Shaw Environmental, Inc.
3010 Briarpark Drive, Suite 4N
Houston, Texas 77042
713.996.4400
Fax: 713.996.4401

Shaw® Shaw Environmental, Inc.

March 23, 2006

Ms. Marilyn Czimer Long
Project Manager
Superfund Cleanup Section
Texas Commission on Environmental Quality
12100 Park 35 Circle, Bldg. D
Austin, Texas 78753

Re: Chicot Monitor Well Installation Report
July – November 2005
Jones Road Superfund Site
Houston, Texas

Dear Ms. Long:

Shaw Environmental, Inc. (Shaw) is pleased to present to the Texas Commission on Environmental Quality (TCEQ) this letter report which summarizes the results of the installation of ten deep monitor wells in the Jones Road area. Nine of these wells targeted sands associated with the Chicot Aquifer and one well targeted sands in the upper portion of the Evangeline Aquifer. The field work to install these wells occurred during the months of July, August, and November of 2005. This letter report is not intended to preclude or serve in the place of the Remedial Investigation Technical Memorandum; rather, this letter report provides a summary of results and preliminary conclusions based on Shaw's interpretations of the currently available data.

The objectives of this specific phase of the investigation included:

- The installation of nine monitor wells within the Chicot Aquifer and screened across a common lithologic zone located below the known impacted zones where the current private wells in the area are producing;
- The installation of one deeper well below the base of the Chicot Aquifer and into the upper portion of the Evangeline Aquifer;
- The geophysical logging of each boring to identify the different lithological zones within the confines of the study area to gain a better understanding of potential pathways of contaminant migration and to aid in selecting the screened interval for each completion;
- To provide monitoring points in and around the perimeter of the study area where groundwater samples could be collected, and
- To provide monitoring points in and around the perimeter of the study area where groundwater elevations can be measured and groundwater flow directions can be determined.

According to the Texas Department of Licensing and Regulation (TDLR), these proposed monitor wells lie within a designated restricted drilling area. Therefore, in order to drill these wells in this area a waiver was needed. A copy of the letter by the TDLR to the TCEQ approving the installation of these monitor wells can be found in Attachment 1 of this report. All monitor wells were installed with a Speedstar SS15-3 water well drilling rig using mud rotary by Bussell & Sons, LLC under the supervision of Best Drilling Services. Prior to the commencement of the drilling activities, all proposed drilling locations were marked, visited by the driller, and cleared of subsurface utilities using a Vactron air knife. Please refer to Figure 1 for the approximate location of each of these wells. Because some of these wells were to be located along the Harris County Road Authority Right-of-Way, a traffic control plan was prepared for each affected location. This plan was prepared by Shaw, reviewed, signed, and stamped by a Shaw engineer, and then submitted to the Harris County Engineer for his review and approval. Subsequently, a permit to work in the Right-of-Way was issued by Harris County Road Authority (Attachment 2). The following is a list of the monitor wells that were installed and their approximate location:

Monitor well MW-10	10860 Tower Oaks Blvd.
Monitor well MW-11/MW-11R	Glenora and Foxburo
Monitor well MW-12	Oak Valley and Timber Crest
Monitor well MW-13	Timber Hollow and Forest Valley
Monitor well MW-14	Mile Drive and Glenora
Monitor well MW-15	Woodedge and Echo Spring
Monitor well MW-16	Woodedge and Jones Road
Monitor well MW-17 (Deep Well)	Neeshaw Drive
Monitor well MW-18	Neeshaw Drive
Monitor well MW-19	Jones Plaza (FM 1960 and Jones Road)

Field Overview

The drilling activities began on July 6, 2005. The setup and drilling procedure was generally the same for each well location. The driller would first mobilize the rig over the air knifed, utility cleared proposed monitor well location and auger down with a 13-inch diameter auger to approximately 10 feet so that he could install approximately 13 feet of 10-inch diameter PVC conductor pipe. The conductor pipe was installed 10 foot below the surface and sat approximately three feet above surface. The driller would then secure the conductor pipe in the ground by pouring bentonite chips around the annulus and hydrating them to create at seal. The pipe's function was to contain the drilling fluids as they came out of the hole and then redirect these fluids into the portable mud pit which was situated adjacent to the rig. The mud pit functioned as a point where the solids suspended in the mud would drop out before being recirculated back into the drill stem. The solids were collected by a screen and also a shovel and were transferred into another small tank that was connected by a hose to a vacuum truck. Fresh water was added to the solids in this small tank so the vacuum truck could remove them. Once the vacuum truck had reached its capacity, it would transport the water and solids to a series of sludge boxes located near 10810 Barely Lane which had been established as the investigative derived waste (IDW) staging area. Approval to use this location to stage the IDW had been obtained from the property owner prior to mobilization.

After the conductor pipe was set, the driller would then drill a small diameter pilot hole/test hole using a 4 ¼ inch drilling bit to an approximate depth of 300 feet. During drilling activities, an onsite geologist would log the hole based upon the drillers lithology picks and also from observing the drill cuttings coming out of the

hole. A copy of the field boring logs can be found in Attachment 3 and a copy of the field notes can be found in Attachment 4. When the proposed total depth for the hole was reached, the driller would prepare the hole for geophysical logging by circulating the mud to condition the hole. As soon as the onsite geophysicist had completed setting up his equipment for logging, the driller would pull his drill string out of the hole and the geophysicist would go back into the hole with his logging tool and lower it to the bottom using a steel cable attached to a winch. The logging tool was setup to run natural gamma, spontaneous potential, and resistivity. When the logging tool reached total depth, the geophysicist would reverse the direction of the tool and pull the logging tool out of the hole at a constant rate while accumulating data on a laptop computer. Upon completion of each geophysical logging run, an electric log was printed out and the results reviewed. A copy of the geophysical log for each of the monitor wells can be found in Attachment 5. The electric log was then faxed to the TCEQ for review and discussion. Based upon the results of the geophysical data and the lithology picks made during drilling, a screen interval was selected and agreed upon for each monitor well.

The drill crew was then instructed where the screen interval would be for that hole and how much casing they should install. The driller then went back into the hole with a 6 ¾ inch bit to ream out the hole diameter sufficient to install 4-inch diameter casing. The driller used the 6 ¾ inch diameter bit to ream the hole to the top of the selected screen interval. When this depth had been achieved the driller would condition the hole for casing by circulating the mud until no cuttings were observed at the surface. The drill string would then be pulled from the hole and 20 foot stands of 4-inch diameter PVC casing would be run into the hole until casing had been set from the top of proposed screen interval to surface. Portland cement was mixed and pumped into the cased hole from the bottom up to fill the annular space between the casing and the drilled hole. This was done until returns were observed on the outside of the casing at the surface, assuring no void spaces between the casing and the formation had occurred. The Portland was allowed to cure overnight and the following day the cement plug at the bottom of the casing would be drilled out using a 3 7/8 inch bit and advanced another 20 feet to the bottom of the selected screen interval. The drill string would then be removed from the hole and the completion string which consisted of a 2 ½" x 4" double K-packer attached to the top of 10 feet of 2-inch diameter PVC pipe threaded into 20 feet of 2-inch diameter stainless steel screen would be lowered into the hole. The driller would then go back into the hole with his drill string and push the completion screen to the bottom of the hole and begin air lifting the fluids and develop the well. The driller would continue to air lift fluids until the formation water from the well ran clear at the surface with minimal sediment. All fluids from the hole were sucked up by the vacuum truck and pumped out into the sludge boxes at the IDW staging area. The fluids in the sludge boxes were allowed to settle several days so that most of the solids would drop to the bottom of the boxes. Once this had occurred, the top layer of fluid would be decanted off by the vacuum truck and pump into the adjacent poly tank until arrangements could be made for proper disposal. The driller returned to each monitor well location after the drilling program was complete and constructed a 3' x 3' concrete flush mounted pad with an 18" diameter traffic man way to protect each well. In addition, each monitor well was provided with a locking cap and lock to protect the integrity of the well. As-built drawings for each monitor well are provided in Attachment 6 and a copy of the State of Texas Well Reports for each monitor well and the plugging report can be found under Attachment 7. Photographic documentation for each of these field activities can be found under Attachment 8.

The geophysical logging of the ten boreholes (MW-10, MW-11, MW-11R, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17, and MW-19) was performed by the Shaw E&I Geophysics group. Borehole depths ranged from a minimum 295 feet to a maximum of 430 feet. Based on the borehole depths, diameter, and required logs, the logging equipment selected was the Robertson Micro Logger2 equipped with a portable winch, and the Combination Electric Logging Probe. The log data acquired for all boreholes included Natural Gamma,

16" Short Normal Resistivity, 64" Long Normal Resistivity, Single Point Resistivity, and Spontaneous Potential (SP). In processing, the SP log was discarded and not used for interpretation or analysis of the log data.

Prior to logging operations, the Robertson Micro-Logger2 instrument, winch, and electric log probe, were checked and inspected for operation in accordance with manufacturers specifications. The "zero" reference for all borehole logs was ground, and the logging direction was "up" from borehole bottom. For each of the boreholes, the electric log probe was first lowered in to the borehole and referenced to ground as zero depth using the probe head as the zeroing point. Once zeroed, the probe was lowered to maximum borehole depth. Starting at maximum depth, log data was acquired in the "up" direction at an ascend rate of approximately 20 to 22 feet per minute. Following the acquisition of borehole resistivity and natural gamma log data, the raw log files were off-loaded to a field PC for post acquisition plotting. In-house processing, log sorting and formatting, was performed using Viewlog Version 3.0 Borehole Data Management System, a log data processing and analysis software program developed by Viewlog Systems, Ltd.

The electric log is the standard water-well combination probe combining shallow, medium and deep penetrating resistivity measurements with self-potential (SP) and natural gamma. The down-hole electric log probe is equipped with electrodes, measurement electronics and an insulated bridle. A low-frequency bi-directional electric current from a source electrode on the probe returns through the formation to the cable armor above the bridle. Potentials due to this current flow are measured on various sense electrodes on the probe with respect to a voltage-reference 'fish' normally located at the surface. The spacing between the source and individual sense electrode determines the depth of investigation of the measurement. These measurements are converted to apparent formation resistivities within the probe and digitally transmitted to the surface.

Soil and water samples were collected from the IDW for waste characterization purposes. Additionally water samples were collected periodically through the drilling program from the drillers supplied drill water as a quality control check. At the conclusion of the drilling program, the monitor wells were sampled as part of the Jones Road quarterly sampling event conducted on private wells. Because of the depths associated with these wells, a bladder pump with dedicated tubing was used to purge and sample the wells. The pump intake was set at the mid-point of the well screen. Water quality parameters (pH, temperature, conductivity, dissolved oxygen, and oxygen reducing potential (ORP)) were collected using low flow methods through a flow through cell until the well stabilized. Groundwater samples were then collected for volatile organic carbons (VOCs) and submitted through the EPA Contract Laboratory Program (CLP) for analyses.

The subsurface geology across the site was correlated relatively well as evidenced by a comparison of the geophysical logs (see Figure 2). The upper 60 feet of the subsurface consisted mostly of silts and clays of the Beaumont Formation with some thin sand lenses between the interval 20 to 30 feet below ground surface (bgs). At approximately 60 - 110 feet bgs there was a well developed sand zone that is predominant across the site although it appears to be thinning somewhat as you head to the north (MW-15 and MW-16). From this point to approximately 150 feet bgs you encounter mostly clays with some sand lenses until the next predominant sand unit at approximately 150 - 190 feet bgs. The geophysical logs indicate another clay/silt layer until approximately 205 - 230 feet bgs where there is another sand. Some of these sand lenses are thicker at some locations and not as developed at others depending on where you are at the site. The next major correlative sand interval occurs at approximately 260 - 295 feet bgs where all the screened completions occurred.

Monitor Well MW-10 – 10860 Tower Oaks Blvd.

Monitor well MW-10 was installed on private property at 10860 Tower Oaks Boulevard managed by Tim Treadway, a partner with the property owners, Gerald A Teel Company, Inc. Prior to rig mobilization, access to this property was granted and an access agreement was signed. Drilling began on July 6, 2005 and the initial pilot hole was drilled to a total depth of 357 feet. The well was logged and the screen interval 270 – 290 feet was selected for the completion interval. The hole was reamed out to 270 feet and casing was set and cemented in-place. The following day the driller drilled out the cement plug at the bottom of the casing and drilled an additional 20 feet to 290 feet. A 2-inch diameter 20-foot stainless steel screen (slot 0.012) connected on top with a 2-inch diameter 10 foot PVC with a 2 ½" x 4" double K-packer was then lowered into the well to total depth. The driller developed the well using his air pumps until the water ran clear.

Monitor Well MW-11/MW-11R – Glenora and Foxburo

Monitor well MW-11 was installed in the Harris County Right-of-Way near the intersection of Glenora and Foxburo. The drillers mobilized to this location on July 7, 2005 and augered down to 10 feet to install the conductor pipe. The following day the drillers drilled a pilot hole to 292 feet. The well was logged and the interval 254 - 274 feet was selected for the screen interval. The hole was reamed out to 254 feet, casing was set to 254 feet and Portland cement was pumped into hole until returns were observed at the surface. On July 11 the drillers returned to the site and drilled out the cement plug and drilled the additional 20 feet beyond the base of the casing for the well screen. Twenty feet of 2-inch diameter stainless steel screen with a 2-inch diameter 10 foot section of PVC with double K-packer was then lowered into the well and pushed to bottom. The drillers began well development using air lift. While developing the well, cuttings in the mud were observed at the surface which is not normal. The driller decided to pull a few joints out of the hole and continued jetting the well. Drill cuttings were still being observed in the mud even though the driller was circulating from up within the casing. The driller stated that this was usually an indication that there may have been a failure in the casing, either along the wall or at one of the joints. Therefore, he suggested that we plug and abandon the well.

On August 23, 2005 an attempt was made to salvage the well. A water level meter indicator was dropped into the hole to determine the depth of the boring. A bottom was tagged at around 181 feet. The driller went back into the hole with 40 feet of 1-inch diameter schedule 80 PVC attached to a drill collar to try flush out the well and screen. Initially the driller lowered his well string to 180 and started circulating. The water observed at the surface was initially cloudy but started to clear. Another 20 feet of drill string was added and development continued. Cuttings were now observed coming out of the hole. Ten additional feet of drill string was added putting the bottom of the drill string at a depth of 210 feet before circulation was lost. It was concluded that this location was not going to make a well so the following day the drillers returned to the location of MW-11 and plugged and abandon the well. Approximately 200 feet of drill pipe was run into the hole and the hole was grouted in place with Portland cement from the bottom up until returns were observed at the surface.

Discussions with the TCEQ concluded that this location was critical to monitoring the groundwater flow and chemical impact in the down gradient direction. Therefore, a replacement well to monitor well MW-11 (MW-11R) was approved for installation. On October 31, 2005 the replacement well was drilled approximately 200 feet north of the original location of MW-11. MW-11R was drilled to a total depth of 285 feet. The electric log indicated a correlative sand at approximately 250 feet, therefore, the screen interval 249 - 269 feet was chosen. The hole was reamed out to 249 feet and 4-inch diameter casing was set to 249 feet and cemented in

place. The next day the drillers drilled out the cement plug and drilled another 20 feet into the formation for the well screen interval (249 – 269 feet). The drill pipe was then pulled from the hole and 20 feet of 2-inch diameter stainless steel screen (0.012 slot) with a 2-inch diameter 10 foot section of PVC with double K-packer was then lowered into the well. The drillers then went back into the hole with their drill pipe and started to develop the well using air lift until the water came back clear.

Monitor Well MW-12 – Oak Valley and Timber Crest

Monitor well MW-12 was also drilled in the Harris County Right-of-Way at the end of Oak Valley, near the intersection of Oak Valley and Timber Crest. On July 12, 2005 the drillers mobilized to the site and set their conductor pipe. Instead of drilling a pilot hole, the driller decided to ream out the hole to target depth. The well was drilled to a total depth of 301 feet. Geophysical logging of the hole indicated that the correlative sand to the previous wells drilled would be the interval 260 – 280 feet. Four inch diameter PVC casing was then run into the hole. Each casing joint was secured with three stainless steel screws drilled into the casing bell to prevent joint failure. Initially we were only able to get 220 feet into the hole before it got stuck. The driller tried washing the casing down but that did not work so we ended up pulling out approximately 80 feet of casing before going back in one casing string at a time, circulating each time. Finally we were able to reach the target depth of 260 feet for the casing. Portland cement was mixed and pumped into the hole until cement returns were observed at the surface. The driller returned on July 14 to drill out the cement plug with the smaller diameter bit and advance the hole another 20 feet screen to 280 feet. The completion string which consisted of a 20 foot section of 2-inch diameter stainless steel screen (0.012 slot) with 10 feet of 2-inch diameter PVC pipe with a double K-packer at the top was lowered into the casing and pushed down with the drill pipe. The drillers than air lifted the well until the water ran clear into the mud pit.

Monitor Well MW-13 - Timber Hollow and Forest Valley

Monitor well MW-13 was drilled in Harris County Right-of-Way along Timber Hollow, just north of Forest Valley. Because this was an active street, an approved traffic control plan was executed and a police officer was contracted to direct traffic flow. On July 18, 2005 the drillers mobilized to the proposed location of MW-13 and set their conductor pipe. The pilot hole was drilled out using a 4 ¼ inch bit to a total depth of 305'. Geophysical logging indicated that the best place to screen in the correlative sand would be the interval 276 - 296 feet. The driller pulled out of the hole and went back in to ream out to 276 feet. Four inch diameter PVC casing was set to 276 feet and cemented in-place using Portland cement that was pumped from the bottom up until returns were observed at the surface. The following day the drillers drilled out the cement plug and drilled the additional 20 feet beyond the casing for the well screen. The completion string which consisted of a 20 foot section of 2-inch diameter stainless steel screen (0.010 slot) with 10 feet of 2-inch diameter PVC pipe with a double K-packer at the top was then lowered into the casing and pushed down with the drill pipe. The drillers than air lifted the well until the water ran clear into the mud pit and moved to the next location, monitor well MW-14 to set their conductor pipe.

Monitor Well MW-14 – Mile Drive and Glenora

Monitor well MW-14 was also located in the Harris County Right-of-Way near the intersection of Mile Drive and Glenora and required a traffic control plan. All the required signage and barricades were setup according to the traffic control plan and a police officer was present during drilling operations to direct traffic. On July 20, 2005 the driller advanced the pilot test hole to a total depth of 294 feet using a 4 ¼ inch bit. The hole was

then conditioned for geophysical logging. During the logging activities the logging tool had trouble getting past 50 feet and got stuck at approximately 92 feet from surface. The decision was made to pull out of the hole and add some additional polymer to the mud to reduce the wall breakdown of the clays lining the hole. The drillers went back into the hole and circulated the polymer to improve the wall breakdown. The drillers pulled out of the hole and geophysical logging was attempted again. This time the logging tool got stuck at 105 feet below surface. After concurrence with the TCEQ, it was decided to forego the geophysical logging of this hole at this time and choose the screen interval based upon the drillers lithology picks. Therefore, the interval 260 - 280 feet was chosen. The drillers returned the following day and reamed out the hole to 260 feet, set casing to 260 feet and cemented the casing in-place. On July 22, 2005 the driller went back into the hole to drill out the cement plug and drilled down to 290 feet. He pulled out of the hole and the geophysical logging tool was lowered into the well to obtain geophysical data through the casing. Upon completion of the logging run, the driller set a 20 foot section of 2-inch diameter stainless steel screen (0.014 slot) with 10 feet of 2-inch diameter PVC pipe with a double K-packer at the interval 260 feet to 280 feet. The well was then developed until the water ran clear.

Monitor Well MW-15 – Woodedge and Echo Spring

Monitor well was also located in the Harris County Right-of-Way near the intersection of Woodedge and Echo Spring and required a traffic control plan. All the required signage and barricades were setup according to the traffic control plan and a police officer was present to direct traffic during the drilling operations. On July 25, 2005 the driller spudded his conductor pipe and drilled the pilot hole to a depth of 305 feet. Geophysical logging indicated that the best place to screen in the correlative sand would be the interval 274 - 294 feet. The driller then reamed out the hole to 274 feet, set 4-inch diameter casing and cemented the casing in-place from the bottom up. The next day, the driller drilled out his cement plug and drilled out to 294 feet, the bottom of the screen interval. The completion string which consisted of a 20 foot section of 2-inch diameter stainless steel screen (0.014 slot) with 10 feet of 2-inch diameter PVC pipe with a double K-packer at the top was then lowered into the casing and pushed down with the drill pipe. The drillers than air lifted the well until the water ran clear into the mud pit and moved to the next location, monitor well MW-16 and to their conductor pipe.

.

Monitor Well MW-16 – Woodedge and Jones Road

Monitor well MW-16 was also located in the Harris County Right-of-Way near the intersection of Woodedge and Jones Road and required a traffic control plan. All the required signage and barricades were setup according to the traffic control plan and a police officer was present during drilling operations to direct traffic. On July 27, 2005 the driller drilled the pilot hole to a depth of 325 feet. Geophysical logging indicated that the best place to screen in the correlative sand would be the interval 258 - 278 feet. The driller reamed out the hole to 258 feet, set 4-inch diameter casing and cement the casing in-place from the bottom up. The next day, the driller drilled out his cement plug and drilled out to 278 feet, the bottom of the screen interval. The completion string which consisted of a 20 foot section of 2-inch diameter stainless steel screen (0.014 slot) with 10 feet of 2-inch diameter PVC pipe with a double K-packer at the top was then lowered into the casing and pushed down with the drill pipe. The driller air lifted the fluids in the well until the water ran clear into the mud pit. The drill crew mobilized down and moved the rig to the next location, monitor well MW-17 and set their conductor pipe.

Monitor Well MW-17 – Neeshaw Drive (Deep Well)

Monitor well MW-17 was located in Harris County Right-of-Way grassy median of Neeshaw Drive and required a traffic control plan. All the required signage and barricades were setup according to the traffic control plan. On July 29, 2005 the driller started to drill the pilot hole at monitor well MW-17. At approximately 105 feet below surface the driller started to lose his mud returns. Gel-X was added to the mud to help reduce the water loss. The driller pulled out of the hole and went back in with the larger bit to ream it out. Initially everything looked fine, however, when the driller reached 105 feet the second time, there was a loss of returns at the surface. The decision was made to pull out of the hole and mix up bags of Portland to try and fill up the void space where we were losing circulation. Eighteen bags of Portland were mixed and pump down the hole and left to setup over the weekend. On August 1, we started drilling again at MW-17. The Portland did not work. We started losing circulation again at 125 feet. We continued to drill down to 165 feet thinking that the cuttings would help fill in the void space. Circulation was still being lost at 165 feet so it was decided to pull out of the hole and move the location down Neeshaw, further to the west. This location was later plugged with Portland and bentonite grout which was pumped from the bottom up. The revised location was installed approximately 150 feet further to the west of the original location. On August 9, 2005 the drillers returned to the revised location for MW-17 and spudded their conductor pipe. The well was drilled to a total depth of 445 feet using the small diameter bit. This well had been chosen to test the very top of the Evangeline Aquifer. A geophysical log was run in the hole to a total depth of 435 feet and the sand interval 410 – 430 feet was chosen for the screen interval. This screen selection was chosen by comparing the geophysical log from monitor well MW-17 to a nearby public water supply well (Timberlake Improvement District), identified as G1010447C (by the TCEQ). Two prominent deep sand units were present in MW-17, the shallower of the two being at 345 – 380 feet and the deeper starting at 410 feet. The M.U.D. log indicated that the sand at around 350 feet was not present in this well, however, the deeper sand unit was. Therefore, it was decided to screen in the deeper sand unit at monitor well MW-17 because it may be more prevalent across the area. The drillers returned the following day and reamed out the hole using their 6 ¾ inch diameter bit to 410 feet and set 4 inch diameter casing. Portland cement was mixed and pumped from the bottom up around the outside of the casing until returns were observed at the surface. The next day the drillers drilled out the cement plug and advanced the well to 430 feet using their 3 7/8 inch bit so that they could set the screen. Twenty feet of 2-inch diameter stainless steel screen (0.014 slot) attached to a 10 foot length of 2-inch diameter PVC pipe with a 2 ½" x 4" double K-packer was then lowered into the well and pushed down to the total depth of 430 feet using the drill string. The well was developed using air lift until the formation water ran clear into the mud pit at the surface.

Monitor Well MW-18 – Neeshaw Drive (Shallow Well)

The drillers mobilized their rig approximately 10 feet to the west of MW-17 and spudded their conductor pipe so they could drill monitor well MW-18. Because of the proximity of MW-18 to MW-17, it had been decided ahead of time that a geophysical log would not be run on this well and the screen interval pick would be based the data collected from the geophysical log from monitor well MW-17. Therefore, the interval from 284 - 304 feet was selected for the screen placement. The driller did not drill a pilot hole and instead reamed the hole from surface to 284 feet and set 4-inch diameter PVC casing. Portland cement was then mixed and pumped from the bottom of the casing up until returns were observed at the surface. The following day (August 12, 2005), the drillers drilled out the cement plug down to 304 feet so that they could set their completion string in the hole. Twenty feet of 2-inch diameter stainless steel screen (0.014 slot) attached to a 10 foot length of 2-inch diameter PVC pipe with a 2 ½" x 4" double K-packer was lowered into the well and pushed down to

the depth of 297 feet using the drill string. The lower seven feet of well must have caved in because the driller could not get the screen down to the targeted depth of 304 feet and lost about seven feet of screened interval up into the casing. Therefore, the well ended up having a screen interval of 284 feet to 297 feet in the sand formation. The driller then developed the well using air lift until the formation water ran clear at the surface into the mud pit.

Monitor Well MW-19 – Jones Plaza (FM 1960 and Jones Road)

The conductor pipe for monitor well MW-19 was installed on November 1, 2005 after the drillers finished the well development at monitor well MW-11R. The next day the drillers returned to the site and a pilot hole was installed to a total depth of 312 feet and a geophysical log was run. The results of the logging effort indicated that the correlative sand interval to complete in was from 240 feet to 260 feet. The driller went back in the hole with the 6 ¾ inch bit and reamed the hole down to a depth of 240 feet. Four inch diameter PVC casing was then run into the hole but it got stuck at approximately 60 feet. The driller pulled the casing out and went back into the hole to ream it out again to approximately 100 feet. When they tried to put the casing back in the hole they got it stuck again at around 120 feet. By this time it had gotten late in the day and the sun had set so for safety reasons it was decided to pull the casing and come back in the morning to finish. The next morning the driller went back into the hole and reamed it out to 240 feet. 4-inch diameter PVC casing was then installed to a depth of 240 feet without incident. The casing was grouted in place using Portland cement pumped from the bottom up until returns were observed at the surface. On November 3, the drillers drilled out the bottom of their cement plug and advanced the hole to 260 feet, the bottom of the targeted screened interval. Twenty feet of 2-inch diameter stainless steel screen (0.012 slot) attached to a 10 foot length of 2-inch diameter PVC pipe with a 2 ½" x 4" double K-packer was then lowered into the well and pushed down to the total depth of 260 feet using the drill string. The well was then developed using air lift until the formation water ran clear at the surface into the mud pit. Completion information for each Chicot monitoring well can be found on Table 1 of this report.

Summary of Analytical Results

Soil

Soil samples were collected from drill cuttings generated during the drilling program to characterize the waste for disposal. On July 6, 2005 one representative soil sample was collected from the sludge boxes staged at Barely Lane, submitted to Accutest Laboratories in Houston, Texas, and run for Volatile Organics Compounds (VOCs) using EPA Method 8260, reactivity, corrosivity, and ignitability (RCI). The analytical results indicated that all VOCs constituents were below the laboratory detection levels. The results for RCI indicated that the reactivity was not detected, the corrosivity or pH was 8.7 and the ignitability or flashpoint was greater 210 degrees Fahrenheit. Therefore, this waste could be disposed as Class II non hazardous waste.

Water

Two types of water samples were collected during this drilling program, one for quality assurance/quality control (QA/QC) and another for waste disposition. QA/QC water samples were collected periodically during the drilling to program from the driller's water truck to ensure that no constituents were being introduced into the subsurface from the drill water used to make up the drilling mud. Five water samples were collected for QA/QC purposes during the drilling program and submitted to Accutest Laboratories for analyses of VOCs by EPA Method 624. Samples were collected on the following dates (and well locations): July 6, 2005 (monitor well MW-10); July 22, 2005 (monitor well MW-14); August 1, 2005 (monitor well MW-17); August

11, 2005 (monitor well MW-18), and November 2, 2005 (monitor well MW-19). Analytical results from each of these sampling events indicated that acetone was the only constituent that was detected at an estimated value of 0.008 (J-flagged) parts per million (ppm) and this was observed only from the sample collected on July 6 at monitor well MW-10. This low level of acetone detection may be attributed to laboratory cross-contamination. All other constituents for all other sampling episodes were below the laboratory detection limit.

One water sample was collected during the initial stage of the drilling program and analyzed for waste disposition. Water sample DF1 collected on July 7, 2005 was submitted to Accutest Laboratories and analyzed for the following: VOCs by EPA Method 624; Semi Volatiles by EPA Method 625; biochemical oxygen demand (BOD) by EPA Method 405.1; pH by EPA Method 150.1; total organic carbon (TOC) by EPA Method 415.1; total kjeldahl nitrogen (TKN) by EPA Method 351.2; ammonia nitrogen (AMN) by EPA Method 350.1; nitrate by EPA Method 353.2; total phosphorus by EPA Method 365.2; nitrite by EPA Method 353.2; total suspended solids (TSS) by EPA Method 160.2; oil and grease by EPA Method 1664; and chemical oxygen demand (COD) by EPA Method 410.4. If the analytical results from this water sample were below the allowable discharge limits established by the Harris County Flood Control, then the water could be discharged into the ditch. However, results for pH and TSS were high enough for Harris County to deny discharge and therefore, the water was transported and disposed at a permitted facility. A copy of the laboratory analytical results for each of these sampling episodes can be found in Attachment 9.

Groundwater Sampling

During the August 2005 Jones Road Quarterly Sampling event, monitor wells MW-10, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17, and MW-18 were sampled. A stainless steel bladder pump with dedicated tubing was used to purge each monitor well. The pump intake was set at the mid point of the screen interval. The flow rate during purging and sampling activities was minimized (<0.5 liters/min) by adjusting the controller box accordingly. All purged water was run through a calibrated flow through cell so that water quality parameters (temperature, conductivity, pH, dissolved oxygen, and ORP) could be measured and recorded. The wells were purged a minimum of 15 minutes until consecutive readings for pH (+/- 0.5 pH), temperature (+/- 1° C), and conductivity (+/- 10%) were achieved. The purging data for each of these wells can be found on Table 2. The wells were then sampled for VOCs using laboratory prepared VOA bottles and shipped through the EPA CLP program to Ceimic Corporation in Narragansett, RI for analyses.

The analytical results for these wells indicated that none of the constituents of concern (COC) were detected in these monitor wells. Estimated values below the Contract-Required Quantification Limit (CRQL) for acetone were detected in monitor wells MW-13 and MW-18. Monitor well MW-18 also indicated a concentration of 0.008 ppm of carbon disulfide. All other analytes listed were either below the CRQL as an estimated value or not validated because it is a known laboratory contaminant (e.g. methylene chloride). See Table 3 for analytical results. The station location MWDUP was a duplicate sample and it was collected from monitor well MW-10. Monitor wells MW-11R and MW-19 were not installed until after this sampling event occurred. These two wells and the remaining eight Chicot wells will be sampled again during the November 2005 Jones Road Quarterly Sampling Event.

Waste Disposal

During the course of the drilling program, approximately 28,000 gallons of Class I water were generated, manifested, and disposed at Intergulf Corporation, in Pasadena, Texas where it was recycled. In addition,

approximately 120 yards of soil of Class II non-hazardous waste was generated, manifested, and properly disposed of at WMI Coastal Plains facility, in Alvin, Texas. Waste disposal manifests for both fluids and solids can be found in Attachment 10.

Conclusions

Based upon the objectives of the field activities, the following conclusions can be made:

- Nine monitor wells were installed within the Chicot Aquifer and screened across a common lithologic unit located below the known impacted zone where the current private wells are producing.
- One additional monitor well was installed and completed into a deeper zone believed to be near the base of the Chicot Aquifer.
- Geophysical logging was conducted at each boring location (with the exception of monitor well location MW-18) and the results provided information on the varying depths of the subsurface sand bearing units across the study area.
- Each monitor well was completed so that groundwater samples could be collected on a quarterly basis to coincide with the quarterly sampling conducted on the private wells at the Jones Road site.
- The placement of these ten wells will be influential in obtaining a better understanding of the Chicot aquifer dynamics as a result of area pumpage.
- Subsequent groundwater analytical data from these ten monitor wells should provide a platform where contaminant plume migration can be monitored and potentially modeled.

Recommendations

Based upon the data obtained from the five miniTROLLS located in the five private wells, the locations of the ten new monitor wells, and the objectives of this remedial investigation, Shaw recommends one of the following:

- Pull the five miniTROLLS from their current locations and reinstall them along with five more miniTROLLS in each of the ten recently drilled monitor wells. With the exception of monitor well MW-17, all nine monitor wells were screened in a comparable lithologic zone which is prevalent across the site. By using all ten wells, the data collected should provide a better spatial distribution then what was previously obtained. Also by monitoring water fluctuations in monitor well MW-17 and MW-18 (which are located only 15 feet apart) you should obtain data that may indicate the vertical relationship between the upper Evangeline and the Chicot aquifer.
- Remove the miniTROLLS from the private wells located at 11619 Advance, 11622 Jones Road, and 11234 Jones Road West and reinstall them in monitor wells MW-11R, MW16, and MW-19. In addition install the five new miniTROLLS in monitor wells MW-10, MW-12, MW14, MW-17, and MW-18, and leave the miniTROLLS currently deployed in the private wells located at 11634

Oak Valley and 11103 Timber Crest. By doing this you still retain good spatial coverage across the neighborhood and have not lost the control of being able to monitor the effect of area pumpage from a shallower zone by keeping the private wells at 11634 Oak Valley and 11103 Timber Crest.

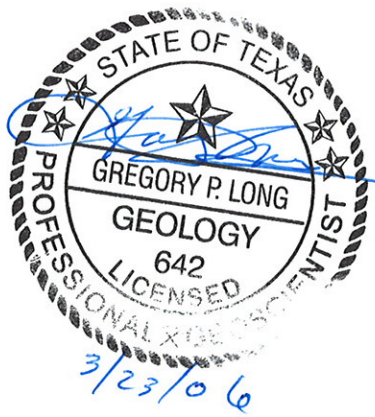
It should be mentioned that five of the miniTROLLS have cables that run from the transducer to the surface so that data can be downloaded and five of them do not have cables and have to be pulled from the well to download data. Therefore, it is recommended that the miniTROLLS be pulled each quarter so that the data can be collected and groundwater sampling can occur. Upon the completion of groundwater sampling, each miniTROLL will be reset and deployed back into its respective well. Because the Chicot aquifer is so prolific, it is recommended that the data collection frequency be changed from every 15 minutes to every hour.

This concludes the Chicot Monitor Well Installation report. If you have any questions, please contact me at 713-996-4519 or Bill Hardmant at 713-996-4599.

Sincerely,
Shaw Environmental, Inc.

Gregory P. Long
Program Manager

GPL/mfa
Attachments



FIGURES

OFFICE	DRAWN BY	CHECKED BY
Houston, TX	B. Lu 03/23/06	

FILE PATH	APPROVED BY
D:\JonesRd\GIS\workspace\BLu\MXD\PropWellLoc.mxd	

Plot Date: 03/05

LEGEND

- CHICOT MONITORING WELL LOCATION
- EVANGELINE MONITORING WELL LOCATION
- STREET

STATE OF TEXAS
GREGORY P. LONG
GEOLOGY
642
LICENSED
PROFESSIONAL GEOSCIENTIST
3/23/06

0 250 500 1,000 Feet

Shaw®

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

FIGURE 1

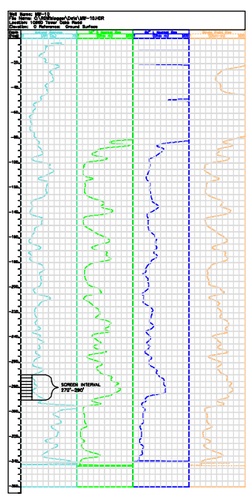
LOCATION OF CHICOT AND EVANGELINE MONITORING WELLS
JONES ROAD SUPERFUND SITE

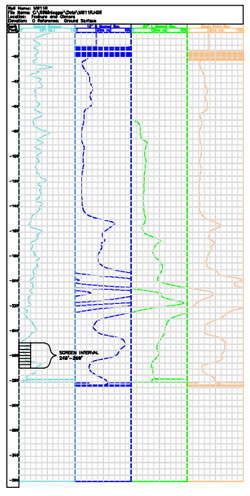
HOUSTON, TEXAS

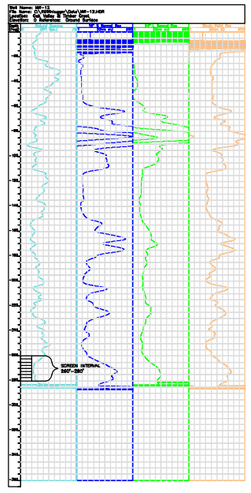
60x22

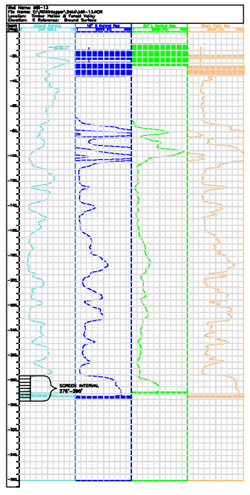
DRAWING NUMBER	118429-L1
APPROVED BY	
CHECKED BY	
DRAWN BY	J. ROZ 12/06/05
OFFICE	Houston, Texas
X-REF	---
IMAGE	---

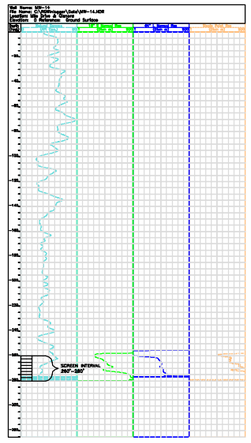
PLOT DATE: 12/07/05
FORMAT REVISION: 5/25/99

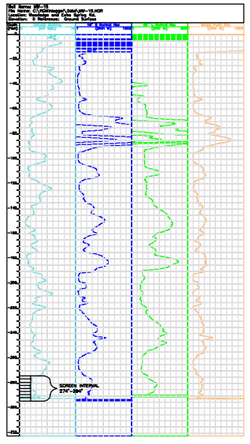


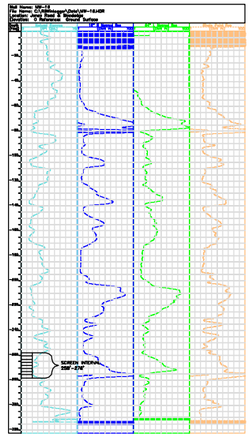


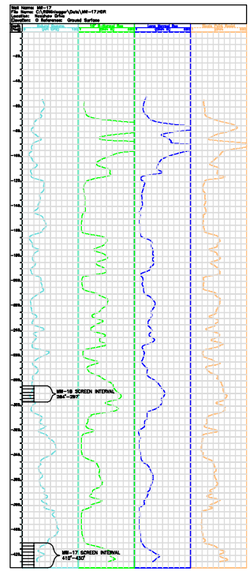


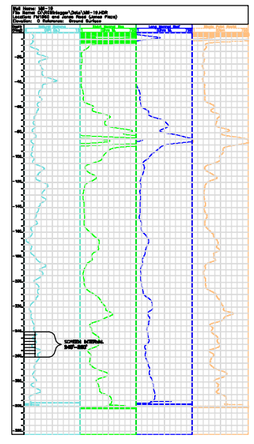












Shaw

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

FIGURE 2
SUITE OF GEOPHYSICAL LOGS FOR MONITOR WELLS
JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

TABLES

Table 1
Chicot Monitoring Well Information
Jones Road Superfund Site
Houston, Texas

Well ID	Location	Start Date	Completed Date	Drilled TD	Elevation in Mean Sea Level	Casing Interval	Screen Interval
MW-10	10860 Tower Oaks Blvd.	07/06/05	07/07/05	357	122.89	0 - 270	270 – 290
MW-11R	Glenora/Foxburo	10/31/05	11/01/05	295	124.70	0 - 249	249 – 269
MW-12	Oak Valley/Timber Crest	07/12/05	07/14/05	301	124.74	0 - 260	260 – 280
MW-13	Timber Hollow/Forest Valley	07/18/05	07/19/05	305	125.35	0 - 276	276 – 296
MW-14	Mile Drive/Glenora	07/20/05	07/22/05	294	126.27	0 - 260	260 – 280
MW-15	Woodedge/Echo Spring	07/25/05	07/26/05	305	124.89	0 - 274	274 – 294
MW-16	Woodedge/Jones	07/27/05	07/28/05	325	124.98	0 - 258	258 – 278
MW-17	Neeshaw Drive	08/09/05	08/11/05	445	124.00	0 - 410	410 – 430
MW-18	Neeshaw Drive	08/11/05	08/12/05	304	123.88	0 - 284	277 – 297
MW-19	Jones Plaza	11/01/05	11/03/05	312	123.26	0 - 240	240 - 260

Table 2
Chicot Monitoring Well Purging Data - August 2005
Jones Road Superfund Site
Houston, Texas

Location ID	Sample Date	Time	Temp°C	pH (s.u.)	Conductivity (uS)	Dissolved Oxygen mg/L	ORP (+/-) mV
MW-10	8/5/2005	9:25	25.74	9.13	0.402	6.40	-36.9
		9:30	26.08	8.44	0.385	5.22	-5.4
		9:40	26.38	8.46	0.385	5.02	-13.2
		9:45	25.69	8.44	0.389	4.83	-24.8
		9:55	26.32	8.43	0.384	4.73	-28.0
		10:00	26.78	8.41	0.384	4.51	-29.9
		10:05	27.26	8.43	0.384	4.15	-33.3
MW-12	8/4/2005	9:20	23.69	8.15	0.468	4.86	-35.5
		9:30	22.58	7.43	0.449	2.32	19.2
		9:33	22.62	7.41	0.448	2.25	17.7
		9:36	22.60	7.40	0.448	2.15	19.1
		9:40	22.76	7.40	0.449	2.16	18.2
MW-13	8/4/2005	16:20	24.96	7.92	0.392	4.66	-25.4
		16:25	23.72	7.91	0.381	1.83	-21.6
		16:30	23.59	7.87	0.379	1.24	-22.6
		16:35	23.56	7.84	0.377	1.04	-21.0
		16:40	23.59	7.82	0.376	0.91	-22.7
MW-14	8/5/2005	12:55	23.82	7.74	0.427	10.33	-14.0
		13:00	23.12	7.57	0.430	8.60	24.1
		13:05	23.03	7.50	0.431	8.65	23.0
		13:10	22.98	7.52	0.434	7.95	6.8
		13:15	22.91	7.52	0.435	8.11	2.6
		13:20	22.88	7.51	0.438	7.74	-3.3
MW-15	8/4/2005	14:20	25.31	8.40	0.306	9.45	-46.4
		14:25	24.36	9.11	0.280	7.68	-47.3
		14:30	24.18	9.28	0.274	7.25	-47.9
		14:35	24.10	9.34	0.273	7.26	-51.5
		14:40	24.06	9.39	0.272	7.57	-56.0
		14:45	24.01	9.48	0.271	7.08	-62.6
MW-16	8/4/2005	11:35	26.02	7.67	0.530	9.30	-6.5
		11:40	24.72	7.59	0.463	6.91	-12.8
		11:45	24.46	7.56	0.452	7.44	-6.1
		11:50	24.21	7.58	0.450	6.23	-12.5
		11:55	24.16	7.51	0.450	5.71	-13.9
MW-17	8/16/2005	Equipment failure - could not purge using the flow through cell					
MW-18	8/16/2005	Equipment failure - could not purge using the flow through cell					

Table 3
Groundwater Analytical Results
August 2005 Quarterly Sampling
Jones Road Superfund Site
Celmic Corporation - CLP Laboratory

STATION LOCATION	EPA SAMPLE ID	SAMPLE DATE	ANALYTE	CONC	VALDQAL	UNITS	ADJCRQL
MW10	F1QA8	08/05/2005	DICHLORODIFLUOROMETHANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	CHLOROMETHANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	VINYL CHLORIDE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	BROMOMETHANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	CHLOROETHANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	TRICHLOROFLUOROMETHANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	1,1-DICHLOROETHENE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	ACETONE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	CARBON DISULFIDE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	METHYL ACETATE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	METHYLENE CHLORIDE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	TRANS-1,2-DICHLOROETHENE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	METHYL TERT-BUTYL ETHER	10	U	UG/L	10
MW10	F1QA8	08/05/2005	1,1-DICHLOROETHANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	CIS-1,2-DICHLOROETHENE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	2-BUTANONE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	CHLOROFORM	10	U	UG/L	10
MW10	F1QA8	08/05/2005	1,1,1-TRICHLOROETHANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	CYCLOHEXANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	CARBON TETRACHLORIDE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	BENZENE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	1,2-DICHLOROETHANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	TRICHLOROETHENE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	METHYLCYCLOHEXANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	1,2-DICHLOROPROPANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	BROMODICHLOROMETHANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	CIS-1,3-DICHLOROPROPENE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	4-METHYL-2-PENTANONE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	TOLUENE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	TRANS-1,3-DICHLOROPROPENE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	1,1,2-TRICHLOROETHANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	TETRACHLOROETHENE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	2-HEXANONE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	DIBROMOCHLOROMETHANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	1,2-DIBROMOETHANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	CHLOROBENZENE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	ETHYLBENZENE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	XYLENES (TOTAL)	10	U	UG/L	10
MW10	F1QA8	08/05/2005	STYRENE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	BROMOFORM	10	U	UG/L	10
MW10	F1QA8	08/05/2005	ISOPROPYLBENZENE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	1,1,2,2-TETRACHLOROETHANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	1,3-DICHLOROBENZENE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	1,4-DICHLOROBENZENE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	1,2-DICHLOROBENZENE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	1,2-DIBROMO-3-CHLOROPROPANE	10	U	UG/L	10
MW10	F1QA8	08/05/2005	1,2,4-TRICHLOROBENZENE	10	U	UG/L	10

Note: MWDUP was a duplicate sample collected from monitor well MW-10

U Not detected at reported quantitation limit

UM laboratory contamination

LJ Reported concentration is below the Contract Required Quantitation Limit (CRQL) and is an estimated value

Table 3
Groundwater Analytical Results
August 2005 Quarterly Sampling
Jones Road Superfund Site
Celmic Corporation - CLP Laboratory

STATION LOCATION	EPA SAMPLE ID	SAMPLE DATE	ANALYTE	CONC	VALDQAL	UNITS	ADJCRQL
MW12	F1QA9	08/04/2005	DICHLORODIFLUOROMETHANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	CHLOROMETHANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	VINYL CHLORIDE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	BROMOMETHANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	CHLOROETHANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	TRICHLOROFLUOROMETHANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	1,1-DICHLOROETHENE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	ACETONE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	CARBON DISULFIDE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	METHYL ACETATE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	METHYLENE CHLORIDE	14	UM	UG/L	10
MW12	F1QA9	08/04/2005	TRANS-1,2-DICHLOROETHENE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	METHYL TERT-BUTYL ETHER	10	U	UG/L	10
MW12	F1QA9	08/04/2005	1,1-DICHLOROETHANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	CIS-1,2-DICHLOROETHENE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	2-BUTANONE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	CHLOROFORM	10	U	UG/L	10
MW12	F1QA9	08/04/2005	1,1,1-TRICHLOROETHANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	CYCLOHEXANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	CARBON TETRACHLORIDE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	BENZENE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	1,2-DICHLOROETHANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	TRICHLOROETHENE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	METHYLCYCLOHEXANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	1,2-DICHLOROPROPANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	BROMODICHLOROMETHANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	CIS-1,3-DICHLOROPROPENE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	4-METHYL-2-PENTANONE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	TOLUENE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	TRANS-1,3-DICHLOROPROPENE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	1,1,2-TRICHLOROETHANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	TETRACHLOROETHENE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	2-HEXANONE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	DIBROMOCHLOROMETHANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	1,2-DIBROMOETHANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	CHLOROBENZENE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	ETHYLBENZENE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	XYLENES (TOTAL)	10	U	UG/L	10
MW12	F1QA9	08/04/2005	STYRENE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	BROMOFORM	10	U	UG/L	10
MW12	F1QA9	08/04/2005	ISOPROPYLBENZENE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	1,1,2,2-TETRACHLOROETHANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	1,3-DICHLOROBENZENE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	1,4-DICHLOROBENZENE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	1,2-DICHLOROBENZENE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	1,2-DIBROMO-3-CHLOROPROPANE	10	U	UG/L	10
MW12	F1QA9	08/04/2005	1,2,4-TRICHLOROBENZENE	10	U	UG/L	10

Note: MWDUP was a duplicate sample collected from monitor well MW-10
U Not detected at reported quantitation limit
UM laboratory contamination
LJ Reported concentration is below the Contract Required Quantitation Limit (CRQL) and is an estimated value

Table 3
Groundwater Analytical Results
August 2005 Quarterly Sampling
Jones Road Superfund Site
Celmic Corporation - CLP Laboratory

STATION LOCATION	EPA SAMPLE ID	SAMPLE DATE	ANALYTE	CONC	VALDQAL	UNITS	ADJCRQL
MW13	F1QB0	08/04/2005	DICHLORODIFLUOROMETHANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	CHLOROMETHANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	VINYL CHLORIDE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	BROMOMETHANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	CHLOROETHANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	TRICHLOROFLUOROMETHANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	1,1-DICHLOROETHENE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	ACETONE	9	LJ	UG/L	10
MW13	F1QB0	08/04/2005	CARBON DISULFIDE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	METHYL ACETATE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	METHYLENE CHLORIDE	15	UM	UG/L	10
MW13	F1QB0	08/04/2005	TRANS-1,2-DICHLOROETHENE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	METHYL TERT-BUTYL ETHER	10	U	UG/L	10
MW13	F1QB0	08/04/2005	1,1-DICHLOROETHANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	CIS-1,2-DICHLOROETHENE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	2-BUTANONE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	CHLOROFORM	10	U	UG/L	10
MW13	F1QB0	08/04/2005	1,1,1-TRICHLOROETHANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	CYCLOHEXANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	CARBON TETRACHLORIDE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	BENZENE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	1,2-DICHLOROETHANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	TRICHLOROETHENE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	METHYLCYCLOHEXANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	1,2-DICHLOROPROPANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	BROMODICHLOROMETHANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	CIS-1,3-DICHLOROPROPENE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	4-METHYL-2-PENTANONE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	TOLUENE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	TRANS-1,3-DICHLOROPROPENE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	1,1,2-TRICHLOROETHANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	TETRACHLOROETHENE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	2-HEXANONE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	DIBROMOCHLOROMETHANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	1,2-DIBROMOETHANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	CHLOROBENZENE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	ETHYLBENZENE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	XYLENES (TOTAL)	10	U	UG/L	10
MW13	F1QB0	08/04/2005	STYRENE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	BROMOFORM	10	U	UG/L	10
MW13	F1QB0	08/04/2005	ISOPROPYLBENZENE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	1,1,2,2-TETRACHLOROETHANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	1,3-DICHLOROBENZENE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	1,4-DICHLOROBENZENE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	1,2-DICHLOROBENZENE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	1,2-DIBROMO-3-CHLOROPROPANE	10	U	UG/L	10
MW13	F1QB0	08/04/2005	1,2,4-TRICHLOROBENZENE	10	U	UG/L	10

Note: MWDUP was a duplicate sample collected from monitor well MW-10

U Not detected at reported quantitation limit

UM laboratory contamination

LJ Reported concentration is below the Contract Required Quantitation Limit (CRQL) and is an estimated value

Table 3
Groundwater Analytical Results
August 2005 Quarterly Sampling
Jones Road Superfund Site
Celmic Corporation - CLP Laboratory

STATION LOCATION	EPA SAMPLE ID	SAMPLE DATE	ANALYTE	CONC	VALDQAL	UNITS	ADJCRQL
MW14	F1QB1	08/05/2005	DICHLORODIFLUOROMETHANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	CHLOROMETHANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	VINYL CHLORIDE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	BROMOMETHANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	CHLOROETHANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	TRICHLOROFLUOROMETHANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	1,1-DICHLOROETHENE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	ACETONE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	CARBON DISULFIDE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	METHYL ACETATE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	METHYLENE CHLORIDE	14	UM	UG/L	10
MW14	F1QB1	08/05/2005	TRANS-1,2-DICHLOROETHENE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	METHYL TERT-BUTYL ETHER	10	U	UG/L	10
MW14	F1QB1	08/05/2005	1,1-DICHLOROETHANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	CIS-1,2-DICHLOROETHENE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	2-BUTANONE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	CHLOROFORM	10	U	UG/L	10
MW14	F1QB1	08/05/2005	1,1,1-TRICHLOROETHANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	CYCLOHEXANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	CARBON TETRACHLORIDE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	BENZENE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	1,2-DICHLOROETHANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	TRICHLOROETHENE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	METHYLCYCLOHEXANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	1,2-DICHLOROPROPANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	BROMODICHLOROMETHANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	CIS-1,3-DICHLOROPROPENE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	4-METHYL-2-PENTANONE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	TOLUENE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	TRANS-1,3-DICHLOROPROPENE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	1,1,2-TRICHLOROETHANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	TETRACHLOROETHENE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	2-HEXANONE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	DIBROMOCHLOROMETHANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	1,2-DIBROMOETHANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	CHLOROBENZENE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	ETHYLBENZENE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	XYLENES (TOTAL)	10	U	UG/L	10
MW14	F1QB1	08/05/2005	STYRENE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	BROMOFORM	10	U	UG/L	10
MW14	F1QB1	08/05/2005	ISOPROPYLBENZENE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	1,1,2,2-TETRACHLOROETHANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	1,3-DICHLOROBENZENE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	1,4-DICHLOROBENZENE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	1,2-DICHLOROBENZENE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	1,2-DIBROMO-3-CHLOROPROPANE	10	U	UG/L	10
MW14	F1QB1	08/05/2005	1,2,4-TRICHLOROBENZENE	10	U	UG/L	10

Note: MWDUP was a duplicate sample collected from monitor well MW-10

U Not detected at reported quantitation limit

UM laboratory contamination

LJ Reported concentration is below the Contract Required Quantitation Limit (CRQL) and is an estimated value

Table 3
Groundwater Analytical Results
August 2005 Quarterly Sampling
Jones Road Superfund Site
Ceimic Corporation - CLP Laboratory

STATION LOCATION	EPA SAMPLE ID	SAMPLE DATE	ANALYTE	CONC	VALDQAL	UNITS	ADJCRQL
MW15	F1QB2	08/04/2005	DICHLORODIFLUOROMETHANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	CHLOROMETHANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	VINYL CHLORIDE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	BROMOMETHANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	CHLOROETHANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	TRICHLOROFLUOROMETHANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	1,1-DICHLOROETHENE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	ACETONE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	CARBON DISULFIDE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	METHYL ACETATE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	METHYLENE CHLORIDE	14	UM	UG/L	10
MW15	F1QB2	08/04/2005	TRANS-1,2-DICHLOROETHENE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	METHYL TERT-BUTYL ETHER	10	U	UG/L	10
MW15	F1QB2	08/04/2005	1,1-DICHLOROETHANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	CIS-1,2-DICHLOROETHENE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	2-BUTANONE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	CHLOROFORM	10	U	UG/L	10
MW15	F1QB2	08/04/2005	1,1,1-TRICHLOROETHANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	CYCLOHEXANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	CARBON TETRACHLORIDE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	BENZENE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	1,2-DICHLOROETHANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	TRICHLOROETHENE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	METHYLCYCLOHEXANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	1,2-DICHLOROPROPANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	BROMODICHLOROMETHANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	CIS-1,3-DICHLOROPROPENE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	4-METHYL-2-PENTANONE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	TOLUENE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	TRANS-1,3-DICHLOROPROPENE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	1,1,2-TRICHLOROETHANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	TETRACHLOROETHENE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	2-HEXANONE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	DIBROMOCHLOROMETHANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	1,2-DIBROMOETHANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	CHLOROBENZENE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	ETHYLBENZENE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	XYLENES (TOTAL)	10	U	UG/L	10
MW15	F1QB2	08/04/2005	STYRENE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	BROMOFORM	10	U	UG/L	10
MW15	F1QB2	08/04/2005	ISOPROPYLBENZENE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	1,1,2,2-TETRACHLOROETHANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	1,3-DICHLOROBENZENE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	1,4-DICHLOROBENZENE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	1,2-DICHLOROBENZENE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	1,2-DIBROMO-3-CHLOROPROPANE	10	U	UG/L	10
MW15	F1QB2	08/04/2005	1,2,4-TRICHLOROBENZENE	10	U	UG/L	10

Note: MWDUP was a duplicate sample collected from monitor well MW-10
U Not detected at reported quantitation limit
UM laboratory contamination
LJ Reported concentration is below the Contract Required Quantitation Limit (CRQL) and is an estimated value

Table 3
Groundwater Analytical Results
August 2005 Quarterly Sampling
Jones Road Superfund Site
Ceimic Corporation - CLP Laboratory

STATION LOCATION	EPA SAMPLE ID	SAMPLE DATE	ANALYTE	CONC	VALDQAL	UNITS	ADJCRQL
MW16	F1QB3	08/04/2005	DICHLORODIFLUOROMETHANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	CHLOROMETHANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	VINYL CHLORIDE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	BROMOMETHANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	CHLOROETHANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	TRICHLOROFLUOROMETHANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	1,1-DICHLOROETHENE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	ACETONE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	CARBON DISULFIDE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	METHYL ACETATE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	METHYLENE CHLORIDE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	TRANS-1,2-DICHLOROETHENE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	METHYL TERT-BUTYL ETHER	10	U	UG/L	10
MW16	F1QB3	08/04/2005	1,1-DICHLOROETHANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	CIS-1,2-DICHLOROETHENE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	2-BUTANONE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	CHLOROFORM	10	U	UG/L	10
MW16	F1QB3	08/04/2005	1,1,1-TRICHLOROETHANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	CYCLOHEXANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	CARBON TETRACHLORIDE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	BENZENE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	1,2-DICHLOROETHANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	TRICHLOROETHENE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	METHYLCYCLOHEXANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	1,2-DICHLOROPROPANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	BROMODICHLOROMETHANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	CIS-1,3-DICHLOROPROPENE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	4-METHYL-2-PENTANONE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	TOLUENE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	TRANS-1,3-DICHLOROPROPENE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	1,1,2-TRICHLOROETHANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	TETRACHLOROETHENE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	2-HEXANONE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	DIBROMOCHLOROMETHANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	1,2-DIBROMOETHANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	CHLOROBENZENE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	ETHYLBENZENE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	XYLENES (TOTAL)	10	U	UG/L	10
MW16	F1QB3	08/04/2005	STYRENE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	BROMOFORM	10	U	UG/L	10
MW16	F1QB3	08/04/2005	ISOPROPYLBENZENE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	1,1,2,2-TETRACHLOROETHANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	1,3-DICHLOROBENZENE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	1,4-DICHLOROBENZENE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	1,2-DICHLOROBENZENE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	1,2-DIBROMO-3-CHLOROPROPANE	10	U	UG/L	10
MW16	F1QB3	08/04/2005	1,2,4-TRICHLOROBENZENE	10	U	UG/L	10

Note: MWDUP was a duplicate sample collected from monitor well MW-10

U Not detected at reported quantitation limit

UM laboratory contamination

LJ Reported concentration is below the Contract Required Quantitation Limit (CRQL) and is an estimated value

Table 3
Groundwater Analytical Results
August 2005 Quarterly Sampling
Jones Road Superfund Site
Celmic Corporation - CLP Laboratory

STATION LOCATION	EPA SAMPLE ID	SAMPLE DATE	ANALYTE	CONC	VALDQAL	UNITS	ADJCRQL
MWDUP	F1QB4	08/05/2005	DICHLORODIFLUOROMETHANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	CHLOROMETHANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	VINYL CHLORIDE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	BROMOMETHANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	CHLOROETHANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	TRICHLOROFLUOROMETHANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	1,1-DICHLOROETHENE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	ACETONE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	CARBON DISULFIDE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	METHYL ACETATE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	METHYLENE CHLORIDE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	TRANS-1,2-DICHLOROETHENE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	METHYL TERT-BUTYL ETHER	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	1,1-DICHLOROETHANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	CIS-1,2-DICHLOROETHENE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	2-BUTANONE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	CHLOROFORM	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	1,1,1-TRICHLOROETHANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	CYCLOHEXANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	CARBON TETRACHLORIDE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	BENZENE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	1,2-DICHLOROETHANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	TRICHLOROETHENE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	METHYLCYCLOHEXANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	1,2-DICHLOROPROPANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	BROMODICHLOROMETHANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	CIS-1,3-DICHLOROPROPENE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	4-METHYL-2-PENTANONE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	TOLUENE	1	LJ	UG/L	10
MWDUP	F1QB4	08/05/2005	TRANS-1,3-DICHLOROPROPENE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	1,1,2-TRICHLOROETHANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	TETRACHLOROETHENE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	2-HEXANONE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	DIBROMOCHLOROMETHANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	1,2-DIBROMOETHANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	CHLOROBENZENE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	ETHYLBENZENE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	XYLENES (TOTAL)	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	STYRENE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	BROMOFORM	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	ISOPROPYLBENZENE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	1,1,2,2-TETRACHLOROETHANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	1,3-DICHLOROBENZENE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	1,4-DICHLOROBENZENE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	1,2-DICHLOROBENZENE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	1,2-DIBROMO-3-CHLOROPROPANE	10	U	UG/L	10
MWDUP	F1QB4	08/05/2005	1,2,4-TRICHLOROBENZENE	10	U	UG/L	10

Note: MWDUP was a duplicate sample collected from monitor well MW-10

U Not detected at reported quantitation limit

UM laboratory contamination

LJ Reported concentration is below the Contract Required Quantitation Limit (CRQL) and is an estimated value

Table 3
Groundwater Analytical Results
August 2005 Quarterly Sampling
Jones Road Superfund Site
Ceimic Corporation - CLP Laboratory

STATION LOCATION	EPA SAMPLE ID	SAMPLE DATE	ANALYTE	CONC	VALDQAL	UNITS	ADJCRQL
MW17	F1RA6	08/16/2005	Dichlorodifluoromethane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Chloromethane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Vinyl Chloride	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Bromomethane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Chloroethane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Trichlorofluoromethane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	1,1-Dichloroethene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Acetone	5.0	U	UG/L	5.0
MW17	F1RA6	08/16/2005	Carbon Disulfide	**0.27**	**LJ**	UG/L	0.50
MW17	F1RA6	08/16/2005	Methyl Acetate	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Methylene Chloride	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	trans-1,2-Dichloroethene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Methyl tert-Butyl Ether	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	1,1-Dichloroethane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	cis-1,2-Dichloroethene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	2-Butanone	5.0	U	UG/L	5.0
MW17	F1RA6	08/16/2005	Bromochloromethane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Chloroform	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	1,1,1-Trichloroethane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Cyclohexane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Carbon Tetrachloride	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Benzene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	1,2-Dichloroethane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Trichloroethene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Methylcyclohexane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	1,2-Dichloropropane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Bromodichloromethane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	cis-1,3-Dichloropropene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	4-Methyl-2-pentanone	5.0	U	UG/L	5.0
MW17	F1RA6	08/16/2005	Toluene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	trans-1,3-Dichloropropene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	1,1,2-Trichloroethane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Tetrachloroethene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	2-Hexanone	5.0	U	UG/L	5.0
MW17	F1RA6	08/16/2005	Dibromochloromethane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	1,2-Dibromoethane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Chlorobenzene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Ethylbenzene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Xylenes (total)	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Styrene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	Bromoform	**0.90**	**UM**	UG/L	0.50
MW17	F1RA6	08/16/2005	Isopropylbenzene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	1,1,2,2-Tetrachloroethane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	1,3-Dichlorobenzene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	1,4-Dichlorobenzene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	1,2-Dichlorobenzene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	1,2-Dibromo-3-chloropropane	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	1,2,4-Trichlorobenzene	0.50	U	UG/L	0.50
MW17	F1RA6	08/16/2005	1,2,3-Trichlorobenzene	0.50	U	UG/L	0.50

Note: MWDUP was a duplicate sample collected from monitor well MW-10

U Not detected at reported quantitation limit

UM laboratory contamination

LJ Reported concentration is below the Contract Required Quantitation Limit (CRQL) and is an estimated value

Table 3
Groundwater Analytical Results
August 2005 Quarterly Sampling
Jones Road Superfund Site
Ceimic Corporation - CLP Laboratory

STATION LOCATION	EPA SAMPLE ID	SAMPLE DATE	ANALYTE	CONC	VALDQAL	UNITS	ADJCRQL
MW18	F1RA7	08/16/2005	Dichlorodifluoromethane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Chloromethane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Vinyl Chloride	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Bromomethane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Chloroethane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Trichlorofluoromethane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	1,1-Dichloroethene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Acetone	**2.4**	LJ	UG/L	5.0
MW18	F1RA7	08/16/2005	Carbon Disulfide	**8.0**		UG/L	0.50
MW18	F1RA7	08/16/2005	Methyl Acetate	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Methylene Chloride	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	trans-1,2-Dichloroethene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Methyl tert-Butyl Ether	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	1,1-Dichloroethane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	cis-1,2-Dichloroethene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	2-Butanone	5.0	U	UG/L	5.0
MW18	F1RA7	08/16/2005	Bromochloromethane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Chloroform	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	1,1,1-Trichloroethane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Cyclohexane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Carbon Tetrachloride	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Benzene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	1,2-Dichloroethane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Trichloroethene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Methylcyclohexane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	1,2-Dichloropropane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Bromodichloromethane	**0.23**	LJ	UG/L	0.50
MW18	F1RA7	08/16/2005	cis-1,3-Dichloropropene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	4-Methyl-2-pentanone	5.0	U	UG/L	5.0
MW18	F1RA7	08/16/2005	Toluene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	trans-1,3-Dichloropropene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	1,1,2-Trichloroethane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Tetrachloroethene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	2-Hexanone	5.0	U	UG/L	5.0
MW18	F1RA7	08/16/2005	Dibromochloromethane	**0.38**	LJ	UG/L	0.50
MW18	F1RA7	08/16/2005	1,2-Dibromoethane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Chlorobenzene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Ethylbenzene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Xylenes (total)	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Styrene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	Bromoform	**1.2**	UM	UG/L	0.50
MW18	F1RA7	08/16/2005	Isopropylbenzene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	1,1,2,2-Tetrachloroethane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	1,3-Dichlorobenzene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	1,4-Dichlorobenzene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	1,2-Dichlorobenzene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	1,2-Dibromo-3-chloropropane	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	1,2,4-Trichlorobenzene	0.50	U	UG/L	0.50
MW18	F1RA7	08/16/2005	1,2,3-Trichlorobenzene	0.50	U	UG/L	0.50

Note: MWDUP was a duplicate sample collected from monitor well MW-10

U Not detected at reported quantitation limit

UM Not detected at reported quantitation limit. Reported concentration should be used as a raised quantitation limit because of interferences and/or laboratory contamination

LJ Reported concentration is below the Contract Required Quantitation Limit (CRQL) and is an estimated value

ATTACHMENT 1
TEXAS DEPARTMENT OF LICENSING AND REGULATION LETTER

11097

TEXAS DEPARTMENT OF LICENSING AND REGULATION

Water Well Driller/Pump Installer Section
P.O. Box 12157 Austin, Texas 78711 (512) 463-7880 FAX (512) 463-8616
Email address: water.well@license.state.tx.us

RECEIVED
MAY 17 2005
SUPER FUND CLEANUP SECTION

May 16, 2005

Ms. Marilyn Czimer Long, P.G.
MC–143
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Re: Environmental and Monitoring Well Drilling in the Groundwater Contamination and Restricted Water Well Drilling Area (identified as the Jones Road Groundwater Plume) in Northwest Houston, Harris County, Texas.

Dear Ms. Long:

The Texas Department of Licensing and Regulation (TDLR) has received a request from the Texas Commission on Environmental Quality (TCEQ) to waive the drilling restrictions in the above referenced area for environmental and monitoring wells. The specificities of the waiver request includes only environmental or monitoring wells drilled and completed on behalf of the TCEQ and/or US Environmental Protection Agency (EPA) to depths less than four hundred (400) feet below ground level (bgl). TDLR approves this waiver request such that environmental or monitoring wells, drilled on behalf of the TCEQ or EPA, may be drilled into the Chicot Aquifer utilizing either the TDLR's 16 Tex. Admin. Code Ch. 76 monitoring well construction specifications, or more stringent TCEQ or EPA requirements.

Environmental and monitoring wells drilled deeper than four hundred (400) feet bgl, must be completed in a manner (as stated in the original January 24, 2003 Notice) to protect the Evangeline Aquifer from cross contamination or commingling of upper groundwater contamination causing groundwater quality degradation.

As referenced in the original January 24, 2003 Notice, more stringent construction specifications continue to be required on any new water wells drilled within the restricted area. Any new water wells located within the specified area, at minimum must be drilled to the Evangeline aquifer with a 3-inch larger borehole than the outside diameter of the casing and pressure cemented from a depth of not less than approximately 400 feet back to the land surface. **Prior to drilling any new water wells within the outlined restricted drilling area, contact the TDLR's Water Well Driller/Pump Installer Section at 512/463-7880.**

If you have any questions or require further information concerning this notification, please contact Lee Parham, Manager, Water Well Driller/Pump Installer Section, at 512/463-7880 or by email at water.well@license.state.tx.us.

Sincerely,

Lee Parham, Manager
Water Well Driller/Pump Installer Section
Compliance Division
TDLR

CC: Mr. Subhash Pal, P.E, TCEQ
Mr. Robert Traylor, TCEQ
Mr. Don Thompson, TCEQ R12
Ms. Nicole Bealle, TCEQ R12

ATTACHMENT 2
HARRIS COUNTY PERMIT R-O-W
& TRAFFIC CONTROL PLAN

HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT
ENGINEERING DIVISION - PERMIT GROUP

REGULATIONS OF HARRIS COUNTY, TEXAS FOR THE CONSTRUCTION OF FACILITIES WITHIN HARRIS COUNTY ROAD RIGHTS-OF-WAY

DATE: 06/30/05
AUTHORIZATION NUMBER: 7-0023815-2

STATE OF TEXAS }{
COUNTY OF HARRIS }{

This Authorization is issued to SHAW ENVIROMENTAL INFR INC , is not transferable and is effective immediately. The document authorizes the applicant to construct, install, modify or repair a facility as defined by the application and plans submitted to the County Engineer in support of this authorization. Construction must begin within six (6) months and be completed within nine (9) months from the date shown hereon. Authority for issuance of this authorization is derived from the Harris County Road Law (Section 2 of Acts 1913, 33rd Leg., Ch 17, Tex. Gen. Laws p. 64) as amended and other rights given to property owners in this state.

This Authorization is issued for the installation, construction, modification or repair at the location (s) shown below and to the named applicant, in consideration of applicant's representation to Commissioners' Court of Harris County, Texas that the construction of the facility will be in strict conformity with the plans and information filed with the County Engineer as part of the application.

MONITOR WELL INSTALLATION WITH STATUTORY AUTHORIZATION

10900-10900 WOODEDGE DR
11100-11100 GLENORA DR
11100-11100 NESHAW DR
11100-11100 WOODEDGE DR
11500-11500 OAK VALLEY DR
11600-11600 TIMBER HOLLOW DR

The applicant is on notice that failure to comply with this authorization and applicable regulations may result in enforcement proceedings before Commissioners' Court, injunctive action, or both at the discretion of Commissioners' Court. Additionally the County Engineer may seek job shutdown or the filing of a Class "C" misdemeanor charge.

If the applicant wishes to deviate from the information on file with the County Engineer, supplemental plans must be filed with the County Engineer and the County Engineer's certification of the change must be secured prior to beginning the work.

The applicant is responsible for notifying the County Engineer and appropriate Commissioners' Precinct by calling the telephone numbers listed below forty-eight (48) hours before work is to progress. A copy of this permit and the approved drawings must be kept onsite at all times during construction.

REPORT ALL VIOLATIONS TO COUNTY ENGINEER, AT (713) 956-3036 OR FAX TO (713) 956-0744.

ADDENDUM ATTACHED

Raymond J. Anderson, P.E.
Permit Manager

JOBSITE COPY

HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT
ENGINEERING DIVISION - PERMIT GROUP

REGULATIONS OF HARRIS COUNTY, TEXAS FOR THE CONSTRUCTION OF FACILITIES WITHIN HARRIS COUNTY ROAD RIGHTS-OF-WAY

STATE OF TEXAS)(
COUNTY OF HARRIS)(

DATE: 06/30/05
AUTHORIZATION NUMBER: 7-0023815-2

REQUIRED INSPECTIONS

CONSTRUCTION START - UTILITY
CONSTRUCTION COMPLETE--UTILITY

SPECIAL REQUIREMENTS

NO ADDITIONAL SPECIAL REQUIREMENTS

COPY

Raymond J. Anderson, P.E.
Permit Manager

JOBSITE COPY

Harris County

DEPARTMENT OF PUBLIC INFRASTRUCTURE
ENGINEERING DIVISION
PERMIT OFFICE

10,000 Northwest Freeway
Suite 102
Houston, TX 77092-8620
(713)956-3000

PROJECT REVIEW/ROUTING

General Information

Project Number: 0000997619
Project Name: JONES ROAD SUPERFUND
Consultant: SHW GROUP LLP **Phone: (281)368-4700**
Contact Person:

KMP# 369N,P,S,T

HCAD Tax ID: 1111111111

Dates Received:
6/14/2005 11:08:19 AM 6/16/2005

Plan Location: **Approved:** **Plan Status:**

Shaw Environmental, Inc.
1430 Enclave Parkway
Houston, TX 77077
281 368-4700
FAX: 281 368-4401

Shaw™ Shaw Environmental, Inc.

June 9, 2005

Permitting Division
Harris County Public Infrastructure Department
10000 Northwest Freeway, Suite 102
Houston, Texas 77092

RE: Traffic Control Plan
Chicot and Evangeline Monitoring Well Installation
TCEQ Jones Road Superfund Site
11600 Jones Road
Houston, Texas

Dear Sir/Madam:

Shaw Environmental, Inc. (Shaw) on behalf of our client, the Texas Commission on Environmental Quality (TCEQ) is submitting the attached Traffic Control; Plan for your consideration and approval. Drilling is currently scheduled to commence on Harris County right-of-way locations beginning on July 1, 2005 and drilling will last until approximately August 1, 2005. Lanes will be closed during the week (Monday through Friday and possibly Saturday) during the hours of 7 am to 6 pm. We will be using flagmen who will be in radio communication with each other. Advance warning signs will be placed during the week ending June 17, 2005. Seven (7) monitoring wells are going to be installed at six (6) different locations (the Neeshaw Road location has a two well cluster) in the area of Jones Road and Tower Oaks Boulevard in northwest Harris County. The installation of each monitoring well will take between two and three days. The monitoring well locations will be drilled in Harris County right-of-way at least four (4) feet off of the asphalt roadway and all equipment and cones will be removed from the roadway at the end of each work day.

Shaw and the TCEQ would be very appreciative of your cooperation in this matter. Should you need any additional information or should have any questions, please contact me at 713-996-4519 or Baron Tucker at 713-996-4557.

Thank you very much.

Sincerely,
Shaw Environmental, Inc.

Gregory Park Long, P.G.
Project Manager

Baron Tucker
Environmental Scientist

Cc: Jim S. H. Sher, P.E., Team Leader, Superfund Cleanup Section, TCEQ, Austin, TX
Subhash C. Pal, P.E., CHMM, Project Manager, Superfund Cleanup Section, TCEQ, Austin, TX
Marilyn Czimer Long, P.G., Project Manager, Superfund Cleanup Section, TCEQ, Austin, TX

OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	FILE PATH
Houston, TX	B. Lu 06/08/05	B. Tucker 06/08/05	G. Long 06/08/05	D:\JonesRd\GIS\workspace\BLu\MXD\PropSampLoc.mxd

Plot Date: 06/05

Legend

- SURVEYED LOCATION OF PRIVATE WATER WELL USED FOR WATER LEVEL MEASUREMENTS
- PROPOSED CHICOT MONITORING WELL LOCATION
- PROPOSED EVANGELINE MONITORING WELL LOCATION
- STREET

STATE OF TEXAS
TERRY LYNN BENTLEY
70641
REGISTERED
PROFESSIONAL ENGINEER

DATE: June 9, 2005

0 250 500 1,000 Feet

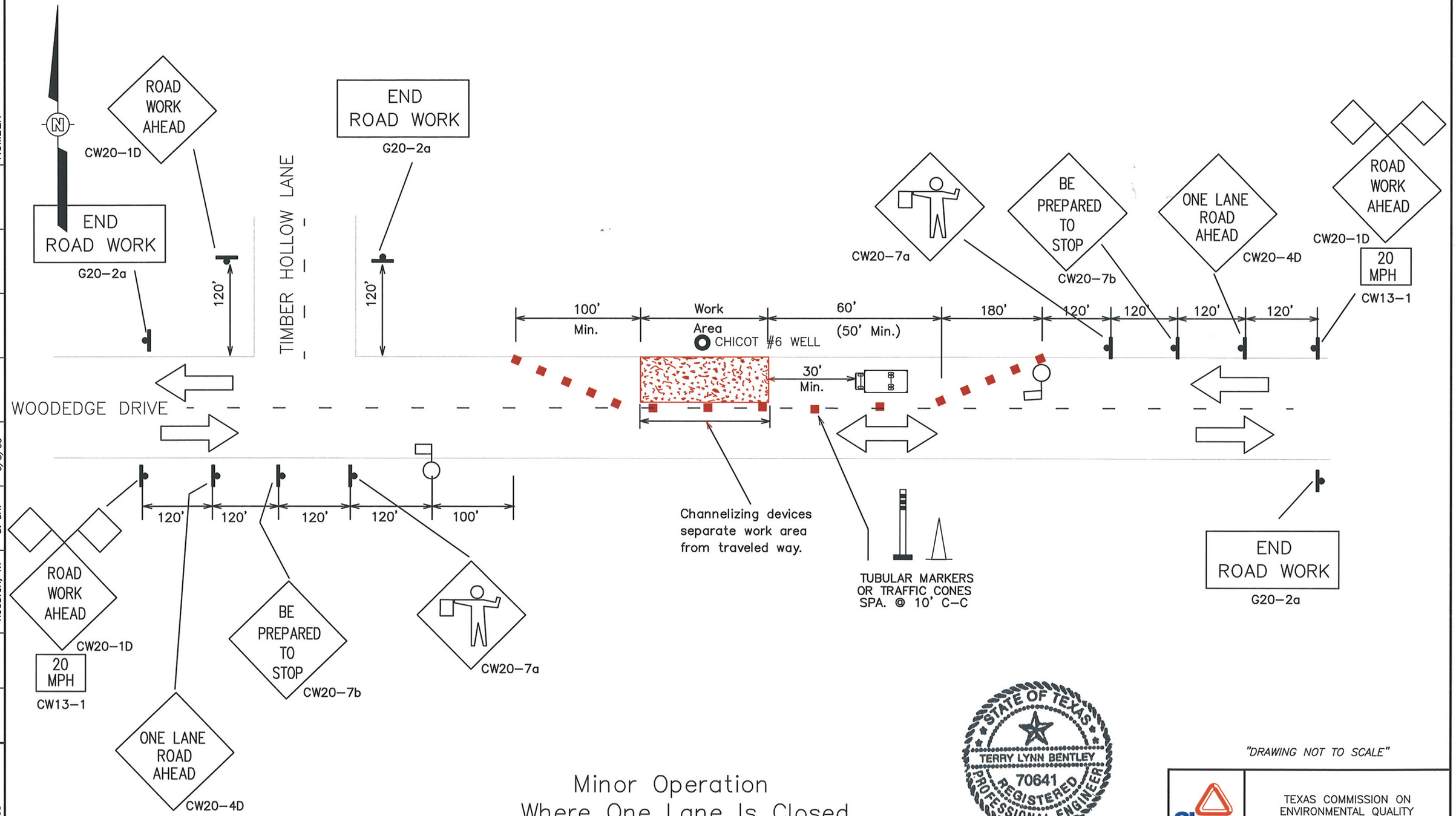
Shaw®

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

FIGURE 1

LOCATION OF PROPOSED CHICOT AND EVANGELINE MONITORING WELLS
JONES ROAD SUPERFUND SITE

CERCLIS #TXN000605460
HOUSTON, TEXAS



Minor Operation Where One Lane Is Closed With Adequate Field of View

REFERENCE:
HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT ENGINEERING DIVISION STANDARD TRAFFIC CONTROL PLAN DRAWING TCP-16

STATE OF TEXAS
TERRY LYNN BENTLEY
70641
REGISTERED PROFESSIONAL ENGINEER

DATE: June 15, 2005

"DRAWING NOT TO SCALE"

Shaw

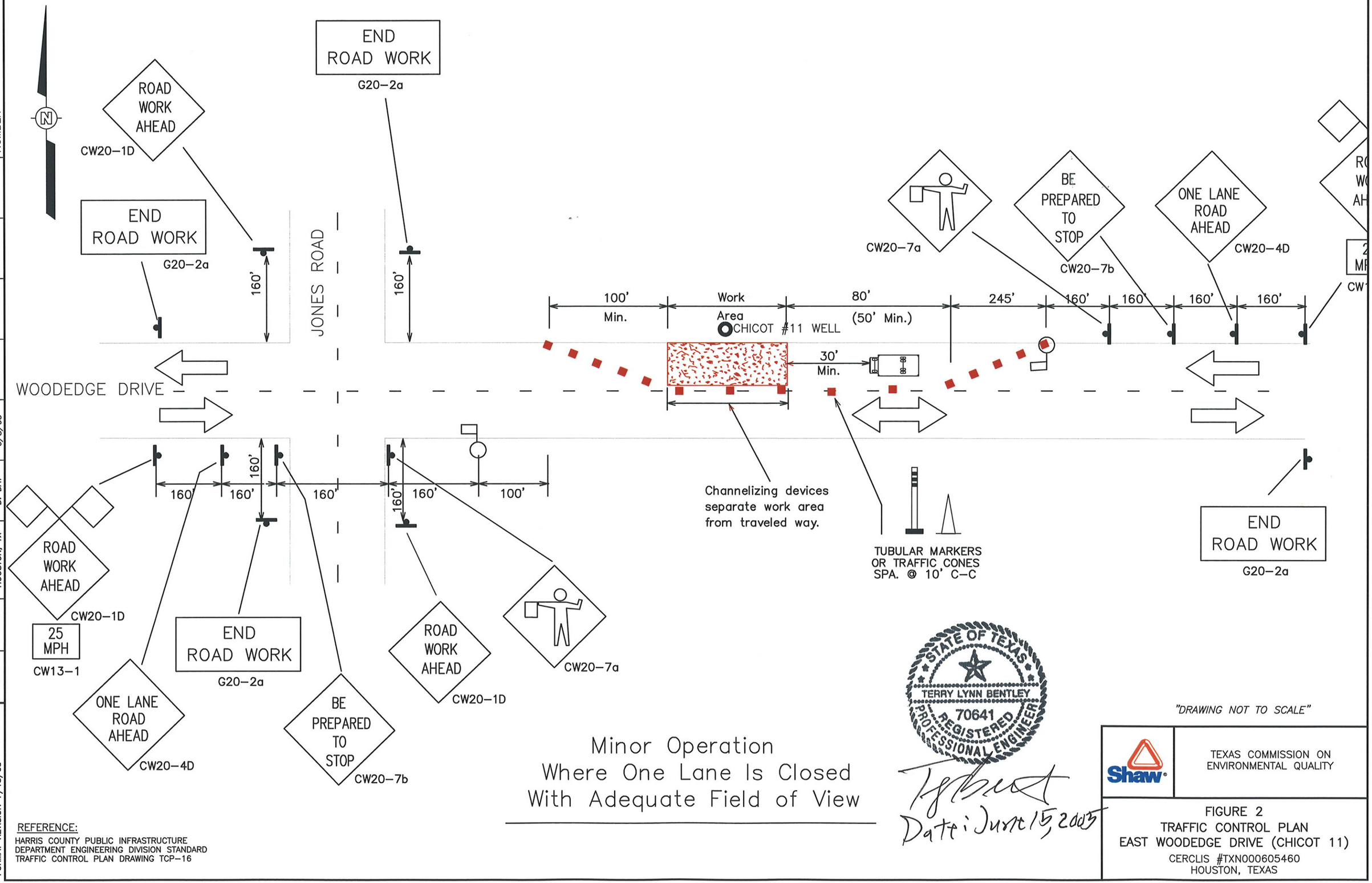
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

FIGURE 1
TRAFFIC CONTROL PLAN
WEST WOODEDGE DRIVE (CHICOT 6)
CERCLIS #TXN000605460
HOUSTON, TEXAS

DRAWING NUMBER	APPROVED BY	CHECKED BY	DRAWN BY	OFFICE	X-REF	IMAGE
110798-B1			D. DAY 6/8/05	HOUSTON, TX	---	---

PLOT DATE: 6/8/05
FORMAT REVISION 7/15/03

DRAWING NUMBER 110798-B1
APPROVED BY
CHECKED BY
DRAWN BY D. DAY 6/8/05
OFFICE HOUSTON, TX
X-REF ---
IMAGE ---
PLOT DATE: 6/8/05
FORMAT REVISION 7/15/03



Minor Operation Where One Lane Is Closed With Adequate Field of View

REFERENCE:
HARRIS COUNTY PUBLIC INFRASTRUCTURE DEPARTMENT ENGINEERING DIVISION STANDARD TRAFFIC CONTROL PLAN DRAWING TCP-16

STATE OF TEXAS
TERRY LYNN BENTLEY
70641
REGISTERED PROFESSIONAL ENGINEER

Date: June 15, 2005

"DRAWING NOT TO SCALE"

Shaw

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

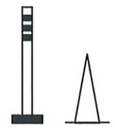
FIGURE 2
TRAFFIC CONTROL PLAN
EAST WOODEDGE DRIVE (CHICOT 11)
CERCLIS #TXN000605460
HOUSTON, TEXAS

DRAWING NUMBER 110798-B1

APPROVED BY	CHECKED BY	DRAWN BY
		D. DAY 6/8/05

IMAGE	X-REF	OFFICE
---	---	HOUSTON, TX

PLOT DATE: 6/8/05
FORMAT REVISION 7/15/03



TUBULAR MARKERS
OR TRAFFIC CONES
SPA. @ 10' C-C

Channelizing devices
separate work area
from traveled way.

END
ROAD WORK
G20-2a

GLENORA DRIVE

30'
Min.

CHICOT #10 WELL

120' 120' 120' 120' 180' 60' (50' Min.) Work Area 100' Min.

ROAD
WORK
AHEAD
CW20-1D

ONE LANE
ROAD
AHEAD
CW20-4D

BE
PREPARED
TO
STOP
CW20-7b

CW20-7a

20
MPH
CW13-1

ROAD
WORK
AHEAD
CW20-1D

CW20-7a

100' 120'

120'

END
ROAD WORK
G20-2a

TEMPORARY
STOP SIGN

MILE DRIVE

120'

120'

120'

END
ROAD WORK
G20-2a

ROAD
WORK
AHEAD
CW20-1D

Minor Operation
Where One Lane Is Closed
With Adequate Field of View

REFERENCE:
HARRIS COUNTY PUBLIC INFRASTRUCTURE
DEPARTMENT ENGINEERING DIVISION STANDARD
TRAFFIC CONTROL PLAN DRAWING TCP-16

STATE OF TEXAS
TERRY LYNN BENTLEY
70641
REGISTERED
PROFESSIONAL ENGINEER

DATE: June 15, 2005

"DRAWING NOT TO SCALE"

Shaw

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

FIGURE 3
TRAFFIC CONTROL PLAN
GLENORA DRIVE (CHICOT 10)
CERCLIS #TXN000605460
HOUSTON, TEXAS

DRAWING NUMBER 110798-B1
APPROVED BY
CHECKED BY
DRAWN BY D. DAY 6/8/05
OFFICE HOUSTON, TX
X-REF ---
IMAGE ---

N

END ROAD WORK
G20-2a

TUBULAR MARKERS OR TRAFFIC CONES SPA. @ 10' C-C

Channelizing devices separate work area from traveled way.

ROAD WORK AHEAD
CW20-1D

BE PREPARED TO STOP
CW20-7b

END ROAD WORK
G20-2a

ONE LANE ROAD AHEAD
CW20-4D

ROAD WORK AHEAD
CW20-1D

CW20-7a

20 MPH
CW13-1

100' 120' 120' 120' 120' 120'

TIMBER HOLLOW DRIVE

EXISTING 4-WAY STOP

30' Min.

CHICOT #5 WELL

120' 120' 120' 120' 180' 60' (50' Min.) Work Area 100' Min.

ONE LANE ROAD AHEAD
CW20-4D

BE PREPARED TO STOP
CW20-7b

CW20-7a

END ROAD WORK
G20-2a

FOREST VALLEY DRIVE

120'

120'

END ROAD WORK
G20-2a

ROAD WORK AHEAD
CW20-1D

"DRAWING NOT TO SCALE"

Minor Operation
Where One Lane Is Closed
With Adequate Field of View

REFERENCE:
HARRIS COUNTY PUBLIC INFRASTRUCTURE
DEPARTMENT ENGINEERING DIVISION STANDARD
TRAFFIC CONTROL PLAN DRAWING TCP-16

STATE OF TEXAS
TERRY LYNN BENTLEY
70641
REGISTERED PROFESSIONAL ENGINEER

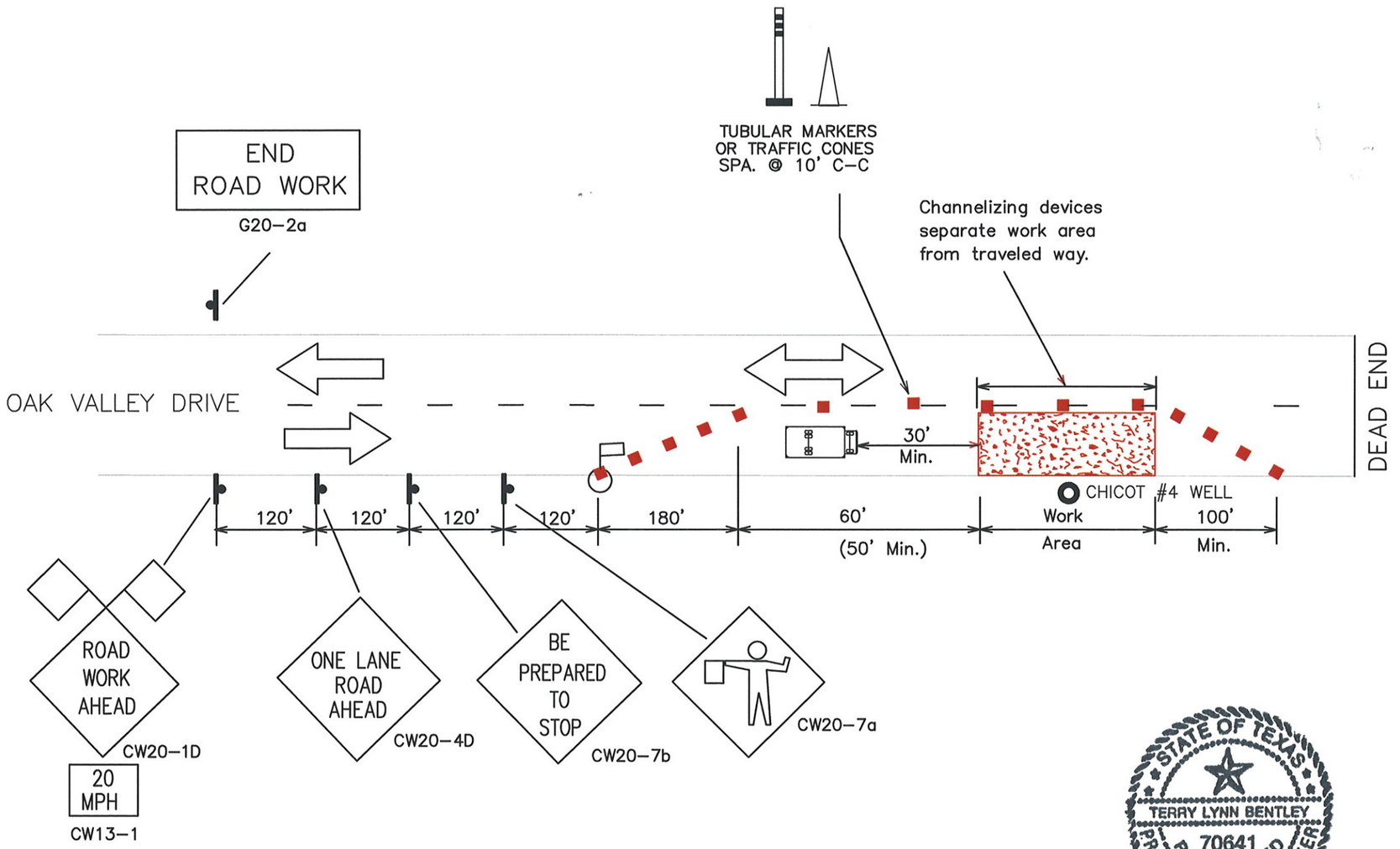
DATE: June 15, 2005

Shaw

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

FIGURE 4
TRAFFIC CONTROL PLAN
TIMBER HOLLOW DRIVE (CHICOT 5)
CERCLIS #TXN000605460
HOUSTON, TEXAS

PLOT DATE: 6/8/05
FORMAT REVISION 7/15/03



Minor Operation
Where One Lane Is Closed
With Adequate Field of View

STATE OF TEXAS
TERRY LYNN BENTLEY
70641
REGISTERED
PROFESSIONAL ENGINEER

DATE: JULY 15, 2005

"DRAWING NOT TO SCALE"

REFERENCE:
HARRIS COUNTY PUBLIC INFRASTRUCTURE
DEPARTMENT ENGINEERING DIVISION STANDARD
TRAFFIC CONTROL PLAN DRAWING TCP–16

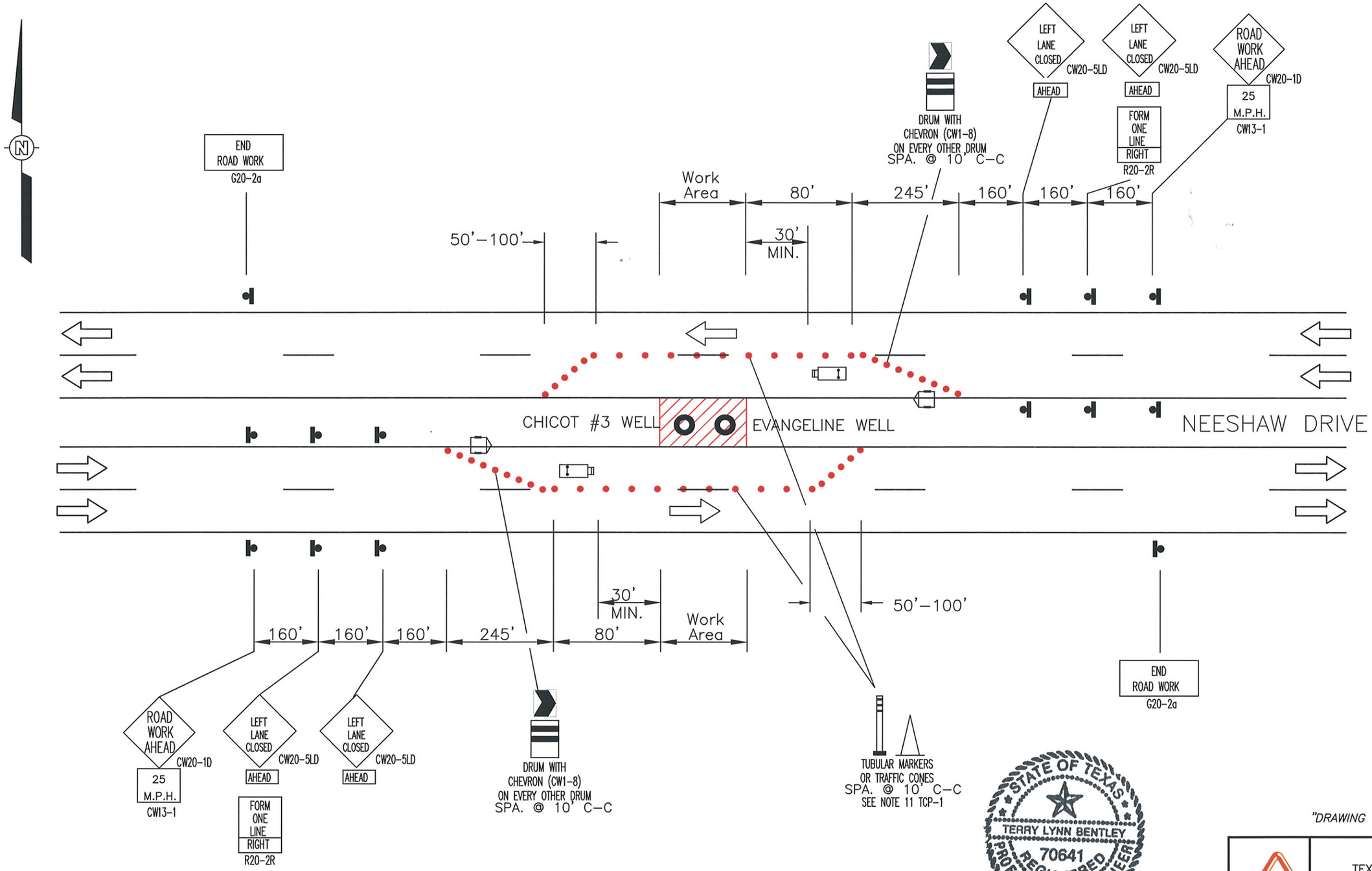
Shaw

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

FIGURE 5
TRAFFIC CONTROL PLAN
OAK VALLEY DRIVE (CHICOT 4)
CERCLIS #TXN000605460
HOUSTON, TEXAS

DRAWING NUMBER	APPROVED BY	CHECKED BY	DRAWN BY	OFFICE	X-REF	IMAGE
110798–B1			D. DAY 6/8/05	HOUSTON, TX	---	---

PLOT DATE: 6/8/05
FORMAT REVISION 7/15/03



MEDIAN WORK (4 LANE BOULEVARD)

REFERENCE:
HARRIS COUNTY PUBLIC INFRASTRUCTURE
DEPARTMENT ENGINEERING DIVISION STANDARD
TRAFFIC CONTROL PLAN DRAWING TCP-10

STATE OF TEXAS
TERRY LYNN BENTLEY
70641
REGISTERED
PROFESSIONAL ENGINEER

DATE: June 9, 2005

"DRAWING NOT TO SCALE"

Shaw

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

FIGURE 6
TRAFFIC CONTROL PLAN
NEESHAW DRIVE
CERCLIS #TXN000605460
HOUSTON, TEXAS

IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	HOUSTON, TX	D. DAY			110798-B1

PLOT DATE: 6/8/05
FORMAT REVISION 7/15/03

ATTACHMENT 3
FIELD BORING LOGS

Shaw™
Shaw Environmental & Infrastructure, Inc.

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 110798	PROJECT NAME: JONES ROAD		
BORING NUMBER: MW-10	COORDINATES:		DATE: 7-6-05
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 7-6-05
ENGINEER/GEOLOGIST: BILL HARDMAN	Depth	Date/Time	DATE COMPLETED: 7-7-05
DRILLING METHODS: MUD ROTARY			PAGE 1 OF 2

DEPTH ( )	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ( )	RECOVERY ( )	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
0	CH			CLAY 0-22 WITH SILT RED BRN TRACE CALCAREOUS NODS.				
	SM			SAND 22-25 LIGHT YELLOW				
50	CH			CLAY 25-65 RED BRN ~~REDDISH~~ GRADING MORE TO LIGHT GREY WITH DEPTH				
	SM			SAND 65-93 FINE TO MED GRAINED LARGER SIZE GRAINS NEAR BASE				
				CH CLAY 93-94				
100	SM			SAND 94-110 YELLOW BROWN				
				CH 110-112				
	SM			SAND 112-130 LIGHT BROWN FINE GRAINED				
				CLAY 130-133 LIGHT GREY MOTTLED RED BRN.				
	SM			SAND 133-145 MED GRAINED				
150	CH			CLAY 145-159 WITH SILT RED BRN MOTTLED LIGHT GREY				
	SM			~~SAND~~ SAND 159-196 MED GRAINED - LIGHT BRN.				
200	CH			CLAY (RARE) 196-224 INTERMIXED WITH SAND, SILT, LIGHT GREY MOTTLED RED BRN.				
	SM			SAND 224-250 LIGHT BROWN.				
250	CH			CLAY 250-267 SAND/SILT/CLAY LENSES				
	SM			SAND 267-296 LIGHT BROWN FINE GRAINED				
300	CH			CLAY 296-309 RED BROWN MOTTLED LIGHT GREY				

NOTES:

Shaw™
Shaw Environmental & Infrastructure, Inc.

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 110798	PROJECT NAME: JONES ROAD		
BORING NUMBER: MW-10	COORDINATES:		DATE: 7-6-05
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 7-6-05
ENGINEER/GEOLOGIST: BILL HARRISON	Depth	Date/Time	DATE COMPLETED: 7-07-05
DRILLING METHODS: MUD ROTARY			PAGE 2 OF 2

DEPTH ( )	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ( )	RECOVERY ( )	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
	CH			~~296-309~~ CLAY 296-309				
	SM			~~309-323~~ SAND 309-323 LIGHT BROWN				
	CH			CLAY 323-332				
	CH			SAND 332-333				
	SM			CLAY 333-342				
350	CH			SAND 342-347				
				CLAY 347-357 REDDISH BROWN				
400				TD @ 357'				
				RSN ELECTRIC LOG ON HOLE				
				SCREENED INTERVAL 270'-290'				

NOTES:

Shaw™
Shaw Environmental & Infrastructure, Inc.

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 110798	PROJECT NAME: Jones Road	
BORING NUMBER: MW-11	COORDINATES:	DATE: 7-8-05
ELEVATION:	GWL: Depth / Date/Time	DATE STARTED: 7-8-05
ENGINEER/GEOLOGIST: Bill Hardman	Depth / Date/Time	DATE COMPLETED: P&A
DRILLING METHODS: Mud Rotary		PAGE 1 OF 1

DEPTH ( )	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ( )	RECOVERY ( )	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
0		CH		CLAY 0-28 SOME SILT/SAND				
		SM		SAND 28-32				
50		CH		CLAY 32-75				
		SM		SAND 75-109				
100		CH		CLAY 109-147				
150		SM		SAND 147-150				
		CH		CLAY 150-161				
		SM		SAND 160-200 SAND WITH SOME THN CLAY BEDS				
200		CH		CLAY 200-214 WITH SOME SAND				
		SM		CLAY 214-215 SAND 215-229				
		SM		CLAY 229-231 SAND 231-251				
250		CH		CLAY 251-253				
		SM		SAND 253-281				
		CH		CLAY 281-292 INTERMIXED WITH SAND/SILT				
300								

NOTES:

TD @ 292'

SCREEN INTERVAL @ 254-274

* WELL PLUGGED AND ABANDONED 8-24-05
DID NOT MAKE WELL.

Shaw
Shaw Environmental & Infrastructure, Inc.

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 110798	PROJECT NAME: JONES ROAD		
BORING NUMBER: MW-11R	COORDINATES:		DATE: 10-31-05
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 10-31-05
ENGINEER/GEOLOGIST: B. HARDMANT	Depth	Date/Time	DATE COMPLETED: 11-01-05
DRILLING METHODS: MUD ROTARY			PAGE 1 OF 1

DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (ft)	RECOVERY (ft)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
0	CH			0-33 CLAY, RED BROWN, MOTTLED LIGHT GREY, SOME THIN SAND LENSES				
	SM			33-35 HARD SANDSTONE				
50	CH			35-70 CLAY LIGHT GREY TO BUFF, MOTTLED RED BROWN, THIN SAND LENSES				
	SM			70-117 SAND, YELLOW BROWN FINE GRAINED, SOME THIN CLAY LAYERS INTERMIXED				
100	CH / SM			117-124 CLAY, RED BROWN MOTTLED LIGHT GREY 124-126 SAND-RED BROWN				
	CH			126-158 CLAY BUFF TO WHITE COLORED TRACE RED/YELLOW BROWN				
150	SM			158-197 SAND VERY FINED GRAINED, GETTING COARSER AS YOU GO DEEPER YELLOW BROWN				
200	CH			197-225 CLAY WHITE TO BUFF, MOTTLED YELLOW BRN				
	SM			225-243 SAND				
250	CH			243-252 CH				
	SM			252-284 SAND FINE GRAINED LIGHT BROWN TO YELLOW				
	CH			284-295 CLAY				
300								

NOTES:

TD @ 295

SCREENED INTERVAL 249-269'

AW
Environmental & Infrastructure, Inc.

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 110798	PROJECT NAME: JONES ROAD		
BORING NUMBER: MW-12	COORDINATES:		DATE: 7-12-05
ELEVATION: OVETC	GWL: Depth	Date/Time	DATE STARTED: 7-12-05
ENGINEER/GEOLOGIST: B. HARDMAN/T	Depth	Date/Time	DATE COMPLETED:
DRILLING METHODS: MUD ROTARY			PAGE 1 OF 1

DEPTH ( )	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ( )	RECOVERY ( )	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
0	CH			CH/CL 0-10				
	CL/SM			CL/SM 10-24				
	SM			SM 24-49				
50	CH			49-53 SD 53-54				
	CH							
	SM			SM 71-122				
100								
	CH			CH 122-133				
	SM			133-140 SM				
				140-142 CH 142-147-SM				
150				CH 147-155				
	SM			155-171 SD				
	CH			171-183 WEATHERED SS??				
				183-185 CH 185-193 BEDR				
200				193-209 SD/CH				
	SM			209-225 SM some CH				
				CH 225-227				
	SM			227-247				
250	CH			247-253				
	SM			253-262				
	CL			262-266				
	SM			266-301				
300								

NOTES:

TD @ 301' 6 5/8 HOLE

SCREENED INTERVAL 260-280

Shaw™
Shaw Environmental & Infrastructure, Inc.

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 110798	PROJECT NAME: JONES ROAD		
BORING NUMBER: MW-13	COORDINATES:		DATE: 7-17-05
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 7-17-05
ENGINEER/GEOLOGIST: B. HARDMAN/T	Depth	Date/Time	DATE COMPLETED: 7-19-05
DRILLING METHODS: MUD ROTARY			PAGE 1 OF 1

DEPTH ( )	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ( )	RECOVERY ( )	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
0								
	CH			0-30 CH				
	SM			30-37 SD				
50	CH			37-68 CH				
	SM			68-104 SD				
100	CH			104-119 CH				
				119-120 SD				
	CH			120-133 CH				
	SM			133-143 SD				
150	CH			143-157 CH				
	SM			157-193 SD				
200	CH			193-200 CH				
	SM			200-209 SD				
	HARD GR			209-214 GR 204-215 CH				
	SM			215-235 SD				
250	SM/CH			INTERBEDDED SD+CH 235-270				
	SM			270-290 MED GRAND				
				290-292 CH				
300	SM			292-300 SM				

NOTES:

TD @ 305'

SCREENED INTERVAL 276-296'

Shaw Environmental & Infrastructure, Inc.

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 110798	PROJECT NAME: JONES ROAD		
BORING NUMBER: MW-14	COORDINATES:		DATE: 7-19-05
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 7-20-05
ENGINEER/GEOLOGIST: B. HARDMAN/T	Depth	Date/Time	DATE COMPLETED: 7-22-05
DRILLING METHODS: MUD ROTARY			PAGE 1 OF 1

DEPTH ( )	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ( )	RECOVERY ( )	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
0	CH/CL			CH/CL 0-15				
	SM			SD 15-19				
				19-65				
50	CH							
	CH/CL			65-85 CH/CL				
100	CH			85-110 CH				
	SM			SD 110-120				
	CH			CH 120-140				
	SM			SD 140-143 CH 143-150				
150	CH							
	SM			SAND				
				168-169 5.5TSF				
	SM			169-185 SD				
	CH			CH WITH LS 185-196				
200								
	SM			196-244 SD				
				CH 244-245				
250								
	SM			245-284 SD				
	CH			284-294 CH TD @ 294				
300								

NOTES:

SCREENED INTERVAL 260-280'

243A-3-86

Shaw™
Shaw Environmental & Infrastructure, Inc.

274-294

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 110798	PROJECT NAME: JONES ROAD		
BORING NUMBER: MW-15	COORDINATES:		DATE: 7-25-05
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 7-25-05
ENGINEER/GEOLOGIST: B. HARDMAN/T	Depth	Date/Time	DATE COMPLETED: 7-26-05
DRILLING METHODS: MUD ROTARY			PAGE 1 OF 1

DEPTH ( )	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ( )	RECOVERY ( )	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
0	CH			0-23 CH				
	SM			23-34 SD				
50	CH			34-72 CH				
	SM			72-101 SD				
100	CH			101-117 CH				
	SM			117-122 SD				
	CH			122-133 CH				
	SM			133-145 SD				
150	SM/GC			SAND GRAVEL 145-185				
	SM			185-194 SD				
200	CH			194-202 CH				
	SM			205-215 SD				
	CH			215-220 CH				
	SM			220-241 SD				
250				241-261 SD/SS/LS RK				
	CH			261-265' CH				
	SM			265-299 SD W GRAVEL				
300	CH			299-305' CH				

NOTES:

TD @ 305'

SCREENED INTERVAL 274'-294'

Shaw™
Shaw Environmental & Infrastructure, Inc.

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 110798	PROJECT NAME: JONES ISLAND		
BORING NUMBER: MW-16	COORDINATES:		DATE: 7-27-05
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 7-27-05
ENGINEER/GEOLOGIST: B. HARDMAN	Depth	Date/Time	DATE COMPLETED: 7-28-05
DRILLING METHODS: MUD ROTARY			PAGE 1 OF 1

DEPTH ( )	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ( )	RECOVERY ( )	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
0	CH			0-12 CH				
				12-14 SD 14-18 CH				
	SD			21-27 CH 18-21 SD				
				27-34 SD				
50	CH			34-71 CH				
	SM			SD 71-102				
100	CH			102-110 CH				
	SM			110-119 SD				
	CH			119-130 CH				
	SM			130-150 SD				
150	CH			150-160 CH				
	SM/GC			160-182 GRAVEL/SD				
	CH			182-203 CH				
200	CH			203-205 HD WATER 205-208 CH				
	SM			208-240 SD				
	CH			240-242 CH				
250	SM			242-263 SD				
				263-265 CH				
	SM			265-283 SD				
	CH			283-303 CH				
300	SM			303-306 SM				
	CH			306-325 CH				

NOTES:

TD 325

SCREENED INTERVAL 258-278'

243A-3-86

Shaw™
Shaw Environmental & Infrastructure, Inc.

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 110798	PROJECT NAME: JONES ISLAND		
BORING NUMBER: MW-17/MW-18	COORDINATES:		DATE: 8/9/05
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 8/9/05
ENGINEER/GEOLOGIST: B. HARDMAN/T	Depth	Date/Time	DATE COMPLETED: 8/11/05
DRILLING METHODS: MUD ROTARY - Boswell & Son's Drilling			PAGE 1 OF 2

DEPTH ( )	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ( )	RECOVERY ( )	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
0								
18				clay/fill				
33				SD				
50				clay lt grey silty				
63								
100				SD				
121				gravel @ 121-121				
135				CH				
141				SD				
150				CH/CL				
155								
200				SD				
				clay stringers @ 235				
				gravel @ 246-248				
250								
253				CH				
				SD gravel @ 263 to 273 stringers				
300								

NOTES:

Shaw
Shaw Environmental & Infrastructure, Inc.

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 110798	PROJECT NAME: JONES ROAD		
BORING NUMBER: MW-17/MW-18	COORDINATES:		DATE: 8/9/05
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 8/9/05
ENGINEER/GEOLOGIST: B. HARDMAN	Depth	Date/Time	DATE COMPLETED: 8/11/05
DRILLING METHODS: MUD ROTARY			PAGE 2 OF 2

DEPTH ( )	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ( )	RECOVERY ( )	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
300				302-303 gravel				
311				SD				
				304-305 gravel				
336				CH				
350				SD				
				365				
372				SD CH				
				CH				
400								
401				SD				
450				445 TD				
200								
250								
300								

NOTES:

TD @ 445

SET SCREEN @ 410-430

TWIN WELL MW-17 DRILLED 8-11-05 COMPLETED 8-12-05 TD @ 284

SCREENED 284-297

243A-3-86

Shaw
Shaw Environmental & Infrastructure, Inc.

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 110798	PROJECT NAME: JONES ROAD		
BORING NUMBER: MW-19	COORDINATES:		DATE: 11-02-05
ELEVATION:	GWL: Depth	Date/Time	DATE STARTED: 11-02-05
ENGINEER/GEOLOGIST: B. HARDMAN	Depth	Date/Time	DATE COMPLETED: 11-05-05
DRILLING METHODS: MUD ROTARY			PAGE 1 OF 1

DEPTH ( )	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER ( )	RECOVERY ( )	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	WELL CONSTRUCTION	REMARKS
0	CH			0-18 CLAY RED BROWN MOTTLED LIGHT GREY				
	SM			18-30 SAND LIGHT BROWN FINE GRAINED				
	CH			30-49 CLAY RED BROWN CHANGING TO LIGHT GREY MOTTLED RED BROWN				
50	SM			49-59 SAND - YELLOW BROWN FINE GRAINED				
	CH			59-68 CLAY LIGHT GREY MOTTLED YELLOW BROWN				
				68-118 SAND				
	SM			YELLOW BROWN FINE GRAINED				
100								
	CH			118-123 CLAY LIGHT GREY MOTTLED YELLOW & RED BROWN				
	SM			123-128 SAND				
				128-164 CLAY RED BROWN MOTTLED GREY CHANGING TO LIGHT GREY MOTTLED YELLOW BROWN				
150	CH							
				164-197 SAND				
	SM			YELLOW BROWN FINE GRAINED				
200								
	CH			197-212 CLAY WITH SAND THIN GRAVELLY LENSES				
	SM			212-229 SAND MEDIUM GRAINED YELLOW BROWN				
				229-232 - SANDSTONE				
				232-302 SAND				
250	SM							
300								

NOTES:

CH	302-310 CLAY
SM	310-312 SAND TD @ 312

SCREENED 240-260

ATTACHMENT 4
FIELD NOTES/DAILY FIELD REPORTS

6/30/05

0945 LEAVE TO PICK UP PERMIT @ HARRIS CNTY. MILES 87682

PICKED UP H.C. PERMIT @ 1020
LEFT FOR JONES SITE TO MEET MAR PATTON
ARRIVE FIELD WAREHOUSE @ 1045
UNLOAD SUPPLIES
1055 HEAD TO B2/081U TO MEET MR. PATTON
MET MR. PATTON - HE SHOWED ME WHERE TO PUT THE BOXES AND PROVIDED ME A SIGNED ACCESS AGREEMENT

LEFT @ 1115 TO CHECK UTILITY MARKERS - CODES LIKE WE HAVE PROBLEMS

CALLED MONT TO DISCUSS
CALLED GREG LOVE TO COME OUT TO SITE

6-30-05

VIEWED ALL LOCATIONS
DENVER 9, 7, 11, 3
?? 4, 8
ND 10, 5, 6

1250 TOOK BEFORE PHOTOS OF LOCATION # 7 TD10860
BEFORE AIR KNIFE

WAITING ON AIR KNIFE
GREG L. SHOWS UP @ 1310
WILL CHECK OUT LOCATIONS

BEST ARRIVED @ 1320 WITH AIR KNIFE
MET WITH PROPERTY OWNER NEXT DOOR (EAST)
GLEN TALKED TO HIM ABOUT WHAT WE ARE DOING.

1330 HELD TAILGATE SAFETY MEETING

CALLED TIM TREADWAY (TD 1086) LEFT MESSAGE
STARTED AIR KNIFE @ 1340 FINISHED @ 1450 CLEAN TO 5'

6-30-05

MOVED TO LOCATION # 3 (TWO WELLS) ON NEESHAM @ 1510
CLEARED EAST HOLE TO 5'
EMPTIED DIET BACK INTO HOLE @ 1600
1607 STARTED UTILITY CLEANER ON WEST HOLE NEAR GAS PIPELINE
1700 FINISHED WEST NEESHAM LOCATION — CLEAR TO 5'

1707 LEFT SITE

ARRIVE BACK @ 1730
MILEAGE IN 87747 (65)

7-01-05

LEAVE FOR SITE @ 0700
MILES ON : 0
STOP TO PICK UP SUPPLIES
ARRIVE SITE @ 0755
WAITING ON BEST

1ST LOCATION WILL BE MILL @ CLEWORK #10
SKILLED ARRIVE @ 0807

CONDUCTED TAILGATE SAFETY @ 0815
SETUP OVER LOCATION #10 @ 820
0835 VAC TRON HAD PROBLEMS STARTING ON
"900 OPERATOR CALLED ALT REGARDING
MALFUNCTION OF EQUIPMENT - LOOKS LIKE
BATTERY CABLE TERMINAL & CONTROL BOX
WHERE THE SWITCH IS.

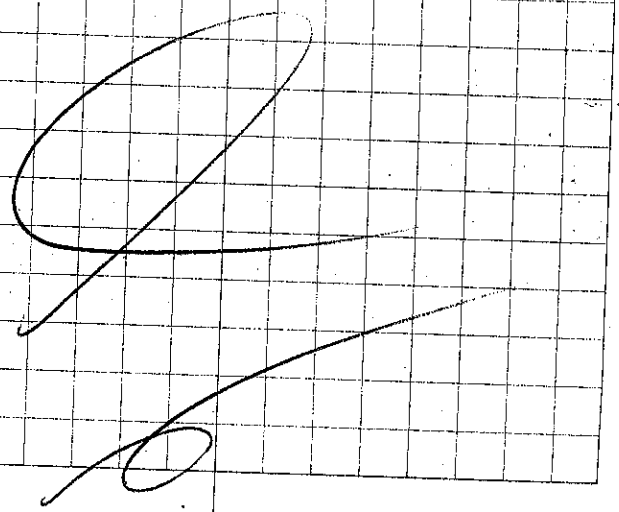
USED WATER TO CUT HOLE THIS TIME
FASTER - WILL PUT PLATE OVER HOLE
AND WATER/SOIL WILL BE DUMPED
INTO A DRUM - TEMPORARILY STAGED @
BEST'S LOCATION UNTIL VAC TRUCKS
ARE OUT HERE ONSITE. THEN BEST WILL
BRING OUT DRUMS AND THEY WILL BE

7-01-05

VACUUMED OUT.
CLOSED LOCATION #10 TO 5'

LEFT LOCATION #10 @ 0915 - WENT TO
HARDWARE STORE TO GET PARTS THEN
MOBBED TO LOCATION #11 JOHN @ WOODRIDGE

EQUIPMENT PROBLEMS - SENT DRIVERS
HOME
LEFT SITE FOR OFFICE @ 1010
ARRIVE BACK @ 1045
42 MILES

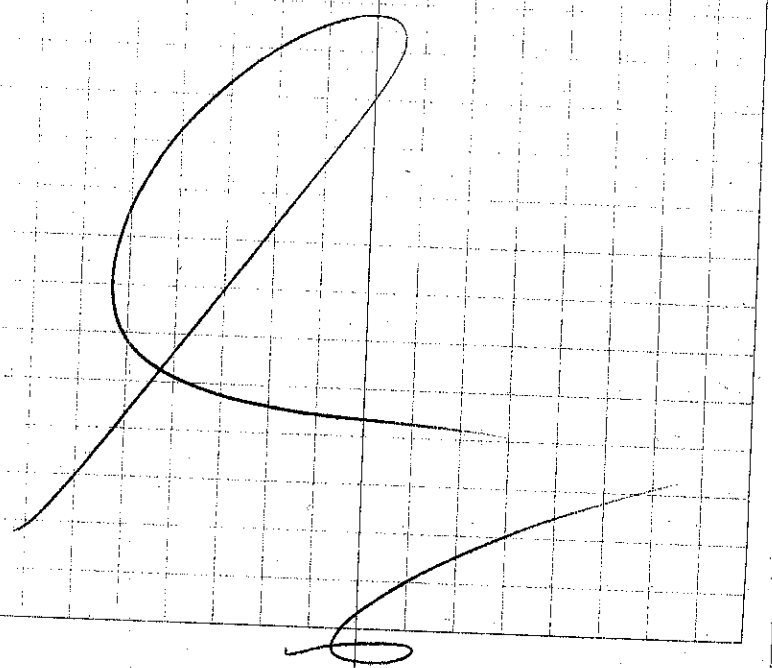


7-5-05

0630 LEAVE FOR SITE
MILAGE = 0 (c) 12166 (T)
ARRIVE SITE @ 0705
0715 GREG ARRIVES
0725 HEAD TO MR. PATTONS PLACE TO TAKE PHOTOS
MRONS ONSITE
POLY TANK ARRIVES @ BL10810 @ 0825
HEAD BACK TO FIELD OFFICE W/ JA MARKING
HEAD OUT TO VIEW LOCATION W/ JA MARKING
11:10 2 SLUDGE BOXES ARRIVE
1225 - VALTRUCK CALLED - ONSITE TOLD HIM TO GRAB LUNCH
CALLED MIKE TONES @ JOHN PLACE @ 1245 TO CATCH ON ACCESS - WENT TO NIT. ATTORNEY ASKED TO CALL BACK IN A WEEK. CALLED IN UTILITY LOCATES.
RECEIVED CALL FROM BEST - DRILLER WILL NOT BE HERE UNTIL 2:30
CALLED SIGN COMPANY - SOME TYPE OF MIXUP HERE - WONT HAVE SIGNAGE UNTIL FRIDAY.
DRILLERS CALLED BACK - LOCATE @ 330

7-5-05

DECIDED TO CALL IT A DAY.
LET WILL LEAVE
LET VALTRUCK LEAVE @ 3pm
WENT OUT TO RESTAKE AREAS.
SET OUT PAPERWORK
LEFT SITE @ 1730
ARRIVE BACK @ 1815
MILES W 25 (c)
(2189 (T)



MW-10 7-06-05

0530 LEAVE FOR SITE
MILEAGE = 0 (C)
MILEAGE 12187 (T)
ARRIVE @ 0617 0630 W. HUBBARD ARRIVES
HEAD TO TO 10860 @ 635 RIG
ONSITE LOCATED OVER WELL
TAKE PHOTO
655 - M. LONG ARRIVES
0700 - G. LONG ARRIVES
WAITING ON DRILLER
CALLED ALI @ 0715 TO FIND OUT
WHERE DRILLER IS.
DRILLER ARRIVES @ 0730
USA VAL TRUCK @ 0740
CONDUCTED HASP TAILGATE @ 0750

0800 COLLECTED WATER SAMPLE FROM
BISSELL WATER TANK
MW-10 DRILL WATER @ 0805
POWER WASH
STARTED DRILLING @ 0810
0-18 CLAY/SILTY CLAY
PICKED UP CAUCK @ 18-20 LT BRN
PICKED UP SAND @ 22'-25

KELLY IS 24' BTC 1'

MW-10 7-6-05

45 @	0837	CH	LT/GRY
65 @	0843	SS	50 → 65
65-85	SAND	0850	
85-93	SAND	COARSE SAND	NEAR BTM
~~93~~	~~COARSE SAND~~		
93-94	CLAY		
94-105	SAND		
110-112	CH	LT GRAY	MOTT RD BRN
112-125	SAND	LT BRN	
125-130	SAND		

DISCUSSED WITH MORGAN ABOUT OSHA
PENETRATED PIPE ON THIS WELL THEN
CHANGING OVER TO CERTA LOCK
130-133 CH LIGHT GRAY MOTT RD BRN
133-145 SAND COARSE WITH FINES
156-159 CH/MOTTLED BRN WITH LT GRAY
159-165 SAND ~~WITH OTHER FINES~~ SOME COARSE FRAGMENTS
165-185 SAND
185-195 SAND
195-196 CH LT GRAY 196-204 SAND/SILT/CLAY
205-225 CH LT GRAY MOTT RD BRN
THIN SAND LENSES

MW-10 7-6-05

224 – 245 SD
245-250 SD
250 - 264 RAM SILT/SD/CLAY LT GRAY/RED BRN
264-265 CH SAA IN COLOR TO LT BRN
265-267 CH
267 - 295 ~~SD~~ SD 296 SD
~~297~~ 296 - RZ
296 - 305 - RAM SD/SILT/CH/QTZ GRAVEL
307-309 CH RED/BRN MOTTLED GRAY
309-323 SD
323-325 CH
325-332 CH
332 - SD ⇒ 333
333 - 342 CH
342-345 SD
345- 347 SD
347-357 CH RED BRN
HIT TOP OF SAND @ 357 @ 1130
STOPPED HOLE AND CLEANED HOLE
FOR LOGGING
POOH OUT OF HOLE TO LOG HAD EQUIPMENT PROBLEMS WITH LOGGING TOOL
STARTED LOGGING @ 1250

GOT TO 345 @ 1300 PULLED BACK OUT

MW-10 7-6-05

DECIDED TO SET SCREEN @ 270-290
WILL SET CASING TO 270
AND MIX CEMENT TO PUMP TO SURFACE
DRIVE OUT PLUG TOMORROW
1345 WASH BACK IN HOLE TO REAM CLAY OUT collect cuttings sample MW-10 cuttings at 15:15
finish reaming 15:30 to 270
Start running in hole with
4" threaded flush joint
PVC casing
16:45 Finish running casing into hole
16:50 mixing portland cement
fly ash grout to
cement well using
6 bags portland to 1 bag
fly ash
17:15 finish grouting
returns into mud
pit

LEFT SITE @ 1510 ARRIVE BASE @ 1730
LEAVE BASE @ 1830 ARRIVE BACK @ 1900
TW 12193 IN MW-3

MW-11

07-07-05

LEAVE FOR SITE @ 0600
STOP TO GET SUPPLIES
MILES OUT 0 (c)
ARRIVE SITE @ 0650
MUD ONSITE @ 0700
TRUCK MILEAGE 12193
0750 LEFT FOR TO 1086
CALLED ATT @ 0823 DRILLER NOT HERE YET

VAC TRUCK ARRIVED @ 0825
DRILLER ARRIVED @ 0830
CONDUCT TAILGATE MEETING @ 0840
CEMENT TOP PORTION OF WELL COMPLETE
GO BACK INTO HOLE TO DRILL OUT
CEMENT PLUG AND SET SCREEN
0945 WELL HOUSING ARRIVED ONSITE
DRILLER CREW ARRIVED @ 1000
1 SLOUGH BOX IS FULL
WILL SET 2" SCREEN (STAINLESS)
0.012 SLOT SCREEN
TRUCK BROKEN ONSITE
LEFT LOCATION @ 1200 TO TALK TO
OWNERS @ 11122 GLENROSA - S.E. POSEY STEPHEN
NO ONE HOME - LEFT BUSINESS CARD

8327313301 VAC TRUCK

7-07-05

1150 ARRIVED MARK + CHERYL RAY

COLLECTED COLOR TEC @ TD 1086
WELL WATER
1ST PULL ND, 2ND PULL ND, 3rd PULL 0.2ppm

STEPHEN POSEY 281 850-4607 (HOME)
CHERYL RAY 281 955-6791 (FAX)

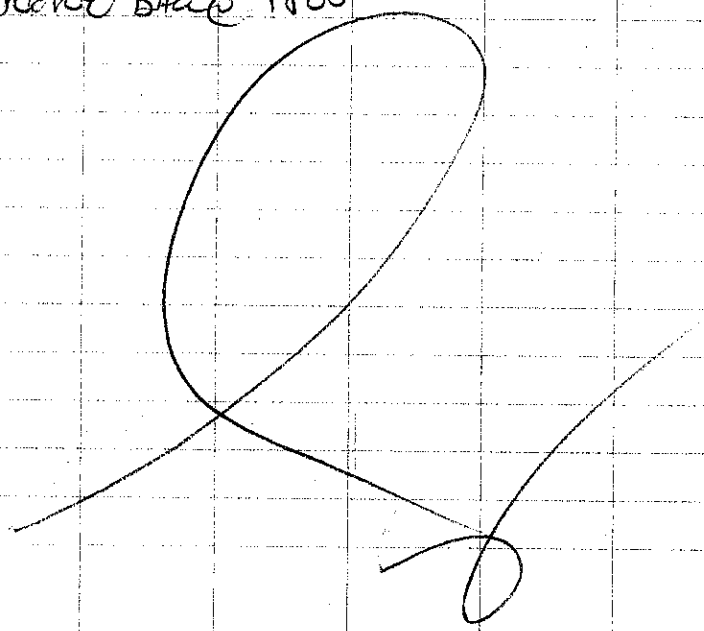
1400 MOBBED TO GLENROSA / FOX BURG
LOCATION MW-11
SETUP OVER MW-11
START DRILLING - LEAVE IN TOP OF ANNULUS - WILL HAVE TO SET
CONDUCT PRE ACTIVITY
RELEASE FIELD @ 1500
~~FAILED~~
RELEASED VAC TRUCK 8327313301 @ 1500
TALKED TO MRS. POSEY ABOUT RIG NO PROBLEM
HEAD BACK TO FIELD OFFICE TO MEET ACCUTEST 1550 - ACCUTEST ARRIVE MUD LEAVE FOR AUSTIN

7-7-05

WENT WITH WILL TO COLLECT SAMPLES FROM POLY TANK COLLECTED DF1 (DRILLING FLUID #1) @ 1430 - 7-07-05

PULLED UP COVER FOR DELIVERY TO ACCUTEST.

WILL LEASED SITE @ 1700
CHECK AREA FOR DRILLERS - GARY TRUCK MILES 12210 on (25)
LEFT SITE @ 1730
ARRIVE BACK @ 1800



7-8-05

0605 LEAVE FOR SITE
MILAGE 0.0 TRUCK 12210
STOP TO PICK UP ICE/WATER
ARRIVE SITE @ 0645
PACK UP - LEAVE TO GET GAS FOR TRUCK
WENT TO LOCATION MW-11 DRILLERS NOT YET ON SITE - WILL WAIT AT THIS LOCATION
0820 DRILLERS STILL NOT ON SITE CALLED ALI AND LET HIM KNOW ALI CALLED BACK - DRILLER GOT SHIPMENT OF PIPE THIS MORNING AND THIS JOB WILL BE HERE APPROX 9AM VAL TRUCK ARRIVED @ 0840
DRILLS ONSITE @ 0900
WILL ARRIVED @ 0900
0915 STARTED DRILLING

0 - 16 CH/SL LT GREY
16 - 18 CALICHE WITH CH DK GREEN/LT GREEN
18 - 24 CH RED BROWN MOTT LT GREEN SOME SAND INTERBEDDED WITH CALICHE

MW-11 245-230 1607 250-260

7-8-05

24-28 CH Red Brn
28-32 SAND
32-45 CH LT GREY
45-65 CH LT GREY MOIST RED BRN
65-75 CH RED/BRN MOIST
75-95 SAND FINE GRN YELLOW/BRN
95-109 SAND YELLOW BRN FINE
109-115 CLAY/WITH SOME SAND SOFT
115-125 CLAY RED BRN/LT GREY
125-147 STIFF CH LT GREY MOTTLED BRN
145-165 CLAY LT GREY TO BRN MOIST LIGHT YELLOW
165
147- SAND TO 150
150 CH-161 BUFF MOTTLED RED/BRN BRN
161-165 - SAND
165-180 SAND MED GRN
180-182 HARD SAND GRAVEL/STONES
182-185 SAND
185-205 SAND MED GRN SOME CHERT PEBBLES
205-215 SOFT SAND/GRIT/GRAVEL
215-225 SAND
225-229 SAND
229-231 CH
231-245 SAND

175-13

MW-11

7-8-05

245-251 SAND MED GRN
251-263 CH BUFF/WHITE
263-265 SAND
265-277 SAND RARE
~~277-279 SAND~~
277-281 SAND
281-285 CH
285-289 SD
289-290 CH DRILLED DOWN TO 292'
1150 - FIRM RESIST
COULD MOVE TO CONFIRM TO SAMPLE
290 FEET SHE AGREES
12 NOON STARTED COMING OUT OF THE HOLE
STARTED LOGGING @ 1230
FINISHED LOGGING @ 1305
FAXED LOG TO MONROE 1345
TOLD DRILLER TO START REAMING HOLE
SCREENED INTERVAL 254-274 @ MW-11
~~STARTED~~
REAMED HOLE TO 254'
STARTED COMING OUT OF HOLE @ 1500
FINISHED COMING OUT OF HOLE @ 1545
STARTED PUTTING CASING IN HOLE @ 1550
FINISHED INSTALLING CASING @ 1622

MW-11

7-8-05

WILL USE 16 SACKS OF CEMENT
6 SACKS + 1 BAG FLY ASH AT 12
REGARDLESS
RELEASED WELL @ 1700
PUMPED GROUT WITH HOSE — GOT RETURNS
LET VAC TRUCK GO @ 1745
DRILLERS LEFT @ 1800
TALKED TO PROPERTY OWNER — POSEY
LEFT SITE @ 1930
TRUCK MI 12230 MW 25(c)
ARRIVE BAK @ 1915

MW-11

0714-05

0600 LEAVE FOR SITE
STOP TO PICK UP ICE MW-11 CM(c)
ARRIVE SITE @ 0650
DO PAPERWORK
TRUCK MILEAGE 12230
DRILLERS ARRIVE ON SITE 0815
CONDUCT HASP TAILGATE MEETING
@ 0820
DRILLERS NEED TO TRIP BACK INTO HOLE
TO DRAW OUT CEMENT PLUG
DRILL 20 FEET FOR SCREEN
0900 VAC TRUCK ARRIVES ON SITE
DRILLED OUT TO 274
SET 2" SCREEN @ 1100 0.010 SLOT
RAN 2" TO' ALL DOUBLES
STARTED JETTING @ 1115
DID NOT GET GOOD RETURNS
PULLED UP OUT OF HOLE A FEW
FEET - JETTED AGAIN - GOT SOME
RETURNS AND SOME FINES. CRAIG FELT
THAT THERE MAY BE A PROBLEM
WITH THE COMPLEX. DON'T THINK
THEY CAN MAKE A WELL OUT OF IT
1305 CALL MADE TO TELL HIM

MW-11

7-11-05

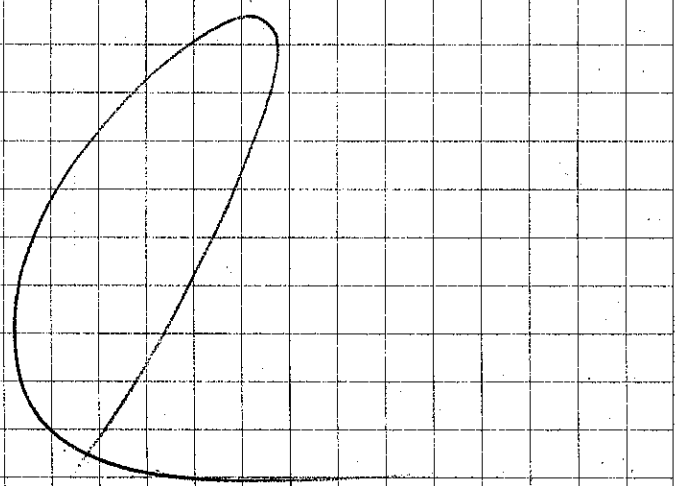
DECIDED TO MOB TO NEXT LOCATION AND DECIDE WHAT TO DO.
AIR SNIFFER SHOWS UP @ 1320
MOBBED TO LOCATION MW-12 @ 1400
ONE UNIT + TC
SET UP UNIT @ TH + FW
1440 STARTED TO RAN HARD -
CALLED MIKE TONEY TO CHECK ON JONES PLAZA ACCESS - HE SAID THAT HE HOPED TO HEAR BACK BY WEDNESDAY. I WILL CALL HIM LATER IN THE WEEK.
1441 WILL H ARRIVED ONSITE
HEAVY RAIN + T-STORMS
SHUT DOWN JOB DUE TO WEATHER CONDITIONS.
CALLED MLOW @ 1520 TO TELL HIM OF STATUS. SHE ASKED THAT I DOCUMENT WHAT HAPPENED.
THE DRILLER INDICATED THAT HE COULD ONLY GET DOWN TO ABOUT 10-15 FEET ABOVE PACKER WITH THE WET BOOT IN TO JET WELL DUE TO WELL JETTING - RECEIVED ONLY PARTIAL WATER RETURNS INDICATING

MW-11

7-11-05

POSSIBLE CASING FAILURE NEAR THE PACKER. CASING FAILURE MAY BE DUE TO A CRACK IN CASING THAT WAS NOT DETECTED POSSIBLE DEFORMATION OF CASING DURING CONCRETE SETTING WILL TRY TO REMEDY USING S.S. SCREWS WITH THE CENTALOCK CLAMPS

1630 LEFT SITE
NEXT BOOM @ 1725
MILES IN 27 (C)
MILES IN TEN 12246



MW-12 7-12-05

LEFT FOR SITE @ 0605
ARRIVE SITE 0645
MILE : 0 (c)
TRUCK 12246
HSD TO CHECK ON LOCATION @ 0730
0800 WILL HOUND, KENDRA & BUSSELL SAFETY ONSITE
CONDUCT TAILGATE SAFETY MEETING @ 0825
START DRILLING @ 0910
0-10 CH/CL DRILL AT WET 6'
10-24 CL/SM LIGHT BROWN FINE GRN
24-30 SAND LT BRN
30-49 CH RED BRN MOIST LT GRAY
49-53 CH
53-54 SAND
54-69 CH LT GRAY
69-71 CH
71-80 SD 81- WATER STRIKE
81-89 SD
89-109 FINE GRAINED SD
109-122 SAND
122-129 CH RED BRN MOIST LITTLE GRAVEL TO BOTTOM
129-133 CH LIGHT GRAY
133-140 SAND
140-142 CHAN

MW-12 0 7-12-05

142-147 SAND
147-149 CH LITE GRAY
149-155 CH RED BRN / MOIST LT GRN
155-169 SD
169-171 SD
171-177 ROCK
177-183 ROCK (55%)
183-185 CH
185-[illegible]

HOME BASE 2 HR DRIVE ONSITE @ 12NOON

185-187 ROCK
187-189 SHALE/ROCK 189-193
193-209 SD / CH
209-225 SD WITH CH RED BRN
225-227 CH
227-229 SD
229-247 SD
247-249 CH
249-253 CH
253-262 SD
262-266 CH

MW-12

7-12-05

266 - 269 - SAND
269-289 SAND
CALLED MLONG @ 1305 TO CONFIRM TO KEEP GOING TO BOTTOM OF SAND - 5 HR AGREED.
DRILLED DOWN TO 300'
STOPPED @ 1310
REAL HARD @ BASE
CALLED MLONG TO CONFER.
PULLED OUT OF HOLE @ 1320
STARTED LOGGING @ 1345
GOT LOG @ 1500
FAXED IT TO MLONG.
LOOKED OVER LOG - DECIDED TO SCREEN FROM 260 - 280.
HEAVY RAIN + T STORMS AROUND

TOOK PITCHER FILE JIM 11118.TIF @ 1525
STARTED RUNNING CASING @ 1530 TO 260'
PUT 3 STAINLESS STEEL SCREENS ABOVE THE GROOVE IN THE BELL CASING FOR EVERY JOINT.
SET CASING DOWN TO 220

MW-12

7-12-05

GOT STUCK @ 220 - WILL WASH OUT HOLE TO SEE IF THEY CAN GET THE REST OF THE CASING IN.
LET OFFICER GO @ 1700 - 5 HOURS
12-5 JIM BAKER
1820 STILL RUNNING WATER INTO HOLE HAS TO GO BACK TO SHOP TO FILL UP WATER TRUCK.
DID NOT WORK - STARTED PULLING CASING OUT OF THE HOLE @ 1825
1900 CALLED MLONG TO TELL HIM WHAT WAS GOING ON WITH THE HOLE.
1910 WILL LEFT SITE
WENT BACK INTO HOLE ONE CASING STEEL AT A TIME (PULLED 4) AND CIRCULATED OUT CUTTINGS
GOT TO 260 @ 1930 STARTED MIXING CEMENT - GOT FULL RETURNS @ 2010
PUMPED DOWN A PAPER PLUG @ 2020
CALLED MLONG @ 2020 TO LET HIM KNOW WE GOT THE CASING IN.
TRUCK MILES 12263
LEAVE SITE @ 2045 BACK @ 2115

MW-12 07-13-05

0615 LEAVE FOR SITE
STOP TO GET ICE
0700 ARRIVE SITE
0710 RECEIVE CALL FROM DRILLER THAT THEY HAVE SOME EQUIPMENT PROBLEMS TO TAKE CARE OF - NOT SURE IF THEY WILL DRILL OUT TODAY OR TOMORROW - CALLED & CANCELED VAC TRUCK FOR TODAY
PREPARED DAILY FIELD FORM FOR YESTERDAY AND - EMAILED OUT.
TRUCK MILAGE 12263
LEAVE FIELD OFFICE @ 0830
ARRIVE OFFICE @ 0915
TRUCK IN @ 72289

MW-12 7-14-05

0615 LEAVE FOR SITE
TRUCK MILAGE 12289
ARRIVE SITE @ 0700
SENT OUT DAILY REPORT FROM YESTERDAY
DRIVE LOCATION - EVERYTHING IS PRETTY WET
HEAD TO MW-12 @ OAKDALE/TIMBER CREST
WELL HOUSING ONSITE @ 0800
0803 RECEIVED CALL FROM VAC TRUCK STUCK IN TRAFFIC WILL BE A LITTLE LATE
0840 CALLED CHUCK @ BEST TO SEE WHERE DRILLERS ARE. - LEFT MESSAGE
DRILLERS SHOW UP @ 0845
CONDUCT TAILGATE MEETING
0910 VAC TRUCK ARRIVED
START GOING BACK INTO THE HOLE W/ DRILL OUT FOR SCREEN 0.012
RUN 20' STAINLESS STEEL SCREEN 0.010 SLOT AND 80' OF TWO INCH PVC RISER WITH 3 CENTRALIZERS. MUD PUMPS START PRESSURING UP WHILE CIRCULATING IN THE HOLE - NOT A GOOD SIGN. PULLED OUT 1 STAND OF PIPE AND CIRCULATED - CUTTINGS WERE SHOWING UP IN THE DRILL MUD. CIRCULATED UNTIL NO MORE CUTTINGS. TAG WELL BACK AND

Jim Baker onsite @ 1000 - 2pm
4 Hrs

MW-12 7-14-05

HOLE WITH THE ONE JOINT AND ENCOUNTERED SOME SOFT CUTTINGS IN MUD. DRILLED OUT FROM 260-280 - GOOD SAND IN CUTTINGS. CREW WAS STILL SEEING SOME CLAY CUTTINGS W MUD. THAT SHOULD NOT HAPPEN. PULLED OUT OF HOLE TO SET SCREEN.

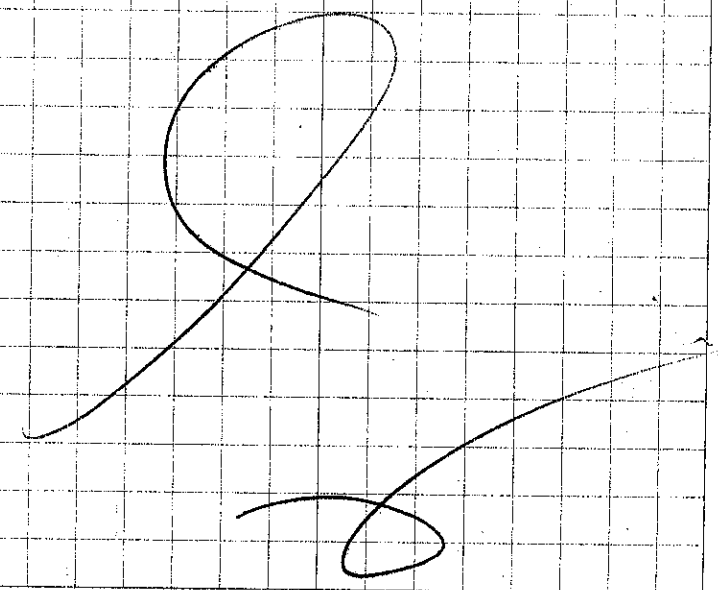
WENT BACK INTO HOLE TO THE LAST LOGGED WHERE WE HAVE SAMPLES WHERE STARED CLEANING UP.

CALLED MLOVE TO TELL HER ABOUT WELL AND TO DISCUSS PROPOSED WEST 200 ADDITION WE WERE GOING TO SETUP @ CURRENT MICE BUT DECIDED IT WOULD BE BETTER TO GO TO THE LOCATION @ TIMBER HILLS F.V. IT IS THE SAME STREET AS MR BAKER AND I ASKED MLOVE IF SHE WOULD AGREE TO PAY HIM HIS 4 HR MIN OVER THE WEEKEND IT WATER TANK. SHE SAID SHE WOULD. TALKED TO MR. BAKER AND HE SAID NO PROBLEM TO DO THAT.

CALLED GREG ABOUT GETTING TRAFFIC LIGHTS FOR TRAFFIC CONTROL

MW-12 7-14-05

REPORT TO LOCATION @ FV @ TH @ 1400
SET UP OVER WELL
STARTED LAYING OUT TRAFFIC CONTROL
HEAVY RAIN - T STORMS AGAIN!
DRILLERS LEFT SITE DUE TO HEAVY T STORMS
LEFT SITE @ 1600
MICE 123F
ROGER BAKER @ 1645

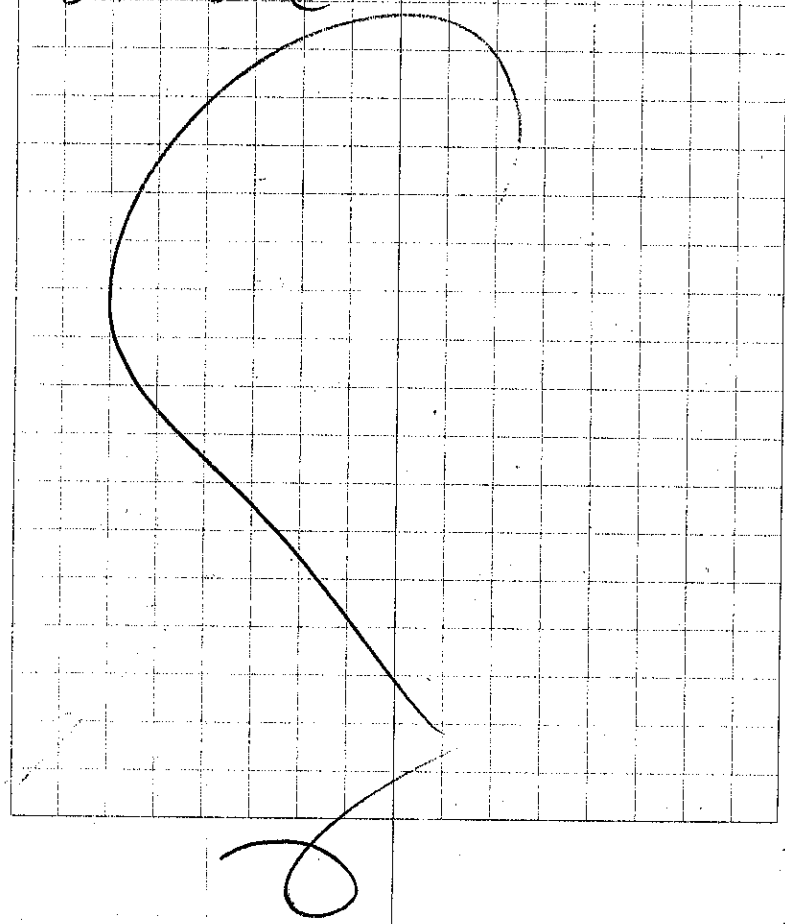


MW-13 7-15-01

0600 LEAVE FOR SITE
HEAVY RAIN + T STORMS ALL AROUND HOUSTON
ARRIVE SITE @ 0645 - LIGHT RAIN + LIGHTNING IN THE DISTANCE
TRUCK MILAGE 12319
BEST DRILLER ONSITE @ 0710 TO DO PRE @ 10860 TOWER OPS
CALLED CRAIG B @ 0730 TO SEE IF WE ARE STILL DRILLING TODAY - ONLY GOT HIS VOICE MAIL
RECEIVED CALL FROM KENDALL ABOUT VAC TRUCK - PUT IT ON HOLD
WILL HUDGINS ONSITE @ 0750
0745 RECEIVED CALL FROM DRILLER NOT SURE YET IF THEY ARE GOING TO DRILL - RECEIVED CALL BACK FOR DRILLER @ 0805 NOT DRILLING TODAY
CALLED VAC DRIVER TO CANCEL
CALLED KEN BAKER TO CANCEL - ASKED HIM TO STILL WATCH TANKS OVER WEEKEND
0845 TCEQ ONSITE @ TO 10860 SHOWS THEM ALL THE WELL LOCATIONS

MW-13 7-15-01

TCEQ LEFT SITE @ 0910
BEST COMPLETE PRE @ TO 10860
SHOWED THEM LOCATION OF MW-12
THEY WILL DO PRE @ MW-12
SECURED LOCATION FOR MW-13
TRUCK MILEAGE 12335
LEFT SITE @ 1000



MW-13

7-18-05

0600 LEAVE FOR SITE
STOP AND GET ICE
MILEAGE OUT 12335
ARRIVE SITE @ 0650
0715 START RAKING AGAIN
0720 STOPPED RAKING
CHECKED PAD LOCATIONS FOR MW-10 & MW-12 - LOOK OK - RAN CABLES
MINOR DAMAGE TO THEM. GAVE THEM A ROUGH FINISH ON CONCRETE.
0800 WAITING ON DRILLERS
DRILLER ARRIVES @ 0820
CONDUCT TAILGATE @ 0830
START TO AUGER DOWN TO SET CONDUCTOR PIPE
SETUP TRAFFIC CONTROL
INSTALL 17' CONDUCTOR PIPE

1000 AM START DRILLING MW-13 THE FV
RED BROWN CLAY NOTED LT GREY
0 - 24 CH
24 - 30 YELLOW BR CH MOTTLED LIGHT GREY
30 - 32 SD
37 - 45 CH YELLOW BR MOTTLED GREY SOME CALICHE
MORE LT GREY THAN YELLOW

MW-13

7-18-05

CH 45-65 LIGHT GREY TO BUFF
65-68 CH
68-85 SD
85-104 SD FINE GRAINED
104-105 CH
105-119 CH RED BR WITH BUFF
119-120 SD
120-125 CH LIGHT GREY TO BUFF
125-133 - CH GREY TO BUFF
133-143 SD
143-145 CH LITE GREY TO BUFF MOTT YELLOW RED BROWN SOME FE STAINING
145-157 CH
157-165 SD
165-[illegible] SD
165-193 SD
193-200 CH
200-205 SD
205-209 SD
209-214 PEA
214-215 CH
215-225 SD
225-235 SD
235-245 SD WITH CLAY

1215 FINN ONSITE

MW-13

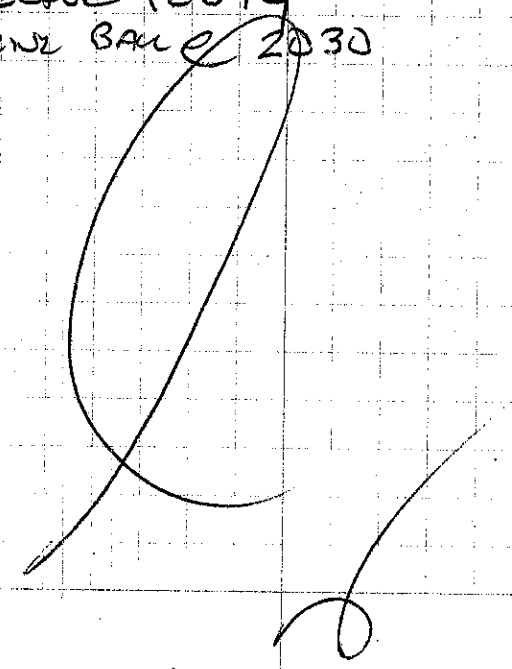
7-18-05

245 - 265 SAND WITH CH + GR
265 - 270 SAT
270 - 285 SD
285 - 290 SD MED GRN
290 - 292 CH
292 - 300 SD TD @ 1300 @ 30
CALL MONK - SITE CONFIRMED

STARTED LOGGING HOLE @ 1350
JUST STARTING TO RUN WITH T-SPOOL
WHILE COMING UP GLOVE GOT CAUGHT
IN WINCH @ 270. STOPPED AND RESTARTED
FROM THE BOTTOM UP.
FINISHED LOGGING @ 1440
FOLEY LOGS TO GREG & MARIAN
AGREED TO MW-13 274-294 SCREEN
TALKED WITH CRAIG ABOUT SCREEN INTERVAL
HE FELT IT WOULD BE BETTER TO SCREEN
@ 276 TOTALLY IN THE SAND. CALLED
MONK - SITE AGREED TO SCREEN FROM
276 - 296 IN MW-13
DRILLED OUT TO 276'
CIRCULATED MUD IN WELL
1730 STARTED PULLING OUT OF HOLE

MW-13 (FINISHED) 7-18-05

1805 PULLING AUGERS PIPE OUT OF HOLE
GOT ALL THE CASING INTO THE
HOLE TO 276 FEET
STARTED CIRCULATING @ 1835
STARTED MIXING PORTLAND @ 1845
USED 16 SACKS
GOT CEMENT RETURNS
DRILLERS LEFT SITE @ ~~1772~~ 1925
SET UP TRAFFIC CONES FOR THE NIGHT
TOOK PHOTOS TO DOCUMENT
LEFT SITE @ 1945
MILEAGE 12344
DRIVE BACK @ 2030



MW-13 7-19-05

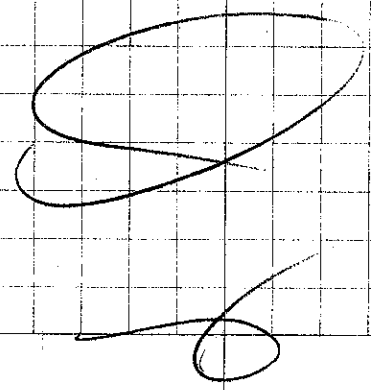
0603 LEAVE FOR SITE
STOP TO GET ICE
ARRIVE SITE @ 0650
PREPARE DAILY FIELD REPORT
AND EMAIL TO TEQ
TRUCK MILEAGE 12344

DRILLERS ARRIVE @ 0820
VALTRON ARRIVE @ 0830
CONSOLCON TAILGATE 0835
DRILLERS PREPARE TO GO BACK AND
HAVE TO DRILL OUT CEMENT PLUG AND
DRILL OUT FOR SETTING SCREEN (0.010)
NOTE: SCREEN SLOT IS .010 ON MW-03
DRILLED OUT TO SCREEN DEPTH
CLEAN RETURN COMING BACK W THE
MUD
1830 STARTED COMING BACK OUT OF THE
HOLE AFTER CIRCULATING TO SET
SCREEN
SET SCREEN AND AIR LIFTED WELL
WATER STARTED TO CLEAN UP CAUSED MUDD.
COLLECTED COLIFORM SAMPLE
RAN FOR ANALYSIS
1ST RINSE ND, 2ND RINSE ND, 3rd RINSE ND

MW-13 7-19-05

CLEARED SITE @ MW-13 AND
MOVED TO NEW LOCATION @
CLEARED @ MILL ROAD MW-14
1430 SETUP OVER MW-14 HAS
TO CUT A FEW LIMBS TO CLEAR
FOR DERICK.
AUGERED DOWN TO 13' FEET TO SET
CONDUCTOR PIPE
HAD TO MOVE MUD PIT TO OTHER
SIDE OF RIG - OFF THE ROAD
GOT EVERYTHING SET TO DRILL
DRILLERS LEFT SITE @ 1600

TRUCK MILAGE 12356
LEFT FIELD OFFICE @ 1630
ARRIVE BACK @ 1715



MW-14

07-20-05

*0545 LEAVE FOR SITE
STOP TO PICK UP ICE
ARRIVE SITE @ 0630
TRUCK MILEAGE 12344
REVIEW DAILY REPORT FOR YESTERDAY
WEATHER LOOKS FAVORABLE
RECEIVED CALL FROM DRILLER @ 0710
ALL IS ON SCHEDULE TO DRILL TODAY
HEADED TO LOCATION MW-14 @
MIKE & GLENN AT SOMEONE HAS
REMOVED 3 TRAFFIC CONES FROM
THEIR BASES. NO APPARENT VANDALISM
TO THE RIG.
WILL WINDOWS ON SITE @ 0800
PORT-O-JOHN ARRIVED @ 0815
DRILLER ARRIVED @ 0820
VAC TRUCK ARRIVED @ 0850
CONDUCT TAILGATE STRESS TRAFFIC
AWARENESS. GET ALL VEHICLES IN
POSITION AND SETUP TRAFFIC CONTROL
START DRILLING @ 0900 BOREHOLE
CH - 0-15
SD 15-19
19-25 CH LT GREY MOIST RED BRN

MW-14

7-20-05

25-45	CH	LITE GREY MOIST RED BRN
45-65	BLDR	TO LITE GREY MOIST YELLOW BRN
		SOME IRON STREAKS
65-85	CH/CL	LITE RED BRN/MOIST GREY
		MORE RED BRN NEAR BASE
85-110	CH	RED BRN MOIST YELLOW BRN
110-120	SAND	F.G. RED BRN
120-125	CH	RED BRN MOIST LITE GREY
125-140	CH	LITE GREY TO BLUE MOIST RED BRN
140-143	SD	WITH SOME CH
143-145	CH	BLDR MOIST YELLOW BRN
145-150	CH	BLDR MOIST RED BRN
150-165	SD	MED GRN LITE BRN
165-168	SD	
168-169	LS RK (SD)	SMOOTH.
169-185	SAND	
185-196	CH/	WITH LS (CMNT) BLDR
196-205	SAND	
205-225	SAND	
225-244	SAND	244-245 CH
244-245	CH	
245-265	MOSTLY SAND	WITH SOME
265-284	SD	
284-294	CH	RED BRN MOIST BLDR

TD HOLE @ 294 @ 1110

MW-14 7-20-05

CALLED MLONG @ 1112 TO CONFIRM WE LOGGED @ NORTH DRILLERS LOG 2 ALSO MONITOR WELL IN AREA. LOOKS TO BE A GOOD PLACE CUM ZNE BELOW US - SO WE AGREED TO SET @ 294.

~~1130 STARTED COMING OUT OF THE HOLE~~

FNN ARRIVED ONSITE @ 1145

1205 STARTED COMING OUT OF HOLE - CIRCULATED FOR AWHILE - STUCK BOTTOM BREAKING IN HOLE C

1215 MR JIM BAKER ONSITE

POOH OUT OF HOLE

STARTED LOGGING HOLE - TOOL GOT STUCK @ 50 GOING IN AS AGAIN AT AROUND 92'. FNN WAS NOT COMFORTABLE WITH HOLE SO HE POOH LOGGING TOOL OUT. CALLED MLONG TO DISCUSS - DECIDED TO MUD UP (IF POSSIBLE) AND TRY TO RELOG HOLE.

DRILLER TRIPPED BACK INTO HOLE AND ADDED POLYMER TO MUD.

HEAVY T STORM @ 1415 SHUT DOWN WORK TEMPORARILY

1445 STORM PASSED - STARTED

MW-14 7-20-05

POOH OUT OF HOLE TO LOG

WENT BACK INTO HOLE TO LOG - GOT STUCK @ 105 AND COULD NOT GET THROUGH IT. CALLED MLONG TO DISCUSS OPTIONS. DECIDED TO USE DRILLERS LOG TO PLACE SAND INTERVAL AGREED TO SET SET AT 260 & SET SCREEN FROM 260-280.

HEAVY T-STORMS BACK IN AREA UNDER A TORNADO WATCH. SHUT DOWN OPERATIONS FOR TODAY @ 1540

TOMORROW WE WILL REAM OUT HOLE TO 260 - SET CASING AND CEMENT.

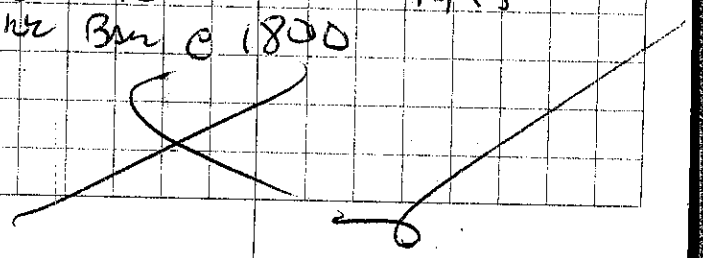
FRIDAY WE WILL E LOG HOLE THROUGH THE CASING.

SET UP TRAFFIC CONTROL FOR THE NIGHT. LET JIM BAKER GO FOR THE DAY - 4 HOURS

SENT OUT DAILY REPORT LEFT SITE

MILEAGE 12362 1715

ARR MR BAR @ 1800



MW-14 7-21-05

0600 LEFT FOR SITE
STOP TO PICK UP ICE
ARRIVE SITE @ 0650
TRUCK MILEAGE 12368
WORK ON PHOTO FILE
0725 RECEIVED CALL FROM VAC TRUCK OPERATOR – HE IS RUNNING A LITTLE LATE
HEAD OUT TO SITE LOCATION @ 0755
OFFICER MILEAGE BUCKMAN ONSITE @ 8004
DRILLERS ONSITE @ 0840
VAC TRUCK ONSITE @ 0855
SET UP TRAFFIC CONTROL CONDUCT TAIL GATE
WENT BACK TO HOLE @ 0900 TO MEETM
START REAMING HOLE OUT
REAMED OUT TO 260'
REACHED DEPTH @ 1150
MUD WAS RED IN COLOR
1200 STARTED COMING OUT OF HOLE
TO SET CASING
GOT OUT OF HOLE @ 1220
START TO SETTING CASING @ 1230
HEAVY RAIN T-STORM SHUT DOWN
START BACK AGAIN @ 1300

MW-14 7-21-05

GOT ALL CASING IN THE HOLE BY 1315
CALLED MLONG TO LET HIM KNOW OF STATUS.
ALSO CALLED MIKE TONEY W/ THE NEW PLAN ABOUT JONES PLAZA ACCESS (COULD HAVE HIM IN THE MORNING BEFORE TO DISCUSS WITH OUR DRIVERS AND ASKED IF THERE WAS ANYTHING I COULD DO TO HELP - BASICALLY IT IS STILL IN CORPORATE IN N.Y. (LOW PROFILE)
PUMPED GROUTING AND GOT RETURNS
DRILLERS LEFT @ 1410 -
VAC TRUCK LEFT @ 1420
RELEASED OFFICER @ 1430
8 - 1430 6½ HRS.
SECURED SITE
CHECKED OTHER POSSIBLE LOCATIONS IF JONES PLAZA DOES NOT WORK OUT. TALKED TO MULLINS
TRUCK MILEAGE 12377
LEFT SITE @ ~~1600~~ 1545
ARRIVE BACK @ 1630

MW-14

0600 LEAVE FOR SITE 07/22/05
STOP TO GET ICE
ARRIVE SITE @ 0650
VAC TRUCK ARRIVES @ 0757
TRAFFIC OFFICER ON DSM @ 0800
0840 DRILLER NOT ONSITE YET
TOLD ME YESTERDAY TO HAVE ELEC
MW READY TO GO @ 0930.
CALLED DRILLER @ 0840 LEFT
MESSAGE.
CALLED FINN @ 0845 TOLD HIM TO
SHOOT FOR 10AM INSTEAD.
DRILLER ARRIVES @ 0850
COLLECTS WATER SAMPLE
MW-14 DRILL WATER @ 0900
NOTE: WATER SAMPLE WAS COLLECTED FROM
DRILLING RIG WATER TRUCK WHICH WAS
LOCATED DIRECTLY ADJACENT TO THE
DRILLING RIG WHICH WAS RUNNING (EXHAUST)
CREW BROUGHT THE S.S. SCREEN
WHICH HE THOUGHT BEST (BASED ON THE
FORMATION) WOULD B 0.01" SLOT
FIRST TWO WELLS (MW-10, MW-11) WERE
0.012, NORTH WELLS MW-12 & MW-13
WERE 0.010.

MW-14

7-22-05

WENT BACK INTO HOLE TO DRILL OUT
CEMENT PLUG. DRILLED OUT TO 290'
USED 20 FEET OF S.S SCREEN 0.014
SLOT WITH 10' PVC RISER WITH 2
U-BACKED. SHAKER RISER TO HEAD
WITH AIR LIFTING FOR DEVELOPMENT
FINN ARRIVED @ 0945
0950 STARTED COMING OUT OF THE HOLE
1007 STARTED LOWER S-LOC INTO THE HOLE
LEFT SITE @ 1020 TO MEET WITH
EDDIE PERRER @ MULLINS
MISSED HIM BY ABOUT 5 MIN.
LIKELY WILL NOT BE BACK TODAY.
LEFT HIM A CARD WITH A NOTE ON IT.
I WILL TRY AGAIN ON MONDAY.
WENT BACK INTO HOLE WITH
SCREEN & RISER TO SET WELL AND
AIR LIFT
WENT BACK TO OFFICE - FAXED
DATA TO MUNIC - DISCUSSED SCREEN
PICK WITH HOB SHE WAS OK
WITH IT. HEADED BACK OUT TO
WELL SITE - DRILLER HAS FINISHED
DEVELOPMENT AND WAS RIGGED DOWN

7-22-05

1215 DECIDED TO SPUD THE NEXT LOCATION ON MONDAY WILL HUDGINS SERVICES ONSITE MOB DOWN AND RELOCATE TO NEXT SITE MW-15 ECHO SPRING & WOODSIDE
DRILLER LEAVE @ 1300
OFFICER LEAVES @ 1300 8-13 (5 HRS)
SET UP TRAFFIC CONTROL FOR WEEKEND
VAC TRUCK LEAVES @ 1320
GAVE WATER SAMPLES TO MIKE TO DROP OFF @ MILAGE 12394 ACCURATE

LEFT SITE @ 1430
ARRIVE BASE @ 1515

MW-15

7-25-05

0600 - LEAVE FOR SITE
STOP TO GET ICE
ARRIVE SITE @ 0650
TRUCK MILEAGE : 12394
WENT OUT & CHECK LOCATIONS - ALL LOOKED GOOD.
SET UP TRAFFIC CONTROL FOR MW-15 ECHO SPRING & WOODSIDE
DUG OUT HOLE WIDE TO ACCOMODATE AUGER - ALL CLEAR
RECEIVED PHONE CALL FROM VAC. TRUCK RUNNING A LITTLE LATE - SOMEONE TOOK ALL HIS HOSES.
OSHA STOPPED BY TO TALK TO EDDIE PEARCE @ MALLICOAT - ACTUALLY HE IS IN THE PROCESS OF SELLING HIS LAND TO DEVELOPERS AND THEY ARE NOT EXCITED ABOUT POSSIBLY HAVING A DEED MW ON THE PROPERTY. TOLD HIM IF THEY NEED TO TALK TO ME ABOUT IT I WOULD BE HAPPY TO.
CALLED MIKE JONES @ NEW PLAN 0830 LEFT VOICE MESSAGE REGARDING ACCESS ISSUES. HE IS OUT UNTIL TOMORROW.

MW-15 7-25-05

DRILLER ARRIVE @ 0845
VAC TRUCK ARRIVED @ 0855
CONDUCT TAILGATE
SETUP TRAFFIC CONTROL
NO OFFICER ON DUTY - CALLED AVC
BACK TO FIND OUT ABOUT TRAFFIC OFFICER
0915 STARTED INSTALLING PILOT HOLE
FOR CONDUCTOR PIPE
0930 - BEST DRILLING ARRIVED TO GO PAST
ON MW-13 & MW-14.
SETUP CONDUCTOR PIPE AND VAC
WITH TRUCK.
1020 STARTED DRILLING MW-15
0-20 - CH RED BRN/LT GREY
20-23 CH
23-34 SD
34-45 CH LITE GREY MOTTLED YELLOW/BRN BRN
45-65 CH
65-72 CH
72-85 SD
85-101 SD
101-105 CH
105-117 CH
117-122 SD

MW-15 7-25-05

122-133 CH
133-145 SD
145-165 GRAVEL
165-167 GRAVEL
1120 WILL HOLDING ONSITE
167-185 SAND/GRAVEL WITH BOULDERS
185-194 SAND
194-202 CH
202-205 SD
205-215 SD
215-220 CH
220-225 SD
225-241 SD
241-244 HD/RK/CS??
244-261 SD/RK/CS
261-265 CH
265-285 SD SOME GRAVEL
1215 JIM BAKER ON SITE
285-299 SD
299-305 CH
CALLED MW @ 1225 - LEFT MESSAGE
FOR ONSITE @ 1230
WILL LEAVE @ 1230
STARTED PULLING OUT OF HOLE @ 1240

MW-15 7-25-05

E-LOGGED HOLE - GOT ALL THE WAY DOWN TO BOTTOM - PULLED OUT NO FARES
LOG TO MUNGE @ 1415
PICKED SCREEN INTERVAL FOR 274-294
WENT BACK INTO HOLE TO REAM OUT.
REAMED OUT TO 274 - ACCURATE
HOLE POWER OUT OF HOLE
STARTED TO WORK CASING @ 1600
GOT CASING TO 84 1630
STARTED MIXING UP PORTLAND
SET PORTLAND - GOT RETURNS
OFFICE BABE LEFT @ 1730
VAC TRUCK LEFT @ 1730
DRILLER LEFT @ 1740
SET UP TRAFFIC CONTROL FOR NIGHT
TOOK PHOTOS TO DOCUMENT.
SET OUT DAILY REPORTS FOR
JULY 22 - JULY 25
TRUCK MILEAGE 12412
LEFT SITE @ 1845
ARRIVE BASE 1930

MW-15 7-26-05

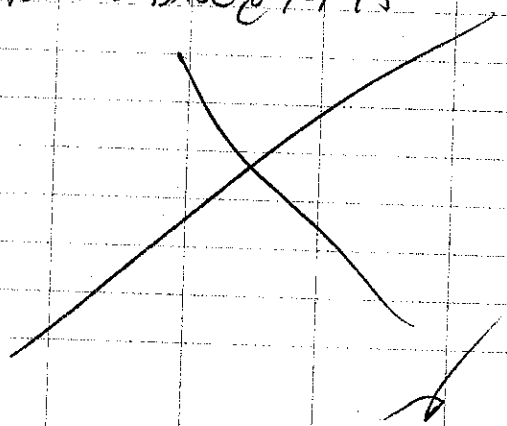
0600 LEAVE FOR SITE
STOP TO GET ICE / SUPPLIES
ARRIVE SITE @ 0650
TRUCK MILEAGE: 12412
UPDATE PHOTO LOG
WENT OUT TO SITE @ MW-15
SEVERAL CONES WERE KNOCKED DOWN
DRILLERS ARRIVED @ 0800
CONDUCTED HEADSTART SAFETY TAILGATE MEETING
OFFICE BABE ON SITE @ 0800
DRILLERS PREPARE TO DRILL OUT CEMENT PLUG
VAC TRUCK OPERATOR ON SITE @ 0900
GOING TO USE @ 0.014 SLOT STAINLESS STEEL SCREEN WITH @ 10 FOOT 2" PVC RISER WITH 2 X PACKERS
THE BELL & T ON THE TOP OF THE CONDUCTOR PIPE STARTED TO CRACK SO THE DRILLER SHUT DOWN TEMPORARILY TO GET ANOTHER T FOR THE TOP.
1045 PULLED OUT OF HOLE AND WENT BACK IN WITH SCREEN @ 1115
STARTED DEVELOPING THE WELL - MUCH GOOD WATER.

MW-15 / MW-16 7-26-05

COLLECTED COLOR TEL ON WELL
1ST ROLL NO, 2ND ROLL NO, 3rd ROLL NO

STARTED COMING OUT OF THE HOLE @ 1245
MOBED TO NEW LOCATION @
JONES ROAD & WOODRIDGE - MW-16
SET CONDUCTOR PIPE IN GROUND AND SETUP RIG
SOLIDS BOXES TO BE REMOVED
27-47-46 BOX #'S 274728
NEED 1 ROLL

DRILLERS LEFT @ 1530
OFFICE BAKER LEFT @ 1600 8-4 8 HRS
SETUP TRAFFIC CONES
TRUCK MILEAGE 12426
LEFT SITE @ 1700
BORE BALL @ 1745



MW-16 7-27-05

0550 LEASE FOR SITE
STOP TO PICK UP SUPPLIES
ARRIVE SITE @ 0640
HEAD TO HOME DEPOT TO PICKUP
SAFETY SUPPLIES
TRUCK OUT: 12426
WENT OUT TO MW-16 LOCATION @ 0755
SITE LOOKS SECURE
0800 DRILLERS ONSITE
0800 POLICE OFFICE TRAFFIC WEIGHT
SETUP TRAFFIC CONTROL @ MW-16
CALLED USA REGISTER LOCATE OPERATOR
HE HAD AN ACCIDENT LAST NITE
GSI ARRIVED @ 0845
SETUP AND STARTED DRILLING
@ 0850
0-14 CH
12-14 SAND
14-18 CH/CL
18-21 SAND
21-27 CH PUD BALL WITH CALCITE
25-27 CH
27-34 SD
34-45 CH PUD BALL

MW-16

8-27-05

45-65 CH LITE GREY TO BUFF MOTTLED W/ BRN
65-71 CH
71-85 SD
85-102 SD

CALLED FIELD @ 0950 TO TOWN HALL
ABOUT AN ETA OF 11:45

102-105 CH LITE GREY WITH YELLOW BRN
105-110 CH SAA
110-119 SD
119-125 CH
125-130 CH
130-145 SD
145-150 SD
150-160 CH
160-165 GRAVEL
165-182 GRAVEL

TRUCK POWER TRUCK ONSITE @ 1015

182-185 CH
185-203 CH
203-205 HD LAYER (LS)
205-208 CH
208-225 SD
225-240 SD MED GRAINED SD SOME LG PEBBLES
240-242 CH

MW-16

7-27-05

242-245 SD
245-263 SD
263-265 CH BUFF TO LITE GREY
265-283 SD
283-285 CL RED BRN MOTTLED BUFF
285-295 RE WITH CH
295-303 CH
303-306 SD
306-325 CH BUFF TO LITE GREY SOME RED BRN

REACHED TD @ 1110

FINISH ONSITE @ 1130

STARTED COMING OUT OF HOLE @ 1130

STARTED LOGGING HOLE @ 1200

GOT DOWN TO 318' WITH TOOL
GOT LOG AND FAXED TO MLML
@ 1420

POSSIBLE SCREEN 258-278'

AGREED ON SCREEN FROM 258-278

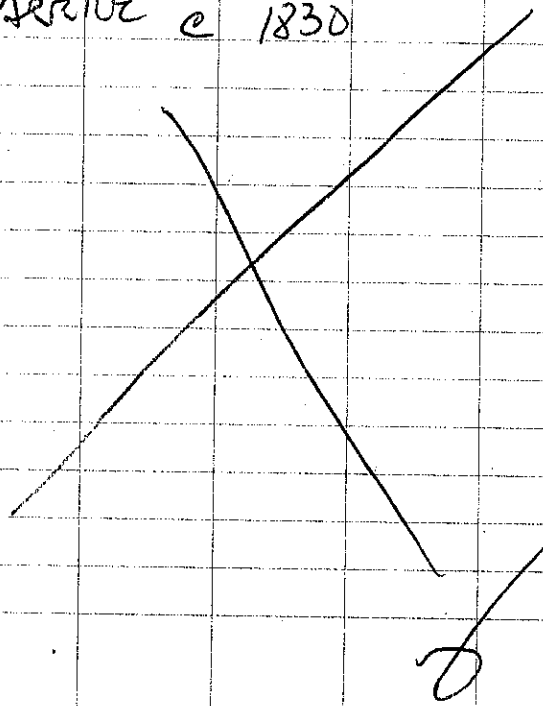
ONE ROLL OF BOSE WAS PICKED UP
TODAY #274 728

DRILLER WENT BACK AND HAVE TO REAM
OUT WELL TO 258' INSIDE CASING

MW-16 7-27-05

OFFICE AUSTIN LEFT @ 3
8-3 (7)HRS
JIM BAKER ON DUTY @ 3pm
SET CASING TO 258'
GROUTING IN PLACE - GOT RETURNS
DRILLERS LEFT @ 1630
OFFICER BAKER @ 1700 (2 HRS)
SET UP TRAFFIC CONTROL FOR NIGHT

TRUCK MILEAGE 12446
LEFT SITE @ 1745
ARRIVE @ 1830



MW-16 7-28-05

0545 LEAVE FOR SITE
STOP TO PICK UP ICE
ARRIVE SITE @
TRUCK MILEAGE OUT: 12446
ARRIVE SITE @ 0630
UPDATED PHOTO LOG
HEAD OUT TO MW-16 @ 0750
RIG LOCATION LOOKS SECURE - NO ISSUES
OFFICER AUSTIN ARRIVED 0800
DRILLERS ARRIVE @ 0820
~~CALLED~~ DRILLERS TRIPPED BACK INTO HOLE
WAITING ON VAC TRUCK.
CALLED R SMITH @ 845
VAC TRUCK DRIVER ARRIVES @ 0855
STARTED DRILLING OUT CEMENT PLUG @ 0900
DRILLED OUT FROM 258-278 FEET
SET SCREEN (0.014 SLOT) STAINLESS STEEL W/ A 10' PVC RISER (2" DIAMETER) WITH TWO C-PACKERS IN WELL
STARTED TO AIR LIFT WATER UNTIL CLEAR - COLLECTED CONTACT @ MW-16 NO ODOR ALL 3 PUMPS

7-28-05

MOBBED DOWN AND LEFT SITE @ 12 NOON TO MOVE TO THE TWO WELLS ON NEEDHAM.

LEE OFFICER AUSTIN GO @ 1200 8-12(4)

STARTED TO SETUP TRAFFIC CONTROL @ 1230

DRILLERS SPUDDED IN THEIR CONDUCTOR PIPE FOR MW-17 (DEEPWELL) AND LEFT EQUIPMENT ONSITE.

DRILLERS LEFT @ 1545

FINISHED PAPERWORK

LEFT SITE @ 1650

TRUCK MILEAGE: 12458

ARRIVE BASE @ 1730

MW-17 7-29-05

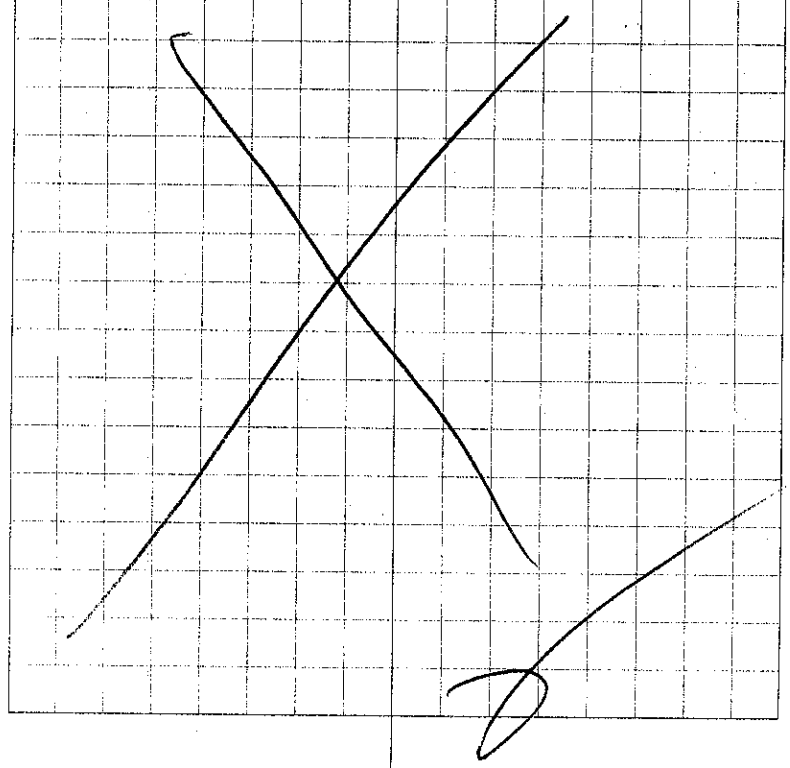
0600 LEAVE FOR SITE
STOP TO GET ICE
ARRIVE SITE @ 0650
DO PAPERWORK
TRUCK MILEAGE @ 12458
CHECKED TRAFFIC CONTROL - LOOKED GOOD
DRILLER ONSITE @ 0800
JAC TRUCK DRIVER CALLED - WOULD BE A LITTLE LATE - TRUCK WOULD NOT START
STARTED MIXING UP MUD ADDING SOME GEL TO IT BEFORE BEGINNING TO DRILL
JAC TRUCK ARRIVED @ 0845
CONDUCT TAILGATE MEETING
0850 MOVED ONSITE
0 - 20 CH
20 - 25 SD RED BRN MOTT GREY
TRACE CALCAREOUS NODS
25 - 33 SD
33 - 45 CH RED BRN/LT GREY
45 - 52 CH LITE GREY/MOTT YEL/RED BRN
52 - 57 SD/RATH WITH CH
57 - 65 CH

MW-17 7-29-05

65 - 80 CH LT GREY / YELLOW MOTT
80 - 85 SD
85 - 105 SD
STARTED LOSING CIRCULATION IN SAND
80 - 105 ADDED GEL TO HELP WATER LOSS
STILL LOSING CIRCULATION @ 105
POOLED OUT OF HOLE WITH SOME DIAMOND BIT. WENT BACK IN WITH LARGER BIT TO REAM IT OUT TO SEE IF A LARGER DIAMETER HOLE WILL WORK BETTER.
STILL LOSING CIRCULATION IN HOLE
POOLED OUT OF HOLE. WILL PUMP SOME CEMENT IN HOLE AND LET IT SETUP OVER THE WEEKEND
FINN ONSITE @ 12 NOON
JIM STOUT ONSITE @ 1210
WENT BACK TO FIELD OFFICE TO DISCUSS CORD
1400 WENT BACK TO DRILL SITE TO OTHER ON DRILLERS - NOT THERE. CALLED THEM THEY ARE ON THEIR WAY TO CEMENT WELL
WENT TO IDW AREA TO CHECK #4 OF POLY TANKS. BOTH TANKS 12 HAS A PINHOLE IN
DRILLERS BACK @ SITE

MW-17 7-25-05

PUMPED 18 BAGS OF PORTLAND DOWN HOLE AND POOLED OUT @ 1510
DRILLERS LEFT @ 1530
SECURED TRAFFIC CONTROL FOR WEEKEND - PREPARED + SENT OUT PAPERWORK
LEFT SITE @ 1615
TRUCK 12468
ARRIVE BACK @ 1700



MW-17

8-01-05

0600 CREW FOR SITE
STOP TO GET ICE
ARRIVE SITE @ 0645
HAD TO WAIT/WARM UP TO GET SUPPLIES
TRUCK OUT: 12468
STOPPED BY HARDWARE STORE TO ORDER
MASTER LOCKS FOR WELLS
0800 RECEIVED CALL FROM VAL TRUCK
RUNNING A LITTLE LATE
DRILLERS ARRIVE @ 0825.
VAL TRUCK ONSITE @ 0830
CONDUCTED HASP TAILGATE @ 0835
DRILLERS STARED TO MUD UP BEFORE
GOING BACK INTO HOLE.
COLLECTED MW-17 DRUM WATER @ 0900
3 VOAs - 8260
0930 STARED DRILLING OUT FROM 105'
LOST CIRCULATION IN HOLE
DRILLED DOWN TO 125' LOST CIRCULATION
" " " 145' NO CIRCULATION
CH - 125 - 145
105 - 125 SD??
125 - 145 CH
MUDDED UP AGAIN

08-01-05

145-165' CH STILL LOSING CIRCULATION
POOLING OUT OF HOLE COMPLETELY
CANNOT MAKE A WELL HERE
CALLED MLONG LEFT VOICE MESSAGE
AT HER OFFICE & CELL
CALLED GREG - TOLD HIM WE
WOULD RELOCATE DRILLERS LEFT 1030
TALKED TO MLONG ABOUT RELOCATE
AND REGROUP SHE AGREES
MAY TRY TO INSTALL WELLS
FURTHER TO THE WEST OF THE CURRENT
LOCATION CALLED NJ FOR UTILITY
CLEARANCE AS STAKED NEW LOCATION

COLLECTED LOW TEC FROM FM WATER
@ 120 FEET.
3 FULL → NJ
SECURED TRAFFIC BREAK
LEFT SITE @ 1310 ARRIVE BASE @ 1400
TRUCK MILEAGE 12477

08/04/05

0700 LEAVE FOR SITE TO MEET USA FOR SLUDGE BOX PICKUP
0740 ARRIVE SITE. DRIVE & BARRIER ONSITE
TRUCK MILEAGE 12477

POLY 241244
24 1883

BOXES 27-47-46
27-47-28

WATCHED THE SAMPLING OF MONITOR WELL MW-12 WITH BLADDER PUMP.

CALLED MLAND TO DISCUSS HOW TO HANDLE PURGE WATER FROM CHLOR WELLS - STATE ASKED FOR US TO CONTAINERIZE FOR THE FIRST SAMPLING ROUND UNTIL WE KNOW THE ANALYTICAL RESULTS.

TRUCK MILEAGE 12484

GT Cox [signature] 8/9/2005

07:00 arrive at Jones Field office

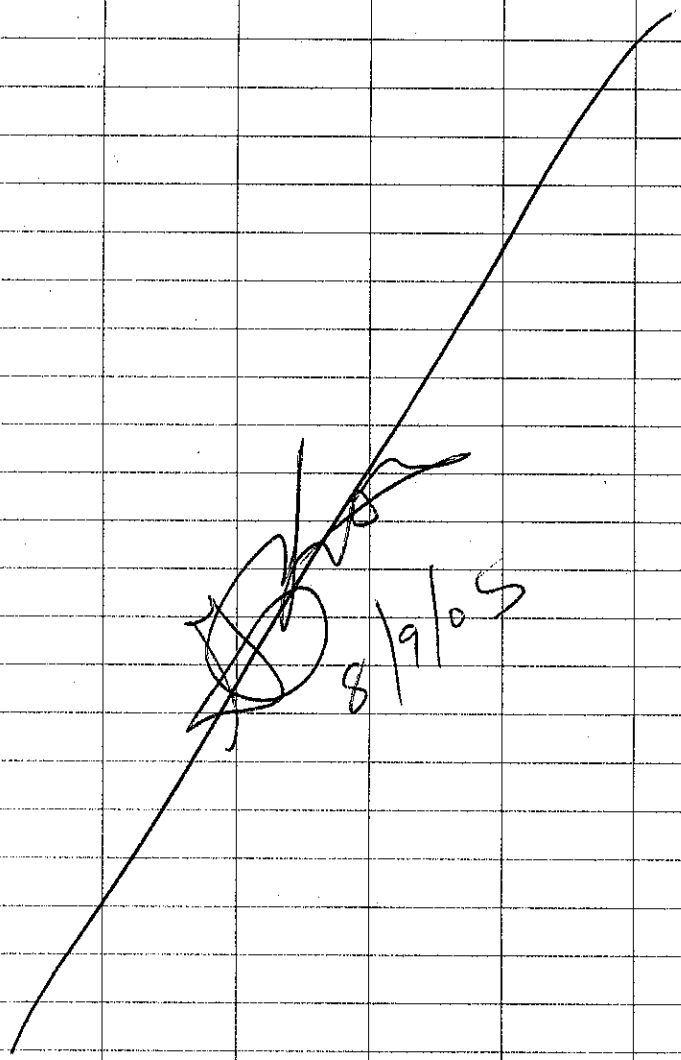
08:20 Russell & Sons con arrives on-site at mw-17 2nd location on Needham Road

0835 USA Vacuum truck Driver arrives on-site

0840 rigged up to set conductor pipe at mw-17 (2nd location)

0935 finished setting conductor pipe and moved mud pit into place

0945 move to original mw-17 location top ft boring with cement coming from ground surface to ± 10 feet bgs @ top of grout plug previously placed in well. mw-17 original location is PSA'd.



GP Long 8/9/05

10:25 circulating mud to mix mud circulating hole preparing to drill at MW-17 2nd location

0 - 18 feet clay

18 - 33 feet sand trace

33 - 45 feet clay grey silty

11:20 45 - 63 same as above clay grey silty

63 - 85 sand layer

11:35 85 - 105 sand

105 - 120 sand gravel layer at 120'

11:55 circulating @ 120' raining

12:00 circulating waiting on rain to pass

120 - 121' gravel/rock

12:05 rain stopped

121 - 135 clay

135' - 141' 135' rock/gravel layer sand 140' rock layer/gravel

141 - 145' clay silty

8/9/05

145-155 CH/CL. Lt Green to Brn
155-165 SD
165-185 SD mix cav
185-197 SD
197-205 CH
205-225 SD 13:00 Drilling
225-245 SD clay layers intermitted @ 235
245-53 SD gravel/ Rock @ 246'-24
253-260 clay
260-265 Sand 13:20
263 gravel
265-270 sand and gravel
270-85 Sand fine to coarse gravel
285-305 Sand
302-303 gravel
304-305 gravel
4:00
305-309 SD gravel and Sand
311-325 CH lt grey to brn
@ 319 stiffer clay

8/9/05 Graylon

325-336 CH
336-345 SD 14:15
345-365 SD silty with very fine grained Sand @ 345-365 Some clay lenses
14:30 365-369 CH clay
365-369 SH
369-372 Sand
372-385 CH clay
385-401 CH Lt grey
401-405 Sand
15:00 405-414 Sand
@ 414 gravel
414-425 Sand
? gravel @ 425'
silty tight clay
425-429 Sand

8/9/05

429 – 437 Clay/Clay

15:30 437 – 445 Sand
stop drilling circulate in preparation to log

15:40 pulling Drill Pipe out of hole to log

16:00 finished pulling out of hole

1616 STERN GOING INTO HOLE WITH LOGGING TOOL
TAGGED 435.55

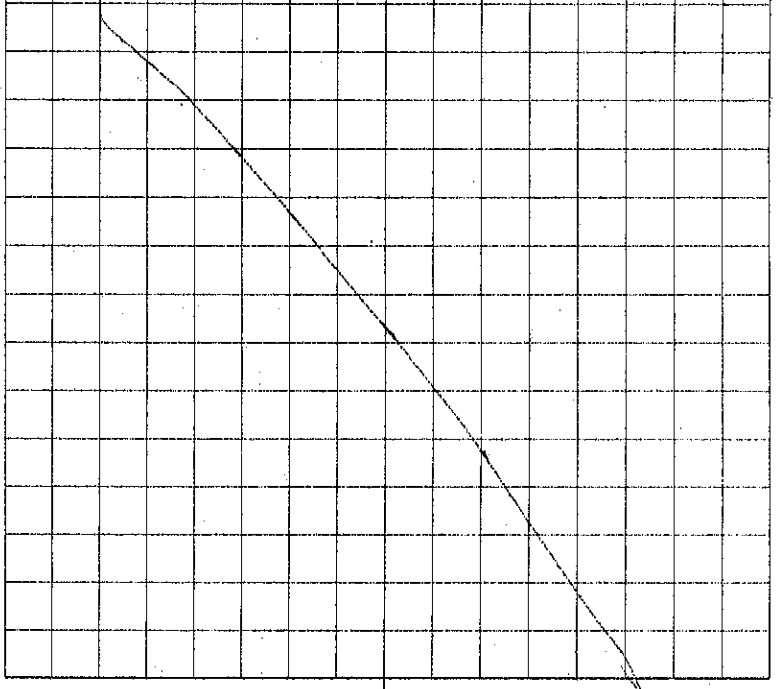
1625 STERN COMING OUT OF HOLE WITH LOGGING TOOL.

1745 FAXED LOG OF MW-17 TO MARILYN DISCUSSED SCREEN DEPTH AGREED TO 410-430
DISCUSSED SCREENING IN UPPER SAND UNIT @ 345-380' HOWEVER M.W.D. LOG G1010447C DOES NOT SHOW THIS SAND UNIT WHICH MAY BE TRANSIENT THEREFORE DECIDED TO SCREEN IN LOWER SAND UNIT @ 410 → WHICH IS PRESENT @ 380 IN MW 206

8/9/05

1810 WENT BACK TO DRILL SITE – DRILLERS ARE GONE. CALLED CLYDE AND TOLD HIM THAT WE WANTED TO SET CASING @ 410. TOMORROW THEY WILL REAM OUT HOLE TO 410 – SET CASING AND CEMENT. DRILL OUT ON THURSDAY.

SETUP TRAFFIC CONTROL FOR THE NIGHT.



8/10/05 G.P. Long

06:30	arrive at Jones Road field office
08:50	drilling crew arrive at MW-17 to start reaming hole to set casing at 410 feet bgs
0905	mixing gel to condition mud and to drilling
0925	start reaming hole
10 30	reaming @ 190 feet
11 35	reaming @ 270 feet
11 45	reaming @ 290 feet
11 55	" @ 310 feet
1205	" @ 330 feet
1220	" @ 350 feet
1240	" @ 370 feet
1300	" @ 390 feet
1310	" @ 410 feet
1335	Pulling out of hole with drill pipe to set 4" casing
1435	Running in hole with 4" casing

G.P. Long 8/10/05

15:15	finish running in hole with 4" Contact Lok casing set at 410 feet bgs.
15:20	mixing grout to cement in 4" casing
1555	finishing setting casing and grout
16:00	cleaning up around location

G.P. Long 8/11/05

0705 arrive at Jones Road field office

0850 Drilling crew arrives at site to finish installing mw-17

10:05 finish cutting cement plug in mw-17 and drill ahead to clean out from 710 to 725 to prepare to set screen

10:15 at 730 feet

10:20 Pulling out of hole to set screen

10:50 making up packer & screen

10 feet of Black PVC with two packers at top with 20 feet of 0.014 slotted stainless screen attached to bottom of PVC

G.P. Long 8/11/05

11:00 Drop screen into well

11:15 Push screen assembly into place bottom of screen at 730 / top of screen at 710

11:30 Developing well by air lifting

11:45 (Called) Cowtech from well development water CHECKS PH - 6

1215 STRONG COMMA AT OF THE HOUR

1300 on location for mw-18

1310 drilling hole for conductor pipe

15:00 drilling at 69 feet

15:50 drilling at 129 feet

16:50 drilling at 189 feet

17:00 drilling at 209 feet

G.P. Long 8/11/05

17:30 collect drilling water sample from water truck MW-18 Drill water

17:45 Drilling at 249 feet bgs

18:05 Drilling at 270 feet bgs

18:25 TD at 284 feet bgs Circulating to condition hole to set casing

18:55 finished pulling out of hole with drill string, preparing to run 4" Certa-Lok Casing into hole.

20:06 Finish grouting well

20:35 leaving site

G.P. Long 8/12/05

0630 arrive at field office

0830 Vacuum Truck arrive at well site

0930 Drillers at well site MW-18

10:05 finish running in hole at MW-18 to drill out cement and drill 20 feet to set screen

10:10 from 284 to 305 had sand and gravel cuttings return

10:30 Pulling out of hole in preparation to set screen

10:45 20 feet Stainless 0.014 slot screen attached to PVC riser with packers on top of riser

10:50 Screen assembly dropped down hole

16 G.P. Long 8/12/05

10:55 running in hole with drill string to push screen into place

11:15 Screen would only push 13 feet out of casing

Well is screened from 284 to 297' bgs.

Top of packer assembly at 268 feet bgs

11:20 Air lifting well to develop well

11:35 collect Color-Tec Sample

11:40 Well Development complete Crew Cleaning up site.

Color Tec Colilert @ MW-18 @ 1135
18 Pour ND, 2nd Pour ND, 3rd Pour ND

121

8-23-05

0615 LEAVE FOR SITE TO DO WORK OVER ON MW-11

ARRIVE SITE @ 0710
ORGANIZED WAREHOUSE — GOT TRAFFIC CONTROL CONES TOGETHER FOR PICKUP
MILEAGE OUT: 12669

TOOK PHOTOS OF ALL WELL LOCATIONS
USE TRUCK DRIVEN BY DRILLER & OSUD HAND HIM USE OF THE WATER IN THE SLUDGE BOXES

DRILLER ARRIVE @ 1000 — START TO SETUP OVER MW-11
SETUP OVER WELL READY TO START
ATE BOXES FOR LUNCH

1330 USE BACK HOE WITH 40' OF 1 INCH SCH 80 PVC ATTACHED TO DRILL COLLAR TO THE BOTTOM WAS TAGGED AT WHERE @ 187'
GOT DOWN TO 180' STAND PUMPED WELL WATER WAS CLOUDY STAND CLEANED UP AFTER A FEW MINUTES

8-23-05

1350 ADDED ANOTHER CONNECTION WENT DOWN TO 200' AND CIRCULATED SEVERAL BOTTOMS SAND + CLAY COMING COME BACK.

CONTINUED AGAIN AND WENT TO 210 AND KEPT CIRCULATING + ~~STD~~ LOST CIRCULATION @ ~~##~~ 210 @ 1410

CALLED ALL TO TELL HIM NOT TO DELIVER ANY MORE. CALLED GREG TO LET HIM KNOW

1425 CALLED M. LONG @ TREAD TO LET HIM KNOW THAT WE DON'T HAVE A WELL HERE. AGREED TO P&A HOLE.

1435 CRAIG BUSSELL ON IPA AGREED TO P&A WELL — DRILLER NOT SETUP TO DO IT TODAY, WILL COME BACK TOMORROW TO P&A WELL.

1515 VAC TRUCK DRIVER LEFT TO EMPTY HIS LOAD OF WATER

HAD DRILLERS MOVE THE MUD PIT SO THAT BEST COULD COME + PICK IT UP.

CLEANED UP SITE FOR OVERNIGHT

SET OUT DRIVE BOOST UNIT EMPTY @ 1630

MILEAGE 12697

LEFT SITE @ 1635

DRIVE BACK @ 1710

8/24/05

8/24/05

0700 arrive at Jones Road field office

8:30 Drilling crew on-site at MW-1 preparing to Plug and abandon

9:20 Ran into 200 foot hundred started tremie grouting.

9:45 ran in with seven bag batch and six bag batch

10:00 added another batch of grout made from six bags only placed 3/4 of batch before casing filled.

10:30 finishing set clean up

11:00 leaving site for field office

10-21-05

LEAVE FOR SITE @ 0650 TO MEET
MILES OUT : 0
~~MEET~~ VACTRON FOR UTILITY CLEARANCE
0740 ARRIVE FIELD OFFICE
UNLOAD TRUCK WITH SUPPLIES FOR
QTRLY SAMPLING.

DRILLERS SHOW UP @ 0815
WAITING ON VACTRON
CONDUCT TAILGATE MEETING @ 0830
MOB TO FIRST LOCATION @ JONES POINT
@ 0840
STARTED TO VACTRON HOLE WITH WATER
@ 0900
CLEARED HOLE TO 5' DEPTH WITH VACTRON
WIDEN DIAMETER OF HOLE TO 12"
HAD BEST CUT 2'x2 PAD IN ASPHALT

MOBBED TO NEW LOCATION @ FOXBORO
BLVD/RT @ 1000
CUT 12" DIAMETER HOLE TO 5'
FINISHED AT FOXBORO/RT 1 @ 1040
LEFT 3 DRUMS @ GLENDALE + FOXBORO
LEFT SITE @ 1115 ARRIVE BASE @ 1200
MILES IN @ 39

10-24-05

0700 LEAVE FOR SITE TO MEET USA
ENVIRONMENTAL TO DROP OFF SLUDGE
BOXES AND POLY TANK @ SITE.
MILES OUT : 64278
ARRIVE FIELD OFFICE @ 0750
NO POWER @ OFFICE

CALL IN TO DIG SAFE NOTIFICATION TO
GET MARKED LOCATION @ GLENDALE + FOXBORO
MARKED.
CALLED MAX PATTON ABOUT PROGRESS @
1030 BASE LINE.

MOBBED TO 1030 BASE LINE - WAITING
ON SLUDGE BOXES TO BE DROPPED.
SLUDGE BOXES WILL NOW NOT ARRIVE
~~64304~~ UNTIL TOMORROW - POLY TANK
IS ON THE WAY.
RECEIVED CALL FROM MAX PATTON -
DROPPED OFF CHECK @ APARTMENTS PER HIS
INSTRUCTIONS -
POLY TANK (1) ARRIVED @ 10 AM
LEFT TEMPLE @ FIELD OFFICE
MILES IN @ 64304 LEFT FOR OFFICE @ 1045
ARRIVED @ 1045

MW-11R
10-31-05

0545 PACK UP AND LEAVE FOR SITE
MILES OUT (0)
STOP TO PICK UP SUPPLIES
ARRIVE FIELD OFFICE @ 0640
LOAD UP TRUCK
TRUCK MILEAGE 64304
0745 BEST DRIVERS TO DROP OFF MUD AT
0745 KENDON CARGO (UNL TRUCK) UP HIGHWAY
0800 BEST DRILLING LEFT SITE - DROPPED
MUD PIT @ LOCATION
0810 BOSSELL SHOWS UP TO UNLOAD
TRAILER AND SETUP MUDPIT
0815 CONDUCT TAILGATE SAFETY MEETING
0845 DRILL RIG ONSITE (CRAIG)
0905 STARTED TO AUGER TO SET UP CONDUCTOR PIPE
0915 UNL TRUCK DRIVING)
MW-1 WAS ORIGINALLY DRILLED TO 292'
SET SCREEN @ 254-294
1040 STARTED DRILLING
MW-11R
0-24 CH RED BRN MOTTLED LT GREY
24-33 CH/WOOD SOME SAND
33-35 HARD SS
35-44 CH LIGHT GREY TO BUFF/MOTTLED RED BRN

MW-11R
10-31-05

44-64	CH	WHITE TO BUFF TRACE RED BRN MOTTLING
64-70	CLAY	
70-84	SAND	SOME CLAY LENSES
84-104	SAND	LT BRN
104-117	SAND	
117-124	CH	RED BRN/LITE GRAY MOTTLE
124-126	SAND	
126-144	CH	BUFF COLORS/TRACE RED BROWN MOTTLE
144-158	CH	BUFF COLORED TRACE MOTTLED RED/YELLOW BRN
158-164	SAND	
164-184	SAND	> COARSE
184-197	SAND	
197-204	CLAY	WHITE TO BUFF MOTTLED YELLOW BRN
204-224	CLAY	
224-225	CLAY	> SAND
225-243	SAND	
243-246	CH	
244-252	CH	
252-264	SAND	TAN/WOOD GRAINS PRESENT
264-284	SAND	
284-285	SAND	TD @ 285 @ 1237

CASING MEASURED TO BE 287 - ADDED 2' TO GO
A LITTLE FURTHER TO HAVE BEFORE LOWERING

MW-1R

10-31-05

1315 BART COLE ARRIVED ONSITE
DRILLER DRILLS DOWN TO 295 TD @ 1330
1340 - STARTED TO PULL OUT OF HOLE
SO IT CAN BE LOGGED
HAD TROUBLE WITH LOGGING TOOL
FINALLY GOT TOOL WORKING AND WENT INTO
HOLE

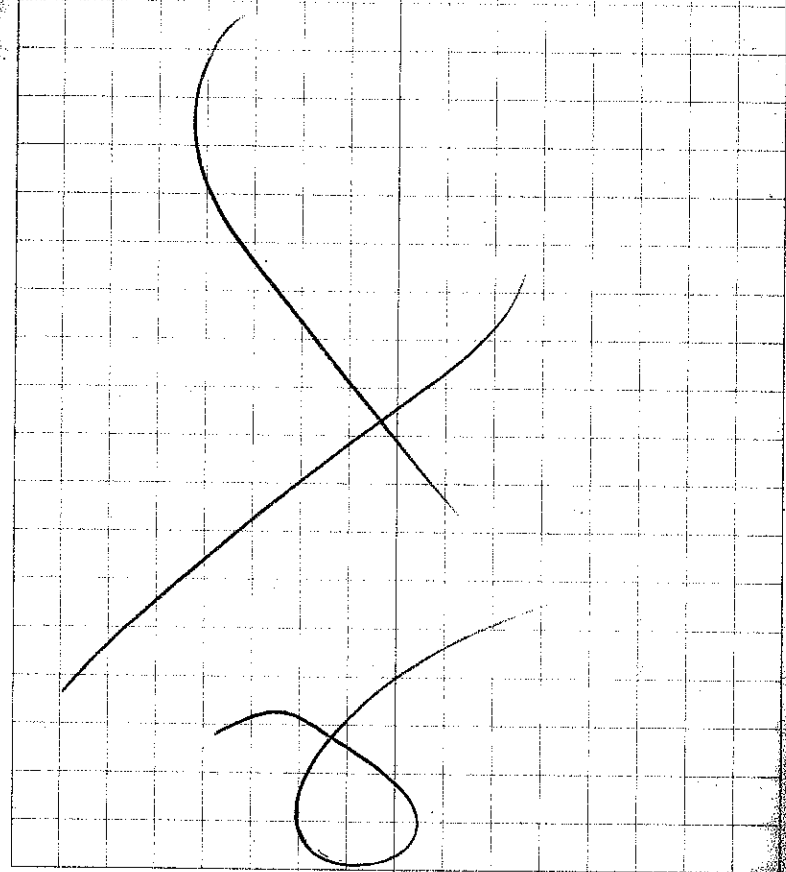
1445 CALLED MIKE TOWEL @ JOHN PUGH - TOW
HIM WE WOULD BE ONSITE TO DRILL ON WEDNESDAY.

FINISHED LOGGING @ 1500 -
WENT BACK INTO HOLE TO REAMOUT
CALLED TCEQ - FAXED LOG
AGREED TO 250 - 270
DRILLER HAD REAMED TO 250
ACTUALLY WAS @ 249 - TOW
HAD TO STOP WHILE SET IT @ 249'
SCREEN 249 - 269'
STARTED TO PULL OUT OF HOLE
1625 SHUT DOWN BECAUSE OF HEAVY RAIN
& T STORMS
1730 GOT ALL CASING IN THE HOLE
PUMPED GROUT/PORTLAND MIX GOT RETURNS @
1750

MW-1R

10-31-05

TRUCK MIXER 6438
LEFT SITE @ 1830
ARRIVED @ 1900
MIXED - 30 MIN



MW-11R

11-01-05

0545 LEAVE FOR SITE
MILEAGE = 0 (cm)
ARRIVE SITE @ 0630
TRUCK MILEAGE OUT (64338)
EMAILED DAILY REPORT TO TECH + CREW.
0840 DRILLER CALLED - RUNNING HOSE
DRILLER ARRIVE @ 0900
VAC TRUCK ARRIVED @ 0920
(12.5 hrs) FOR VAC TRUCK 10-31-05
WENT BACK INTO HOLE TO DRILL OUT 20 FEET TO SET SCREEN FROM 249-269
WILL SET 20' S.S. SCREEN 0.012 SLOT WITH 10 FOOT OF 2in PVC RISER WITH BACK
0955 STARTED TO DRILL OUT 20 FOOT SCREEN INTERVAL
1030 - STARTED PULLING PIPE OUT OF HOLE AFTER DRILLING OUT TO 269 + CIRCULATING.
DEVELOPED WELL - PRODUCED WITH ALOT ABOUT 10 GPM FOR ABOUT 5' MIN.
STOPPED TO CLEAN UP - NO WITNESS - THEN STARTED PRODUCING WATER. LET WELL SIT FOR A WHILE. REALIZED SCREEN WAS SET WITH CASING. PULLED OUT OF HOLE

11-01-05

AND PUT A FISHING TOOL ON PIPE. WENT BACK INTO HOLE TO RETRIEVE SCREEN AND PULL IT TO RECIRCULATE
GOT SCREEN BACK AND PULLED IT OUT OF THE HOLE. WENT BACK INTO HOLE TO DRILL OUT SCREEN INTERVAL AGAIN. LOST CIRCULATION TEMPORARILY. ADDED GEL TO MUD.
1415 - PULLED OUT OF HOLE TO SET SCREEN
SAND IN SCREEN INTERVAL IS MEDIUM GRAINED AND ANGULAR
AIR LIFTED WELL TO CLEAN IT OUT MAKING GOOD WATER - 150 @
BROKE DOWN RIG @ 1500 - 1600
TO RELOCATE TO JONES PLAZA TO INSTALL MW-19
SETUP OVER MW-19 @ 1650 STARTED TO DRILL OUT HOLE FOR CONDUCTOR PIPE
FINISHED @ 1730 - SECURED SITE WITH CONES + TAPE.
LEFT SITE @ 1745
TRUCK IN @ 64338
ARRIVE BACK @ 1815
CREW 30 MINS

VAC TRUCK 9.5 hrs

MW-19
11-02-05

0545 LEAVE FOR SITE
MILES AT :0
ARRIVE SITE @ 0630
PERFORM DAILY FIELD EQUIP AND ENGINE OUT
TRUCK OUT @ 64328
0820 RUSSELL SHOWS UP - HAS TO RIG SOMETHING FOR RUNS BECAUSE OF LOCATION TO BURBANK
VAC TRUCK WILL BE LATE DUE TO ACCIDENT ON FREEWAY
CONDUCT TAILGATE SAFETY MEETING
VAC TRUCK ARRIVES
START DRILLING @ 0900
0-18 CH RED BRN MOT LT GRY
18-24 SAND LIGHT BRN FG
24-30 SAND SAA
30-44 CH RED BRN
44-49 CH RED BRN MOTTLED LIGHT TO MED BRN
49-59 SAND
59-64 CH LIGHT GREY MOTTLED YELLOW BRN
64-68 CLAY SAA
68-84 SAND
84-104 SAND

MW-19
11-02-05

104-118	SAND	YELLOW BROWN FINE GRAINED
118-123	CH	LIGHT GREY MOTTLED RED YELLOW BRN
123-124	SAND	
124-128	SAND	
128-144	CLAY	RED BRN MOTTLED GREY
144-164	CLAY	LIGHT GREY MOTTLED YELL BRN
164-184	SAND	YELLOW BRN FINE GRAINED
184-197	SAND	SAA
197-200	CLAY	
200-204	GENERALLY SAND ??	CLAY
204-212	CLAY	
212-224	SAND	WITH SOME SAND MED GRAINED
224-229	SAND	
229-282	HARD	LAYER SANDSTONE??
282-239	SAND	
239-244	~~CLAY~~ SAND	
244-264	SAND	
264-284	SAND	WITH GRAVEL
284-302	SAND	FINE TO MED GRAINED LT BRN, FINE + BRICK DEBRIS @ 1130
302-304	CLAY	
304-310	CLAY	
310-312	SAND	TD @ 312

CALLED TLEQ - LEFT MESSAGE WITH M. LONG

MW-19

11-02-05

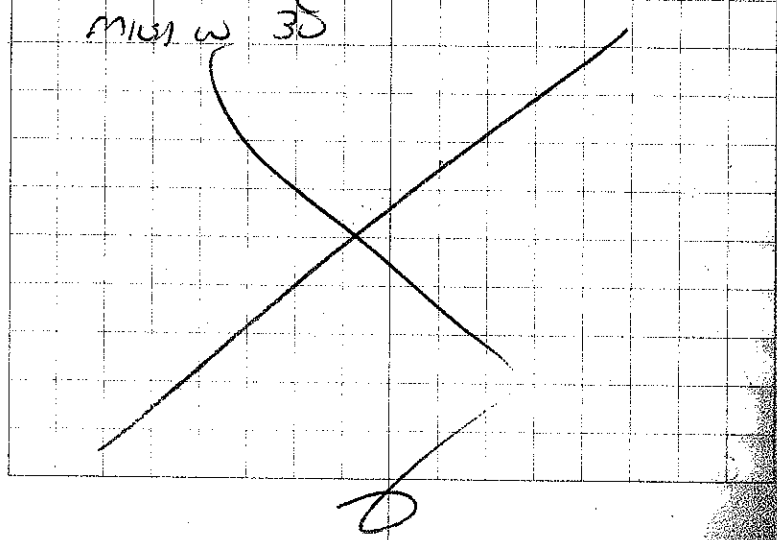
CAME OUT OF HOLE @ 1150
COLLECTED MW-19 DRUM WATER @ 1200
3 VOAs
STARTED LOGGING @ 1245 FROM BOTTOM OF HOLE
1315 WENT BACK INTO HOLE TO REAM OUT
HEADED BACK TO FIELD OFFICE TO PRINT LOG
PRINTED OUT LOG AND FAXED TO MARILEE
AGREED ON DEPTH OF 240-260
TOLD DRILLER TO REAM TO 240 FEET
AND THEN SET CASING.
REAMED TO 240
DRILLER COMING OUT OF HOLE @ 1545
STARTED TO RUN CASING @ 1610

CALLED TCEQ TO DISCUSS WASTE. TRANSPORTER (USA) SAID THAT WE DID NOT NEED TO REPROFILE THE WASTE (SOIL/WATER) AND WE COULD HAUL IT UNDER THE PREVIOUS CHARACTERIZATION. THE TCEQ SAID IT WAS SHAW'S DECISION. CALLED GREG LONG (SHAW) HE SAID HE WAS COMFORTABLE USING THE PREVIOUS PROFILE - NO NEED TO REPROFILE.
CASING GOT STUCK @ 60' - PULLED CASING OUT

MW 19

11-02-05

OF HOLE AND REDRILLED OUT THE TIGHT SPOT. TRIED TO GO BACK INTO HOLE - CASING STILL GOT STUCK @ ≈ 60' PULLED OUT OF HOLE AGAIN AND WENT BACK IN WITH REAMER. PUSHED CASING DOWN - HAMM TROUBLE WITH SCREW JOINT
1810 - COULD NOT GET MORE THAN 120' OF CASING IN THE HOLE. DECIDED TO PULL IT OUT, AND DRILL IT BACK IN TOMORROW
LEFT SITE FOR FIELD OFFICE @ 1840
TRUCK IN @ 64335
LEFT FIELD OFFICE @ 1850
DRIVER BACK @ 1930
MILES W 35



MW-19

11-03-05

0545 LEAVE FOR SITE
MILES OUT: 0
ARRIVE SITE @ 0630
TRUCK OUT: 64331
PREPARED DAILY REPORT AND EMAILED REPORT TO TEEC.
0755 BISSELL ONSITE
PAYER (DEL PACK) WILL BE ADDED TO MUD TO HELP REDUCE THE CLAY SWELLING
CONDUCT TAILGATE MEETING @ 0810
VAC TRUCK IN 11-2-05 (12.50)

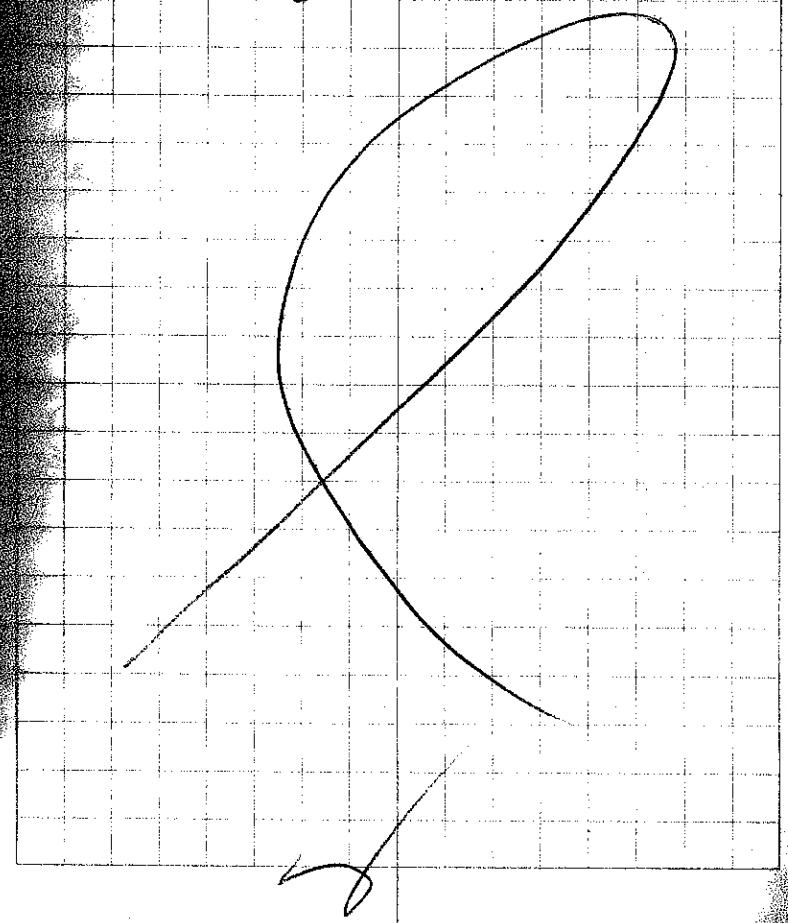
CHECKED PH OF WATER IN SLUDGE BOX (HAS NOT BEEN TRANSFERRED YET)
FIELD PH READING OF 11.0

REAMED OUT TO 240 FEET
CIRCULATING @ 1050
STARTED COMING OUT OF HOLE @ 1055
RAN CASING BACK INTO HOLE - NO PROBLEM
1150 CIRCULATING BEFORE PUMPING IN PORTLAND
GOT FOUR READINGS ON THE PORTLAND

MW-19

11-03-05

CLEANED UP SITE A BIT AND SECURED FOR TOMORROW. EMAILED DAILY REPORT
LEFT SITE @ 1400
TRUCK MILES 64344
ARRIVE BACK @ 1430
MASON ON 35



MW-19 11-04-05

0545 - LEAVE FOR SITE
MILEAGE OUT = 0
ARRIVE SITE @ 0630
TRUCK MILES OUT: 64344
DRILLERS ARRIVE @ 0815
JAL TRUCK ARRIVE @ 0820
0830 CONDUCT TAILGATE SAFETY MEETING
PREPARED 12 SLOT STAINLESS STEEL SCREEN
20' WITH 10' 2" DIAMETER PVC RISER
STARTED BACK INTO HOLE @ 0850 TO DRILL OUT
PLUG AND 20' SCREEN INTERVAL
DRILLED OUT CEMENT PLUG @ 0930
DRILLED OUT TO 260' + DROPPED SCREEN 0955
WENT BACK INTO HOLE TO DEVELOP WELL
1015 STARTED TO DEVELOP WELL.
STOPPED DEVELOPMENT @ 1130 WATER CLEAR
RIGGED DOWN @ 1150
PRESSURE WASHED DRILL & CLEAN AREA
LEFT DRILL SITE @ 1415
MILAGE IN 64352 TRUCK
LEFT SITE @ 1430
ARRIVE BASE @ 1515
MILEAGE IN: 30

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 111108

Date: 6/30/2005
Daily Report #: 1

Weather : Hot and Sunny

Summary of Day's Activities

* Cleared utilites using the air knife at TO10860 and the two wells proposed along the center of Neeshaw Drive
*
*
*
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units			Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Oversite of utility clearance using the air knife
Arturo Palacios	Best	Using the air knife
Pedro Lopez	Best	Using the air knife
Sebastian Jacobo	Best	Using the air knife

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw			
printer/copier	Shaw			
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids

Potential Scope Changes/Variances (note actions taken below)

*
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

* Some conflicts exist with current well locations and underground utilities. May have to relocate some of the wells.
*
*
*
*

Date Submitted: 6/30/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 111108

Date: 7/1/2005
Daily Report #: 2

Weather : Hot and Sunny

Summary of Day's Activities

* Cleared utilites using the air knife at Mile Drive and Glenora
*
*
*
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units			Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Oversite of utility clearance using the air knife
Pedro Lopez	Best	Using the air knife
Sebastian Jacobo	Best	Using the air knife

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw			
printer/copier	Shaw			
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids

Potential Scope Changes/Variances (note actions taken below)

* Air knife was not working properly so we shut down after clearing only one location.
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

* Some conflicts exist with current well locations and underground utilities. May have to relocate some of the wells.
*
*
*
*

Date Submitted: 7/1/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 111108

Date: 7/5/2005
Daily Report #: 3

Weather : Hot and Sunny

Summary of Day's Activities

* Scheduled to start drilling today at around noon. Driller called - will be delayed until later in the day. Changed schedule to
* thing in the morning. Had the sludge boxes delivered and one 6900 gallon poly tank. Revisited the locations, called in utili
* locate service again on a few locations. Relocated the proposed well at Woodedge and Timberhollow.
*
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units			Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Marilyn Long	TCEQ	TCEQ Technical representative
Greg Long	Shaw	Project manager
Will Hudgins	Shaw	Technician for waste handling - minitroll gauging

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	1	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	No	Not applicable
Equipment Inspections Performed	No	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	No	

Safety Comments: Heat stress is possible - drink plenty of fluids

*
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

* Relocated some proposed locations. Recalled in some of the original utility tickets. Driller became available too late in the
* to start work - decided to start tomorrow morning early
*
*
*

Date Submitted: 7/5/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 111108

Date: 7/6/2005
Daily Report #: 4

Weather : Hot and Sunny, heavy rain shower for short duration

Summary of Day's Activities

* Drilled Chicot well at TO10860. Drilled to a total depth of 357' TD. Ran elog (Gamma, Resistivity, Long & Short SP)
* Picked the screen interval from 270 to 290. Reamed out hole to casing diameter. Set casing and cemented from bottom u
* bottom of casing at 270. Air knifed to other locations - Glenora and Foxburo (Drillers set conductor pipe there last night) a
* Valley and Timber Crest.
* Collected water sample of drill water to run for 8260, collected soil sample for waste disposal classification.

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units	3	3	VOA Bottles Used	
Units			Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Marilyn Long	TCEQ	TCEQ Technical representative
Greg Long	Shaw	Project manager
Will Hudgins	Shaw	Technician for waste handling - minitroll gauging
Robert Pipes	Bussell	Drillers helper
Robert Givern	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Finn Michealson	Shaw	Geophysical

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	1	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions, traffic awareness

*
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

*
*
*
*
*

Date Submitted: 7/6/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 111108
Date: 7/7/2005
Daily Report #: 4

Weather : Hot and Sunny, heavy rain shower for short duration

Summary of Day's Activities

* Set 20 foot of stainless steel screen (0.012 slot) from 270 t0 290 feet in MW-10. Developed well until clear. Collected Col
* on well production water - 3rd pull indicated a slight color change (likely <5 ppb). Mobbed to new location, MW-11 located
* end of Glenora and Foxburo. Set up over well and started drilling, conductor pipe started leaking so driller shut down. We
* location tomorrow. Driller reset conductor pipe at this location and at MW-12 (location at Oak Valley and Timber Crest).
* Collected drilling fluid sample from poly tank for discharge requirements.

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units	1	1	Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Marilyn Long	TCEQ	TCEQ Technical representative
Terry Bentley	Shaw	Shaw Business Line Manager - Safety review of activities
Will Hudgins	Shaw	Technician for waste handling and sampling
Robert Pipes	Bussell	Drillers helper
Robert Givern	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Finn Michealson	Shaw	Geophysical
Kendall	USA	Vacuum truck operator

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	1	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions, traffic awareness

*
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

* Contacted property owners at 11122 Glenora and 11507 Foxburo to let them know ow that we would likely be leaving the c
* location MW-11 over the weekend. They indicated that it would not be a problem.
*
*
*

Date Submitted: 7/7/2005
Submitted By: Bill Hardmant
Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 7/8/2005
Daily Report #: 5

Weather : Hot and Sunny, light rain shower for short duration

Summary of Day's Activities

* Drilled monitor well MW-11 to 292 feet (Glenora @ Foxburo). Logged hole and reviewed screen picks with the TCEQ. De
* set screen from 254 - 274. Reamed hole to 254 feet. Set Certalock casing to depth and grouted/cemented inplace. Got fu
* returns. Secured site for the weekend.
*
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units			Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Will Hudgins	Shaw	Technician for waste handling and sampling
Robert Piper	Bussell	Drillers helper
Robert Gomerz	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Finn Michelsen	Shaw	Geophysical
Kendall	USA	Vacuum truck operator

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	1	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions, traffic awareness

*
*
*

New Instructions Received (who/what)

* Discussed screen interval for MW-11 with Marilyn Long (TCEQ). Agreed to 254 - 274 feet
*
*
*
*

Additional Comments

* Visited with property owner at Glenora and Foxburo - Stephen Posey.
*
*
*
*

Date Submitted: 7/8/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 7/11/2005
Daily Report #: 6

Weather : Hot and Sunny in the morning, heavy rain and T-storms in the afternoon.

Summary of Day's Activities

* Drilled out cement plug in monitor well MW-11 and drilled to 274 feet to set screen (20' of stainless steel 0.012). Pulled ou
* set up screen with packers. Set screen from 254 to 274 and and went back into hole to jet well. We were only able to get
* to 15 feet above packer. Jetted well and only got partial returns. Pulled a few strings out of hole and jetted again. Notice
* the formation coming back in the returns. Driller felt that there may have been failure in the casing near the packer. Will n
* able to salvage well. Best air knifed three additional locations. Only one left is Jones Plaza.

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units			Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Will Hudgins	Shaw	Technician for waste handling and sampling
Robert Piper	Bussell	Drillers helper
Robert Gogrez	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendall	USA	Vacuum truck operator

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	1	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions, traffic awareness. Shut dow at 1530 do to thunderstorms and heavy rain.

*
*
*

New Instructions Received (who/what)

* Discussed well problems with Marilyn - decided to continue with the next location before deciding what to do with location
* TCEQ asked that we secure the well cap on MW-11 so that it cannot be tampered with. Driller may add stainless steel scr
* casing to secure it better.
*
*

Additional Comments

* Contacted Mike Tones with New Plan regarding Jones Plaza access. He said that he was hoping to hear back on that this
*
*
*
*

Date Submitted: 7/112005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 7/12/2005
Daily Report #: 7

Weather : Hot and Sunny in the morning, heavy rain and T-storms in the afternoon.

Summary of Day's Activities

* Located over monitor well MW-12, Oak Valley and Timber Crest. Drilled out hole to 301 feet. Logged hole and picked a s
* interval of 260 to 280. Set casing to 260 feet. Had trouble getting the casing in past 220 feet. Had to pull several joints of
* from hole and then recirculate. Went back in hole one casing joint at a time, recirculating in between until we were able to
* casing in the hole. Heavy T-storms in the afternoon caused some delay. Driller developed small hole in their Kelly. My ne
* replace hose after completing well on Wednesday.

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units			Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Will Hudgins	Shaw	Technician for waste handling and sampling
Robert Piper	Bussell	Drillers helper
Robert Goemez	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendall	USA	Vacuum truck operator
Finn Michelsen	Shaw	Geophysical
Jim Baker	Constable	Traffic Control (12 - 5)

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name
1	Police	5	Traffic Control	Jim Baker

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	1	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions, traffic awareness. Shut dow temporarily while T-storms moved through the area.

*
*
*

New Instructions Received (who/what)

* Discussed screen interval for MW-12 with Marilyn Long, based upon e-log agreed that the screened interval should be 260
* Took pictures of isolated private wells for Jim Sher. Got totalizer flow readings from carbon system at ES11627.
*
*
*

Additional Comments

* When running Certalock casing in the hole, drilled three stainless steel set screws through casing bell to assure a good joi
*
*
*
*

Date Submitted: 7/12/2005
Submitted By: Bill Hardmant
Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 7/13/2005
Daily Report #: 8

Weather : Hot and Sunny in the morning, heavy rain and T-storms in the afternoon.

Summary of Day's Activities

* Driller called and said that he wanted to do some repairs on his equipment so he would not be drilling today. All subs were
* contacted and notified that they would not be needed today.
*
*
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units			Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1		
printer/copier	Shaw	1		
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	No	
Equipment Inspections Performed	No	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	No	

Safety Comments:

*
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

*
*
*
*
*

Date Submitted: 7/13/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 7/14/2005
Daily Report #: 9

Weather : Hot and Sunny in the morning, heavy rain and T-storms by mid day and all aftern

Summary of Day's Activities

* Drilled out cement plug in monitor well MW-12, circulated fluids in the well, drilled from 260 to 280 feet and then pulled out
* hole and set 20 feet of stainless steel screen (0.012 slot) with a 20 foot 2 inch diameter PVC riser with two packers. Devel
* well using air until clear water returned. Demobed off location and moved to new location near the intersection of Forest V
* and Timber Hollow (MW-13). Setup traffic control signage. Did not start drilling due to heavy T-storms.
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units			Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Will Hudgins	Shaw	Technician for waste handling and sampling
Robert Piper	Bussell	Drillers helper
Robert Goemez	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendall	USA	Vacuum truck operator
Jim Baker	Constable	Traffic Control (10 - 2)

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name
1	Police	4	Traffic Control	Jim Baker

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1		
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions, traffic awareness. Heavy ra and thunderstorms

* Setup traffic control signs for work along county roadway.
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

* Discussed with Marilyn Long changing the location of the next hole from Mile @ Glenora to Forest Valley @ Timber Hollow
* reason for the change had to do with leaving the drill rig along a busy road over the weekend. With the next location in the
* neighborhood, Officer Jim Baker can keep an eye on the rig over the weekend. Agreed that he would be compensated his
* hour minimum for the weekend duty. Need to find alternative source for liquid disposal. Anlaytical results indicated a high
* and high suspended solids in the proposed discharge water.

Date Submitted: 7/14/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 7/15/2005
Daily Report #: 10

Weather : Heavy rain and T-storms on and off all morning. Flooding in the area

Summary of Day's Activities

* Driller called to cancel drilling today due to weather. Best Drilling came out to site to do the surface pads on monitor wells
* MW-10 and MW-12. Met the TCEQ at the site to show them the well locations that have been drilled. Secured the work a
* for the weekend at location MW-13 (Timber Hollow and Forest Valley).
*
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units			Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Will Hudgins	Shaw	Technician for waste handling and sampling
Best Drilling	Best	Surface completion pads
Jim Sher	TCEQ	Superfund Program Manager
Marilyn Long	TCEQ	Jones Road Technical Lead
John Flores	TCEQ	Public Relations

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw			
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	No	

Safety Comments: Weathter conditions - heavy rain, flooding and thunderstorms

* Secured the location at MW-13 (Timber Hollow and Forest Valley) for traffic control
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

*
*
*
*
*

Date Submitted: 7/15/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 7/18/2005
Daily Report #: 12

Weather : Light rain at times during the day, brief T-storms, otherwise hot and humid

Summary of Day's Activities

* Set 17 foot conductor pipe at monitor well location MW-13 (Timber Hollow @ Forest Valley). Drilled rat hole to 305 feet. L
* hole and conferred with the TCEQ on screen pick. Final screen pick 276 - 296 feet. Reamed out hole to 276 feet and inst
* 4 inch diameter PVC casing. Cemented casing in hole.
*
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units			Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Will Hudgins	Shaw	Technician for waste handling and sampling
Robert Piper	Bussell	Drillers helper
Robert Goemez	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendall	USA	Vacuum truck operator
Finn Michelsen	Shaw	Geophysical

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	1	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions, traffic awareness along stree in the neighborhood.

* Setup traffic control and used a flagman
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

* Original screen pick based on the log was 274 - 294. Driller felt it would be better to set top of screen in a better developed
* at the top so suggested we go to 276 - 296. Shaw contacted the TCEQ regarding this and they agreed.
*
*
*

Date Submitted: 7/18/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 7/19/2005
Daily Report #: 13

Weather : Hazy, hot and humid, no rain all day

Summary of Day's Activities

* Drilled through cement plug on monitor well MW-13 and drilled out sand interval for screen setting at 276 -296. Set 20 fee
* stainless steel screen 0.010 slot with a 2 inch diameter PVC riser witih packers into well and developed. Air lifted until wat
* clear. Collected Color tec from water - Non Detect after three pulls. Rigged down from this location and mobbed to new lo
* at Glenora and Mile Drive (MW-14). Set 15 foot conductor pipe and arranged mud pit along drainage ditch.
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units	1	2	Color Tec Tubes Used	Checked water in MW-13 (ND)
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Will Hudgins	Shaw	Technician for waste handling and sampling
Robert Piper	Bussell	Drillers helper
Robert Goemez	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendall	USA	Vacuum truck operator

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1		
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions, traffic awareness along stree in the neighborhood.

* Relocated to next location and setup traffic control. More traffic along this street and at a higher speed.
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

*
*
*
*
*

Date Submitted: 7/19/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 7/20/2005
Daily Report #: 14

Weather : Cloudy and humid in the morning, heavy rain and T-storms in the afternoon - shut down

Summary of Day's Activities

* Drilled out from conductor pipe and TD the hole at 294 feet in a clay. Ran E-log and got stuck at 50 feet and again at 92 f
* into the hole. Pulled out of hole with tool and went back in with drill pipe. Conditioned hole as best we could to minimize b
* down of the walls of the hole. Shut down temporarily due to weather. Pulled back out of hole and went back in to E-log. T
* stuck at 110 feet. Called TCEQ to discuss. Agreed to ream out hole and then set casing. After casing is set, we would E-
* hole through the PVC casing. Heavy rain and T-storms in the area again - Pulled E-log out of hole, setup traffic control for night and shut down job for the day.

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units		2	Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Will Hudgins	Shaw	Technician for waste handling and sampling
Robert Piper	Bussell	Drillers helper
Robert Goemez	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendall	USA	Vacuum truck operator
Jim Baker	Sheriff	Traffic control (12 - 4)
Finn Michelson	Shaw	Geophysical

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name
1	Police	4	Traffic Control	Jim Baker

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1		
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions, traffic awareness along stree in the neighborhood.

* Had to shut down job several times during the afternoon due to T-storms. Houston area under a tornado watch until this
* evening
*

New Instructions Received (who/what)

* Could not get logging tool past 110 feet therefore decided to pull out of hole and ream it out tomorrow, set casing and log
* through the casing on Friday.
*
*
*

Additional Comments

* Talked to Finn Michelsen regarding how the gamma log would be affected by the cemented cased hole. He felt that there
* be a minimal dampening affect on the gamma result in the neighborhood of approximately 5%.
*
*
*

Date Submitted: 7/20/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 7/21/2005
Daily Report #: 15

Weather : The morning was hazy, hot and humid, heavy rain and T-storms on and off all afternoon

Summary of Day's Activities

* Reamed out monitor well MW-14 to 260 feet. Set 4 inch casing to 260 feet and cemented in place. Will drill out tomorrow
* E-log hole again. Checked on potential other locations if Jones Plaza does not work out. Talked to Eddie Pearce at
* Mulligan's Golf course. He did not say yes and he did not say no, asked me to come back tomorrow.
*
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units		2	Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Will Hudgins	Shaw	Technician for waste handling and sampling
Robert Piper	Bussell	Drillers helper
Leonardo Sanchez	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendall Dub	USA	Vacuum truck operator
Muclease Buckman	Sheriff	Traffic control (8 - 2:30)

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name
1	Police	6.5	Traffic Control	Muclease Buckman

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1		
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions, traffic awareness along stree in the neighborhood.

* Shut down twice during the day due to heavy thunderstorms.
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

* Checked out potential other locations to drill if Jones Plaza falls through. Contacted Mike Tones at New Plan and the acce
* agreement is still at corporate in NY. Not a high priority.
*
*
*

Date Submitted: 7/21/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 7/22/2005
Daily Report #: 16

Weather : Hot and humid

Summary of Day's Activities

* Collected second water sample from drillers water truck (MW-14 Drill Water) and ran for 8260 VOCs. Driller drilled out
* the cement plug and drilled out hole to 290'. Elogged the hole from the bottom and through the casing (gamma only).
* Tried to meet with Eddie Pearce (Mulligans) but missed him by a few minutes. Set 0.014 slot stainless steel screen
* from 260 to 280 feet. Developed well and rigged down. Moved traffic control to next location at Echo Springs and
* Woodedge (MW-15). Drillers took equipment back to the yard for the weekend.

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units		2	Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Will Hudgins	Shaw	Technician for waste handling and sampling
Robert Piper	Bussell	Drillers helper
Edwardo Sanchez	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendall Dub	USA	Vacuum truck operator
Muclease Buckman	Sheriff	Traffic control (8 - 1:00)

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name
1	Police	5	Traffic Control	Muclease Buckman

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	1	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions, traffic awareness along streets in the neighborhood.

*
*
*

New Instructions Received (who/what)

* Collected water sample from drillers water truck (MW-14 Drill Water)
*
*
*
*

Additional Comments

* Tried to meet with Eddie Pearce (Mulligans) about access to drill a well on his property.
*
*
*
*

Date Submitted: 7/22/2005

Submitted By: Bill Hardmant
Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798
Date: 7/25/2005
Daily Report #: 17

Weather : Hot and humid

Summary of Day's Activities

* Met with Eddie Pearce about possible well. He told me that he might be selling the place so he did not want to install
* a well. Set up traffic control for MW-15. Drilled down to 305' feet. Pulled out of hole and logged the open hole. Faxed
* E-log to Marilyn Long to agree on screen pick. Decided to set screen from 274- 294. Driller reamed hole to 274 feet
* and set casing to 274. Cemented casing in place and left for the day. Secured area for overnight traffic.
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units		2	Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Will Hudgins	Shaw	Technician for waste handling and sampling
Robert Piper	Bussell	Drillers helper
Robert Goerz	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendall Dub	USA	Vacuum truck operator
Jim Baker	Sheriff	Traffic control (12:00 - 5:30)

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name
1	Police	5.5	Traffic Control	Jim Baker

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	1	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions, traffic awareness along streets in the neighborhood. We are now in a high traffic area!

*
*
*

New Instructions Received (who/what)

* Called Mike Tones with New Plan - he was out for the day. Left him a detailed message regarding the TCEQ's need
* to install the well on their property and the urgency of it.
*
*
*

Additional Comments

* Met with Eddie Pearce about installing a well - he basically said no.
*
*
*
*

Date Submitted: 7/25/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 7/26/2005
Daily Report #: 18

Weather : Hot and humid

Summary of Day's Activities

* Drilled out cement plug on monitor well MW-15 from bottom of casing and drilled down to 294 feet to set 20 feet of
* stainless steel screen (0.014 slot) with a 2-inch diameter 10 foot PVC riser with two K-packers. Air lifted/developed
* the well. Collected a color tec sample and ran it (ND after 3 pulls). Demob from location and setup at monitor well
* MW-16 (Jones Road and Woodedge) - busy intersection. Setup traffic control and set conductor pipe for drilling in the
* morning. Secured the site as best we could for the night. Two sludge boxes are ready to go for disposal (Class II).
Will try to get rid of them before the next rain (Thursday?)

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units	1	3	Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Robert Piper	Bussell	Drillers helper
Robert Goerz	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendall Dub	USA	Vacuum truck operator
Jim Baker	Sheriff	Traffic control (8:00 - 4:00)

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name
1	Police	8	Traffic Control	Jim Baker

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1		
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions, traffic awareness along streets in the neighborhood. We are now in a high traffic area!

* Need fulltime police traffic control for the next two days - I am hoping that they will be able to accommodate us.
*
*

New Instructions Received (who/what)

* Received email from Mike Tones at New Plan with their access agreement. Forwarded the agreement to the TCEQ
* for their review. Emailed Jim Sher photo of surface completion for monitor well MW-10.
*
*
*

Additional Comments

* Should have two sludge boxes removed from the site by Thursday 7-28-05 (weather permitting). Will have another
* poly tank delivered to the site to hold fluids.
*
*
*

Date Submitted: 7/26/2005

Submitted By: Bill Hardmant
Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 7/27/2005
Daily Report #: 19

Weather : Hot and humid

Summary of Day's Activities

* Drilled down to 325 feet on monitor well MW-16 (Jones Road at Woodedge). E-logged hole and picked the screen
* interval to be 258 - 278. Confirmed the screen pick with the TCEQ. Reamed out hole to 258 feet and set 4 inch
* diameter casing to 258. Cemented casing in place. Set up traffic control for the evening.
* Received another poly tank to contain the liquid waste.
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units		3	Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Finn Michelsen	Shaw	Geophysical Logger
Robert Piper	Bussell	Drillers helper
Robert Goerz	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Johnny Coloman	USA	Vacuum truck operator
Jim Baker	Sheriff	Traffic control (3:00 - 5:00)
Tracy Austin	Sheriff	Traffic control (8:00 - 3:00)

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name
1	Police	2	Traffic Control	Jim Baker
1	Police	7	Traffic Control	Tracy Austin

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	1	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions, traffic awareness along streets in the neighborhood. We are now in a high traffic area!

* Had police officers onsite during the entire time we were drilling.
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

* Received new poly tank to the IDW staging area.
*
*
*
*

Date Submitted: 7/27/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798
Date: 7/28/2005
Daily Report #: 20

Weather : Hot and humid

Summary of Day's Activities

* Drilled out the cement plug in the casing for monitor well MW-16 and drilled from 258 to 278 feet to set screen.
* Installed 20 feet of stainless steel screen (0.014 slot) with 10 feet of 2-inch diameter PVC riser with two K-packers.
* Air lifted well to purge and develop. Demobed from site and relocated to monitor well MW-17 (Deep well on Neeshaw).
* Set conductor pipe and set up traffic control for tomorrow's drilling. Plan to drill rat hole to desired depth, E-log, and
* set casing for the weekend. Also collected color tec from MW-16 water, ND after three pulls.

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units	1	4	Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Robert Piper	Bussell	Drillers helper
Robert Goerz	Bussell	Drillers helper
Johnny Coloman	USA	Vacuum truck operator
Kendell Wright	USA	Vacuum truck operator
Tracy Austin	Sheriff	Traffic control (8:00 - 12:00)

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name
1	Police	4	Traffic Control	Tracy Austin

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1		
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions
We are moving from a high traffic area to a lower traffic area, still retain awareness!

* Had police officers onsite during the entire time we were drilling.
*
*

New Instructions Received (who/what)

* Get estimate from driller on costs to send a video camera down monitor well MW-11, include drillers cost for
* well preparation before video taping.
*
*
*

Additional Comments

*
*
*
*
*

Date Submitted: 7/28/2005
Submitted By: Bill Hardmant
Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 7/29/2005
Daily Report #: 21

Weather : Hot and humid

Summary of Day's Activities

* Started drilling deeper Chicot well MW-17 on Neeshaw. Drilled down to 105 feet and lost circulation in the hole, added
* some polymer to the mud to reduce water loss - did not help. Pulled out of the hole and went back in to ream hole
* bigger to 105. Still lost circulation at that depth. Could not add anything else to mud to retain water loss. Pulled out
* of hole and discussed options. Agreed to pump portland down the hole and let it set over the weekend hoping to fix
* the problem. Mixed up 18 bags of portland and pumped into hole. Let it set over the weekend. Checked pH in the field on the two poly tanks, both should a pH of 11.

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units		4	Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Finn Michelsen	Shaw	Geophysicist
Robert Piper	Bussell	Drillers helper
Robert Goerz	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Marilyn Long	TCEQ	Technical Lead
Kendell Wright	USA	Vacuum truck operator
Jim Sher	TCEQ	Superfund Team Leader

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1		
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions
Maintain traffic awareness.

*
*
*

New Instructions Received (who/what)

* Collected field pH analyses of the water in the two poly tanks - both showed a pH of 11.
*
*
*
*

Additional Comments

*
*
*
*
*

Date Submitted: 7/29/2005
Submitted By: Bill Hardmant
Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 8/1/2005
Daily Report #: 22

Weather : Hot and humid

Summary of Day's Activities

* Went back into hole to drill out cement and see if circulation can be maintained. Started drilling at 105 feet - got some
* returns but mud was thin (collected Color tec). Drilled down to 125 feet - lost circulation, pulled up a joint and
* circulated some more. Went back into hole and drilled out to 145 still losing circulation. Added more Gel X to mud
* Drilled into a clay to 165 feet hoping cuttings would fill void - still losing circulation. Pulled out of hole - called TCEQ
* Decided to relocate well on Neeshaw. Called in for additional utility clearance. Restaked locations further to the west on Neeshaw Drive. Let drill crew go. Collected water sample from water truck MW-17 Drilling water.

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units	1	5	Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Will Hudgins	Shaw	Conducted minitroll data dump
Robert Piper	Bussell	Drillers helper
Robert Goerz	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendell Wright	USA	Vacuum truck operator

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1		
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions
Maintain traffic awareness.

*
*
*

New Instructions Received (who/what)

* Collected water sample from driller's water truck MW-17 Drilling Water and submitted to laboratory for analytical
* testing using EPA Method 8260. Collected Color tec from water at approximately 100 feet in hole - 3 pulls ND.
*
*
*

Additional Comments

* Discussed with the TCEQ the option of relocating these two wells further down Neeshaw Drive.
*
*
*
*

Date Submitted: 8/1/2005
Submitted By: Bill Hardmant
Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798
Date: 8/9/2005
Daily Report #: 23

Weather : Hot and humid, with T-storms

Summary of Day's Activities

* Driller spudded into new location for MW-17 located on Neeshaw Drive. Set conductor pipe and drilled to a TD of 445.
* Performed an E-log of the hole and faxed log to M. Long at TCEQ to discuss screen pick. Decided to set screen
* interval from 410 - 430. Driller will ream out hole and then set casing to 410 tomorrow.
*
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units	0	5	Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Greg Long	Shaw	Project Manager/senior geoscientist
Robert Piper	Bussell	Driller
Robert Goerz	Bussell	Drillers helper
Finn Michelsen	Shaw	Geophysical
Kendell Wright	USA	Vacuum truck operator

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	1	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions
Maintain traffic awareness.

*
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

* Discussed with TCEQ the options of screening in sand at 410 feet or at 341 feet. Based upon another E-log collected
* from a M.U.D. well in the area, the sand located at 341 was not present in the M.U.D. well. However the sand at 410
* feet in MW-17 was present in the M.U.D. well. Therefore it was decided that this deeper sand may be more
* continuous across the area and would be a preferred zone to monitor from.
* Original location for monitor well MW-17 was plugged.

Date Submitted: 8/10/2005
Submitted By: Bill Hardmant
Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 8/10/2005
Daily Report #: 24

Weather : Sunny, hot and humid

Summary of Day's Activities

* Driller reamed out hole in monitor well MW-17 to desired casing depth of 410. Installed 4-inch diameter PVC casing in
* the hole and cemented in place (pressure grout).
* Will drill out cement plug tomorrow and drill to set screen.
*
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units	0	5	Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Greg Long	Shaw	Project Manager/senior geoscientist
Robert Piper	Bussell	Drillers helper
Robert Goerz	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendell Wright	USA	Vacuum truck operator

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	0	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions
Maintain traffic awareness. School is this area is now in session, be more aware of children along the streets.

*
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

*
*
*
*
*

Date Submitted: 8/11/2005
Submitted By: Bill Hardmant
Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 8/11/2005
Daily Report #: 25

Weather ; Sunny, hot and humid

Summary of Day's Activities

* Driller drilled out of cement plug in monitor well MW-17 and set a 20 foot stainless steel screen (0.014 slot) with a 2"
* diameter 10 foot riser with two K-packers in the well. The screen was set at 410 - 430 feet. The well was air lifted and
* developed until clear water was produced. Ran a color tec on water - ND. Relocated to other Chicot well (shallow one)
* on Neeshaw (MW-18). Spudded in well and reamed out hole to 284 feet. Set 4-inch diameter PVC casing to 284 feet
* and cemented in place. Got full cement returns. Collected water sample from drill water used on MW-18. Identified this water sample as MW-18 Drill Water and will run it for EPA Method 8260.

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units	1	6	Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Greg Long	Shaw	Project Manager/senior geoscientist
Robert Piper	Bussell	Drillers helper
Robert Goerz	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendell Wright	USA	Vacuum truck operator

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	0	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions
Maintain traffic awareness. School is this area is now in session, be more aware of children along the streets.

*
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

* Collected Color Tec on MW-17 development water, ND after three pulls. Also took field pH of produced water from well
* MW-17 (6.0). Collected drilling water sample for drill water used for drilling fluids on monitor well MW-18 and submitted
* to lab for analyses.
*
*

Date Submitted: 8/12/2005
Submitted By: Bill Hardmant
Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 8/12/2005
Daily Report #: 26

Weather : Sunny, hot and humid

Summary of Day's Activities

* Driller drilled out of cement plug in monitor well MW-18 and set a 20 foot stainless steel screen (0.014 slot) with a 2"
* diameter 10 foot riser with two K-packers in the well. The screen was set to be set 284 - 304 but after drilling out that
* interval (which was mostly sand and gravel) the bottom section would not stay open so when the screen was installed
* only 13 feet of screen went below the bottom of the casing. It was recommended not to force the screen so it was set
* at 284 to 297 feet. Seven feet of screen remained inside the casing. The well was then developed and a Color tec sample was collected (ND). Driller rigged down and mobbed off site. Traffic control was removed from the location.

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units	1	7	Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Greg Long	Shaw	Project Manager/senior geoscientist
Robert Piper	Bussell	Drillers helper
Robert Goerz	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendell Wright	USA	Vacuum truck operator

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	0	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions
Maintain traffic awareness. School is this area is now in session, be more aware of children along the streets.

*
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

* Collected Color Tec on MW-18 development water, ND after three pulls. After drilling out the screen interval, the hole
* did not remain open (gravel and sand) therefore when the screen was set only 13 feet actually went below the bottom
* of the casing. The remaining 7 feet along with the 10 section of 2-inch diameter riser pipe is in the casing.
* Told driller to mob offsite until negotiations can be made for the final well location (Jones Plaza).
*

Date Submitted: 8/13/2005
Submitted By: Bill Hardmant
Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 8/23/2005
Daily Report #: 27

Weather : Sunny, hot and humid

Summary of Day's Activities

* Vacuum truck driver pulled all water off the remaining four sludge boxes. Three are now ready for transport and
* disposal. Took after photographs of all well locations. Driller mobbed back out to site and setup over monitor well
* MW-11. Went back into the hole with 40 feet of one-inch diameter schedule 80 PVC pipe and connected it to the
* drill stem. Trip back into hole to 180 feet and started circulating. After water returns cleared up they added another
* joint and slowly went down to 200 feet circulating as they went. After water cleared, they added another joint and went to 210 feet before they lost circulation. Prior to losing circulation they were getting clay and sand in the returns.

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units		7	Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Site Geologist/site manager
Robert Piper	Bussell	Drillers helper
Robert Goerz	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendell Wright	USA	Vacuum truck operator

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	0	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions

*
*
*

New Instructions Received (who/what)

* Plug and abandon monitor well MW-11 with tremie pipe from the bottom up.
*
*
*
*

Additional Comments

* Based upon loss of circulation, contacted the TCEQ to concur that the well should be plugged and abandoned. This is
* scheduled for 8-24-05.
*
*
*

Date Submitted: 8/23/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 110798

Date: 8/24/2005
Daily Report #: 28

Weather : Sunny, hot and humid

Summary of Day's Activities

* Drillers setup over monitor well MW-11 and pumped cement grout mixture into well using tremie pipe so that they could
* plug and abandon the well from the bottom up. When they got grout returns at the service, the well was plugged.
* Tremie piped reached 200 feet below ground surface and well plug from 200 feet to surface inside 4 inch casing.
*
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units		7	Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Greg Long	Shaw	Project Manager/Senior Scientist
Robert Piper	Bussell	Drillers helper
Robert Goerz	Bussell	Drillers helper

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	0	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	Yes	

Safety Comments: Heat stress is possible - drink plenty of fluids, potential weather conditions

*
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

* Remainder of traffic control was picked up by United Rentals. Held onto traffic control cones in case we got the go
* ahead to drill at Jones Plaza.
* Two of the four sludge boxes will be removed from the site on 8-25-05, the remaining two should be removed on
* 8/26/2005. Remainder of drilling fluids will be hauled the weekend of 8-26-05 along with the 3 poly tanks.
*

Date Submitted: 8/26/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: Pending

Date: 10/31/2005
Daily Report #: 2

Weather : Partly cloudy and mild/heavy rain and T-storms in afternoon

Summary of Day's Activities

* Spudded monitor well MW-11R. Drilled to 295 feet. Conducted geophysical logging of hole. Agreed with TCEQ to
* screen at 249 - 269 feet. Went back into hole and reamed to 249 feet. Started running casing in hole. Shut down
* temporarily because of heavy T-storms. Got all casing in the hole and cemented in place.
*
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units			Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Project Geoscientist
Robert Piper	Bussell	Drillers helper
Robert Gogrz	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendall Wright	USA	Vacuum Truck Operator
Brant Cole	Shaw	Geophysical logging
Finn Michelsen	Shaw	Geophysical logging
Steven Mimms	Bussell	Drillers helper

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	1	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	No	

Safety Comments: Shut down in afternoon because of violent weather

*
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

*
*
*
*
*

Date Submitted: 11/1/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: Pending
Date: 11/1/2005
Daily Report #: 3

Weather : Sunny and mild

Summary of Day's Activities

* Drilled out of casing from 249 - 269 to set screen. Installed 20 foot stainless steel screen (0.012 slot) with a 10-foot
* PVC riser in the well and developed the well. Water ran clear. Mobbed down and moved rig to next location (MW-19)
* located at Jones Plaza. Drilled out approximately 10 feet and set conductor pipe. Secured area - will begin drilling
* tomorrow.
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units			Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Project Geoscientist
Robert Piper	Bussell	Drillers helper
Robert Gogrz	Bussell	Drillers helper
Craig Bussell	Bussell	Driller
Kendall Wright	USA	Vacuum Truck Operator

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	1	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	No	

Safety Comments: None

*
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

* Setup at Jones Plaza to begin drilling on 11-02-05
*
*
*
*

Date Submitted: 11/2/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 118429

Date: 11/2/2005
Daily Report #: 4

Weather : Sunny and mild

Summary of Day's Activities

* Started drilling pilot hole for monitor well MW-19 at Jones Plaza. Drilled to a total depth of 312 feet. Ran geophysical
* log of hole and agreed to set screeen interval from 240 to 260 feet. Driller went back into hole and reamed out hole
* to 240 feet. Driller started running casing in hole. Had problems with casing getting stuck at 120 feet. They could not
* get it in the hole. Decided to pull casing and ream out hole again in the moring. Shut down for day.
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units			Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Project Geoscientist
Robert Piper	Bussell	Drillers helper
Robert Gogrz	Bussell	Drillers helper
Brant Cole	Shaw	Geophysical logging
Kendall Wright	USA	Vacuum Truck Operator
Finn Michelsen	Shaw	Geophysical logging

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	1	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	No	

Safety Comments: Traffic awareness in the parking lot and alleyway

*
*
*

New Instructions Received (who/what)

*
*
*
*
*

Additional Comments

*
*
*
*
*

Date Submitted: 11/3/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 118429

Date: 11/3/2005
Daily Report #: 5

Weather : Sunny and mild

Summary of Day's Activities

* Reamed out monitor MW-19 again down to 240 feet. Added some gel to mud to keep clays from swelling. Circulated
* hole and then installed 240 feet of Certalok 4" diameter PVC casing. Did not have any problems getting the casing in
* hole. Pumped Portland grout into casing until we got full returns. Shut down for day to let casing set. Secured area
* for the rest of the day. Will drill out screen interval tomorrow, set screen and develop well.
*

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests	1	1	QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units	3	3	VOA Bottles Used	
Units			Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Project Geoscientist
Robert Piper	Bussell	Drillers helper
Robert Gogrz	Bussell	Drillers helper
Steve Mimms	Bussell	Drillers helper
Kendall Wright	USA	Vacuum Truck Operator

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	1	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	No	

Safety Comments: Traffic awareness in the parking lot and alleyway

*
*
*

New Instructions Received (who/what)

* TCEQ requested that Shaw measure distance between wells located at PH11603 and PH11610 and get estimate to
* install a water line between the two properties. Called the TCEQ to confirm that permission to conduct this task has
* been received by the property owner at PH11602, located between the two properties.
*
*

Additional Comments

* Checked pH of water from drilling mud - field pH was 11. Yesterday a water sample was collected from the driller's
* water truck and submitted to Accutest Labs for 8260 analysis.
* Notified TCEQ that an additional 10 hours of Project Geoscientist may be needed to complete the drilling program
*
*

Date Submitted: 11/3/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

Shaw
Shaw Environmental & Infrastructure, Inc.

SHAW E & I, INC.
DAILY FIELD REPORT

Project Name: TCEQ/Jones Road
Project Number: 118429

Date: 11/4/2005
Daily Report #: 5

Weather : Sunny and mild

Summary of Day's Activities

* Drilled out cement plug and drilled an additional 20 feet to 260 feet for screen interval. Set completion assembly
* 20 feet of 2-inch diameter stainless steel screen (0.012 slot) with a 10 foot section of 2-inch diameter PVC and
* a double K-packer on top. Developed well until water ran clear. Cleaned up site, pressure washed.
* Monitor well drilling program is now complete.
* Stopped by PH11603 to check on temporary water line for TCEQ.

Summary of Quantities

Units	Day's Quantity	Total Quantity	Activity	Comment/Notes
Units			MW purged	Units-Number of locations
Units			MW sampled	Units-Number of locations
Units			Private well samples	Units-Number of sample points
Units			Private well locations	Units-Number of locations
Units			QA/QC Samples-Dups	Duplicate samples collected
Units			QA/QC MS/MSD	MS/MSD Samples Collected
Tests			QA/QC Field Blanks	Field Blank Samples Collected
			QA/QC Trip Blanks	Trip Blank Samples Collected
Drums			IDW water generated	Poured into drum currently staged at site
Drums			IDW solids generated	
Units				
Units			VOA Bottles Used	
Units			Color Tec Tubes Used	
Units				
			IDW Haz water staged	
Drums			IDW water staged	
Drums			IDW solids staged	

Personnel On Site

Name	Affiliation	Function/Activity
Bill Hardmant	Shaw	Project Geoscientist
Robert Piper	Bussell	Drillers helper
Robert Gogrz	Bussell	Drillers helper
Steve Mimms	Bussell	Drillers helper
Kendall Wright	USA	Vacuum Truck Operator

Initials: WBH

Subcontractor Activities

Quantity	Trade	Hours Worked	Activities Performed	Name

Equipment Information

Type Equipment	Vendor	Units	Onsite/used	Comments
Laptop computer	Shaw	1	1	
printer/copier	Shaw	1	1	
Flow through Cells	Multiple			
Colorimetric Kit	Rental			

Day's Safety Activities

	Yes/No	Comment
Tailgate Safety Meeting Conducted	Yes	
Equipment Inspections Performed	Yes	
Breathing Zone Air Monitoring Conducted	No	
Heat Stress Monitoring Conducted	No	

Safety Comments: Traffic awareness in the parking lot and alleyway

*
*
*

New Instructions Received (who/what)

* Measured distance for temporary water line from PH11603 to PH11610. Took photos and emailed to Jim Sher at
* TCEQ. Contacted Rick Davis with Wellco to get estimate.
*
*
*

Additional Comments

*
*
*
*
*

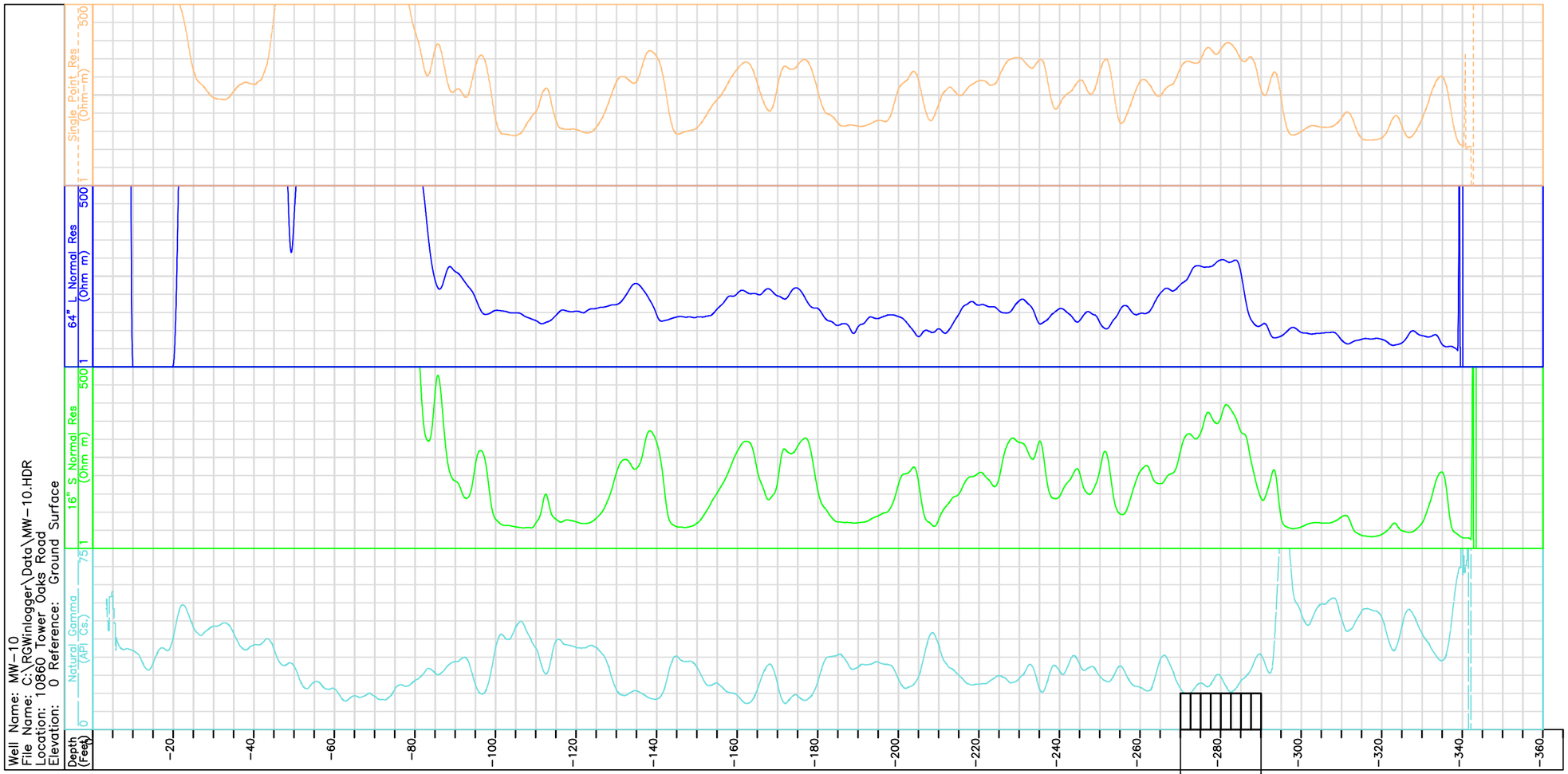
Date Submitted: 11/4/2005

Submitted By: Bill Hardmant

Shaw E & I, Inc. Field Supervisor

ATTACHMENT 5
GEOPHYSICAL BORING LOGS

IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	*Houston, Texas*	*J. RDZ*			118429-B1
			12/06/05			



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

GEOPHYSICAL LOG
MONITOR WELL MW-10

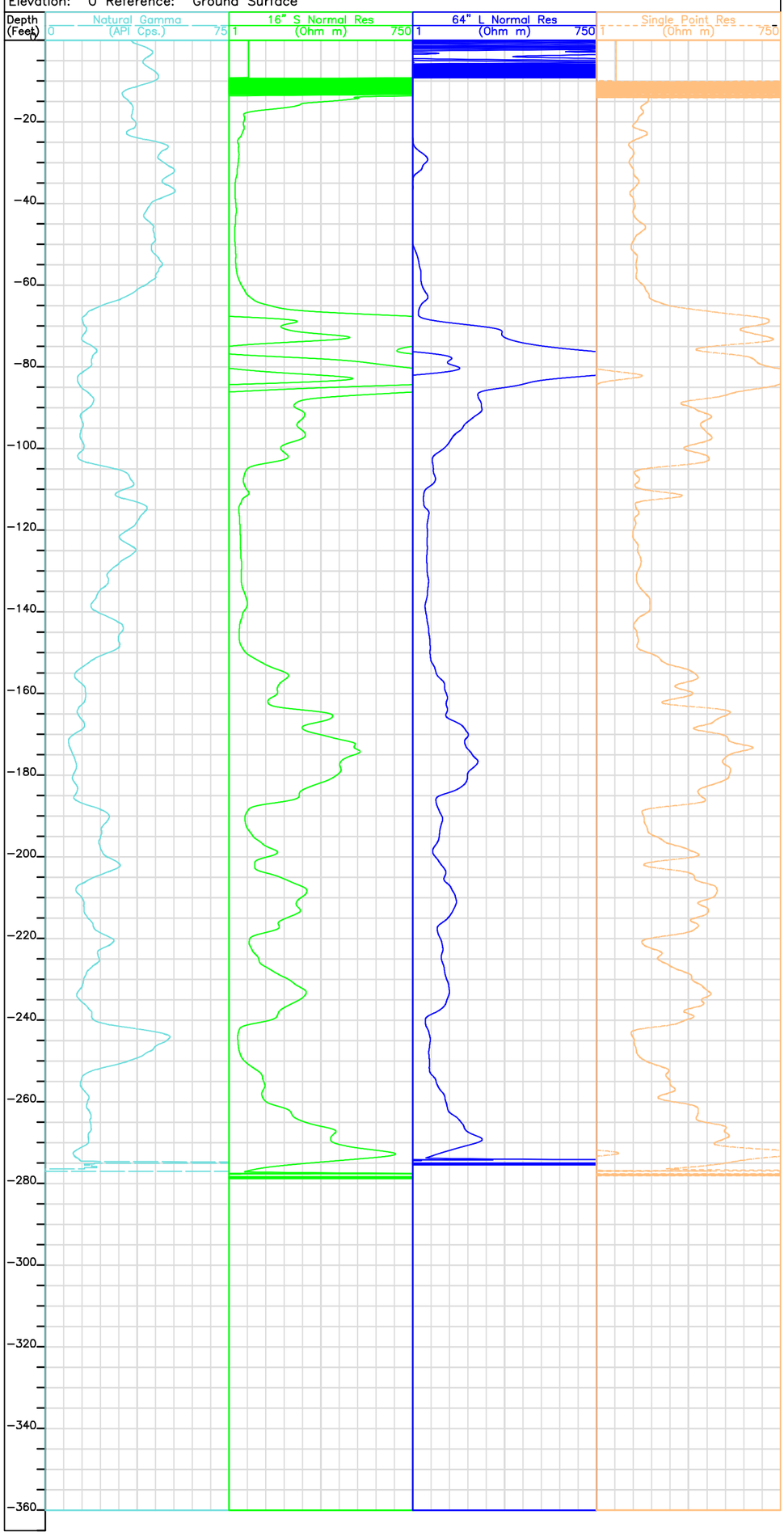
JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

PLOT DATE: 12/13/05
FORMAT REVISION 3/25/99

PLOT DATE: 12/13/05
FORMAT REVISION 3/25/99

IMAGE	X-REF	OFFICE	DRAWN BY		CHECKED BY		APPROVED BY		DRAWING NUMBER
---	---	*Houston, Texas*	*J. RDZ*	*12/06/05*					118429-B1

Well Name: MW-11
File Name: C:\RGWinlogger\Data\MW-11.HDR
Location: Foxburo and Glenora
Elevation: 0 Reference: Ground Surface



WELL WAS PLUGGED AND ABANDONED

GEOPHYSICAL LOG
MONITOR WELL MW-11
JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

IMAGE	X-REF	OFFICE	DRAWN BY	
---	---	*Houston, Texas*	*J. RDZ*	*12/06/05*

CHECKED BY	APPROVED BY	DRAWING NUMBER
		118429-B1

PLOT DATE: 12/13/05
FORMAT REVISION 3/25/99

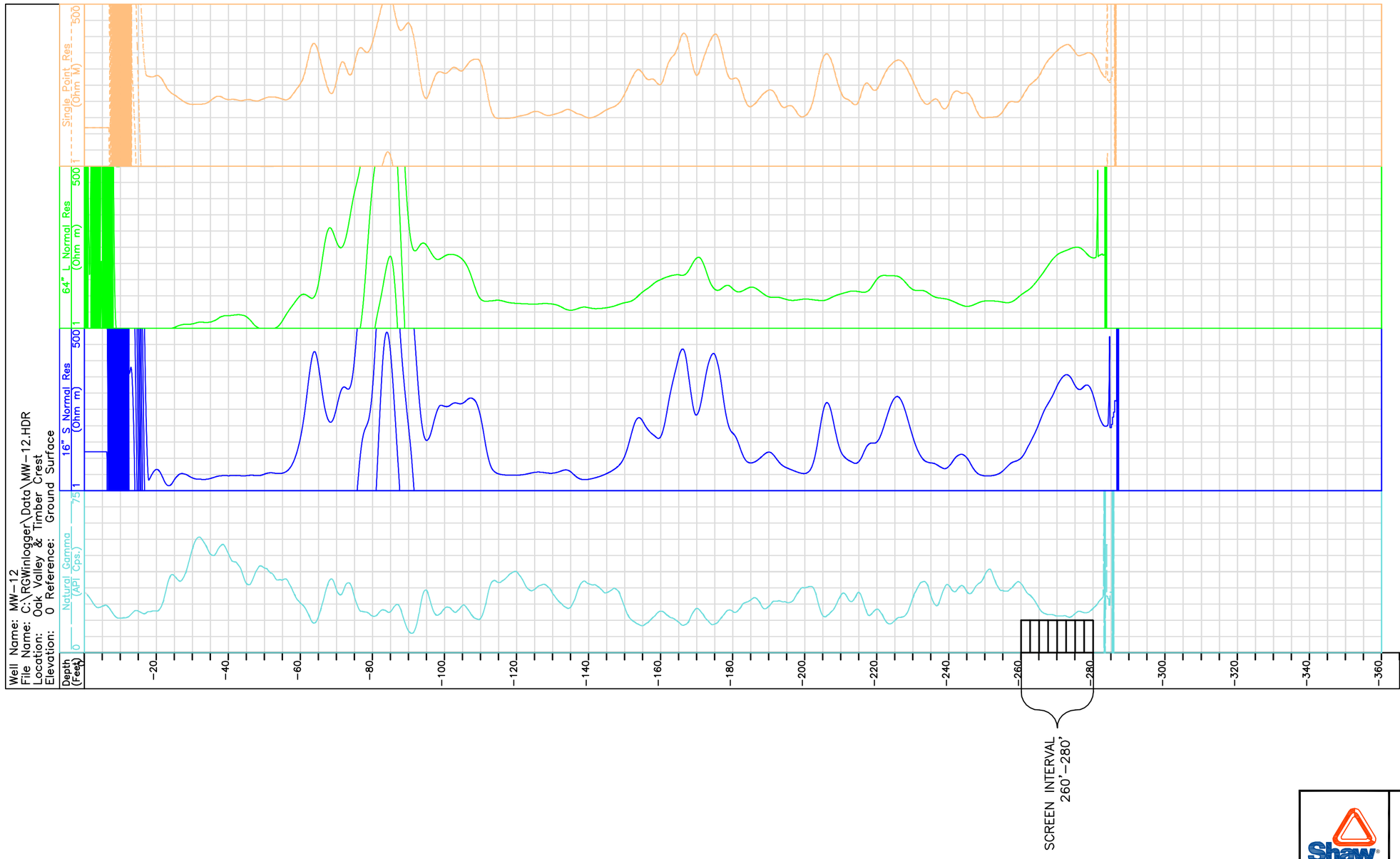
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

GEOPHYSICAL LOG
MONITOR WELL MW-11R

JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

IMAGE	X-REF	OFFICE	DRAWN BY	
---	---	*Houston, Texas*	*J. ROZ*	*12/06/05*

CHECKED BY	APPROVED BY	DRAWING NUMBER
		118429-B1



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

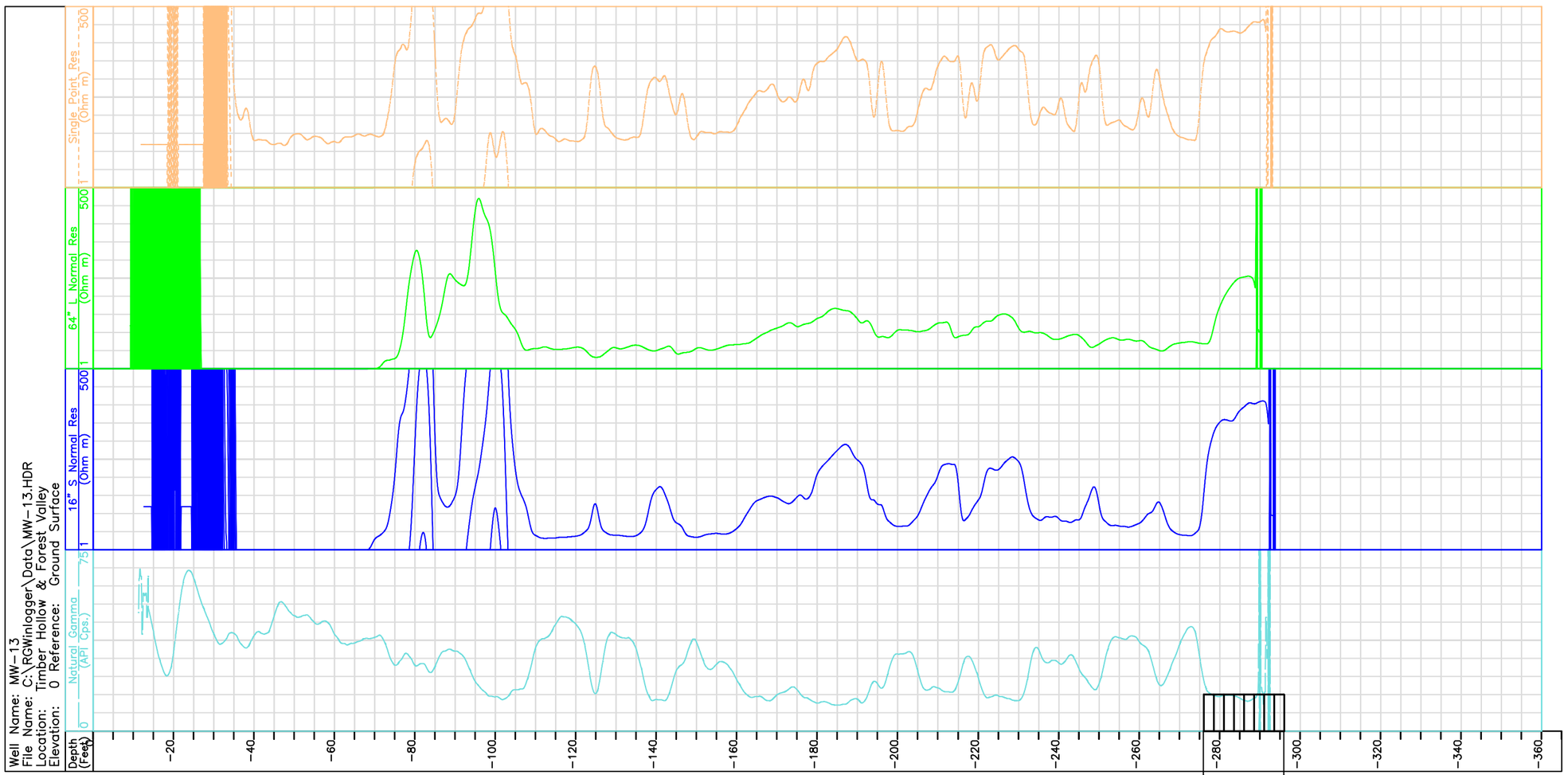
GEOPHYSICAL LOG
MONITOR WELL MW-12

JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

PLOT DATE: 12/13/05
FORMAT REVISION 3/25/99

IMAGE	X-REF	OFFICE	DRAWN BY	
---	---	*Houston, Texas*	*J. RDZ*	*12/06/05*

CHECKED BY	APPROVED BY	DRAWING NUMBER
		118429-B1



PLOT DATE: 12/13/05
FORMAT REVISION 3/25/99

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

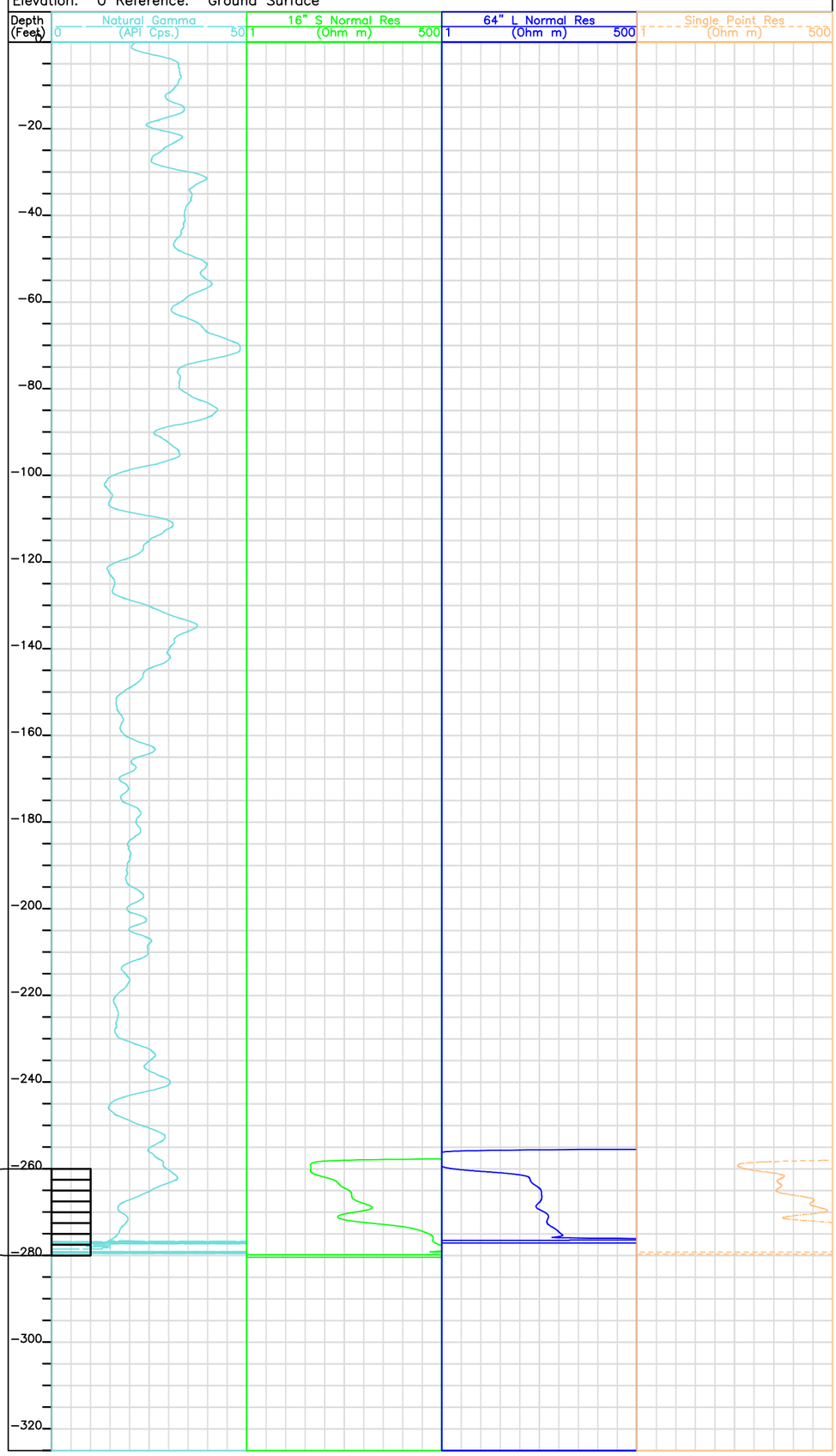
GEOPHYSICAL LOG
MONITOR WELL MW-13

JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

PLOT DATE: 12/13/05
FORMAT REVISION 3/25/99

IMAGE	X-REF	OFFICE	DRAWN BY		CHECKED BY		APPROVED BY		DRAWING NUMBER
---	---	*Houston, Texas*	*J. RDZ*	*12/06/05*					118429-B1

Well Name: MW-14
File Name: C:\RGWinlogger\Data\MW-14.HDR
Location: Mile Drive & Glenora
Elevation: 0 Reference: Ground Surface

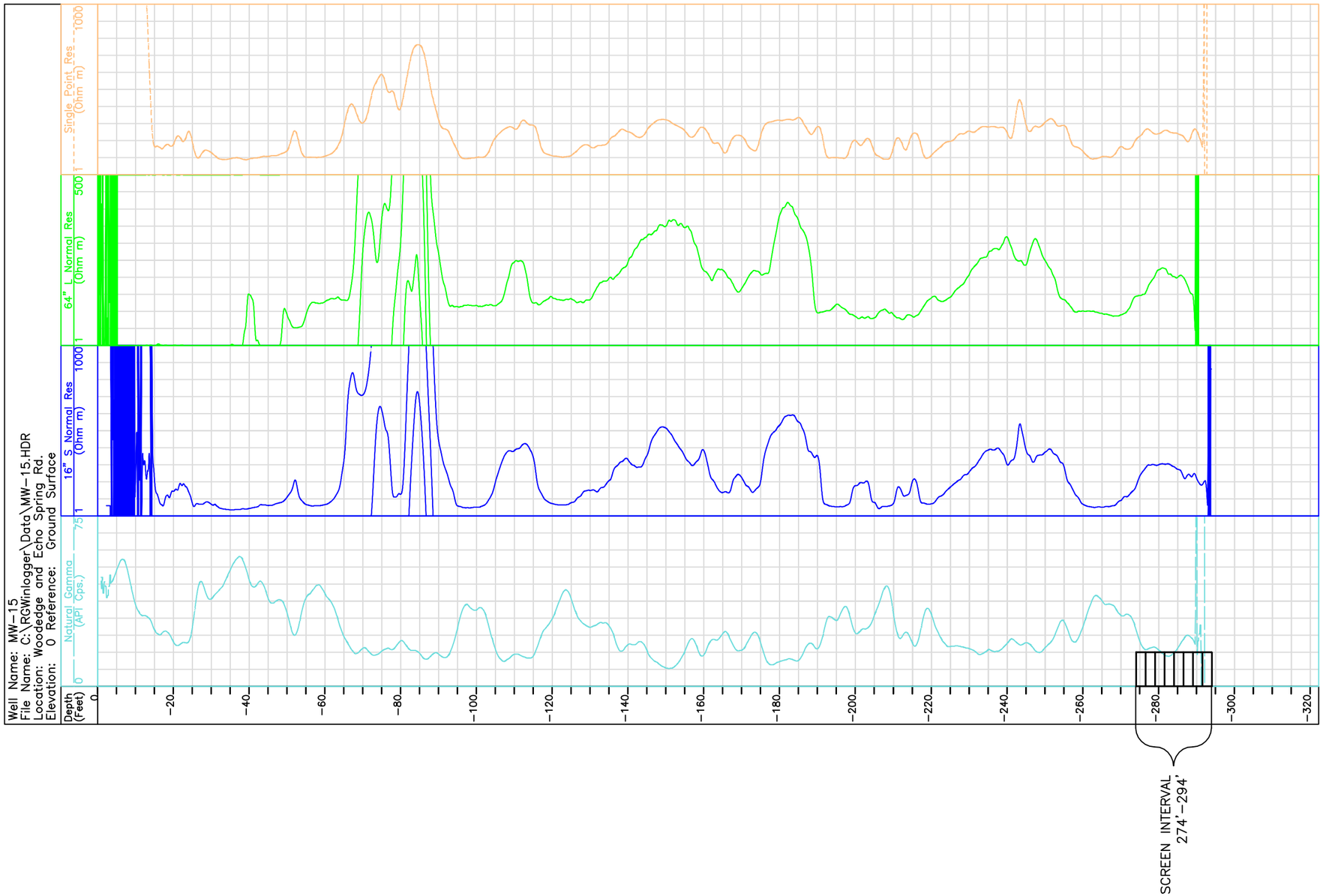


GEOPHYSICAL LOG
MONITOR WELL MW-14
JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

IMAGE	X-REF	OFFICE	DRAWN BY	
---	---	*Houston, Texas*	*J. ROZ*	*12/06/05*

CHECKED BY	APPROVED BY	DRAWING NUMBER
		118429-B1



PLOT DATE: 12/13/05
FORMAT REVISION 3/25/99

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

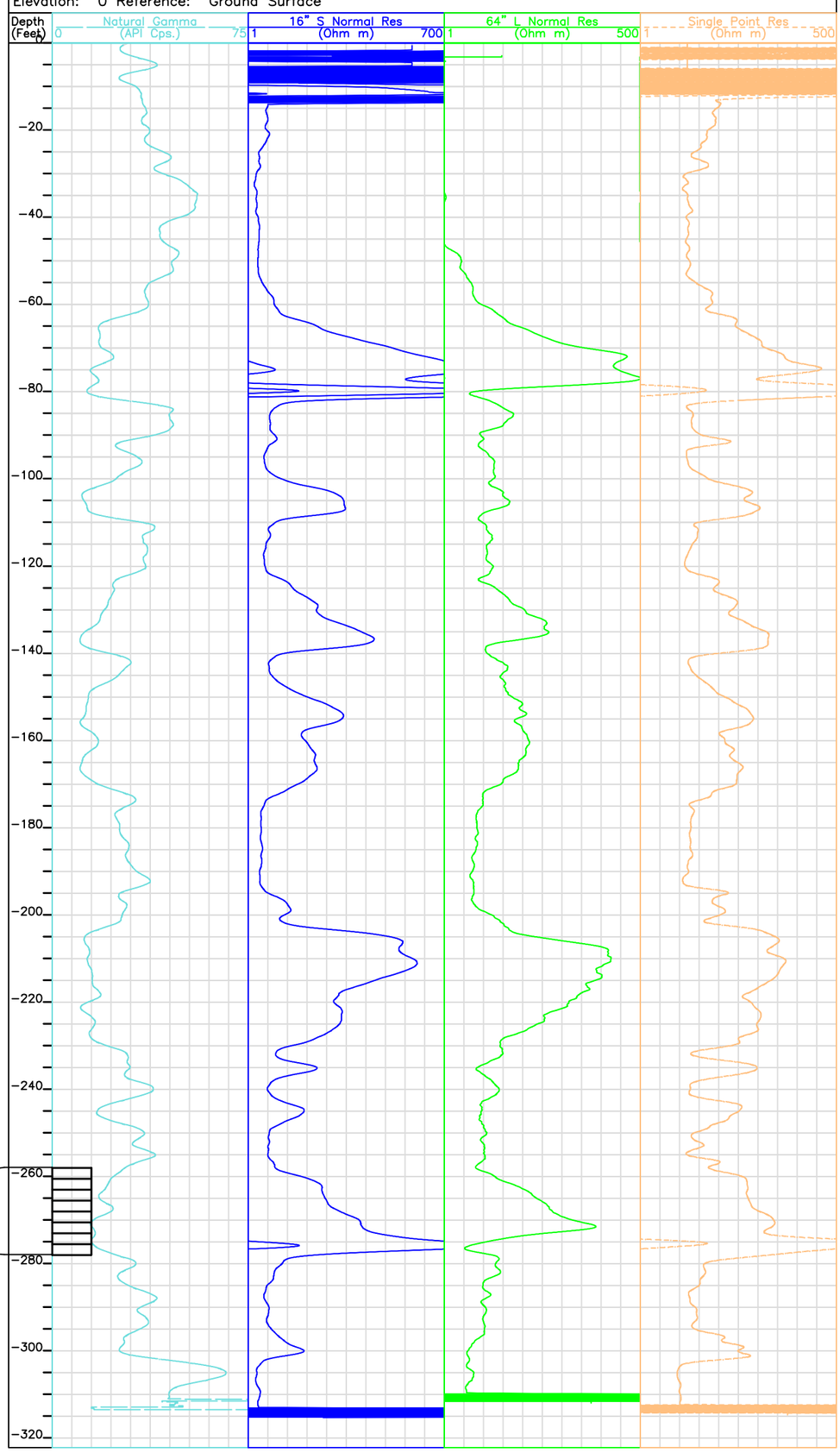
GEOPHYSICAL LOG
MONITOR WELL MW-15

JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

PLOT DATE: 12/13/05
FORMAT REVISION 3/25/99

IMAGE	X-REF	OFFICE	DRAWN BY		CHECKED BY		APPROVED BY		DRAWING NUMBER
---	---	*Houston, Texas*	*J. RDZ*	*12/06/05*					118429-B1

Well Name: MW-16
File Name: C:\RGWinlogger\Data\MW-16.HDR
Location: Jones Road & Woodedge
Elevation: 0 Reference: Ground Surface



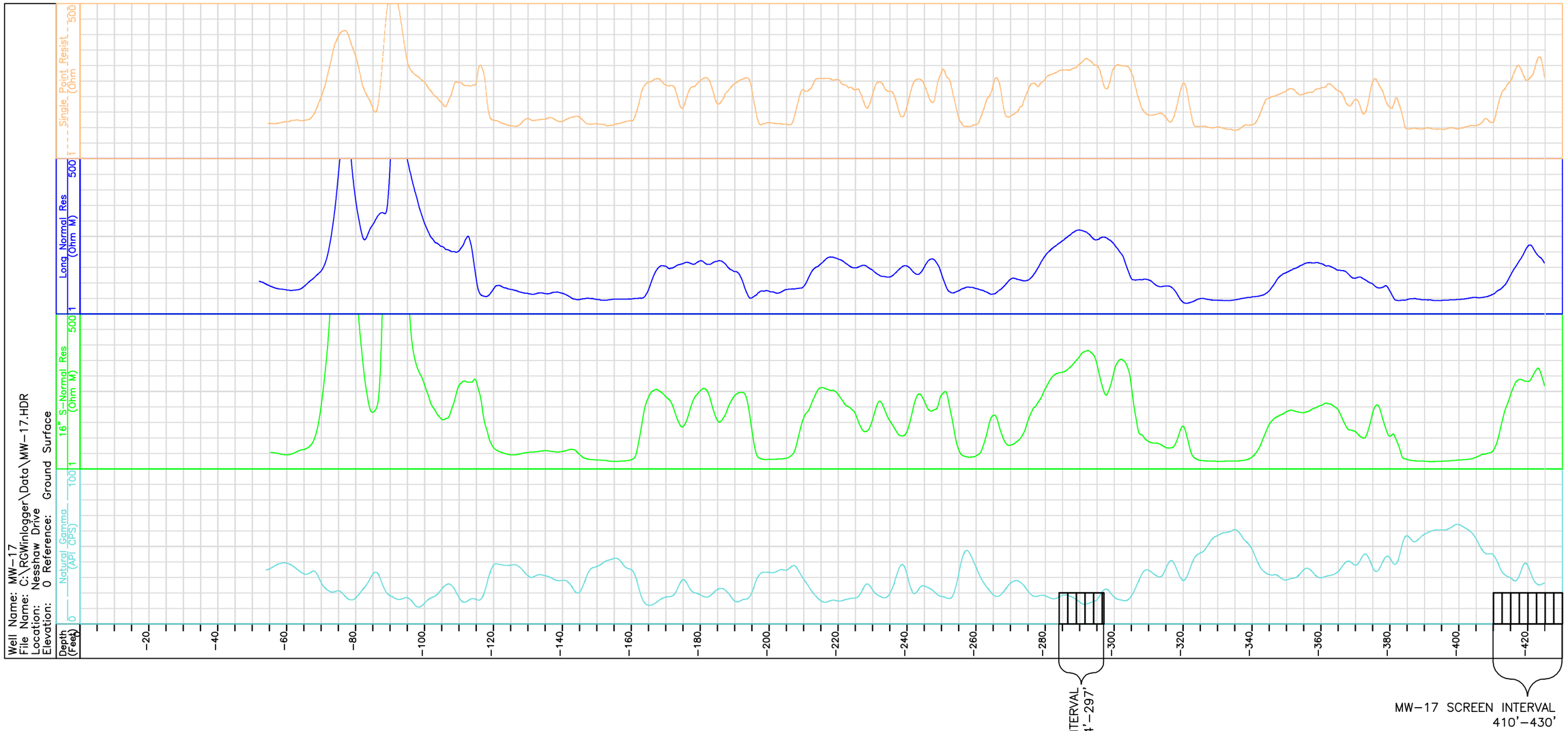
SCREEN INTERVAL
258'-278'

GEOPHYSICAL LOG
MONITOR WELL MW-16
JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

IMAGE	X-REF	OFFICE	DRAWN BY	
---	---	*Houston, Texas*	*J. RDZ*	*12/06/05*

CHECKED BY	APPROVED BY	DRAWING NUMBER
		118429-B1



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

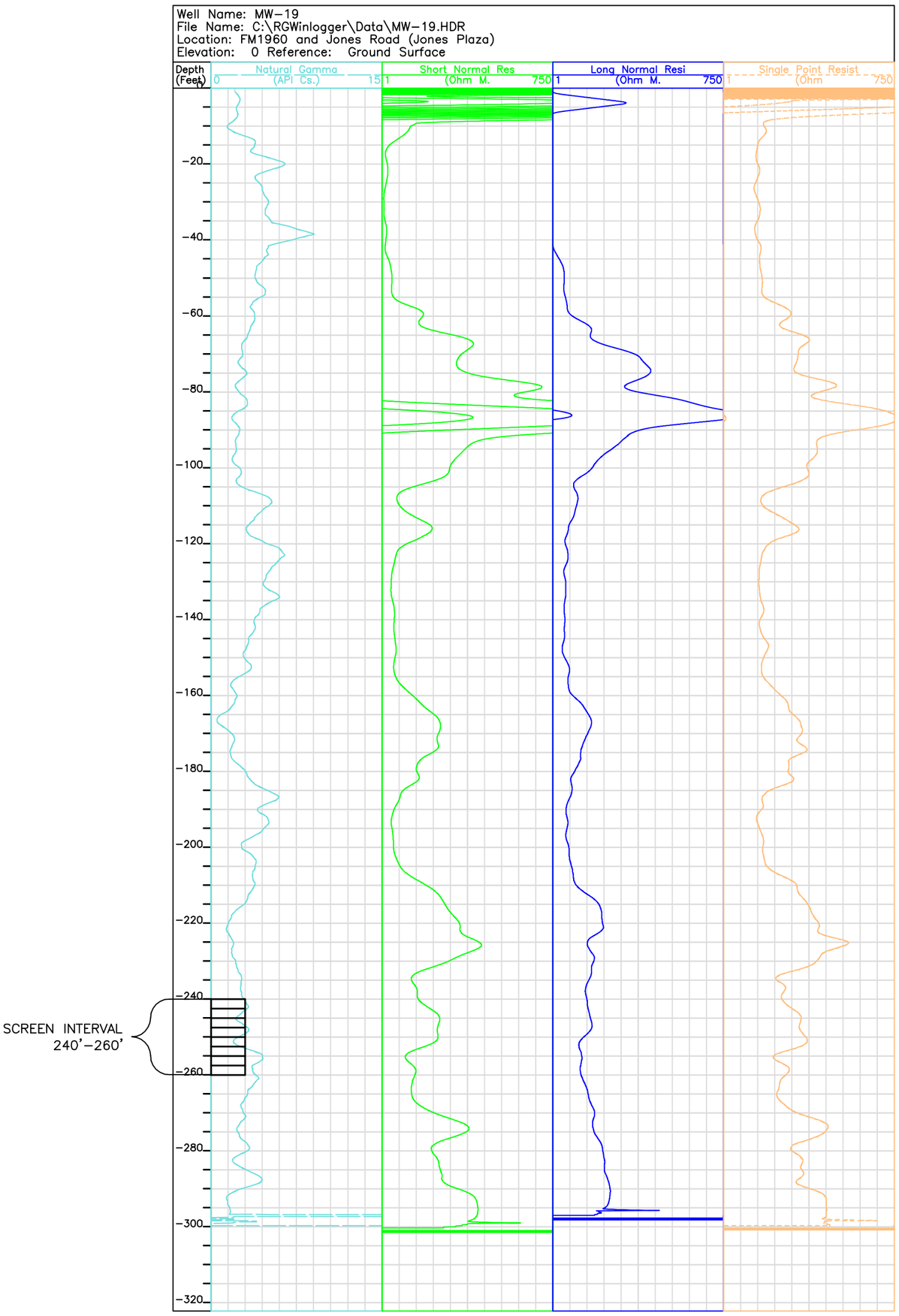
GEOPHYSICAL LOG MONITOR WELL MW-17/18

JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

PLOT DATE: 12/13/05
FORMAT REVISION 3/25/99

PLOT DATE: 12/13/05
FORMAT REVISION 3/25/99

IMAGE	X-REF	OFFICE	DRAWN BY		CHECKED BY		APPROVED BY		DRAWING NUMBER
---	---	*Houston, Texas*	*J. RDZ*	*12/06/05*					118429-B1



GEOPHYSICAL LOG
MONITOR WELL MW-19
JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

ATTACHMENT 6
MONITOR WELL COMPLETION
AS-BUILT DIAGRAMS

MW-10

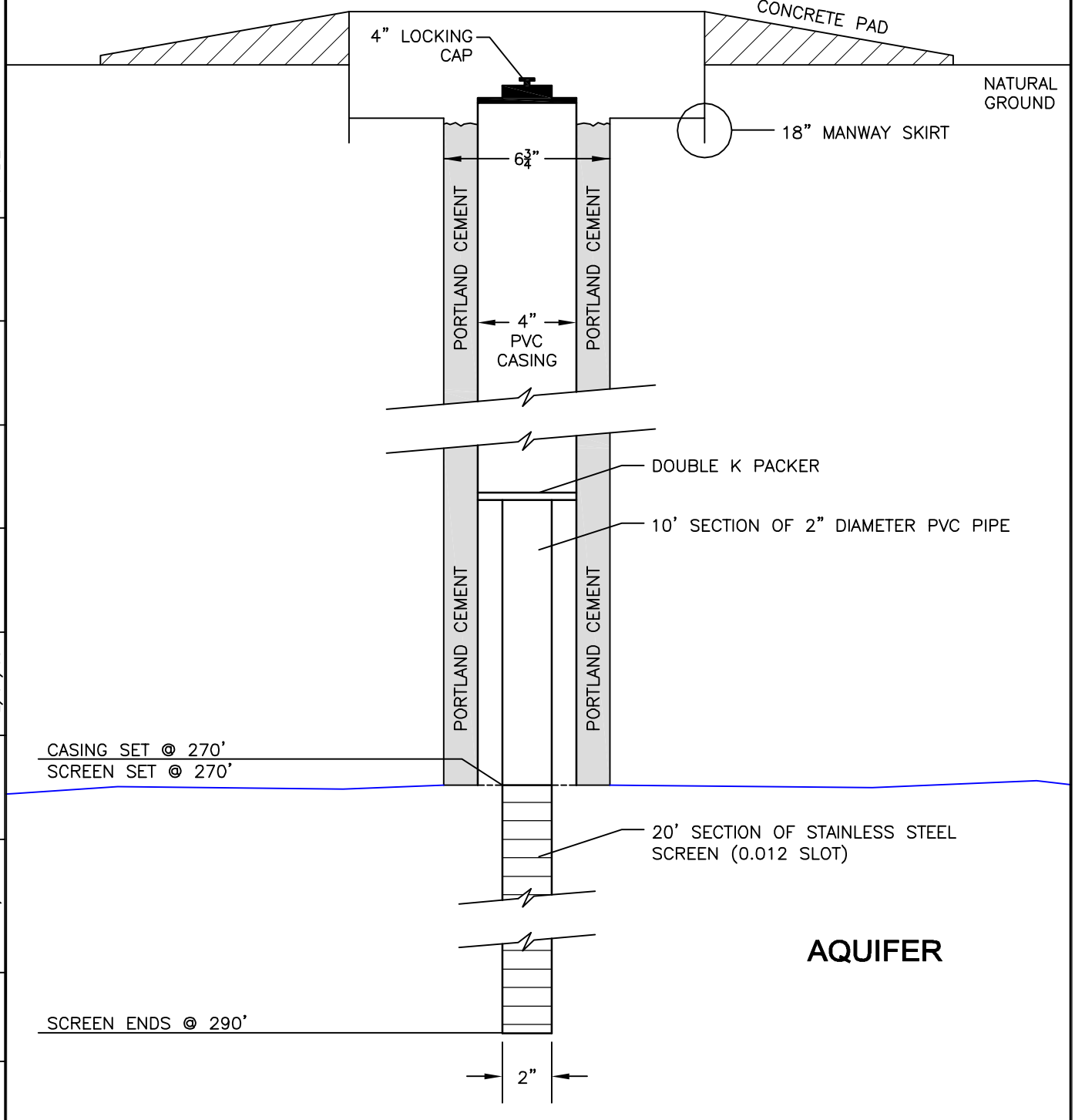


IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	Houston, Texas	J. RDZ 12/01/05	-- --	-- --	118429-A1

PLOT DATE: 12/13/05
MW-1MAT REVISION 3/25/99

"DRAWING NOT TO SCALE"

Shaw

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

MONITOR WELL MW-10
10860 TOWER OAKS BLVD
JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

MW-11R

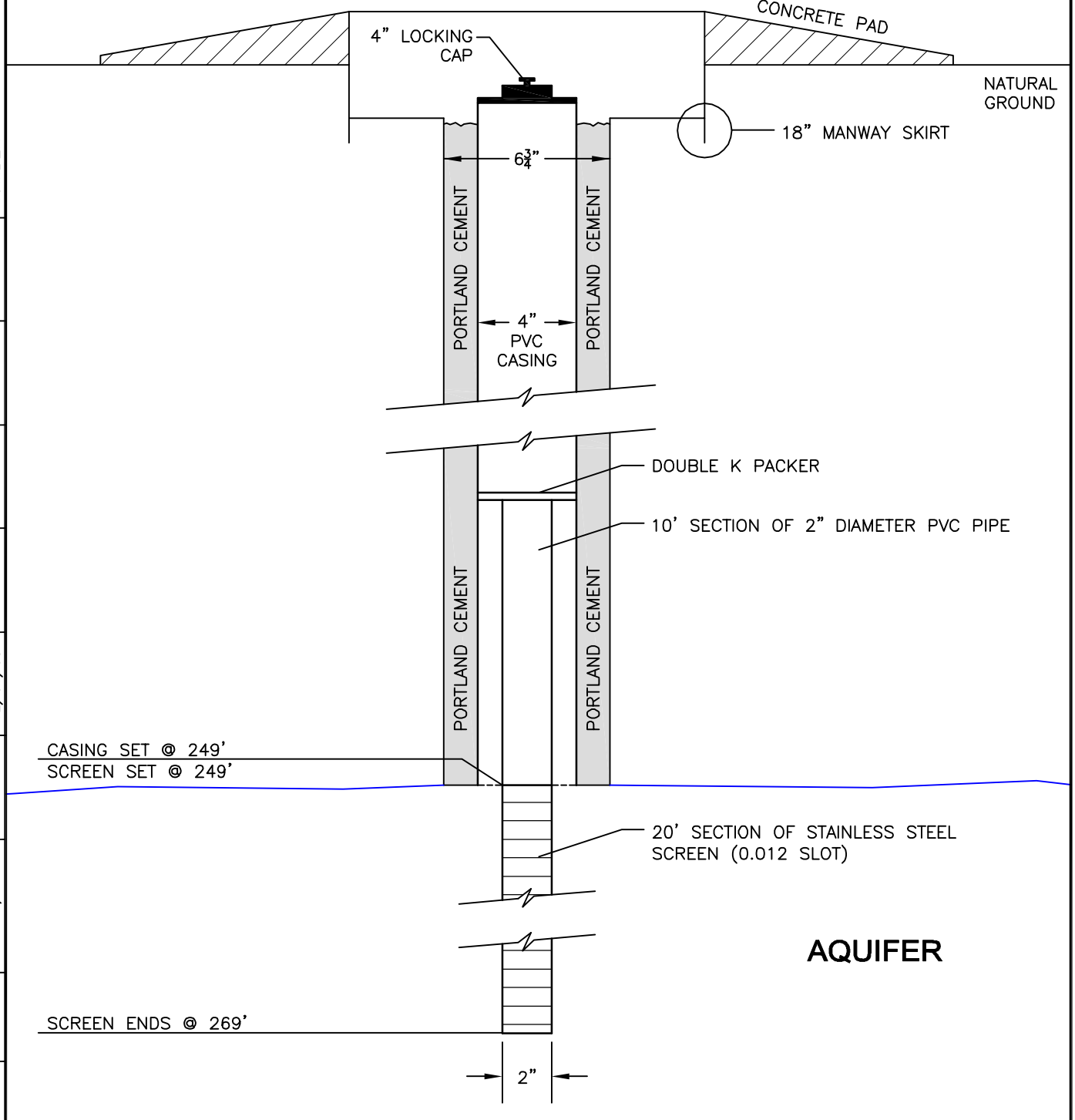


IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	Houston, Texas	J. RDZ 12/01/05	-- --	-- --	118429-A1

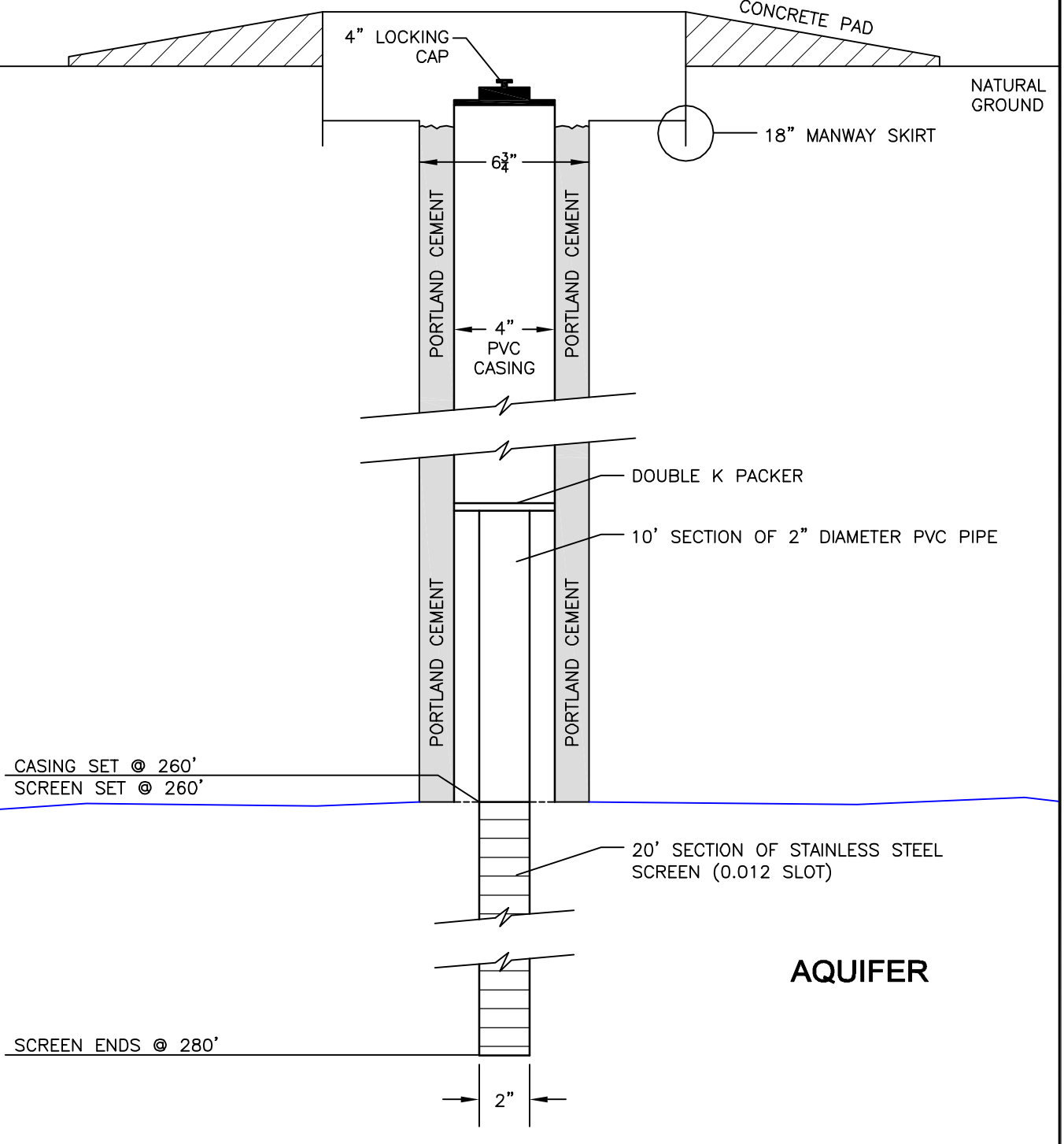
PLOT DATE: 12/13/05
MW-1MAT REVISION 3/25/99

"DRAWING NOT TO SCALE"

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

MONITOR WELL MW-11R
GLENORA @ FOXBURO
JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

MW-12



"DRAWING NOT TO SCALE"

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

MONITOR WELL MW-12
OAK VALLEY @ TIMBERCREST
JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	Houston, Texas	J. RDZ 12/01/05	-- --	-- --	118429-A1

PLOT DATE: 12/13/05
MW-1MAT REVISION 3/25/99

MW-13

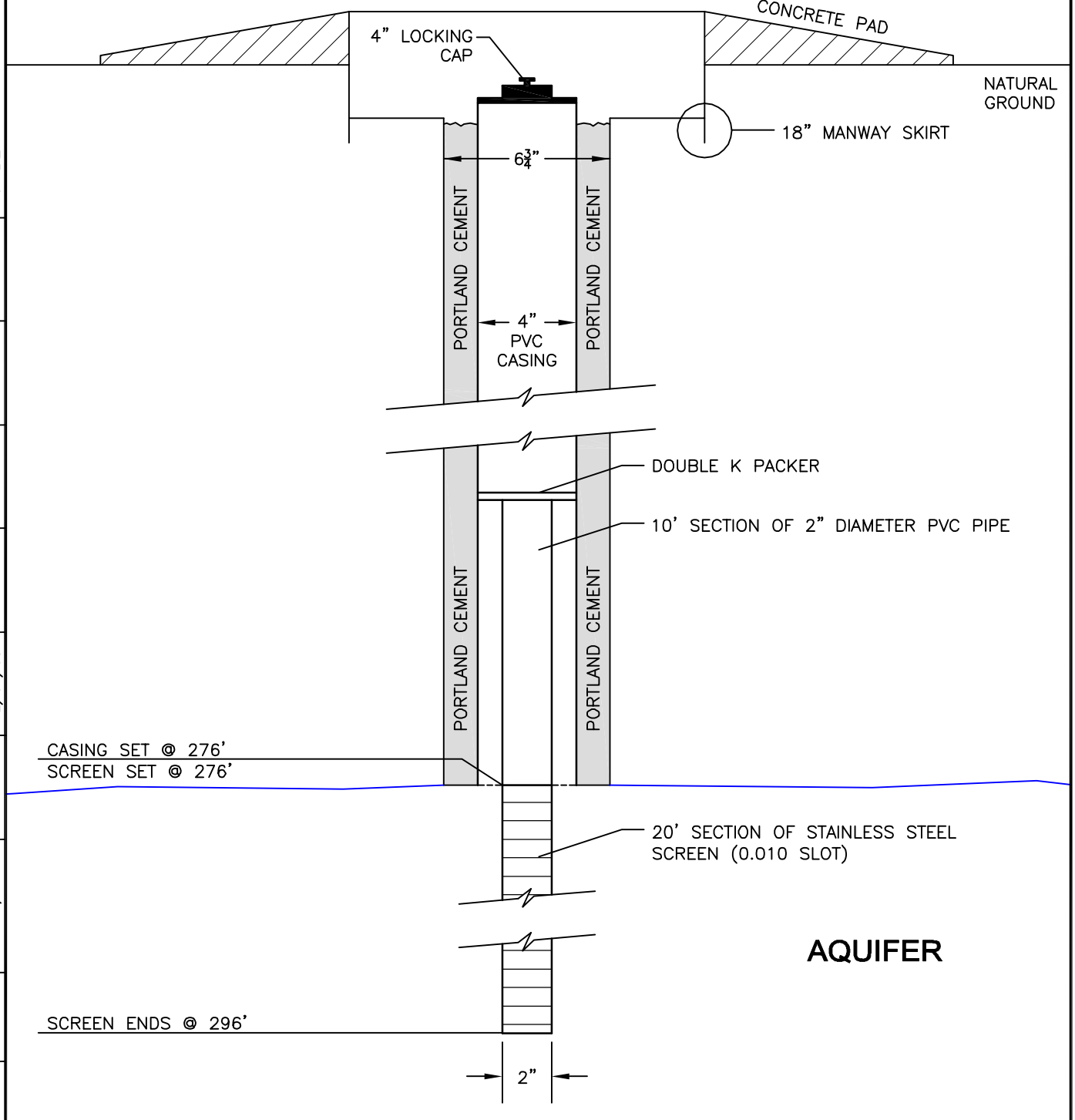


IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	Houston, Texas	J. RDZ 12/01/05	-- --	-- --	118429-A1

PLOT DATE: 12/13/05
MW-1MAT REVISION 3/25/99

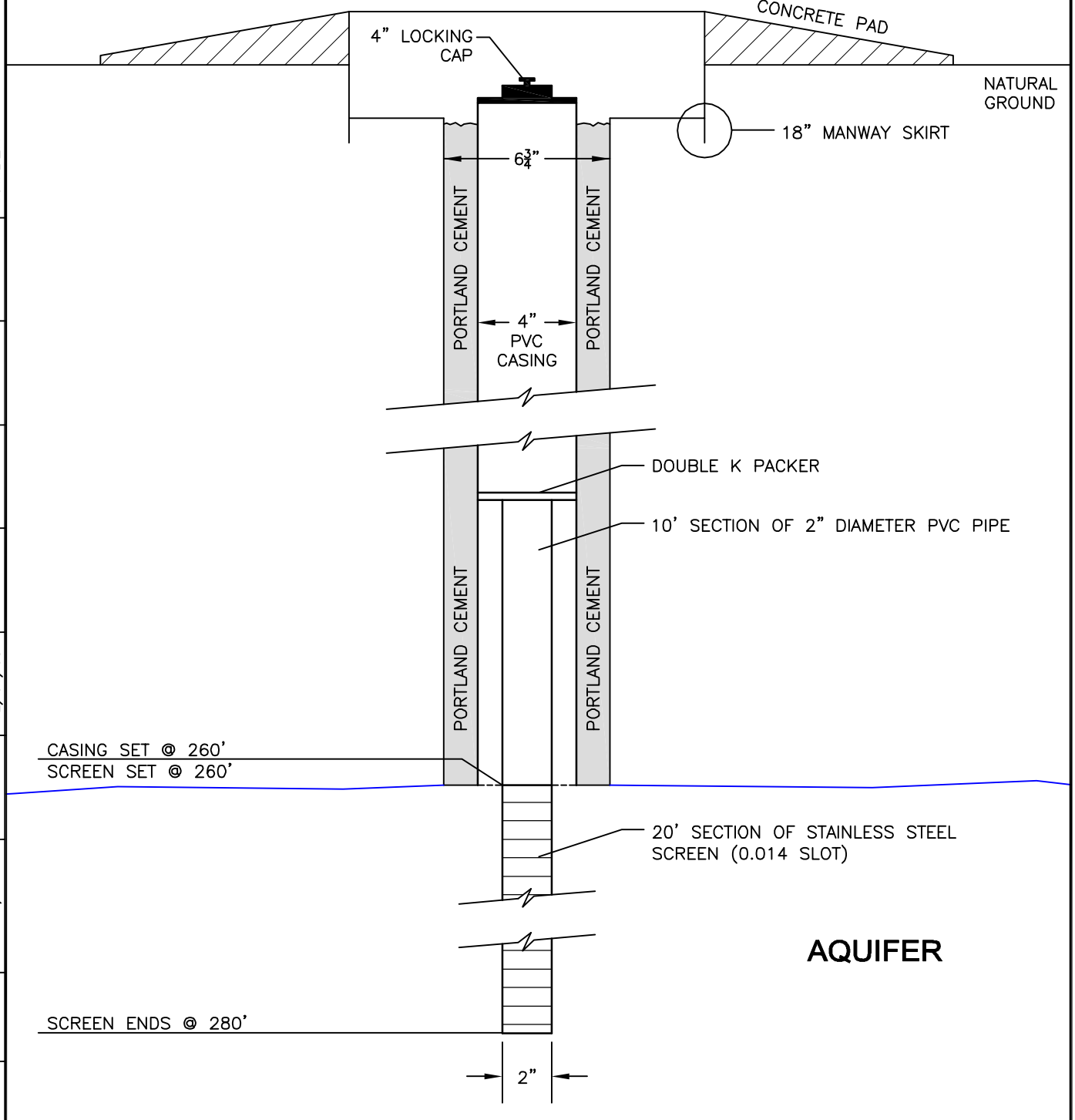
"DRAWING NOT TO SCALE"

Shaw

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

MONITOR WELL MW-13
TIMBER HOLLOW @ FOREST VALLEY
JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

MW-14



DRAWING NUMBER	APPROVED BY	CHECKED BY	DRAWN BY	OFFICE	X-REF	IMAGE
118429-A1	--	--	12/01/05	Houston, Texas	---	---
	--	--	J. RDZ			

PLOT DATE: 12/13/05
MW-1MAT REVISION 3/25/99

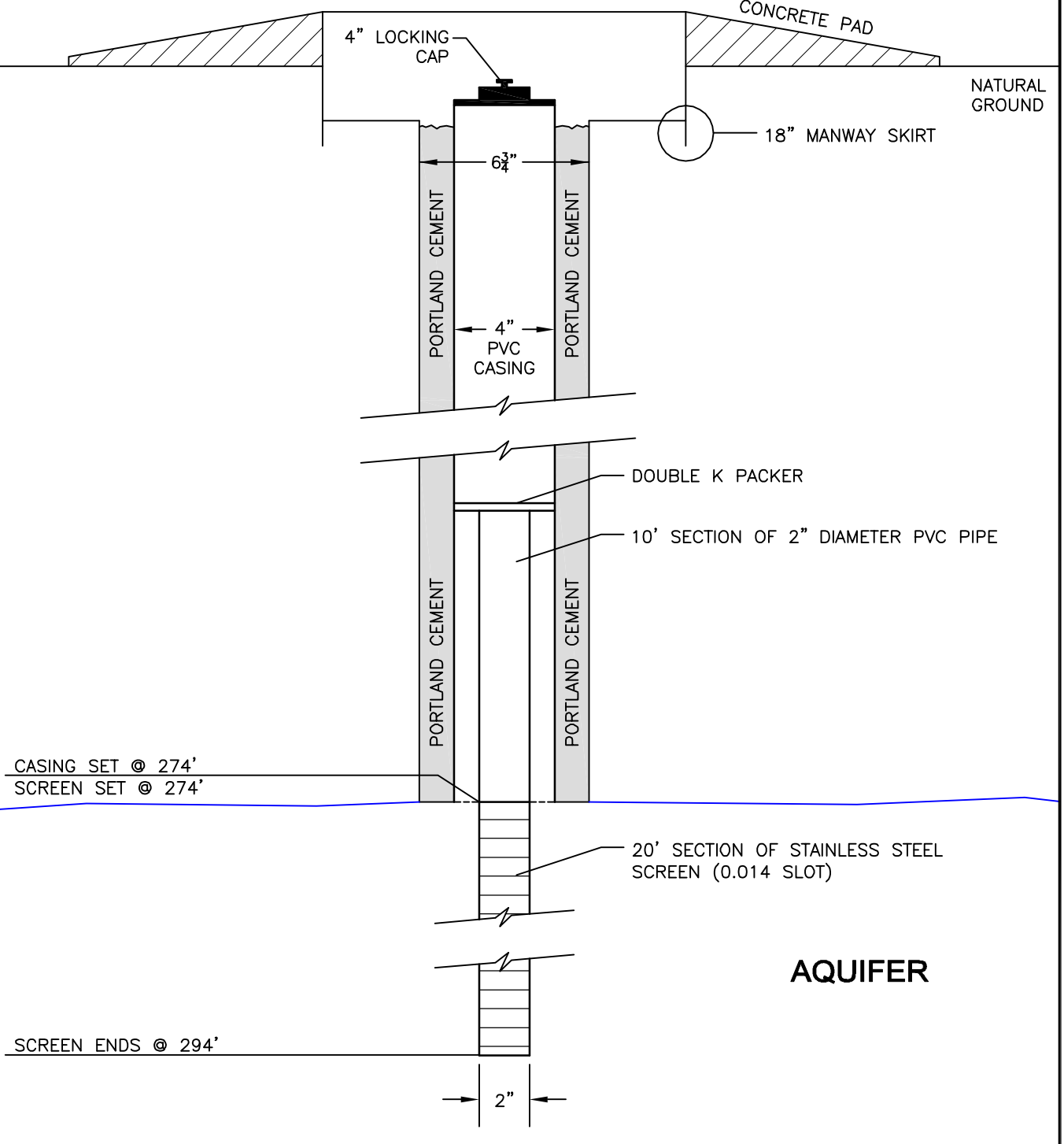
"DRAWING NOT TO SCALE"

Shaw

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

MONITOR WELL MW-14
MILE DRIVE @ GLENORA
JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

MW-15



"DRAWING NOT TO SCALE"

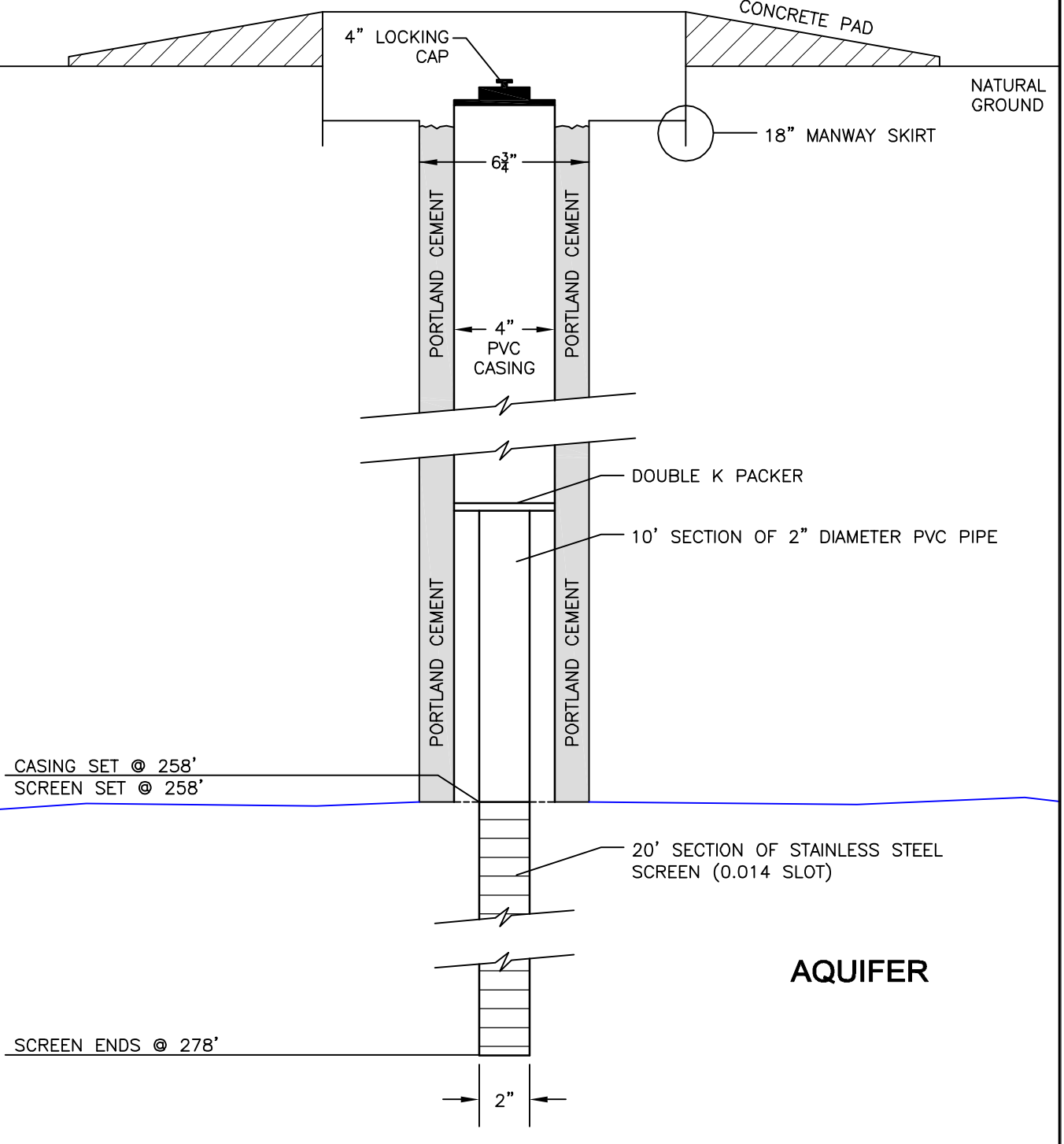
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

MONITOR WELL MW-15
WOODEDGE @ ECHO SPRING
JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	Houston, Texas	J. RDZ 12/01/05	-- --	-- --	118429-A1

PLOT DATE: 12/13/05
MW-1MAT REVISION 3/25/99

MW-16



DRAWING NUMBER	APPROVED BY	CHECKED BY	DRAWN BY	OFFICE	X-REF	IMAGE
118429-A1	--	--	J. RDZ 12/01/05	Houston, Texas	---	---

PLOT DATE: 12/13/05
MW-1MAT REVISION 3/25/99

"DRAWING NOT TO SCALE"

Shaw

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

MONITOR WELL MW-16
WOODEDGE @ JONES ROAD
JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

MW-17

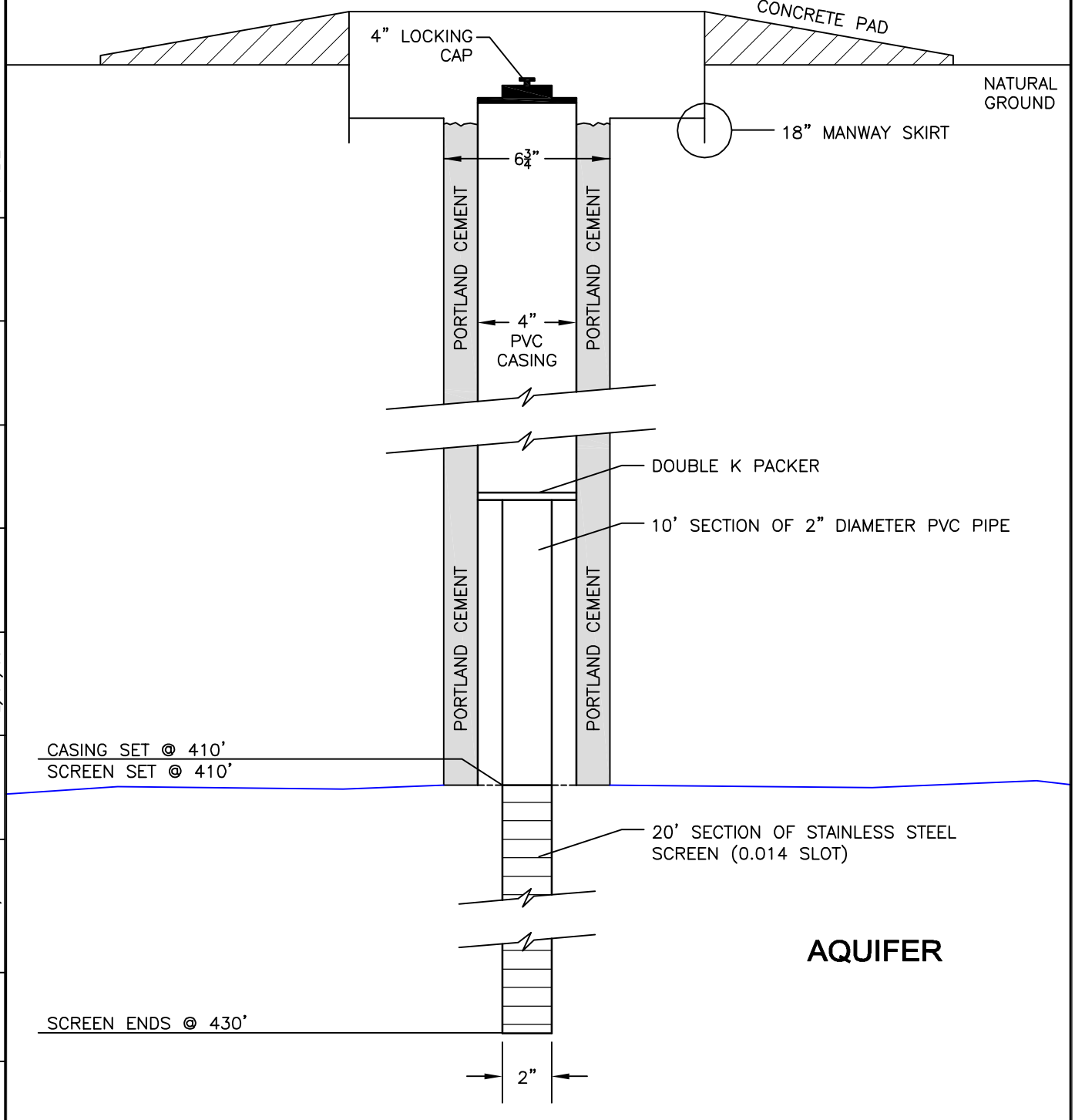


IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	Houston, Texas	J. RDZ 12/01/05	-- --	-- --	118429-A1

PLOT DATE: 12/13/05
MW-1MAT REVISION 3/25/99

"DRAWING NOT TO SCALE"

Shaw

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

MONITOR WELL MW-17
NEESHAW DRIVE
JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

MW-18

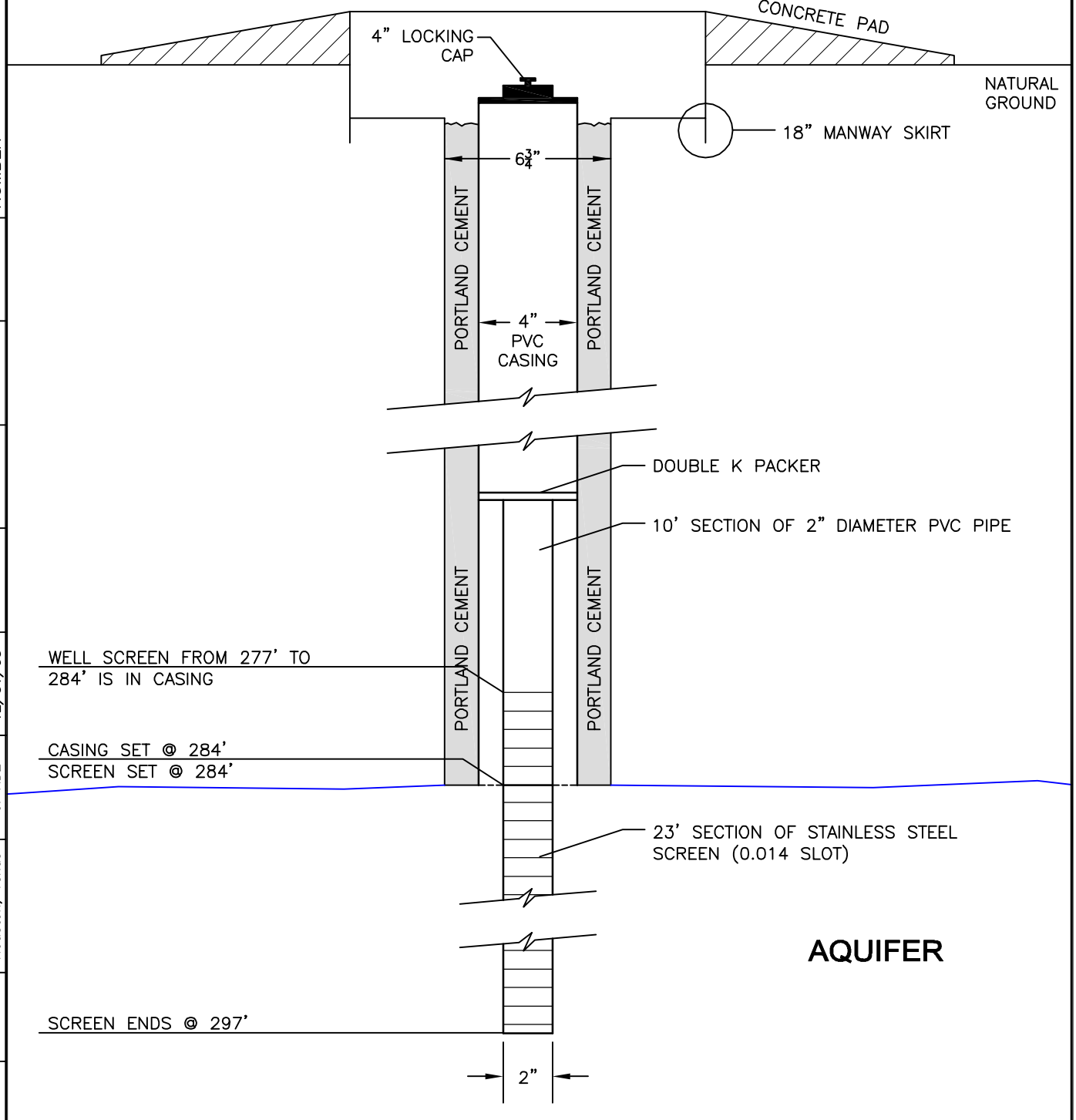


IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	*Houston, Texas*	*J. RDZ* 12/01/05	-- --	-- --	118429-A1

PLOT DATE: 12/13/05
MW-1MAT REVISION 3/25/99

"DRAWING NOT TO SCALE"

Shaw

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

MONITOR WELL MW-18
NEESHAW DRIVE
JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

MW-19

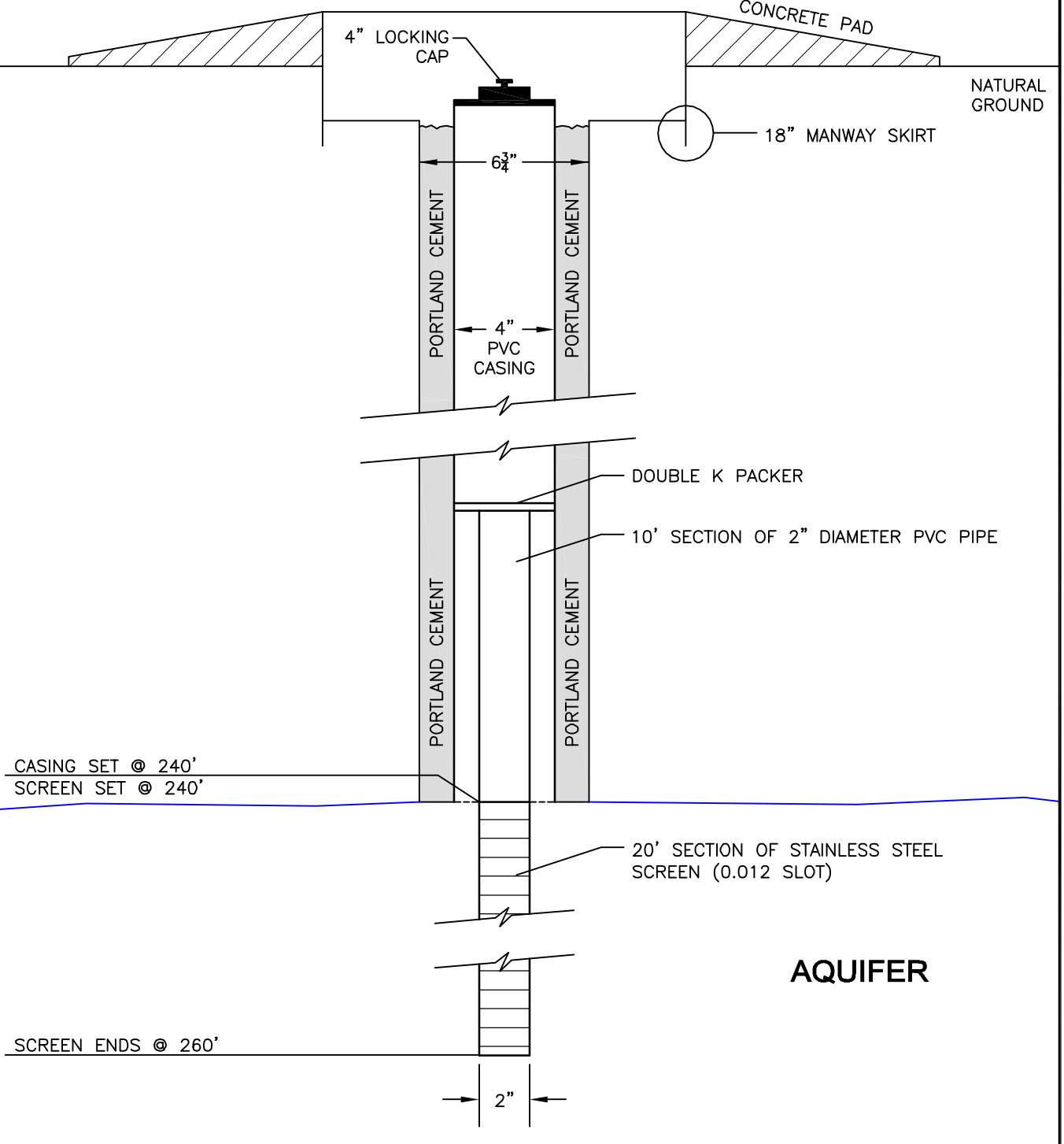


IMAGE	X-REF	OFFICE	DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
---	---	Houston, Texas	J. RDZ 12/01/05	-- --	-- --	118429-A1

PLOT DATE: 12/13/05
MW-1MAT REVISION 3/25/99

"DRAWING NOT TO SCALE"

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

MONITOR WELL MW-19 JONES PLAZA
FM 1960 AND JONES ROAD
JONES ROAD SUPERFUND SITE
HOUSTON, TEXAS

ATTACHMENT 7
STATE OF TEXAS WELL REPORTS
PLUGGING REPORTS

STATE OF TEXAS WELL REPORT for Tracking #69086

Owner:	**TCEQ**	Owner Well #:	**MW-10**
Address:	**MC-143, P.O. Box 13087 Austin , TX 78711**	Grid #:	**65-04-5**
Well Location:	**10860 Tower Oaks Houston , TX 77064**	Latitude:	**29° 56' 23" N**
Well County:	**Harris**	Longitude:	**095° 34' 58" W**
Elevation:	**No Data**	GPS Brand Used:	**Taken from Topo Map**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date: Started: **7/6/2005**
Completed: **7/7/2005**

Diameter of Hole: Diameter: **6 3/4 in From Surface To 270 ft**
Diameter: **3 7/8 in From 270 ft To 342 ft**

Drilling Method: **Mud Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data: 1st Interval: **From 0 ft to 270 ft with 24 Portland/Gel (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **Pressure Grout**
Cemented By: **Bussell & Son Water Wells**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion: **Surface Slab Installed**

Water Level: Static level: **148.91 ft. below land surface on 8/8/2005**
Artesian flow: **No Data**

Packers: **2 1/2"x4" Double K-Packer 259-260**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **Jet**
Depth to pump bowl: **(No Data) ft**

Well Tests: **Jetted \ Estimated**
Yield: **25 GPM with 25 ft drawdown after 1 hour**

Water Quality: Type of Water: **No Data**
Depth of Strata: **267-296 ft.**
Chemical Analysis Made: **No Data**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information: **Best Drilling Services**
P.O. Box 845
Friendswood , TX 77549

Driller License Number:	**2443**
Licensed Well Driller Signature:	**Charles F. Smith**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**Amended 10/19/05 Ref.#2391**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking #**69086**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0-22 Clay
22-25 Sand
25-65 Clay
65-93 Sand
63-94 Clay
94-110 Sand
110-112 Clay
112-130 Sand
130-133 Clay
133-145 Sand
145-159 Clay
159-196 Sand
196-224 Clay
224-250 Sand
250-267 Clay
267-296 Sand
296-309 Clay
309-323 Sand
323-332 Clay
332-333 Sand
333-342 Clay

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4 New PVC 0/270 Sch. 40
2 1/2 New PVC 259/270 Sch. 40
2 1/2 New Rod Based Stainless Steel 270/290 0.012

STATE OF TEXAS WELL REPORT for Tracking #69109

Owner:	**TCEQ**	Owner Well #:	**MW-11**
Address:	**MC-143, P.O. Box 13087 Austin , TX 78711**	Grid #:	**65-04-4**
Well Location:	**Glenora & Foxburo Houston , TX 77065**	Latitude:	**29° 56' 08" N**
Well County:	**Harris**	Longitude:	**095° 35' 38" W**
Elevation:	**No Data**	GPS Brand Used:	**Taken from Topo Map**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date: Started: **7/8/2005**
Completed: **7/10/2005**

Diameter of Hole: Diameter: **6 3/4 in From Surface To 254 ft**
Diameter: **3 7/8 in From 254 ft To 292 ft**

Drilling Method: **Mud Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data: 1st Interval: **From 0 ft to 254 ft with 24 Portland/Gel (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **Pressure Grout**
Cemented By: **Bussell & Son Water Wells**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion: **No Data**

Water Level: Static level: **No Data**
Artesian flow: **No Data**

Packers: **2 1/2"x4" Double K-Packer 243-244**

Plugging Info: Casing left in well: Cement/Bentonite left in well:
From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used
2-253 0-240 Portland/Bentonite Mix - 12 Sacks

Type Of Pump: **No Data**

Well Tests: **No Data**

Water Quality: Type of Water: **No Data**
Depth of Strata: **263-289 ft.**
Chemical Analysis Made: **No Data**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information: **Best Drilling Services**
P.O. Box 845
Friendswood , TX 77549

Driller License Number:	**2443**
Licensed Well Driller Signature:	**Charles F. Smith**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**Casing failure during development. Well was plugged on 08/25/05 by Bussell & Son Water Wells.**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking #**69109**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0-28 Clay
28-32 Sand
32-75 Clay
75-109 Sand
109-147 Clay
147-150 Sand
150-161 Clay
161-180 Sand
180-186 Sand Stone
186-200 Sand
200-215 Clay
215-229 Sand
229-231 Clay
231-251 Sand
251-263 Clay
263-265 Sand
265-277 Clay
277-281 Sand
281-285 Clay
285-289 Sand
289-292 Clay

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4 New PVC/Certilock 0/254 Sch. 40
2 1/2 New PVC 243/254 Sch. 40
2 1/2 New Rod Based Stainless Steel 254/274 0.012

STATE OF TEXAS WELL REPORT for Tracking #71443

Owner:	**TCEQ**	Owner Well #:	**MW-11R**
Address:	**MC-143, P.O. Box 13087 Austin , TX 78711**	Grid #:	**65-04-4**
Well Location:	**Glenora & Foxburo Houston , TX 77065**	Latitude:	**29° 56' 11" N**
Well County:	**Harris**	Longitude:	**095° 35' 39" W**
Elevation:	**No Data**	GPS Brand Used:	**Garmin E-Trex**
Type of Work:	**Replacement Well**	Proposed Use:	**Monitor**

Drilling Date: Started: **10/31/2005**
Completed: **11/1/2005**

Diameter of Hole: Diameter: **6 3/4 in From Surface To 249 ft**
Diameter: **3 7/8 in From 249 ft To 269 ft**

Drilling Method: **Mud Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data: 1st Interval: **From 0 ft to 249 ft with 24 Portland/Gel (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **Pressure Grout**
Cemented By: **Bussell & Son Water Wells**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion: **Surface Slab Installed**

Water Level: Static level: **150.25' ft. below land surface on 11/7/2005**
Artesian flow: **No Data**

Packers: **2 1/2"x4" Double K-Packer 238-239**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **No Data**

Well Tests: **Jetted \ Estimated**
Yield: **25 GPM with 25 ft drawdown after 1 hour**

Water Quality: Type of Water: **No Data**
Depth of Strata: **252-284 ft.**
Chemical Analysis Made: **No Data**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information: **Best Drilling Services**
P.O. Box 845
Friendswood , TX 77549

Driller License **2443**

Number:

Licensed Well Driller Signature: **Charles F. Smith**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **Amended 11/30/05 Ref.#2631**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking #**71443**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0-33 Reddish Brown Clay
33-35 Sandstone
35-70 Light Gray to Brown Clay
70-117 Yellowish Brown Fine Grained Sand
117-124 Reddish Brown Clay
124-126 Reddish Brown Sand
126-158 Light Brown Clay
158-197 Yellowish Brown V. Fine Grained Sand
197-225 Light Brown Clay
225-243 Sand
243-252 Clay
252-284 Light Brown Fine Grained Sand
284-295 Clay

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4 New PVC/Certilock 0/249 Sch. 40
2 1/2 New PVC 238-249 Sch. 40
2 1/2 New Rod Based Stainless Steel 249/269 0.012

STATE OF TEXAS WELL REPORT for Tracking #69087

Owner:	**TCEQ**	Owner Well #:	**MW-12**
Address:	**MC-143, P.O. Box 13087 Austin , TX 78711**	Grid #:	**65-04-4**
Well Location:	**Oak Valley and Timber Crest Houston , TX 77064**	Latitude:	**29° 56' 22" N**
Well County:	**Harris**	Longitude:	**095° 35' 33" W**
Elevation:	**No Data**	GPS Brand Used:	**Taken from Topo Map**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date: Started: **7/12/2005**
Completed: **7/14/2005**

Diameter of Hole: Diameter: **6 3/4 in From Surface To 260 ft**
Diameter: **3 7/8 in From 260 ft To 301 ft**

Drilling Method: **Mud Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data: 1st Interval: **From 0 ft to 260 ft with 24 Portland/Gel (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **Pressure Grout**
Cemented By: **Bussell & Son Water Wells**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion: **Surface Slab Installed**

Water Level: Static level: **146.79 ft. below land surface on 8/4/2005**
Artesian flow: **No Data**

Packers: **2 1/2"x4" Double K-Packer 249-250**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **No Data**

Well Tests: **Jetted \ Estimated**
Yield: **25 GPM with 25 ft drawdown after 1 hour**

Water Quality: Type of Water: **No Data**
Depth of Strata: **266-301 ft.**
Chemical Analysis Made: **No Data**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information: **Best Drilling Services**
P.O. Box 845
Friendswood , TX 77549

Driller License **2443**

Number:

Licensed Well Driller Signature: **Charles F. Smith**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **Amended 10/19/05 Ref.#2392**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking #**69087**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0-10 Clay
10-24 Clay & Sand
24-49 Sand
49-53 Clay
53-54 Sand
54-71 Clay
71-122 Sand
122-133 Clay
133-140 Sand
140-142 Clay
142-147 Sand
147-155 Clay
155-171 Sand
171-183 Sand Stone
183-193 Clay
193-209 Sand & Clay
209-225 Sand
225-227 Clay
227-247 Sand
247-253 Clay
253-262 Sand
262-266 Clay
266-301 Sand

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4 New PVC/Certilock 0/260 Sch. 40
2 1/2 New PVC 249/260 Sch. 40
2 1/2 New Rod Based Stainless Steel 260/280 0.012

STATE OF TEXAS WELL REPORT for Tracking #69089

Owner:	**TCEQ**	Owner Well #:	**MW-13**
Address:	**MC-143, P.O. Box 13087 Austin , TX 78711**	Grid #:	**65-04-4**
Well Location:	**Forest Valley & Timber Hollow Houston , TX 77065**	Latitude:	**29° 56' 31" N**
Well County:	**Harris**	Longitude:	**095° 35' 21" W**
Elevation:	**No Data**	GPS Brand Used:	**Taken from Topo Map**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date: Started: **7/17/2005**
Completed: **7/19/2005**

Diameter of Hole: Diameter: **6 3/4 in From Surface To 276 ft**
Diameter: **3 7/8 in From 276 ft To 296 ft**

Drilling Method: **Mud Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data: 1st Interval: **From 0 ft to 276 ft with 25 Portland/Gel (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **Pressure Grout**
Cemented By: **Bussell & Son Water Wells**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion: **Surface Slab Installed**

Water Level: Static level: **145.40 ft. below land surface on 8/4/2005**
Artesian flow: **No Data**

Packers: **2 1/2"x4" Double K-Packer 265-266**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **No Data**

Well Tests: **Jetted \ Estimated**
Yield: **25 GPM with 25 ft drawdown after 1 hour**

Water Quality: Type of Water: **No Data**
Depth of Strata: **270-300 ft.**
Chemical Analysis Made: **No Data**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information: **Best Drilling Services**
P.O. Box 845
Friendswood , TX 77549

Driller License **2443**

Number:

Licensed Well Driller Signature: **Charles F. Smith**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **Amended 11/30/05 Ref.#2629**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking #**69089**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0-30 Clay
30-37 Sand
37-68 Clay
68-104 Sand
104-119 Clay
119-120 Sand
120-133 Clay
133-143 Sand
143-157 Clay
157-193 Sand
193-200 Clay
200-209 Sand
209-214 Sand Stone
214-215 Clay
215-235 Sand
235-270 Interbedded Sand & Clay
270-290 Sand
290-290 Clay
292-300 Sand

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4 New PVC/Certilock 0/276 Sch. 40
2 1/2 New PVC 265/276 Sch. 40
2 1/2 New Rod Based Stainless Steel 276/296 0.010

STATE OF TEXAS WELL REPORT for Tracking #69091

Owner:	**TCEQ**	Owner Well #:	**MW-14**
Address:	**MC-143, P.O. Box 13087 Austin , TX 78711**	Grid #:	**65-04-4**
Well Location:	**Glenora St. & Mile Dr. Houston , TX 77065**	Latitude:	**29° 56' 39" N**
Well County:	**Harris**	Longitude:	**095° 35' 38" W**
Elevation:	**No Data**	GPS Brand Used:	**Taken from Topo Map**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date: Started: **7/19/2005**
Completed: **7/22/2005**

Diameter of Hole: Diameter: **6 3/4 in From Surface To 260 ft**
Diameter: **3 7/8 in From 260 ft To 294 ft**

Drilling Method: **Mud Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data: 1st Interval: **From 0 ft to 260 ft with 24 Portland/Gel (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **Pressure Grout**
Cemented By: **Bussell & Son Water Wells**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion: **Surface Slab Installed**

Water Level: Static level: **141.92 ft. below land surface on 8/5/2005**
Artesian flow: **No Data**

Packers: **2 1/2"x4" Double K-Packer 249-250**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **No Data**

Well Tests: **Jetted \ Estimated**
Yield: **30 GPM with 25 ft drawdown after 1 hour**

Water Quality: Type of Water: **No Data**
Depth of Strata: **196-284 ft.**
Chemical Analysis Made: **No Data**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information: **Best Drilling Services**
P.O. Box 845
Friendswood , TX 77549

Driller License **2443**

Number:

Licensed Well Driller Signature: **Charles F. Smith**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **Amended 11/30/05 Ref.#2628**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking #**69091**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0-15 Clay
15-19 Sand
19-110 Clay
110-120 Sand
120-140 Clay
140-143 Sand
143-150 Clay
150-168 Sand
168-169 Sand Stone
169-185 Sand
185-196 Clay
196-244 Sand
244-245 Clay
245-284 Sand
284-294 Clay

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4 New PVC/Certilock 0/260 Sch. 40
2 1/2 New PVC 249/260 Sch. 40
2 1/2 New Rod Based Stainless Steel 260/280 0.014

STATE OF TEXAS WELL REPORT for Tracking #69095

Owner:	**TCEQ**	Owner Well #:	**MW-15**
Address:	**MC-143, P.O. Box 13087 Austin , TX 78711**	Grid #:	**65-04-4**
Well Location:	**Echo Spring & Woodedge. Houston , TX 77065**	Latitude:	**29° 56' 42" N**
Well County:	**Harris**	Longitude:	**095° 35' 13" W**
Elevation:	**No Data**	GPS Brand Used:	**Taken from Topo Map**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date: Started: **7/25/2005**
Completed: **7/26/2005**

Diameter of Hole: Diameter: **6 3/4 in From Surface To 274 ft**
Diameter: **3 7/8 in From 274 ft To 305 ft**

Drilling Method: **Mud Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data: 1st Interval: **From 0 ft to 274 ft with 26 Portland/Gel (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **Pressure Grout**
Cemented By: **Bussell & Son Water Wells**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion: **Surface Slab Installed**

Water Level: Static level: **145.28 ft. below land surface on 8/4/2005**
Artesian flow: **No Data**

Packers: **2 1/2"x4" Double K-Packer 263-264**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **No Data**

Well Tests: **Jetted \ Estimated**
Yield: **25 GPM with 25 ft drawdown after 1 hour**

Water Quality: Type of Water: **No Data**
Depth of Strata: **220-299 ft.**
Chemical Analysis Made: **No Data**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information: **Best Drilling Services**
P.O. Box 845
Friendswood , TX 77549

Driller License **2443**

Number:

Licensed Well Driller Signature: **Charles F. Smith**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **Amended 11/30/05 Ref.#2627**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking **#69095**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0-23 Clay
23-34 Sand
34-72 Clay
72-101 Sand
101-117 Clay
117-122 Sand
122-133 Clay
133-145 Sand
145-185 Sand & Gravel
185-194 Sand
194-202 Clay
202-215 Sand
215-220 Clay
220-241 Sand
241-261 Sand, Sand Stone & Lime Stone
261-265 Clay
265-299 Sand & Gravel
299-305 Clay

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4 New PVC/Certilock 0/274 Sch. 40
2 1/2 New PVC 263/274 Sch. 40
2 1/2 New Rod Based Stainless Steel 274/294 0.014

STATE OF TEXAS WELL REPORT for Tracking #69096

Owner:	**TCEQ**	Owner Well #:	**MW-16**
Address:	**MC-143, P.O. Box 13087 Austin , TX 78711**	Grid #:	**65-04-4**
Well Location:	**Woodedge & Jones Rd. Houston , TX 77065**	Latitude:	**29° 56' 42" N**
Well County:	**Harris**	Longitude:	**095° 35' 04" W**
Elevation:	**No Data**	GPS Brand Used:	**Taken from Topo Map**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date: Started: **7/27/2005**
Completed: **7/28/2005**

Diameter of Hole: Diameter: **6 3/4 in From Surface To 258 ft**
Diameter: **3 7/8 in From 258 ft To 325 ft**

Drilling Method: **Mud Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data: 1st Interval: **From 0 ft to 258 ft with 24 Portland/Gel (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **Pressure Grout**
Cemented By: **Bussell & Son Water Wells**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion: **Surface Slab Installed**

Water Level: Static level: **146.9 ft. below land surface on 8/4/2005**
Artesian flow: **No Data**

Packers: **2 1/2"x4" Double K-Packer 247-248**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **No Data**

Well Tests: **Jetted \ Estimated**
Yield: **25 GPM with 25 ft drawdown after 1 hour**

Water Quality: Type of Water: **No Data**
Depth of Strata: **208-283 ft.**
Chemical Analysis Made: **No Data**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information: **Best Drilling Services**
P.O. Box 845
Friendswood , TX 77549

Driller License **2443**

Number:

Licensed Well Driller Signature: **Charles F. Smith**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **Amended 11/30/05 Ref.#2626**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking #**69096**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0-12 Clay
12-14 Sand
14-18 Clay
18-21 Sand
21-27 Clay
27-34 Sand
34-71 Clay
71-102 Sand
102-110 Clay
110-119 Sand
119-130 Clay
130-150 Sand
150-160 Clay
160-182 Sand & Gravel
182-203 Clay
203-205 Sand Stone
205-208 Clay
208-240 Sand
240-242 Clay
242-263 Sand
263-265 Clay
265-283 Sand
283-303 Clay
303-306 Sand
306-325 Clay

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4 New PVC/Certilock 0/258 Sch. 40
2 1/2 New PVC 247/258 Sch. 40
2 1/2 New Rod Based Stainless Steel 258/278 0.014

STATE OF TEXAS WELL REPORT for Tracking #69098

Owner:	**TCEQ**	Owner Well #:	**MW-17**
Address:	**MC-143, P.O. Box 13087 Austin , TX 78711**	Grid #:	**65-04-4**
Well Location:	**Neeshaw Rd. Houston , TX 77065**	Latitude:	**29° 56' 21" N**
Well County:	**Harris**	Longitude:	**095° 35' 16" W**
Elevation:	**No Data**	GPS Brand Used:	**Taken from Topo Map**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date: Started: **8/9/2005**
Completed: **8/11/2005**

Diameter of Hole: Diameter: **6 3/4 in From Surface To 410 ft**
Diameter: **3 7/8 in From 410 ft To 445 ft**

Drilling Method: **Mud Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data: 1st Interval: **From 0 ft to 410 ft with 40 Portland/Gel (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **Pressure Grout**
Cemented By: **Bussell & Son Water Wells**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion: **Surface Slab Installed**

Water Level: Static level: **250.41 ft. below land surface on 8/16/2005**
Artesian flow: **No Data**

Packers: **2 1/2"x4" Double K-Packer 399-400**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **No Data**

Well Tests: **Jetted \ Estimated**
Yield: **30 GPM with 25 ft drawdown after 1 hour**

Water Quality: Type of Water: **No Data**
Depth of Strata: **400-445+ ft.**
Chemical Analysis Made: **No Data**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information: **Best Drilling Services**
P.O. Box 845
Friendswood , TX 77549

Driller License **2443**

Number:

Licensed Well Driller Signature: **Charles F. Smith**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **Amended 11/30/05 Ref.#2625**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking #**69098**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0-18 Clay/Fill
18-33 Sand
33-63 Clay
63-120 Sand
120-121 Gravel
121-135 Clay
135-141 Sand
141-155 Clay
155-246 Sand with Clay Stringers
246-248 Gravel
248-253 Sand
253-263 Clay
263-273 Sand with Gravel
273-300 Clay
300-311 Sand with Gravel Layers
311-336 Clay
336-365 Sand
365-369 Clay
369-372 Sand
372-400 Clay
400-445 Sand

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4 New PVC/Certilock 0/410 Sch. 40
2 1/2 New PVC 399/410 Sch. 40
2 1/2 New Rod Based Stainless Steel 410/430 0.014

STATE OF TEXAS WELL REPORT for Tracking #69100

Owner:	**TCEQ**	Owner Well #:	**MW-18**
Address:	**MC-143, P.O. Box 13087 Austin , TX 78711**	Grid #:	**65-04-4**
Well Location:	**Neeshaw Rd. Houston , TX 77065**	Latitude:	**29° 56' 21" N**
Well County:	**Harris**	Longitude:	**095° 35' 16" W**
Elevation:	**No Data**	GPS Brand Used:	**Taken from Topo Map**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date: Started: **8/11/2005**
Completed: **8/12/2005**

Diameter of Hole: Diameter: **6 3/4 in From Surface To 284 ft**
Diameter: **3 7/8 in From 284 ft To 304 ft**

Drilling Method: **Mud Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data: 1st Interval: **From 0 ft to 410 ft with 27 Portland/Gel (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **Pressure Grout**
Cemented By: **Bussell & Son Water Wells**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion: **Surface Slab Installed**

Water Level: Static level: **148.96 ft. below land surface on 8/16/2005**
Artesian flow: **No Data**

Packers: **2 1/2"x4" Double K-Packer 266-267**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **No Data**

Well Tests: **Jetted \ Estimated**
Yield: **20 GPM with 25 ft drawdown after 1 hour**

Water Quality: Type of Water: **No Data**
Depth of Strata: **260-304 ft.**
Chemical Analysis Made: **No Data**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information: **Best Drilling Services**
P.O. Box 845
Friendswood , TX 77549

Driller License **2443**

Number:

Licensed Well Driller Signature: **Charles F. Smith**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **Amended 11/30/05 Ref.#2624**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking **#69100**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0-18 Clay/Fill
18-33 Sand
33-63 Clay
63-120 Sand
120-121 Gravel
121-135 Clay
135-141 Sand
141-155 Clay
155-246 Sand with Clay Stringers
246-248 Gravel
248-253 Sand
253-263 Clay
260-304 Sand with Gravel Layers

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4 New PVC/Certilock 0/284 Sch. 40
2 1/2 New PVC 266/277 Sch. 40
2 1/2 New Rod Based Stainless Steel 277/297 0.014

STATE OF TEXAS WELL REPORT for Tracking #71449

Owner:	**TCEQ**	Owner Well #:	**MW-19**
Address:	**MC-143, P.O. Box 13087 Austin , TX 78711**	Grid #:	**65-04-4**
Well Location:	**FM 1960 and Jones Rd. Houston , TX 77065**	Latitude:	**29° 56' 08" N**
Well County:	**Harris**	Longitude:	**095° 35' 00" W**
Elevation:	**No Data**	GPS Brand Used:	**Garmin E-Trex**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date: Started: **11/2/2005**
Completed: **11/5/2005**

Diameter of Hole: Diameter: **6 3/4 in From Surface To 240 ft**
Diameter: **3 7/8 in From 240 ft To 260 ft**

Drilling Method: **Mud Rotary**

Borehole Completion: **Open Hole**

Annular Seal Data: 1st Interval: **From 0 ft to 240 ft with 24 Portland/Gel (#sacks and material)**
2nd Interval: **No Data**
3rd Interval: **No Data**
Method Used: **Pressure Grout**
Cemented By: **Bussell & Son Water Wells**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion: **Surface Slab Installed**

Water Level: Static level: **153.18 ft. below land surface on 11/7/2005**
Artesian flow: **No Data**

Packers: **2 1/2"x4" Double K-Packer 229-230**

Plugging Info: Casing or Cement/Bentonite left in well: **No Data**

Type Of Pump: **No Data**

Well Tests: **Jetted \ Estimated**
Yield: **25 GPM with 25 ft drawdown after 1 hour**

Water Quality: Type of Water: **No Data**
Depth of Strata: **232-302 ft.**
Chemical Analysis Made: **No Data**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information: **Best Drilling Services**
P.O. Box 845
Friendswood , TX 77549

Driller License **2443**

Number:

Licensed Well Driller Signature: **Charles F. Smith**

Registered Driller Apprentice Signature: **No Data**

Apprentice Registration Number: **No Data**

Comments: **Amended 11/30/05 Ref.#2632**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking **#71449**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0-18 Reddish Brown Clay
18-30 Light Brown Fine Grained Sand
30-49 Reddish Brown Clay
49-59 Yellowish Brown Fine Grained Sand
59-68 Light Gray Clay
68-118 Yellowish Brown Fine Grained Sand
118-123 Light Gray Clay
123-128 Sand
128-164 Reddish Brown Clay
164-197 Yellowish Brown Fine Grained Sand
197-212 Clay with Gravel Lenses
212-229 Yellowish Brown Medium Grained Sand
229-232 Sandstone
232-302 Sand
302-310 Clay
310-312 Sand

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4 New PVC/Certilock 0/240 Sch. 40
2 1/2 New PVC 229-240 Sch. 40
2 1/2 New Rod Based Stainless Steel 240/260 0.012

ATTACHMENT 8
PHOTOGRAPHIC DOCUMENTATION

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** 10860 Tower Oaks Blvd., Houston, TX

Photograph Number: 1

Photographer: Bill Hardmant, Shaw

Date: 06/30/05

Direction: View to the West

Comments: Photo shows location of proposed monitor well MW-10 located at 10860 Tower Oaks Blvd.

Photograph Number: 2

Photographer: Bill Hardmant, Shaw

Date: 06/30/05

Direction: View to the Southwest

Comments: Photo shows drill crew clearing subsurface utilities at MW-10 using an air knife.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** 10860 Tower Oaks Blvd., Houston, TX

Photograph Number: 3

Photographer: Bill Hardmant, Shaw

Date: 06/30/05

Direction: View is down

Comments: Photo shows the cleared location for monitor well MW-10 to a depth of 5 feet.

Photograph Number: 4

Photographer: Bill Hardmant, Shaw

Date: 06/30/05

Direction: View to the Northwest

Comments: Photo shows the Vactron unit putting soil back into the hole of monitor well MW-10 after clearing the location.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** 10860 Tower Oaks Blvd., Houston, TX

Photograph Number: 5

Photographer: Bill Hardmant, Shaw

Date: 07/06/05

Direction: View to the East

Comments: Photo shows the driller drilling the pilot hole at the location of monitor well MW-10.

Photograph Number: 6

Photographer: Bill Hardmant, Shaw

Date: 07/06/05

Direction: View to the Northeast

Comments: Photo shows the geophysical log being run on monitor well MW-10.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** 10860 Tower Oaks Blvd., Houston, TX

Photograph Number: 7

Photographer: Bill Hardmant, Shaw

Date: 07/06/05

Direction: View to the East

Comments: Photo shows drillers preparing to install the 4-inch diameter PVC casing in the well (MW-10).

Photograph Number: 8

Photographer: Bill Hardmant, Shaw

Date: 07/07/05

Direction: View to the East

Comments: Photo shows the well screen to be set in monitor well MW-10.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** 10860 Tower Oaks Blvd., Houston, TX

Photograph Number: 9

Photographer: Bill Hardmant, Shaw

Date: 07/07/05

Direction: View is down

Comments: Photo shows a close up view of the 2-inch diameter stainless steel screen (0.012 slot) to be used in monitor well MW-10.

Photograph Number: 10

Photographer: Bill Hardmant, Shaw

Date: 08/23/05

Direction: View to the West

Comments: Photo shows the location of monitor well MW-10 after all drilling activities are complete.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Glenora and Foxburo, Houston, TX

Photograph Number: 11

Photographer: Bill Hardmant, Shaw

Date: 07/07/05

Direction: View to the West

Comments: Photo shows the conductor pipe spudded at the location of monitor well MW-11.

Photograph Number: 12

Photographer: Bill Hardmant, Shaw

Date: 07/08/05

Direction: View to the West

Comments: Photo shows the drilling of monitor well MW-11.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Glenora and Foxburo, Houston, TX

Photograph Number: 13

Photographer: Bill Hardmant, Shaw

Date: 07/08/05

Direction: View is down

Comments: Photo shows the rubber O-rings and the plastic splines used in the Certa-lok PVC casing.

Photograph Number: 14

Photographer: Bill Hardmant, Shaw

Date: 07/08/05

Direction: View is down

Comments: Photo shows the Certa-lok casing and the rubber O-ring installed within the precut casing groove.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Glenora and Foxburo, Houston, TX

Photograph Number: 15

Photographer: Bill Hardmant, Shaw

Date: 07/08/05

Direction: View is down

Comments: Photo shows the spline being installed in the Certa-lok casing as it is being lowered into the well.

Photograph Number: 16

Photographer: Bill Hardmant, Shaw

Date: 07/08/05

Direction: View to the South

Comments: Photo shows the driller installing casing in the hole.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Glenora and Foxburo, Houston, TX

Photograph Number: 17

Photographer: Bill Hardmant, Shaw

Date: 07/08/05

Direction: View to the West

Comments: Photo shows another view of the driller installing the plastic spline into the Certa-lok casing.

Photograph Number: 18

Photographer: Bill Hardmant, Shaw

Date: 08/10/05

Direction: View is down

Comments: Photo shows a picture of the 2 ½" x 4" double K-packer used at the top of each completion string installed in all of the monitor wells.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Glenora and Foxburo, Houston, TX

Photograph Number: 19

Photographer: Bill Hardmant, Shaw

Date: 10/31/05

Direction: View to the North

Comments: Traffic cone located left of center in photo shows the proposed location where monitor well MW-11R will be drilled.

Photograph Number: 20

Photographer: Bill Hardmant, Shaw

Date: 10/31/05

Direction: View to the Southeast

Comments: Photos shows the driller drilling monitor well MW-11R.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Glenora and Foxburo, Houston, TX

Photograph Number: 21

Photographer: Bill Hardmant, Shaw

Date: 10/31/05

Direction: View to the South

Comments: Photo shows the geophysical log being run on monitor well MW-11R.

Photograph Number: 22

Photographer: Bill Hardmant, Shaw

Date: 11/01/05

Direction: View to the Northwest

Comments: Photo shows monitor well MW-11R being developed after the screen has been set.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Oak Valley and Timber Crest, Houston, TX

Photograph Number: 23

Photographer: Bill Hardmant, Shaw

Date: 07/11/05

Direction: View to the Southwest

Comments: Photo shows the proposed location of monitor well MW-12 prior to drilling.

Photograph Number: 24

Photographer: Bill Hardmant, Shaw

Date: 07/12/05

Direction: View to the South

Comments: Photo shows the drilling of monitor well MW-12 at the south end of Oak Valley.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Oak Valley and Timber Crest, Houston, TX

Photograph Number: 25

Photographer: Bill Hardmant, Shaw

Date: 07/12/05

Direction: View to the East

Comments: Photo shows the geophysical logging of monitor well MW-12.

Photograph Number: 26

Photographer: Bill Hardmant, Shaw

Date: 08/23/05

Direction: View to the Southwest

Comments: Photo shows the finished surface completion of monitor well MW-12.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Timber Hollow & Forest Valley, Houston, TX

Photograph Number: 27

Photographer: Bill Hardmant, Shaw

Date: 07/14/05

Direction: View to the Northwest

Comments: Photo shows the proposed location of monitor well MW-13 prior to drilling.

Photograph Number: 28

Photographer: Bill Hardmant, Shaw

Date: 07/18/05

Direction: View to the Northwest

Comments: Photo shows the drilling of monitor well MW-13. The photo also displays the traffic control setup required for this location.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Timber Hollow & Forest Valley, Houston, TX

Photograph Number: 29

Photographer: Bill Hardmant, Shaw

Date: 07/18/05

Direction: View to the South

Comments: Photo shows the drillers helper removing drill cuttings from the drill water before it is circulated back through the mud pit. Notice the de-sander attached to bucket of excavator.

Photograph Number: 30

Photographer: Bill Hardmant, Shaw

Date: 07/18/05

Direction: View to the Southwest

Comments: Photo shows the driller running 4-inch diameter PVC casing into the hole.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Timber Hollow & Forest Valley, Houston, TX

Photograph Number: 31

Photographer: Bill Hardmant, Shaw

Date: 07/19/05

Direction: View is down

Comments: Photo shows the 2-inch diameter stainless steel screen and the 10 foot length of 2-inch diameter PVC with the double K-packer attached to the top of the completion string.

Photograph Number: 32

Photographer: Bill Hardmant, Shaw

Date: 07/25/05

Direction: View to the South

Comments: Photo shows the finished surface completion for monitor well MW-13.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Mile Drive and Glenora, Houston, TX

Photograph Number: 33

Photographer: Bill Hardmant, Shaw

Date: 07/01/05

Direction: View to the North

Comments: Photo shows the proposed location of monitor well MW-14 prior to drilling. Workers are clearing for subsurface utilities using the Vactron.

Photograph Number: 34

Photographer: Bill Hardmant, Shaw

Date: 07/19/05

Direction: View to the East

Comments: Photo shows driller using an auger to drill out the initial 10 feet so they can set their conductor pipe.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Mile Drive and Glenora, Houston, TX

Photograph Number: 35

Photographer: Bill Hardmant, Shaw

Date: 07/20/05

Direction: View to the North

Comments: Photo shows the traffic control setup as required by the permit issued by the Harris County Engineer.

Photograph Number: 36

Photographer: Bill Hardmant, Shaw

Date: 07/20/05

Direction: View to the South

Comments: Photo shows the drilling of monitor well MW-14.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Mile Drive and Glenora, Houston, TX

Photograph Number: 37

Photographer: Bill Hardmant, Shaw

Date: 07/22/05

Direction: View to the South

Comments: Photo shows the stainless steel screen and PVC pipe with the double K-packer at the top ready to be assembled and installed in the well.

Photograph Number: 38

Photographer: Bill Hardmant, Shaw

Date: 08/23/05

Direction: View to the North

Comments: Photo shows the finished surface completion for monitor well MW-14.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Woodedge and Echo Spring, Houston, TX

Photograph Number: 39

Photographer: Bill Hardmant, Shaw

Date: 07/25/05

Direction: View to the Southwest

Comments: Photo shows the location of monitor well MW-15. The drillers are installing their conductor pipe.

Photograph Number: 40

Photographer: Bill Hardmant, Shaw

Date: 07/25/05

Direction: View to the East

Comments: Photo shows the drilling location for monitor well MW-15 and the traffic control setup according to the permit.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Woodedge and Echo Spring, Houston, TX

Photograph Number: 41

Photographer: Bill Hardmant, Shaw

Date: 07/26/05

Direction: View to the Southwest

Comments: Photo shows the driller installing the completion string into monitor well MW-15.

Photograph Number: 42

Photographer: Bill Hardmant, Shaw

Date: 08/23/05

Direction: View to the West

Comments: Photo shows the final surface completion for monitor well MW-15.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Woodedge and Jones Road, Houston, TX

Photograph Number: 43

Photographer: Bill Hardmant, Shaw

Date: 05/12/05

Direction: View to the West

Comments: Photo shows the proposed location of monitor well MW-16.

Photograph Number: 44

Photographer: Bill Hardmant, Shaw

Date: 08/23/05

Direction: View to the Northwest

Comments: Photo shows the finished surface completion for monitor well MW-16.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Neeshaw Drive, Houston, TX

Photograph Number: 45

Photographer: Greg Long, Shaw

Date: 08/09/05

Direction: View to the Southwest

Comments: Photo shows the geophysical log being run on monitor well MW-17.

Photograph Number: 46

Photographer: Greg Long, Shaw

Date: 08/11/05

Direction: View to the Southwest

Comments: Photo shows the driller installing the production string into monitor well MW-17.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Neeshaw Drive, Houston, TX

Photograph Number: 47

Photographer: Bill Hardmant, Shaw

Date: 08/12/05

Direction: View is down

Comments: Photo shows the development water from monitor well MW-18.

Photograph Number: 48

Photographer: Bill Hardmant, Shaw

Date: 08/23/05

Direction: View to the West

Comments: Photo shows the finished surface completions for monitor wells MW-17 (foreground) and MW-18 (background).

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** FM 1960 @ Jones (Jones Plaza), Houston, TX

Photograph Number: 49

Photographer: Bill Hardmant, Shaw

Date: 10/21/05

Direction: View to the West

Comments: Photo shows the drilling company clearing the proposed location of monitor well MW-19 for underground utilities using the Vactron unit.

Photograph Number: 50

Photographer: Bill Hardmant, Shaw

Date: 11/04/05

Direction: View to the Southwest

Comments: Photo shows monitor well MW-19 after drilling was complete.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Barely Lane, Houston, TX

Photograph Number: 51

Photographer: Bill Hardmant, Shaw

Date: 07/05/05

Direction: View to the Northwest

Comments: Photo shows location where the Investigative Derived Waste (IDW) was staged during the drilling program.

Photograph Number: 52

Photographer: Bill Hardmant, Shaw

Date: 07/05/05

Direction: View to the North

Comments: Photo shows the delivery of one of the poly tanks used to contain the IDW.

Shaw Environmental & Infrastructure, Inc.

Photographic Record

Client: TCEQ **Project Number:** 118429

Site Name: Jones Road Groundwater Plume **Site Location:** Barely Lane, Houston, TX

Photograph Number: 53

Photographer: Bill Hardmant, Shaw

Date: 07/05/05

Direction: View to the South

Comments: Photo shows the delivery of the sludge boxes to the IDW staging area.

Photograph Number: 54

Photographer: Will Hudgins, Shaw

Date: 08/30/05

Direction: View to the Southwest

Comments: Photo shows the IDW staging area after all wastes have been disposed.

ATTACHMENT 9
LABORATORY ANALYTICAL RESULTS

Gulf Coast
ACCUTEST.
Laboratories

07/13/05

Technical Report for

Shaw E & I, Inc.

Jones Road

PROJECT #110798

Accutest Job Number: T10825A

Sampling Date: 07/06/05

Report to:

Shaw E & I, Inc.

greg.long@shawgrp.com

ATTN: Greg Long

Total number of pages in report: **22**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Ron Martino
Laboratory Manager

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Table of Contents

-1-

Sections: 1 2 3 4 5 6

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Sample Results **5**
3.1: T10825-2A: MW-10 DRILL CUTTINGS 5
Section 4: Misc. Forms **8**
4.1: Chain of Custody 9
4.2: LRC Form 11
Section 5: GC/MS Volatiles - QC Data Summaries **15**
5.1: Method Blank Summary 16
5.2: Blank Spike Summary 18
Section 6: General Chemistry - QC Data Summaries **20**
6.1: Method Blank and Spike Results Summary 21
6.2: Duplicate Results Summary 22

Accutest Laboratories

Sample Summary

Shaw E & I, Inc.

Job No: T10825A

Jones Road
Project No: PROJECT #110798

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
T10825-2A	07/06/05	15:15	WH	07/07/05	SO	Soil	MW-10 DRILL CUTTINGS

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

ACCUTEST Laboratories

2

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Shaw E & I, Inc. **Job No** T10825A

Site: Jones Road **Report Date** 7/13/2005 9:15:13 AM

1 Sample was collected on 07/06/2005 and were received at Accutest on 07/07/2005 properly preserved, at 4.4 Deg. C and intact. These Samples received an Accutest job number of T10825A. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix SO **Batch ID:** VF1584

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Surrogates in the blank spike are not within the control limits. Since all the spike compounds are within the control limits, the data is acceptable.

Wet Chemistry By Method EPA 160.3 M

Matrix SO **Batch ID:** GN8404

- Sample(s) T10827-7DUP, T10827-8DUP were used as the QC samples for Solids, Percent.

Wet Chemistry By Method SW846 1010

Matrix SO **Batch ID:** GN8414

- Sample(s) T10785-3DUP were used as the QC samples for Ignitability (Flashpoint).

Wet Chemistry By Method SW846 CHAP7

Matrix SO **Batch ID:** GP3316

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T10825-2ADUP were used as the QC samples for Cyanide Reactivity.

Matrix SO **Batch ID:** GP3317

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T10825-2ADUP were used as the QC samples for Sulfide Reactivity.

Accutest Laboratories Gulf Coast (ALGC) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALGC and as stated on the COC. ALGC certifies that the data meets the Data QualityObjectives for precision, accuracy and completeness as specified in the ALGC Quality Manual except as noted above. This report is to be used in its entirety. ALGC is not responsible for any assumptions of data quality if partial data packages are used

Report of Analysis

Client Sample ID:	MW-10 DRILL CUTTINGS		
Lab Sample ID:	T10825-2A	**Date Sampled:**	07/06/05
Matrix:	SO - Soil	**Date Received:**	07/07/05
Method:	SW846 8260B	**Percent Solids:**	94.0
Project:	Jones Road		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0066426.D	1	07/12/05	LJ	n/a	n/a	VF1584
Run #2							

	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.053	0.0076	mg/kg	
71-43-2	Benzene	ND	0.0053	0.0015	mg/kg	
75-27-4	Bromodichloromethane	ND	0.0053	0.0015	mg/kg	
75-25-2	Bromoform	ND	0.0053	0.0013	mg/kg	
108-90-7	Chlorobenzene	ND	0.0053	0.0015	mg/kg	
75-00-3	Chloroethane	ND	0.0053	0.0015	mg/kg	
67-66-3	Chloroform	ND	0.0053	0.0013	mg/kg	
75-15-0	Carbon disulfide	ND	0.011	0.0014	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.0053	0.0012	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.0053	0.0014	mg/kg	
75-35-4	1,1-Dichloroethylene	ND	0.0053	0.0013	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.0053	0.0015	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.0053	0.0016	mg/kg	
124-48-1	Dibromochloromethane	ND	0.0053	0.0015	mg/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0053	0.0015	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0053	0.0013	mg/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0053	0.0014	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0053	0.0014	mg/kg	
100-41-4	Ethylbenzene	ND	0.0053	0.0013	mg/kg	
591-78-6	2-Hexanone	ND	0.011	0.0073	mg/kg	
108-10-1	4-Methyl-2-pentanone	ND	0.011	0.0074	mg/kg	
74-83-9	Methyl bromide	ND	0.0053	0.0016	mg/kg	
74-87-3	Methyl chloride	ND	0.0053	0.0015	mg/kg	
75-09-2	Methylene chloride	ND	0.011	0.0026	mg/kg	
78-93-3	Methyl ethyl ketone	ND	0.011	0.0072	mg/kg	
100-42-5	Styrene	ND	0.0053	0.0014	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.0053	0.0013	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0053	0.0015	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.0053	0.0015	mg/kg	
127-18-4	Tetrachloroethylene	ND	0.0053	0.0014	mg/kg	
108-88-3	Toluene	ND	0.0053	0.0013	mg/kg	
79-01-6	Trichloroethylene	ND	0.0053	0.0014	mg/kg	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10 DRILL CUTTINGS		
Lab Sample ID:	T10825-2A	**Date Sampled:**	07/06/05
Matrix:	SO - Soil	**Date Received:**	07/07/05
Method:	SW846 8260B	**Percent Solids:**	94.0
Project:	Jones Road		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	0.0053	0.0014	mg/kg	
1330-20-7	Xylene (total)	ND	0.016	0.0040	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		75-137%
2037-26-5	Toluene-D8	97%		88-147%
460-00-4	4-Bromofluorobenzene	107%		82-154%
17060-07-0	1,2-Dichloroethane-D4	106%		62-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-10 DRILL CUTTINGS		
Lab Sample ID:	T10825-2A	**Date Sampled:**	07/06/05
Matrix:	SO - Soil	**Date Received:**	07/07/05
		Percent Solids:	94.0
Project:	Jones Road		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Corrosivity as pH	8.7				1	07/11/05 08:00	NC	SW846 CHAP7
Cyanide Reactivity	0.020 U	0.40	0.020	mg/kg	40	07/11/05 13:03	LN	SW846 CHAP7
Ignitability (Flashpoint)	> 210			Deg. F	1	07/11/05 09:00	NC	SW846 1010
Solids, Percent	94			%	1	07/08/05	NC	EPA 160.3 M
Sulfide Reactivity	0.0 B	9.0		mg/kg	40	07/11/05 13:15	LN	SW846 CHAP7

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- LRC Form

CHAIN OF CUSTODY

ACCUTEST Laboratories

10165 Harwin Drive, Ste. 150, Houston, TX 77036
TEL: 713-271-4700 FAX: 713-271-4770
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: T10825

Client / Reporting Information

Company Name: SHAW ENVIRONMENTAL
Address: 3010 BRIARPARK Suite 4 N
City: HOUSTON State: TX Zip: 77042
Project Contact: GREG LONG E-mail: GREG.LONG@SHAW GRP.COM
Phone #: 713 996-4519
Sampler's Name: WILLIAM HARDMAN

Project Information

Project Name: JONES ROAD
Street:
City: HOUSTON State: TX
Project #: 110798
Fax #: 281-807-0311
Client Purchase Order #:

Requested Analysis

8260
RCI

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

Accutest Sample #	Field ID / Point of Collection	Matrix	Date	Time	Sampled By	Matrix	# of bottles	HCl	Water	Methanol	NaOH	Water	Other	8260	RCI	LAB USE ONLY
1	MW-10 DRINKING WATER		7/6/05	0800	WH	WATER	3	3						X		
2	MW-10 Drill Cuttings		7/6/05	15:15	WH	SOIL	1				X			X	X	

Turnaround Time (Business Days)

- [X] 10 Day STANDARD
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] Other

Approved By: / Date:

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] Reduced Tier 1
- [ ] Full Tier 1
- [ ] TRRP13
- [ ] EDD Format

Commercial "A" = Results Only

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date Time:	Received by:	Relinquished by:	Date Time:	Received by:
1 WHardman	7/6/05 13:15	2	2	7/7/05 7:15	3
3	7/7/05 0845	4	4		
Relinquished by:	Date Time:	Received by:	Custody Seal #	Preserved where applicable	On Ice
5		6			4.7

ACCUTEST.

SAMPLE RECEIPT LOG

JOB #: T10825 DATE/TIME RECEIVED: 7/7/05 / 8:45

CLIENT: Shaw Env. INITIALS: AR

Condition/Variance (Circle "Y" for yes and "N" for no or NA. If "N" is circled, see variance for explanation):

1. (Y) N Sample received in undamaged condition.
2. (Y) N Samples received within temp. range.
3. Y (NA) Sample received with proper pH.
4. (Y) N Sample received in proper containers.
5. (Y) N Sample volume sufficient for analysis.
6. (Y) N Sample received with chain of custody.
7. (Y) N Chain of Custody matches **sample IDs and analysis** on containers.
8. Y N (NA) Custody seal received intact and tamper not evident on cooler.
9. Y N (NA) Custody seal received intact and tamper not evident on bottles.

SAMPLE or FIELD ID	BOTTLE #	DATE SAMPLED	MATRIX	VOLUME	LOCATION	PRESERV.	PH
1	1-3	7/6	AQ	40mL	VREF	1,2,3,4,5,6	U, <2, >12, NA
2	1	"	SO	4oz	"	1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA

AR 7.7.05

LOCATION: WI: Walk-In VR: Volatile Refrig. SUB: Subcontract EF: Encore Freezer

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: Other

Comments:

pH of waters checked excluding volatiles

pH of soils ~~N/A~~

Delivery method: Courier: Client

Tracking#:

COOLER TEMP: 4.4 COOLER TEMP:

COOLER TEMP: COOLER TEMP:

Method of sample disposal: (circle one) **Accutest disposal** **Hold** **Return to Client** Form: SM012, Rev.12/14/04, QAO

4.1 4

T10825A: Chain of Custody

Page 2 of 2

ACCUTEST. Laboratories T10825A

LABORATORY REVIEW CHECKLIST: REPORTABLE DATA								
Laboratory Name: Accutest Gulf Coast			Date: 7/12/2005					
Project Name: Jones Road.			Laboratory Job Number: T10825A					
Reviewer Name: Ron Martino			Batch Number(s):					
#[1]	Analysis[2]	Description	Yes	No	NA[3]	NR[4]	ER #[5]	
	OI	CHAIN-OF-CUSTODY (COC):						
		1) Were all samples included on a completed COC?	X					
		2) Did the samples requiring chemical preservation arrive at the laboratory preserved?	X					
		3) Were samples requiring thermal preservation within temperature specs at log-in?	X					
		4) Were the samples in the appropriate containers?	X					
	OI	SAMPLE AND QUALITY CONTROL (QC) IDENTIFICATION:						
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X					
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X					
	OI	TEST REPORTS:						
		1) Were samples prepared and analyzed within holding times?	X					
		2) Were reported results within calibration range?	X					
		3) Were all calculations verified?	X					
		4) Were all analyte identifications verified?	X					
		5) Were sample quantitation limits reported for all analytes not detected?	X					
		6) If required for the project, were the tentatively identified compounds reported?			X			
		7) Were results reported on a dry weight basis?			X			
	O	SURROGATE RECOVERY DATA:						
		1) Were surrogates added prior to extraction?	X					
		2) Were surrogate percent recoveries in all samples within the laboratory QC acceptance criteria?		X			2	
	OI	TEST REPORTS FOR BLANK SAMPLES:						
		1) Were appropriate type(s) of blanks analyzed?	X					
		2) Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X					
		3) Were blanks free of detected compounds?	X					
	OI	LABORATORY CONTROL SAMPLES (LCSs):						
		1) Was each LCS prepared from a source external to the calibration standards?	X					
		2) Were all project-required analytes included in the LCS?	X					
		3) Was each LCS taken through the entire analytical procedure, including preparation and, if applicable, cleanup procedures?	X					
		4) Were LCSs analyzed at the required frequency?	X					
		5) Were LCS percent recoveries within the laboratory QC acceptance criteria?	X					
	OI	MATRIX SPIKE (MS) and MATRIC SPIKE DUPLICATE (MSD) DATA:						
		1) Were all project-required analytes included in the MS and MSD?	X					
		2) Were MS/MSD analyzed at the appropriate frequency?	X					
		3) Were MS percent recoveries within the laboratory QC acceptance criteria?	X					
		4) Were MSD percent recoveries and relative percent differences (RPDs) within the laboratory QC acceptance criteria?	X					
	OI	ANALYTICAL DUPLICATE DATA:						
		1) Were appropriate analytical duplicates analyzed for each matrix?	X					
		2) Were analytical duplicates analyzed at the appropriate frequency?	X					
		3) Were RPDs or relative standard deviations within the laboratory QC acceptance criteria?	X					
	OI	METHOD QUANTITATION LIMITS (MQLs):						
		Is the concentration of the lowest non-zero calibration standard in the calibration curve reported? A DCS was analyzed on a quarterly basis.	X				1	
	OI	The ND listed on the hard copy reports and/or EDD represents non detection of the target analyte at a concentration below the MDL.			X			
	OI	VALIDATION RESULTS FOR NON-REFERENCE METHODS						
		Were all samples prepared and analyzed using a Reference Method?	X					
	OI	OTHER PROBLEMS/ANOMALIES:						
		Are all known problems, anomalies or special conditions (e.g., use of minimum analytical limits) associated with the data noted in the Laboratory Review Checklist and Exception Reports?	X					

LAB REVIEW CHECKLIST (continued): SUPPORTING DATA								
Laboratory Name: Accutest Gulf Coast			Date: 7/12/2005					
Project Name: Jones Road.			Laboratory Job Number: T10825A					
Reviewer Name: Ron Martino			Batch Number(s):					
#[1]	Analysis[2]	Description	Yes	No	NA[3]	NR[4]	ER #[5]	
	OI	INITIAL CALIBRATION (ICAL) and ICAL VERIFICATION (ICV):						
		1) Were response factors (RFs) and/or relative response factors (RRFs) within the method-required QC acceptance criteria?	X					
		2) Were percent RSDs or correlation coefficient criteria met?	X					
		3) Were the number of standards recommended in the method used for all analytes?	X					
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	X					
		5) Are ICV data available for all instruments used?	X					
		6) Has the calibration curve been verified using a NIST-traceable second source?	X					
	OI	CONTINUING CALIBRATION VERIFICATION (CCV):						
		1) Was the CCV analyzed at the method-required frequency?	X					
		2) Were percent differences within the method-required QC acceptance criteria?	X					
		3) Was the ICAL curve verified for each analyte of interest?	X					
	O	MASS SPECTRAL TUNING:						
		1) Was the appropriate compound for the method used for tuning?	X					
		2) Were ion abundance data within the method-required QC acceptance criteria?	X					
	O	INTERNAL STANDARD (IS):						
		1) Were IS area counts within the method-required QC acceptance criteria?	X					
		2) Were IS retention times within the method-required QC acceptance criteria?	X					
	OI	RAW DATA (NELAC Section 1 Appendix A Glossary, and Section 5.12):						
		1) Were the raw data (e.g., chromatograms, spectral data) reviewed by an analyst?	X					
		2) Were all data associated with manual integrations flagged?	X					
	O	DUAL COLUMN CONFIRMATION:						
		1) Did dual column confirmation results meet the method-required QC acceptance criteria?			X			
		2) Were all percent differences less than 25%?			X			
	O	TENTATIVELY IDENTIFIED COMPOUNDS (TICs):						
		If TICs were requested, were the mass spectra and TIC data reviewed?			X			
	I	ICS RESULTS:						
		1) Were percent recoveries within method acceptance criteria?			X			
		2) Were the absolute values for all analytes less than the IDL?			X			
	I	SERIAL DILUTIONS, POST DIGESTION SPIKES, AND METHOD OF STANDARD ADDITIONS:						
		Were percent differences, recoveries, and linearity within the QC acceptance criteria specified in the method?			X			
	OI	VALIDATION RESULTS FOR NON-REFERENCE METHODS:						
		Are all non-Reference Methods documented and validated (NELAC 5.10.2.1)?			X			
	OI	METHOD DETECTION LIMIT (MDL) STUDIES:						
		Are MDL studies for each analyte in a given matrix current, on file, less than a year old?	X					
	OI	STANDARDS TRACEABILITY:						
		Are all standards used in the analyses NIST-traceable?	X					
	OI	DOCUMENTATION OF WATER AND REAGENTS QUALITY:						
		Is documentation of the quality of water and reagents used in the analyses on file?	X					
	OI	COMPOUND/ANALYTE IDENTIFICATION PROCEDURES:						
		Are the procedures for compound identification documented?	X					
	OI	DEMONSTRATION OF ANALYST CAPABILITY:						
		1) Was demonstration of capability conducted according to NELAC Appendix 5C?	X					
		2) Is documentation of the analyst's demonstration of capability on file?	X					
		3) Is documentation of the analyst's proficiency up-to-date and on file?	X					
	OI	PROFICIENCY TEST REPORTS (NELAC 5.4.2):						
		Are proficiency testing or interlaboratory comparison results on file?	X					
	OI	LABORATORY STANDARD OPERATING PROCEDURES (SOPs):						
		Are laboratory SOPs current and on file for each method performed?	X					

[1] Items identified by the letter "R" should be submitted to TNRCC in the Data Package. Items identified by the letter "S" should be retained and made available to the TNRCC upon request for a period of three years after the data are submitted.

[2] O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);

[3] NA = Not applicable;

[4] NR = Not Reviewed;

[5] ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked.

LAB REVIEW CHECKLIST (continued): Exception Reports	
Laboratory Name: Accutest Gulf Coast	Date: 7/12/2005
Project Name: Jones Road.	Laboratory Job Number: T10825A
Reviewer Name: Ron Martino	Batch Number(s):

ER #	Description
1	For reporting purposes, the RL on the reports is equal to the MQL. The MDL is equal to the MDL/SQL. The unadjusted MQL is reported in the blank result page for all analysis.
2	All anomalies are discussed in the case narrative.
	All supporting laboratory documentation is on file with the laboratory's QA/QC department

1. APPENDIX A LABORATORY DATA PACKAGE COVER PAGE

This data package consists of:

- ☐ This signature page, the laboratory review checklist, and the following reportable data:
- ☐ R1 Field chain-of-custody documentation;
- ☐ R2 Sample identification cross-reference;
- ☐ R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
  - b) dilution factors,
  - c) preparation methods,
  - d) cleanup methods, and
  - e) if required for the project, tentatively identified compounds (TICs).
- ☐ R4 Surrogate recovery data including:
  - a) Calculated recovery (%R), and
  - b) The laboratory's surrogate QC limits.
- ☐ R5 Test reports/summary forms for blank samples;
- ☐ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - a) LCS spiking amounts,
  - b) Calculated %R for each analyte, and
  - c) The laboratory's LCS QC limits.
- ☐ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a) Samples associated with the MS/MSD clearly identified,
  - b) MS/MSD spiking amounts,
  - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- ☐ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - a) the amount of analyte measured in the duplicate,
  - b) the calculated RPD, and
  - c) the laboratory's QC limits for analytical duplicates.
- ☐ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ☐ R10 Other problems or anomalies.
- ☐ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By me signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [ ] This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Ron Martino		Lab Director	7/12/2005
Name:	Signature:	Title:	Date:

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T10825A
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF1584-MB	F0066425.D	1	07/12/05	LJ	n/a	n/a	VF1584

The QC reported here applies to the following samples: **Method:** SW846 8260B

T10825-2A

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	7.2	ug/kg	
71-43-2	Benzene	ND	5.0	1.4	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.4	ug/kg	
75-25-2	Bromoform	ND	5.0	1.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	1.4	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.4	ug/kg	
67-66-3	Chloroform	ND	5.0	1.3	ug/kg	
75-15-0	Carbon disulfide	ND	10	1.3	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	1.3	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	1.4	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.5	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.4	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.4	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.3	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.3	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.4	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.3	ug/kg	
591-78-6	2-Hexanone	ND	10	6.8	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	10	7.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.5	ug/kg	
75-09-2	Methylene chloride	ND	10	2.5	ug/kg	
78-93-3	Methyl ethyl ketone	ND	10	6.7	ug/kg	
100-42-5	Styrene	ND	5.0	1.3	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.4	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.4	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	1.3	ug/kg	
108-88-3	Toluene	ND	5.0	1.3	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	1.3	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.4	ug/kg	
1330-20-7	Xylene (total)	ND	15	3.8	ug/kg	

Method Blank Summary

Job Number: T10825A
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF1584-MB	F0066425.D	1	07/12/05	LJ	n/a	n/a	VF1584

The QC reported here applies to the following samples: **Method:** SW846 8260B

T10825-2A

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	75-137%
2037-26-5	Toluene-D8	98%	88-147%
460-00-4	4-Bromofluorobenzene	106%	82-154%
17060-07-0	1,2-Dichloroethane-D4	103%	62-135%

Blank Spike Summary

Job Number: T10825A
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF1584-BS	F0066424.D	1	07/12/05	LJ	n/a	n/a	VF1584

The QC reported here applies to the following samples: **Method:** SW846 8260B

T10825-2A

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	250	305	122	55-166
71-43-2	Benzene	50	55.0	110	64-136
75-27-4	Bromodichloromethane	50	56.1	112	64-136
75-25-2	Bromoform	50	48.2	96	67-140
108-90-7	Chlorobenzene	50	49.3	99	72-136
75-00-3	Chloroethane	50	52.7	105	56-142
67-66-3	Chloroform	50	55.5	111	64-135
75-15-0	Carbon disulfide	50	53.3	107	51-127
56-23-5	Carbon tetrachloride	50	56.2	112	56-148
75-34-3	1,1-Dichloroethane	50	56.0	112	62-138
75-35-4	1,1-Dichloroethylene	50	54.2	108	50-149
107-06-2	1,2-Dichloroethane	50	56.2	112	61-136
78-87-5	1,2-Dichloropropane	50	55.6	111	65-131
124-48-1	Dibromochloromethane	50	49.2	98	70-137
156-59-2	cis-1,2-Dichloroethylene	50	54.1	108	63-133
10061-01-5	cis-1,3-Dichloropropene	50	58.1	116	69-134
156-60-5	trans-1,2-Dichloroethylene	50	56.8	114	63-142
10061-02-6	trans-1,3-Dichloropropene	50	54.5	109	79-142
100-41-4	Ethylbenzene	50	49.4	99	71-135
591-78-6	2-Hexanone	250	259	104	57-150
108-10-1	4-Methyl-2-pentanone	250	293	117	67-134
74-83-9	Methyl bromide	50	46.9	94	53-133
74-87-3	Methyl chloride	50	49.4	99	50-138
75-09-2	Methylene chloride	50	54.5	109	53-146
78-93-3	Methyl ethyl ketone	250	286	114	58-148
100-42-5	Styrene	50	49.2	98	71-133
71-55-6	1,1,1-Trichloroethane	50	56.3	113	58-145
79-34-5	1,1,2,2-Tetrachloroethane	50	41.6	83	71-133
79-00-5	1,1,2-Trichloroethane	50	46.3	93	72-129
127-18-4	Tetrachloroethylene	50	48.8	98	65-145
108-88-3	Toluene	50	48.6	97	70-136
79-01-6	Trichloroethylene	50	53.5	107	64-138
75-01-4	Vinyl chloride	50	46.5	93	55-145
1330-20-7	Xylene (total)	150	151	101	74-135

Blank Spike Summary

Job Number: T10825A
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF1584-BS	F0066424.D	1	07/12/05	LJ	n/a	n/a	VF1584

The QC reported here applies to the following samples: **Method:** SW846 8260B

T10825-2A

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	107%	75-137%
2037-26-5	Toluene-D8	92%	88-147%
460-00-4	4-Bromofluorobenzene	81%*	82-154%
17060-07-0	1,2-Dichloroethane-D4	107%	62-135%

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T10825A
Account: ITTXHO - Shaw E & I, Inc.
Project: Jones Road

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Cyanide Reactivity	GP3316/GN8420	0.40	<0.40	mg/kg				
Sulfide Reactivity	GP3317/GN8421	8.0	<8.0	mg/kg				

Associated Samples:
Batch GP3316: T10825-2A
Batch GP3317: T10825-2A

6.1

6

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T10825A
Account: ITTXHO - Shaw E & I, Inc.
Project: Jones Road

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Corrosivity as pH	GN8413	T10825-2A		8.7	8.7		0-%
Cyanide Reactivity	GP3316/GN8420	T10825-2A	mg/kg	0.020 U	<0.40	0.0	0-20%
Ignitability (Flashpoint)	GN8414	T10785-3	Deg. F	>210	>210	0.0	0-20%
Solids, Percent	GN8404	T10827-8	%	89.4	89.1	0.3	0-20%
Solids, Percent	GN8404	T10827-7	%	87.9	87.8	0.1	0-20%
Sulfide Reactivity	GP3317/GN8421	T10825-2A	mg/kg	0.0 B	<9.0	0.0	0-20%

Associated Samples:
Batch GN8404: T10825-2A
Batch GN8413: T10825-2A
Batch GN8414: T10825-2A
Batch GP3316: T10825-2A
Batch GP3317: T10825-2A

6.2
6

Gulf Coast
ACCUTEST. Laboratories

07/13/05

Technical Report for

Shaw E & I, Inc.

Jones Road

Harris County Flood Control

Accutest Job Number: T10844

Sampling Date: 07/07/05

Report to:

Shaw E & I, Inc.

greg.long@shawgrp.com

ATTN: Greg Long

Total number of pages in report: **43**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Ron Martino
Laboratory Manager

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Table of Contents

-1-

Sections: 1 2 3 4 5 6 7

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Sample Results **7**
3.1: T10844-1: DF1 7
3.2: T10844-2: TRIP BLANK 13
Section 4: Misc. Forms **15**
4.1: Chain of Custody 16
4.2: LRC Form 18
Section 5: GC/MS Volatiles - QC Data Summaries **22**
5.1: Method Blank Summary 23
5.2: Blank Spike Summary 25
5.3: Matrix Spike/Matrix Spike Duplicate Summary 27
Section 6: GC/MS Semi-volatiles - QC Data Summaries **29**
6.1: Method Blank Summary 30
6.2: Blank Spike Summary 33
6.3: Matrix Spike/Matrix Spike Duplicate Summary 36
Section 7: General Chemistry - QC Data Summaries **39**
7.1: Method Blank and Spike Results Summary 40
7.2: Duplicate Results Summary 41
7.3: Matrix Spike Results Summary 42
7.4: Matrix Spike Duplicate Results Summary 43

Sample Summary

Shaw E & I, Inc.

Job No: T10844

Jones Road
Project No: Harris County Flood Control

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
T10844-1	07/07/05	14:30	BH	07/08/05	AQ	Water	DF1
T10844-2	07/07/05	00:00	BH	07/08/05	AQ	Trip Blank Water	TRIP BLANK

ACCUTEST Laboratories

2

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Shaw E & I, Inc. **Job No** T10844

Site: Jones Road **Report Date** 7/13/2005 9:12:12 AM

1 Sample and 1 Trip Blank were collected on 07/07/2005 and were received at Accutest on 07/08/2005 properly preserved, at 2.8 Deg. C and intact. These Samples received an Accutest job number of T10844. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method EPA 624

Matrix AQ **Batch ID:** VY503

- All samples were analyzed within the recommended method holding time.
- Sample(s) T10844-1MS, T10844-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 2-Hexanone, 4-Methyl-2-pentanone, Acetone, Bromoform, Methyl ethyl ketone are outside control limits. Probable cause due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 1,1,2,2-Tetrachloroethane, 2-Hexanone, 4-Methyl-2-pentanone, Acetone, Bromoform, Methyl ethyl ketone are outside control limits. Probable cause due to matrix interference.

Extractables by GCMS By Method EPA 625

Matrix AQ **Batch ID:** OP4763

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T10844-1MS, T10844-1MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for Benzoic Acid, Hexachlorocyclopentadiene are outside control limits biased high. Since there are no detects for these compounds in the associated samples, the data is acceptable.
- OP4763-MS: Compounds outside control limits due to matrix interference.
- OP4763-MSD: Compounds outside control limits due to matrix interference.
- OP4763-MS for 2-Fluorophenol: Outside control limits due to matrix interference.
- OP4763-MS for Nitrobenzene-d5: Outside control limits due to matrix interference.
- OP4763-MS for Phenol-d5: Outside control limits due to matrix interference.

Wet Chemistry By Method EPA 150.1/9040

Matrix AQ **Batch ID:** GN8411

- Sample(s) T10845-2DUP were used as the QC samples for pH.

Wet Chemistry By Method EPA 160.2

Matrix AQ **Batch ID:** GN8422

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T10843-3DUP were used as the QC samples for Solids, Total Suspended.

Wet Chemistry By Method EPA 1664

Matrix AQ	Batch ID: GP3310

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T10834-2MS, T10834-2MSD were used as the QC samples for HEM Oil And Grease.
- Matrix Spike Duplicate Recovery(s) for HEM Oil And Grease are outside control limits. Probable cause due to matrix interference.

Wet Chemistry By Method EPA 350.1

Matrix AQ	Batch ID: GP3314

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T10844-1DUP, T10844-1MS were used as the QC samples for Nitrogen, Ammonia.

Wet Chemistry By Method EPA 351.2

Matrix AQ	Batch ID: GP3318

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T10844-1DUP, T10844-1MS were used as the QC samples for Nitrogen, Total Kjeldahl.

Wet Chemistry By Method EPA 353.2

Matrix AQ	Batch ID: GN8407

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T10844-1DUP, T10844-1MS were used as the QC samples for Nitrogen, Nitrite.

Matrix AQ	Batch ID: GN8410

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T10844-1DUP, T10844-1MS were used as the QC samples for Nitrogen, Nitrate + Nitrite.

Wet Chemistry By Method EPA 365.2

Matrix AQ	Batch ID: GP3313

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T10844-1DUP, T10844-1MS were used as the QC samples for Phosphorus, Total.

Wet Chemistry By Method EPA 410.4

Matrix AQ	Batch ID: GP3309

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T10834-3DUP, T10834-3MS were used as the QC samples for Chemical Oxygen Demand.

Wet Chemistry By Method EPA 415.1/9060

Matrix AQ	Batch ID: GN8406

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T10844-1DUP, T10844-1MS were used as the QC samples for Total Organic Carbon.

Wet Chemistry By Method SM18 4500NO3E/NO2B

Matrix AQ	Batch ID: R12689

- T10844-1 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Accutest Laboratories Gulf Coast (ALGC) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALGC and as stated on the COC. ALGC certifies that the data meets the Data QualityObjectives for precision, accuracy and completeness as specified in the ALGC Quality Manual except as noted above. This report is to be used in its entirety. ALGC is not responsible for any assumptions of data quality if partial data packages are used

Accutest Laboratories

Report of Analysis

Client Sample ID:	DF1		
Lab Sample ID:	T10844-1	Date Sampled:	07/07/05
Matrix:	AQ - Water	Date Received:	07/08/05
Method:	EPA 624	Percent Solids:	n/a
Project:	Jones Road		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0065161.D	1	07/09/05	LJ	n/a	n/a	VY503
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	0.0317	0.050	mg/l	J
71-43-2	Benzene	ND	0.0020	mg/l	
75-27-4	Bromodichloromethane	ND	0.0020	mg/l	
75-25-2	Bromoform	ND	0.0020	mg/l	
108-90-7	Chlorobenzene	ND	0.0020	mg/l	
75-00-3	Chloroethane	ND	0.0020	mg/l	
67-66-3	Chloroform	ND	0.0020	mg/l	
75-15-0	Carbon disulfide	ND	0.010	mg/l	
56-23-5	Carbon tetrachloride	ND	0.0020	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0020	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0020	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0020	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0020	mg/l	
124-48-1	Dibromochloromethane	ND	0.0020	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0020	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0020	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0020	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0020	mg/l	
100-41-4	Ethylbenzene	0.0014	0.0020	mg/l	J
591-78-6	2-Hexanone	ND	0.010	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.010	mg/l	
74-83-9	Methyl bromide	ND	0.0020	mg/l	
74-87-3	Methyl chloride	ND	0.0020	mg/l	
75-09-2	Methylene chloride	ND	0.0050	mg/l	
78-93-3	Methyl ethyl ketone	ND	0.010	mg/l	
100-42-5	Styrene	ND	0.0020	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0020	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0020	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0020	mg/l	
108-88-3	Toluene	0.0032	0.0020	mg/l	
79-01-6	Trichloroethylene	ND	0.0020	mg/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DF1		
Lab Sample ID:	T10844-1	Date Sampled:	07/07/05
Matrix:	AQ - Water	Date Received:	07/08/05
Method:	EPA 624	Percent Solids:	n/a
Project:	Jones Road		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	0.0020	mg/l	
1330-20-7	Xylene (total)	0.0103	0.0060	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	116%		73-139%
17060-07-0	1,2-Dichloroethane-D4	128%		66-139%
2037-26-5	Toluene-D8	115%		77-148%
460-00-4	4-Bromofluorobenzene	106%		84-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DF1		
Lab Sample ID:	T10844-1	Date Sampled:	07/07/05
Matrix:	AQ - Water	Date Received:	07/08/05
Method:	EPA 625 SW846 3510C	Percent Solids:	n/a
Project:	Jones Road		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A12699.D	1	07/08/05	SC	07/08/05	OP4763	EA935
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	0.025	0.0050	mg/l	
95-57-8	2-Chlorophenol	ND	0.0050	0.0010	mg/l	
59-50-7	4-Chloro-3-methyl phenol	ND	0.0050	0.0010	mg/l	
120-83-2	2,4-Dichlorophenol	ND	0.0050	0.0010	mg/l	
105-67-9	2,4-Dimethylphenol	ND	0.0050	0.0020	mg/l	
51-28-5	2,4-Dinitrophenol	ND	0.025	0.011	mg/l	
534-52-1	4,6-Dinitro-o-cresol	ND	0.010	0.0050	mg/l	
95-48-7	2-Methylphenol	ND	0.0050	0.0010	mg/l	
	3&4-Methylphenol	ND	0.0050	0.0010	mg/l	
88-75-5	2-Nitrophenol	ND	0.0050	0.0010	mg/l	
100-02-7	4-Nitrophenol	ND	0.025	0.010	mg/l	
87-86-5	Pentachlorophenol	ND	0.025	0.012	mg/l	
108-95-2	Phenol	ND	0.0050	0.0010	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	0.0050	0.0010	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	0.0050	0.0020	mg/l	
83-32-9	Acenaphthene	ND	0.0050	0.0030	mg/l	
208-96-8	Acenaphthylene	ND	0.0050	0.0030	mg/l	
120-12-7	Anthracene	ND	0.0050	0.0020	mg/l	
56-55-3	Benzo(a)anthracene	ND	0.0050	0.0010	mg/l	
50-32-8	Benzo(a)pyrene	ND	0.0050	0.0010	mg/l	
205-99-2	Benzo(b)fluoranthene	ND	0.0050	0.0010	mg/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.0050	0.0020	mg/l	
207-08-9	Benzo(k)fluoranthene	ND	0.0050	0.0020	mg/l	
101-55-3	4-Bromophenyl phenyl ether	ND	0.0050	0.0030	mg/l	
85-68-7	Butyl benzyl phthalate	ND	0.0050	0.0020	mg/l	
100-51-6	Benzyl Alcohol	ND	0.0050	0.0010	mg/l	
91-58-7	2-Chloronaphthalene	ND	0.0050	0.0030	mg/l	
106-47-8	4-Chloroaniline	ND	0.0050	0.0010	mg/l	
86-74-8	Carbazole	ND	0.0050	0.0020	mg/l	
218-01-9	Chrysene	ND	0.0050	0.0010	mg/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.0050	0.0010	mg/l	
111-44-4	bis(2-Chloroethyl)ether	ND	0.0050	0.0010	mg/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DF1		
Lab Sample ID:	T10844-1	Date Sampled:	07/07/05
Matrix:	AQ - Water	Date Received:	07/08/05
Method:	EPA 625 SW846 3510C	Percent Solids:	n/a
Project:	Jones Road		

ABN TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	0.0050	0.0020	mg/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.0050	0.0030	mg/l	
95-50-1	1,2-Dichlorobenzene	ND	0.0050	0.0020	mg/l	
541-73-1	1,3-Dichlorobenzene	ND	0.0050	0.0020	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	0.0050	0.0020	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	0.0050	0.0020	mg/l	
606-20-2	2,6-Dinitrotoluene	ND	0.0050	0.0020	mg/l	
91-94-1	3,3'-Dichlorobenzidine	ND	0.010	0.0010	mg/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.0050	0.0015	mg/l	
132-64-9	Dibenzofuran	ND	0.0050	0.0030	mg/l	
84-74-2	Di-n-butyl phthalate	ND	0.0050	0.0020	mg/l	
117-84-0	Di-n-octyl phthalate	ND	0.0050	0.0010	mg/l	
84-66-2	Diethyl phthalate	0.0015	0.0050	0.0010	mg/l	J
131-11-3	Dimethyl phthalate	ND	0.0050	0.0010	mg/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.0050	0.0020	mg/l	
206-44-0	Fluoranthene	ND	0.0050	0.0020	mg/l	
86-73-7	Fluorene	ND	0.0050	0.0030	mg/l	
118-74-1	Hexachlorobenzene	ND	0.0050	0.0030	mg/l	
87-68-3	Hexachlorobutadiene	ND	0.0050	0.0020	mg/l	
77-47-4	Hexachlorocyclopentadiene	ND	0.0050	0.0020	mg/l	
67-72-1	Hexachloroethane	ND	0.0050	0.0020	mg/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0050	0.0030	mg/l	
78-59-1	Isophorone	ND	0.0050	0.0010	mg/l	
91-57-6	2-Methylnaphthalene	0.0538	0.0050	0.0030	mg/l	
88-74-4	2-Nitroaniline	ND	0.025	0.0010	mg/l	
99-09-2	3-Nitroaniline	ND	0.025	0.0020	mg/l	
100-01-6	4-Nitroaniline	ND	0.025	0.0030	mg/l	
91-20-3	Naphthalene	0.0145	0.0050	0.0030	mg/l	
98-95-3	Nitrobenzene	ND	0.0050	0.0020	mg/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.0050	0.0010	mg/l	
86-30-6	N-Nitrosodiphenylamine	ND	0.0050	0.0020	mg/l	
85-01-8	Phenanthrene	0.0067	0.0050	0.0030	mg/l	
129-00-0	Pyrene	ND	0.0050	0.0020	mg/l	
120-82-1	1,2,4-Trichlorobenzene	ND	0.0050	0.0030	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	32%		10-66%
4165-62-2	Phenol-d5	21%		10-53%
118-79-6	2,4,6-Tribromophenol	84%		32-128%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DF1		
Lab Sample ID:	T10844-1	Date Sampled:	07/07/05
Matrix:	AQ - Water	Date Received:	07/08/05
Method:	EPA 625 SW846 3510C	Percent Solids:	n/a
Project:	Jones Road		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	60%		29-115%
321-60-8	2-Fluorobiphenyl	61%		34-113%
1718-51-0	Terphenyl-d14	67%		12-145%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DF1		
Lab Sample ID:	T10844-1	Date Sampled:	07/07/05
Matrix:	AQ - Water	Date Received:	07/08/05
		Percent Solids:	n/a
Project:	Jones Road		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chemical Oxygen Demand	28.0	20	5.1	mg/l	1	07/08/05 14:00	LN	EPA 410.4
HEM Oil And Grease	4.0	2.0	0.40	mg/l	1	07/08/05 09:00	NC	EPA 1664
Nitrogen, Ammonia	0.22	0.10		mg/l	2.5	07/11/05 10:50	LN	EPA 350.1
Nitrogen, Nitrate [a]	0.80	0.15	0.0050	mg/l	1	07/08/05 12:15	LN	SM18 4500NO3E/NO2B
Nitrogen, Nitrate + Nitrite	0.80	0.10	0.0050	mg/l	2	07/08/05 12:15	LN	EPA 353.2
Nitrogen, Nitrite	0.0030 U	0.050	0.0030	mg/l	1	07/08/05 10:39	LN	EPA 353.2
Nitrogen, Total Kjeldahl	1.2	1.0	0.020	mg/l	10	07/12/05 12:25	LN	EPA 351.2
Phosphorus, Total	0.25	0.020	0.0040	mg/l	1	07/11/05 08:20	LN	EPA 365.2
Solids, Total Suspended	1160	6.0	1.6	mg/l	1	07/12/05 08:30	NC	EPA 160.2
Total Organic Carbon	12.0	1.0	0.20	mg/l	1	07/08/05 09:34	LN	EPA 415.1/9060
pH	12.1			su	1	07/08/05 11:40	NC	EPA 150.1/9040

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Accutest Laboratories

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	T10844-2	Date Sampled:	07/07/05
Matrix:	AQ - Trip Blank Water	Date Received:	07/08/05
Method:	EPA 624	Percent Solids:	n/a
Project:	Jones Road		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0065158.D	1	07/09/05	LJ	n/a	n/a	VY503
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	0.050	mg/l	
71-43-2	Benzene	ND	0.0020	mg/l	
75-27-4	Bromodichloromethane	ND	0.0020	mg/l	
75-25-2	Bromoform	ND	0.0020	mg/l	
108-90-7	Chlorobenzene	ND	0.0020	mg/l	
75-00-3	Chloroethane	ND	0.0020	mg/l	
67-66-3	Chloroform	ND	0.0020	mg/l	
75-15-0	Carbon disulfide	ND	0.010	mg/l	
56-23-5	Carbon tetrachloride	ND	0.0020	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0020	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0020	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0020	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0020	mg/l	
124-48-1	Dibromochloromethane	ND	0.0020	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0020	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0020	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0020	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0020	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	mg/l	
591-78-6	2-Hexanone	ND	0.010	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.010	mg/l	
74-83-9	Methyl bromide	ND	0.0020	mg/l	
74-87-3	Methyl chloride	ND	0.0020	mg/l	
75-09-2	Methylene chloride	0.0047	0.0050	mg/l	J
78-93-3	Methyl ethyl ketone	ND	0.010	mg/l	
100-42-5	Styrene	ND	0.0020	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0020	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0020	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0020	mg/l	
108-88-3	Toluene	ND	0.0020	mg/l	
79-01-6	Trichloroethylene	ND	0.0020	mg/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	T10844-2	Date Sampled:	07/07/05
Matrix:	AQ - Trip Blank Water	Date Received:	07/08/05
Method:	EPA 624	Percent Solids:	n/a
Project:	Jones Road		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	0.0020	mg/l	
1330-20-7	Xylene (total)	ND	0.0060	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		73-139%
17060-07-0	1,2-Dichloroethane-D4	130%		66-139%
2037-26-5	Toluene-D8	113%		77-148%
460-00-4	4-Bromofluorobenzene	112%		84-150%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- LRC Form

CHAIN OF CUSTODY

Page 1 of 1

10165 Harwin, Suite 150 - Houston, TX 77036 - 713-271-4700 fax: 713-271-4770

FED-EX Tracking #: | Bottle Order Control #:

Accutest Quote #: GG12_2003_005 | Accutest Job #: T10844

Client / Reporting Information

Company Name: Shaw Environmental Inc.
Project Contact: Greg Long | E-Mail:
Address: 3010 Briarpark Drive, Suite 4N
City: Houston | State: TX | Zip: 77042
Phone No.: 713-996-4519 | Fax No.:
Sampler's Name: BILL HARDMAN / WILL ANDREWS

Project Information

Project Name / No.: Harris County Flood Control JONES ROAD
Bill to: SHAW EDI | Invoice Attn:
Address: 3010 BRIAR PARK SUITE 4N
City: HOUSTON | State: TX | Zip: 77042
Phone No.: 713 996 4519 | Fax No.:
Client Purchase Order #:

Requested Analyses

Accutest Sample #	Field ID / Point of Collection	Collection Date	Collection Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH	HNO3	H2SO4	EnCore	NaHSO4	MEOH	NONE	VOA (624)	SEMI (625)	BOD & pH	TOC	TKN & AMN	Nitrate & Total Phosphorus	Nitrite & TSS	O & G (1664)	COD			LAB USE ONLY
1	DFZ	7-07-05	1430	WTR	9	X								X			X				X				
1	DFZ	7-0705	1430	WTR	4								X		X	X				X					
1	DFZ	7-07-05	1430	WTR	3				X									X	X			X			
2	T.B. -QR 7/8/05																								

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Wastewater; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; SOL - Other Solid

Turnaround Time (Business days)

- [ ] 10 Day STANDARD — Approved By / Date:
- [ ] 5 Day RUSH
- [ ] 4 Day RUSH
- [ ] 3 Day EMERGENCY
- [X] 2 Day EMERGENCY — ALL analysis 2 DAY
- [ ] 1 Day EMERGENCY — BOD -5 day
- [ ] Other

Real time analytical data available via Leblink

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] Reduced Tier 1
- [ ] Full Data Package
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results & Standard QC

Comments / Remarks

CALL GREG LONG IF THERE ARE QUESTIONS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
	7/8/05 0830		2		2
Relinquished by: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable ☐	On Ice: X	Cooler Temp.: 2.8

4.1

T10844: Chain of Custody
Page 1 of 2

ACCUTEST.

SAMPLE RECEIPT LOG

JOB #: T10844 DATE/TIME RECEIVED: 7/8/05 /08:30

CLIENT: Shaw Env. INITIALS: AR

Condition/Variance (Circle "Y" for yes and "N" for no or NA. If "N" is circled, see variance for explanation):

1. (Y) N Sample received in undamaged condition.
2. (Y) N Samples received within temp. range.
3. (Y) N Sample received with proper pH.
4. (Y) N Sample received in proper containers.
5. (Y) N Sample volume sufficient for analysis.
6. (Y) N Sample received with chain of custody.
7. (Y) N Chain of Custody matches **sample IDs and analysis** on containers.
8. Y N (NA) Custody seal received intact and tamper not evident on cooler.
9. Y N (NA) Custody seal received intact and tamper not evident on bottles.

SAMPLE or FIELD ID	BOTTLE #	DATE SAMPLED	MATRIX	VOLUME	LOCATION	PRESERV.	PH
1	1-3	7/7	AQ	40mL	VREF	(1),2,3,4,5,6	U, <2, >12, (NA)
1	4-5			40mL	IBB	(1),2,3,4,5,6	U, <2, >12, (NA)
1	6-7			WM32		(1),2,3,4,5,6	U, (2), >12, NA
1	8-9			A1000		(1),2,3,4,5,6	(U), <2, >12, NA
1	10-11			P1000		(1),2,3,4,5,6	(U), <2, >12, NA
1	12-13			P1000		1,2,3,(4),5,6	(U), <2, >12, NA
1	14			P250		1,2,3,(4),5,6	U, (<2), >12, NA
2	1-2	N/A		40mL	VREF	(1),2,3,4,5,6	U, <2, >12, (NA)
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA

AM 7.8.05

LOCATIONS: ~~WI: Walk-In~~ ~~VR: Volatile Refrig.~~ SUB: Subcontract EF: Encore Freezer

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: Other

~~pH of waters checked excluding volatiles~~

pH of soils N/A

Comments:

Delivery method: Courier: Client

Tracking#:

COOLER TEMP: 2.8 COOLER TEMP: COOLER TEMP:

COOLER TEMP: COOLER TEMP:

Method of sample disposal: (circle one) **Accutest disposal** **Hold** **Return to Client**

Form: SM012, Rev.12/14/04, QAO

4.1

T10844: Chain of Custody
Page 2 of 2

LABORATORY REVIEW CHECKLIST: REPORTABLE DATA								
Laboratory Name: Accutest Gulf Coast			Date: 7/12/2005					
Project Name: Jones Road.			Laboratory Job Number: T10844					
Reviewer Name: Ron Martino			Batch Number(s):					
#[1]	Analysis[2]	Description	Yes	No	NA[3]	NR[4]	ER #[5]	
	OI	CHAIN-OF-CUSTODY (COC):						
		1) Were all samples included on a completed COC?	X					
		2) Did the samples requiring chemical preservation arrive at the laboratory preserved?	X					
		3) Were samples requiring thermal preservation within temperature specs at log-in?	X					
		4) Were the samples in the appropriate containers?	X					
	OI	SAMPLE AND QUALITY CONTROL (QC) IDENTIFICATION:						
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X					
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X					
	OI	TEST REPORTS:						
		1) Were samples prepared and analyzed within holding times?	X					
		2) Were reported results within calibration range?	X					
		3) Were all calculations verified?	X					
		4) Were all analyte identifications verified?	X					
		5) Were sample quantitation limits reported for all analytes not detected?	X					
		6) If required for the project, were the tentatively identified compounds reported?			X			
		7) Were results reported on a dry weight basis?			X			
	O	SURROGATE RECOVERY DATA:						
		1) Were surrogates added prior to extraction?	X					
		2) Were surrogate percent recoveries in all samples within the laboratory QC acceptance criteria?		X			2	
	OI	TEST REPORTS FOR BLANK SAMPLES:						
		1) Were appropriate type(s) of blanks analyzed?	X					
		2) Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X					
		3) Were blanks free of detected compounds?	X					
	OI	LABORATORY CONTROL SAMPLES (LCSs):						
		1) Was each LCS prepared from a source external to the calibration standards?	X					
		2) Were all project-required analytes included in the LCS?	X					
		3) Was each LCS taken through the entire analytical procedure, including preparation and, if applicable, cleanup procedures?	X					
		4) Were LCSs analyzed at the required frequency?	X					
		5) Were LCS percent recoveries within the laboratory QC acceptance criteria?	X					
	OI	MATRIX SPIKE (MS) and MATRIC SPIKE DUPLICATE (MSD) DATA:						
		1) Were all project-required analytes included in the MS and MSD?	X					
		2) Were MS/MSD analyzed at the appropriate frequency?	X					
		3) Were MS percent recoveries within the laboratory QC acceptance criteria?		X			2	
		4) Were MSD percent recoveries and relative percent differences (RPDs) within the laboratory QC acceptance criteria?		X			2	
	OI	ANALYTICAL DUPLICATE DATA:						
		1) Were appropriate analytical duplicates analyzed for each matrix?	X					
		2) Were analytical duplicates analyzed at the appropriate frequency?	X					
		3) Were RPDs or relative standard deviations within the laboratory QC acceptance criteria?	X					
	OI	METHOD QUANTITATION LIMITS (MQLs):						
		Is the concentration of the lowest non-zero calibration standard in the calibration curve reported? A DCS was analyzed on a quarterly basis.	X				1	
	OI	The ND listed on the hard copy reports and/or EDD represents non detection of the target analyte at a concentration below the MDL.			X			
	OI	VALIDATION RESULTS FOR NON-REFERENCE METHODS						
		Were all samples prepared and analyzed using a Reference Method?	X					
	OI	OTHER PROBLEMS/ANOMALIES:						
		Are all known problems, anomalies or special conditions (e.g., use of minimum analytical limits) associated with the data noted in the Laboratory Review Checklist and Exception Reports?	X					

LAB REVIEW CHECKLIST (continued): SUPPORTING DATA								
Laboratory Name: Accutest Gulf Coast			Date: 7/12/2005					
Project Name: Jones Road.			Laboratory Job Number: T10844					
Reviewer Name: Ron Martino			Batch Number(s):					
#[1]	Analysis[2]	Description	Yes	No	NA[3]	NR[4]	ER #[5]	
	OI	INITIAL CALIBRATION (ICAL) and ICAL VERIFICATION (ICV):						
		1) Were response factors (RFs) and/or relative response factors (RRFs) within the method-required QC acceptance criteria?	X					
		2) Were percent RSDs or correlation coefficient criteria met?	X					
		3) Were the number of standards recommended in the method used for all analytes?	X					
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	X					
		5) Are ICV data available for all instruments used?	X					
		6) Has the calibration curve been verified using a NIST-traceable second source?	X					
	OI	CONTINUING CALIBRATION VERIFICATION (CCV):						
		1) Was the CCV analyzed at the method-required frequency?	X					
		2) Were percent differences within the method-required QC acceptance criteria?	X					
		3) Was the ICAL curve verified for each analyte of interest?	X					
	O	MASS SPECTRAL TUNING:						
		1) Was the appropriate compound for the method used for tuning?	X					
		2) Were ion abundance data within the method-required QC acceptance criteria?	X					
	O	INTERNAL STANDARD (IS):						
		1) Were IS area counts within the method-required QC acceptance criteria?	X					
		2) Were IS retention times within the method-required QC acceptance criteria?	X					
	OI	RAW DATA (NELAC Section 1 Appendix A Glossary, and Section 5.12):						
		1) Were the raw data (e.g., chromatograms, spectral data) reviewed by an analyst?	X					
		2) Were all data associated with manual integrations flagged?	X					
	O	DUAL COLUMN CONFIRMATION:						
		1) Did dual column confirmation results meet the method-required QC acceptance criteria?			X			
		2) Were all percent differences less than 25%?			X			
	O	TENTATIVELY IDENTIFIED COMPOUNDS (TICs):						
		If TICs were requested, were the mass spectra and TIC data reviewed?			X			
	I	ICS RESULTS:						
		1) Were percent recoveries within method acceptance criteria?			X			
		2) Were the absolute values for all analytes less than the IDL?			X			
	I	SERIAL DILUTIONS, POST DIGESTION SPIKES, AND METHOD OF STANDARD ADDITIONS:						
		Were percent differences, recoveries, and linearity within the QC acceptance criteria specified in the method?			X			
	OI	VALIDATION RESULTS FOR NON-REFERENCE METHODS:						
		Are all non-Reference Methods documented and validated (NELAC 5.10.2.1)?			X			
	OI	METHOD DETECTION LIMIT (MDL) STUDIES:						
		Are MDL studies for each analyte in a given matrix current, on file, less than a year old?	X					
	OI	STANDARDS TRACEABILITY:						
		Are all standards used in the analyses NIST-traceable?	X					
	OI	DOCUMENTATION OF WATER AND REAGENTS QUALITY:						
		Is documentation of the quality of water and reagents used in the analyses on file?	X					
	OI	COMPOUND/ANALYTE IDENTIFICATION PROCEDURES:						
		Are the procedures for compound identification documented?	X					
	OI	DEMONSTRATION OF ANALYST CAPABILITY:						
		1) Was demonstration of capability conducted according to NELAC Appendix 5C?	X					
		2) Is documentation of the analyst's demonstration of capability on file?	X					
		3) Is documentation of the analyst's proficiency up-to-date and on file?	X					
	OI	PROFICIENCY TEST REPORTS (NELAC 5.4.2):						
		Are proficiency testing or interlaboratory comparison results on file?	X					
	OI	LABORATORY STANDARD OPERATING PROCEDURES (SOPs):						
		Are laboratory SOPs current and on file for each method performed?	X					

[1] Items identified by the letter "R" should be submitted to TNRCC in the Data Package. Items identified by the letter "S" should be retained and made available to the TNRCC upon request for a period of three years after the data are submitted.

[2] O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);

[3] NA = Not applicable;

[4] NR = Not Reviewed;

[5] ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked.

LAB REVIEW CHECKLIST (continued): Exception Reports		
Laboratory Name: Accutest Gulf Coast		Date: 7/12/2005
Project Name: Jones Road.		Laboratory Job Number: T10844
Reviewer Name: Ron Martino		Batch Number(s):
ER #	Description	
1	For reporting purposes, the RL on the reports is equal to the MQL. The MDL is equal to the MDL/SQL. The unadjusted MQL is reported in the blank result page for all analysis.	
2	All anomalies are discussed in the case narrative.	
	All supporting laboratory documentation is on file with the laboratory's QA/QC department	

1. APPENDIX A LABORATORY DATA PACKAGE COVER PAGE

This data package consists of:

- ☐ This signature page, the laboratory review checklist, and the following reportable data:
- ☐ R1 Field chain-of-custody documentation;
- ☐ R2 Sample identification cross-reference;
- ☐ R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
  - b) dilution factors,
  - c) preparation methods,
  - d) cleanup methods, and
  - e) if required for the project, tentatively identified compounds (TICs).
- ☐ R4 Surrogate recovery data including:
  - a) Calculated recovery (%R), and
  - b) The laboratory's surrogate QC limits.
- ☐ R5 Test reports/summary forms for blank samples;
- ☐ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - a) LCS spiking amounts,
  - b) Calculated %R for each analyte, and
  - c) The laboratory's LCS QC limits.
- ☐ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a) Samples associated with the MS/MSD clearly identified,
  - b) MS/MSD spiking amounts,
  - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- ☐ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - a) the amount of analyte measured in the duplicate,
  - b) the calculated RPD, and
  - c) the laboratory's QC limits for analytical duplicates.
- ☐ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ☐ R10 Other problems or anomalies.
- ☐ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By me signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [ ] This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Ron Martino		Lab Director	7/12/2005
Name:	Signature:	Title:	Date:

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T10844
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY503-MB	Y0065122.D	1	07/08/05	LJ	n/a	n/a	VY503

The QC reported here applies to the following samples: Method: EPA 624

T10844-1, T10844-2

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	50	ug/l	
71-43-2	Benzene	ND	2.0	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	ug/l	
75-25-2	Bromoform	ND	2.0	ug/l	
108-90-7	Chlorobenzene	ND	2.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	2.0	ug/l	
75-15-0	Carbon disulfide	ND	10	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ug/l	
100-41-4	Ethylbenzene	ND	2.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	ug/l	
74-83-9	Methyl bromide	ND	2.0	ug/l	
74-87-3	Methyl chloride	ND	2.0	ug/l	
75-09-2	Methylene chloride	ND	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	ug/l	
100-42-5	Styrene	ND	2.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	ug/l	
108-88-3	Toluene	ND	2.0	ug/l	
79-01-6	Trichloroethylene	ND	2.0	ug/l	
75-01-4	Vinyl chloride	ND	2.0	ug/l	
1330-20-7	Xylene (total)	ND	6.0	ug/l	

Method Blank Summary

Job Number: T10844
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY503-MB	Y0065122.D	1	07/08/05	LJ	n/a	n/a	VY503

The QC reported here applies to the following samples: Method: EPA 624

T10844-1, T10844-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	111%	73-139%
17060-07-0	1,2-Dichloroethane-D4	116%	66-139%
2037-26-5	Toluene-D8	115%	77-148%
460-00-4	4-Bromofluorobenzene	118%	84-150%

Blank Spike Summary

Job Number: T10844
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY503-BS	Y0065121.D	1	07/08/05	LJ	n/a	n/a	VY503

The QC reported here applies to the following samples: Method: EPA 624

T10844-1, T10844-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	146	117	31-158
71-43-2	Benzene	25	23.5	94	67-118
75-27-4	Bromodichloromethane	25	24.5	98	66-115
75-25-2	Bromoform	25	29.3	117	57-119
108-90-7	Chlorobenzene	25	24.7	99	72-116
75-00-3	Chloroethane	25	26.4	106	61-135
67-66-3	Chloroform	25	24.5	98	66-117
75-15-0	Carbon disulfide	25	19.8	79	39-136
56-23-5	Carbon tetrachloride	25	25.8	103	67-131
75-34-3	1,1-Dichloroethane	25	23.7	95	63-125
75-35-4	1,1-Dichloroethylene	25	24.3	97	52-143
107-06-2	1,2-Dichloroethane	25	25.9	104	61-120
78-87-5	1,2-Dichloropropane	25	24.1	96	64-118
124-48-1	Dibromochloromethane	25	27.1	108	67-117
156-59-2	cis-1,2-Dichloroethylene	25	23.0	92	65-116
10061-01-5	cis-1,3-Dichloropropene	25	26.2	105	67-118
156-60-5	trans-1,2-Dichloroethylene	25	25.0	100	66-128
10061-02-6	trans-1,3-Dichloropropene	25	29.3	117	73-126
100-41-4	Ethylbenzene	25	24.1	96	71-119
591-78-6	2-Hexanone	125	157	126	45-132
108-10-1	4-Methyl-2-pentanone	125	147	118	46-127
74-83-9	Methyl bromide	25	23.2	93	51-126
74-87-3	Methyl chloride	25	26.1	104	47-130
75-09-2	Methylene chloride	25	23.8	95	53-130
78-93-3	Methyl ethyl ketone	125	145	116	47-128
100-42-5	Styrene	25	24.0	96	69-115
71-55-6	1,1,1-Trichloroethane	25	24.7	99	67-128
79-34-5	1,1,2,2-Tetrachloroethane	25	28.3	113	57-121
79-00-5	1,1,2-Trichloroethane	25	26.2	105	62-117
127-18-4	Tetrachloroethylene	25	24.2	97	72-128
108-88-3	Toluene	25	25.4	102	70-121
79-01-6	Trichloroethylene	25	25.2	101	69-120
75-01-4	Vinyl chloride	25	26.2	105	59-145
1330-20-7	Xylene (total)	75	77.8	104	72-120

Blank Spike Summary

Job Number: T10844
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY503-BS	Y0065121.D	1	07/08/05	LJ	n/a	n/a	VY503

The QC reported here applies to the following samples: Method: EPA 624

T10844-1, T10844-2

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	111%	73-139%
17060-07-0	1,2-Dichloroethane-D4	114%	66-139%
2037-26-5	Toluene-D8	115%	77-148%
460-00-4	4-Bromofluorobenzene	111%	84-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T10844
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T10844-1MS	Y0065162.D	1	07/09/05	LJ	n/a	n/a	VY503
T10844-1MSD	Y0065163.D	1	07/09/05	LJ	n/a	n/a	VY503
T10844-1	Y0065161.D	1	07/09/05	LJ	n/a	n/a	VY503

The QC reported here applies to the following samples: Method: EPA 624

T10844-1, T10844-2

CAS No.	Compound	T10844-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	31.7	J	125	227	156*	215	147*	5	39-130/26
71-43-2	Benzene	ND		25	25.5	102	24.1	96	6	65-122/15
75-27-4	Bromodichloromethane	ND		25	26.1	104	24.7	99	6	64-119/22
75-25-2	Bromoform	ND		25	33.8	135*	34.7	139*	3	50-123/28
108-90-7	Chlorobenzene	ND		25	25.1	100	24.4	98	3	72-118/20
75-00-3	Chloroethane	ND		25	28.1	112	26.6	106	5	60-136/25
67-66-3	Chloroform	ND		25	25.4	102	25.0	100	2	65-120/20
75-15-0	Carbon disulfide	ND		25	20.7	83	19.8	79	4	37-140/24
56-23-5	Carbon tetrachloride	ND		25	26.4	106	26.2	105	1	64-135/23
75-34-3	1,1-Dichloroethane	ND		25	24.6	98	23.5	94	5	65-126/21
75-35-4	1,1-Dichloroethylene	ND		25	26.7	107	25.1	100	6	55-140/25
107-06-2	1,2-Dichloroethane	ND		25	28.4	114	27.4	110	4	57-125/25
78-87-5	1,2-Dichloropropane	ND		25	24.8	99	23.8	95	4	63-121/22
124-48-1	Dibromochloromethane	ND		25	28.7	115	28.9	116	1	60-123/23
156-59-2	cis-1,2-Dichloroethylene	ND		25	25.1	100	24.0	96	4	62-120/24
10061-01-5	cis-1,3-Dichloropropene	ND		25	26.6	106	25.5	102	4	61-119/23
156-60-5	trans-1,2-Dichloroethylene	ND		25	27.0	108	25.2	101	7	64-130/22
10061-02-6	trans-1,3-Dichloropropene	ND		25	30.0	120	29.8	119	1	65-129/23
100-41-4	Ethylbenzene	1.4	J	25	26.1	99	26.4	100	1	70-123/18
591-78-6	2-Hexanone	ND		125	217	174*	219	175*	1	41-137/27
108-10-1	4-Methyl-2-pentanone	ND		125	190	152*	182	146*	4	41-133/22
74-83-9	Methyl bromide	ND		25	22.5	90	20.6	82	9	47-129/27
74-87-3	Methyl chloride	ND		25	27.3	109	26.9	108	1	45-133/24
75-09-2	Methylene chloride	ND		25	26.4	106	25.0	100	5	49-128/21
78-93-3	Methyl ethyl ketone	ND		125	208	166*	204	163*	2	43-125/29
100-42-5	Styrene	ND		25	23.8	95	23.6	94	1	65-120/21
71-55-6	1,1,1-Trichloroethane	ND		25	24.8	99	23.7	95	5	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	32.9	132*	33.2	133*	1	50-128/22
79-00-5	1,1,2-Trichloroethane	ND		25	30.2	121*	29.6	118	2	58-120/22
127-18-4	Tetrachloroethylene	ND		25	23.3	93	22.7	91	3	69-132/21
108-88-3	Toluene	3.2		25	28.1	100	27.8	98	1	70-123/18
79-01-6	Trichloroethylene	ND		25	25.5	102	25.8	103	1	70-120/19
75-01-4	Vinyl chloride	ND		25	26.6	106	24.7	99	7	51-147/24
1330-20-7	Xylene (total)	10.3		75	90.1	106	90.3	107	0	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T10844
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T10844-1MS	Y0065162.D	1	07/09/05	LJ	n/a	n/a	VY503
T10844-1MSD	Y0065163.D	1	07/09/05	LJ	n/a	n/a	VY503
T10844-1	Y0065161.D	1	07/09/05	LJ	n/a	n/a	VY503

The QC reported here applies to the following samples: Method: EPA 624

T10844-1, T10844-2

CAS No.	Surrogate Recoveries	MS	MSD	T10844-1	Limits
1868-53-7	Dibromofluoromethane	113%	115%	116%	73-139%
17060-07-0	1,2-Dichloroethane-D4	125%	126%	128%	66-139%
2037-26-5	Toluene-D8	113%	118%	115%	77-148%
460-00-4	4-Bromofluorobenzene	105%	107%	106%	84-150%

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T10844
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4763-MB	A12697.D	1	07/08/05	SC	07/08/05	OP4763	EA935

The QC reported here applies to the following samples: Method: EPA 625

T10844-1

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	25	5.0	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	1.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	1.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	1.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	11	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	5.0	ug/l	
95-48-7	2-Methylphenol	ND	5.0	1.0	ug/l	
	3&4-Methylphenol	ND	5.0	1.0	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	1.0	ug/l	
100-02-7	4-Nitrophenol	ND	25	10	ug/l	
87-86-5	Pentachlorophenol	ND	25	12	ug/l	
108-95-2	Phenol	ND	5.0	1.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	2.0	ug/l	
83-32-9	Acenaphthene	ND	5.0	3.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	3.0	ug/l	
120-12-7	Anthracene	ND	5.0	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	2.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	3.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	2.0	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	3.0	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	1.0	ug/l	
86-74-8	Carbazole	ND	5.0	2.0	ug/l	
218-01-9	Chrysene	ND	5.0	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	1.0	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	2.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	3.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.0	ug/l	

Method Blank Summary

Job Number: T10844
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4763-MB	A12697.D	1	07/08/05	SC	07/08/05	OP4763	EA935

The QC reported here applies to the following samples: Method: EPA 625

T10844-1

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	2.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	2.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	1.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	1.5	ug/l	
132-64-9	Dibenzofuran	ND	5.0	3.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	2.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	1.0	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	1.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	1.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.0	2.0	ug/l	
86-73-7	Fluorene	ND	5.0	3.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	3.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	2.0	ug/l	
67-72-1	Hexachloroethane	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	3.0	ug/l	
78-59-1	Isophorone	ND	5.0	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	3.0	ug/l	
88-74-4	2-Nitroaniline	ND	25	1.0	ug/l	
99-09-2	3-Nitroaniline	ND	25	2.0	ug/l	
100-01-6	4-Nitroaniline	ND	25	3.0	ug/l	
91-20-3	Naphthalene	ND	5.0	3.0	ug/l	
98-95-3	Nitrobenzene	ND	5.0	2.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	1.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	3.0	ug/l	
129-00-0	Pyrene	ND	5.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	3.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	38%	10-66%
4165-62-2	Phenol-d5	24%	10-53%

Method Blank Summary

Job Number: T10844
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4763-MB	A12697.D	1	07/08/05	SC	07/08/05	OP4763	EA935

The QC reported here applies to the following samples: Method: EPA 625

T10844-1

CAS No.	Surrogate Recoveries		Limits
118-79-6	2,4,6-Tribromophenol	79%	32-128%
4165-60-0	Nitrobenzene-d5	65%	29-115%
321-60-8	2-Fluorobiphenyl	68%	34-113%
1718-51-0	Terphenyl-d14	95%	12-145%

Blank Spike Summary

Job Number: T10844
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4763-BS	A12698.D	1	07/08/05	SC	07/08/05	OP4763	EA935

The QC reported here applies to the following samples: Method: EPA 625

T10844-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
65-85-0	Benzoic Acid	50	18.1	36*	11-29
95-57-8	2-Chlorophenol	50	37.2	74	47-87
59-50-7	4-Chloro-3-methyl phenol	50	38.7	77	53-93
120-83-2	2,4-Dichlorophenol	50	36.0	72	52-96
105-67-9	2,4-Dimethylphenol	50	35.8	72	40-92
51-28-5	2,4-Dinitrophenol	50	44.7	89	21-117
534-52-1	4,6-Dinitro-o-cresol	50	35.7	71	44-112
95-48-7	2-Methylphenol	50	31.0	62	34-83
	3&4-Methylphenol	100	56.3	56	27-80
88-75-5	2-Nitrophenol	50	37.4	75	53-99
100-02-7	4-Nitrophenol	50	15.6	31	11-41
87-86-5	Pentachlorophenol	50	27.3	55	23-140
108-95-2	Phenol	50	15.0	30	10-44
95-95-4	2,4,5-Trichlorophenol	50	37.1	74	55-105
88-06-2	2,4,6-Trichlorophenol	50	39.5	79	55-103
83-32-9	Acenaphthene	50	37.2	74	51-105
208-96-8	Acenaphthylene	50	40.5	81	58-114
120-12-7	Anthracene	50	40.6	81	59-110
56-55-3	Benzo(a)anthracene	50	44.1	88	64-103
50-32-8	Benzo(a)pyrene	50	43.2	86	60-113
205-99-2	Benzo(b)fluoranthene	50	40.6	81	54-114
191-24-2	Benzo(g,h,i)perylene	50	46.1	92	38-125
207-08-9	Benzo(k)fluoranthene	50	40.2	80	58-115
101-55-3	4-Bromophenyl phenyl ether	50	40.7	81	55-113
85-68-7	Butyl benzyl phthalate	50	48.1	96	53-120
100-51-6	Benzyl Alcohol	50	28.2	56	26-88
91-58-7	2-Chloronaphthalene	50	34.6	69	32-116
106-47-8	4-Chloroaniline	50	39.6	79	37-132
86-74-8	Carbazole	50	44.7	89	45-140
218-01-9	Chrysene	50	37.5	75	63-103
111-91-1	bis(2-Chloroethoxy)methane	50	34.4	69	53-99
111-44-4	bis(2-Chloroethyl)ether	50	37.2	74	51-99
108-60-1	bis(2-Chloroisopropyl)ether	50	37.2	74	47-103
7005-72-3	4-Chlorophenyl phenyl ether	50	39.7	79	52-106
95-50-1	1,2-Dichlorobenzene	50	32.7	65	26-103
541-73-1	1,3-Dichlorobenzene	50	29.5	59	20-102

Blank Spike Summary

Job Number: T10844
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4763-BS	A12698.D	1	07/08/05	SC	07/08/05	OP4763	EA935

The QC reported here applies to the following samples: Method: EPA 625

T10844-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-46-7	1,4-Dichlorobenzene	50	30.2	60	22-102
121-14-2	2,4-Dinitrotoluene	50	37.6	75	57-113
606-20-2	2,6-Dinitrotoluene	50	42.5	85	61-110
91-94-1	3,3'-Dichlorobenzidine	50	52.3	105	36-148
53-70-3	Dibenzo(a,h)anthracene	50	52.1	104	42-121
132-64-9	Dibenzofuran	50	45.3	91	54-104
84-74-2	Di-n-butyl phthalate	50	32.9	66	57-114
117-84-0	Di-n-octyl phthalate	50	43.7	87	44-130
84-66-2	Diethyl phthalate	50	40.1	80	57-113
131-11-3	Dimethyl phthalate	50	40.4	81	47-119
117-81-7	bis(2-Ethylhexyl)phthalate	50	44.9	90	62-113
206-44-0	Fluoranthene	50	38.9	78	59-113
86-73-7	Fluorene	50	40.0	80	51-104
118-74-1	Hexachlorobenzene	50	36.5	73	59-110
87-68-3	Hexachlorobutadiene	50	22.1	44	12-98
77-47-4	Hexachlorocyclopentadiene	50	7.1	14*	15-100
67-72-1	Hexachloroethane	50	25.5	51	14-108
193-39-5	Indeno(1,2,3-cd)pyrene	50	47.2	94	44-126
78-59-1	Isophorone	50	38.4	77	56-106
91-57-6	2-Methylnaphthalene	50	41.8	84	37-102
88-74-4	2-Nitroaniline	50	36.9	74	52-117
99-09-2	3-Nitroaniline	50	56.6	113	41-140
100-01-6	4-Nitroaniline	50	61.9	124	56-177
91-20-3	Naphthalene	50	36.5	73	40-101
98-95-3	Nitrobenzene	50	36.3	73	52-106
621-64-7	N-Nitroso-di-n-propylamine	50	40.1	80	50-161
86-30-6	N-Nitrosodiphenylamine	50	55.4	111	50-161
85-01-8	Phenanthrene	50	40.0	80	62-106
129-00-0	Pyrene	50	45.8	92	47-121
120-82-1	1,2,4-Trichlorobenzene	50	31.3	63	28-102

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	39%	10-66%
4165-62-2	Phenol-d5	26%	10-53%

Blank Spike Summary

Job Number: T10844
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4763-BS	A12698.D	1	07/08/05	SC	07/08/05	OP4763	EA935

The QC reported here applies to the following samples: Method: EPA 625

T10844-1

CAS No.	Surrogate Recoveries	BSP	Limits
118-79-6	2,4,6-Tribromophenol	82%	32-128%
4165-60-0	Nitrobenzene-d5	68%	29-115%
321-60-8	2-Fluorobiphenyl	69%	34-113%
1718-51-0	Terphenyl-d14	89%	12-145%

6.2

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T10844
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4763-MS [a]	A12700.D	1	07/08/05	SC	07/08/05	OP4763	EA935
OP4763-MSD [a]	A12701.D	1	07/08/05	SC	07/08/05	OP4763	EA935
T10844-1	A12699.D	1	07/08/05	SC	07/08/05	OP4763	EA935

The QC reported here applies to the following samples: Method: EPA 625

T10844-1

CAS No.	Compound	T10844-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic Acid	ND		100	125	125*	84.9	85*	38*	12-56/18
95-57-8	2-Chlorophenol	ND		100	118	118*	91.3	91	26*	36-100/19
59-50-7	4-Chloro-3-methyl phenol	ND		100	123	123*	90.5	91	30*	44-107/14
120-83-2	2,4-Dichlorophenol	ND		100	122	122*	88.0	88	32*	43-104/18
105-67-9	2,4-Dimethylphenol	ND		100	143	143*	99.3	99	36*	26-110/20
51-28-5	2,4-Dinitrophenol	ND		100	134	134*	106	106	23	24-131/30
534-52-1	4,6-Dinitro-o-cresol	ND		100	121	121	94.8	95	24*	36-125/19
95-48-7	2-Methylphenol	ND		100	112	112*	82.6	83	30*	28-98/15
	3&4-Methylphenol	ND		200	210	105*	165	83	24*	28-97/22
88-75-5	2-Nitrophenol	ND		100	126	126*	92.1	92	31*	41-110/22
100-02-7	4-Nitrophenol	ND		100	110	110*	70.7	71	43*	10-71/28
87-86-5	Pentachlorophenol	ND		100	132	132	93.8	94	34*	24-157/17
108-95-2	Phenol	ND		100	69.2	69	54.3	54	24*	11-74/19
95-95-4	2,4,5-Trichlorophenol	ND		100	112	112	88.6	89	23*	50-114/17
88-06-2	2,4,6-Trichlorophenol	ND		100	127	127*	98.0	98	26*	46-114/17
83-32-9	Acenaphthene	ND		100	138	138*	98.8	99	33*	47-111/19
208-96-8	Acenaphthylene	ND		100	135	135*	95.7	96	34*	54-116/17
120-12-7	Anthracene	ND		100	147	147*	114	114	25*	53-114/17
56-55-3	Benzo(a)anthracene	ND		100	129	129*	96.8	97	29*	57-108/12
50-32-8	Benzo(a)pyrene	ND		100	128	128*	97.0	97	28*	53-113/13
205-99-2	Benzo(b)fluoranthene	ND		100	120	120*	85.5	86	34*	49-119/18
191-24-2	Benzo(g,h,i)perylene	ND		100	130	130*	94.6	95	32*	33-120/22
207-08-9	Benzo(k)fluoranthene	ND		100	128	128*	95.8	96	29*	52-120/13
101-55-3	4-Bromophenyl phenyl ether	ND		100	118	118*	94.1	94	23*	53-116/15
85-68-7	Butyl benzyl phthalate	ND		100	142	142*	98.6	99	36*	42-126/12
100-51-6	Benzyl Alcohol	ND		100	105	105*	78.3	78	29*	31-100/25
91-58-7	2-Chloronaphthalene	ND		100	127	127*	92.6	93	31*	36-116/16
106-47-8	4-Chloroaniline	ND		100	43.8	44	56.8	57	26	12-120/30
86-74-8	Carbazole	ND		100	194	194*	136	136	35*	29-148/15
218-01-9	Chrysene	ND		100	123	123*	85.4	85	36*	54-109/11
111-91-1	bis(2-Chloroethoxy)methane	ND		100	117	117*	84.3	84	32*	43-107/22
111-44-4	bis(2-Chloroethyl)ether	ND		100	116	116*	86.8	87	29*	43-102/17
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	125	125*	91.7	92	31*	35-113/30
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	112	112*	87.1	87	25*	50-109/16
95-50-1	1,2-Dichlorobenzene	ND		100	111	111*	85.8	86	26	33-100/27
541-73-1	1,3-Dichlorobenzene	ND		100	112	112*	79.2	79	34*	30-96/21

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T10844
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4763-MS [a]	A12700.D	1	07/08/05	SC	07/08/05	OP4763	EA935
OP4763-MSD [a]	A12701.D	1	07/08/05	SC	07/08/05	OP4763	EA935
T10844-1	A12699.D	1	07/08/05	SC	07/08/05	OP4763	EA935

The QC reported here applies to the following samples: Method: EPA 625

T10844-1

CAS No.	Compound	T10844-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-46-7	1,4-Dichlorobenzene	ND		100	112	112*	84.1	84	28*	31-97/19
121-14-2	2,4-Dinitrotoluene	ND		100	113	113	85.9	86	27*	48-124/16
606-20-2	2,6-Dinitrotoluene	ND		100	121	121*	88.0	88	32*	56-115/19
91-94-1	3,3'-Dichlorobenzidine	ND		100	46.0	46	36.9	37*	22	38-148/28
53-70-3	Dibenzo(a,h)anthracene	ND		100	151	151*	113	113	29*	37-117/22
132-64-9	Dibenzofuran	ND		100	121	121*	88.5	89	31*	50-110/13
84-74-2	Di-n-butyl phthalate	ND		100	148	148*	111	111	29*	44-125/15
117-84-0	Di-n-octyl phthalate	ND		100	179	179*	128	128	33*	34-148/18
84-66-2	Diethyl phthalate	1.5	J	100	127	126	86.8	85	38*	32-132/13
131-11-3	Dimethyl phthalate	ND		100	119	119	85.9	86	32*	42-123/13
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	156	156*	114	114	31*	50-125/15
206-44-0	Fluoranthene	ND		100	108	108	84.5	85	24*	51-119/15
86-73-7	Fluorene	ND		100	133	133*	101	101	27*	43-111/15
118-74-1	Hexachlorobenzene	ND		100	113	113	85.7	86	27*	50-122/14
87-68-3	Hexachlorobutadiene	ND		100	94.8	95*	71.0	71	29*	23-91/18
77-47-4	Hexachlorocyclopentadiene	ND		100	24.4	24	12.4	12	65*	10-116/30
67-72-1	Hexachloroethane	ND		100	120	120*	87.7	88	31*	18-108/19
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	133	133*	98.2	98	30*	40-121/23
78-59-1	Isophorone	ND		100	138	138*	95.7	96	36*	47-114/18
91-57-6	2-Methylnaphthalene	53.8		100	227	173*	177	123*	25*	41-100/19
88-74-4	2-Nitroaniline	ND		100	141	141*	102	102	32*	30-130/16
99-09-2	3-Nitroaniline	ND		100	136	136	121	121	12	25-140/24
100-01-6	4-Nitroaniline	ND		100	89.0	89	52.1	52	52*	11-190/29
91-20-3	Naphthalene	14.5		100	162	148*	119	105	31*	38-107/20
98-95-3	Nitrobenzene	ND		100	135	135*	94.3	94	35*	37-123/18
621-64-7	N-Nitroso-di-n-propylamine	ND		100	124	124	106	106	16	44-162/23
86-30-6	N-Nitrosodiphenylamine	ND		100	215	215*	157	157	31*	44-162/15
85-01-8	Phenanthrene	6.7		100	143	136*	111	104	25*	53-116/14
129-00-0	Pyrene	ND		100	122	122	97.3	97	23*	38-129/14
120-82-1	1,2,4-Trichlorobenzene	ND		100	113	113*	82.7	83	31*	36-98/16

CAS No.	Surrogate Recoveries	MS	MSD	T10844-1	Limits
367-12-4	2-Fluorophenol	85%* [b]	64%	32%	10-66%
4165-62-2	Phenol-d5	61%* [b]	48%	21%	10-53%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T10844
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP4763-MS [a]	A12700.D	1	07/08/05	SC	07/08/05	OP4763	EA935
OP4763-MSD [a]	A12701.D	1	07/08/05	SC	07/08/05	OP4763	EA935
T10844-1	A12699.D	1	07/08/05	SC	07/08/05	OP4763	EA935

The QC reported here applies to the following samples: Method: EPA 625

T10844-1

CAS No.	Surrogate Recoveries	MS	MSD	T10844-1	Limits
118-79-6	2,4,6-Tribromophenol	124%	105%	84%	32-128%
4165-60-0	Nitrobenzene-d5	127%* [b]	89%	60%	29-115%
321-60-8	2-Fluorobiphenyl	105%	84%	61%	34-113%
1718-51-0	Terphenyl-d14	96%	75%	67%	12-145%

(a) Compounds outside control limits due to matrix interference.
(b) Outside control limits due to matrix interference.

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T10844
Account: ITTXHO - Shaw E & I, Inc.
Project: Jones Road

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chemical Oxygen Demand	GP3309/GN8405	20	<20	mg/l	60.0	66.0	110.0	86-117%
HEM Oil And Grease	GP3310/GN8408	2.0	<2.0	mg/l	40	32.0	80.0	78-114%
Nitrogen, Ammonia	GP3314/GN8417	0.050	<0.050	mg/l	0.400	0.37	93.0	80-120%
Nitrogen, Nitrate + Nitrite	GN8410	0.050	<0.050	mg/l	0.500	0.49	98.0	89-112%
Nitrogen, Nitrite	GN8407	0.050	<0.050	mg/l	0.500	0.46	92.0	89-117%
Nitrogen, Total Kjeldahl	GP3318/GN8423	0.10	<0.10	mg/l	1.00	1.0	102.0	85-117%
Phosphorus, Total	GP3313/GN8415	0.020	<0.020	mg/l	0.250	0.25	100.0	80-120%
Solids, Total Suspended	GN8422	2.0	<2.0	mg/l				
Total Organic Carbon	GN8406	1.0	<1.0	mg/l	25.0	27.0	108.0	83-110%

Associated Samples:
Batch GN8406: T10844-1
Batch GN8407: T10844-1
Batch GN8410: T10844-1
Batch GN8422: T10844-1
Batch GP3309: T10844-1
Batch GP3310: T10844-1
Batch GP3313: T10844-1
Batch GP3314: T10844-1
Batch GP3318: T10844-1

7.1

7

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T10844
Account: ITTXHO - Shaw E & I, Inc.
Project: Jones Road

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chemical Oxygen Demand	GP3309/GN8405	T10834-3	mg/l	51.0	54.0	5.7	0-14%
Nitrogen, Ammonia	GP3314/GN8417	T10844-1	mg/l	0.22	0.26	17.0	0-20%
Nitrogen, Nitrate + Nitrite	GN8410	T10844-1	mg/l	0.80	0.80	0.0	0-10%
Nitrogen, Nitrite	GN8407	T10844-1	mg/l	0.0030 U	<0.050	0.0	0-10%
Nitrogen, Total Kjeldahl	GP3318/GN8423	T10844-1	mg/l	1.2	1.1	8.7	0-19%
Phosphorus, Total	GP3313/GN8415	T10844-1	mg/l	0.25	0.26	3.9	0-20%
Solids, Total Suspended	GN8422	T10843-3	mg/l	7.3	7.7	4.5	0-23%
Total Organic Carbon	GN8406	T10844-1	mg/l	12.0	12.0	0.0	0-11%
pH	GN8411	T10845-2	su	8.2	8.1	0.0	0-6.8%

Associated Samples:
Batch GN8406: T10844-1
Batch GN8407: T10844-1
Batch GN8410: T10844-1
Batch GN8411: T10844-1
Batch GN8422: T10844-1
Batch GP3309: T10844-1
Batch GP3313: T10844-1
Batch GP3314: T10844-1
Batch GP3318: T10844-1

7.2

7

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T10844
Account: ITTXHO - Shaw E & I, Inc.
Project: Jones Road

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chemical Oxygen Demand	GP3309/GN8405	T10834-3	mg/l	51.0	75.0	102	102.0	78-123%
HEM Oil And Grease	GP3310/GN8408	T10834-2	mg/l	<2.0	40	33.0	83.0	78-114%
Nitrogen, Ammonia	GP3314/GN8417	T10844-1	mg/l	0.22	2.00	2.2	99.0	75-125%
Nitrogen, Nitrate + Nitrite	GN8410	T10844-1	mg/l	0.80	0.200	1.0	100.0	80-119%
Nitrogen, Nitrite	GN8407	T10844-1	mg/l	0.0030 U	0.100	0.097	97.0	75-134%
Nitrogen, Total Kjeldahl	GP3318/GN8423	T10844-1	mg/l	1.2	10.0	10.4	92.0	81-120%
Phosphorus, Total	GP3313/GN8415	T10844-1	mg/l	0.25	0.250	0.48	92.0	75-125%
Total Organic Carbon	GN8406	T10844-1	mg/l	12.0	10.0	21.0	90.0	74-121%

Associated Samples:
Batch GN8406: T10844-1
Batch GN8407: T10844-1
Batch GN8410: T10844-1
Batch GP3309: T10844-1
Batch GP3310: T10844-1
Batch GP3313: T10844-1
Batch GP3314: T10844-1
Batch GP3318: T10844-1

7.3

7

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T10844
Account: ITTXHO - Shaw E & I, Inc.
Project: Jones Road

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
HEM Oil And Grease	GP3310/GN8408	T10834-2	mg/l	<2.0	40	21.0	44.0	

Associated Samples:
Batch GP3310: T10844-1

7.4

Gulf Coast
ACCUTEST. Laboratories

07/13/05

Technical Report for

Shaw E & I, Inc.

Jones Road

Harris County Flood Control

Accutest Job Number: T10844A

Sampling Date: 07/07/05

Report to:

Shaw E & I, Inc.

greg.long@shawgrp.com

ATTN: Mr. Greg Long

Total number of pages in report: **10**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Ron Martino
Laboratory Manager

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4

Table of Contents

-1-

Section 1: Sample Summary 3
Section 2: Sample Results 4
2.1: T10844-1A: DF1 4
Section 3: Misc. Forms 5
3.1: Chain of Custody 6
Section 4: General Chemistry - QC Data Summaries 8
4.1: Method Blank and Spike Results Summary 9
4.2: Duplicate Results Summary 10

Sample Summary

Shaw E & I, Inc.

Job No: T10844A

Jones Road
Project No: Harris County Flood Control

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
T10844-1A	07/07/05	14:30	BH	07/08/05	AQ	Water	DF1

Accutest Laboratories

Report of Analysis

Client Sample ID:	DF1		
Lab Sample ID:	T10844-1A	Date Sampled:	07/07/05
Matrix:	AQ - Water	Date Received:	07/08/05
		Percent Solids:	n/a
Project:	Jones Road		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
BOD, 5 Day	13.0	2.0	mg/l	1	07/08/05 01:00	NC	EPA 405.1/SM 5210B

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

10165 Harwin, Suite 150 - Houston, TX 77036 - 713-271-4700 fax: 713-271-4770

Page 1 of 1

FED-EX Tracking # | Bottle Order Control # | Accutest Quote # GG12_2003_005 | Accutest Job # T10844

Client / Reporting Information

Company Name: Shaw Environmental Inc.
Project Contact: Greg Long | E-Mail:
Address: 3010 Briarpark Drive, Suite 4N
City: Houston | State: TX | Zip: 77042
Phone No.: 713-986-4519 | Fax No.:
Sampler's Name: BILL HARDMAN / WILL ANDREWS

Project Information

Project Name / No.: Harris County Flood Control JONES ROAD
Bill to: SHAW EDI | Invoice Attn.:
Address: 3010 BRIAR PARK SUITE 4N
City: HOUSTON | State: TX | Zip: 77042
Phone No.: 713 996 4519 | Fax No.:
Client Purchase Order #:

Requested Analyses

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Wastewater
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
SOL - Other Solid

Accutest Sample #	Field ID / Point of Collection	Collection Date	Collection Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH	HNO3	H2SO4	EnCore	NaHSO4	MEOH	NONE	VOA (624)	SEMI (625)	BOD & pH	TOC	TKN & AMN	Nitrate & Total Phosphorus	Nitrite & TSS	O & G (1664)	COD			LAB USE ONLY
1	DF1	7-07-05	1430	WTR	9	X								X			X				X				
1	DF1	7-07-05	1430	WTR	4								X		X	X				X					
1	DF1	7-07-05	1430	WTR	3				X									X	X			X			
2	T.B. -OR 7/8/05																								

Turnaround Time (Business days)

- [ ] 10 Day STANDARD — Approved By/ Date:
- [ ] 5 Day RUSH
- [ ] 4 Day RUSH
- [ ] 3 Day EMERGENCY
- [X] 2 Day EMERGENCY — ALL analysis 2 DAY
- [ ] 1 Day EMERGENCY — BOD -5 day
- [ ] Other

Real time analytical data available via Lablink

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] Reduced Tier 1
- [ ] Full Data Package
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results & Standard QC

Comments / Remarks: CALL GREG LONG IF THERE ARE QUESTIONS

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		7/8/05 0830	1	2		2
3	Relinquished by:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable ☐	On Ice X — Cooler Temp. 2.8

3.1 3

T10844A: Chain of Custody
Page 1 of 2

ACCUTEST.

SAMPLE RECEIPT LOG

JOB #: T10844 DATE/TIME RECEIVED: 7/8/05 / 08:30

CLIENT: Shaw Env. INITIALS: QR

Condition/Variance (Circle "Y" for yes and "N" for no or NA. If "N" is circled, see variance for explanation):

1. (Y) N Sample received in undamaged condition.
2. (Y) N Samples received within temp. range.
3. (Y) N Sample received with proper pH.
4. (Y) N Sample received in proper containers.
5. (Y) N Sample volume sufficient for analysis.
6. (Y) N Sample received with chain of custody.
7. (Y) N Chain of Custody matches **sample IDs and analysis** on containers.
8. Y N (NA) Custody seal received intact and tamper not evident on cooler.
9. Y N (NA) Custody seal received intact and tamper not evident on bottles.

SAMPLE or FIELD ID	BOTTLE #	DATE SAMPLED	MATRIX	VOLUME	LOCATION	PRESERV.	PH
1	1-3	7/7	AQ	40mL	VREF	(1),2,3,4,5,6	U, <2, >12, (NA)
1	4-5	↓	↓	40mL	IBB	(1),2,3,4,5,6	U, <2, >12, (NA)
1	6-7			WM32	↓	(1),2,3,4,5,6	U, (<2), >12, NA
1	8-9			A1000		(1),2,3,4,5,6	(U), <2, >12, NA
1	10-11			P1000		(1),2,3,4,5,6	(U), <2, >12, NA
1	12-13			P1000		1,2,3,(4),5,6	(U), <2, >12, NA
1	14	↓		P250	↓	1,2,3,(4),5,6	(U), <2, >12, NA
2	1-2	N/A	↓	40mL	VREF	(1),2,3,4,5,6	U, <2, >12, (NA)
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA

AR 7.8.05

LOCATION: ~~WI: Walk-In~~ ~~VR: Volatile Refrig.~~ SUB: Subcontract EF: Encore Freezer

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: Other

~~pH of waters checked excluding volatiles~~

pH of soils N/A

Comments:

Delivery method: Courier: Client

Tracking#:

COOLER TEMP: 2.8 COOLER TEMP: COOLER TEMP: COOLER TEMP:

Method of sample disposal: (circle one) Accutest disposal Hold Return to Client

Form: SM012, Rev.12/14/04, QAO

3.1 3

T10844A: Chain of Custody
Page 2 of 2

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T10844A
Account: ITTXHO - Shaw E & I, Inc.
Project: Jones Road

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
BOD, 5 Day	GP3311/GN8409	2.0	<2.0	mg/l	400	402	101.0	69-126%

Associated Samples:
Batch GP3311: T10844-1A

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T10844A
Account: ITTXHO - Shaw E & I, Inc.
Project: Jones Road

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
BOD, 5 Day	GP3311/GN8409	T10844-1A	mg/l	13.0	35.0	92.0*	0-16%

Associated Samples:
Batch GP3311: T10844-1A

Gulf Coast
ACCUTEST.
Laboratories

07/18/05

Technical Report for

Shaw E & I, Inc.

Jones Road

PROJECT #110798

Accutest Job Number: T10825

Sampling Date: 07/06/05

Report to:

Shaw E & I, Inc.

greg.long@shawgrp.com

ATTN: Greg Long

Total number of pages in report: **15**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Ron Martino
Laboratory Manager

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4

Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Sample Results **4**
2.1: T10825-1: MW-10 DRILLING WATER 4
Section 3: Misc. Forms **6**
3.1: Chain of Custody 7
Section 4: GC/MS Volatiles - QC Data Summaries **9**
4.1: Method Blank Summary 10
4.2: Blank Spike Summary 12
4.3: Matrix Spike/Matrix Spike Duplicate Summary 14

Sample Summary

Shaw E & I, Inc.

Job No: T10825

Jones Road
Project No: PROJECT #110798

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
T10825-1	07/06/05	08:00	WH	07/07/05	AQ	Water	MW-10 DRILLING WATER
T10825-2	07/06/05	15:15	WH	07/07/05	SO	Soil	MW-10 DRILL CUTTINGS

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-10 DRILLING WATER		
Lab Sample ID:	T10825-1	Date Sampled:	07/06/05
Matrix:	AQ - Water	Date Received:	07/07/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Jones Road		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0065329.D	1	07/16/05	RR	n/a	n/a	VY514
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	0.0080	0.050	0.0028	mg/l	J
71-43-2	Benzene	ND	0.0020	0.00047	mg/l	
75-27-4	Bromodichloromethane	ND	0.0020	0.00033	mg/l	
75-25-2	Bromoform	ND	0.0020	0.00065	mg/l	
108-90-7	Chlorobenzene	ND	0.0020	0.00054	mg/l	
75-00-3	Chloroethane	ND	0.0020	0.00046	mg/l	
67-66-3	Chloroform	ND	0.0020	0.00066	mg/l	
75-15-0	Carbon disulfide	ND	0.0020	0.00062	mg/l	
56-23-5	Carbon tetrachloride	ND	0.0020	0.00052	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0020	0.00052	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0020	0.00068	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0020	0.00053	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0020	0.00059	mg/l	
124-48-1	Dibromochloromethane	ND	0.0020	0.00068	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0020	0.00083	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0020	0.00059	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0020	0.00075	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0020	0.00061	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00048	mg/l	
591-78-6	2-Hexanone	ND	0.010	0.0019	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.010	0.0073	mg/l	
74-83-9	Methyl bromide	ND	0.0020	0.00047	mg/l	
74-87-3	Methyl chloride	ND	0.0020	0.00060	mg/l	
75-09-2	Methylene chloride	ND	0.0050	0.00067	mg/l	
78-93-3	Methyl ethyl ketone	ND	0.010	0.0030	mg/l	
100-42-5	Styrene	ND	0.0020	0.00050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00037	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0020	0.00046	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0020	0.00066	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0020	0.00074	mg/l	
108-88-3	Toluene	ND	0.0020	0.00054	mg/l	
79-01-6	Trichloroethylene	ND	0.0020	0.00063	mg/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-10 DRILLING WATER		
Lab Sample ID:	T10825-1	Date Sampled:	07/06/05
Matrix:	AQ - Water	Date Received:	07/07/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Jones Road		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	0.0020	0.00042	mg/l	
1330-20-7	Xylene (total)	ND	0.0060	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		73-139%
17060-07-0	1,2-Dichloroethane-D4	104%		66-139%
2037-26-5	Toluene-D8	122%		77-148%
460-00-4	4-Bromofluorobenzene	102%		84-150%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

10165 Harwin Drive, Ste. 150, Houston, TX 77036
TEL. 713-271-4700 FAX: 713-271-4770
www.accutest.com

FED-EX Tracking #

Bottle Order Control #

Accutest Quote #

Accutest Job # T10825

Client / Reporting Information

Company Name: SHAW ENVIRONMENTAL
Address: 3010 BRIARPARK SUITE 4 N
City: HOUSTON State: TX Zip: 77042
Project Contact: GREG LONG E-mail: GREG.LONG@SHAW-GRP.COM
Phone #: 713 996-4519
Sampler's Name: WILLIAM HARDMAN

Project Information

Project Name: JONES ROAD
Street:
City: HOUSTON State: TX
Project #: 110798
Fax #: 281-807-0311
Client Purchase Order #:

Requested Analysis

8260
RCT

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Time	Sampled By	Matrix	# of bottles	Preservation: HCl	H2SO4	HNO3	NaOH	Zn Acetate	NaHSO4	None	8260	RCT	LAB USE ONLY
1	MW-10 DRILLING WATER		7-6-05	0800	WH	WG	3	3							X	X	
2	MW-10 Drill Cuttings		7-6-05	15:15	WH	SO	1				X				X	X	

NORMAL TURN
72-HOUR TURN X

Turnaround Time (Business Days)

- [X] 10 Day STANDARD
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] Other

Approved By: / Date:

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] Reduced Tier 1
- [ ] Full Tier 1
- [ ] TRRP13
- [ ] EDD Format

Commercial "A" = Results Only

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by:	Date Time:	Received by:	Relinquished by:	Date Time:	Received by:
1		7/6/05 1315		2	7/7/05 7:15	
3		7/7/05 0845		4		
5				Custody Seal #	Preserved where applicable	On Ice: Cooler Temp: 4.7

JUL-05-2005 14:19 ACCUTEST GULF COAST 713 271 4770 P.01/01

TOTAL P.01

T10825: Chain of Custody
Page 1 of 2

ACCUTEST.

SAMPLE RECEIPT LOG

JOB #: T10825 DATE/TIME RECEIVED: 7/7/05/ 8:45

CLIENT: Shaw Env. INITIALS: AR

Condition/Variance (Circle "Y" for yes and "N" for no or NA. If "N" is circled, see variance for explanation):

1. (Y) N Sample received in undamaged condition.
2. (Y) N Samples received within temp. range.
3. Y (NA) Sample received with proper pH.
4. (Y) N Sample received in proper containers.
5. (Y) N Sample volume sufficient for analysis.
6. (Y) N Sample received with chain of custody.
7. (Y) N Chain of Custody matches **sample IDs and analysis** on containers.
8. Y N (NA) Custody seal received intact and tamper not evident on cooler.
9. Y N (NA) Custody seal received intact and tamper not evident on bottles.

SAMPLE or FIELD ID	BOTTLE #	DATE SAMPLED	MATRIX	VOLUME	LOCATION	PRESERV.	PH
1	1-3	7/6	AQ	40mL	VREF	1,2,3,4,5,6	U, <2, >12, NA
2	1	"	SO	4oz	"	1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA

AR 7.7.05

LOCATION: WI: Walk-In VR: Volatile Refrig. SUB: Subcontract EF: Encore Freezer

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: Other

Comments:

pH of waters checked excluding volatiles

~~pH of soils N/A~~

Delivery method: Courier: client

Tracking#:

COOLER TEMP: 4.4 COOLER TEMP: COOLER TEMP: COOLER TEMP:

Method of sample disposal: (circle one) Accutest disposal Hold Return to Client

Form: SM012, Rev.12/14/04, QAO

3.1

T10825: Chain of Custody

Page 2 of 2

ACCUTEST. Laboratories

T10825

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T10825
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY514-MB	Y0065316.D	1	07/16/05	RR	n/a	n/a	VY514

The QC reported here applies to the following samples: Method: SW846 8260B

T10825-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.47	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.42	ug/l	
1330-20-7	Xylene (total)	ND	6.0	2.0	ug/l	

Method Blank Summary

Job Number: T10825
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY514-MB	Y0065316.D	1	07/16/05	RR	n/a	n/a	VY514

The QC reported here applies to the following samples: Method: SW846 8260B

T10825-1

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	106%	73-139%
17060-07-0	1,2-Dichloroethane-D4	98%	66-139%
2037-26-5	Toluene-D8	120%	77-148%
460-00-4	4-Bromofluorobenzene	105%	84-150%

Blank Spike Summary

Job Number: T10825
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY514-BS	Y0065315.D	1	07/16/05	RR	n/a	n/a	VY514

The QC reported here applies to the following samples: Method: SW846 8260B

T10825-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	120	96	31-158
71-43-2	Benzene	25	26.6	106	67-118
75-27-4	Bromodichloromethane	25	21.3	85	66-115
75-25-2	Bromoform	25	26.9	108	57-119
108-90-7	Chlorobenzene	25	25.1	100	72-116
75-00-3	Chloroethane	25	26.9	108	61-135
67-66-3	Chloroform	25	24.8	99	66-117
75-15-0	Carbon disulfide	25	29.0	116	39-136
56-23-5	Carbon tetrachloride	25	26.3	105	67-131
75-34-3	1,1-Dichloroethane	25	27.9	112	63-125
75-35-4	1,1-Dichloroethylene	25	25.1	100	52-143
107-06-2	1,2-Dichloroethane	25	23.0	92	61-120
78-87-5	1,2-Dichloropropane	25	23.4	94	64-118
124-48-1	Dibromochloromethane	25	22.9	92	67-117
156-59-2	cis-1,2-Dichloroethylene	25	24.7	99	65-116
10061-01-5	cis-1,3-Dichloropropene	25	20.7	83	67-118
156-60-5	trans-1,2-Dichloroethylene	25	26.9	108	66-128
10061-02-6	trans-1,3-Dichloropropene	25	25.7	103	73-126
100-41-4	Ethylbenzene	25	23.9	96	71-119
591-78-6	2-Hexanone	125	139	111	45-132
108-10-1	4-Methyl-2-pentanone	125	109	87	46-127
74-83-9	Methyl bromide	25	24.3	97	51-126
74-87-3	Methyl chloride	25	25.2	101	47-130
75-09-2	Methylene chloride	25	24.5	98	53-130
78-93-3	Methyl ethyl ketone	125	122	98	47-128
100-42-5	Styrene	25	24.7	99	69-115
71-55-6	1,1,1-Trichloroethane	25	26.7	107	67-128
79-34-5	1,1,2,2-Tetrachloroethane	25	25.0	100	57-121
79-00-5	1,1,2-Trichloroethane	25	24.4	98	62-117
127-18-4	Tetrachloroethylene	25	25.4	102	72-128
108-88-3	Toluene	25	29.0	116	70-121
79-01-6	Trichloroethylene	25	24.7	99	69-120
75-01-4	Vinyl chloride	25	25.2	101	59-145
1330-20-7	Xylene (total)	75	74.8	100	72-120

Blank Spike Summary

Job Number: T10825
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY514-BS	Y0065315.D	1	07/16/05	RR	n/a	n/a	VY514

The QC reported here applies to the following samples: Method: SW846 8260B

T10825-1

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	73-139%
17060-07-0	1,2-Dichloroethane-D4	97%	66-139%
2037-26-5	Toluene-D8	124%	77-148%
460-00-4	4-Bromofluorobenzene	92%	84-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T10825
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T10878-4MS	Y0065335.D	1	07/16/05	RR	n/a	n/a	VY514
T10878-4MSD	Y0065336.D	1	07/16/05	RR	n/a	n/a	VY514
T10878-4	Y0065334.D	1	07/16/05	RR	n/a	n/a	VY514

The QC reported here applies to the following samples: Method: SW846 8260B

T10825-1

CAS No.	Compound	T10878-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	128	102	130	104	2	39-130/26
71-43-2	Benzene	ND		25	28.3	113	28.1	112	1	65-122/15
75-27-4	Bromodichloromethane	ND		25	22.4	90	21.6	86	4	64-119/22
75-25-2	Bromoform	ND		25	26.7	107	27.2	109	2	50-123/28
108-90-7	Chlorobenzene	ND		25	25.2	101	25.4	102	1	72-118/20
75-00-3	Chloroethane	ND		25	28.6	114	28.4	114	1	60-136/25
67-66-3	Chloroform	ND		25	26.1	104	25.3	101	3	65-120/20
75-15-0	Carbon disulfide	ND		25	30.4	122	30.5	122	0	37-140/24
56-23-5	Carbon tetrachloride	ND		25	27.3	109	27.5	110	1	64-135/23
75-34-3	1,1-Dichloroethane	ND		25	29.2	117	28.1	112	4	65-126/21
75-35-4	1,1-Dichloroethylene	ND		25	23.6	94	24.7	99	5	55-140/25
107-06-2	1,2-Dichloroethane	ND		25	24.5	98	24.4	98	0	57-125/25
78-87-5	1,2-Dichloropropane	ND		25	23.8	95	23.6	94	1	63-121/22
124-48-1	Dibromochloromethane	ND		25	23.3	93	23.3	93	0	60-123/23
156-59-2	cis-1,2-Dichloroethylene	1.9	J	25	29.1	109	28.9	108	1	62-120/24
10061-01-5	cis-1,3-Dichloropropene	ND		25	19.4	78	19.6	78	1	61-119/23
156-60-5	trans-1,2-Dichloroethylene	ND		25	26.8	107	27.8	111	4	64-130/22
10061-02-6	trans-1,3-Dichloropropene	ND		25	25.6	102	24.5	98	4	65-129/23
100-41-4	Ethylbenzene	ND		25	24.4	98	24.1	96	1	70-123/18
591-78-6	2-Hexanone	ND		125	147	118	144	115	2	41-137/27
108-10-1	4-Methyl-2-pentanone	ND		125	107	86	110	88	3	41-133/22
74-83-9	Methyl bromide	ND		25	24.1	96	23.8	95	1	47-129/27
74-87-3	Methyl chloride	ND		25	24.3	97	24.9	100	2	45-133/24
75-09-2	Methylene chloride	ND		25	24.3	97	24.6	98	1	49-128/21
78-93-3	Methyl ethyl ketone	ND		125	123	98	135	108	9	43-125/29
100-42-5	Styrene	ND		25	19.1	76	19.6	78	3	65-120/21
71-55-6	1,1,1-Trichloroethane	ND		25	26.6	106	27.6	110	4	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	26.6	106	25.7	103	3	50-128/22
79-00-5	1,1,2-Trichloroethane	ND		25	25.6	102	26.4	106	3	58-120/22
127-18-4	Tetrachloroethylene	83.1		25	151	272* a	147	256* a	3	69-132/21
108-88-3	Toluene	ND		25	28.3	113	28.0	112	1	70-123/18
79-01-6	Trichloroethylene	3.2		25	28.7	102	27.7	98	4	70-120/19
75-01-4	Vinyl chloride	ND		25	24.7	99	25.9	104	5	51-147/24
1330-20-7	Xylene (total)	ND		75	73.1	97	73.6	98	1	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T10825
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T10878-4MS	Y0065335.D	1	07/16/05	RR	n/a	n/a	VY514
T10878-4MSD	Y0065336.D	1	07/16/05	RR	n/a	n/a	VY514
T10878-4	Y0065334.D	1	07/16/05	RR	n/a	n/a	VY514

The QC reported here applies to the following samples: Method: SW846 8260B

T10825-1

CAS No.	Surrogate Recoveries	MS	MSD	T10878-4	Limits
1868-53-7	Dibromofluoromethane	105%	109%	108%	73-139%
17060-07-0	1,2-Dichloroethane-D4	101%	99%	101%	66-139%
2037-26-5	Toluene-D8	125%	121%	118%	77-148%
460-00-4	4-Bromofluorobenzene	94%	92%	100%	84-150%

(a) Outside control limits due to high level in sample relative to spike amount.

Gulf Coast
ACCUTEST. Laboratories

07/26/05

Technical Report for

Shaw E & I, Inc.

Jones Road

110798

Accutest Job Number: T10993

Sampling Date: 07/22/05

Report to:

Shaw E & I, Inc.

greg.long@shawgrp.com

ATTN: Greg Long

Total number of pages in report: **17**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Ron Martino
Laboratory Manager

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4

Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Sample Results **4**
2.1: T10993-1: MW-14 DRILL WATER 4
Section 3: Misc. Forms **6**
3.1: Chain of Custody 7
Section 4: GC/MS Volatiles - QC Data Summaries **9**
4.1: Method Blank Summary 10
4.2: Blank Spike Summary 12
4.3: Matrix Spike/Matrix Spike Duplicate Summary 16

Accutest Laboratories

Sample Summary

Shaw E & I, Inc.

Job No: T10993

Jones Road
Project No: 110798

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
T10993-1	07/22/05	09:00	BH	07/22/05	AQ	Water	MW-14 DRILL WATER

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-14 DRILL WATER		
Lab Sample ID:	T10993-1	Date Sampled:	07/22/05
Matrix:	AQ - Water	Date Received:	07/22/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Jones Road		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0066529.D	1	07/25/05	RR	n/a	n/a	VF1590
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.050	0.0028	mg/l	
71-43-2	Benzene	ND	0.0020	0.00047	mg/l	
75-27-4	Bromodichloromethane	ND	0.0020	0.00033	mg/l	
75-25-2	Bromoform	ND	0.0020	0.00065	mg/l	
108-90-7	Chlorobenzene	ND	0.0020	0.00054	mg/l	
75-00-3	Chloroethane	ND	0.0020	0.00046	mg/l	
67-66-3	Chloroform	ND	0.0020	0.00066	mg/l	
75-15-0	Carbon disulfide	ND	0.0020	0.00062	mg/l	
56-23-5	Carbon tetrachloride	ND	0.0020	0.00052	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0020	0.00052	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0020	0.00068	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0020	0.00053	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0020	0.00059	mg/l	
124-48-1	Dibromochloromethane	ND	0.0020	0.00068	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0020	0.00083	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0020	0.00059	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0020	0.00075	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0020	0.00061	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00048	mg/l	
591-78-6	2-Hexanone	ND	0.010	0.0019	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.010	0.0073	mg/l	
74-83-9	Methyl bromide	ND	0.0020	0.00047	mg/l	
74-87-3	Methyl chloride	ND	0.0020	0.00060	mg/l	
75-09-2	Methylene chloride	ND	0.0050	0.00067	mg/l	
78-93-3	Methyl ethyl ketone	ND	0.010	0.0030	mg/l	
100-42-5	Styrene	ND	0.0020	0.00050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00037	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0020	0.00046	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0020	0.00066	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0020	0.00074	mg/l	
108-88-3	Toluene	ND	0.0020	0.00054	mg/l	
79-01-6	Trichloroethylene	ND	0.0020	0.00063	mg/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-14 DRILL WATER		
Lab Sample ID:	T10993-1	Date Sampled:	07/22/05
Matrix:	AQ - Water	Date Received:	07/22/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Jones Road		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	0.0020	0.00042	mg/l	
1330-20-7	Xylene (total)	ND	0.0060	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		73-139%
17060-07-0	1,2-Dichloroethane-D4	115%		66-139%
2037-26-5	Toluene-D8	104%		77-148%
460-00-4	4-Bromofluorobenzene	131%		84-150%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories
10165 Harwin Drive, Ste. 150, Houston, TX 77036
TEL. 713-271-4700 FAX: 713-271-4770
www.accutest.com

FED-EX Tracking # | Bottle Order Control #
Accutest Quote # | Accutest Job # T10993

Client / Reporting Information

Company Name: SHAW E&I
Address: 3010 BRIARPARK SUITE 4N
City: HOUSTON State: TX Zip: 77042
Project Contact: GREG LONG E-mail: GREG.LONG@SHAWGRP.COM
Phone #: 713 996 4519
Sampler's Name: BILL HARDMAN

Project Information

Project Name: JONES ROAD
Street: NA
City: HOUSTON State: TEXAS
Project #: 110798
Fax #: 713 996-4401
Client Purchase Order #

Requested Analysis

VOCs 8260

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Number of preserved Bottles: HCl	HNO3	DI Water	H2SO4	NaOH	MEOH	Encore	LAB USE ONLY
1	MW-14 DEEP WATER		7/22/05	0900	WBH	WTR	3	3							X

Turnaround Time (Business Days)

- [X] 10 Day STANDARD — Approved By: / Date:
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] Other

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

- [ ] Commercial "A" — [ ] EDD Format ____
- [ ] Commercial "B"
- [ ] Reduced Tier 1
- [ ] Full Tier 1
- [ ] TRRP13

Commercial "A" = Results Only

Comments / Remarks

CALL GREG LONG @ 713 996 4519 WITH ANY QUESTIONS

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by	Date Time	Received by	Relinquished by	Date Time	Received by
1	WBH	7/22/05 0900	1	1	7/22/05 1450	2
2			2	2		
3			3	3		4
4			4	4		
5			5	Custody Seal #	Preserved where applicable	On Ice: X

Cooler Temp: 5.8

T10993: Chain of Custody
Page 1 of 2

ACCUTEST.

SAMPLE RECEIPT LOG

JOB #: T10993 DATE/TIME RECEIVED: 7/22/05 | 14:50

CLIENT: Shaw E3I INITIALS: QR

Condition/Variance (Circle "Y" for yes and "N" for no or NA. If "N" is circled, see variance for explanation):

1. Y N Sample received in undamaged condition.
2. Y N Samples received within temp. range.
3. Y N Sample received with proper pH.
4. Y N Sample received in proper containers.
5. Y N Sample volume sufficient for analysis.
6. Y N Sample received with chain of custody.
7. Y N Chain of Custody matches sample IDs and analysis on containers.
8. Y N NA Custody seal received intact and tamper not evident on cooler.
9. Y N NA Custody seal received intact and tamper not evident on bottles.

SAMPLE or FIELD ID	BOTTLE #	DATE SAMPLED	MATRIX	VOLUME	LOCATION	PRESERV.	PH
1	1-3	7/22	AQ	40ml	VREF	1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA

VR 7-22-05

LOCATION: WI: Walk-In VR: Volatile Refrig. SUB: Subcontract EF: Encore Freezer

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: Other

pH of waters checked excluding volatiles

pH of soils N/A

Comments:

Delivery method: Courier: Client

Tracking#:

COOLER TEMP: 5.8 COOLER TEMP:

COOLER TEMP: COOLER TEMP:

Method of sample disposal: (circle one) Accutest disposal Hold Return to Client

Form: SM012, Rev.12/14/04, QAO

3.1

T10993: Chain of Custody

Page 2 of 2

ACCUTEST. Laboratories

T10993

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T10993
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF1590-MB	F0066522.D	1	07/25/05	RR	n/a	n/a	VF1590

The QC reported here applies to the following samples: Method: SW846 8260B

T10993-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.47	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.42	ug/l	
1330-20-7	Xylene (total)	ND	6.0	2.0	ug/l	

Method Blank Summary

Job Number: T10993
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF1590-MB	F0066522.D	1	07/25/05	RR	n/a	n/a	VF1590

The QC reported here applies to the following samples: Method: SW846 8260B

T10993-1

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	105%	73-139%
17060-07-0	1,2-Dichloroethane-D4	106%	66-139%
2037-26-5	Toluene-D8	101%	77-148%
460-00-4	4-Bromofluorobenzene	129%	84-150%

Blank Spike Summary

Job Number: T10993
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF1590-BS	F0066521.D	1	07/25/05	RR	n/a	n/a	VF1590

The QC reported here applies to the following samples: Method: EPA 524

T10993-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	20	166	830*	70-130
78-93-3	2-Butanone	20	155	775*	70-130
71-43-2	Benzene	20	24.7	124	70-130
75-27-4	Bromodichloromethane	20	26.0	130	70-130
75-25-2	Bromoform	20	26.8	134*	70-130
74-83-9	Bromomethane	20	26.1	131*	70-130
75-15-0	Carbon disulfide	20	16.1	81	70-130
108-90-7	Chlorobenzene	20	24.4	122	70-130
75-00-3	Chloroethane	20	26.7	134*	70-130
67-66-3	Chloroform	20	25.0	125	70-130
74-87-3	Chloromethane	20	25.8	129	70-130
56-23-5	Carbon tetrachloride	20	26.1	131*	70-130
75-34-3	1,1-Dichloroethane	20	24.2	121	70-130
75-35-4	1,1-Dichloroethylene	20	19.8	99	70-130
107-06-2	1,2-Dichloroethane	20	25.7	129	70-130
78-87-5	1,2-Dichloropropane	20	25.1	126	70-130
124-48-1	Dibromochloromethane	20	25.4	127	70-130
10061-01-5	cis-1,3-Dichloropropene	20	27.1	136*	70-130
156-60-5	trans-1,2-Dichloroethylene	20	23.8	119	70-130
156-59-2	cis-1,2-Dichloroethylene	20	23.9	120	70-130
10061-02-6	trans-1,3-Dichloropropene	20	27.4	137*	70-130
100-41-4	Ethylbenzene	20	23.9	120	70-130
591-78-6	2-Hexanone	20	168	840*	70-130
75-09-2	Methylene chloride	20	21.2	106	70-130
108-10-1	4-Methyl-2-pentanone	20	157	785*	70-130
100-42-5	Styrene	20	24.1	121	70-130
71-55-6	1,1,1-Trichloroethane	20	24.6	123	70-130
79-34-5	1,1,2,2-Tetrachloroethane	20	27.6	138*	70-130
79-00-5	1,1,2-Trichloroethane	20	24.1	121	70-130
127-18-4	Tetrachloroethylene	20	24.4	122	70-130
108-88-3	Toluene	20	23.5	118	70-130
79-01-6	Trichloroethylene	20	25.5	128	70-130
75-01-4	Vinyl chloride	20	25.9	130	70-130
1330-20-7	Xylenes (total)	60	74.0	123	70-130

Blank Spike Summary

Job Number: T10993
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF1590-BS	F0066521.D	1	07/25/05	RR	n/a	n/a	VF1590

The QC reported here applies to the following samples: Method: EPA 524

T10993-1

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-d4	1058%*	70-130%
460-00-4	4-Bromofluorobenzene	940%*	65-116%

Blank Spike Summary

Job Number: T10993
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF1590-BS	F0066521.D	1	07/25/05	RR	n/a	n/a	VF1590

The QC reported here applies to the following samples: Method: SW846 8260B

T10993-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	166	133	31-158
71-43-2	Benzene	25	24.7	99	67-118
75-27-4	Bromodichloromethane	25	26.0	104	66-115
75-25-2	Bromoform	25	26.8	107	57-119
108-90-7	Chlorobenzene	25	24.4	98	72-116
75-00-3	Chloroethane	25	26.7	107	61-135
67-66-3	Chloroform	25	25.0	100	66-117
75-15-0	Carbon disulfide	25	16.1	64	39-136
56-23-5	Carbon tetrachloride	25	26.1	104	67-131
75-34-3	1,1-Dichloroethane	25	24.2	97	63-125
75-35-4	1,1-Dichloroethylene	25	19.8	79	52-143
107-06-2	1,2-Dichloroethane	25	25.7	103	61-120
78-87-5	1,2-Dichloropropane	25	25.1	100	64-118
124-48-1	Dibromochloromethane	25	25.4	102	67-117
156-59-2	cis-1,2-Dichloroethylene	25	23.9	96	65-116
10061-01-5	cis-1,3-Dichloropropene	25	27.1	108	67-118
156-60-5	trans-1,2-Dichloroethylene	25	23.8	95	66-128
10061-02-6	trans-1,3-Dichloropropene	25	27.4	110	73-126
100-41-4	Ethylbenzene	25	23.9	96	71-119
591-78-6	2-Hexanone	125	168	134*	45-132
108-10-1	4-Methyl-2-pentanone	125	157	126	46-127
74-83-9	Methyl bromide	25	26.1	104	51-126
74-87-3	Methyl chloride	25	25.8	103	47-130
75-09-2	Methylene chloride	25	21.2	85	53-130
78-93-3	Methyl ethyl ketone	125	155	124	47-128
100-42-5	Styrene	25	24.1	96	69-115
71-55-6	1,1,1-Trichloroethane	25	24.6	98	67-128
79-34-5	1,1,2,2-Tetrachloroethane	25	27.6	110	57-121
79-00-5	1,1,2-Trichloroethane	25	24.1	96	62-117
127-18-4	Tetrachloroethylene	25	24.4	98	72-128
108-88-3	Toluene	25	23.5	94	70-121
79-01-6	Trichloroethylene	25	25.5	102	69-120
75-01-4	Vinyl chloride	25	25.9	104	59-145
1330-20-7	Xylene (total)	75	74.0	99	72-120

Blank Spike Summary

Job Number: T10993
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF1590-BS	F0066521.D	1	07/25/05	RR	n/a	n/a	VF1590

The QC reported here applies to the following samples: Method: SW846 8260B

T10993-1

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	107%	73-139%
17060-07-0	1,2-Dichloroethane-D4	106%	66-139%
2037-26-5	Toluene-D8	97%	77-148%
460-00-4	4-Bromofluorobenzene	94%	84-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T10993
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T10965-1MS	F0066535.D	1	07/25/05	RR	n/a	n/a	VF1590
T10965-1MSD	F0066536.D	1	07/25/05	RR	n/a	n/a	VF1590
T10965-1	F0066530.D	1	07/25/05	RR	n/a	n/a	VF1590

The QC reported here applies to the following samples: Method: SW846 8260B

T10993-1

CAS No.	Compound	T10965-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	148	118	140	112	6	39-130/26
71-43-2	Benzene	ND		25	24.2	97	24.0	96	1	65-122/15
75-27-4	Bromodichloromethane	ND		25	25.3	101	25.0	100	1	64-119/22
75-25-2	Bromoform	ND		25	24.2	97	23.6	94	3	50-123/28
108-90-7	Chlorobenzene	ND		25	23.9	96	23.5	94	2	72-118/20
75-00-3	Chloroethane	ND		25	29.3	117	27.9	112	5	60-136/25
67-66-3	Chloroform	ND		25	25.0	100	24.5	98	2	65-120/20
75-15-0	Carbon disulfide	ND		25	16.0	64	15.7	63	2	37-140/24
56-23-5	Carbon tetrachloride	ND		25	25.8	103	25.4	102	2	64-135/23
75-34-3	1,1-Dichloroethane	ND		25	25.6	102	24.7	99	4	65-126/21
75-35-4	1,1-Dichloroethylene	ND		25	21.4	86	21.1	84	1	55-140/25
107-06-2	1,2-Dichloroethane	34.8		25	79.2	178*	63.2	114	22	57-125/25
78-87-5	1,2-Dichloropropane	ND		25	25.1	100	24.2	97	4	63-121/22
124-48-1	Dibromochloromethane	ND		25	24.3	97	24.0	96	1	60-123/23
156-59-2	cis-1,2-Dichloroethylene	ND		25	23.3	93	22.7	91	3	62-120/24
10061-01-5	cis-1,3-Dichloropropene	ND		25	25.2	101	24.6	98	2	61-119/23
156-60-5	trans-1,2-Dichloroethylene	ND		25	24.5	98	23.8	95	3	64-130/22
10061-02-6	trans-1,3-Dichloropropene	ND		25	25.9	104	24.9	100	4	65-129/23
100-41-4	Ethylbenzene	ND		25	23.8	95	23.4	94	2	70-123/18
591-78-6	2-Hexanone	ND		125	141	113	140	112	1	41-137/27
108-10-1	4-Methyl-2-pentanone	ND		125	144	115	136	109	6	41-133/22
74-83-9	Methyl bromide	ND		25	27.2	109	26.8	107	1	47-129/27
74-87-3	Methyl chloride	ND		25	28.1	112	27.0	108	4	45-133/24
75-09-2	Methylene chloride	ND		25	22.2	89	21.2	85	5	49-128/21
78-93-3	Methyl ethyl ketone	ND		125	140	112	128	102	9	43-125/29
100-42-5	Styrene	ND		25	11.8	47*	11.0	44*	7	65-120/21
71-55-6	1,1,1-Trichloroethane	ND		25	25.4	102	24.6	98	3	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	27.1	108	26.5	106	2	50-128/22
79-00-5	1,1,2-Trichloroethane	ND		25	24.0	96	23.8	95	1	58-120/22
127-18-4	Tetrachloroethylene	ND		25	23.7	95	23.8	95	0	69-132/21
108-88-3	Toluene	ND		25	23.7	95	23.5	94	1	70-123/18
79-01-6	Trichloroethylene	ND		25	24.6	98	24.3	97	1	70-120/19
75-01-4	Vinyl chloride	ND		25	28.8	115	28.5	114	1	51-147/24
1330-20-7	Xylene (total)	ND		75	73.6	98	72.1	96	2	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T10993
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T10965-1MS	F0066535.D	1	07/25/05	RR	n/a	n/a	VF1590
T10965-1MSD	F0066536.D	1	07/25/05	RR	n/a	n/a	VF1590
T10965-1	F0066530.D	1	07/25/05	RR	n/a	n/a	VF1590

The QC reported here applies to the following samples: Method: SW846 8260B

T10993-1

CAS No.	Surrogate Recoveries	MS	MSD	T10965-1	Limits
1868-53-7	Dibromofluoromethane	107%	105%	106%	73-139%
17060-07-0	1,2-Dichloroethane-D4	115%	109%	112%	66-139%
2037-26-5	Toluene-D8	100%	100%	105%	77-148%
460-00-4	4-Bromofluorobenzene	98%	98%	132%	84-150%

Gulf Coast
ACCUTEST.
Laboratories

08/04/05

Technical Report for

Shaw E & I, Inc.

Jones Road

PROJECT #110798

Accutest Job Number: T11067

Sampling Date: 08/01/05

Report to:

Shaw E & I, Inc.
ABB Lummus Building
3010 Briarpark
Houston, TX 77042

ATTN: Mr. Greg Long

Total number of pages in report: 15

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Ron Martino
Laboratory Manager

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Table of Contents

Sections: 1 2 3 4

-1-

Section 1: Sample Summary **3**
Section 2: Sample Results **4**
2.1: T11067-1: MW-17 DRILL WATER 4
Section 3: Misc. Forms 6
3.1: Chain of Custody 7
Section 4: GC/MS Volatiles - QC Data Summaries **9**
4.1: Method Blank Summary 10
4.2: Blank Spike Summary 12
4.3: Matrix Spike/Matrix Spike Duplicate Summary 14

Accutest Laboratories

Sample Summary

Shaw E & I, Inc.

Job No: T11067

Jones Road
Project No: PROJECT #110798

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
T11067-1	08/01/05	09:00	BH	08/01/05	AQ	Water	MW-17 DRILL WATER

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-17 DRILL WATER		
Lab Sample ID:	T11067-1	Date Sampled:	08/01/05
Matrix:	AQ - Water	Date Received:	08/01/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Jones Road		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0066742.D	1	08/02/05	RR	n/a	n/a	VF1604
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.050	0.0028	mg/l	
71-43-2	Benzene	ND	0.0020	0.00047	mg/l	
75-27-4	Bromodichloromethane	ND	0.0020	0.00033	mg/l	
75-25-2	Bromoform	ND	0.0020	0.00065	mg/l	
108-90-7	Chlorobenzene	ND	0.0020	0.00054	mg/l	
75-00-3	Chloroethane	ND	0.0020	0.00046	mg/l	
67-66-3	Chloroform	ND	0.0020	0.00066	mg/l	
75-15-0	Carbon disulfide	ND	0.0020	0.00062	mg/l	
56-23-5	Carbon tetrachloride	ND	0.0020	0.00052	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0020	0.00052	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0020	0.00068	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0020	0.00053	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0020	0.00059	mg/l	
124-48-1	Dibromochloromethane	ND	0.0020	0.00068	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0020	0.00083	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0020	0.00059	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0020	0.00075	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0020	0.00061	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00048	mg/l	
591-78-6	2-Hexanone	ND	0.010	0.0019	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.010	0.0073	mg/l	
74-83-9	Methyl bromide	ND	0.0020	0.00047	mg/l	
74-87-3	Methyl chloride	ND	0.0020	0.00060	mg/l	
75-09-2	Methylene chloride	ND	0.0050	0.00067	mg/l	
78-93-3	Methyl ethyl ketone	ND	0.010	0.0030	mg/l	
100-42-5	Styrene	ND	0.0020	0.00050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00037	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0020	0.00046	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0020	0.00066	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0020	0.00074	mg/l	
108-88-3	Toluene	ND	0.0020	0.00054	mg/l	
79-01-6	Trichloroethylene	ND	0.0020	0.00063	mg/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-17 DRILL WATER		
Lab Sample ID:	T11067-1	Date Sampled:	08/01/05
Matrix:	AQ - Water	Date Received:	08/01/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Jones Road		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	0.0020	0.00042	mg/l	
1330-20-7	Xylene (total)	ND	0.0060	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		73-139%
17060-07-0	1,2-Dichloroethane-D4	102%		66-139%
2037-26-5	Toluene-D8	105%		77-148%
460-00-4	4-Bromofluorobenzene	149%		84-150%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST

10165 Harwin, Suite 150 - Houston, TX 77036 - 713-271-4700 fax: 713-271-4770

Page 1 of 1

FED-EX Tracking #: | Bottle Order Control #:

Accutest Quote #: GD12_3003_005 | Accutest Job #: T11067

Client / Reporting Information

Company Name: Shaw Environmental Inc.

Project Contact: Greg Long | E-Mail: GREG.LONG@SHAWGRP.COM

Address: 3010 Briarpark Drive, Suite 4N

City: Houston | State: TX | Zip: 77042

Phone No.: 713-996-4519 | Fax No.:

Samplers's Name: BILL HARDMANT

Project Information

Project Name / No.: ~~Harris County Flood Control~~ JONES ROAD

Bill to: GREG LONG | Invoice Attn.:

Address: 3010 BRIARPARK

City: | State: | Zip:

Phone No.: | Fax No.:

Client Purchase Order #:

Requested Analyses

8260

Accutest Sample #	Field ID / Point of Collection	Collection Date	Collection Time	Matrix	# of bottles	Number of preserved bottles: HCl	MeOH	HNO3	H2SO4	NaHSO4	NaOH	None	VOA (8260)	SEMI (625)	BOD & pH	TOC	TKN & AMN	Nitrate & Total Phosphorus	Nitrite & TSS	O & G (1664)	COD	LAB USE ONLY
1	MW-17 Drill Water	8-01-05	0900	W	3	X							X									

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Wastewater
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
SOL - Other Solid

Turnaround Time (Business days)

- [X] 10 Day STANDARD — Approved By:/ Date:
- [ ] 5 Day RUSH
- [ ] 4 Day RUSH
- [ ] 3 Day EMERGENCY
- [X] 2 Day EMERGENCY — ALL analysis 2 DAY
- [ ] 1 Day EMERGENCY — BOD -5 day
- [ ] Other

Real time analytical data available via Lablink

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] Reduced Tier 1
- [ ] Full Data Package
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only

Commercial "B" = Results & Standard QC

Comments / Remarks

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1		8/01/05 1200		2	8/01/05 1200	2
3	Relinquished by:	8/01/05 1320	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time:	Received By: 5	Custody Seal #	Preserved where applicable ☐	On Ice / Cooler Temp: A 3.6

T11067: Chain of Custody
Page 1 of 2

ACCUTEST.

SAMPLE RECEIPT LOG

JOB #: T11067 DATE/TIME RECEIVED: 8/1/05/13:20

CLIENT: Shaw Env. INITIALS: AR

Condition/Variance (Circle "Y" for yes and "N" for no or NA. If "N" is circled, see variance for explanation):

1. (Y) N Sample received in undamaged condition.
2. (Y) N Samples received within temp. range.
3. Y (N) A Sample received with proper pH.
4. (Y) N Sample received in proper containers.
5. (Y) N Sample volume sufficient for analysis.
6. (Y) N Sample received with chain of custody.
7. (Y) N Chain of Custody matches sample IDs and analysis on containers.
8. Y N (N/A) Custody seal received intact and tamper not evident on cooler.
9. Y N (N/A) Custody seal received intact and tamper not evident on bottles.

SAMPLE or FIELD ID	BOTTLE #	DATE SAMPLED	MATRIX	VOLUME	LOCATION	PRESERV.	PH
1	1-3	8/1	AQ	40ml	VREF	(1),2,3,4,5,6	U, <2, >12, (NA)
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA

AR 8-1-05

LOCATION: WI: Walk-In VR: Volatile Refrig. SUB: Subcontract EF: Encore Freezer

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: Other

Comments:

pH of waters checked excluding volatiles

pH of soils N/A

Delivery method: Courier: Client

Tracking#:

COOLER TEMP: 3.6 COOLER TEMP:

COOLER TEMP: COOLER TEMP:

Method of sample disposal: (circle one) Accutest disposal Hold Return to Client

Form: SM012, Rev.12/14/04, QAO

T11067: Chain of Custody

Page 2 of 2

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T11067
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF1604-MB	F0066728.D	1	08/02/05	RR	n/a	n/a	VF1604

The QC reported here applies to the following samples: Method: SW846 8260B

T11067-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.47	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	39.6	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	1.0	5.0	0.67	ug/l	J
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.42	ug/l	
1330-20-7	Xylene (total)	ND	6.0	2.0	ug/l	

Method Blank Summary

Job Number: T11067
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF1604-MB	F0066728.D	1	08/02/05	RR	n/a	n/a	VF1604

The QC reported here applies to the following samples: Method: SW846 8260B

T11067-1

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	105%	73-139%
17060-07-0	1,2-Dichloroethane-D4	120%	66-139%
2037-26-5	Toluene-D8	100%	77-148%
460-00-4	4-Bromofluorobenzene	127%	84-150%

Blank Spike Summary

Job Number: T11067
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF1604-BS	F0066727.D	1	08/02/05	RR	n/a	n/a	VF1604

The QC reported here applies to the following samples: Method: SW846 8260B

T11067-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	179	143	31-158
71-43-2	Benzene	25	23.7	95	67-118
75-27-4	Bromodichloromethane	25	24.5	98	66-115
75-25-2	Bromoform	25	26.4	106	57-119
108-90-7	Chlorobenzene	25	23.0	92	72-116
75-00-3	Chloroethane	25	25.4	102	61-135
67-66-3	Chloroform	25	23.7	95	66-117
75-15-0	Carbon disulfide	25	25.1	100	39-136
56-23-5	Carbon tetrachloride	25	25.2	101	67-131
75-34-3	1,1-Dichloroethane	25	24.3	97	63-125
75-35-4	1,1-Dichloroethylene	25	25.6	102	52-143
107-06-2	1,2-Dichloroethane	25	27.0	108	61-120
78-87-5	1,2-Dichloropropane	25	24.3	97	64-118
124-48-1	Dibromochloromethane	25	25.4	102	67-117
156-59-2	cis-1,2-Dichloroethylene	25	23.2	93	65-116
10061-01-5	cis-1,3-Dichloropropene	25	26.5	106	67-118
156-60-5	trans-1,2-Dichloroethylene	25	25.5	102	66-128
10061-02-6	trans-1,3-Dichloropropene	25	29.0	116	73-126
100-41-4	Ethylbenzene	25	23.0	92	71-119
591-78-6	2-Hexanone	125	161	129	45-132
108-10-1	4-Methyl-2-pentanone	125	158	126	46-127
74-83-9	Methyl bromide	25	24.5	98	51-126
74-87-3	Methyl chloride	25	25.2	101	47-130
75-09-2	Methylene chloride	25	23.9	96	53-130
78-93-3	Methyl ethyl ketone	125	164	131*	47-128
100-42-5	Styrene	25	23.5	94	69-115
71-55-6	1,1,1-Trichloroethane	25	24.7	99	67-128
79-34-5	1,1,2,2-Tetrachloroethane	25	27.8	111	57-121
79-00-5	1,1,2-Trichloroethane	25	25.6	102	62-117
127-18-4	Tetrachloroethylene	25	23.1	92	72-128
108-88-3	Toluene	25	23.0	92	70-121
79-01-6	Trichloroethylene	25	24.1	96	69-120
75-01-4	Vinyl chloride	25	26.6	106	59-145
1330-20-7	Xylene (total)	75	71.2	95	72-120

Blank Spike Summary

Job Number: T11067
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF1604-BS	F0066727.D	1	08/02/05	RR	n/a	n/a	VF1604

The QC reported here applies to the following samples: Method: SW846 8260B

T11067-1

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	73-139%
17060-07-0	1,2-Dichloroethane-D4	116%	66-139%
2037-26-5	Toluene-D8	96%	77-148%
460-00-4	4-Bromofluorobenzene	96%	84-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T11067
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T11052-1MS	F0066736.D	1	08/02/05	RR	n/a	n/a	VF1604
T11052-1MSD	F0066737.D	1	08/02/05	RR	n/a	n/a	VF1604
T11052-1	F0066731.D	1	08/02/05	RR	n/a	n/a	VF1604

The QC reported here applies to the following samples: Method: SW846 8260B

T11067-1

CAS No.	Compound	T11052-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	116	93	116	93	0	39-130/26
71-43-2	Benzene	ND		25	24.1	96	23.9	96	1	65-122/15
75-27-4	Bromodichloromethane	ND		25	22.6	90	22.6	90	0	64-119/22
75-25-2	Bromoform	ND		25	20.8	83	20.4	82	2	50-123/28
108-90-7	Chlorobenzene	ND		25	23.4	94	23.3	93	0	72-118/20
75-00-3	Chloroethane	ND		25	27.5	110	26.9	108	2	60-136/25
67-66-3	Chloroform	ND		25	23.7	95	23.6	94	0	65-120/20
75-15-0	Carbon disulfide	ND		25	26.0	104	26.0	104	0	37-140/24
56-23-5	Carbon tetrachloride	ND		25	25.0	100	24.9	100	0	64-135/23
75-34-3	1,1-Dichloroethane	ND		25	25.4	102	25.2	101	1	65-126/21
75-35-4	1,1-Dichloroethylene	ND		25	27.3	109	26.8	107	2	55-140/25
107-06-2	1,2-Dichloroethane	ND		25	23.7	95	23.6	94	0	57-125/25
78-87-5	1,2-Dichloropropane	ND		25	24.2	97	23.9	96	1	63-121/22
124-48-1	Dibromochloromethane	ND		25	21.5	86	21.3	85	1	60-123/23
156-59-2	cis-1,2-Dichloroethylene	ND		25	23.1	92	23.1	92	0	62-120/24
10061-01-5	cis-1,3-Dichloropropene	ND		25	22.7	91	22.9	92	1	61-119/23
156-60-5	trans-1,2-Dichloroethylene	ND		25	26.5	106	26.3	105	1	64-130/22
10061-02-6	trans-1,3-Dichloropropene	ND		25	22.3	89	22.8	91	2	65-129/23
100-41-4	Ethylbenzene	ND		25	24.3	97	24.1	96	1	70-123/18
591-78-6	2-Hexanone	ND		125	89.1	71	99.2	79	11	41-137/27
108-10-1	4-Methyl-2-pentanone	ND		125	98.7	79	106	85	7	41-133/22
74-83-9	Methyl bromide	ND		25	26.1	104	25.4	102	3	47-129/27
74-87-3	Methyl chloride	ND		25	27.4	110	26.7	107	3	45-133/24
75-09-2	Methylene chloride	ND		25	23.3	93	23.1	92	1	49-128/21
78-93-3	Methyl ethyl ketone	ND		125	107	86	110	88	3	43-125/29
100-42-5	Styrene	ND		25	22.6	90	22.2	89	2	65-120/21
71-55-6	1,1,1-Trichloroethane	ND		25	25.3	101	25.4	102	0	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	23.6	94	23.4	94	1	50-128/22
79-00-5	1,1,2-Trichloroethane	ND		25	21.3	85	21.6	86	1	58-120/22
127-18-4	Tetrachloroethylene	19.5		25	43.1	94	43.0	94	0	69-132/21
108-88-3	Toluene	ND		25	24.4	98	23.9	96	2	70-123/18
79-01-6	Trichloroethylene	ND		25	24.6	98	24.5	98	0	70-120/19
75-01-4	Vinyl chloride	ND		25	29.8	119	29.3	117	2	51-147/24
1330-20-7	Xylene (total)	ND		75	75.2	100	73.2	98	3	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T11067
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T11052-1MS	F0066736.D	1	08/02/05	RR	n/a	n/a	VF1604
T11052-1MSD	F0066737.D	1	08/02/05	RR	n/a	n/a	VF1604
T11052-1	F0066731.D	1	08/02/05	RR	n/a	n/a	VF1604

The QC reported here applies to the following samples: Method: SW846 8260B

T11067-1

CAS No.	Surrogate Recoveries	MS	MSD	T11052-1	Limits
1868-53-7	Dibromofluoromethane	97%	99%	102%	73-139%
17060-07-0	1,2-Dichloroethane-D4	100%	99%	120%	66-139%
2037-26-5	Toluene-D8	101%	101%	101%	77-148%
460-00-4	4-Bromofluorobenzene	106%	105%	138%	84-150%

Gulf Coast
ACCUTEST.
Laboratories

08/16/05

Technical Report for

Shaw E & I, Inc.

Jones Road

PROJECT #111108

Accutest Job Number: T11171

Sampling Date: 08/11/05

Report to:

Shaw E & I, Inc.
ABB Lummus Building
3010 Briarpark
Houston, TX 77042

ATTN: Mr. Greg Long

Total number of pages in report: **20**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Ron Martino
Laboratory Manager

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3 4 5

Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Sample Results 5
3.1: T11171-1: MW-18 DRILL WATER 5
Section 4: Misc. Forms **7**
4.1: Chain of Custody 8
4.2: LRC Form 10
Section 5: GC/MS Volatiles - QC Data Summaries **14**
5.1: Method Blank Summary 15
5.2: Blank Spike Summary 17
5.3: Matrix Spike/Matrix Spike Duplicate Summary 19

Accutest Laboratories

Sample Summary

Shaw E & I, Inc.

Job No: T11171

Jones Road
Project No: PROJECT #111108

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
T11171-1	08/11/05	17:30	GL	08/12/05	AQ	Water	MW-18 DRILL WATER

ACCUTEST Laboratories

2

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Shaw E & I, Inc.	Job No	T11171
Site:	Jones Road	Report Date	8/16/2005 1:28:37 PM

1 Sample was collected on 08/11/2005 and were received at Accutest on 08/12/2005 properly preserved, at 5.2 Deg. C and intact. These Samples received an Accutest job number of T11171. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ	Batch ID: VY548

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) T11169-3MS, T11169-3MSD were used as the QC samples indicated.

Accutest Laboratories Gulf Coast (ALGC) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALGC and as stated on the COC. ALGC certifies that the data meets the Data QualityObjectives for precision, accuracy and completeness as specified in the ALGC Quality Manual except as noted above. This report is to be used in its entirety. ALGC is not responsible for any assumptions of data quality if partial data packages are used

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-18 DRILL WATER		
Lab Sample ID:	T11171-1	Date Sampled:	08/11/05
Matrix:	AQ - Water	Date Received:	08/12/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Jones Road		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0065963.D	1	08/15/05	RR	n/a	n/a	VY548
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.050	0.0028	mg/l	
71-43-2	Benzene	ND	0.0020	0.00047	mg/l	
75-27-4	Bromodichloromethane	ND	0.0020	0.00033	mg/l	
75-25-2	Bromoform	ND	0.0020	0.00065	mg/l	
108-90-7	Chlorobenzene	ND	0.0020	0.00054	mg/l	
75-00-3	Chloroethane	ND	0.0020	0.00046	mg/l	
67-66-3	Chloroform	ND	0.0020	0.00066	mg/l	
75-15-0	Carbon disulfide	ND	0.0020	0.00062	mg/l	
56-23-5	Carbon tetrachloride	ND	0.0020	0.00052	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0020	0.00052	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0020	0.00068	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0020	0.00053	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0020	0.00059	mg/l	
124-48-1	Dibromochloromethane	ND	0.0020	0.00068	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0020	0.00083	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0020	0.00059	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0020	0.00075	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0020	0.00061	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00048	mg/l	
591-78-6	2-Hexanone	ND	0.010	0.0019	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.010	0.0073	mg/l	
74-83-9	Methyl bromide	ND	0.0020	0.00047	mg/l	
74-87-3	Methyl chloride	ND	0.0020	0.00060	mg/l	
75-09-2	Methylene chloride	ND	0.0050	0.00067	mg/l	
78-93-3	Methyl ethyl ketone	ND	0.010	0.0030	mg/l	
100-42-5	Styrene	ND	0.0020	0.00050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00037	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0020	0.00046	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0020	0.00066	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0020	0.00074	mg/l	
108-88-3	Toluene	ND	0.0020	0.00054	mg/l	
79-01-6	Trichloroethylene	ND	0.0020	0.00063	mg/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-18 DRILL WATER		
Lab Sample ID:	T11171-1	Date Sampled:	08/11/05
Matrix:	AQ - Water	Date Received:	08/12/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Jones Road		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	0.0020	0.00042	mg/l	
1330-20-7	Xylene (total)	ND	0.0060	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		73-139%
17060-07-0	1,2-Dichloroethane-D4	101%		66-139%
2037-26-5	Toluene-D8	110%		77-148%
460-00-4	4-Bromofluorobenzene	124%		84-150%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- LRC Form

CHAIN OF CUSTODY

ACCUTEST Laboratories

10165 Harwin Drive, Ste. 150, Houston, TX 77036
TEL. 713-271-4700 FAX: 713-271-4770
www.accutest.com

FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest Job #

Client / Reporting Information

Company Name: SHAW ENVIRONMENTAL
Address: 3010 BORMPARK DRIVE SUITE 4N
City: HOUSTON State: TX Zip: 77042
Project Contact: GREG LONG E-mail: GREG.LONG@SHAWGRP.COM
Phone #: 713 996-4519
Sampler's Name: GREG LONG

Project Information

Project Name: JONES ROAD
Street: NEEDHAM DRIVE
City: HOUSTON State: TX
Project #: 110798
Fax #: 713 996-4401
Client Purchase Order #:

Requested Analysis

8260

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	8260	Number of preserved Bottles: HCl	H2SO4	HNO3	NONE	NaHSO4	NaOH	ZnOAc	LAB USE ONLY
1	MW-18 OBW GROUNDWATER		8-1-05	1730	GL	WW	3	X								

Turnaround Time (Business Days)

- [X] 10 Day STANDARD — Approved By: / Date: TAT
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] Other

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] Reduced Tier 1
- [ ] Full Tier 1
- [ ] TRRP13
- [ ] EDD Format

Commercial "A" = Results Only

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received by:	Relinquished by:	Date Time:	Received by:
1	8/2/05 1526		2	8.2.05 1346	8/2/05 1346
Relinquished by: 3	Date Time:	Received by: 3	Relinquished by: 4	Date Time:	Received by: 4
Relinquished by: 5	Date Time:	Received by: 5	Custody Seal #	Preserved where applicable ☐	On Ice ☑ Cooler Temp. 5.2°C

4.1 4

T11171: Chain of Custody
Page 1 of 2

ACCUTEST.

SAMPLE RECEIPT LOG

JOB #: T11171

DATE/TIME RECEIVED: 8/12/05 1345

CLIENT: Shaw Env

INITIALS: BN

Condition/Variance (Circle "Y" for yes and "N" for no or NA. If "N" is circled, see variance for explanation):

1. (Y) N Sample received in undamaged condition.
2. (Y) N Samples received within temp. range.
3. Y (N) Sample received with proper pH.
4. (Y) N Sample received in proper containers.
5. (Y) N Sample volume sufficient for analysis.
6. (Y) N Sample received with chain of custody.
7. (Y) N Chain of Custody matches sample IDs and analysis on containers.
8. (Y) N NA Custody seal received intact and tamper not evident on cooler.
9. (Y) N NA Custody seal received intact and tamper not evident on bottles.

SAMPLE or FIELD ID	BOTTLE #	DATE SAMPLED	MATRIX	VOLUME	LOCATION	PRESERV.	PH
1	1-3	8/11/05	WW	40ml	VREF	1,(2),3,4,5,6	(U) <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA

Reading Nos 8/12/05

LOCATION: WI: Walk-In VR: Volatile Refrig. SUB: Subcontract EF: Encore Freezer

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: Other

pH of waters checked excluding volatiles

pH of soils N/A

Comments:

Delivery method: Courier: Pick up

Tracking#:

COOLER TEMP: 5.2°C COOLER TEMP:

COOLER TEMP: COOLER TEMP:

Method of sample disposal: (circle one) Accutest disposal Hold Return to Client

Form: SM012, Rev.12/14/04, QAO

4.1 4

T11171: Chain of Custody

Page 2 of 2

ACCUTEST. Laboratories T11171

LABORATORY REVIEW CHECKLIST: REPORTABLE DATA

Laboratory Name: Accutest Gulf Coast — Date: 8/16/2005

Project Name: Jones Road. — Laboratory Job Number: T11171

Reviewer Name: Ron Martino — Batch Number(s):

#[1]	Analysis[2]	Description	Yes	No	NA[3]	NR[4]	ER #[5]
	OI	CHAIN-OF-CUSTODY (COC):					
		1) Were all samples included on a completed COC?	X				
		2) Did the samples requiring chemical preservation arrive at the laboratory preserved?	X				
		3) Were samples requiring thermal preservation within temperature specs at log-in?	X				
		4) Were the samples in the appropriate containers?	X				
	OI	SAMPLE AND QUALITY CONTROL (QC) IDENTIFICATION:					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
	OI	TEST REPORTS:					
		1) Were samples prepared and analyzed within holding times?	X				
		2) Were reported results within calibration range?	X				
		3) Were all calculations verified?	X				
		4) Were all analyte identifications verified?	X				
		5) Were sample quantitation limits reported for all analytes not detected?	X				
		6) If required for the project, were the tentatively identified compounds reported?			X		
		7) Were results reported on a dry weight basis?			X		
	O	SURROGATE RECOVERY DATA:					
		1) Were surrogates added prior to extraction?	X				
		2) Were surrogate percent recoveries in all samples within the laboratory QC acceptance criteria?	X				
	OI	TEST REPORTS FOR BLANK SAMPLES:					
		1) Were appropriate type(s) of blanks analyzed?	X				
		2) Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		3) Were blanks free of detected compounds?	X				
	OI	LABORATORY CONTROL SAMPLES (LCSs):					
		1) Was each LCS prepared from a source external to the calibration standards?	X				
		2) Were all project-required analytes included in the LCS?	X				
		3) Was each LCS taken through the entire analytical procedure, including preparation and, if applicable, cleanup procedures?	X				
		4) Were LCSs analyzed at the required frequency?	X				
		5) Were LCS percent recoveries within the laboratory QC acceptance criteria?	X				
	OI	MATRIX SPIKE (MS) and MATRIC SPIKE DUPLICATE (MSD) DATA:					
		1) Were all project-required analytes included in the MS and MSD?	X				
		2) Were MS/MSD analyzed at the appropriate frequency?	X				
		3) Were MS percent recoveries within the laboratory QC acceptance criteria?	X				
		4) Were MSD percent recoveries and relative percent differences (RPDs) within the laboratory QC acceptance criteria?	X				
	OI	ANALYTICAL DUPLICATE DATA:					
		1) Were appropriate analytical duplicates analyzed for each matrix?			X		
		2) Were analytical duplicates analyzed at the appropriate frequency?			X		
		3) Were RPDs or relative standard deviations within the laboratory QC acceptance criteria?			X		
	OI	METHOD QUANTITATION LIMITS (MQLs):					
		Is the concentration of the lowest non-zero calibration standard in the calibration curve reported? A DCS was analyzed on a quarterly basis.	X				1
	OI	The ND listed on the hard copy reports and/or EDD represents non detection of the target analyte at a concentration below the MDL.			X		
	OI	VALIDATION RESULTS FOR NON-REFERENCE METHODS					
		Were all samples prepared and analyzed using a Reference Method?	X				
	OI	OTHER PROBLEMS/ANOMALIES:					
		Are all known problems, anomalies or special conditions (e.g., use of minimum analytical limits) associated with the data noted in the Laboratory Review Checklist and Exception Reports?	X				

LAB REVIEW CHECKLIST (continued): SUPPORTING DATA

Laboratory Name: Accutest Gulf Coast | Date: 8/16/2005

Project Name: Jones Road. | Laboratory Job Number: T11171

Reviewer Name: Ron Martino | Batch Number(s):

#[1]	Analysis[2]	Description	Yes	No	NA[3]	NR[4]	ER #[5]
	OI	INITIAL CALIBRATION (ICAL) and ICAL VERIFICATION (ICV):					
		1) Were response factors (RFs) and/or relative response factors (RRFs) within the method-required QC acceptance criteria?	X				
		2) Were percent RSDs or correlation coefficient criteria met?	X				
		3) Were the number of standards recommended in the method used for all analytes?	X				
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		5) Are ICV data available for all instruments used?	X				
		6) Has the calibration curve been verified using a NIST-traceable second source?	X				
	OI	CONTINUING CALIBRATION VERIFICATION (CCV):					
		1) Was the CCV analyzed at the method-required frequency?	X				
		2) Were percent differences within the method-required QC acceptance criteria?	X				
		3) Was the ICAL curve verified for each analyte of interest?	X				
	O	MASS SPECTRAL TUNING:					
		1) Was the appropriate compound for the method used for tuning?	X				
		2) Were ion abundance data within the method-required QC acceptance criteria?	X				
	O	INTERNAL STANDARD (IS):					
		1) Were IS area counts within the method-required QC acceptance criteria?	X				
		2) Were IS retention times within the method-required QC acceptance criteria?	X				
	OI	RAW DATA (NELAC Section 1 Appendix A Glossary, and Section 5.12):					
		1) Were the raw data (e.g., chromatograms, spectral data) reviewed by an analyst?	X				
		2) Were all data associated with manual integrations flagged?	X				
	O	DUAL COLUMN CONFIRMATION:					
		1) Did dual column confirmation results meet the method-required QC acceptance criteria?			X		
		2) Were all percent differences less than 25%?			X		
	O	TENTATIVELY IDENTIFIED COMPOUNDS (TICs):					
		If TICs were requested, were the mass spectra and TIC data reviewed?			X		
	I	ICS RESULTS:					
		1) Were percent recoveries within method acceptance criteria?			X		
		2) Were the absolute values for all analytes less than the IDL?			X		
	I	SERIAL DILUTIONS, POST DIGESTION SPIKES, AND METHOD OF STANDARD ADDITIONS:					
		Were percent differences, recoveries, and linearity within the QC acceptance criteria specified in the method?			X		
	OI	VALIDATION RESULTS FOR NON-REFERENCE METHODS:					
		Are all non-Reference Methods documented and validated (NELAC 5.10.2.1)?			X		
	OI	METHOD DETECTION LIMIT (MDL) STUDIES:					
		Are MDL studies for each analyte in a given matrix current, on file, less than a year old?	X				
	OI	STANDARDS TRACEABILITY:					
		Are all standards used in the analyses NIST-traceable?	X				
	OI	DOCUMENTATION OF WATER AND REAGENTS QUALITY:					
		Is documentation of the quality of water and reagents used in the analyses on file?	X				
	OI	COMPOUND/ANALYTE IDENTIFICATION PROCEDURES:					
		Are the procedures for compound identification documented?	X				
	OI	DEMONSTRATION OF ANALYST CAPABILITY:					
		1) Was demonstration of capability conducted according to NELAC Appendix 5C?	X				
		2) Is documentation of the analyst's demonstration of capability on file?	X				
		3) Is documentation of the analyst's proficiency up-to-date and on file?	X				
	OI	PROFICIENCY TEST REPORTS (NELAC 5.4.2):					
		Are proficiency testing or interlaboratory comparison results on file?	X				
	OI	LABORATORY STANDARD OPERATING PROCEDURES (SOPs):					
		Are laboratory SOPs current and on file for each method performed?	X				

[1] Items identified by the letter "R" should be submitted to TNRCC in the Data Package. Items identified by the letter "S" should be retained and made available to the TNRCC upon request for a period of three years after the data are submitted.

[2] O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

[3] NA = Not applicable;

[4] NR = Not Reviewed;

[5] ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked.

LAB REVIEW CHECKLIST (continued): Exception Reports

Laboratory Name: Accutest Gulf Coast | Date: 8/16/2005

Project Name: Jones Road. | Laboratory Job Number: T11171

Reviewer Name: Ron Martino | Batch Number(s):

ER #	Description
1	For reporting purposes, the RL on the reports is equal to the MQL. The MDL is equal to the MDL/SQL. The unadjusted MQL is reported in the blank result page for all analysis.
2	All anomalies are discussed in the case narrative. All supporting laboratory documentation is on file with the laboratory's QA/QC department

1. APPENDIX A LABORATORY DATA PACKAGE COVER PAGE

This data package consists of:

- ☐ This signature page, the laboratory review checklist, and the following reportable data:
- ☐ R1 Field chain-of-custody documentation;
- ☐ R2 Sample identification cross-reference;
- ☐ R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
  - b) dilution factors,
  - c) preparation methods,
  - d) cleanup methods, and
  - e) if required for the project, tentatively identified compounds (TICs).
- ☐ R4 Surrogate recovery data including:
  - a) Calculated recovery (%R), and
  - b) The laboratory's surrogate QC limits.
- ☐ R5 Test reports/summary forms for blank samples;
- ☐ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - a) LCS spiking amounts,
  - b) Calculated %R for each analyte, and
  - c) The laboratory's LCS QC limits.
- ☐ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a) Samples associated with the MS/MSD clearly identified,
  - b) MS/MSD spiking amounts,
  - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- ☐ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - a) the amount of analyte measured in the duplicate,
  - b) the calculated RPD, and
  - c) the laboratory's QC limits for analytical duplicates.
- ☐ R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- ☐ R10 Other problems or anomalies.
- ☐ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By me signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [ ] This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Ron Martino		Lab Director	8/16/2005
Name:	Signature:	Title:	Date:

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: T11171
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY548-MB	Y0065955.D	1	08/15/05	RR	n/a	n/a	VY548

The QC reported here applies to the following samples: Method: SW846 8260B

T11171-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	2.8	ug/l	
71-43-2	Benzene	ND	2.0	0.47	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.33	ug/l	
75-25-2	Bromoform	ND	2.0	0.65	ug/l	
108-90-7	Chlorobenzene	ND	2.0	0.54	ug/l	
75-00-3	Chloroethane	ND	2.0	0.46	ug/l	
67-66-3	Chloroform	ND	2.0	0.66	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.62	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.52	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.52	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.68	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.53	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.59	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.68	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.83	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	0.59	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.75	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.61	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	1.9	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	10	7.3	ug/l	
74-83-9	Methyl bromide	ND	2.0	0.47	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	5.0	0.67	ug/l	
78-93-3	Methyl ethyl ketone	ND	10	3.0	ug/l	
100-42-5	Styrene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.37	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.46	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.66	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.74	ug/l	
108-88-3	Toluene	ND	2.0	0.54	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.63	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.42	ug/l	
1330-20-7	Xylene (total)	ND	6.0	2.0	ug/l	

Method Blank Summary

Job Number: T11171
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY548-MB	Y0065955.D	1	08/15/05	RR	n/a	n/a	VY548

The QC reported here applies to the following samples: Method: SW846 8260B

T11171-1

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	107%	73-139%
17060-07-0	1,2-Dichloroethane-D4	98%	66-139%
2037-26-5	Toluene-D8	108%	77-148%
460-00-4	4-Bromofluorobenzene	119%	84-150%

Blank Spike Summary

Job Number: T11171
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY548-BS	Y0065954.D	1	08/15/05	RR	n/a	n/a	VY548

The QC reported here applies to the following samples: Method: SW846 8260B

T11171-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	118	94	31-158
71-43-2	Benzene	25	25.6	102	67-118
75-27-4	Bromodichloromethane	25	24.2	97	66-115
75-25-2	Bromoform	25	22.1	88	57-119
108-90-7	Chlorobenzene	25	24.2	97	72-116
75-00-3	Chloroethane	25	24.5	98	61-135
67-66-3	Chloroform	25	24.5	98	66-117
75-15-0	Carbon disulfide	25	24.8	99	39-136
56-23-5	Carbon tetrachloride	25	26.4	106	67-131
75-34-3	1,1-Dichloroethane	25	25.2	101	63-125
75-35-4	1,1-Dichloroethylene	25	21.8	87	52-143
107-06-2	1,2-Dichloroethane	25	23.7	95	61-120
78-87-5	1,2-Dichloropropane	25	23.8	95	64-118
124-48-1	Dibromochloromethane	25	24.4	98	67-117
156-59-2	cis-1,2-Dichloroethylene	25	23.0	92	65-116
10061-01-5	cis-1,3-Dichloropropene	25	24.1	96	67-118
156-60-5	trans-1,2-Dichloroethylene	25	22.9	92	66-128
10061-02-6	trans-1,3-Dichloropropene	25	25.7	103	73-126
100-41-4	Ethylbenzene	25	23.2	93	71-119
591-78-6	2-Hexanone	125	127	102	45-132
108-10-1	4-Methyl-2-pentanone	125	118	94	46-127
74-83-9	Methyl bromide	25	27.2	109	51-126
74-87-3	Methyl chloride	25	25.3	101	47-130
75-09-2	Methylene chloride	25	22.2	89	53-130
78-93-3	Methyl ethyl ketone	125	116	93	47-128
100-42-5	Styrene	25	22.0	88	69-115
71-55-6	1,1,1-Trichloroethane	25	28.7	115	67-128
79-34-5	1,1,2,2-Tetrachloroethane	25	26.2	105	57-121
79-00-5	1,1,2-Trichloroethane	25	24.2	97	62-117
127-18-4	Tetrachloroethylene	25	22.8	91	72-128
108-88-3	Toluene	25	24.6	98	70-121
79-01-6	Trichloroethylene	25	23.5	94	69-120
75-01-4	Vinyl chloride	25	27.0	108	59-145
1330-20-7	Xylene (total)	75	70.0	93	72-120

Blank Spike Summary

Job Number: T11171
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY548-BS	Y0065954.D	1	08/15/05	RR	n/a	n/a	VY548

The QC reported here applies to the following samples: Method: SW846 8260B

T11171-1

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	111%	73-139%
17060-07-0	1,2-Dichloroethane-D4	99%	66-139%
2037-26-5	Toluene-D8	111%	77-148%
460-00-4	4-Bromofluorobenzene	106%	84-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T11171
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T11169-3MS	Y0065964.D	1	08/15/05	RR	n/a	n/a	VY548
T11169-3MSD	Y0065965.D	1	08/15/05	RR	n/a	n/a	VY548
T11169-3	Y0065961.D	1	08/15/05	RR	n/a	n/a	VY548

The QC reported here applies to the following samples: Method: SW846 8260B

T11171-1

CAS No.	Compound	T11169-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	97.9	78	99.6	80	2	39-130/26
71-43-2	Benzene	ND		25	24.9	100	24.4	98	2	65-122/15
75-27-4	Bromodichloromethane	ND		25	23.6	94	22.9	92	3	64-119/22
75-25-2	Bromoform	ND		25	19.2	77	20.7	83	8	50-123/28
108-90-7	Chlorobenzene	ND		25	23.6	94	23.7	95	0	72-118/20
75-00-3	Chloroethane	ND		25	24.0	96	24.1	96	0	60-136/25
67-66-3	Chloroform	ND		25	23.8	95	24.0	96	1	65-120/20
75-15-0	Carbon disulfide	ND		25	23.4	94	24.0	96	3	37-140/24
56-23-5	Carbon tetrachloride	ND		25	25.4	102	24.9	100	2	64-135/23
75-34-3	1,1-Dichloroethane	ND		25	25.6	102	25.1	100	2	65-126/21
75-35-4	1,1-Dichloroethylene	ND		25	19.7	79	19.9	80	1	55-140/25
107-06-2	1,2-Dichloroethane	ND		25	22.9	92	22.6	90	1	57-125/25
78-87-5	1,2-Dichloropropane	ND		25	24.4	98	23.3	93	5	63-121/22
124-48-1	Dibromochloromethane	ND		25	22.9	92	23.0	92	0	60-123/23
156-59-2	cis-1,2-Dichloroethylene	ND		25	22.5	90	22.6	90	0	62-120/24
10061-01-5	cis-1,3-Dichloropropene	ND		25	21.8	87	22.6	90	4	61-119/23
156-60-5	trans-1,2-Dichloroethylene	ND		25	23.1	92	23.0	92	0	64-130/22
10061-02-6	trans-1,3-Dichloropropene	ND		25	23.7	95	24.2	97	2	65-129/23
100-41-4	Ethylbenzene	ND		25	23.2	93	22.4	90	4	70-123/18
591-78-6	2-Hexanone	ND		125	99.5	80	103	82	3	41-137/27
108-10-1	4-Methyl-2-pentanone	ND		125	95.1	76	100	80	5	41-133/22
74-83-9	Methyl bromide	ND		25	28.0	112	27.4	110	2	47-129/27
74-87-3	Methyl chloride	ND		25	24.0	96	26.1	104	8	45-133/24
75-09-2	Methylene chloride	ND		25	20.0	80	20.3	81	1	49-128/21
78-93-3	Methyl ethyl ketone	ND		125	93.8	75	99.4	80	6	43-125/29
100-42-5	Styrene	ND		25	21.1	84	20.8	83	1	65-120/21
71-55-6	1,1,1-Trichloroethane	ND		25	28.3	113	27.8	111	2	68-131/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	24.6	98	24.4	98	1	50-128/22
79-00-5	1,1,2-Trichloroethane	ND		25	22.8	91	23.2	93	2	58-120/22
127-18-4	Tetrachloroethylene	ND		25	22.6	90	22.1	88	2	69-132/21
108-88-3	Toluene	ND		25	24.5	98	24.0	96	2	70-123/18
79-01-6	Trichloroethylene	ND		25	22.5	90	22.6	90	0	70-120/19
75-01-4	Vinyl chloride	ND		25	24.3	97	25.1	100	3	51-147/24
1330-20-7	Xylene (total)	ND		75	70.8	94	68.4	91	3	71-122/16

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T11171
Account: ITTXHO Shaw E & I, Inc.
Project: Jones Road

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T11169-3MS	Y0065964.D	1	08/15/05	RR	n/a	n/a	VY548
T11169-3MSD	Y0065965.D	1	08/15/05	RR	n/a	n/a	VY548
T11169-3	Y0065961.D	1	08/15/05	RR	n/a	n/a	VY548

The QC reported here applies to the following samples: Method: SW846 8260B

T11171-1

CAS No.	Surrogate Recoveries	MS	MSD	T11169-3	Limits
1868-53-7	Dibromofluoromethane	112%	112%	104%	73-139%
17060-07-0	1,2-Dichloroethane-D4	100%	104%	98%	66-139%
2037-26-5	Toluene-D8	116%	115%	106%	77-148%
460-00-4	4-Bromofluorobenzene	108%	108%	119%	84-150%

Gulf Coast
ACCUTEST Laboratories

11/16/05

Technical Report for

Shaw E & I, Inc.

Jones Road

PROJECT #118429.01

Accutest Job Number: T11785

Sampling Date: 11/02/05

Report to:

Shaw E & I, Inc.

greg.long@shawgrp.com

ATTN: Greg Long

Total number of pages in report: **8**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Ron Martino
Laboratory Manager

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Sections: 1 2 3

Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Sample Results **4**
2.1: T11785-1: MW-19 DRILL WATER 4
Section 3: Misc. Forms **6**
3.1: Chain of Custody 7

Sample Summary

Shaw E & I, Inc.

Job No: T11785

Jones Road
Project No: PROJECT #118429.01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
T11785-1	11/02/05	12:00	BH	11/02/05	AQ	Water	MW-19 DRILL WATER

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-19 DRILL WATER		
Lab Sample ID:	T11785-1	Date Sampled:	11/02/05
Matrix:	AQ - Water	Date Received:	11/02/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Jones Road		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y0067839.D	1	11/16/05	LJ	n/a	n/a	VY650
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	0.050	0.0028	mg/l	
71-43-2	Benzene	ND	0.0020	0.00047	mg/l	
75-27-4	Bromodichloromethane	ND	0.0020	0.00033	mg/l	
75-25-2	Bromoform	ND	0.0020	0.00065	mg/l	
108-90-7	Chlorobenzene	ND	0.0020	0.00054	mg/l	
75-00-3	Chloroethane	ND	0.0020	0.00046	mg/l	
67-66-3	Chloroform	ND	0.0020	0.00066	mg/l	
75-15-0	Carbon disulfide	ND	0.0020	0.00062	mg/l	
56-23-5	Carbon tetrachloride	ND	0.0020	0.00052	mg/l	
75-34-3	1,1-Dichloroethane	ND	0.0020	0.00052	mg/l	
75-35-4	1,1-Dichloroethylene	ND	0.0020	0.00068	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0020	0.00053	mg/l	
78-87-5	1,2-Dichloropropane	ND	0.0020	0.00059	mg/l	
124-48-1	Dibromochloromethane	ND	0.0020	0.00068	mg/l	
156-59-2	cis-1,2-Dichloroethylene	ND	0.0020	0.00083	mg/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.0020	0.00059	mg/l	
156-60-5	trans-1,2-Dichloroethylene	ND	0.0020	0.00075	mg/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.0020	0.00061	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00048	mg/l	
591-78-6	2-Hexanone	ND	0.010	0.0019	mg/l	
108-10-1	4-Methyl-2-pentanone	ND	0.010	0.0073	mg/l	
74-83-9	Methyl bromide	ND	0.0020	0.00047	mg/l	
74-87-3	Methyl chloride	ND	0.0020	0.00060	mg/l	
75-09-2	Methylene chloride	ND	0.0050	0.00067	mg/l	
78-93-3	Methyl ethyl ketone	ND	0.010	0.0030	mg/l	
100-42-5	Styrene	ND	0.0020	0.00050	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0020	0.00037	mg/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.0020	0.00046	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0020	0.00066	mg/l	
127-18-4	Tetrachloroethylene	ND	0.0020	0.00074	mg/l	
108-88-3	Toluene	ND	0.0020	0.00054	mg/l	
79-01-6	Trichloroethylene	ND	0.0020	0.00063	mg/l	

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-19 DRILL WATER		
Lab Sample ID:	T11785-1	Date Sampled:	11/02/05
Matrix:	AQ - Water	Date Received:	11/02/05
Method:	SW846 8260B	Percent Solids:	n/a
Project:	Jones Road		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-01-4	Vinyl chloride	ND	0.0020	0.00042	mg/l	
1330-20-7	Xylene (total)	ND	0.0060	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		73-139%
17060-07-0	1,2-Dichloroethane-D4	93%		66-139%
2037-26-5	Toluene-D8	98%		77-148%
460-00-4	4-Bromofluorobenzene	135%		84-150%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

10165 Harwin Drive, Ste. 150, Houston, TX 77036
TEL. 713-271-4700 FAX: 713-271-4770
www.accutest.com

FED-EX Tracking # | Bottle Order Control #

Accutest Quote # | Accutest Job # 111785

Client / Reporting Information

Company Name: SHAW ENVIRONMENTAL, INC
Address: 3010 BEECHER SUITE 4N
City: HOUSTON State: TEXAS Zip: 77042
Project Contact: GREG LONG E-mail: GREG.LONG@SHAWGRP.COM
Phone #: 713 996-4519
Sampler's Name: BILL HARDMAN

Project Information

Project Name: JONES ROAD
Street: JONES RD & FM 1960
City: HOUSTON State: TX
Project #: 118429.01
Fax #: 713-996-4401
Client Purchase Order #

Requested Analysis

VOA 8260

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

Accutest Sample #	Field ID / Point of Collection	SUMMA # / MEOH Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Number of preserved Bottles: HCl	H2SO4	NaOH	HNO3	NONE	NaHSO4	MEOH	ENCORE	VOA 8260	LAB USE ONLY
	MW-19 DRILL WATER		11/03/05	1200	WBM	WTR	3	3								X	

Turnaround Time (Business Days)

- [X] 10 Day STANDARD — Approved By: / Date:
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] Other

Emergency & Rush T/A data available VIA LabLink

Data Deliverable Information

- [ ] Commercial "A" — [ ] EDD Format ____
- [ ] Commercial "B"
- [ ] Reduced Tier 1
- [ ] Full Tier 1
- [ ] TRRP13

Commercial "A" = Results Only

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by:	Date Time:	Received by:	Custody Seal #	Preserved where applicable	On Ice	Cooler Temp
1		11/03/05 1330					
2						X	5.2
3							
4							
5							

1 Relinquished by: — Received by: — Relinquished by: — Date Time: 11.02.05 — Received by:
3 Relinquished by: — Date Time: — Received by:
5 Relinquished by: — Date Time: — Received by:

T11785: Chain of Custody
Page 1 of 2

ACCUTEST.

SAMPLE RECEIPT LOG

JOB #: T11785 DATE/TIME RECEIVED: 11/2/05 14:10

CLIENT: Shaw Env. INITIALS: AR

Condition/Variance (Circle "Y" for yes and "N" for no or NA. If "N" is circled, see variance for explanation):

1. (Y) N Sample received in undamaged condition.
2. (Y) N Samples received within temp. range.
3. Y N (NA) Sample received with proper pH.
4. (Y) N Sample received in proper containers.
5. (Y) N Sample volume sufficient for analysis.
6. (Y) N Sample received with chain of custody.
7. (Y) N Chain of Custody matches **sample IDs and analysis** on containers.
8. Y N (NA) Custody seal received intact and tamper not evident on cooler.
9. Y N (NA) Custody seal received intact and tamper not evident on bottles.

SAMPLE or FIELD ID	BOTTLE #	DATE SAMPLED	MATRIX	VOLUME	LOCATION	PRESERV.	PH
1	1-3	11/2	AQ	40ml	VREF	1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA

11-2-05

LOCATION: WI: Walk-In VR: Volatile Refrig. SUB: Subcontract EF: Encore Freezer

PRESERVATIVES: 1: None 2: HCL 3: HNO3 4: H2SO4 5: NAOH 6: Other

Comments:

pH of waters checked excluding volatiles

pH of soils N/A

Delivery method: Courier: driver

Tracking#:

COOLER TEMP: 5.2 COOLER TEMP:

COOLER TEMP: COOLER TEMP:

Method of sample disposal: (circle one) Accutest disposal Hold Return to Client

Form: SM012, Rev.12/14/04, QAO

3.1 3

T11785: Chain of Custody

Page 2 of 2

T11785 ACCUTEST. Laboratories 8 of 8

ATTACHMENT 10
WASTE MANIFESTS

WASTE MANAGEMENT

Schedule

NON-HAZARDOUS WASTE MANIFEST

RS

2013-05-104

FOR OFFICE USE ONLY
Customer Acc. No. _____
Ticket No. _____

Box # 274728

GENERATOR

WMI 131000

Name: Shaw Environmental, Inc.
Address: c/o USA, P.O. Box 87687, Houston, TX 77287
Phone No.: 713-996-4519

Generating Location: Glenora @ Foxboro Dr. Houston, TX 77065, 2013-05-104
State Gen. ID No.: N/A
Gen. US EPA ID No.: N/A

WASTE CODE	PROFILE NUMBER	WASTE DESCRIPTION	QUANTITY	UNITS
N/A	CP-41334	Soil cuttings and Groundwater	15	Y
		Signed in the course and scope of work of contractual performance or service on behalf of the TCEQ as required by State Contract.		

CODES: D = DRUM; B = BAG; C = CARTON; P = POUND; Y = YARDS; 0 = OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

WILLIAM B. HARDMAN (SHAW REPRESENTATIVE) 8-4-05 _____
AUTHORIZED AGENT'S NAME (PRINT) DATE SIGNATURE

TRANSPORTER

Transporter's Name: BAYOU CITY WASTE SYSTEMS
Address: 10234 LUCORE ST HOUSTON, TX 77017
Phone No.: 713-864-6540
Driver's name: Horacio Elizondo
Vehicle No.: 52 - 21FCG2 TX

I hereby certify that the above listed material was picked up at the Generator site listed above and delivered without incident to the disposal facility listed below.

08-05-05 H Elizondo 08-5-05 H Elizondo
SHIPMENT DATE DRIVER'S SIGNATURE DELIVERY DATE DRIVER'S SIGNATURE

DISPOSAL FACILITY

Site Name: WMI COASTAL PLAINS
Address: ~~21000 E. HWY 6, ALVIN, TX 77511~~ R1721
Phone No.: 281-388-1708
Permit No.: _____
Time: _____

I hereby certify that the above listed material has been accepted and that information presented on this document is true and accurate.

C Leandro 8-5-05 C Leandro
NAME (PRINT) DATE SIGNATURE

White - Original • Canary - Transporter • Pink - Disposal Facility • Goldenrod - Generator

WASTE MANAGEMENT

52 Solidify 3 2013-05-104

NON-HAZARDOUS WASTE MANIFEST

FOR OFFICE USE ONLY
Customer Acc. No. _____
Ticket No. _____

Box # 274786

GENERATOR

WMI 131001

Name Shaw Environmental, Inc.

Address c/o USA, P.O. Box 87687, Houston, TX 77287

Phone No. 713-996-4519

Generating Location Glenora @ Foxboro Dr. Houston, TX 77065, 2013-05-104

State Gen. ID No. N/A

Gen. US EPA ID No. N/A

WASTE CODE	PROFILE NUMBER	WASTE DESCRIPTION	QUANTITY	UNITS
N/A	CP-41334	Soil cuttings and Groundwater	15	Y
		Signed in the course and scope of work of contractual performance or service on behalf of the TCEQ as required by State Contract.		

CODES: D = DRUM; B = BAG; C = CARTON; P = POUND; Y = YARDS; 0 = OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

WILLIAM B. HARDMAN (SHAW REPRESENTATIVE) 8-4-05
AUTHORIZED AGENT'S NAME (PRINT) DATE SIGNATURE

TRANSPORTER

Transporter's Name BAYOU CITY WASTE SYSTEMS

Address 10234 LUCORE ST HOUSTON, TX 77017

Phone No. 713-864-6540

Driver's name Horacio Elizondo

Vehicle No. 52 - 21F CG2 TX

I hereby certify that the above listed material was picked up at the Generator site listed above and delivered without incident to the disposal facility listed below.

08-05-05 H Elizondo 08-05-05 H Elizondo
SHIPMENT DATE DRIVER'S SIGNATURE DELIVERY DATE DRIVER'S SIGNATURE

DISPOSAL FACILITY

Site Name WMI COASTAL PLAINS

Address 21000 E. HWY 6, ALVIN, TX 77511 H1721

Permit No. _____

Phone No. 281-388-1708

Time _____

I hereby certify that the above listed material has been accepted and that information presented on this document is true and accurate.

D Russell 8-5-05 D Russell
NAME (PRINT) DATE SIGNATURE

White - Original • Canary - Transporter • Pink - Disposal Facility • Goldenrod - Generator

WASTE MANAGEMENT

NON-HAZARDOUS WASTE MANIFEST

FOR OFFICE USE ONLY
Customer Acc. No. _____
Ticket No. _____

GENERATOR

WMI 130995

Name: Shaw Environmental, Inc.
Address: c/o USA, P.O. Box 87687, Houston, TX 77287
Phone No.: 713-996-4519

Generating Location: Glenora @ Foxboro Dr. Houston, TX 77065 2013-05-104
State Gen. ID No.: N/A
Gen. US EPA ID No.: N/A

WASTE CODE	PROFILE NUMBER	WASTE DESCRIPTION	QUANTITY	UNITS
N/A	CP-41334	Soil cuttings and Groundwater	15	Y
		Signed in the course and scope of work of contractual performance or service on behalf of the TCEQ, as required by State Contract.		

CODES: D = DRUM; B = BAG; C = CARTON; P = POUND; Y = YARDS; O = OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

WILLIAM B. HARDMAN (SAW EMPLOYEE) — AUTHORIZED AGENT'S NAME (PRINT)
8-23-05 — DATE
SIGNATURE

TRANSPORTER

Transporter's Name: BAYOU CITY WASTE SYSTEMS
Address: 10234 LUCORE ST HOUSTON, TX 77017
Phone No.: 713-864-6540
Driver's name: Horacio Elizondo
Vehicle No.: 52-25-163-AWS #52

I hereby certify that the above listed material was picked up at the Generator site listed above and delivered without incident to the disposal facility listed below.

08-26-05 — SHIPMENT DATE
H Elizondo — DRIVER'S SIGNATURE
08-26-05 — DELIVERY DATE
H Elizondo — DRIVER'S SIGNATURE

DISPOSAL FACILITY

Site Name: WMI COASTAL PLAINS
Address: ~~21000 E. HWY 6, ALVIN, TX 77511~~ H1721
Phone No.: 281-388-1708
Permit No.: _____
Time: _____

I hereby certify that the above listed material has been accepted and that information presented on this document is true and accurate.

C Lozano — NAME (PRINT)
8-26-05 — DATE
C Lozano — SIGNATURE

White - Original • Canary - Transporter • Pink - Disposal Facility • Goldenrod - Generator

WASTE MANAGEMENT

NON-HAZARDOUS WASTE MANIFEST

FOR OFFICE USE ONLY
Customer Acc. No. _____
Ticket No. _____

GENERATOR

WMI 130996

Name: Shaw Environmental, Inc.
Address: c/o USA, P.O. Box 67687, Houston, TX 77267
Phone No.: 713-996-4519

Generating Location: Glenora @ Foxboro Dr. Houston, TX 77065, 2013-05-104
State Gen. ID No.: N/A
Gen. US EPA ID No.: N/A

WASTE CODE	PROFILE NUMBER	WASTE DESCRIPTION	QUANTITY	UNITS
N/A	CP-41334	Soil cuttings and Groundwater	15	Y
		Signed in the course and scope of work of contractual performance or service on behalf of the TCEQ, as required by State Contract.		

CODES: D = DRUM; B = BAG; C = CARTON; P = POUND; Y = YARDS; O = OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

WILLIAM B. HARDMAN (SHAW EMPLOYEE) (PRINT) — AUTHORIZED AGENT'S NAME
8-23-05 — DATE
SIGNATURE

TRANSPORTER

Transporter's Name: BAYOU CITY WASTE SYSTEMS
Address: 10234 LUGORE ST HOUSTON, TX 77017
Phone No.: 713-864-6540
Driver's name: Horacio Elizondo
Vehicle No.: (#52) 274736

I hereby certify that the above listed material was picked up at the Generator site listed above and delivered without incident to the disposal facility listed below.

08-26-05 H Elizondo — SHIPMENT DATE / DRIVER'S SIGNATURE
08-26-05 — DELIVERY DATE
H Elizondo — DRIVER'S SIGNATURE

DISPOSAL FACILITY

WMI COASTAL PLAINS
Site Name: 21000 E. HWY 6, ALVIN, TX 77511
Address: H1721
Permit No.:
Phone No.: 281-388-1708
Time:

I hereby certify that the above listed material has been accepted and that information presented on this document is true and accurate.

C Leandro — NAME (PRINT)
8-26-05 — DATE
C Leandro — SIGNATURE

White - Original • Canary - Transporter • Pink - Disposal Facility • Goldenrod - Generator

WASTE MANAGEMENT

#12553 Solidify

NON-HAZARDOUS WASTE MANIFEST

2013-05-104

FOR OFFICE USE ONLY
Customer Acc. No. _____
Ticket No. _____

GENERATOR

WMI 130997

Name Shaw Environmental, Inc.

Address c/o USA, P.O. Box 87687, ~~Houston, TX 77287~~

Phone No. 713-996-4519

Generating Location Glenora @ Foxboro Dr. ~~Houston, TX 77065, 2013-05-104~~

State Gen. ID No. N/A

Gen. US EPA ID No. N/A

WASTE CODE	PROFILE NUMBER	WASTE DESCRIPTION	QUANTITY	UNITS
N/A	CP-41334	Soil cuttings and Groundwater	15	Y
		Signed in the course and scope of work of contractual performance or sevice on behalf of the TCEQ, as required by State Contract.		

CODES: D = DRUM; B = BAG; C = CARTON; P = POUND; Y = YARDS; 0 = OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

WILLIAM B. HARDMAN (SHAW EMPLOYEE) — AUTHORIZED AGENT'S NAME (PRINT)

8-23-05 — DATE

W.B. — SIGNATURE

TRANSPORTER

BAYOU CITY WASTE SYSTEMS — 713-864-6540

Transporter's Name

Address ~~10234 LUCORE ST~~ HOUSTON, TX 77017

Phone No.

Driver's name JOSE C. MACIAS

Vehicle No. 735

I hereby certify that the above listed material was picked up at the Generator site listed above and delivered without incident to the disposal facility listed below.

08-26-05 — SHIPMENT DATE — Jose C. MACIAS — DRIVER'S SIGNATURE

08-26-05 — DELIVERY DATE — Jose C. MACIAS — DRIVER'S SIGNATURE

DISPOSAL FACILITY

WMI COASTAL PLAINS — 281-388-1708

Site Name 21000 E HWY 6, ALVIN, TX 77511

Phone No.

Address H1721

Permit No.

Time

I hereby certify that the above listed material has been accepted and that information presented on this document is true and accurate.

C. Leonard — NAME (PRINT)

8-26-05 — DATE

C. Leonard — SIGNATURE

White - Original • Canary - Transporter • Pink - Disposal Facility • Goldenrod - Generator

WASTE MANAGEMENT

Solidify

NON-HAZARDOUS WASTE MANIFEST

2013-05-104

FOR OFFICE USE ONLY
Customer Acc. No. _____
Ticket No. _____

GENERATOR

WMI 130998

Name: Shaw Environmental, Inc.
Address: c/o USA, P.O. Box 87687, Houston, TX 77287
Phone No.: 713-996-4519

Generating Location: Glenora @ Foxboro Dr. Houston, TX 77065, 2013-05-104
State Gen. ID No.: N/A
Gen. US EPA ID No.: N/A

WASTE CODE	PROFILE NUMBER	WASTE DESCRIPTION	QUANTITY	UNITS
N/A	CP-41334	Soil cuttings and Groundwater	15	Y
		Signed in the course and scope of work of contractual performance or service on behalf of ~~tceq~~ the TCEQ, as required by State Contract.		

CODES: D = DRUM; B = BAG; C = CARTON; P = POUND; Y = YARDS; 0 = OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

WILLIAM HARDMAN (SHAW EMPLOYEE) — AUTHORIZED AGENT'S NAME (PRINT)
8-23-05 — DATE
SIGNATURE

TRANSPORTER

Transporter's Name: BAYOU CITY WASTE SYSTEMS
Address: 10234 LUCORE ST HOUSTON, TX 77017
Phone No.: 713-864-6540
Driver's Name: JOSE C MACIAS-
Vehicle No.: 735

I hereby certify that the above listed material was picked up at the Generator site listed above and delivered without incident to the disposal facility listed below.

08-26-05 — SHIPMENT DATE — JOSE C MACIAS — DRIVER'S SIGNATURE
08-26-05 — DELIVERY DATE — JOSE C MACIAS — DRIVER'S SIGNATURE

DISPOSAL FACILITY

Site Name: WMI COASTAL PLAINS
Address: 21000 E. HWY 6, ALVIN, TX 77511
Phone No.: 281-388-1708
Permit No.: H1721
Time: _____

I hereby certify that the above listed material has been accepted and that information presented on this document is true and accurate.

C Leandro — NAME (PRINT)
8-26-05 — DATE
C Leandro — SIGNATURE

White - Original • Canary - Transporter • Pink - Disposal Facility • Goldenrod - Generator

Box RT 022567 2013-05-104

WASTE MANAGEMENT

NON-HAZARDOUS WASTE MANIFEST

FOR OFFICE USE ONLY
Customer Acc. No. _____
Ticket No. _____

GENERATOR

WMI 130993

Shaw Environmental, Inc.

Name c/o USA, P.O. Box 87687,
Address Houston, TX 77287

713-996-4519
Phone No.

Generating Location Glenora @ Foxboro Dr. Houston, TX 77065, 2013-05-104

N/A
State Gen. ID No.

N/A
Gen. US EPA ID No.

WASTE CODE	PROFILE NUMBER	WASTE DESCRIPTION	QUANTITY	UNITS
N/A	CP-41334	Soil cuttings and Groundwater	15	Y
		Signed in the course and scope of work of contractual performance or service on behalf of the TCEQ as required by State Contract.		

CODES: D = DRUM; B = BAG; C = CARTON; P = POUND; Y = YARDS; 0 = OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

William B. Hardman (Shaw E&I) 11-09-05
AUTHORIZED AGENT'S NAME (PRINT) DATE SIGNATURE

TRANSPORTER

BAYOU CITY WASTE SYSTEMS 713-864-6540

Transporter's Name 1854 LUCORE ST
Address HOUSTON, TX 77017

Phone No. _____
Driver's name _____
Vehicle No. _____

I hereby certify that the above listed material was picked up at the Generator site listed above and delivered without incident to the disposal facility listed below.

11-9-05 _____ 11-10- _____
SHIPMENT DATE DRIVER'S SIGNATURE DELIVERY DATE DRIVER'S SIGNATURE

DISPOSAL FACILITY

WMI COASTAL PLAINS 281-388-1708

Site Name 21000 E HWY 6, ALVIN, TX 77511
Address H1721

Phone No. _____
Permit No. _____
Time _____

I hereby certify that the above listed material has been accepted and that information presented on this document is true and accurate.

Leandro 11-9-05 _____
NAME (PRINT) DATE SIGNATURE

White - Original • Canary - Transporter • Pink - Disposal Facility • Goldenrod - Generator

Box RT 0325013 Glenora 2013-05-104

WASTE MANAGEMENT

NON-HAZARDOUS WASTE MANIFEST

FOR OFFICE USE ONLY
Customer Acc. No. _____
Ticket No. _____

GENERATOR

WMI 130992

Name Shaw Environmental, Inc
Address c/o USA, P.O. Box 87687, Houston, TX 77287
Phone No. 713-996-4519

Generating Location Glenora @ Foxboro Dr Houston, TX 77065 2013-05-104
State Gen. ID No. N/A
Gen. US EPA ID No. N/A

WASTE CODE	PROFILE NUMBER	WASTE DESCRIPTION	QUANTITY	UNITS
N/A	CP-41334	Soil cuttings and Groundwater	15	Y
		Signed in the course and scope of work of contractual performance or service on behalf of the TCEQ, as required by State Contract.		

CODES: D = DRUM; B = BAG; C = CARTON; P = POUND; Y = YARDS; 0 = OTHER

I hereby certify that the above listed material(s), is (are) not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

WILLIAM B HARDMAN (PRINT) | 11-09-05 | SIGNATURE

AUTHORIZED AGENT'S NAME (PRINT) | DATE | SIGNATURE

TRANSPORTER

BAYOU CITY WASTE SYSTEMS 713-864-6540

Transporter's Name
Address 10234 LUCORE ST HOUSTON, TX 77017
Phone No.
Driver's name
Vehicle No.

I hereby certify that the above listed material was picked up at the Generator site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE | DRIVER'S SIGNATURE | DELIVERY DATE | DRIVER'S SIGNATURE

DISPOSAL FACILITY

WMI COASTAL PLAINS 281-368-1708

Site Name 21000 E. HWY 6, ALVIN, TX 77511
Address H1721
Phone No.
Permit No.
Time

I hereby certify that the above listed material has been accepted and that information presented on this document is true and accurate.

L Lowder (PRINT) | 11-9-05 | SIGNATURE

NAME (PRINT) | DATE | SIGNATURE

White - Original • Canary - Transporter • Pink - Disposal Facility • Goldenrod - Generator

AUG 0 5 2005

2013-05-104

Shipping Manifest

No. 20927

Intergulf Corporation

P.O. Box 1590
LaPorte, Tx. 77572

Telephone: (281) 474-4210 **Fax: (281) 474-4226**

GENERATOR

Facility Name: Shaw Environmental, Inc. Job # 2013-05-104

Facility Address: FM 1960 @ Jones Road, Houston, TX

Contact: Greg Long Phone#: 713-996-4519

Material Classification (per Material Characterization Form): Groundwater from Monitor Well Investigation

Quantity in Gallons: 5000 gals

I certify that the material being transferred on this shipment is not a hazardous waste as defined in 40 CFR Part 261, nor does it contain any PCB's or halogenated solvents.

Signature: SHAW EKI (Generators Representative) Title: Tech

Date: 8/5/05

Signed in the course and scope of the Contractual Performance or Service on behalf of the TCEQ, as required by a State Contract.

TRANSPORTER

USA Industrial Services

Company Name: (713) 864-6540

Phone #: TXR000054437 Truck #: 831 / 103

EPA I.D. #: State I.D. #: 87242

Drivers Name: Jerry DOT #: 005403276C

Signature: Date: 8-5-05

RECEIVING FACILITY

Name: Intergulf Corporation

Address: 10020 Bayport Blvd. Pasadena, TX 77507

EPA ID# TXR000031286 **Phone #:** (281) 474-4210

TNRCC#: A85602

Intergulf Corporation Job #

Facility Operators Name: P. Massey

Signature: **Date:** 08 05 05

2013-05-104

Shipping Manifest

No. 20926

Intergulf Corporation
P.O. Box 1590
LaPorte, Tx. 77572

Telephone: (281) 474-4210 **Fax: (281) 474-4226**

GENERATOR

Facility Name: Shaw Environmental, Inc. Job # 2013-05-104

Facility Address: FM 1960 @ Jones Road, Houston, TX

Contact: Greg Long Phone#: 713-996-4519

Material Classification (per Material Characterization Form): Groundwater from Monitor Well Investigation

Quantity in Gallons: 5,000 gals

I certify that the material being transferred on this shipment is not a hazardous waste as defined in 40 CFR Part 261, nor does it contain any PCB's or halogenated solvents.

Signature: Shaw Emp (Generators Represenative) Title: Tech

Date: 8/5/05

Signed in the Course and Scope of the Contractual Performance or service on behalf of the TCEQ, as required by the State Contract

TRANSPORTER

Company Name: USA Industrial Services

Phone #: (713) 864-6540 Truck #: 831 / 103

EPA I.D. #: TXR000054437 State I.D. #: 87242

Drivers Name: Jerry DOT #: 005403276C

Signature: Date: 8-5-05

RECEIVING FACILITY

Name: Intergulf Corporation

Address: 10020 Bayport Blvd. Pasadena, TX 77507

EPA ID# TXR000031286 **Phone #: (281) 474-4210**

AUG 05 2005 **TNRCC#:A85602**

Intergulf Corporation Job #

Facility Operators Name: JESSE CAMPOS

Signature: Jesse Campos **Date:** 8-5-05

Shipping Manifest

No. 20407

Intergulf Corporation

P.O. Box 1590
LaPorte, Tx. 77572

Telephone: (281) 474-4210 Fax: (281) 474-4226

GENERATOR

Facility Name: Shaw Environmental, Inc.
Facility Address: FM 1960 @ Jones Rd., Houston, TX 2013-06-404
Contact: Greg Long Phone#: (713) 996-4640
Material Classification (per Material Characterization Form): Groundwater from Moniter Well Investigation
Quantity in Gallons: 5000

I certify that the material being transferred on this shipment is not a hazardous waste as defined in 40 CFR Part 261, nor does it contain any PCB's or halogenated solvents.

Signature: W.B. (SHAW EMPLOYEE) (Generators Representative) Title: SITE MANAGER
Date: 8-25-05

Signed in the course and scope of the contractual performance or sevice on behalf of the TCEQ, as required by a State contract.

TRANSPORTER

Company Name: USA Industrial Services
Phone #: (713) 864-6540 Truck #: 831 / 1001
EPA I.D. #: TXR000054437 State I.D. #: 87242
Drivers Name: Jerry Justice DOT #: 0054032706
Signature: Jerry Justice Date: 8-27-05

RECEIVING FACILITY

Name: Intergulf Corporation
Address: 10020 Bayport Blvd.
EPA ID# TXR000031286

Pasadena, TX 77507
Phone #: (281) 474-4210
TNRCC#: A85602

Intergulf Corporation Job #
Facility Operators Name: Andrew Lawson
Signature: Date: 8-27-05

Shipping Manifest

No. 20408

Intergulf Corporation
P.O. Box 1590
LaPorte, Tx. 77572

Telephone: (281) 474-4210 **Fax: (281) 474-4226**

GENERATOR

Facility Name: Shaw Environmental, Inc.
Facility Address: FM 1960 @ Jones Rd. Houston, TX 2013-05-104
Contact: Greg Long Phone#: (713) 996-4519
Material Classification (per Material Characterization Form): Groundwater from Monitor Well Investigation
Quantity in Gallons: 5000

I certify that the material being transferred on this shipment is not a hazardous waste as defined in 40 CFR Part 261, nor does it contain any PCB's or halogenated solvents.

Signature: (Generator's Representative) (SHAW EMPLOYEE) Title: SITE GEOLOGIST
Date: 8-25-05

Signed in the course and scope of the contractual performance or service on behalf of the TCEQ, as required by a State contract.

TRANSPORTER

Company Name: USA Industrial Services
Phone #: (713) 864-6540 Truck #: 831 / 1001
EPA I.D. #: TXR000054437 State I.D. #: 87242
Drivers Name: Jerry Justice DOT #: 005483276C
Signature Jerry Justice Date: 8-27-05

RECEIVING FACILITY

Name: Intergulf Corporation
Address: 10020 Bayport Blvd. Pasadena, TX 77507
EPA ID# TXR000031286 **Phone #:** (281) 474-4210
TNRCC#: A85602

Intergulf Corporation Job # _____
Facility Operators Name: _____
Signature: _____ **Date:** 8/27/05

Shipping Manifest

No. 20406

Intergulf Corporation
P.O. Box 1590
LaPorte, Tx. 77572

Telephone: (281) 474-4210 **Fax: (281) 474-4226**

GENERATOR

Facility Name: Shaw Environmental, Inc.

Facility Address: FM 1960 @ Jones Rd., Houston, TX 2013-05-104

Contact: Greg Long Phone#:)713) 996-4510

Material Classification (per Material Characterization Form): Groundwater from Monitor Well Investigation

Quantity in Gallons: 4000

I certify that the material being transferred on this shipment is not a hazardous waste as defined in 40 CFR Part 261, nor does it contain any PCB's or halogenated solvents.

Signature: (Shaw Employee) (Generators Representative) Title: Site Manager

Date: 8-25-05

Signed in the course and scope of the contractual performance or service on behalf of the TCEQ, as required by a State contract.

TRANSPORTER

Company Name: USA Industrial Services

Phone #: (713) 864-8540 Truck #: 831 / 1001

EPA I.D. #: TXR000054437 State I.D. #: 87242

Drivers Name: Terry Justice DOT #: 005403276C

Signature: Date: 8-27-05

RECEIVING FACILITY

Name: Intergulf Corporation
Address: 10020 Bayport Blvd. Pasadena, TX 77507
EPA ID# TXR000031286 **Phone #:** (281) 474-4210
TNRCC#: A85602

Intergulf Corporation Job #

Facility Operators Name: JESSE CAMPOS

Signature: Jesse Campos **Date:** 8/29/05

2013-05-104 RS

Shipping Manifest

No. 20445

Intergulf Corporation
P.O. Box 1590
LaPorte, Tx. 77572

Telephone: (281) 474-4210 **Fax: (281) 474-4226**

GENERATOR

Facility Name: Shaw Environmental, Inc.
Facility Address: FM 1960 @ Jones Rd. Houston, TX
Contact: Greg Long Phone#: 713-996-4519
Material Classification (per Material Characterization Form): Groundwater from monitoring well investigation
Quantity in Gallons: 4000 gals,

I certify that the material being transferred on this shipment is not a hazardous waste as defined in 40 CFR Part 261, nor does it contain any PCB's or halogenated solvents.

Signature: Ked. Moeller (Generators Representative) Title: Ecologist/Shaw
Date: 11/10/05

SIGNED IN THE COURSE AND SCOPE OF THE CONTRACTUAL PERFORMANCE OF SERVICE ON BEHALF OF THE TCEQ, AS REQUIRED BY STATE CONTRACT.

TRANSPORTER

Company Name: USA Industrial Services
Phone #: 713-844-6540 Truck #: 831/448
EPA I.D. #: TXR000054437 State I.D. #: 87242
Drivers Name: Jerry Justice DOT #: 005626866C
Signature: Jerry Justice Date: 11-10-05

RECEIVING FACILITY

Name: Intergulf Corporation
Address: 10020 Bayport Blvd. Pasadena, TX 77507
EPA ID# TXR000031286 Phone #: (281) 474-4210
TNRCC#: A85602

Intergulf Corporation Job #
Facility Operators Name: JESSE MUÑOZ
Signature: Date: 11-10-05