of 2
PROGRESS	TASK C2	DATE Sat 9-23-95	SITE HYDROLOGIST L Johnson
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER Romp TRSA-1

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
7	7:30	1/2	measured 1½ steel & lay up on pipe trailer to start in well
7:30	8	1/2	called Rick L. about well screen, we set 20 not 40
8	8:30	1/2	poured 20 more buckets of gravel 44 total
8:30	11	2½	started in w/ 1½ in steel
11	11:15	1/4	added 15 more buckets 55 total
NPT 11:15	12:15	1	lunch
12:15	12:30	1/4	tried to tag gravel
12:30	1:30	1	poured 15 buckets of gravel 70 Buck total & let settle. started set up grout pump
1:30	7:30	1	trying to tag gravel, 1½ in steel couldn't feel gravel. tried to use the tag line, motor will not run. tremie pipe plugged off

Paid time 11 hrs
Non Paid 1 hr.
total time 12 hrs

Lloyd Johnson Jr.
9/23/95
James C Armstrong

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME Layne	CREW James A.	REPORT NO. 2 of 2
PROGRESS	TASK C2	DATE Sat 9-23-95	SITE HYDROLOGIST L. Johnson
DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER — DETAILS OF OPERATIONS
			tryed several times to unplug
2:30	3:30	1	T.O.H w/ 380 ft 1½ in steel
			became unpluged
3:30	7		lowered 1½ in steel to 924, started
			trying to thin mud, then tryed to
			tag gravel lowered to 1000 ft feel
			nothing picked up 84 ft pluged
			off.

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
LAYNE	JAMES, RON, ALDO	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	9/24/95	RAC

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1015	1015	AV PK	

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER: TR SA-1 (PAYNE TERMINAL) — DETAILS OF OPERATIONS
			RAC ON-SITE 0945 GO GET LAYNE CREW @
			ROOM - HAD BEEN ON SITE UNTIL 0920
			MEASURE 965' ON WIRE LINE TO TAG GRAV
			WIRE LINE READER @ 968' W/ JUST GRAVEL
			2 BAGS OF SAND POURED IN WAIT 15 MIN
			3½ BUCKETS OF BENTONITE PELLETS POURED IN
			TAGGED @ 936' LUNCH W/ RON + ALDO WHIL
			JAMES STAYED ON SITE AND RAN THE TREMIE
			UP + DOWN TO KEEP BENTONITE FROM BRIDGING
			TREMIE PLUGGED + PULLED ½ WAY UP TO CLE
			TREMIE BACK IN @ 1500 - WIRE LINE OUT @ 153
			TO BE MEASURED AGAIN 927.8' TO PAINT WH
			IS ~5' ABOVE GROUND (922.8' TO TOP OF PELLETS
			MIXING CEMENT @ 1645 (3½ LLOYD 400-GAL TUBS OF
			MUD FIRST PUT DOWN HOLE TO HELP KEEP HOLE FROM FI
			WHEN CEMENT PUMPED DOWN). 3RD 400 GAL TUB OF ~~B~~ CEM
			DOWN HOLE @ 1800. GOING TO PULL ~~B~~ TREMIE

767 + FLUSH ONE TUB OF MUD THRU TO CLEAR CEMENT THAT MAY BE @ NEXT INTERVAL. MU SHOULD BRING ANY XTRA CEMENT 55' UP HOLE (IF MUD WAS PUMPED DOWN) FINISH PUMPING MUD @ 18 NOW PULLING 1 SINGLE + 2 DOUBLES (105') I LEFT 1900 WHILE LAYNE STILL CLEANING GROUT PUMP. +

James C Armstrong
9.25 HRS
PAID

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW			REPORT NO.
LAYNE	JAMES, RON, ALPO			
PROGRESS		TASK C-2	DATE 9/25/95 MON	SITE HYDROLOGIST RAL
DEPTH	PROPOSED TOTAL DEPTH 1015		FORMATION/AQUIFER AVPK	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: TR SA-1 PAYNE TERMINAL

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			0700–0800 LAYNE CREW GETTING PVC (4") READY
			TO SET (SECOND STRING) WHILE I GOT A 4" CAP +
			SLIP JOINT THEN THEY STARTED LOWERING 4" PVC SCRE
			+ SECTIONS - SCREWING THEM AFTER GLUEING EACH
			40' SECTION - PIPE IN HOLE TO ~~748'~~ @ 1115
			LAYNE CREW CIRCULATE THRU TREMIE TO TRY AN
			FLUSH LOWER PART TO ALLOW PVC PIPE TO GO LOWER
			ONLY WENT A COUPLE OF FEET (749') - WILL SET P
			THERE - WOULD NEVER PURGE HEAVY MUD + CEMENT o
			OF FINISHED WELL.
			1300 PULLING TREMIE UP + READY TO POUR GR
			35' (~~40~~ BUCKETS) - TAGGED W/ WIRELINE @ 689' - T
			OF GRAVEL - 2 BAGS OF SAND ON TOP - WILL PUMP CEME
			~~ON~~ TO TOP OF SAND/GRAVEL PACK TO TRY AND SEAL DOWN I
			THE GRAVEL A LITTLE - WHILE PUMPING CEMENT WILL PUS
			TREMIE TO 708' AND SEAL GRAVEL - 1645 CEMENT REA
			TO PUMP BUT TREMIE PLUGGED - NEED TO BREAK IT DOW

PULL IT OUT OF HOLE SOME UNTIL IT UNPLUGS - 1ST BA
GOING IN @ 1700, 2ND BATCH GOING INTO GRA
AND NOW ITS FLOWING OUT THE TOP OF THE F
STOPPED PUMPING IMMEDIATELY + COMMENCED
PULLING TREMIE OUT AND PUTTING IT DOWN TH
PVC TO CLEAR IT. MUD FLOWED OUT + 1 MIN OF CE
FLOWED OUT + NOW THE WELL IS FLOWING SLIGHT
@ 2030. CREW PUT SMALL PUMP ON TREMIE + PUMPED OUT*

*BOTTOM, HELPING TO CLEAR MUD FROM WELL. BY 2200 FAIRLY CLEAR WATER WAS BEING PUMPED, CREW OFF SITE @ 2200.

15 HRS PAID TIME

James Armstrong

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
LAYNE	JAMES, RON, ALPO	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	C-2	9/26/95	RAL

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1015	1015	AV PK	\

ROMP SITE NAME/NUMBER: TR SA-1 PAYNE TERMINAL

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			0700 LAYNE ON-SITE 0715 BEGIN PULLING
			TREMIE OUT OF 4" PVC + BACK INTO 14" WELL A
			68' @ 0930 GROUT PUMP BREAKS @
			1030 RUNNING BY 1045 MIXED MUD BUT PUMP DO
			AGAIN BY 1100. 1300 GROUT PUMP FIRED UP + RUN
			2 BATCHES IN BY 1400. 3RD BATCH (400g) IN E
			1430. CREW WILL NOW CLEAN GATES + PUMP AND
			GLUE AIR LINE TOGETHER TO RUN DOWN DEEP 4
			+ CONNECT TO AIR COMPRESSOR FOR A SLOW PURGE
			DEVELOPED DEEP 4" UNTIL CREW LEFT (STILL PUMP
			MUD-LIGHTER THOUGH) LAYNE CREW OFF SITE 1
			James C Armstrong

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW	REPORT NO.
LAYNE	JAMES, RON, ALPO	

PROGRESS	TASK	DATE	SITE HYDROLOGIST
	G2	9/27/95	RAL

DEPTH	PROPOSED TOTAL DEPTH	FORMATION/AQUIFER	DATE MOVED ON SITE
1015	1015	AV PK	

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	ROMP SITE NAME/NUMBER: TR SA-1 (PAYNE TERMINAL) — DETAILS OF OPERATIONS
			0700 LAYNE CREW PUTTING IN TREMIE PIPE - TAG
			CEMENT @ 490' (MIDDLE of 20'-18" VOID) HAVE
			CREW PUT 100g (20-5g) OF GRAVEL TO MAKE
			UP 10' AND CLOSE VOID - MIXING CEMENT FOR
			2 BATCHES ONTOP of GRAVEL. SINGLETARY
			TO DELIVER 6YDS @ 1500 (CALLED FOR 7 MORE,
			TOMORROW 1-130). 1ST BATCH OF 400g GOING IN
			0920 - 2ND BATCH IN BY 1015. WILL START
			PURGING DEEP 4" w/ AIR AGAIN 1100 NOW - CLEARED
			MUD PIPES BY 1030. HEAVY MUD IN DEEP 4" OUT
			+ AIR SHUT OFF @ 1300 - IT STARTS FLOWING
			SINGLETARY ONSITE 1610 TO PUMP 6YDS - CREW P[illegible]
			3-50LB BAGS OF BENTONITE INTO TRUCK + THEN DOWN H[illegible]
			CEMENT IN HOLE @ 1645
			CREW OFFSITE 1745
			7 3/4 HRS LAYNE TIME
			James C Armstrong

10" - SURF
16" - WDOUT

SWFWMD GEOHYDROLOGIC DATA
DAILY DRILLING/CORE REPORT

RIG NO/NAME	CREW		REPORT NO.
LAYNE	JAMES, RON, ALDO		
PROGRESS	TASK C-2	DATE 9/28/95	SITE HYDROLOGIST RAL
DEPTH 1015	PROPOSED TOTAL DEPTH 1015	FORMATION/AQUIFER AV PK	DATE MOVED ON SITE

ROMP SITE NAME/NUMBER: TR SA-1 (PAYNE TERMINAL)

MILITARY TIME TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS
			0700 TAGGED CEMENT @ 189' PUMPING DEEP 4" (ON
			w/ AIR FAIRLY HARD TO DEVELOP STOPPED ON THAT 4
			@ 1000 + BEGAN PUMPING THE OTHER (SHALLOW 4"
			AFTER LUNCH - STEEL CASING FROM AROUND WELL
			REMOVED + 400g (200 LBS) OF MUD WAS MIXED
			ADD TO 5 YD³ TRUCK COMING @ 1315. TREMIE
			DOWN TO 189'. WELDER - LAYNE HIRED TO WEL
			SECURITY CASING ON WELLS CALLED @ 1305 TO SA
			HE WAS LEAVING THE SEBRING LAYNE SITE + HEADI
			HERE. SINGLETARY ARRIVES @ 1315 - DONE PUMPING
			CEMENT @ 1350 CLEANING MUD PUMP + PIPE
			PUMPED ~ 4 YDS DOWN HOLE. CREW WORKING ON
			RIG + SECURING WELL HEAD VALVES. 1500 WELD
			ARRIVES + IS THROUGH @ 1630 ALL THREE WELL
			PROTECTIONS ON
			8 HRS LAYNE
			James C. Armstrong