



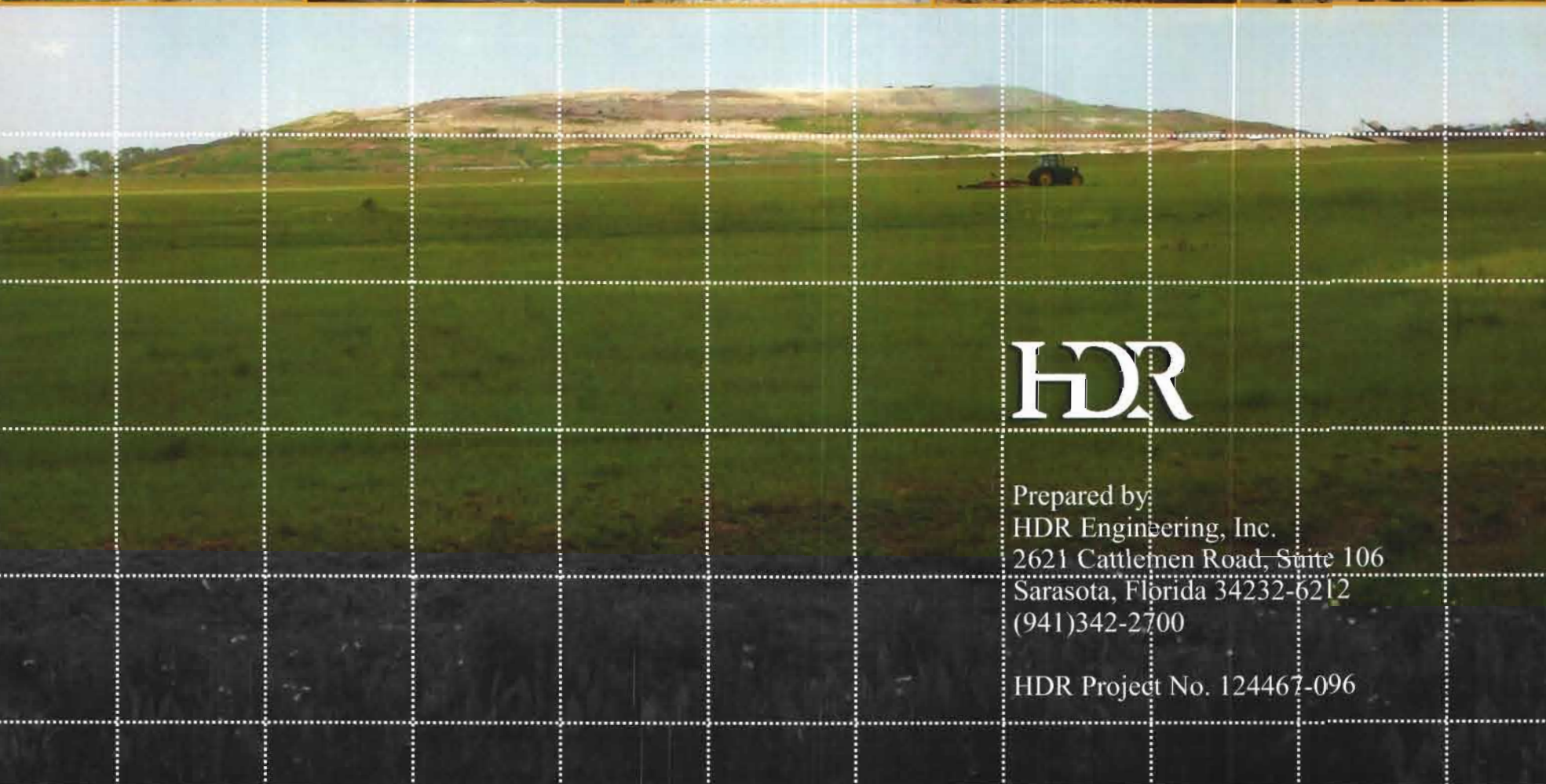
Sarasota County  
Solid Waste Operations

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
AUG 13 2010  
SOUTHWEST DISTRICT  
TAMPA

# Central County Solid Waste Disposal Complex Phase I Landfill Gas Collection and Control System Sequence 1

Certification of Construction Completion Report  
DEP Construction Permit No. 130542-009-SC/08

August 2010



# HDR

Prepared by:  
HDR Engineering, Inc.  
2621 Cattlemen Road, Suite 106  
Sarasota, Florida 34232-6212  
(941)342-2700

HDR Project No. 124467-096

August 13, 2010

Susan J. Pelz, P.E.  
Florida Department of Environmental Protection  
Southwest District  
13051 North Telecom Parkway  
Temple Terrace, Florida 33637-0926

Subject: Certification of Construction Completion Report  
Sarasota County Central County Solid Waste Disposal Complex (CCSWDC)  
Phase I Landfill Gas Collection and Control System – Sequence 1  
FDEP Construction Permit Number 130542-009-SC/08

Dear Ms. Pelz:

On behalf of Sarasota County Solid Waste Operations (SWO), HDR Engineering, Inc. (HDR) is pleased to submit four copies of the Certification of Construction Completion Report (Report) for the CCSWDC Phase I landfill Gas Collection and Control System – Sequence 1. As stated in the Report, HDR served as the Engineer of Record and provided on-site Construction Quality Assurance (CQA) services during the construction of the project as a representative of the SWO. The enclosed Report includes a completed Certification of Construction Completion form, signed and sealed by a Professional Engineer licensed in the State of Florida.


HDR believes that the Report meets the requirements established in the subject permit and the CQA Plan. Please contact me at 813-282-2776 if you have any questions or require additional information.

Sincerely,



Richard Siemering  
Solid Waste Section Manager

cc: Spencer Anderson, P.E., Sarasota County  
Jack Gibson, Sarasota County  
Gary Bennett, Sarasota County  
Lois Rose, Sarasota County

  
Cliff Koenig, P.E.  
Engineer of Record  
AUG 13 2010  
Department of Environmental Protection  
Southwest District



Florida Department of Environmental Protection  
Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, FL 32399-2400

DEP Form # 62-701.900(2)  
Form Title: Certification of Construction Completion  
Effective Date: May 19, 1994

DEP Application No.

(Filled by DEP)

## Certification of Construction Completion of a Solid Waste Management Facility

DEP Construction Permit No: 130542-009-SC/08 County: Sarasota

Name of Project: Central County Solid Waste Disposal Complex Phase I Gas Collection and Control System

Name of Owner: Sarasota County Solid Waste Operations

Name of Engineer: HDR Engineering, Inc.

Type of Project: Construction of a Landfill Gas Collection and Control System at the Phase I landfill

Cost: Estimate \$ 1,823,071.11 Actual \$ 1,357,711.82 (Bid Amount)

Site Design: Quantity: 1,000 ton/day Site Acreage: 55 Acres

Deviations from Plans and Application Approved by DEP: Construction of Phase I landfill gas collection and control system was constructed in general accordance with the specifications and drawings submitted as part of the permit application. No significant deviations occurred during construction. Refer to the certification report for a summary of minor deviations.

Address and Telephone No. of Site: 4000 Knights Trail Road, Nokomis FL 34224

(941) 861-1570

Name(s) of Site Supervisor: Ms. Lois E. Rose, Manager, Solid Waste

Date Site inspection is requested: As soon as possible.

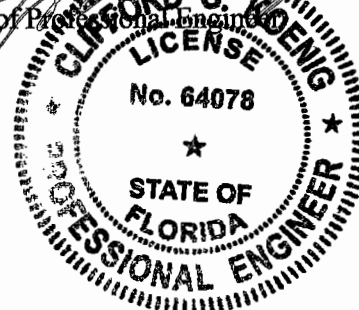
This is to certify that, with the exception of any deviation noted above, the construction of the project has been completed in substantial accordance with the plans authorized by Construction

Permit No: 130542-009-SC/08 :Dated: July 15, 2009

Date: 8-13-2010

Signature of Professional Engineer

Page 1 of 1



Northwest District  
160 Governmental Center  
Pensacola, FL 32501-5794  
850-695-8360

Northeast District  
7825 Baymeadows Way, Ste. B200  
Jacksonville, FL 32256-7590  
904-448-4300

Central District  
3319 Maguire Blvd., Ste. 232  
Orlando, FL 32803-3787  
407-894-7555

Southwest District  
3804 Coconut Palm Dr.  
Tampa, FL 33619  
813-744-8100

South District  
2295 Victoria Ave., Ste. 384  
Fort Myers, FL 33901-3881  
941-332-8975

Southeast District  
400 North Congress Ave.  
West Palm Beach, FL 33401  
561-681-6600



Sarasota County  
Solid Waste Operations

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Central County Solid Waste Disposal Complex  
Phase I – Sequence 1  
Landfill Gas Collection and Control System  
Certification of Construction Completion Report

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August 2010

Prepared by  
HDR Engineering, Inc.  
2621 Cattlemen Road, Suite 106  
Sarasota, Florida 34232-6212  
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HDR Project No. 124467-096  
Florida Certification of Authorization No. 00004213



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## ATTACHMENTS

ATTACHMENT A	PHASE I GAS COLLECTION AND CONTROL SYSTEM FDEP TITLE V AND SOLID WASTE PROGRAM CONSTRUCTION PERMITS
ATTACHMENT B	CQA DAILY LOG
ATTACHMENT C	GAS WELL INSTALLATION AND DRILLING LOGS
ATTACHMENT D	CONDENSATE SUMPS LEAK TEST REPORT
ATTACHMENT E	PROGRESS PHOTOGRAPHS
ATTACHMENT F	SUBSURFACE SOIL EXPLORATION AND COMPACTION TEST RESULTS
ATTACHMENT G	PHASE I GAS COLLECTION AND CONTROL SYSTEM RECORD DRAWINGS

## 1.0 INTRODUCTION

On behalf of Sarasota County Solid Waste Operations (SWO), HDR Engineering, Inc. (HDR) has prepared this Certification of Construction Completion Report to document the construction activities of the Phase I Landfill Gas Collection and Control System (LFGCCS) at the Central County Solid Waste Disposal Complex (CCSWDC). The Phase I LFGCCS construction included only the first sequence of wells and piping on the side slopes of Phase I up to a maximum elevation 80 feet (Sequence 1) and not in the active disposal area. The landfill gas collection system will be expanded into further areas of the Phase I landfill after final build-out elevations have been reached (Sequence 2) during closure construction activities for Phase I currently being permitted under FDEP File No. 130542-014-SF/01.

Construction of the Phase I LFGCCS Sequence 1 began on January 19, 2010, and Final Completion was achieved by the Contractor on June 14, 2010. HDR provided Engineer of Record (EOR) and Construction Quality Assurance (CQA) services to SWO throughout the duration of the project. Ardaman and Associates, Inc. (Ardaman) was retained by HDR to provide as requested testing services during the construction of the project.

HDR's responsibilities during construction of the Phase I LFGCCS Sequence 1 included:

- Original design and construction documents;
- Daily CQA monitoring of all construction activities;
- Attendance at progress meetings during construction;
- Review of shop drawings and other contractor submittals;
- Review and address contractor Requests for Information (RFI) during construction;
- Review of contractor's pay requests; and
- Preparation of the Certification of Construction Completion Report for submittal to FDEP.

The CQA activities were performed to confirm that the construction materials and procedures were in compliance with the Construction Permits No. 130542-009-SC/08 dated July 15, 2009, and 1150089-005-AC dated August 5, 2009 issued by the Florida Department of Environmental Protection (FDEP), Southwest District and in accordance with Chapter 62-701, Solid Waste Management Facilities, and Florida Administrative Code (FAC). A copy of the Phase I LFGCCS construction permits are provided in Attachment A.

The Phase I LFGCCS Sequence 1 was constructed in general accordance with the above mentioned permits and associated permit drawings. Minor deviations from the approved permit documents were required to facilitate construction or to update the documents to comply with current industry standards.

These minor deviations include the following:

- Construction Permit Drawings required the installation of 29 Gas Extraction Wells (GW). Due to revised filling sequence and operations on Phase I, the southwest corner of Phase I has not reached final design grades, therefore, only GW-1 through 26 were installed;

- The Construction Permit Drawings require the connection to the leachate cleanout (LCO) pipes on the north and south slopes. Ten connections were designed but due to the revised filling sequence, LCO-4S and LCO-5S connections were not installed.
- A Condensate Knockout Pot at the southeast corner was replaced with an HDPE wye;
- The 2" SDR 9 (airline) and 4" SDR 9 (forcemain) were installed in the up-gradient side of the header pipe to facilitate connections to GWs;
- The high point of the 24-inch header pipe on the east slope was placed approximately 10 feet further north than shown on the Pre-Construction survey; hence, the high point elevation was lowered and the overall pipe length from the high point was increased, resulting in the location of the header, forcemain, airline valve pits and wye at the southeast corner being deeper than designed. Extensions to the valve pits were required in order to provide a minimum of 2 feet from the top of the valve pit to existing grade. Valve stem extensions were also necessary to extend the valve actuators to near the top of the valve pit. Please refer to Section 4. 4 for additional information.
- As a result of the lower invert elevation of the wye, the slope of the 30-inch header pipe from the wye to the south access road varies from 1.3% to 1.8% along the final 150 feet of trench before passing the anchor trench (Refer to as-built Sheet 00C-3D for control point numbers 10174, 50082, and 50084). Waste was only located along the initial 50 feet of trench. Please refer to Section 4. 4 for additional information.
- The subbase for the corrugated metal pipe (CMP) within the landfill footprint was not required to be compacted to 95% modified proctor. A gravel layer compacted with the hoe was placed as a subbase;
- GW-3, GW-8, and GW-18 were installed as Type 1 GW instead of Type 2 GW. The location of the header pipe was not close enough to the GWs to facilitate a Type 2 connection;
- The header and forcemain valve pit diameters were increased in order to facilitate the installation of valves inside the HDPE pits.
- Access ports at each GW were replaced with 1-inch ball valves. The ball valves allow liquid level measurements to be measured by inserting a liquid level sensor through the ball valve at the GW.

## 2.0 PROJECT DESCRIPTION

### 2.1 General

The CCSWDC site encompasses approximately 6,150 acres and is located two miles east of I-75 and three miles south of S.R. 72 in central Sarasota County. The Class I landfill is located within a 550 acre special exception area which is located at the approximate center of the site.

The Phase I LFGCCS Sequence 1 included 26 vertical GWs, header and lateral piping of various sizes, condensate sumps, isolation valves for airlines, condensate, and landfill gas, access points for header, forcemain and air lines, and a skid mounted flare station for the efficient combustion of the collected gas.

## **2.2 Construction Activities**

Construction activity observations by the CQA inspectors were recorded in CQA daily logs provided in Attachment B. Construction and documentation for Phase I LFGCCS Sequence 1 included the following components:

- Gas extraction wells;
- Piping installation (including header and lateral trenching, road crossing);
- Condensate sump and U-traps installation;
- Header, forcemain, and valve pit installation; and
- Flare station installation;

### **2.2.1 Gas Extraction Wells**

The Phase I LFGCCS was considered critical with respect to the adequate performance of the CCSWDC and protection of the environment. The Phase I LFGCCS Sequence 1 system consists of 26 vertical GWs drilled into the waste. Each vertical GW has the following components (from top to bottom):

- Minimum 18-inch thick intermediate soil layer;
- 2-foot thick hydrated bentonite seal;
- Minimum 18-inch thick soil plug layer;
- 2-foot thick hydrated bentonite seal;
- 1-foot thick soil plug layer;
- Geonet with heat bonded geotextile; and
- Washed non-calcareous stone (size 1 to 3-inch) surrounding the perforated pipe.

The GWs were designed to be installed to a depth of approximately two-thirds of the waste depth and at least 15 feet from the bottom liner system. Therefore, the installed GWs did not interfere with the liner or leachate collection system in Phase I.

CQA personnel were on-site full-time during the entire duration of the installation of the GWs to observe construction activities related to the installation of the GW components. Please refer to Attachment C for GW installation and drilling logs.

### **2.2.2 Gas Remote Wellheads**

The Phase I LFGCCS Sequence 1 system consists of 8 remote wellheads connected to the existing LCO piping. The gas system was connected on the north slope to LCO-1N, 2N, 3N, 4N, and 5N, and on the south slope to LCO-1S, 2S, and 3S. LCO-4S and 5S were not installed due to the southwest corner of Phase I not at final design grades. The remote wellheads will provide for gas extraction from the existing LCO piping.



### **2.2.3 Condensate Sumps**

Condensate generated from the LFGCCS will gravity drain to 4 condensate sumps located on the south slope and along the east access road outside of the landfill. On the north slope, condensate drains to three U-traps. The U-traps have a drain line that allows accumulated condensate being discharge into the existing Phase I collection system. Condensate forms within the interior of the gas collection pipes as landfill gas contacts the cooler HDPE pipe surface. The condensate sumps serve as low points within the LFGCCS for the condensate to collect via gravity flow. The pneumatic condensate sump pumps are activated independently by the condensate level in each sump. The condensate is then pumped to the existing Cell 1 leachate collection system, located at the north slope of Phase I and ultimately routed to the existing leachate storage tank. Refer to Attachment D for leak test results obtained for condensate sumps 3, 4, and 5 located outside of the Phase I landfill. Sump 2 did not require a leak test since it is located within the landfill footprint.

### **2.2.4 Flare Station**

The Flare Station includes one blower. The blower system is used to draw landfill gas through the LFGCCS to the flare. The blower for the LFGCCS is located at the flare station on the blower skid. The blower will be operated continuously in accordance with FDEP Air Program permit and Title V regulatory requirements. The Flare Station includes an additional connection for a future blower if needed. The Flare Station equipment includes:

- Condensate demister separator/condensate knock-out pot.
- Blower system to provide vacuum pressure to draw the gas from the landfill.
- Candlestick flare station.

## **3.0 CONSTRUCTION QUALITY ASSURANCE PROGRAM**

### **3.1 General**

The scope of CQA monitoring, testing, and documentation services performed during the construction of the Phase I LFGCCS Sequence 1 included review of documents, record drawings, field CQA operations, and preparation of the final Construction Certification Report. These activities are summarized in the following sections. A list of personnel involved in the construction of the Phase I LFGCCS Sequence 1 is included in Section 3.5.

Installation of the GWs began on January 28, 2010 and was completed on February 5, 2010. Installation of header piping, laterals to GWs, sumps, U-traps, and the Flare Station began on February 8, 2010 and reached substantial completion on May 12, 2010. Construction of the Phase I LFGCCS Sequence 1 reached final acceptance on June 12, 2010.

### 3.2 Related Documents

As previously noted, this Report summarizes the CQA activities performed by HDR during construction of Phase I LFGCCS Sequence 1. The following documents define the design and technical aspects of the project which governed the construction:

- Permit Application entitled “Central County Solid Waste Disposal Complex Class I landfill Phase I LFGCCS Construction/Operation Permit Application” prepared by HDR, dated December 29, 2008, and amendments dated March 13, 2009, and April 20, 2009.
- Construction Permit entitled “Central County Solid Waste Disposal Complex Class I Landfill (CCSWDC) Phase I Gas Collection and Control System Construction Permit No.: 130542-009-SC/08, Sarasota County”, dated July 15, 2009.
- Permit drawings entitled “Central County Solid Waste Disposal Complex, Sarasota County, Phase I – Sequence I Landfill Gas Collection and Control System, dated April 20, 2009, prepared by HDR Engineering, Inc.
- “Contract Documents and Specifications for CCSWDC Landfill Gas Collection – Phase I – Sequence 1, CIP # 95215, Bid # 09803CS”, prepared by Sarasota County Capital Management Services and HDR.

All of the above documents are hereafter collectively referred to as the CQA Documents in this Report. During the construction of Phase I LFGCCS Sequence 1, some minor modifications from the approved permit documents were required to facilitate construction or to update the documents to comply with current industry standards. These minor modifications are discussed in detail within Section 1.0 of this certification report.

### 3.3 Field CQA Operations

The following activities were performed as part of CQA services provided by HDR:

- Notifying contractor of areas that needed additional compaction based on failing in-situ tests and re-testing these areas to ensure compliance with the requirements of the CQA Documents;
- Observing placement, grading, and compaction of earthwork related construction activities (including the flare station pad);
- Observing delivery, storage, and tracking the inventory of materials delivered for the project;
- Observing installation of GWs;
- Documenting and observing leak tests on installed piping;
- Observing construction of U-traps, and connection of U-traps to existing leachate collection system; and
- Observing repair of the perimeter roads;

During construction activities involving CQC and CQA testing, the observations made by CQA personnel and results for both CQC and CQA tests obtained by CQA personnel were compared with the

requirements of the CQA Documents. The Contractor was notified of deficiencies in construction practices and/or materials to ensure appropriate corrective actions were taken. Corrective actions and CQA/CQC retesting were monitored by CQA personnel for compliance with the requirements of the CQA Documents.

### **3.4 Certification Report and Record Drawings**

During construction of the Phase I LFGCCS Sequence 1, CQA monitoring and testing activities were documented by CQA personnel in Daily Logs. CQA Daily Logs are included in Attachment B. Compaction test results completed by the CQA laboratory are included in Attachment F.

Record drawings for the Phase I LFGCCS Sequence 1 and this Construction Certification Report were prepared as the final task of the construction of the Phase I LFGCCS. Record drawings are included in Attachment G.

### **3.5 Project Personnel and Responsibility**

The principal organizations involved in designing and construction of the Phase I LFGCCS Sequence 1 include the facility owner/operator, Design Engineer, CQA organization, and Contractor as listed below.

Owner:

Sarasota Solid Waste Operations  
Central County Solid Waste Disposal Complex  
4000 Knights Trail Road  
Nokomis, FL  
(941) 861-1570

Name

Lois Rose, Manager Solid Waste Operations.  
Jack Gibson, Construction Manager

Design Engineering:

HDR Engineering, Inc.  
200 W. Forsyth Street, Suite 800  
Jacksonville, FL 32202-4321  
(904) 598-8900

Name

Cliff Koenig, P.E., Engineer of Record

Construction Quality Assurance:

HDR Engineering, Inc.  
2421 Cattlemen Road, Suite 106  
Sarasota, FL 34232  
(941) 342-2700

Name

Richard A. Siemering, Solid Waste Section  
Manager  
Carlos Restrepo, P.E., Field CQA Representative

LFG General Contractor:

SCS Field Services  
1901 Central Drive, Suite 550  
Bedford, TX 76021  
(817) 571-2288

Name

Robert Butler, Project Manager  
Johnny Meier, Field Superintendent

Flare Station Contractor:

LFG Specialties, LLC/Shaw E&I Group  
16406 US Route 224 E.  
Findlay, OH 45840  
(419) 424-4915

Name

Lawrence Derr, Project Manager

CQA Geotechnical Testing Laboratory:

Ardaman and Associates, Inc.  
78 Sarasota Center Blvd.  
Sarasota, FL 34240  
(941) 922-3526

Name

Jerry Kuehn., P.E, Senior Project Engineer

## **4.0 SUMMARY OF CONSTRUCTION**

### **4.1 Gas Extraction Wells**

Gas extraction wells (GW) were constructed with 6-inch diameter high density polyethylene (HDPE), SDR 11 inserted into a 36-inch diameter borehole. The boreholes were terminated at approximately 15 feet above the estimated bottom of the cell with a maximum depth equivalent to two-thirds of the waste depth.

The GWs have 10 feet of solid HDPE pipe near the surface of the landfill (not including 4 foot stick up) welded to perforated HDPE pipe deeper in the landfill in order to minimize the potential for air intrusion into the landfill and gas system. Perforations in the HDPE pipes were fabricated by the manufacturer in the configuration shown in the Record Drawings provided in Attachment G on Sheet D-01, Detail 2. All GWs were capped at the bottom of the well.

Before placing the HDPE pipe into the GW borehole, CQA personnel verified the depths. After the GW was installed, 1-inch to 3-inch, washed, non-calcareous gravel was deposited in the bottom of the borehole, as well as around the perforated pipe. The gravel was placed up to 2 feet above the end of the perforated pipe length. Above the gravel, a 6-ounce non-woven geotextile bonded to geonet (geocomposite ring) was placed before installation of a 1-foot soil plug around the solid-wall pipe. A 2-foot thick hydrated bentonite seal was installed and filled on top with a minimum of 18-inch thick backfill. A second 2-foot hydrated bentonite seal was installed on top of the backfill. The remainder of the borehole was backfilled with cover soils to grade.

The solid HDPE pipe was extended approximately 4 feet above the existing ground surface. This allows for final cover placement during closure of Phase I with approximately 2 feet of pipe extension above the final cover grade.

During drilling, CQA personnel verified the type of waste excavated and temperature. The maximum waste temperature was recorded at GW-2 with 102 °F. Adjustments to GWs depths were not necessary. Contractor's GW installation and drilling logs are included in Attachment C.



## **4.2 Wellheads**

Each GW was fitted with Landtec Accu-Flo wellheads. The wellheads were installed with a 2-inch diameter vertical wellhead assembly, kanaflex hose, and fittings. The Accu-Flo wellhead is specifically designed to allow easy installation and maintenance. The installed wellhead is built with quick connect access ports, allowing the connection of a landfill gas monitor. The Accu-Flo wellhead can be adjusted with a built-in gate valve. This valve can be manipulated to increase or decrease the amount of vacuum available to the GW.

## **4.3 Gas Extraction Header and Lateral Pipes**

Landfill gas will be collected from the GWs and conveyed to the flare through a network of header and lateral pipelines constructed of HDPE SDR 17 pipe. Condensate flowing in the header and lateral lines along the south slope and east access road drains to four condensate sumps (Sumps 2, 3, 4, and 5). Condensate flowing along the north slope drains to three U-traps (U-1, 2, and 3). The condensate is then pumped into the existing leachate collection system via the 4-inch SDR 9 forcemain line. The 4-inch SDR-9 forcemain line is connected to the existing Cell 1 leachate collection system. A minimum slope of 5 percent for header and laterals within the landfill footprint and 1 percent slope for headers outside of the landfill footprint were provided to minimize surging and blockage problems due to condensate buildup and landfill settling.

The location and alignment of the headers and laterals were adjusted during construction where conditions in the landfill varied from the design or to facilitate meeting the required slope. The header and lateral piping was installed by the Contractor according to the design criteria.

Lateral piping is used to transmit landfill gas from the GW into the main header piping of the gas collection system and provide a pathway for the vacuum present in the header line to influence the GWs. The lateral piping was installed using HDPE SDR 11 piping. Depending on the type of GW, a 4-inch, 6-inch, or 8-inch diameter pipe was used for laterals.

Access points were also installed in the header line. 18-inch x 8-inch SDR 11 tees and 24-inch x 8-inch tees were fused to the header line. An 8-inch SDR 11 riser extension with a blind flange was fused to the tees.

Header and lateral pipes were subjected to air pressure tests to detect any leaks in the piping. The required test pressure was 10 psig, to be held for one hour. HDR allowed a test pressure of 5 psi for portions of piping connected to Sump 2 due to the sump manufacturer's recommendation that the sump not be pressurized to greater than 5 psi. The pressure drop, in any test, could not exceed 5 percent of the testing gauge pressure over the 1 hour test period. As shown in Table 1, all piping sections, requiring an air pressure test, passed air pressure testing. These tests are documented in the CQA Daily Field Logs provided in Attachment B.

Header and lateral pipe sections were joined using butt-fusion methods. CQA personnel monitored the butt-fusion techniques to ensure that industry accepted procedures were used during construction. CQA personnel also verified the diameter to ensure compliance with the requirements of the Contract Documents.

**Table 1 – Air Pressure Test Summary**

Date	Pipe Dia.	Length (ft)	Description	Stationing	Location	Pressure (psig)	Duration (hrs)	Pass/Fail
3/8/2010	18" SDR 17	1,773	Header	0+00 (U-3) to 16+75 (U-1) and 0+00 (U-3) to 0+95 (EOP)	North Slope	10	1.0	Pass
	8" SDR 11	96	Lateral GW-6		North Slope	10	1.0	Pass
	6" SDR 11	190	Laterals GW-1,4,7, LCO-5N		North Slope	10	1.0	Pass
	4" SDR 11	240	Laterals GW-2,3,5,8,9,10		North Slope	10	1.0	Pass
	4" SDR 9	2,265	Along header and laterals		North Slope	10	1.0	Pass
	2" SDR 9	2,265	Along header and laterals		North Slope	10	1.0	Pass
3/9/2010	6" SDR 11	283	Remote Wellheads LCO-1N, 2N, 3N, 4N		North Slope	10	1.0	Pass
4/8/2010	24" SDR 17	1,164	Header	0+00 (U-1) to 11+64 (Wye)	East Slope	10	1.0	Pass
	6" SDR 11	96	Laterals GW-14,15,16		East Slope	10	1.0	Pass
	4" SDR 11	347	Laterals GW-11,12,13,17, 18		East Slope	10	1.0	Pass
	4" SDR 9	1,607	Along header and laterals		East Slope	10	1.0	Pass
4/13/2010	2" SDR 9	1,607	Along header and laterals		East Slope	10	1.0	Pass
4/15/2010	18" SDR 17	1,400	Header	0+00 (Sump 2) to 10+70 (Wye) and 0+00 (sump 2) to 3+30 (EOP)	South Slope	5*	1.0	Pass
	6" SDR 11	120	Laterals GW-19,20, LCO-3S		South Slope	5*	1.0	Pass
	4" SDR 11	270	Laterals GW-21,22,23,24, 25,26		South Slope	5*	1.0	Pass
	4" SDR 9	1,750	Along header and laterals		South Slope	10	1.0	Pass
	2" SDR 9	1,750	Along header and laterals		South Slope	10	1.0	Pass
4/16/2010	6" SDR 11	233	Remote Wellheads LCO-1S, 2S		South Slope	10	1.0	Pass
4/19/2010	30" SDR 17	400	Header	0+00 (Wye) to 4+00 (Sump 3)	East of Phase V	10	1.0	Pass
4/24/2010	30" SDR 17	545	Header	4+00 (Sump 3) to 9+45 (Sump 4)	East of Phase V	10	1.0	Pass
4/29/2010	30" SDR 17	505	Header	9+45 (Sump 4) to 14+50	East of Phase V	10	1.0	Pass
5/8/2010	30" SDR 17	400	Header	14+50 to 18+50 (Sump 5)	East of Phase V	10	1.0	Pass
5/5/2010	36" SDR 17 / 90 elbow	90	Header	Sump 5 to Flare Station	Flare Station	10	1.0	Pass
5/12/2010	4" SDR 9	1,850	Forcemain line	0+00 (Wye) to 18+50 (Sump 5)	East slope to Flare Station	10	1.0	Pass
	2" SDR 9	1,850	Air return line	0+00 (Wye) to 18+50 (Sump 5)	East slope to Flare Station	10	1.0	Pass
	14" SDR 17	12	26" x 14" reducer at Knockout		Flare Station	10	1.0	Pass

\* 18" SDR 17 header in south slope tested at 5 psig for 1 hr. Sump 2 connected to 18" header not recommended to be tested at 10 psig

The header line crossed 5 access roads. The Contractor excavated to the required depths to install the 42-inch and 48-inch Reinforced Concrete Pipes (RCP) to protect the header line. A limerock base was placed before installing the RCPs. During backfilling, Contractor and CQA personnel conducted compaction tests to meet a 95% modified proctor. Compaction test results are provided in Attachment F.

The header and lateral for LCO-1S, on the south slope, were installed inside a corrugated metal pipe (CMP) where the future access road on the south slope of Phase I crosses the header and LCO-1S lateral. The access road will be constructed once Phase I reaches final build-out elevations. The subbase for the CMP was not compacted to 95% modified proctor. The Contractor installed a compacted gravel base layer for the CMP as recommended by HDR.

#### **4.4 Pipe Slope**

The header, lateral, air, and forcemain lines were installed with a minimum slope of 5 percent within the landfill footprint. Pipes located outside of the landfill footprint were installed with a 1 percent minimum slope.

The Contractor and CQA personnel field verified the slope of the header pipe at 25-foot intervals along the length of the pipe before backfilling. Survey tubes for pipe coordinates and elevations were placed every 50-foot intervals for as-builts. Changes in pipe direction, fittings, and connections were also surveyed. The final as-built survey is included in Attachment G as part of the Record Drawings.

During installation of the 24-inch header line from the high point to the wye along the east side slope, CQA personnel informed the Contractor that the trench depth was becoming deeper than required in the Contract Documents to maintain minimum cover, which would provide an excessive depth of cover over the pipe. Further review of as-builts demonstrated that the Contractor moved the high point location approximately 10 feet further north than that shown on the pre-construction survey; hence, the high point elevation was lowered and the overall pipe length from the high point to the wye was increased, resulting in a flatter slope along the surface of the pipe route, causing the Contractor to progressively excavate a deeper trench to meet the minimum 5 percent slope.

Given the high point invert was installed lower than designed and staked-out, as well as the pipe length in this area, the difference between the pipe surface slope and the actual pipe slope resulted in the wye invert being approximately 5 feet deeper than designed. Thus, rather than having an invert elevation of approximately 40 feet NGVD at the wye as shown on the Contract Drawings (C-004), the installed invert elevation is approximately 35.3 feet NGVD.

As a result, the lower invert elevation of the wye required that the 30-inch header pipe at the road crossing just south of the southeast corner of Phase I be adjusted to maximize pipe slope. The header, airline, and forcemain valve pits were extended and valve stem extensions were installed for the header valves in order to provide the required clearance from the top of the pits to the existing grade.



The 30-inch header line from the wye to the road just south of Phase I southeast corner (approximately 150 feet) varied from 1.3 percent (60.15 feet) to 1.8 percent (49.94 feet) and then to 2.4 percent (41.60 feet). Waste was only found during the first 50 feet of trench. HDR reviewed the header pipe configuration and based on waste being found only on the first 50 feet of trench, accepted the pipe slope obtained in this area. The Contractor provided an additional 2 year warranty to SWO to cover any repairs along this section of pipe. Due to the limited depth and area of waste at this section of pipe, HDR does not anticipate settlement which would cause the pipe to exhibit condensate drainage issues.

#### **4.5 Air and Forcemain Lines**

Air and forcemain lines were constructed of 2-inch and 4-inch HDEP SDR 9 pipe, respectively. The air line serves as an air source for the operation of pneumatic pumps which are commonly installed in GWs to reduce the volume of liquid contained within the well boring when needed to improve GW performance. The GWs installed as part of the LFGCCS Sequence 1 were not provided with pneumatic pumps. The forcemain line allows discharge of water pumped from the GW into the existing leachate collection system.

The air and forcemain lines were installed in the same trench as the GW lateral and connected to the air and forcemain lines along the header. Air and forcemain lines along the header were installed on the up-gradient side of the slope to facilitate connections to the GWs. The air and forcemain lines were fused together to create one complete system. Air and forcemain line risers were installed at each GW and Sumps with 1-inch stainless steel ball valves.

Air and forcemain pipes were subjected to air pressure test to detect any leaks in the piping. No loss in pressure was reported as shown in Table 1 provided in Section 4.3.

As part of the design, a dual containment forcemain line was required to be installed outside of the landfill footprint. Based on the meeting minutes between HDR and FDEP on October 17, 2008, dual contained condensate forcemain lines are not required. HDR approved the change from a dual containment pipe to a single pipe.

#### **4.6 Condensate Sumps**

Three 36-inch HDPE SDR 17 condensate sumps (S-2, S-3, and S-4) and one 48-inch HDPE SDR 17 condensate sump (S-5) were installed. Sump S-1 will be installed as part of the Phase I Closure LFGCCS – Sequence 2. The sumps were installed at low points in the header line to serve as a removal location for condensate which is present in the header line.

During excavation of Sumps 3, 4, and 5, outside of the landfill footprint, a layer of rock was found during the bottom 4 feet of excavation. The Contractor was able to remove the rock to the required depth level.

Once the Sumps were installed, 10 cubic yards of concrete was placed around the sump to serve as ballast to prevent uplift forces.

The condensate sumps have a 6-inch flanged access point for the pneumatic pump. QED pneumatic pumps were installed with a bubbler system that will turn the pump on or off based on the liquid level inside the sump. Condensate removed from the sump is pumped into the 4-inch forcemain return line. Condensate sumps S-3, S-4, and S-5 (located outside of the landfill footprint) were leak tested by the manufacturer. Please refer to Attachment D for leak test results for the sumps. Sump S-2 located on the south side slope of Phase I was not required to be tested since it was located within the lined footprint of Phase I.

#### **4.7 Leachate Cleanouts**

The Phase I LFGCCS Sequence 1 incorporated the connection to existing Phase I leachate cleanouts. Existing 6-inch leachate cleanouts risers extended along the base liner of the landfill to the leachate sump at the base of the landfill. These leachate cleanouts give access to the landfill gas which is present at the base of the landfill.

Gas accumulation in the existing leachate collection system flowed passively and was flared by solar flares located at each leachate cleanout riser. As part of the Phase I LFGCCS Sequence 1, the solar flares were removed. Condensate lines were connected between the U-traps and the existing leachate cleanout risers. An additional tee was installed at the leachate cleanout riser connecting to remote GWs. The remote GWs were located next to each U-trap. The forcemain line was connected at the Cell 1 leachate cleanout riser for discharge of condensate accumulated in the landfill gas system.

All fusions at the cleanout risers were made with electrofusion collars. CQA personnel verified that excavations at the cleanouts were made with all necessary precautions to prevent any damage to the bottom liner system. No damage to the liner was reported. A total of 8 leachate cleanout risers were connected to the landfill gas system including 5 cleanouts on the north side slope and 3 on the south side slope.

#### **4.8 U-traps**

The Contractor field fabricated all U-traps. Three U-traps were installed on the north slope and were connected to the existing leachate collection system for Cells 1, 3, and 5 of Phase I. Gas condensate accumulated in the LFGCCS at the north slope will gravity drain to the U-traps. The U-traps include a 4" condensate drain line that is connected to the LCO risers. CQA personnel verified that dimensions based on the construction documents were met. All U-traps were filled with water before flare station start-up.

## **4.9 Isolation Valves**

The Phase I LFGCCS Sequence 1 was designed and constructed using header isolation valves, air line valve pits, and forcemain valve pits. The first set of valve pits are located at the northwest corner of Phase I. This will allow reduction of the supply of vacuum or the ability to close the landfill gas system for the future Phase II landfill.

The remaining two sets of valve pits are located at the southeast corner of Phase I where the header line diameter increases from 18-inch to 24-inch and where the header increases from a 24-inch to a 30-inch diameter header. These valve pits will allow reduction of the supply of vacuum or complete closing of the landfill gas system to the south side slope or to the east and north side slopes.

The header, forcemain, and air line isolation valves are housed in the valve pits. The header and forcemain valve pits were constructed using a 48-inch diameter HDPE SDR 32.5 standard manhole pipe with a 1-inch thick square HDPE bottom, the airline valve pit was constructed using a 36-inch diameter HDPE SDR 32.5 standard manhole pipe with an open bottom. All valve pits have a lockable lid using a metal rod.

The airline valves are used for isolating the air supply to the air line installed in parallel with the header line. The air line valve pit contains a 2-inch diameter ball valve. The airline valve pit located along the 24-inch header line (at the southeast corner of Phase I) controls the supply of pressurized air to the north and east side slopes. The airline valve pit located along the 18-inch header line (at the southeast corner of Phase I) controls the supply of pressurized air to the south side slope.

The forcemain valves are used for isolating leachate pumped from GWs to the forcemain line installed in parallel with the header line. The forcemain valve pit contains a 2-inch diameter ball valve and a 2-inch check valve. The forcemain valve pit located along the 24-inch header line (at the southeast corner of Phase I) controls the condensate or leachate from the south side slope and the condensate sumps outside of the landfill. The forcemain valve pit located along the 18-inch header line (at the southeast corner of Phase I) controls the condensate or leachate from the south side slope.

## **4.10 Flare Station**

The flare station at the CCSWDC consists of a condensate knockout pot, a blower skid (the vacuum source), several meters and analyzers, an air compressor, a flame arrestor, the flare stack with a propane ignition tip, and the programmable logic controller (PLC). The skid mounted system was provided by Shaw LFG Specialties.

Ardaman conducted a subsurface soil exploration for the area selected for the flare station to determine soil conditions and provide a recommendation on the foundation design. Ardaman's geotechnical report is included in Attachment F.

The Contractor surveyed the areas for the flare, compressor pads, and fence. The compaction of the flare and compressor pad areas was observed by CQA personnel. Soil was filled to grade in 6- to 8- inch lifts. Each lift was rolled approximately 6 times each prior to the addition of the next lift. Once it was determined that the grade surrounding the future location of the flare station was adequately compacted and raised, the area was prepared for the construction of the concrete pad which the flare station would be placed on. The soil foundation was compaction tested and the test results are provided in Attachment F. The soil foundation for the Flare Station passed compaction by achieving 95% of modified proctor maximum dry density.

Once the area designated for the concrete pad was prepared, the forms were installed for the edge of the concrete pad. Rebar was placed within the forms for the concrete pad and spaced according to the recommendations of the Flare Station manufacturer. CQA personnel reviewed the rebar placement and documented that the rebar was placed in substantial accordance with the Flare Station manufacturer's recommendations.

Once the concrete was poured into the forms, a vibratory shaker was used to evenly spread the concrete over the entire area of the pad. A chamfer was used on the edge of the concrete to create an edge on all sides of the flare station pad. The concrete was spread to ensure that sections did not set before other sections were installed. Once the concrete was partially set a brush was used to create traction grooves on the surface of the flare station concrete pad. Once the concrete was set, the forms were removed and the area surrounding the concrete pad was backfilled with stone, raising it to the level of the concrete pad.

A concrete cylinder test was taken to measure the strength of the concrete for the pad at 7, 14, and 28 days. The concrete achieved 4,000 psi, as required by the specifications, within 28 days. The concrete strength test result report is provided in Appendix F. Once it was determined that the concrete had reached the specified strength, the Contractor used a crane to move the skid mounted flare station and place it onto the concrete pad. The flare stack was elevated off the ground using two thick wires connected with hooks to small indentations on the wind screen of the flare stack. Prior to complete installation, the UV Sensor and associated sealant was placed in the ignition area of the flare stack. Once this was completed the flare stack was raised into the correct position on the skid. The flare stack was then bolted to the flare skid.

After the flare station was set and connected to the gas collection system, an overall walkthrough was performed by the CQA representative and the Contractor. Drain lines and additional fittings provided by the flare manufacturer were installed. After all of the checks were completed, Shaw began commissioning and start up of the flare station. A training seminar was provided to County staff and HDR by Shaw.



#### **4.11 Utilities**

Existing overhead power lines located west of the maintenance building area were used to provide power to the flare station. Florida Power and Light Company (FPL) installed the transformer and junction box. The Contractor was responsible for connecting electrical lines to the junction box. The installation of the power lines and transformers were completed by FPL on March 1, 2010. The Contractor connected a phone line from the Flare Station control panel to the County's Maintenance Building.

#### **5.0 CONCLUSION**

During construction of the above components, CQA personnel checked that conformance testing was performed at the frequencies required by the Contract Documents and that the installation met or exceeded the requirements of the Contract Documents. CQA personnel checked that conditions or materials identified as not conforming to the Contract Documents were replaced, repaired, and/or retested as described in this report.

The observations associated with the construction of Phase I LFGCCS Sequence 1 indicate that the construction was completed in compliance with Construction Permit No. 130542-009-SC/08 and the Contract Documents. Deviations identified in this Report are believed to be minor in nature and were approved by HDR before implementation by the Contractor. HDR has determined that the final completed construction satisfied project specifications and permit requirements.

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

AUG 13 2010

SOUTHWEST DISTRICT  
TAMPA

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**ATTACHMENT A**  
**PHASE I GAS COLLECTION AND CONTROL SYSTEM**  
**FDEP CONSTRUCTION PERMITS**  
**(SOLID WASTE AND TITLE V)**

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# Florida Department of Environmental Protection

Southwest District Office  
13051 North Telecom Parkway  
Temple Terrace, Florida 33637-0926

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

CERTIFIED MAIL #7008 0150 0003 4894 2128  
RETURN RECEIPT REQUESTED

July 15, 2009

## NOTICE OF PERMIT

Sarasota County Solid Waste Operations  
c/o Mr. Frank Coggins, Manager  
4000 Knights Trail Road  
Nokomis, Fl. 34275

Re: Central County Solid Waste Disposal Complex (CCSWDC)  
Phase I Gas Collection and Control System Construction  
Permit No.: 130542-009-SC/08, Sarasota County

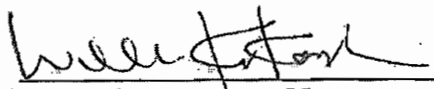
Dear Mr. Coggins:

Enclosed is permit number 130542-009-SC/08, issued pursuant to Section(s) 403.087(1), Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Blvd., Mail Station 35, Tallahassee, 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Hillsborough County, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

  
Deborah A. Getzoff  
District Director  
Southwest District

CERTIFICATE OF SERVICE

This undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed or transmitted electronically to the addressee and the listed persons before the close of business on July 15, 2009 to the listed persons.

Clerk Stamp

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

*Anna Brantly*      7/15/2009  
(Clerk)      (Date)

DAG/sgm

Attachments

Copies furnished to:

Sarasota County Elected Officials Notification  
Carlo Lebron, P.E., HDR Engineering, Inc., [carlo.lebron@hdrinc.com](mailto:carlo.lebron@hdrinc.com)  
Richard Tedder, FDEP Tallahassee, (e-mail)  
Frank Hornbrook, FDEP, Tallahassee, (e-mail)  
John Morris, P.G., FDEP Tampa (e-mail)  
Ronni Moore, OGC Tallahassee (e-mail)  
Susan Pelz, P.E., FDEP Tampa (e-mail)



# Florida Department of Environmental Protection

Southwest District  
13051 North Telecom Parkway  
Temple Terrace, Florida 33637-0926  
Telephone: 813-632-7600

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

## PERMITTEE

Sarasota County  
Solid Waste Operations  
Mr. Frank Coggins, Manager  
4000 Knights Trail Road  
Nokomis, Florida 34275

## PERMIT/CERTIFICATION

WACS ID No: SWD/58/51614  
Permit No: **130542-009-SC/08**  
Date of Issue: **07/15/2009**  
Expiration Date: **07/15/2014**  
County: Sarasota  
Lat/Long: 27°12'6.57"N  
82°23'34.07"W  
Sec/Town/Rge: 3/38S/19E  
Project: Central County Solid Waste  
Disposal Complex (CCSWDC),  
Phase I Gas Collection/Control  
System Construction

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-4, 62-302, 62-330, 62-520, 62-522, 62-550, and 62-701. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or referenced in Specific Condition #A.2., and made a part hereof and specifically described as follows:

To **construct** a landfill gas collection and control system for an existing Class I landfill, referred to as the Central County Solid Waste Disposal Complex (CCSWDC), Class I Landfill (Phase I), subject to the specific and general conditions attached, **located at the north end of Knights Trail Road, 2 miles east of I-75, northeast of Venice, Sarasota County, Florida.** The specific conditions attached are for the construction of:

1. A landfill gas collection and control system.

## General information:

Phases I Gas extraction system	70 vertical extraction wells (6-inch slotted PVC pipe), below-grade lateral and header pipelines w/3 condensate knockout pots, 2 condensate sumps (S-2 & S-3) and 3 condensate u-traps (U-1 to U-3). System is also connected to 3 existing leachate cleanouts on south and north sides of Phase I for condensate drainage to existing leachate collection system. Landfill gas conveyed from Phase I via gas transmission line to landfill gas control unit located south of future Phase 3. Transmission line condensate gravity drains to 3 condensate sumps (S-4 to S-6). [ref. Sp. Cond. #A.2.a.(3), Sheets C-03 & C-05]
Gas processing system	Gas inlet from gas extraction system, knockout pot, 2 blowers, vertical candlestick flare unit. Condensate collected at knock down pot, blowers and flare drained via a 2" HDPE gravity drain line to condensate sump S-6. [ref. Sp. Cond. #A.2.a.(3), Sheet C-06]

Replaces Permit No.: **N/A, new permit**

This permit contains compliance items summarized in **Attachment 1** that shall be complied with and submitted to the Department by the dates noted. If the compliance dates are not met and submittals are not received by the Department on the dates noted, enforcement action may be initiated to assure compliance with the conditions of this permit.

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
  - (a) Have access to and copy any records that must be kept under conditions of the permit;
  - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
  - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

**GENERAL CONDITIONS:**

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-730.300, Florida Administrative Code, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

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



**GENERAL CONDITIONS:**

14. The permittee shall comply with the following:

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

(b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

(c) Records of monitoring information shall include:

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

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

**SPECIFIC CONDITIONS: PART A -Solid Waste Facility General Requirements**

1. **Facility Designation.** This gas control system is designed to recover combustible gas and shall be constructed, operated, closed, monitored and maintained in accordance with all applicable requirements of Chapters 62-4, 62-302, 62-330, 62-520, 62-522, 62-550, and 62-701, Florida Administrative Code (F.A.C.) and all applicable requirements of Department rules.

2. **Permit Application Documentation.** This permit is valid for **construction** of a gas collection and control system for existing Central County Solid Waste Disposal Complex (CCSWDC), Class I Landfill (Phase I), in accordance with all applicable requirements of Department rules and in accordance with the reports, plans and other information prepared by HDR Engineering, Inc. (unless otherwise specified) as follows:

a. Central County Solid Waste Disposal Complex Class I Landfill Phase I Gas Collection and Control System Construction and Operation Permit Application (3-ring binder & plan set) dated December 29, 2008 (received December 30, 2008), as revised, replaced or amended (information collated into originals\*) dated March 13, 2009 (received March 26, 2009) and dated April 20, 2009 (received April 22, 2009). This information includes, but is not limited to:

- 1) Section 2 - *Engineering Report*;
- 2) Section 4 - *Specifications*; and
- 3) Plan Sheets titled, Permit Drawings for Central County Solid Waste Disposal Complex, Sarasota County Phase I Gas Collection and Control System, (17 Sheets) signed and sealed April 20, 2009 (received April 22, 2009).

3. **Permit Modifications.**

a. Any construction, operation or other activities not previously approved as part of this permit shall require a separate Department permit unless the Department determines a permit modification to be more appropriate, or unless otherwise approved in writing by the Department. Any significant changes to the construction or operation at the facility shall require a permit modification. Permits shall be modified in accordance with the requirements of Rule 62-4.080, F.A.C. A modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review by the Department is considered a substantial modification.

b. This permit authorizes the construction of the Phase I gas collection and control system and other related appurtenances, only.

4. **Permit Renewal.** On or before January 1, 2014 the permittee shall notify the Department in writing or electronically of its intent to apply for renewal of this permit and of the anticipated date of submittal of the permit renewal application. **No later than May 1, 2014**, the permittee shall apply for a renewal of a permit on forms and in a manner prescribed by the Department, in order to assure conformance with all applicable Department rules. Permits shall be renewed at least every five years as required by Rule 62-4.090, F.A.C. and Rule 62-701.320(10)(b), F.A.C. In the event that the regulations governing this permitted construction are revised, the permit renewal shall include modification of those specific construction conditions which are affected by the revision of regulations to incorporate those revisions in accordance with Specific Condition A.8.

\* see OCULUS for un-collated submittals

**SPECIFIC CONDITIONS: PART A -Solid Waste Facility General Requirements**

5. **Professional Certification.** Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.), Florida Statutes, applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.
6. **General Conditions.** The permittee shall be aware of and operate under the "General Conditions." General Conditions are binding upon the permittee and enforceable pursuant to Chapter 403, Florida Statutes.
7. **Permit Acceptance.** By acceptance of this Permit, the Permittee certifies that he/she has read and understands the obligations imposed by the Specific and General Conditions contained herein and also including date of permit expiration and renewal deadlines. It is a violation of this permit for failure to comply with all conditions and deadlines.
8. **Regulations.** Chapter 62-701, F.A.C., effective May 27, 2001, is incorporated into this permit by reference. In the event that the regulations governing this permitted operation are revised, the Department shall notify the permittee, and the permittee shall request modification of those specific conditions which are affected by the revision of regulations to incorporate those revisions.
9. **Prohibitions.** The prohibitions of Rule 62-701.300, F.A.C., shall not be violated by the activities at this facility.
  - a. In the event that limestone is encountered during excavation or construction activities, the excavation/construction activities shall cease and the Department shall be notified **within 24 hours of discovery**. Written notification shall be submitted **within 7 days of discovery**. The written notification shall include the location, elevation, and extent of limestone noted on a plan sheet, a description of the materials encountered, and a plan of action which ensures that groundwater will not be adversely affected by the continued construction and operation of the facility. Excavation or construction activities shall not resume in the affected area until the Department-approved plan of action has been completed.
  - b. In the event that surface depressions or other occurrences which may be indicative of sinkhole activity or subsurface instability, are discovered on-site, or within 500 feet of the site, the Department shall be notified in accordance with Specific Condition #C.6.b. The written notification shall include a description of the incident, the location and size of the affected area shown on an appropriate plan sheet, and a corrective action plan which describes the actions necessary to prevent the unimpeded discharge of waste or leachate into ground or surface water.
  - c. Open burning of solid waste is prohibited except in accordance with Rule 62-701.300(3) and Chapter 62-256, F.A.C. All fires which require longer than one (1) hour to extinguish must be promptly reported to the Department in accordance with Specific Condition #C.6.b.

**SPECIFIC CONDITIONS: PART B - Construction Requirements**

1. **Construction.** All significant construction activities shall be approved by the Department prior to initiating work, unless specifically authorized otherwise.

a. This permit authorizes the construction of the gas collection and control system for Phase I of the Class I landfill and related appurtenances only.

2. **Certification of Construction Completion.** All information required by this Specific Condition shall be signed and sealed by a registered professional engineer or land surveyor as appropriate.

a. **Within sixty (60) days** after the specified construction has been completed, the following activities shall be completed and submitted by the permittee for Department approval. Operation of the constructed systems, structures, equipment, etc., shall not be initiated prior to Department approval of the information required by this Specific Condition:

1) The owner or operator shall submit a Certification of Construction Completion, Form 62-701.900(2), signed and sealed by the professional engineer in charge of construction and quality assurance to the Department for approval, and shall arrange for Department representatives to inspect the construction in the company of the permittee, the engineer, and the facility operator.

2) The owner or operator shall submit Record Drawings/Documents showing all changes (i.e., all additions, deletions, revisions to the plans previously approved by the Department including site grades and elevations). The Record Documents shall include, but not be limited, to as-built plans, details and elevations (survey).

3) The owner or operator shall submit a narrative indicating all changes in plans, the cause of the deviations, and certification of the Record Drawings/Documents by the Engineer to the Department.

4) The professional engineer of record shall submit to the Department a final report to verify conformance with the plans and specifications in accordance with Rules 62-701.400(7) and (8), F.A.C.

3. **Record Drawings/Documents.** The Record Drawings/Documents shall include, but not be limited to, the following information:

a. As-built survey of location and elevations along landfill gas header and transmission lines and condensate discharge lines and drain pipes [ref. Spec 02221-3.9.A.];

b. Ground surface elevations and well depths for each of the extraction wells and horizontal collector vertical borings listed on the "Well Schedule" identified on Sheet D-01 of the Construction Drawings [ref. Sp. Cond. #A.2.a.(3)];

c. Copies of photographs documenting all stages of the construction project;

**SPECIFIC CONDITIONS: PART B - Construction Requirements**

4. **Pre-Construction Meeting Notification.** Department Solid Waste Permitting staff shall be notified **at least one (1) week prior** to all pre-construction meetings. Prior to initiating construction activities, the permittee shall make arrangements for the Engineer of Record to meet on site and discuss all plan changes with Department Solid Waste Permitting Staff. A copy of the minutes from the pre-construction conference shall be submitted to the Department within two (2) weeks of the conference.

5. **Construction Schedule and Progress Report.**

a. The Engineer of Record or another qualified professional engineer shall make periodic inspections during construction to ensure that design integrity is maintained.

b. An updated construction schedule and progress report shall be submitted to the Department **monthly, by the 15<sup>th</sup> of each month**. The monthly progress report should be submitted electronically in PDF format or in an appropriately labeled three-ring binder of sufficient size to store the monthly progress reports for the entire project. The monthly progress reports shall include, but not be limited to:

- 1) A narrative explaining the status (and any delays) of major stages of the construction;
- 2) A summary of submittals and change order requests;
- 3) Weekly progress meeting minutes; and
- 4) Color copies of photographs, which are representative of the typical construction activities for the reporting period, and which show overall views and details of major stages of construction. If digital photographs are taken, a CD-Rom containing the photographs may be submitted in lieu of printed copies.

6. **Construction Tolerances.** Invert elevations of the landfill gas collection and control pipes shall be recorded at a frequency sufficient to demonstrate that the headers and laterals have been constructed to the slopes and grades shown on the drawings and will drain adequately. This information shall be included with the Record Documents.

7. **Laboratory and Field Testing Requirements.** Field and laboratory testing during the construction activities shall be conducted by a qualified testing laboratory.

8. **Construction Quality Assurance.**

a. A complete set of construction drawings and shop drawings, which include daily additions, deletions and revisions, shall be maintained on-site at all times for reference.

b. Leachate or gas condensate shall not be deposited, injected, dumped, spilled, leaked, or discharged in any manner to the land, surface water or groundwater at any time during the construction activities.

c. Unsatisfactory, defective or non-conforming work shall be reported to the Engineer and shall be corrected, or the reasons for not correcting the work shall be recorded and maintained onsite for reference and inspections. Documentation of the corrections or reasons for not correcting the work shall be submitted with the Record Documents required by Specific Conditions #B.3.

**SPECIFIC CONDITIONS: PART B - Construction Requirements**

(Specific Condition #B.8., cont'd)

d. Excavated refuse shall be loaded and transported to the Class I landfill working face by the end of each working day. No refuse shall be allowed to remain uncovered overnight. The refuse must be removed immediately during any rain event to prevent stormwater from contacting the refuse. [ref. Spec 02221-3.3 A. & B.]

e. The non-perforated PVC laterals, leachate and condensate drain lines, connections to LFG header, and air supply lines, shall be subjected to pressure tests to detect any leaks in the piping. [ref. Spec 15060-3.4]

f. All dewatering liquids shall be managed as leachate.

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

**1. Facility Operation Requirements.**

- a. The permittee shall operate this facility in accordance with Chapter 62-701, F.A.C., and Operation Permit No. 130542-007-SO-01, (including modifications, if any), or its successors.
- b. This permit does not authorize the operation of the Phase I gas collection and control system and other related appurtenances until the following requirements have been completed and submitted by the Permittee, and approved by the Department:

- 1) Certification of Construction Completion requirements of Specific Conditions #B.2. and #B.3.,
- 2) Issuance of a permit modification of Operation Permit No. 130542-007-SO-01 or its successor, which authorizes operation of the landfill gas collection and control system and its related appurtenances.

The permittee may temporarily operate the constructed system for up to 180 days to allow for system start-up and operational adjustments while the certification of construction completion submittals and approvals required by this specific condition are completed. The permit shall notify the Department electronically or in writing of the start date for temporary start-up operation of the system.

- c. Leachate and/or gas condensate shall not be deposited, injected, dumped, spilled, leaked, or discharged in any manner to soils, surface water or groundwater outside the liner and leachate management systems at any time during the construction or operation of this facility.

**2. Facility Personnel.** The owner or operator shall provide adequate personnel for constructing, operating, monitoring and maintaining the facility in an orderly, safe, and sanitary manner.

**3. Control of Access.** Access to, and use of, the facility shall be controlled as required by Rule 62-701.500(5), F.A.C.

**4. Monitoring of Waste.** Wastes shall be monitored as required by Operation Permit No. 130542-007-SO-01, (including modifications, if any), or its successors.

**5. Control of Nuisance Conditions.** The owner or operator shall control odors, vectors (mosquitoes, other insects, rodents), and fugitive particulates (dust, smoke) arising from the construction and operation so as to protect the public health and welfare. Such control shall minimize the creation of nuisance conditions on adjoining property. Odors observed by Department personnel upon site inspection, shall constitute a nuisance condition, and the permittee must take immediate corrective action to abate the nuisance.



**SPECIFIC CONDITIONS: PART C - Operation Requirements**

**6. Facility Maintenance and Repair.**

a. The site shall be properly maintained including maintenance of access roads to disposal areas, equipment, stormwater and leachate management systems, cover systems and berms, gas monitoring and management systems, surface water monitoring system, and groundwater monitoring system. Erosion and ponded water in disposal areas shall be prevented.

b. In the event of damage to any portion of the landfill site facilities, unauthorized leachate discharges, failure of any portion of the landfill systems (including damaged or dry groundwater monitoring wells), fire, explosion, the development of sinkhole(s) or other subsurface instability at the site, the permittee shall **immediately (within 24 hours)** notify the Department explaining such occurrence and remedial measures to be taken, method to prevent reoccurrence, and time needed for repairs. **Written, detailed notification shall be submitted to the Department within seven (7) days following the occurrence.** Routine maintenance does not require notification but shall be noted on daily reports.

**7. Stormwater Management.** The site shall have a surface water management system designed, constructed, operated, and maintained to prevent surface water from running on to waste filled areas, and a stormwater runoff control system designed, constructed, operated, and maintained to collect and control stormwater to meet the requirements of Chapter 62-330, F.A.C., and the requirements for management and storage of surface water in accordance with Rule 62-701.500(10), F.A.C., to meet applicable standards of Chapters 62-3, 62-302, and 62-330, F.A.C. The stormwater management system shall be inspected for damage and proper operation daily.

**SPECIFIC CONDITIONS: PART D - Recordkeeping**

1. **Report Submittals.** Unless otherwise specified, all submittals, notifications, requests for permit modification, reports for compliance with this permit, etc., shall be sent to: Solid Waste Section, Department of Environmental Protection, Southwest District Office, 13051 North Telecom Parkway, Temple Terrace, Florida 33637-0926.
2. **Operation Plan and Operating Record.** Each landfill owner or operator shall have an operational plan which meets the requirements of Rule 62-701.500(2), F.A.C. A copy of the Department approved permit, operational plan, construction reports and record drawings, and supporting information shall be kept at the facility at all times for reference and inspections. Operating records as required by Rule 62-701.500(3), F.A.C., are part of the operations plan, and shall also be maintained at the site.
3. **Waste Records.** The permittee shall maintain all records required by the construction specifications, and this permit on-site, and shall provide copies to the Department upon request, unless specified otherwise.
4. **Financial Assurance.** The permittee shall provide adequate financial assurance for this facility and related appurtenances in accordance with Rule 62-701.630, F.A.C. and Operation Permit No. 130542-007-SO-01 (including modifications, if any), or its successors.

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

1. **Water Quality Monitoring Quality Assurance.** Water quality monitoring shall be conducted as required by Operation Permit No. 130542-007-SO-01 (including modifications, if any), or its successors.

**SPECIFIC CONDITIONS: PART F - Landfill Gas Management**

**1. Landfill Gas - NSPS and Title V Air Requirements.**

a. This solid waste permit will meet the statutory requirement to obtain an air construction permit before modifying or constructing a source of air pollution, except for those landfills that are subject to the prevention of significant deterioration (PSD) requirements of Chapter 62-212, F.A.C. Facilities that are subject to the PSD requirements shall obtain an air construction permit from the Bureau of Air Regulation prior to beginning construction or modification pursuant to Rule 62-210.400, F.A.C.

b. The permittee shall comply with any applicable Title V air operation permit application requirements of Chapter 62-213, F.A.C., and 40 CFR 60, Subparts WWW and CC, as adopted by reference at Rule 62-204.800, F.A.C. Title V Permit applications shall be submitted to the District Air Program Administrator or County Air Program Administrator with air permitting authority for the landfill.

c. The permittee shall submit to the Division of Air Resources Management, Department of Environmental Protection, Mail Station 5500, 3900 Commonwealth Blvd., Tallahassee, FL 32399-3000, any amended design capacity report and any Non-Methane Organic Compound (NMOC) emission rate report, as applicable, pursuant to 40 CFR 60.757(a)(3) and (b).

**2. Gas Monitoring and Control.**

a. Landfill gas shall be monitored to demonstrate compliance with the criteria established in Rule 62-701.530(1)(a), F.A.C. (less than 25% of the lower explosive limit (LEL) for combustible gases in structures and less than 100% of the LEL for combustible gases at or beyond the property boundary).

b. The owner or operator shall control landfill gas after the shutdown of the active landfill gas collection system (i.e., gas is no longer routed to the boiler or the flare). In the event that a passive gas venting system is required the owner or operator shall submit an application for minor permit modification to authorize its construction/operation.

**3. Gas Monitoring Locations.** Landfill gas monitoring shall be conducted as required by Operation Permit No. 130542-007-SO-01 (including modifications, if any), or its successors.

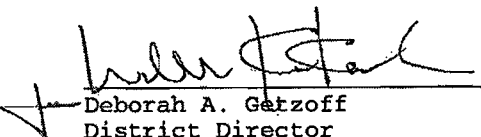
**4. Gas Remediation.** In the event that the Lower Explosive Limit (LEL) is greater than 25% inside structures both on and off of the landfill site, or greater than 100% at the property boundary, the owner shall submit to the Department, **within 7 days of detection**, a remediation plan detailing the nature and extent of the problem and the proposed remedy. The remedy shall be completed **within 60 days of detection** unless otherwise approved by the Department.

**SPECIFIC CONDITIONS: PART G - Closure and Long-Term Care Requirements**

1. **Closure Permit Requirements.** No later than ninety (90) days prior to the date when wastes will no longer be accepted for portions of the landfill which have reached closure design dimensions, the landfill owner or operator shall submit a closure permit application to the Department, in order to assure conformance with all applicable Department rules. A closure permit is required prior to implementing closure related activities.
2. **Final Cover.** Portions of the landfill which have been filled with waste to the extent of designed dimensions shall be closed (shall receive final cover) within 180 days after reaching design dimensions, in accordance with Rule 62-701.500(7)(g), F.A.C. and all applicable requirements of Department rules.
3. **Long-Term Care Requirements.**
  - a. The owner or operator shall perform long-term care for the site in accordance with Rule 62-701.620, F.A.C., and the conditions of Operation Permit No. 130542-007-SO-01 (including modifications, if any), or its successors.
  - b. Long-term care includes, but is not limited to, water quality, leachate and gas monitoring, maintenance of the final cover system, maintenance of the leachate collection and removal system, erosion control, and the prevention of ponding within disposal areas.
4. **Use of Closed Landfill Areas.** Prior to implementation, the owner or operator shall submit a plan for any proposed uses of the closed portions of the landfill to the Department for approval. This plan shall include a description of the proposed use and evaluation of the impact on the existing landfill systems (e.g. final cover, leachate collection, bottom liner), engineering designs, calculations and plans as appropriate, etc. The proposed activity shall not be initiated without prior Department approval, and may require a permit modification or separate permit.

Executed in Hillsborough County, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

  
Deborah A. Garzoff  
District Director  
Southwest District

**ATTACHMENT 1**

<b>SPECIFIC CONDITION</b>	<b>SUBMITTAL DUE DATE</b>	<b>REQUIRED ITEM</b>
A.4	No later than January 1, 2014  No later than May 1, 2014	Notification of date of permit renewal application submittal  Submit application for permit renewal
A.9.a.	Within 24 hours of discovery  Within 7 days of verbal notification	Notification of sinkholes or subsurface instability  Written notification & corrective action plan
B.2.a.	Within 60 days of completion	Submit certification of construction completion, record drawings, etc.
B.4.	At least 1 week prior  No later than 2 week after pre-construction meeting	Notify of preconstruction meeting  Submit meeting minutes
B.5.b.	Monthly, by the 15 <sup>th</sup> each month	Submit monthly progress report & schedule
C.6.b.	Within 24 hours of discovery  Within 7 days of verbal notification	Notification of: sinkholes, failure of landfill systems or equipment, etc.  Written notification & corrective action plan



# Florida Department of Environmental Protection

Southwest District  
13051 N. Telecom Parkway  
Temple Terrace, Florida 33637-0926

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

## NOTICE OF FINAL PERMIT

### ELECTRONIC MAIL

[fcoggins@scgov.net]

In the Matter of an  
Application for Permit by:

Mr. Frank Coggins, Manager  
Sarasota County Solid Waste Operation  
4000 Knights Trail Road  
Nokomis, FL 34275-3610

DEP File No. 1150089-005-AC  
Sarasota County

Dear Mr. Coggins:

Enclosed is Final Permit Number 1150089-005-AC. This permit authorizes Sarasota County Solid Waste Operations to construct a landfill gas open candlestick flare at the Sarasota County Central County Solid Waste Disposal Complex landfill. This facility is located at 4000 Knights Trail Road in Nokomis, Sarasota County, Florida. This permit is issued pursuant to Section(s) 403.087, Florida Statutes.

Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Hillsborough County, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

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Mara Grace Nasca  
District Air Program Administrator  
Southwest District

MGN/DRZ/pp

Enclosures

Permittee: Sarasota Board of County Commissioners  
Facility Name: Sarasota County Central County Solid Waste Disposal Complex  
FINAL Air Construction Permit No.: 1150089-005-AC

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit(s) (including the Final Permit(s)) was sent by electronic mail before the close of business on \_\_\_\_\_ to the person(s) listed:

Mr. Frank Coggins, Manager  
Sarasota County Solid Waste Operations  
[fcoggins@scgov.net]

Mr. Carlo Lebron, P.E.  
HDR Engineering, Inc.  
[Carlo.Lebron@hdrinc.com]

Mr. John Hickey  
Sarasota County ESBC Air Quality  
[jhickey@scgov.net]

Clerk Stamp

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

\_\_\_\_\_  
(Clerk)

\_\_\_\_\_  
(Date)





# Florida Department of Environmental Protection

Southwest District  
13051 N. Telecom Parkway  
Temple Terrace, Florida 33637-0926

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

## **PERMITTEE:**

Sarasota Board of County Commissioners  
Sarasota County Solid Waste Operations  
4000 Knights Trail Road  
Nokomis, FL 34275-3610

**FINAL Permit No:** 1150089-005-AC

**County:** Sarasota

**Effective Date:** 05/08/2009

**Expiration Date:** 12/31/2010

**Project:** Landfill Gas Flare

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-204, 62-210, 62-212, 62-213, 62-296, 62-297, and Chapter 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the Florida Department of Environmental Protection and as specifically described below:

This permit authorizes the construction and initial operation of a landfill gas (LFG) flare at the Sarasota County Central County Solid Waste Disposal Complex Landfill as described below.

**Open Candlestick Utility Flare Control Device for Emission Unit (EU) 001 - Municipal Solid Waste Landfill** - The landfill gas (LFG) open candlestick flare will be a control device on the existing emissions unit at this facility, which is a Class I municipal solid waste landfill (EU 001). In conjunction with a new LFG gas collection system, LFG will be collected from Phase I of the landfill and piped to the new open candlestick flare to be combusted. (Note: This flare has been sized to handle the expected LFG generation from the landfill through the year 2024 and will be used to control LFG from Phase II of the landfill, which is not expected to receive solid waste until 2010.) The flare will be a control device for odor, volatile organic compounds (VOC), hazardous air pollutants (HAPs), and non-methane organic compounds (NMOC). The flare is designed to achieve 98% destruction efficiency of VOC and NMOC. The candlestick flare will be designed to combust up to 5,500 scfm of LFG collected from the landfill, and will be equipped with a pilot flame fueled by propane/natural gas, a pilot monitoring thermocouple, a main flame monitoring thermocouple, an inlet flame arrestor, and a flame flashback indicator.

This flare is being installed voluntarily to proactively reduce LFG emissions from this facility, and therefore, at this time this flare is not subject to the NSPS Subpart WWW and NSPS Subpart A 40 CFR 60.18 flare control device requirements (*see Federal Rule Applicability below*). (Note: The flare will be designed and installed with the capability to meet the above NSPS requirements in anticipation of the flare potentially being used in the future as an NSPS Subpart WWW LFG control device.)

## **Passive Solar Activated Safety Flares (Existing EU 004)**

Upon completion of the new landfill gas collection system and the new LFG candlestick flare, the existing passive solar-activated safety flares located at the leachate collection sumps/wells will be removed and the sumps/wells connected to the gas collection system such that the LFG from these areas is controlled by the new candlestick LFG flare. These passive solar flares are included in the current facility Title V air operation permit (1150089-004-AV) as Emission Unit 004 in Appendix U-1, List of Unregulated Emission Units and or Activities.

**PERMITTE:**

Sarasota County Solid Waste Operations  
Sarasota County Central County Solid Waste Disposal Complex

**FINAL Permit No.:** 1150089-005-AC**Project:** Landfill Gas Flare**Federal Rule Applicability**

This facility is engaged in landfilling of municipal solid waste (MSW). This landfill has a design capacity greater than 2.5 million megagrams by mass and 2.5 million cubic meters by volume, thereby subjecting this facility to the requirements of NSPS 40 CFR 60 Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills), as adopted by reference in Rule 62-204.800(8)(b), F.A.C. The November 12, 2008 NMOC emission estimate report for this landfill, based on the 2005 Tier 2 site sampling and the projected yearly waste acceptance rates, established that the current emissions of NMOC are less than 50 megagrams per year. Therefore this facility is not currently subject to the collection and control system requirements of NSPS Subpart WWW, nor to NESHAP 40 CFR 63 Subpart AAAA (National Emission Standards for Hazardous Air Pollutants (NESHAP) for Municipal Solid Waste Landfills). The November 12, 2008 report did project that NMOC emissions would exceed the 50 Mg/year level sometime in the middle of 2010. At that time the facility will be subject to the collection and control system requirements of NSPS Subpart WWW, and will also become subject to NESHAP Subpart AAAA. This will require submittal of an NSPS Subpart WWW collection and control system design plan within 12 months of the date of the NMOC report that establishes that NMOC emissions are over 50Mg/year, with the collection and control system to be installed 30 months from the date of that report.

**Facility Title V Major Source Status**

Potential emissions from this facility, before the installation of the LFG candlestick flare, are less than the Rule 62-210.300(194), F.A.C. Title V major source levels. However, in accordance with the requirements of Rule 62-204.800(8)(b)74., F.A.C. and NSPS Subpart WWW 40 CFR 60.752(b), a facility subject to NSPS Subpart WWW is also subject to the Title V permitting requirements. Therefore at the time of this permit this facility is a Title V source by designation. (Note: At some point after the flare begins operation carbon monoxide (CO) emissions from the flare will exceed the Title V major source level of 100 tons per year, making the facility a Title V major facility for CO.)

**PSD Major Source Status Note:**

The current Sarasota County Central County Solid Waste Disposal Complex facility (prior to the addition candlestick flare) is a minor PSD source. Based on AP-42 emission factors, the maximum candlestick utility flare design capacity LFG flow rate for 8,760 hours per year, and the expected LFG generation rate in the year 2024, potential emissions of carbon monoxide (the pollutant with the highest emission rate) from the utility candlestick flare are estimated to be 247.9 tons per year, which is less than PSD major source level of 250 tons per year. (Note: At some point after the year 2024, as the LFG generation rate continues to increase CO emissions from the flare (and other LFG combustion sources at the facility) could exceed the PSD major source level of 250 tons per year, making the facility a PSD major facility for CO.)

**Facility Information Summary:****Site Name:** Sarasota County Central County Solid Waste Disposal Complex Landfill**Location:** 4000 Knights Trail Road in Nokomis, Sarasota County**UTM:** 17-362.51 E 3009.03 N**Latitude:** 27°11'49.62" **Longitude:** 82°23'17.14"**Facility ID No:** 1150089**Emission Unit (EU) ID No.:** 001 - Class I Municipal Solid Waste Landfill w/LFG Candlestick Flare

**PERMITTE:**

Sarasota County Solid Waste Operations  
Sarasota County Central County Solid Waste Disposal Complex

**FINAL Permit No.:** 1150089-005-AC

**Project:** Landfill Gas Flare

**Permitting History/Affected Permits**

This municipal solid waste landfill facility is currently permitted on Title V Air Operation Permit 1150089-004-AV.

**Attachments to This Permit:**

- General Conditions (*version dated 11/1/05*)

**SPECIFIC CONDITIONS:**

**Section A. Facility-Wide Specific Conditions**

**A1. General Conditions** - A part of this permit is the attached 15 General Conditions.

[Rule 62-4.160, F.A.C.]

**A2. Other Requirements** - Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C., or any other requirements under federal, state or local law.

[Rule 62-210.300, F.A.C.]

**A3. General Particulate Emission Limiting Standards: General Visible Emissions Standard** - Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.

[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

**A4. General Pollutant Emission Limiting Standards: Objectionable Odor Prohibited** - No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An objectionable odor is any odor present in the outdoor atmosphere, which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.

[Rules 62-210.200 (Definition of "Objectionable Odor"), and 62-296.320(2), F.A.C.]

**A5. Federal Rule Applicability** - This facility is subject to the applicable requirements of Federal New Source Performance Standard (NSPS) 40 CFR 60 Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills)\*, as adopted by reference in Rule 62-204.800(8)(b), F.A.C., and the 40 CFR 60 Subpart A General Provisions\* as adopted by reference in Rule 62-204.800(8)(d), F.A.C..

[Rules 62-204.800(8), F.A.C.; NSPS 40 CFR 60 Subparts WWW and A]

*(\* Permitting Note - For the complete requirements of NSPS 40 CFR 60 Subpart WWW, and the Subpart A General Provisions, see Appendix NSPS 40 CFR 60 Subpart WWW and Appendix NSPS 40 CFR 60 Subpart A included as appendices to the current Title V air operation permit for the Sarasota County Central County Solid Waste Disposal Complex Landfill (currently Title V Air Operation Permit 1150089-004-AV).)*

**PERMITTEE:**  
Sarasota County Solid Waste Operations  
Sarasota County Central County Solid Waste Disposal Complex

**FINAL Permit No.:** 1150089-005-AC  
**Project:** Landfill Gas Flare

**A6. Special Compliance Tests** - When the Department, after investigation, has good reason (such as complaints, increased visible emissions, or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emission unit and to provide a report on the results of said tests to the Department.

[Rule 62-297.310(7)(b), F.A.C.]

### **Section B. LFG Open Candlestick Flare Specific Conditions**

#### **Operation Requirements**

**B1. Permitted Hours of Operation** - The open candlestick utility flare is permitted for continuous operation (i.e., 8,760 hours/year).

[Rule 62-210.200, F.A.C. (Definition of Potential to Emit); EPSAP construction permit application submitted 12/18/09]

#### **Notification Requirements**

**B2. Notification of Start of Operation of Candlestick Flare** - The permittee shall notify the Southwest Districts Air Compliance Section of the date of the initial operation of the candlestick flare controlling LFG from the landfill. The notification shall be submitted in writing within 15 days of operation of the flare. *(See also Specific Condition No. C1, which requires submittal of a Title V operation permit revision application based on the date of initial operation.)*

[Rule 62-4.070(3), F.A.C.]

**B3. Notification of Relocation of the LFG Candlestick Flare** - The permittee shall notify the Southwest Districts Air Compliance Section any time the LFG candlestick flare is relocated to a different location on the site. The notification shall be submitted in writing within 15 days of operation of the flare at the new location. The notification shall include the following information.

- a. The date operation of the flare was terminated at its previous location
- b. The date the flare was relocated to its current location.
- c. A description of the new location, including a site plan of the facility showing the new and old location.
- d. The reason for relocation of the flare.

[Rule 62-4.070(3), F.A.C.]

**PERMITTE:**

Sarasota County Solid Waste Operations  
Sarasota County Central County Solid Waste Disposal Complex

**FINAL Permit No.:** 1150089-005-AC

**Project:** Landfill Gas Flare

**Section C - Title V Operation Permit Revision**

**C1. Submittal of Application for Title V Operation Permit Revision\*** - An application to revise the Title V air operation permit for this facility to incorporate the LFG candlestick flare shall be submitted to the Air Permitting Section of the Southwest District Office of the Department no later than 180 days after initial operation of the candlestick flare controlling LFG from the landfill. To properly apply for Title V operation permit revision, the applicant shall submit the following:

- a. the appropriate application form (DEP Form No. 62-210.900(1) *Application for Air Permit - Long Form*), including a certification that construction was completed and noting any deviations from the construction permit application; and
- b. a description of the location of the candlestick flare (please include site plan showing the actual flare location).

[Rules 62-4.070(3), 62-4.220, 62-213.420(1)(a)1., and 62-297.310(7)(a)1., F.A.C.]

*(\* Permitting Note - Depending on the timing of installation of the LFG collection system and candlestick flare, the permittee may request that incorporation of the candlestick flare into the Title V operation permit be handled as part of the upcoming Title V permit renewal. The Title V renewal application is due to be submitted no later than 10/26/09.)*

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

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Mara Grace Nasca  
District Air Program Administrator  
Southwest District

## ATTACHMENT - GENERAL CONDITIONS

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

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. Not applicable to Air Permits.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

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

- a. Have access to and copy any records that must be kept under conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonable necessary to assure compliance with this permit or Department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. A description of and cause of noncompliance; and
- b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

## ATTACHMENT - GENERAL CONDITIONS

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-730.300 F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

- ( ) Determination of Best Available Control Technology (BACT)
- ( ) Determination of Prevention of Significant Deterioration (PSD)
- ( ) Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- c. Records of monitoring information shall include:
  - 1. the date, exact place, and time of sampling or measurements;
  - 2. the person responsible for performing the sampling or measurements;
  - 3. the dates analyses were performed;
  - 4. the person responsible for performing the analyses;
  - 5. the analytical techniques or methods used;
  - 6. the results of such analyses.

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

16. Not applicable to Air Permits.

17. Not applicable to Air Permits.



FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

AUG 13 2010

SOUTHWEST DISTRICT  
TAMPA

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**ATTACHMENT B  
CQA DAILY LOG**

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# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 1/20/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
64 F	49 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift – JLG 1044C
Brandon Swift	Welder / Driver	Excavator - Kobalko
Abel Sanchez	Welder / Driver	Truck F-250
		Flat bed F-450

**Work Performed:**

- SCS arrived on site at 6:30 am., began moving 4" SDR 9 and 18" SDR 17 pipe from staging area (south of Phase II) to an authorized area on the west side of Phase I.
- Pipe crew began fusing 18" SDR 17 (Header) for stringers. A max. of 200 LF stringers are used.
- HDR met with Ed Russ (Sarasota County) to discuss concerns on Phase I fill sequence. LFG construction will be adjusted to existing conditions to ensure minimum cover and slopes are met per the construction documents.
- Fusing pipe was stopped for 1 hour until forklift used to move pipe was repaired.
- Pipe crew continue fusing 18" SDR 17. SCS proceeded to cap open ends of all pipes. No other activity conducted.
- Total 18" SDR 17 pipe fused 1/20/2010 – 1000 LF
- Total 18" SDR 17 pipe fused week of 1/11/2010 – 1/15/2010 -800 LF (not under HDR supervision)
- Remaining pipe (not fused) – 100 LF
- SCS left the site at 4:30 pm.



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 1/21/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
76 F	67 F	Partly sunny		none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift -- JLG 1044C
Brandon Swift	Welder / Driver	Excavator - Kobalko
Abel Sanchez	Welder / Driver	Truck F-250
		Flat bed F-450

**Work Performed:**

- SCS arrived on site at 7:00 am
- Pipe crew began fusing 4" SDR 9 (Condensate Line) for stringers. A max. of 240 LF stringers are used.
- It was clarified to SCS who will be providing the soils for the project. County will provide backfill / bedding for GW / trenches.  
SCS will provide granular material for GWs
- Hyatt started survey for silt fence location around Phase I and bales on perimeter swale towards the Flare Station Pad
- SCS finished fusing 4" SDR 9 pipes at 4:30 pm. Proceeded to cap open ends of all pipes.
- Total 4" SDR 9 pipe fused 1/21/2010 -- 2560 LF
- SCS left the site at 5:00 pm.



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 1/22/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
70 F	59 F		Overcast	0.11 inches

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift – JLG 1044C
Brandon Swift	Welder / Driver	Excavator - Kobalko
Abel Sanchez	Welder / Driver	Truck F-250
Steve Miller	Welder / Driver	Flat bed F-450

**Work Performed:**

- SCS arrived on site at 7:00 am
- Pipe crew continue fusing 4" SDR 9 (Condensate Line) for stringers at the staging area. A max. of 240 LF stringers are used.
- Ed Russ (Sarasota County) required SCS to regrade disturbed area on top of Phase I to allow for proper drainage. SCS regraded area.
- Hyatt finished survey for silt fence location around Phase I and bales on perimeter swale towards the Flare Station Pad
- SCS needed clarification on 1 hr wait after hydrating bentonite for wells. It was informed to SCS that if bentonite manufacturer provides a certified letter stating a different time, it will be considered
- SCS took soil samples for sieve analysis. Soils were taken from the existing borrow area south of Phase II (east borrow area)
- SCS finished fusing 4" SDR 9 pipes at 4:30 pm. Proceeded to cap open ends of all pipes.
- Total 4" SDR 9 pipe fused 1/22/2010 – 1840 LF
- SCS left the site at 5:00 pm.

❖ No work performed during the weekend of 1/23-1/24/2010



Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 1/25/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
68 F	49 F		Light rain / Cloudy	0.39 inches

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift – JLG 1044C
Steve Miller	Welder / Driver	Excavator - Kobalko
Abel Sanchez	Welder / Driver	Truck F-250
Ray Perez	Welder / Driver	Flat bed F-450
Joel Sanchez	Welder / Driver	

**Work Performed:**

- |  |
|--|
| <ul style="list-style-type: none"> <li>SCS arrived on site at 7:00 am. Pipe crew continued fusing 4" SDR 9 (Condensate Line) for stringers at the staging area.</li> </ul>   |
| <ul style="list-style-type: none"> <li>Pipe crew began fusing 4" SDR 11 (Riser / Laterals) for stringers. A max. of 240 LF stringers are used.</li> </ul>  |
| <ul style="list-style-type: none"> <li>Ardaman arrived on site to conduct boring testing (STP-1) at the flare sation area. 50 ft boring was drilled. Ardaman took soil sample, from borrow area to be used for backfilling of wells and bedding in trenches , for sieve analysis.</li> </ul> |
| <ul style="list-style-type: none"> <li>Pipe crew began fusing 6" SDR 11 (Wellhead/ Laterals) for stringers. A max. of 160 LF stringers are used.</li> </ul>  |
| <ul style="list-style-type: none"> <li>SCS finished fusing pipes at 4:30 pm. Proceeded to cap open ends of all pipes.</li> </ul>   |
| <ul style="list-style-type: none"> <li>Total 4" SDR 9 pipe fused 1/25/2010.– 1440 LF</li> </ul>  |
| <ul style="list-style-type: none"> <li>Total 4" SDR 11 pipe fused1/25/2010 -720 LF</li> </ul>  |
| <ul style="list-style-type: none"> <li>Total 6" SDR 11 pipe fused 1/25/2010 – 760 LF</li> </ul>  |
| <ul style="list-style-type: none"> <li>Drill rig mobilized on site. Operations will not begin until silt fence is placed</li> </ul>  |
| <ul style="list-style-type: none"> <li>SCS left the site at 5:00 pm.</li> </ul>  |

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 1/26/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
63 F	47 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift – JLG 1044C
Steve Miller	Welder / Driver	Excavator – Kobalko
Abel Sanchez	Welder / Driver	Truck F-250
Ray Perez	Welder / Driver	Flat bed F-450
Joel Sanchez	Welder / Driver	

**Work Performed:**

- SCS arrived on site at 7:00 am.
  - Pipe crew began fusing 6" SDR 11 (Perforated) and 6" SDR 11 (Solid) pipes for wells
  - HDR clarified to SCS that each wellhead will have a condensate and air return line with a cap until HDR determines which well will have a pump system installed
  - HDR discussed with SCS how the header pipe will be installed underneath 2 existing elliptical reinforced concrete pipes (ERCPs) located at the east side of yard waste processing area. RCPs discharge stormwater from yard waste processing area to the east perimeter swale. HDR will coordinate with SCS for revised pipe layout in this area
  - Perforated and solid pipe lengths for wells 1 – 26 were verified. Incorrect lengths were reported to SCS
  - Total 6" SDR 11 perforated pipe 1/26/2010 – 532 LF
  - Total 6" SDR 11 solid pipe 1/26/2010 – 364 LF (includes 10 ft solid pipe plus 4 ft above grade stickup)
  - SCS proceeded to cap open ends of all pipes. SCS left the site at 5:00 pm
- ❖ During Progress Meeting #2, the following was addressed:
- SCS will need to install silt fence close to the existing downchute pipes on all slopes. Straw bales will be placed on either side of downchute pipes to prevent any silt moving towards the perimeter swale
  - SCS will move existing downchute pipes during excavation. Downchute must be placed back at the end of the day
  - Well GW-19 can be moved closest to the outside of stormwater bench
  - Veolia (Landfill Operator) will need to regrade north slope of Phase I in order to meet design grades (intermediate cover). SCS will need to coordinate with Veolia for construction in this area.
  - HDR will provide detail information on how the LFG Header pipe will cross the bottom liner system of Phase I at the southeast corner



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 1/27/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
63 F	44 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift – JLG 1044C
Steve Miller	Welder / Driver	Excavator - Kobalco
Abel Sanchez	Welder / Driver	Truck F-250
Ray Perez	Welder / Driver	Flat bed F-450
Joel Sanchez	Welder / Driver	
Brandon Swift	Welder / Driver	

**Work Performed:**

- SCS arrived on site at 7:00 am.
- Pipe crew began fusing 18" SDR 17 pipes and cross for U-traps 1 - 3. U-traps to be completed during header pipe installation.
- HDR verified U-trap dimensions and reported to SCS for corrections.
- Veolia (landfill operator) began regrading northwest slope of Phase I.
- K & S Environmental (subcontractor) arrived on site to install straw bales and silt fence. SCS still needs to install temporary ditch block on the south perimeter swale (south of future Phase III area)
- SCS proceeded to cap open ends of all pipes. SCS left the site at 5:00 pm.



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 1/28/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
70 F	51 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meler	Superintendent	Forklift - JLG 1044C
Steve Miller	Laborer / Driver	Excavator - Kobalco
Abel Sanchez	Laborer / Driver	Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Articulated dump truck - JLG
Brandon Swift	Laborer / Driver	Dozer - Deere 450 J LGP
Fred Harlan	Laborer / Driver	

**Work Performed:**

- SCS arrived on site at 7:00 am. and began hauling backfill material and bentonite to the temporary staging area on Phase I
- Veolia (landfill operator) continues regrading the northwest slope of Phase I.
- K&C Environmental (Subcontractor) is not present to continue installing silt fence. SCS installs remaining silt fence on northeast slope
- B&H Drilling (Subcontractor) began drilling GW-9, GW-14, GW-10. It was notified to SCS that construction operations can not be conducted where silt fence is not in place. (GW-14). Drill rig moves to GW-10
- Pre-assembled well casings are put in place over 1 ft of gravel (bedding layer). HDR verified that each well had the appropriate backfill / geonet / hydrated bentonite layers
- GW 10, GW-14 were not completed at the end of the day. Wells covered as required in contract documents
- SCS continued operations until 6:30 pm. It was notified to SCS that working hours are 10 hrs/day, 6 days/wk

**❖ Well Schedule (6" SDR 11)**

GW	Db	Solid	Perforated
9	33'	14'	22'
10	34'	14'	23'
14	32'	14'	21'





# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 1/29/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
72 F	51 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift – JLG 1044C
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko
Abel Sanchez	Laborer / Driver	Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Articulated dump truck – JLG
Brandon Swift	Laborer / Driver	Dozer – Deere 450 J LGP
Fred Harlan	Laborer / Driver	

**Work Performed:**

- SCS arrived on site at 7:00 am, proceeded to complete GW-10, GW-14
- K&C Environmental (Subcontractor) continues installing silt fence on east and north slope. South slope does not have silt fence. straw bales are not placed along the east perimeter swale yet. Straw bales must be placed before trench construction.
- B & H Drilling (Subcontractor) starts drilling GW-11, GW-12, GW-13, GW-15
- Location of GW-13 was moved 3 ft north to avoid damaging existing downchute pipe
- Pre-assembled well casings are put in place over 1 ft of gravel (bedding layer). HDR verified that each well had the appropriate backfill / geonet / hydrated bentonite layers
- GW-15 was not completed at the end of the day. Wells covered as required in contract documents
- SCS left the site at 6:00 pm

**❖ Well Schedule (6" SDR 11)**

GW	Db	Solid	Perforated
11	33'	14'	22'
12	35'	14'	24'
13	33'	14'	22'
15	32'	14'	21'



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 1/30/2010	Day: Saturday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

## Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
72 F	54 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift – JLG 1044C
Steve Miller	Laborer / Driver	2 X Excavator – Kobalco
Abel Sanchez	Laborer / Driver	Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Articulated dump truck – JLG
Brandon Swift	Laborer / Driver	Dozer – Deere 450 J LGP
Fred Harlan	Laborer / Driver	

## Work Performed:

- SCS arrived on site at 7:00 am, proceeded to complete GW-15
- B & H Drilling (Subcontractor) starts drilling GW-16, GW-17, GW-18
- Pre-assembled well casings are put in place over 1 ft of gravel (bedding layer). HDR verified that each well had the appropriate backfill / geonet / hydrated bentonite layers
- All wells were completed at the end of the day
- SCS proceeded to pick up blown litter around the north and east slopes.
- SCS left the site at 3:30 pm

### ❖ Well Schedule (6" SDR 11)

GW	Db	Solid	Perforated
16	30'	14'	19'
17	34'	14'	23'
18	32'	14'	21'



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/1/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

## Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
68 F	62 F		Cloudy	0.23

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	Forklift – JLG 1044C
Steve Miller	Laborer / Driver	Excavator – Kobalko
Abel Sanchez	Laborer / Driver	Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	
Brandon Swift	Laborer / Driver	
Fred Harlan	Laborer / Driver	

## Work Performed:

- SCS arrived on site at 7:00 am
- B & H Drilling (Subcontractor) not working today
- K&C Environmental (Subcontractor) continues installing silt fence on south slope
- SCS started repair of existing silt fence installed by Veolia (bench on east slope)
- HDR coordinated with SCS for excavation at the southeast corner of Phase I to locate existing bottom liner where LFG header will cross. Existing bottom liner was found at approximately 3 ft below grade at the crossing point. HDR will provide construction details for the header at this point.
- SCS needed clarification on the gravel access road located at the southeast corner of Phase I. HDR clarified to SCS that gravel access road at this location is not necessary since heavy equipment will not utilize existing paved roads south and east of Phase I. SCS may need to install gravel access road at the exit from the borrow pit once backfilling of trenches begin
- SCS started moving 2" SDR 9 pipe (airline return line) to Phase I for staging
- Pipe crew began fusing 4" SDR 9 for risers.
- Total 4" SDR 9 riser pipe (6 LF length) fused 2/1/2010 – 13 X 4" SDR 9 with elbows and cap, 6 X 4" SDR 9 with cap
- SCS left the site at 5:00 pm



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/2/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
68 F	52 F		Cloudy	0.29

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	Forklift – JLG 1044C
Steve Miller	Laborer / Driver	Excavator – Kobalco
Abel Sanchez	Laborer / Driver	Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Brandon Swift	Laborer / Driver	
Fred Harlan	Laborer / Driver	

**Work Performed:**

- SCS arrived on site at 7:00 am
- Pipe crew began fusing 2" SDR 9 (air return line) for risers. (6' risers)
- SCS started clearing area at the flare pad.
- Due to weather conditions, SCS left the site at 12:00 pm

**❖ During Progress Meeting #3, the following was addressed:**

- SCS will install a 10' x 20' gravel access road at the staging area. Gravel access road at the southeast corner of Phase I is not required
- SCS will install straw bales at each downchute pipe, stormwater swale, temporary ditch block during week of 2/8/2010 – 2/13/2010
- SCS requested installing 4" SDR 9 (condensate) and 2" SDR 9 (air return line) at the upgradient side of the header trench. HDR reviewed and approved.
- SCS will survey northwest slope of Phase I and will provide HDR new survey to calculate revised well schedule for GW-1 to GW-6



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/3/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
67 F	52 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	Forklift – JLG 1044C
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko
Abel Sanchez	Laborer / Driver	Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Brandon Swift	Laborer / Driver	
Fred Harlan	Laborer / Driver	

**Work Performed:**

- SCS arrived on site at 7:00 am
- B & H Drilling (Subcontractor) starts drilling GW-7, GW-8, GW-20, GW-22, GW-23, GW-24, GW-25
- Pre-assembled well casings are put in place over 1 ft of gravel (bedding layer). HDR verified that each well had the appropriate backfill / geonet / hydrated bentonite layers
- GW-8 was filled with an additional 2' of gravel. HDR reported to SCS to constantly verify elevations. GW-8 was backfilled with 1' soil, 3.5' hydrated bentonite, and 1.5' of backfill
- The following GWs were moved to locate near the edge of bench:
  - GW-7: 12' south
  - GW-22: 3.5' south
  - GW-23: 3' north
  - GW-26: 5' east / 7' north
- FDEP arrived at CCSWDC for inspection. HDR met with FDEP at 11:30 am to discuss drilling operations and temperature of waste. FDEP concerned of waste temperatures higher than 140 F. HDR informed FDEP that temperature of waste excavated from wells ranges from 72 F to 98 F. No other concerns from FDEP.
- GW-22 needed an access ramp for drill rig. (GW-22 located halfway south slope).
- All wells were completed at the end of the day
- SCS proceeded to pick up blown litter on north and south slopes.
- SCS left the site at 5:00 pm



# Daily Field Report

(Continued)

Date: 2/3/2010 Wednesday

❖ Well Schedule (6" SDR 11)

GW	Db	Solid	Perforated
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7	30'	14'	19'
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8	34'	14'	23'	GW-8 filled with 2 ft of additional gravel. Only 1 bentonite plug installed (3.5 ft)
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20	31'	14'	20'
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22	25'	14'	14'
----	-----	-----	-----

23	31'	14'	20'
----	-----	-----	-----

24	32'	14'	21'
----	-----	-----	-----

25	31'	14'	20'
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# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/4/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
76 F	55 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Steve Miller	Acting Superintendent	Forklift – JLG 1044C
Ray Perez	Laborer / Driver	Excavator – Kobalco
Joel Sanchez	Laborer / Driver	Truck F-250
Brandon Swift	Laborer / Driver	Flat bed F-450
Fred Harlan	Laborer / Driver	Bobcat

**Work Performed:**

- SCS arrived on site at 7:00 am.
- B & H Drilling (Subcontractor) starts drilling GW-19, GW-21, GW-26
- Pre-assembled well casings are put in place over 1 ft of gravel (bedding layer). HDR verified that each well had the appropriate backfill / geonet / hydrated bentonite layers
- Hyatt Survey arrived on site and proceeded to survey the northeast slope after Veolia (landfill operator regarded area)
- HDR reviewed new elevations for GW-1 to GW-6 and provided SCS revised well schedule
- B & H Drilling (Subcontractor) starts drilling GW-1, GW-2
- Pre-assembled well casings are put in place over 1 ft of gravel (bedding layer). HDR verified that each well had the appropriate backfill / geonet / hydrated bentonite layers
- GW-1 and GW-2 were not completed at the end of the day. Wells covered as required in contract documents
- Pipe crew started fusing additional perforated pipe needed for GW-3 to GW-6
- SCS left the site at 5:30 pm

**❖ Well Schedule (6" SDR 11)**

GW	Db	Solid	Perforated
1	33'	14'	22'
2	34'	14'	23'
19	30'	14'	19'
21	30'	14'	19'
26	29'	14'	18'



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/5/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Don Whiting (HDR)	

## Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
75 F	60 F		Cloudy	0.67 inches

Contractor's Employees / Title		Equipment Used
Steve Miller	Laborer / Driver	Forklift - JLG 1044C
Ray Perez	Laborer / Driver	2 X Excavator - Kobalco
Joel Sanchez	Laborer / Driver	Truck F-250
Brandon Swift	Laborer / Driver	Flat bed F-450
Fred Harlan	Laborer / Driver	Bobcat

## Work Performed:

- SCS arrived on site at 7:00 am
- B & H Drilling (Subcontractor) drilling GW-3, GW-4, GW-5 and GW-6
- Prior to installation the perforated pipe for GW-4 was found to be approx. 2 ft. too long. SCS removed 1'-10" section from the bottom and fused cap to bottom of casing. HDR verified the corrected length of perforated pipe at 22 ft.
- B & H Drilling (Subcontractor) completed last bore (GW-6) at 11:10 am
- Pre-assembled well casings were installed over 1 ft of gravel (bedding layer). HDR verified each well had the appropriate backfill / geonet / hydrated bentonite layers. SCS completed backfill of GW-1, GW-2 and GW-3 but did not finish top lift of backfill on GW-4, GW-5 and GW-6 due to rain & lightning. Wells covered as required in contract documents
- SCS completed last bentonite plug at 2:15 pm.
- SCS stopped all work on landfill at 2:35 pm due to rain & lightning.
- SCS left the site at 3:00 pm.

## ❖ Well Schedule (6" SDR 11)

GW	Db	Solid	Perforated
3	35'	14'	24'
4	33'	14'	22'
5	33'	14'	22'
6	35'	14'	24'





## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/6/2010	Day: Saturday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Don Whiting (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
60 F	65 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Steve Miller	Laborer / Driver	Forklift -- JLG 1044C
Ray Perez	Laborer / Driver	2 X Excavator -- Kobalco
Joel Sanchez	Laborer / Driver	Truck F-250
Brandon Swift	Laborer / Driver	Flat bed F-450
Fred Harlan	Laborer / Driver	Bobcat

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS using small excavator to complete top lift of backfill on GW-4, GW-5 and GW-6. Water ponding on bench between GW-3 and GW-4 from yesterday's rain. Depressions from excavator tracks allowed water to spill down the face of embankment. Veolia, the County and HDR observed the spill. SCS operator created berm along edge of bench to contain water and stop the spill.
- SCS determined conditions were too wet to continue work on the land fill due to yesterday's rain.
- Contractor placed rock on east entrance road to staging area. Performed general site clean-up and material inventory.
- SCS fusing HDPE pipe fittings in staging area.
- Steve Miller stated SCS will only work until 12:00 noon today in staging area only.



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/8/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
67 F	45 F			none

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	Forklift - JLG 1044C
Steve Miller	Laborer / Driver	2 X Excavator - Kobalco
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	2 X Articulated dump trucks
		Dozer

**Work Performed:**

- SCS arrived on site at 7:00 am
- Pipe crew began fusing bottom portion of U-trap 3 ( U-3) for installation. Due to difficulty fusing the 8" x 8" x 4" SDR 9 tee (for drain line from U-3 to LCO) it was fused looking west. A 90° elbow will be installed and then will connect to the LCO. HDR approved this change. Drain line will be installed at a later date.
- SCS started excavation on north slope to install U-3. HDR moved U-3 6' north and 17' east to locate U-3 behind the LCO
- U-3 was trenched to the depth indicated on plans and specifications. HDR verified that U-3 was set level and had bedding and backfill as specified in plans.
- SCS proceeded to trench for header installation (using a laser level to achieve a 5% slope) heading east towards the high point (HP) east of GW-2.
- A 200 LF of 18" SDR 17 was placed in the trench
- 18" SDR 17 header will start at U-3 (STA 0+00) heading east towards the HP. SCS will install the 18" SDR 17 header heading west to Phase II (with blind flange) at a later date
- 2" SDR 9 (airline) and 4" SDR 9 (condensate) were also placed in the trench. The 2" and 4" SDR 9 were placed at the upgradient side of the slope. HDR already approved this change from construction documents
- A 200 LF of 4" SDR 9 and a 240 LF of 2" SDR 9 were used.
- Total trench excavated: STA 0+00 to STA 1+00. SCS proceeded to backfill from STA 0+00 to STA 0+75. SCS took elevations of header pipe every 25 ft and at every fitting. Surveyor will take elevations every 50 ft. Pipe installed met required slope
- Remaining open trench was covered with a rain tarp at the end of the day (as agreed by HDR and County)
- SCS left the site at 5:00 pm



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/9/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
67 F	47 F		Mostly Cloudy / Rain	0.11 inches

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	2 X Articulated dump trucks
Abel Sanchez	Laborer / Driver	Dozer

**Work Performed:**

- SCS arrived on site at 7:00 am
- It was brought to SCS attention, by the County, that excavations must follow OSHA regulations.
- SCS proceeded to adjust trench previously excavated to avoid any hazardous conditions
- SCS proceeded to trench for header installation (using a laser level to achieve a 5% slope) from STA 1+00 to STA 1+50
- 18" SDR 17 (header), 4" SDR 9 (condensate), 2" SDR 9 (airline) installed in trench.
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill from STA 0+75 to STA 1+25
- HDR coordinated with SCS for layout of flare pad. SCS proceeded to clear area for concrete pad
- Due to weather conditions, SCS stop work at 3:00 pm. SCS proceeded to cap 18", 2", and 4" pipes
- Remaining open trench was covered with a rain tarp at the end of the day
- SCS left the site at 5:00 pm

❖ During Progress Meeting #3, the following was addressed:

- HDR and SCS to coordinate with County for flare pad layout before concrete pouring.



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/10/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
56 F	40 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Johnny Meler	Superintendent	
Adolfo Matus	Laborer / Driver	2 X Excavator – Kobalko
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	2 X Articulated dump trucks
Abel Sanchez	Laborer / Driver	2 X Dozer – CAT D6M, Deere 450L LGP

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS continued trench from STA 1+50 to STA 2+87.5 (HP) (using a laser level to achieve a 5% slope) and started access ramp for trenching from HP to U-2
- 18"x18"x4" SDR 11 tee fused for GW-2 lateral.
- GW-2 header / lateral connection at STA 2+04
- SCS installed GW-2 lateral (26' of 4" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 6' risers for all pipes
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill from STA 1+25 to STA 2+50
- SCS left the site at 6:00 pm



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/11/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
50 F	43 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Adolfo Matus	Laborer / Driver	2 X Excavator – Kobalko, Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	Articulated dump truck
Abel Sanchez	Laborer / Driver	2 X Dozer- CAT D6M, Deere 450L LGP

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS continued trenching from HP (STA 2+87.5) to STA 4+50 (using a laser level to achieve a 5% slope)
- SCS installed 18" SDR 17 (header), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench.
- 18 " 45° SDR 11 elbow installed at HP (STA 2+87.5)
- GW-3 required a type 2 lateral connection per documents. Header was approximately 12' from well, HDR approved change to type 1 lateral
- GW-3 header / lateral connection at STA 3+55
- SCS installed GW-3 lateral (12' of 4" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 6' risers for all pipes
- 18"x18"x4" SDR 11 Installed for remote wellhead connection at STA 4+30
- Stormwater ponding on bench started seeping to trench. SCS proceeded to excavate into waste to allow water percolate. Dewatering was not required. SCS is not required to regrade bench. Veolia (landfill operator) responsible.
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill trench from STA 2+87.5 to STA 4+50
- SCS left the site at 6:30 pm



Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
65 F	45 F		Overcast / rain	0.71

**Work Performed:**

- SCS arrived on site at 7:00 am
- Trenching for header will resume on Monday February 15. 18"x18"x8" tee for access point (AP) not delivered yet.
- GW-1 header / lateral connection at STA 0+75
- SCS installed GW-1 lateral (75' of 6" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 6' of 4" SDR 11, 4" SDR 9 and 2" SDR 9 included for future connection. 6' risers for all pipes
- SCS took elevations every 25 ft for GW-1 lateral. Pipe met required slope
- HDR met with Jack Gibson and Dan McAllister (County) to discuss layout at flare station. County would like to install gravel beyond Limits of proposed chain link fence to avoid damaging fence during future generator installation. HDR will review and provide County details
- SCS continued dressing up disturbed area on north slope
- SCS left the site at 5:00 pm

❖ SCS will not work on Saturday 2/13/2010



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/15/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
67 F	45 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	2 X articulated dump trucks
Abel Sanchez	Laborer / Driver	Dozer
Adolfo Matus	Laborer / Driver	

### Work Performed:

- SCS arrived on site at 7:00 am
- Pipe crew proceeded to fuse bottom portion of U-2. 8"x4" SDR 11 tee for U-2 drain line fused looking west. A 90° elbow needed to connect drain line to existing LCO. Connection to LCO at a later date.
- **HDR Informed SCS that risers for lateral / condensate / air return lines must be plumb as possible. SCS will need to make necessary corrections. No response from SCS regarding this subject.**
- SCS proceeded to excavate and install U-2, then trench heading upslope and meet 18" SDR 17 header at STA 4+30
- HDR informed SCS that trench excavated did not have at least 3' of cover as required and stationing will be out of sequence.
- SCS proceeded to remove U-2 and backfilled trench
- SCS will continue from STA 4+30 after the 18"x8" tee for AP arrives
- SCS left the site at 5:00 pm



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/16/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Don Whiting (HDR) 0700 hr. – 1200 hr.	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
55° F	45° F	Sunny	Windy	None

Contractor's Employees / Title		Equipment Used
Johnny Meler	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalco , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harian	Laborer / Driver	Articulated dump trucks
Adolfo Matus	Laborer / Driver	Dozer

**Work Performed:**

- SCS on site at 7:00 am
- SCS fusing HDPE pipe fittings together in staging area while waiting on delivery of factory fabricated, 18" x 8" Tees.
- Concrete Subcontractor Frederick Derr & Company (FD&C) on-site in AM.  
Three (3) man crew. F-350 Truck and Massey Ferguson Tractor/Loader with back blade.
- SCS, FD&C and HDR discussed top elevation of concrete pads for flare station. It was determined top of concrete should be 6" above existing grade at east end of proposed 32' x 12' Blower Skid. Stone will be placed around pads to within 2" - 3" from top of concrete pads. Confirmed concurrence with R. Siemerling via phone.
- FD&C crew laid out flare station pads and began excavation with MF back blade.
- SCS began excavation between header access point located west of GW-4 and 18 x 6 Tee for GW-4, in preparation for header installation. SCS indicated 18 x 8 Tees are scheduled to arrive on-site this afternoon.





# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/16/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR) 1100 hr. – 1700 hr.	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
55° F	45° F	Sunny	Windy	None

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalco , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	Articulated dump trucks
Adolfo Matus	Laborer / Driver	Dozer

**Work Performed:**

- SCS proceeded to install 18"x8" SDR 11 tee for AP (STA 4+69)
  - SCS continued excavation from STA 4+50 to STA 4+84 (using a laser level to achieve a 5% slope)
  - SCS installed 18"x6" SDR 11 tee for GW-4 lateral (STA 4+84). Lateral to be installed at a later date
  - SCS took elevations every 25 ft. Pipe met required slope
  - SCS proceeded to backfill trench from STA 4+50 to STA 4+75
  - FD&C installed frame and crushed gravel for flare pad
  - HDR informed SCS that 4" SDR 9 and 2" SDR 9 risers for AP must be 1' lower than 8" SDR 11 riser. No response from SCS regarding this subject.
  - SCS left the site at 6:30 pm
- ❖ During Progress Meeting #4, the following was addressed:
- SCS to repair silt fence on southeast slope and to install hay bales next to existing downchute pipes

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/17/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
59 F	43 F		Overcast	none

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalco , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	2 X articulated dump trucks
Adolfo Matus	Laborer / Driver	Dozer

### Work Performed:

- SCS arrived on site at 7:00 am
- SCS proceeded to trench from STA 4+84 to STA 8+00 (using a laser level to achieve a 5% slope)
- SCS installed GW-4 lateral (41' of 6" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 6' of 4" SDR 11, 4" SDR 9 and 2" SDR 9 included for future connection. 6' risers for all pipes
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill from STA 5+84 to STA 7+50
- FD&C (Subcontractor) continued framing and placing crushed gravel for stack pad subbase
- County requested HDR to log in approximate square footage of sod damaged by SCS during header installation. HDR will log in estimated area starting at U-2.
- SCS left the site at 6:00 pm



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/18/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
57 F	40 F		Overcast	none

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harian	Laborer / Driver	2 X articulated dump trucks
Adolfo Matus	Laborer / Driver	Dozer

### Work Performed:

- SCS arrived on site at 7:00 am
- SCS started trench for GW-5 lateral and U-2 installation (using a laser level to achieve a 5% slope)
- GW-5 header / lateral connection at STA 6+47. U-2 at STA 8+34
- 18" x 18" x 4' SDR 11 tee fused for GW-5 lateral
- SCS installed GW-5 lateral (74' of 4" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 6' risers for all pipes
- When moving U-2 for installation, it hit a connector pipe from existing LCO to flare (Cell 3) and broke the pipe. County was informed and inspected the damage. SCS proceeded to repair damaged pipe.
- A 45° SDR 11 elbow was needed at the east stubout of U-2 in order to maintain the surveyed header alignment after U-2 was moved 10' east to locate behind LCO
- **HDR informed SCS that all laterals will need to be surveyed for signed/sealed as-builts. SCS's field notes are not approved for as-builts**
- SCS started access ramp for trenching from U-2 to HP
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill from STA 7+50 to STA 8+25
- U-2 was trenched to the depth indicated on plans and specifications. HDR verified that U-2 was set level and had bedding and backfill as specified in plans
- SCS left the site at 6:00 pm



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/19/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
61 F	43 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko , Komatsu
Abel Sanchez	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	articulated dump truck
Adolfo Matus	Laborer / Driver	Dozer

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS continued excavation from U-2 (STA 8+34) heading upslope to STA 10+50 (using a laser level to achieve a 5% slope)
- SCS installed 18" SDR 17 (header), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench.
- FD&C (Subcontractor) continued framing, placing crushed gravel for subbase, rebar. HDR verified dimensions. Concrete pouring scheduled for Monday February 22, 2010 at 7:30 am
- 18"x18"x8" SDR 11 tee fused for GW-6 lateral. GW-6 header / lateral connection at STA 8+67
- GW-6 lateral to be installed at a later date
- 18"x18"x8" SDR 11 tee fused for GW-7 lateral. GW-7 header / lateral connection at STA 9+96
- GW-7 lateral to be installed at a later date
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill from STA 8+34 to STA 9+96
- SCS left the site at 6:30 pm



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/20/2010	Day: Saturday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
68 F	52 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalco , Komatsu
Abel Sanchez	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Brandon Swift	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	articulated dump truck
Adolfo Matus	Laborer / Driver	Dozer

### Work Performed:

- SCS arrived on site at 7:00 am
- SCS began trench for GW-6 and GW-7 lateral installation (using a laser level to achieve a 5% slope)
- SCS installed GW-6 lateral (96' of 8" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 6' of 6" SDR 11, 4" SDR 9 and 2" SDR 9 included for future connection. 6' risers for all pipes
- SCS installed GW-7 lateral (40' of 6" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 6' of 4" SDR 11, 4" SDR 9 and 2" SDR 9 included for future connection. 6' risers for all pipes
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to bring additional soil and regrade disturbed areas
- SCS left the site at 5:00 pm

❖ HDR will document approximate disturbed area once all construction activities on north slope are completed.



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/22/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
72 F	60 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	2 X articulated dump trucks
Abel Sanchez	Laborer / Driver	Dozer
Adolfo Matus	Laborer / Driver	

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS continued excavation from STA 10+50 to STA 10 + 70 (HP) then downslope to STA 12+75 (using a laser level to achieve a 5% slope)
- 18" SDR 17 (header), 4" SDR 9 (condensate), 2" SDR 9 (airline) placed in trench
- SCS installed 2 X 22.5° SDR 11 elbows at HP (STA 10+50)
- FD&C (Subcontractor) proceeded to pour concrete for flare station pads (7:30 am). Ardaman (Subcontractor) and SCS collected 4 concrete cylinder samples (each) for testing.
- GW-8 required a Type 2 lateral. Header is approximately 10' from well. HDR approved change to Type 1 lateral
- 18"x4" SDR 11 tee fused for GW-8 lateral. GW-8 header / lateral connection at STA 11+34
- GW-8 lateral to be installed at a later date
- 18"x8" SDR 11 tee fused for AP. AP / header connection at STA 12+05
- 7' risers of 8" SDR 11, 4" SDR 9, 2" SDR 9 installed for AP
- FD&C removed frames on concrete slabs (pm), proceeded to install and compact additional gravel around stack pad
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill trench from STA 10+25 to STA 12+05
- SCS left the site at 6:30 pm



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/23/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
72° F	56° F		Partly Cloudy	None

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	Articulated dump trucks
Adolfo Matus	Laborer / Driver	Dozer
Abel Sanchez	Laborer / Driver	

**Work Performed:**

<ul style="list-style-type: none"><li>SCS arrived on site at 7:00 am</li></ul>
<ul style="list-style-type: none"><li>SCS continued excavation from STA 12+75 to STA 14+00 (using a laser level to achieve a 5% slope)</li></ul>
<ul style="list-style-type: none"><li>SCS carefully exposed existing downchute pipe located on north slope and proceeded to install 18" header</li></ul>
<ul style="list-style-type: none"><li>18" SDR 17 (header), 4" SDR 9 (condensate), 2" SDR 9 (airline) placed in trench</li></ul>
<ul style="list-style-type: none"><li>SCS installed GW-8 lateral (10' of 4" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 6' risers for all pipes</li></ul>
<ul style="list-style-type: none"><li>18"x4" SDR 11 tee fused for GW-9 lateral. GW-9 header / lateral connection at STA 12+82</li></ul>
<ul style="list-style-type: none"><li>GW-9 lateral to be installed at a later date</li></ul>
<ul style="list-style-type: none"><li>18"x4" SDR 11 tee fused for remote wellhead. Remote wellhead / lateral connection at STA 12+85</li></ul>
<ul style="list-style-type: none"><li>7' riser of 4" SDR 11 installed for Remote wellhead. Connection to LCO to be installed at a later date</li></ul>
<ul style="list-style-type: none"><li>SCS took elevations every 25 ft. Pipe met required slope</li></ul>
<ul style="list-style-type: none"><li>SCS proceeded to backfill from STA 12+75 to STA 13+50</li></ul>
<ul style="list-style-type: none"><li>SCS left the site at 6:00 pm</li></ul>
<ul style="list-style-type: none"><li>❖ During Progress Meeting #4, the following was addressed:</li></ul>
<ul style="list-style-type: none"><li>SCS will continue installing 18" SDR 17 header on north slope then proceeded to south slope. 24' SDR 17 header will be installed later</li></ul>
<ul style="list-style-type: none"><li>HDR provided SCS compressor pad location at flare station</li></ul>



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/24/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
59 F	43 F		Overcast / Rain	0.47 Inches

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	2 X articulated dump trucks
Adolfo Matus	Laborer / Driver	Dozer
Abel Sanchez	Laborer / Driver	

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS continued excavation from STA 14+00 to STA 15+00 (using a laser level to achieve a 5% slope)
- SCS installed 18" SDR 17 (header), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench.
- SCS installed GW-9 lateral (39' of 4" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 6' risers for all pipes
- 18"x4 SDR 11 tee installed for GW-10 lateral. GW-10 header / lateral connection at STA 14+50
- GW-10 lateral to be installed at a later date
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill from STA 13+50 to STA 15+00
- SCS left the site at 6:00 pm





# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/25/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
58 F	38 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	2 X articulated dump trucks
Adolfo Matus	Laborer / Driver	Dozer
Abel Sanchez	Laborer / Driver	

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS installed GW-10 lateral (79' of 4" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 6' risers for all pipes
- SCS continued excavation from STA 15+50 to STA 16+50 (using a laser level to achieve a 5% slope)
- SCS installed 18" SDR 17 (header), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench.
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill from STA 15+00 to STA 16+00
- SCS left the site at 6:00 pm



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/26/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
58 F	45 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	Forklift
Steve Miller	Laborer / Driver	2 X Excavator – Kobalco , Komatsu
Abel Sanchez	Laborer / Driver	2 X Truck F-250
Adolfo Matus	Laborer / Driver	Flat bed F-450
Brandon Swift	Laborer / Driver	Bobcat
		articulated dump truck
		Dozer

**Work Performed:**

- SCS arrived on site at 7:00 am
- 18" welding machine out of service – SCS waiting on replacement parts
- Pipe crew proceeded to fuse bottom portion of U-1. 8"X4" SDR 11 tee for U-1 drain line fused looking west. A 90° elbow needed to connect drain line to existing LCO. Connection to LCO at a later date.
- Following sump and pits delivered – HDR verified all dimensions:
  - ✓ Sump 2
  - ✓ 4 x airline valve pits (36" SDR 32.5)
  - ✓ 1 x FM valve pit (48" SDR 32.5) – SCS waiting on remaining 3 FM valve pits
  - ✓ 3 x Header valve pit (48" SDR 32.5 w/ 18" outlets)
  - ✓ 1 x Header valve pit (48" SDR 32.5 w/ 24" outlets)
- SCS continued excavation from STA 16+50 to STA 16+78 and installed U-1(using a laser level to achieve a 5% slope)
- U-1 at STA 16+73
- U-1 was trenched to the depth indicated on plans and specifications. HDR verified that U-1 was set level and had bedding and backfill as specified in plans.
- SCS installed 18" SDR 17 (header), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench.
- SCS will connect a 90° elbow and a blind flange at the east side of U-1. SCS will continue with 18" SDR 17 header on the south slope, then continue on east slope
- SCS took elevations every 25 ft. Pipe met required slope
- SCS left the site at 6:00 pm



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 2/27/2010	Day: Saturday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
54 F	45 F		Overcast / Rain	0.23

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	Forklift
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko , Komatsu
Abel Sanchez	Laborer / Driver	2 X Truck F-250
Adolfo Matus	Laborer / Driver	Flat bed F-450
Brandon Swift	Laborer / Driver	Bobcat
		articulated dump truck
		Dozer

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS proceeded to dress up north slope
- Pipe crew began moving 18" SDR 17 pipes to Phase I to fuse for stringers. Fusing will be conducted next week
- Due to weather conditions, SCS left the site at 12:00 pm

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/1/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
67 F	56 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Abel Sanchez	Laborer / Driver	Flat bed F-450
Adolfo Matus	Laborer / Driver	Bobcat
		2 X articulated dump trucks
		Dozer

### Work Performed:

- SCS arrived on site at 7:00 am
- Pipe crew proceeded to fuse 18" SDR 17 (header) for stringers at an authorized area on Phase I. A max. of 250 LF stringers used
- FPL arrived on site to install new power pole for Flare Station. County's preferred location (150 ft west of the chain link fence) could not be selected. FPL required an easement permit and could take 2 additional months for processing. FPL decided to install power pole 3 ft south of the chain link fence instead of 30 ft as planned.
- Flare skid / Stack arrived on site. Unloading will be conducted tomorrow when crane is available
- Total 18" SDR 17 pipe fused today: 1,750 LF
- SCS left the site at 6:00 pm



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/2/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
67 ° F	49 ° F		Overcast / Rain	0.21 inches

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift
Steve Miller	Laborer / Driver	2 X Excavator – Kobelco , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Abel Sanchez	Laborer / Driver	Flat bed F-450
Adolfo Matus	Laborer / Driver	Bobcat
		Articulated dump trucks
		Dozer

**Work Performed:**

- SCS arrived on site at 7:00 am
- Crane arrived and proceeded to unload flare / stack onto the ground. Placement of flare and stack on concrete slabs will occur when concrete has reached design strength
- Compressor delivered on skid. This compressor slightly larger than expected. HDR will contact SCS in order to clarify changes on compressor size. Compressor pad dimensions will change
- SCS requested time extension due to rain in the month of February. HDR and County will review conditions per contract
- Pipe crew continued fusing 4" SDR 9 (condensate) for stringers. A max. of 200 LF of stringers are used
- Total 4" SDR 9 fused today: 2,000 LF
- SCS left the site at 6:00 pm

- ❖ During Progress Meeting #5, the following was addressed:
  - HDR to review header airtest schedule in order to finalize north slope

Rain occurred early morning. SCS work was not delayed due to rain. SCS fusing pipe



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/3/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 086-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
59 F	45 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift
Steve Miller	Laborer / Driver	2 X Excavator - Kobelco, Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Adolfo Matus	Laborer / Driver	Bobcat
Abel Sanchez	Laborer / Driver	2 X articulated dump trucks
		Dozer

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS proceeded to remove existing downchute pipe near U-3
- SCS continued excavation from U-3 heading west to header blind flange (future connection to Phase II) and installed Header valve pit and Forcemain (condensate) valve pit
- Trench excavated from STA 0+00 to STA 0+95 (heading west) (using a laser level to achieve a 5% slope)
- Header valve pit located at STA 0+63
- Forcemain (condensate) valve pit located at STA 0+70
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill from STA 0+00 to STA 0+63
- Airline valve pit will be installed tomorrow
- SCS left the site at 6:00 pm



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/4/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
59 F	43 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meler	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator - Kobalco , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	2 X articulated dump trucks
Abel Sanchez	Laborer / Driver	Dozer

### Work Performed:

- SCS arrived on site at 7:00 am
- SCS proceeded to install airline valve pit west of U-3
- SCS started excavation on south slope to install Sump # 2. Per design, Sump # 2 is required to have 6.5' of cover at the 18" stubs. Approved Sump # 2 will only have 5' of cover at the 18" stubs. 18" header will transition to 3' of cover. HDR approved this change
- Ball valve and bentonite for airline valve pit will be installed next week. Ball valve not delivered yet.
- SCS proceeded to backfill Sump # 2 and area around valve pits on north slope
- SCS proceeded to excavate at U-3 and U-2 to expose the 4" stub for drain line to existing LCO. SCS fused a 90 elbow and a butt cap before air test next week. U-1 4" stub for drain line had a butt cap already
- HDR clarified to SCS that 4" SDR 9 condensate line will connect to the LCO-1N only. SCS will prepare this connection tomorrow
- SCS left the site at 6:00 pm



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/5/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Don Whiting (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
60 F	40 F	Sunny	Windy	None

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	Forklift
Steve Miller	Laborer / Driver	2 X Excavator - Kobelco , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	articulated dump truck
Abel Sanchez	Laborer / Driver	Dozer

### Work Performed:

- SCS arrived on site at 7:00 am
- Excavated to expose 18" header and fused 4" saddle fittings to top of header, 1 each, east side of U1, U2 & U3.
- Contractor butt fused (2) 18" 45° bends together then fused 18" diam. pipe lengths on either end of bends to make 90° corner section. Contractor also installed blind flange on end of header in preparation for air test. Total length = 24+/- LF.
- SCS excavated and installed 24 ft. header corner section east of U1.
- Contractor installed 24+/- LF of 2" airline and 4" condensate return piping around corner adjacent to header, east of U1.
- SCS also installed a 4" tee, 2 ft.+/- drop, 90° bend and 3 ft.+/- horiz. length, with capped end, to cross 4" condensate return pipe under header east of U1.
- Contractor backfilled all new piping installed east of U1 except 4" saddle fitting on top of header.





## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/6/2010	Day: Saturday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Don Whiting (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
50 F	60 F	Sunny		None

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	Forklift
Steve Miller	Laborer / Driver	2 X Excavator - Kobelco , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Hartan	Laborer / Driver	articulated dump truck
Abel Sanchez	Laborer / Driver	Dozer

**Work Performed:**

- SCS arrived on site at 7:00 am
- Contractor core drilled header pipe inside each 4" saddle fittings installed yesterday, 1 each, on east side of U1, U2 & U3.
- Fused 4" riser pipes to each saddle fitting for remote wellhead condensate then backfilled each excavation at U1, U2 & U3.
- In staging area, crew fabricated 6" risers for (5) remote wellheads to be installed at existing leachate cleanouts on north slope.
- SCS fusing laterals to 6" risers at northwest corner of landfill.
- Preliminary lateral lengths for remote wellheads:

LCO-1N = 29 LF

LCO-2N = 93 LF

LCO-3N = 38 LF

LCO-4N = 108 LF

LCO-5N = 36 LF

NOTE: Laterals to be air tested above ground prior to installation then cut to fit after testing is completed



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/8/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
70 F	50 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift
Joel Sanchez	Laborer / Driver	2 X Excavator - Kobelco, Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Abel Sanchez	Laborer / Driver	Flat bed F-450
Ray Perez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	2 X articulated dump trucks
		Dozer

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS proceeded to install 2" ball valve for airline valve pit (west of U-3)
- Cliff Koenig (HDR) on site to inspect flare / stack and overall construction progress
- SCS air tested header / condensate / airline pipes. Pressure gauges connected at GW-1 risers. Pipes tested at 10 psig for 1 hour. No loss in pressure during testing.
- SCS air tested lateral for remote wellhead at U-3. Pipe tested at 10 psig for 1 hour. No loss in pressure during testing.
- SCS proceeded to excavate at U-3 to connect U-3 drain line and remote wellhead lateral to LCO-5N.
  - 12' (4" SDR 11- drainline) connected to LCO-5N
  - 27.5' (6" SDR 11 - remote wellhead lateral) and 6' riser connected to LCO-5N
  - 8' (4" SDR 11 - for sample port) connected to LCO-5N
  - 8' (6" SDR 11 - for sample port) connected to LCO-5N
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill area
- SCS left the site at 6:00 pm



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1		Date: 3/9/2010		Day: Tuesday
Project Owner: Sarasota County		Contractor: SCS Field Services		
HDR Project No. 096-124466		CQA: Carlos Restrepo (HDR)		
Weather Conditions:				
Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
70° F	56° F		Mostly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift
Steve Miller	Laborer / Driver	2 X Excavator – Kobelco , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Abel Sanchez	Laborer / Driver	Flat bed F-450
Fred Harlan	Laborer / Driver	Bobcat
Ray Perez	Laborer / Driver	Articulated dump trucks
Joel Sanchez	Laborer / Driver	Dozer

### Work Performed:

- SCS arrived on site at 7:00 am
  - Proceeded to dress up area around U-3
  - Pipe crew tested remaining laterals for remote wellheads and lateral for U-trap drain lines. Pipes tested at 10 psig for 1 hour. No loss in pressure during testing
  - Connection of drain lines and remote wellhead laterals to remaining LCOs will continue at a later date
  - Hyatt Survey on site to survey header pipe on north slope
  - SCS started excavation on south slope to install 18" SDR 17 header. Will start at Sump # 2 heading east. Excavation from STA 0+00 (Sump #2) to STA1+50 (using a laser level to achieve a 5% slope)
  - 18" SDR 17 (header), 4" SDR 9 (condensate), 2" SDR 9 (airline) placed in trench
  - A branch saddle will be installed for remote wellhead next to Sump #2 at STA 0+15
  - 18"x8" SDR 11 tee fused for AP. AP / header connection at STA 0+78
  - SCS took elevations every 25 ft. Pipe met required slope
  - SCS proceeded to backfill trench from STA 0+00 to STA 0+80
  - SCS left the site at 6:30 pm
- 
- During Progress Meeting #6, the following was addressed:
  - New crew will arrive next week to fuse 24" and 30" pipes / installation
  - SCS will install lateral for remote wellheads on north slope. Connections to LCO 1N to LCO 4N to continue after approval from County



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1		Date: 3/10/2010	Day: Wednesday
Project Owner: Sarasota County		Contractor: SCS Field Services	
HDR Project No. 096-124466		CQA: Carlos Restrepo (HDR)	
<b>Weather Conditions:</b>			
Temperature		Weather	Precipitation
Max.	Min.	Clear	Other
76 F	63 F	Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift
Steve Miller	Laborer / Driver	2 X Excavator - Kobalco , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	Bobcat
Joel Sanchez	Laborer / Driver	2 X articulated dump trucks
Ray Perez	Laborer / Driver	Dozer

### Work Performed:

- SCS arrived on site at 7:00 am
- SCS continued excavation from STA 1+50 to STA 2+75 (using a laser level to achieve a 5% slope)
- Cliff Koenig (HDR) provided distances for CMP to be installed on south slope where future access road will cross the header pipe  
78' of CMP will be placed 29' from GW-22
- 8' risers of 8" SDR 11, 4" SDR 9, 2" SDR 9 installed for AP
- 2" and 4" SDR 9 risers at Sump # 2 will be installed at a later date
- SCS proceeded to fix a damaged downchute pipe on north slope. Veolia (Landfill operator) provided materials
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill trench from STA 0+75 to STA 2+25
- SCS left the site at 6:00 pm

- SCS lost 3 hours regrading trench from STA 1+50 to STA 2+75 to meet proper cover. A laser trench was not used during initial excavation.



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/11/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
76 F	67 F		Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	2 X articulated dump trucks
Abel Sanchez	Laborer / Driver	Dozer

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS continued excavation from STA 2+75 to STA 4+00 (using a laser level to achieve a 5% slope)
- 18"x4" SDR 11 tee fused for GW-23 lateral. GW-23 header / lateral connection at STA 1+46
- SCS installed GW-23 lateral (54' of 4" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 6" risers for all pipes
- GW-22 branch saddle at STA 2+05
- Remote wellhead branch saddle at STA 3+01
- 18" SDR 17 (header), 4" SDR 9 (condensate), 2" SDR 9 (airline) placed in trench
- 4 sections of 20' CMP (80' total) installed on south slope. Cliff Koenig (HDR) clarified compaction requirement. A 95% Modified Proctor not required. A 6" crushed gravel bedding, compacted with bucket was installed
- SCS took elevations every 25 ft. Pipe met required slope.
- SCS took elevations at start and end of CMP. 18" header elevations not taken inside CMP
- SCS proceeded to backfill from STA 2+25 to STA 3+91
- SCS left the site at 6:30 pm



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/12/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
66 F	61 F		Rain	3.66 inches

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	Forklift
Steve Miller	Laborer / Driver	2 X Excavator - Kobelco , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	articulated dump truck
Abel Sanchez	Laborer / Driver	Dozer

**Work Performed:**

- SCS arrived on site at 7:00 am
- Proceeded to help Veolia (landfill operator) fix a damaged downchute pipe on north slope.
- Stormwater from rain last night eroded minimum backfill from LCO-4N lateral. SCS brought additional soil to backfill.
- SCS proceeded to pick up blown litter on south slope

❖ Due to rain last night and today, SCS will not continue operations



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/13/2010	Day: Saturday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 098-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
69 F	58 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	Forklift
Steve Miller	Laborer / Driver	2 X Excavator – Kobelco , Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	articulated dump truck
Abel Sanchez	Laborer / Driver	Dozer

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS installed branch saddles for GW-23 and remote wellhead
- SCS proceeded to measure water depths inside all GWs

❖ Due to rain yesterday, SCS will not continue operations

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/15/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
68 F	52 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift
Joel Sanchez	Laborer / Driver	2 X Excavator – Kobalco , Komatsu
Steve Miller	Laborer / Driver	2 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
		Bobcat
		2 X articulated dump trucks
		Dozer

### Work Performed:

- SCS arrived on site at 7:00 am
- SCS continued excavation from STA 4+00 to STA 4+50 (HP) then downslope to STA 5+25 (using a laser level to achieve a 5% slope)
- 18" SDR 17 (header), 4" SDR 9 (condensate), 2" SDR 9 (airline) placed in trench
- 4" SDR 11 branch saddle installed at STA 4+42 for GW-21. HDR approved change
- Header pipe will have a 2' of cover at HP (approximately 6' either side of GW-21). This area is a low spot on bench for water to drain to existing downchute
- SCS continues regrading north slope affected by rain last week (1 person x 7 hrs)
- Following sump and pits delivered – HDR verified all dimensions:
  - ✓ Sump 3
  - ✓ 3 x FM valve pit (48" SDR 32.5)
  - ✓ 18" x 24" x 30" Wye (To be installed at southeast corner instead of Knockout Pot – Detail 1 / Sheet D-07)
- ❖ Sump # 3 has a 1% slope for both stubs. It is designed for a 2.6% and 1%. SCS will install Sump # 3 as delivered and will transition slope from 2.6% to 1% to meet end of 30" header to Sump # 3. 1% minimum slope required for header pipe outside of waste limits.
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill trench from STA 4+00 to STA 4+50
- SCS left the site at 6:00 pm





## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/16/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
67 ° F	52 ° F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift
Steve Miller	Laborer / Driver	3 X Excavator – Kobelco , Komatsu
Brandon Swift	Laborer / Driver	3 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Ray Perez	Laborer / Driver	Bobcat
Joel Sanchez	Laborer / Driver	Articulated dump trucks
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	Dozer
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

### Work Performed:

- SCS arrived on site at 7:00 am
- SCS continues regrading north slope affected by rain last week (all personel x 10 hrs)
- SCS proceeded to install lateral for remote wellhead to LCO-2N (93' + 6' riser). Connections to LCOs at a later date
- 2<sup>nd</sup> crew arrived today. Began fusing 24" SDR 17 (header) for stringers. A max. of 250 LF stringers used.
- Total 24" SDR 17 pipe fused today - 500 LF
- SCS took elevations every 25 ft for LCO-2N lateral. Pipe met required slope. Proceeded to backfill trench

- During Progress Meeting #8, the following was addressed:
- Lateral / U-Trap connections to existing LCO-1N to LCO-4N will be allowed after March 31, 2010.
- SCS to start wellhead connections on north slope before sodding
- HDR / SCS to meet with County this week to calculate sod required on north slope between Cells 3-5

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/17/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

## Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
67 F	52 F		Overcast	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift
Steve Miller	Laborer / Driver	3 X Excavator – Kobalko , Komatsu
Brandon Swift	Laborer / Driver	3 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Ray Perez	Laborer / Driver	2 X articulated dump trucks
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	Dozer
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

## Work Performed:

- SCS arrived on site at 7:00 am
- **SCS continues regrading north slope affected by rain last week (1 person x 4 hrs)**
- 2<sup>nd</sup> crew continues fusing 24" SDR 17 for stringers. A max. of 250 LF stringers used.
- Total 24" SDR 17 pipe fused today - 750 LF
- SCS proceeded to install wellheads on GW-1 to GW-10 and 3 remote wellheads (LCO-2N, LCO-4N, LCO-5N)
- Other wellheads (LCO-1N and LCO-3N) to be installed after March 31, 2010
- 1" Airline / Condensate ball valves to be installed on risers at each well at a later date. All GWs will have a reducer 2" x 1" for airline and a 4"x1" for condensate, a 1" ball valve for each line, and a quick disconnect
- SCS proceeded to lift airline valve pit 6" off the ground and installed 2' of hydrated bentonite.
- HDR / SCS met with Ed Russ (County) to estimate sod to be installed between U-2 and U-3 (Cells 3-5) on North Slope. SCS will install 40,352 SF of sod in this area. SCS is still responsible to install sod in remaining disturbed areas on north slope and all other areas disturbed by construction activities
- SCS left the site at 6:00 pm

- ❖ It was clarified to SCS that all GWs will have a ¾" NPT plug for water level access instead of a 1" labcock as shown on Detail 3 / Sheet D-07. SCS to make changes at a later date



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/18/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Don Whiting (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
65 F	55 F	Sunny		None

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	Forklift
Steve Miller	Laborer / Driver	3 X Excavator – Kobelco , Komatsu
Brandon Swift	Laborer / Driver	3 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	2 X articulated dump trucks
Abel Sanchez	Laborer / Driver	Dozer
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am.
- Excavated trench for 18" header on south slope from Sta. 5+25+/- (east of GW-21) heading east to Sta. 7+35+/-.
- Three (3) man crew fusing 30" HDPE pipe in yard just south of Phase I perimeter road.
- SCS installed 18x6 tee on header at Sta. 5+91 for lateral to GW-20.
- Installed 18" header, 4" condensate return line and 2" air line (adjacent to 18" header) from Sta. 5+25+/- to Sta. 7+30+/-.
- SCS installed 4" & 2" tees, each with 2' stub outs, on 4" condensate return line and 2" air line at Sta. 5+91 +/- for laterals to GW20.
- Backfilled header trench from Sta. 4+40+/- to Sta. 7+00+/- . SCS left trench open at Sta. 5+91 to install 6", 4" & 2" laterals to GW20.
- SCS fused 700 LF of 30" HDPE pipe in yard.
- SCS left the site at 5:30 pm.



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/19/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
70F	52 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	Forklift
Steve Miller	Laborer / Driver	3 X Excavator - Kobelco, Komatsu
Brandon Swift	Laborer / Driver	32 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	2 X articulated dump trucks
Abel Sanchez	Laborer / Driver	Dozer
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS continued excavation from STA 7+25 to STA 9+00 (using a laser level to achieve a 5% slope)
- 18" SDR 17 (header) placed in trench
- 18"x6" SDR 11 tee fused for GW-19 lateral. GW-19 lateral / header connection at STA 7+33
- 18"x8" SDR 11 tee fused for AP. AP / header connection at STA 7+69
- 2<sup>nd</sup> crew continues fusing 30" SDR 17 for stringers. A max. of 250 LF stringers used.
- Total 30" SDR 17 pipe fused today - 750 LF
- 18" welding machine broke down in the afternoon. SCS did not have time to place 4" SDR 9 (condensate) and 2" SDR 9 (airline) in trench. SCS proceeded to backfill trench halfway 18" header. No trash was visible. Average soil cover of 4.5 ft in this area
- SCS took elevations every 25 ft. Pipe met required slope
- SCS left the site at 6:00 pm



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/20/2010	Day: Saturday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
74 F	58 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Johnny Meler	Superintendent	Forklift
Steve Miller	Laborer / Driver	3 X Excavator - Kobelco , Komatsu
Brandon Swift	Laborer / Driver	3 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	articulated dump truck
Abel Sanchez	Laborer / Driver	Dozer
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

### Work Performed:

- SCS arrived on site at 7:00 am
- 2<sup>nd</sup> crew proceeded to move 24" stringers to bench on east slope
- SCS installed GW-20 lateral (20' of 6" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 8' risers for all pipes and 6" extension for all pipes (4" SDR 11, 2" SDR 9, and 4" SDR 9)
- SCS installed GW-19 lateral (44' of 6" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 8' risers for all pipes and 6" extension for all pipes (4" SDR 11, 2" SDR 9, and 4" SDR 9)
- 4" branch saddle installed for remote wellhead at STA 8+25. (8' riser - 4" SDR 11)
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill from STA 7+25 to STA 9+00
- End of 18" header (STA 9+00) sealed with tape. SCS will open trench at a later date to connect 18" header to 24" / 30" header
- SCS left the site at 3:30 pm



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1		Date: 3/22/2010	Day: Monday
Project Owner: Sarasota County		Contractor: SCS Field Services	
HDR Project No. 096-124466		CQA: Carlos Restrepo (HDR)	
<b>Weather Conditions:</b>			
Temperature		Weather	Precipitation
Max.	Min.	Clear	Other
67 F	56 F	Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Johnny Meler	Superintendent	
Steve Miller	Laborer / Driver	
Brandon Swift	Laborer / Driver	
Fred Harlan	Laborer / Driver	
Ray Perez	Laborer / Driver	
Joel Sanchez	Laborer / Driver	
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

### Work Performed:

- SCS arrived on site at 7:00 am
- Due to rain yesterday Sunday March 21, 2010 (1.17 inches), SCS will not work today.
- Minor erosion damage on north and south slopes. SCS will repair when conditions improve
- SCS left the site at 8:30 am



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/23/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
70 F	52 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	3 X Excavator - Kobelco, Komatsu
Brandon Swift	Laborer / Driver	3 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Ray Perez	Laborer / Driver	2 x articulated dump trucks
Joel Sanchez	Laborer / Driver	Dozer
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
  - SCS began excavation at Sump # 2 (south slope) heading west to GW-26.
  - 2<sup>nd</sup> crew began excavation at U-1 to install 24" SDR 17 header on east slope.
  - HDR requested SCS to clarify plan on working two slopes at the same time without additional equipment. SCS proceeded to stop excavation on south slope and move all equipment to east slope. Total trench excavated on south slope (25 ft)
  - Ed Russ (County) agreed on SCS's plan and allowed SCS to leave the trench open as long as any visible trash is removed
  - SCS exposed 18" elbow - east of U-1 (flanged) and will connect the 18" x 24" reducer (flanged)
  - SCS excavated from U-1 (STA 0+00) to STA 1+00 (using a laser level to achieve a 5% slope)
  - 24" SDR 17 (header), 4" SDR 9 (condensate), 2" SDR 9 (airline) placed in trench
  - Branch saddles for lateral connections are permitted on east slope only
  - SCS took elevations every 25 ft. Pipe met required slope
  - SCS proceeded to backfill trench from STA 0+00 to STA 0+50
  - SCS will leave the 18" x 24" connection (at U-1) open in order to remove aluminum plate used to block header for air testing.
  - SCS left the site at 6:00 pm
- 
- ❖ During Progress Meeting #9, the following was addressed:
  - SCS to continue 24" header installation on east slope then move to 18" header installation on south slope
  - SCS is responsible to install 40,352 SF of sod on north slope between Cells 3-5. SCS has been instructed by the County to



## Daily Field Report (Continued)

Date: 3/23/2010 Tuesday

complete this requirement as soon as possible. SCS is still responsible for installing sod at any other areas disturbed due to construction activities.

- HDR and SCS to coordinate location of box culvert and ERCP at the south perimeter swale of Phase I. This ERCP may affect the placement of the 30" header coming out of Phase I.
- SCS has been informed that several section of silt fence need repair. SCS agreed and wil repair





# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/24/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
74 F	58 F		Partly Cludy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	3 X Excavator – Kobalko , Komatsu
Brandon Swift	Laborer / Driver	3 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Ray Perez	Laborer / Driver	1 X articulated dump trucks
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	Dozer
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS continued excavation on east slope from STA 1+00 to STA 2+75 (using a laser level to achieve a 5% slope)
- Pipe crew began fusing 4" SDR 11 / 4" SDR 9 / 2" SDR 9 for GW-11 and GW-12 laterals
- 24" SDR 17 (header), 4" SDR 9 (condensate), 2" SDR 9 (airline) placed in trench
- 4" branch saddle for GW-11 lateral installed at STA 1+32
- SCS installed GW-11 lateral (67' of 4" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 8' risers for all pipes
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill trench from STA 0+50 to STA 1+75
- SCS left the site at 6:00 pm

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/25/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
76 F	67 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Steve Miller	Laborer / Driver	3 X Excavator – Kobelco , Komatsu
Brandon Swift	Laborer / Driver	3 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Joel Sanchez	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	1 x articulated dump trucks
Abel Sanchez	Laborer / Driver	Dozer
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

### Work Performed:

- SCS arrived on site at 7:00 am.
- SCS continued excavation on east slope from STA 2+75 to STA 4+50 (using a laser level to achieve a 5% slope)
- 24" SDR 17 (header), 4" SDR 9 (condensate), 2" SDR 9 (airline) placed in trench
- Sod company installing sod on north slope damaged GW-4 landtec wellhead while backing up with skidster. SCS proceeded to repair GW-4. No other damage.
- SCS proceeded to regrade eroded areas on south slope and backfilled the 25 ft of trench west of Sump #2. (1 person x 4 hrs)
- SCS has not repaired silt fence around Phase I
- HDR met with Lois / Ed Russ (County). County concerned that SCS has a lot of open trench, has not sodded the north slope , has not repaired silt fence before the rain tonight or tomorrow morning. HDR informed County that SCS will backfill open trench on east slope (leaving the end of trench open for the stringer) before the end of day
- HDR also informed County that SCS is aware of sodding requirements, silt repair. HDR has no control of SCS's construction and they are ultimately responsible for any erosion repairs
- 4" branch saddle for GW-12 lateral installed at STA 2+53
- SCS installed GW-12 lateral (50' of 4" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 8' risers for all pipes
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill trench from STA 1+75 to STA 3+75
- SCS left the site at 6:00 pm



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/26/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
71 F	54 F		Cloudy	0.31 inches

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	
Brandon Swift	Laborer / Driver	
Ray Perez	Laborer / Driver	
Joel Sanchez	Laborer / Driver	
Fred Harlan	Laborer / Driver	
Abel Sanchez	Laborer / Driver	
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
- Due to rain last night, SCS is not working today
- SCS left the site at 8:30 am
- HDR informed SCS again that silt fence needs to be repaired, pick up blown litter. SCS said that will repair / clean tomorrow
- Sumps # 4 and # 5 arrived this week. HDR check dimensions
- HDR / County / Veolia / SCS met to discuss erosion and drainage issues at Phase I.

Refer to meeting minutes for additional information

Meeting Minutes  
March 26, 2010

**Attendees:**

Ed Russ (ER), Sarasota County  
Dan McAllister (DM), Sarasota County  
Jim (JS), Sarasota County  
Tim (T ), Veolia  
Richard Siemering (RS), HDR  
Carlos Restrepo (CR), HDR  
Johnny Meier (JM), SCS Field Services (via phone)

**I. Introduction**

This meeting has been scheduled to address erosion and sediment transportation at Phase I

**II. Erosion Control**

RS stated that sediment transportation on all slopes, silt fence built up, and bench regrading at Phase I are required to be repaired / maintained through out the remaining of the construction project. Veolia's daily landfill operations and SCS's landfill gas construction operations must be coordinated in order to facilitate compliance with FDEP and all other regulatory requirements. Veolia and SCS must coordinate efforts. Erosion is part of any construction operation but SCS must be proactive in maintaining disturbed areas.

RS stated that according to SCS, the silt built up at the bench is due to erosion from the upper tier and due to the fact that Veolia has removed their silt fence. This excess silt has moved to SCS's area.

RS stated that according to Veolia, SCS has not properly graded the bench, therefore, silt is overtopping the bench into SCS's area.

(T ) stated that SCS is cutting the bench down, therefore, Veolia will loose the 5% grade they had already achieved at the bench. The additional silt transported to the bench due to erosion on upper tier is not to be used for backfilling operations on SCS project. Veolia constantly uses this silt to cover / repair slopes on upper tier.

(T ) stated that Veolia has no other issues and is not aware of SCS's contract agreement with the County and / or SCS's responsibilities. (T ) stated that Veolia is responsible for the transported silt to the bench and has no problem fixing the bench but it must be placed into design grades before Veolia does any repairs.

JM stated that SCS is responsible to place bench into design grades. JM does not believe bench was at design grade before moving his equipment to Phase I.

(T ) stated that if SCS fixes the bench, Veolia has no problem in removing silt accumulating in bench after a rain event.

(T ) stated again that silt on bench should not be used as backfill for SCS's project. (T stated that SCS was cutting down 3 ft of silt at the bench and it was Veolia's backfill. Veolia takes full responsibility on anything that happens on their side

JM stated again that bench was not at 5% but was trying to maintain it and moved some of the silt up the slope

(T ) asked JM if SCS will put bench o design grades

JM agreed on putting bench to design grades after construction completion

RS stated that SCS and Veolia must work together on resolving drainage and erosion problems. SCS needs to coordinate any work done at the landfill with Veolia and must leave the bench to design grades. SCS needs to be proactive and remove any visible trash , blown litter, and repair /maintain silt fencea

JM stated that SCS will repair / maintain silt fence , remove trash, pick up blown litter

(T ) stated that north bench has not been graded by SCS and if it rains, it will affect the recently placed sod

RS stated that SCS must regrade north slope bench as soon as possible

JM agreed.

ER asked SCS if they have selected a sod company to start sodding the northwest portion SCS is responsible for. ER stated that the County has already completed their part for sodding

(J ) stated that he believes SCS has no knowledge of the importance of having the benches graded

(T ) stated that Veolia had reached design grades on east bench about 1 year ago and did additional work last week. Therefore Veolia had the benches per design

RS stated that bench grading will be addressed again at the weekly progress meeting next week and that Veolia needs to coordinate with County and HDR to address this issue and be able to come to a final agreement.



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/27/2010	Day: Saturday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
79 F	63 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Brandon Swift	Laborer / Driver	
Ray Perez	Laborer / Driver	3 X Excavator - Kobelco , Komatsu
Joel Sanchez	Laborer / Driver	3 X Truck F-250
Fred Harlan	Laborer / Driver	
Abel Sanchez	Laborer / Driver	
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS installed GW-13 lateral (15' of 4" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 8' risers for all pipes
- GW-13 installed as Type 1. 24" header not close enough to install as Type 2 per documents. HDR approved change
- SCS decided not to continue excavation today due to expected rain on Sunday March 28, 2010
- SCS proceeded to backfill GW-13 trench
- SCS left the site at 12:00 pm



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/29/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
67 F	54 F		Overcast / Rain (AM)	

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	
Brandon Swift	Laborer / Driver	
Ray Perez	Laborer / Driver	
Joel Sanchez	Laborer / Driver	
Fred Harlan	Laborer / Driver	
Abel Sanchez	Laborer / Driver	
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- Due to rain on Sunday March 28, 2010 and early morning today, SCS did not work.
- HDR informed SCS that silt fence around Phase I was not repaired last week and it should be a priority for the next working day. Several areas are eroded and must be repaired as soon as possible.

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 3/30/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
71 F	53 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Brandon Swift	Laborer / Driver	2 X Excavator – Kobelco , Komatsu
Ray Perez	Laborer / Driver	2 X Truck F-250
Joel Sanchez	Laborer / Driver	
Fred Harlan	Laborer / Driver	
Abel Sanchez	Laborer / Driver	

### Work Performed:

- SCS arrived on site at 7:00 am
  - SCS proceeded to repair silt fence on south slope (7 am – 2 pm) then north slope (2 pm – 6 pm)
  - FD & C (Subcontractor) on site to layout compressor pad east of Flare Station pad ( 10' x 10' and 4' offset from Flare Pad)
  - EC Electrical (Subcontractor) on site. Began trenching for electrical conduit from power pole to Flare Station pad. Trench 3 ft deep. 3" SCH 80 PVC conduit pipe placed in trench, 2' of cover, warning tape, 1' of cover
  - SCS started removing silt accumulated on east slope. Silt will be moved up slope. Veolia responsible for regarding top east slope
  - 2<sup>nd</sup> crew not present today. Will be back tomorrow
  - Silt accumulated on east perimeter swale to be removed by Veolia. Silt accumulated on south and north perimeter swales to be removed by Veolia / SCS
- ❖ During Progress Meeting #10, the following was addressed:
- SCS to coordinate with Veolia for sediment and erosion control
  - SCS to repair silt fence as soon as possible. Damaged silt fence must be replaced
  - SCS to install sod on north slope as soon as possible
  - SCS to remove downchute pipe on south slope and backfill eroded area





## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1		Date: 3/31/2010	Day: Wednesday
Project Owner: Sarasota County		Contractor: SCS Field Services	
HDR Project No. 096-124466		CQA: Carlos Restrepo (HDR)	
<b>Weather Conditions:</b>			
Temperature		Weather	Precipitation
Max.	Min.	Clear	Other
74 F	54 F	Sunny	
			none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Ray Perez	Laborer / Driver	1 X Excavator - Kobelco
Joel Sanchez	Laborer / Driver	3 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	Bobcat
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	1 X articulated dump trucks
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	Dozer
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

### Work Performed:

- SCS arrived on site at 7:00 am
- SCS started access road at southeast corner heading upslope for excavator access
- SCS started regarding south slope and moving silt up slope ( 1 person x skidster)
- A gravel access pad installed at southeast corner
- SCS continued excavation on east slope from STA 4+50 to STA 5+75 (using a laser level to achieve a 5% slope) - 2<sup>nd</sup> crew
- EC Electrical (subcontractor) excavating for telephone line installation from Flare Station to Maintenance Bldg  
1" SCH 80 PVC conduit pipe placed in trench, 2' of cover, warning tape, 1' of cover. Telephone conduit line placed directly south from Flare Station then east (offset 2' from paved road inside maintenance bldg area) then south (offset 2' from paved road)
- FD & C (subcontractor) continues preparing area for compressor pad
- SCS started dressing up north slope for sod installation on Friday April 2, 2010
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill trench from STA 4+00 to STA 5+25
- SCS left the site at 6:00 pm

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/1/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
77 F	58 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Brandon Swift	Laborer / Driver	2X Excavator – Kobelco , Komatsu
Ray Perez	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Fred Harlan	Laborer / Driver	2 x articulated dump trucks
Abel Sanchez	Laborer / Driver	Dozer
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am.
- SCS continued excavation on east slope from STA 5+75 to STA 7+25 (using a laser level to achieve a 5% slope) – 2<sup>nd</sup> crew
- 24" SDR 17 (header), 4" SDR 9 (condensate), 2" SDR 9 (airline) placed in trench
- FD&C (Subcontractor) continues working on compressor pad
- EC Electrical (subcontractor) excavating for telephone line installation from Flare Station to Maintenance Bldg
- Ardaman and Associates (CQA Test) on site for subbase compaction test around compressor pad area. Compaction test at 127 pcf
- FD&C (Subcontractor) proceeded to pour concrete for compressor pad
- EC Electrical (subcontractor) required clarification on ground ring around flare station. HDR informed EC to contact flare vendor for Requirements. Flare vendor requires ground ring to be 10 ft offset from flare pad and compressor pad
- 6" branch saddle for GW-14 lateral installed at STA 5+50
- SCS installed GW-14 lateral (10' of 6" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 8' risers for all pipes 5' of 4" SDR 11 extension and 5' of 2" and 4" SDR 9 extension
- GW-14 changed from Type 2 to Type 1 – GW-14 not close enough to header for Type 1. HDR approved change
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill trench from STA 5+25 to STA 7+00
- SCS left the site at 6:00 pm



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/2/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
80 F	60 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	2X Excavator – Kobelco , Komatsu
Brandon Swift	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	2 x articulated dump trucks
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	Dozer
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS continued excavation on east slope from STA 7+25 to STA 9+50 (using a laser level to achieve a 5% slope) – 2<sup>nd</sup> crew
- 24" SDR 17 (header), 4" SDR 9 (condensate), 2" SDR 9 (airline) placed in trench
- 6" branch saddle for GW-15 lateral installed at STA 7+17
- 8" branch saddle for AP installed at STA 7+50
- EC Electrical (subcontractor) continues conduit installation. Will return back on site during week of April 12-16, 2010 after SCS has placed flare station and compressor on pads
- Sod Company on site installing sod on north slope
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill trench from STA 7+00 to STA 8+50
- SCS left the site at 6:00 pm



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/3/2010	Day: Saturday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

## Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
81 F	61 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobelco , Komatsu
Brandon Swift	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	2 x articulated dump trucks
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	Dozer
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

## Work Performed:

- SCS arrived on site at 7:00 am
- SCS connected U-2 and remote wellhead (north slope) to LCO-3N. Existing flare stack abandoned. Remaining connections (LCO-1N, LCO-2N, LCO-4N) to be completed next week
- SCS installed GW-15 lateral (34' of 6" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 8' risers for all pipes 5' of 4" SDR 11 extension and 5' of 2" and 4" SDR 9 extension
- SCS installed GW-16 lateral (52' of 6" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 8' risers for all pipes 5' of 4" SDR 11 extension and 5' of 2" and 4" SDR 9 extension
- SCS did not take levations of laterals. Laterals have more than 5% slope. HDR approved
- SCS proceeded to backfill laterals and LCO-3N connections
- SCS left the site at 4:00 pm



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/5/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
85 F	62 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalco
Brandon Swift	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	1 X articulated dump trucks
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS continued excavation on east slope from STA 9+50 to STA 10 + 25 (using a laser level to achieve a 5% slope) – 2<sup>nd</sup> crew
- 24" SDR 17 (header), 4" SDR 9 (condensate), 2" SDR 9 (airline) placed in trench
- SCS connected remote wellhead lateral (north slope) to LCO-4N. 10' of 6" SDR 11 riser at LCO-4N. Lateral was previously installed.
- SCS connected remote wellhead lateral (north slope) to LCO-2N. 10' of 6" SDR 11 riser at LCO-2N. Lateral was previously installed. Connection to LCO-1N to be completed after 24" header (east slope) is air tested
- Sod company on site installing sod on north slope. SCS coordinated with Veolia (landfill operator) for areas on north slope that are not responsibility of SCS. Veolia to coordinate payment to SCS for sodding this area
- HDR clarified to SCS that SCS is not responsible to re-sod areas where sod is dead unless they were disturbed during construction. Dead sod areas are responsibility of County
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill trench from STA 8+50 to STA 9+50
- SCS left the site at 6:00 pm



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/6/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
81 F	61 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko
Brandon Swift	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	1 x water truck
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	3 X articulated dump trucks
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS continued excavation on east slope from STA 10+25 to STA 11+64 (using a laser level to achieve a 5% slope) – 2<sup>nd</sup> crew
- 24" SDR 17 (header), 4" SDR 9 (condensate), 2" SDR 9 (airline) placed in trench. Flange at end of 24" header to connect 24" header valve pit.
- 24" header valve pit (east slope) to be installed approx. 15' north of surveyed location. SCS does not have additional 24" pipe  
SCS has installed 1150 LF of 24" pipe. HDR approved change
- KO on east slope will be replaced with a 18" x 24" x 30" wye. Wye to be connected to outlet side of 24" header valve pit. Since no  
Additional 24" pipe available, Wye will be installed approx. 25' north of surveyed location. HDR approved change
- Pipe crew began fusing 4" SDR 11 / 4" and 2" SDR 9 for GW-17 / 18 laterals
- Sod company on site at 12:00 pm. Began installing sod on north slope
- 4" branch saddle for GW-17 lateral installed at STA 10+25
- SCS started watering sod installed on north slope
- SCS took elevations every 25 ft. Pipe met required slope
- Due to valve pits / wye installation at the end of 24" pipe. Trench will not be completely backfilled.
- SCS left the site at 6:00 pm



## Daily Field Report (Continued)

Date: 4/6/2010 Tuesday

❖ During Progress Meeting #11, the following was addressed:

- SCS to clean north and south perimeter swales
- SCS to repair/ maintain silt fences
- SCS to coordinate with Veolia (landfill operator) for grading benches
- SCS to set flare station / stack / compressor onto concrete pads this week
- SCS to air test 24" header this week



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/7/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
81 F	63 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko
Brandon Swift	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	1 x water truck
Ray Perez	Laborer / Driver	2 X articulated dump trucks
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
- Flare station / Stack placed onto concrete pads. Compressor and additional connections / assemblies to be done at a later date
- SCS installed GW-17 lateral (80' of 4" SDR 11), 2" SDR 9 (airline) and 4" SDR 9 (condensate) in the trench. 8' risers for all pipes
- 4" branch saddle for GW-18 lateral installed at STA 11+40. Lateral to be installed at a later date
- SCS installed 24" header valve pit and 4" Forcemain valve pit (for 24" header)
- Ed Russ (County) provided Invert elevations of 24" outlet from header valve pit and top of paved road in order to calculate slope for 30" header pipe. 30" header will have to be adjusted to 2.5% slope between the 24" header valve pit and the existing anchor trench in order not to damage liner. (Approx. 170 LF at 2.5%) After 30" header crosses the anchor trench, header will continue at the required slope underneath south access road. HDR approved change
- 18" x 24" x 30" Wye connected to 24" header valve pit
- Sod company not on site today.
- SCS proceeded to excavate in several locations along the proposed 30" header (outside the landfill) in order to determine groundwater elevation. SCS excavated an average of 9' deep holes and found minimum groundwater. After 1 hour, water started seeping to holes from the existing swale. SCS proceeded to pump stormwater in swale up north to allow remaining water to dry out before excavating for 30" header
- SCS left the site at 6:00 pm





## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/8/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
81 F	67 F	Partly Cloudy		none

Contractor's Employees / Title		Equipment Used
Jhonny Meler	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko
Brandon Swift	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	1 x water truck
Ray Perez	Laborer / Driver	2 X articulated dump trucks
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am.
- SCS proceeded to excavate at the southeast corner to verify one more time elevation on anchor trench. There will be 4.1' vertical offset between the invert of 24" header pipe and top of anchor trench. 30" pipe will be placed at 2.5%
- SCS proceeded to repair silt fence along the south slope
- SCS took elevations of 18" header on south slope and 18" inlet at the 18" x 24" x 30" wye to verify slope. Remaining 18" pipe connecting wye will have the required 5% slope
- SCS conducted air test on 24" header and 4" forcemain pipes at the east slope. Air test conducted at GW-18. Pipes tested at 10 psig for 1 hour. No loss in pressure.
- 2" airline will be tested tomorrow after the airline valve pit is installed. SCS proceeded to remove aluminum skillet used at U-1 at the 18" x 24" reducer after air test.
- SCS continued dressing up east slope. Sod company delivered sod at 3:00 pm. Sod will be installed tomorrow  
SCS started saw cutting paved roads along the 30" header. Saw cutting on last paved road before crossing to flare station to be done at a later date
- SCS installed 18" header valve pit on east slope. Remaining 18" header will be connected to end of 18" header on south slope tomorrow
- SCS left the site at 6:00 pm

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/9/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Don Whiting (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	Light AM rain
75 F	70 F	Mostly Cloudy		

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	JCB Forklift
Steve Miller	Laborer / Driver	3 X Excavator -- Kobelco, Komatsu
Brandon Swift	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	1 x water truck
Ray Perez	Laborer / Driver	3 X articulated dump trucks
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	Dozer
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	

### Work Performed:

- SCS arrived on site at 7:00 am
- Excavated trench for header from 18" header valve pit heading south and east to match exist. trench at approx. Sta. 9+00+/-.
- SCS installed 175 LF of 18" header in trench from Sta. 9+00+/- on south slope to 18" header isolation valve pit on east slope.
- Crew installed 4" forcemain between both FM valve pits on east slope. Installed 4x4 tee (in place of wye) for forcemain running south.
- SCS installed 2" risers, 2" ball valve and valve pit for air line on east slope north of header wye.
- Subcontractor installed sod on north slope of landfill.
- SCS installed 220+/- LF of 4" FM and 225+/- LF of 2" air line from Sta. 9+00+/- on south slope to header wye location on east slope.
- Excavated between U-Trap U1 and LCO-1.
- SCS installed 4" pipe from U1 to LCO-1 and 4" pipe from forcemain to LCO-1 at northeast corner of landfill.
- SCS began backfilling 18" header from Sta. 9+00+/- on south slope to 18" header isolation valve pit on east slope.



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/10/2010	Day: Saturday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: (HDR)	

## Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
82F	60F	Sunny		.24

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko
Brandon Swift	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	1 x water truck
Ray Perez	Laborer / Driver	2 X articulated dump trucks
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	
	Laborer / Driver (2 <sup>nd</sup> crew)	

## Work Performed:

- SCS arrived on site at 7:00 am
- Installed U-1 into LCO-1N (25' of 4" SDR 11 and 25' of 4" SDR 9) at the NE corner.
- Installed 27' of 6" SDR 11 to remote well head riser at LCO-1N at NE corner.
- Backfilled pipe and trench on NE corner.
- Continued sodding of north slope including NE corner.
- Installed 2" airline valve pit
- Placed 60' of downcomer pipe to swale for drainage.
- Cleaned up road and site for possible rain on Monday.
- SCS worked ½ day.
-

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/12/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
81 F	63 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	1 X Excavator – Kobalco
Brandon Swift	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	Forklift
Ray Perez	Laborer / Driver	2 X articulated dump trucks
Fred Harlan	Laborer / Driver	1 x Dozer
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	

### Work Performed:

- SCS arrived on site at 7:00 am
- SCS continued excavation on south slope from Sump # 2 at STA 0+00 heading west to STA 1+75 (using a laser level to achieve a 5% slope)
- 18" SDR 17 (header), 4" SDR 9 (condensate), 2" SDR 9 (airline) placed in trench
- 18" x 4" SDR 11 tee for GW-24 installed at STA 0+35. GW-24 lateral to be installed tomorrow
- SCS plans to continue with 30" header tomorrow
- SCS proceeded to install flame arrestor , check valve , pipe between flare station and stack, pipe stands at flare station
- HDR to contact Shaw (Flare manufacturer) for leak at flame control box
- Sod company not on site today
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill trench from STA 0+00 to STA 1+50
- SCS left the site at 6:00 pm



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/13/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
82 F	65 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko
Brandon Swift	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	
Fred Harlan	Laborer / Driver	3 X articulated dump trucks
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

<ul style="list-style-type: none"><li>SCS arrived on site at 7:00 am</li></ul>
<ul style="list-style-type: none"><li>Sod company on site delivering / installing sod on north slope</li></ul>
<ul style="list-style-type: none"><li>SCS continued excavation on south slope from STA 1+75 heading west to STA3+30 End of Pipe (using a laser level to achieve a 5% slope)</li></ul>
<ul style="list-style-type: none"><li>18" SDR 17 (header), 4" SDR 9 (condensate), 2" SDR 9 (airline) placed in trench</li></ul>
<ul style="list-style-type: none"><li>18" x 4" SDR 11 tee for GW-25 installed at STA 1+83.</li></ul>
<ul style="list-style-type: none"><li>GW-24 lateral installed. 81 LF of 4" SDR 11 / 4" SDR 9 / 2" SDR 9. 6' risers all pipes</li></ul>
<ul style="list-style-type: none"><li>SCS conducted air test on 2" line – east slope. 10 psig for 1 hour. No loss in pressure</li></ul>
<ul style="list-style-type: none"><li>GW-25 lateral to be installed tomorrow</li></ul>
<ul style="list-style-type: none"><li>18" x 4" SDR 11 tee for GW-26 installed at STA 3+25</li></ul>
<ul style="list-style-type: none"><li>GW-26 lateral to be installed tomorrow</li></ul>
<ul style="list-style-type: none"><li>Hyatt (Subcontractor) on site for survey on east and south slope. (laterals to LCO on south slope not surveyed)</li></ul>
<ul style="list-style-type: none"><li>SCS took elevations every 25 ft. Pipe met required slope</li></ul>
<ul style="list-style-type: none"><li>SCS proceeded to backfill trench from STA 1+50 to STA 3+30. Blind flange for 18" header installed at STA 3+30 for future connection</li></ul>
<ul style="list-style-type: none"><li>SCS left the site at 6:00 pm</li></ul>



## Daily Field Report (Continued)

Date: 4/13/2010 Tuesday

❖ During Progress Meeting #12, the following was addressed:

- SCS to coordinate with Veolia to bring benches to design grades
- SCS to clean north perimeter swale
- SCS will start working 12 hour shifts. Major construction activities requiring HDR supervision will stop at 5 pm.
- SCS / HDR / County to measure remaining areas on east slope where SCS is not required to sod.



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/14/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
80 F	64 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko
Brandon Swift	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	
Ray Perez	Laborer / Driver	
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
- Sod company on site. Finished north slope then moved to east slope
- GW-25 lateral installed. 63 LF of 4" SDR 9 (lateral) / 4" SDR 9 / 2" SDR 9 installed. 6' risers all pipes. SCS took elevations. Pipe met required slope. 4" SDR 9 used instead of 4" SDR 11 for lateral. HDR approved
- GW-26 lateral installed. 35 LF of 4" SDR 11 / 4" SDR 9 / 2" SDR 9 installed. 6' risers all pipes. SCS took elevations. Pipe Met required slope
- SCS installed 4" / 2" blind flanges at EOP STA 3+30
- 2<sup>nd</sup> crew excavated at north edge of exist. paved road to locate exist. ERCP and at limits of liner. 6" of backfill will be required on top of exist. liner. 30" pipe will have a slope of 11% crossing road and approx. 2.2% between wye and exist. road
- 42" RCP will be installed 6" above exist. ERCP. Compaction required at 95% modified proctor.
- 1<sup>st</sup> crew left at 8:00 am for drug test. Returned at 12:00 pm.
- SCS provided HDR survey elevations for 24" TOP at HP and 24" TOP at wye. It was determined that SCS moved HP north therefore, pipe invert at wye is 5' lower than required. SCS responsible to adjust valve pits at southeast corner. All valves will have 2' exposed at the upgradient side
- SCS proceeded to removed asphalt in access road.
- SCS continued dressing up south slope
- SCS left the site at 6:00 pm



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/15/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
81 F	62 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	1 X Excavator – Kobalko
Brandon Swift	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Fred Harlan	Laborer / Driver	Forklift
Ray Perez	Laborer / Driver	2 X articulated dump trucks
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am.
- Pipe crew began fusing 6" SDR 11 pipe for remote wellhead laterals on south slope
- SCS air tested 18" header on south slope at 5 psig for 1 hour. Sump # 2 connected to 18" header not recommended for 10 psig test HDR approved. No pressure loss. 4" and 2" SDR 9 lines on south slope tested at 10 psig for 1 hour. No loss in pressure
- 2<sup>nd</sup> crew continued excavation across south access road for installation of 42" RCP – Class V. 42" RCP installed at 11% slope starting at edge of existing liner to south edge of road – Approximately 64LF of 42" RCP (37 LF of RCP north of exist. road)
- Sod company on site installing sod on east slope. SCS decided to sod only disturbed areas and will not replace dead sod on east slope.
- Ed Russ / Jim Szala (County) installing stake marks on south / east / north benches. SCS to regrade benches based on County markings. Areas in bench not disturbed by SCS during construction will need to be regarded by Veolia before SCS proceeds to adjust grades
- 42" RCP installed SCS proceeded to backfill to spring line. Compaction test tomorrow
- SCS air tested LCO-3S lateral. 10 psig for 1 hour. No loss in pressure
- SCS left the site at 6:00 pm





# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/16/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
78 F	62 F		Mostly Cloudy	none

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	JCB Forklift
Steve Miller	Laborer / Driver	2 X Excavator – Kobelco, Komatsu
Brandon Swift	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	
Ray Perez	Laborer / Driver	2 X articulated dump trucks
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	Dozer
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
- Continued backfill and compaction at road crossing.
- Ardaman (CQA Sub) on site for compaction test. 95% modified proctor required. Obtained 100% at spring line of 42" RCP.
- Nodarse (CQC Sub) on site for compaction test. Obtained 98% and 100% at top of grade
- Top 6" of backfill at road crossing will be removed before paving. SCS required to compact backfill before placing asphalt
- HDR met with Ed Russ (County) to discuss intermediate cover elevations on east slope. Ed Russ concerned that downchute on
- Northeast part is in a different location than shown on fill sequence drawings. HDR will review and provide County a response
- SCS installed LCO-3S remote wellhead lateral – 40 LF of 6" SDR 11.
- SCS air tested laterals for LCO -2S and LCO- 1S
- SCS installed LCO-2S remote wellhead lateral – 163 LF of 6" SDR 11
- SCS proceeded to turn over blower at flare station ( bearing maintenance)
- SCS placed 30" header inside 42" RCP. Fused flange. Connection to wye tomorrow
- 30" header will have a 2.2% between wye and edge of liner. (30" header installed 6" above liner) HDR approved.
- SCS left the site at 6:00 pm



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/17/2010	Day: Saturday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
80F	67F		Mostly Cloudy	none

Contractor's Employees / Title		Equipment Used
Steve Miller	Laborer / Driver	2 X Excavator – Kobalco
		2 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	1 x water truck
Ray Perez	Laborer / Driver	2 X articulated dump trucks
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS continued excavation from wye STA 0+00 towards access road STA 1+95
- 30" header / 4" SDR 9 / 2" SDR 9 placed in trench
- Sod company not on site today
- SCS took elevations every 10 ft between wye and road. Pipe at approximately 2%.
- SCS proceeded to backfill trench from STA 0+00 to STA 1+95
- SCS left the site at 4:30 pm



Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/19/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
74 F	69 F		Mostly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko
		3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	
Ray Perez	Laborer / Driver	
Fred Harlan	Laborer / Driver	1 x Dozer
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Dennis Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
- Began trenching and installation of LCO-1S. LCO-1S with 40' of CMP. CMP starts 20' south of header. (71 LF of 6" SDR 11)
- 2<sup>nd</sup> crew installing flange on 30" header that will connect to Sump # 3. 2<sup>nd</sup> crew air tested 30" header starting at Wye to flange at Sump # 3. 10 psig for 1 hour. No loss in pressure. Sump # 3 tested by Manufacturer. Sump # 3 not tested in the field
- SCS continues grading east bench
- Hyatt (Subcontractor) on site taking elevations of 24" header at HP (east slope) and at Wye. Hyatt determined that SCS moved HP on east slope, therefore, affecting header elevation at southeast corner. SCS responsible to adjust valve pits at southeast corner
- Sod company on site installing sod on south slope. East slope to continue later
- SCS proceeded to adjust 4" / 2" valve pits at southeast corner (for 18" and 24" header lines). Valve pits will be required to have 2 ft exposed at the upgradient side
- SCS proceeded to backfill trench for LCO-1S. Pipe met required slope. Markings left for start/end of CMP
- SCS left the site at 6:30 pm



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/20/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
79 F	69 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	3 X Excavator – Kobalco
Brandon Swift	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Abel Sanchez	Laborer / Driver	Water truck
Fred Harlan	Laborer / Driver	2 X articulated dump trucks
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	1 x Dozer
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
  - Sod company on site installing sod on south slope
  - SCS continues adjusting valve pit elevations at southeast corner
  - 2<sup>nd</sup> crew continues excavation south of access road STA 2+69 towards Sump # 3 STA 3+97
  - 30" SDR 17 / 4" SDR 9 / 2" SDR 9 installed in trench. 30" header will have 3% slope from access road towards Sump # 3
  - EC Electrical (Subcontractor) on site continues electrical connection at Flare Station. Ground ring installed around Flare pad and Compressor pad (10' offset from concrete pads)
  - SCS installed wellhead for GW-26
  - SCS continues watering sod on south slope
  - SCS left the site at 6:00 pm
- 
- ❖ During Progress Meeting #13, the following was addressed:
    - SCS to clean perimeter swales at the end of project. Areas directly at downchute exits are responsibility of Veolia
    - Veolia in agreement with SCS to grade benches



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/21/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
77 F	63 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko
Brandon Swift	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Fred Harlan	Laborer / Driver	2 x dump trucks
Ray Perez	Laborer / Driver	Water truck
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
- 2<sup>nd</sup> crew started excavating at Sump # 3. Stormwater from east perimeter swale seeping to Sump # 3 excavation. SCS will dewater per approved dewatering plan. Water from Sump # 3 to be pumped at CO-13 (west of Flare station)
- SCS installed wellheads for GW-25 / 24 / 23 / 22 / 21 / 20 / 19 / 18 / 17 / 16 / 15 / 14 / 13 / 12
- Wellheads for GW-11 and 3 remote wellheads on south slope to be installed at a later date
- SCS started dewatering Sump # 3. Ed Russ (County) shut down Phase 2 pumps. SCS proceeded to disconnect lid at CO-13. FM line needed to be emptied before connecting dewatering line. HDR / County approved change to empty truck directly at existing leachate storage tank. SCS agreed. No additional cost to County. SCS will rinse water truck before using it to watering sod  
Truck will be rinsed at Exist. leachate storage tank (inside splash pad)
- 2<sup>nd</sup> crew decided to leave Sump # 3 installation for later this week. Waiting for all stormwater in east perimeter swale to drain
- 2<sup>nd</sup> crew proceeded to excavate at yard waste road crossing # 1. Removed asphalt and started 42" RCP installation.
- 2<sup>nd</sup> crew using Hyatt's survey for depth of trench. 42" RCP will be installed at 1% per requirements.
- 2<sup>nd</sup> crew installed 5 x 42" RCP. Backfilled to spring line with existing soil and compacted.
- EC Electrical (Subcontractor) on site continues electrical connection at flare station
- SCS left the site at 6:00 pm

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/22/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
82F	64 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	3 X Excavator – Kobalko
Brandon Swift	Laborer / Driver	3 X Truck F-250
Joel Sanchez	Laborer / Driver	Flat bed F-450
Fred Harlan	Laborer / Driver	Forklift
Ray Perez	Laborer / Driver	2 X articulated dump trucks
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	1 x Dozer
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	

### Work Performed:

- SCS arrived on site at 7:00 am.
- 2<sup>nd</sup> crew continued installing 42" RCP at yard waste road crossing # 1. Total of 9 x 42" RCP (72 LF). Proceeded to backfill to Spring line and compacted. Additional lifts every 6" and compacted. Nodarse (Subcontractor) on site for CQC soil testing. Nodarse tested compaction for subbase. Obtained 100%. SCS proceeded to continue backfill with existing soil and compacting. Last 2 ft of cover (road base) will be limerock. First 6" of limerock tested. Obtained 96%. Additional lifts will be tested tomorrow by CQA.
- EC electrical (subcontractor) on site continues electrical connections at flare station
- Sod company on site continues installing sod on south slope. SCS removed silt fence on south slope
- Veolia regrading south bench
- SCS left the site at 6:00 pm



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/23/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
83 F	67 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	JCB Forklift
Steve Miller	Laborer / Driver	2 X Excavator – Kobelco, Komatsu
Brandon Swift	Laborer / Driver	3 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Ray Perez	Laborer / Driver	Water truck
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	2 X articulated dump trucks
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	Dozer
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
- SCS began excavating again at Sump # 3. Encountered a rock layer for last 3 ft of excavation. SCS trying to removed rock for 4 hrs
- SCS finished installing and compacting base for yard waste road crossing # 1.
- 2<sup>nd</sup> crew fusing flange at 30" line that will connect to Sump # 3
- SCS began dewatering Sump # 3 excavation. Approx. 1.5 ft of water
- Sod company installing sod on east slope
- Ardaman (CQA) on site to test yard waste road crossing # 1. Obtained 112% compaction
- EC Electrical (Subcontractor) on site continues electrical connection at flare station
- Jack Gibson and Jim Cox (County) on site to verify compliance with trench safety after they received a call from operations. HDR informed County that SCS personnel were never in the trench. No other concerns from County.
- SCS installed Sump # 3. 10 CY of concrete placed around Sump # 3. Additional crushed gravel used to continue backfilling Sump # 3 up to invert of 30" lines.
- SCS left the site at 6:00 pm



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/24/2010	Day: Saturday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
84 F	70 F	Sunny		none

Contractor's Employees / Title		Equipment Used
Johnny Meler	Superintendent	JCB Forklift
Steve Miller	Laborer / Driver	2 X Excavator – Kobelco, Komatsu
Brandon Swift	Laborer / Driver	3 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Ray Perez	Laborer / Driver	Water truck
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	1 X articulated dump trucks
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	Dozer
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	

### Work Performed:

- SCS arrived on site at 7:00 am
- 2<sup>nd</sup> crew started trench excavation from Sump # 3 STA 4+00 to start of 42" RCP (yard waste road crossing # 1) STA 5+09 then from end of 42" RCP (yard waste road crossing # 1) STA 5+82 to STA 6+82 (using a laser level to achieve a 1% slope)
- SCS continued dewatering around Sump # 3. Total of 4 water trucks needed to dewater.
- Sod Company on site installing sod on east slope.
- EC Electrical (Subcontractor) on site continues electrical connection at flare station.
- 30" header air tested. 10 psig for 1 hr. No loss in pressure
- 30" header connected to Sump # 3. 4" and 2" SDR 9 also installed in trench. 4" / 2" risers (10 LF) installed at Sump # 3
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill trench from STA 4+00 to STA 5+09
- SCS left the site at 6:00 pm





# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/26/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
80 F	67 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko
Brandon Swift	Laborer / Driver	3 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Fred Harlan	Laborer / Driver	1 x Forklift
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Dennis Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
- EC Electrical (Subcontractor) on site continues electrical connection at Flare Station. Pouring concrete for control panel pad
- **SCS dewatering east perimeter swale due to rain during the weekend (1.19 inches)**
- 2<sup>nd</sup> crew started moving 42" RCP to yard waste road crossing # 2.
- SCS continues all morning pumping water from east perimeter swale. SCS blocking water up north in same perimeter swale.
- HDR met with Jack Gibson (County) to discuss dewatering issues. No other concerns from County. Ed Russ (County) informed SCS that Veolia will not dewater perimeter swale. Perimeter swale have ditch blocks preventing water to continue flow up north. SCS may continue blocking water using soil.
- SCS continued excavation in the afternoon. Excavated from STA 5+82 (south of yard waste road crossing # 1) to STA 7+34 (HP) then to STA 9+45 (LP) at Sump # 4 (using a laser level to achieve a 1% slope)
- 30" header, 4" and 2" SDR 9 lines placed in trench
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill trench from STA 5+82 to STA 9+25
- SCS continued dressing up area around Sump #3
- Sod company not on site today. East slope remains for sodding
- SCS left the site at 6:00 pm

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/27/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
77 F	62 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalco
Brandon Swift	Laborer / Driver	3 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Fred Harlan	Laborer / Driver	Water truck
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	1 X articulated dump trucks
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	1 x Dozer
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	1 x Forklift

### Work Performed:

- SCS arrived on site at 7:00 am
- SCS began excavating for Sump # 4 installation.
- SCS continues dressing up area from Sump # 3 towards Sump # 4
- HDR met with Ed Russ (County) to select Phase II leachate forcemain pipe markers that will be removed. Pipe markers will be used for the 30" header outside of landfill. Total of 8 pipe markers selected. HDR provided markers to SCS for installation
- Sod company not on site today
- EC Electrical (Subcontractor) on site continues electrical connection at flare station. HDR Electrical Engineer on site to inspect electrical work at flare station
- SCS encountered a rock layer for last 3 ft of excavation at Sump # 4. SCS trying to removed rock for 2 hrs
- SCS installed Sump # 4. 10 CY of concrete placed around Sump # 4. Additional crushed gravel used to continue backfilling Sump # 4 up to invert of 30" lines.
- SCS left the site at 6:00 pm

### ❖ During Progress Meeting #14, the following was addressed:

- Hydroseeding permitted along the 30" header
- County to provide SCS information on existing Phase I leachate FM piping location near the flare station



## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/28/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
76F	60F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko
Brandon Swift	Laborer / Driver	3 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Fred Harlan	Laborer / Driver	1 x dump trucks
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	Water truck
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am
- EC Electrical (Subcontractor) on site continues electrical connection at flare station
- 2<sup>nd</sup> crew proceeded to excavate at yard waste road crossing # 2. Removed asphalt and started 42" RCP installation.
- 2<sup>nd</sup> crew using Hyatt's survey for depth of trench. 42" RCP will be installed at 1% per requirements.
- 2<sup>nd</sup> crew installed 7 x 42" RCP (56 LF). Backfilled to spring line with existing soil and compacted. 6" lifts after that and compacted. last 2 ft of backfill with Limerock. Compaction test tomorrow
- SCS continues dewatering at Sump # 4. Water pumped to existing leachate storage tank.
- SCS proceeded to remove sediments at collection sump (containment pad at existing leachate storage tank). Ed Russ (County) present during cleaning. County approved cleaning of collection sump.
- SCS stop working at 4:00 pm for monthly safety meeting. 2<sup>nd</sup> crew continued backfilling at yard waste road crossing # 2
- Sod company not on site today. East slope remains to be sodded
- SCS left at 6:00 pm



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/29/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
79 F	67 F		Partly Cloudy	none

Contractor's Employees / Title		Equipment Used
Jhonny Meier	Superintendent	
Steve Miller	Laborer / Driver	2 X Excavator – Kobalko
Brandon Swift	Laborer / Driver	3 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Fred Harlan	Laborer / Driver	Forklift
Chris Boggs	Laborer / Driver (2 <sup>nd</sup> crew)	1 X articulated dump trucks
Josh Adams	Laborer / Driver (2 <sup>nd</sup> crew)	1 x Dozer
Steve	Laborer / Driver (2 <sup>nd</sup> crew)	
Dustin Adams	Laborer / Driver (2 <sup>nd</sup> crew)	

**Work Performed:**

- SCS arrived on site at 7:00 am.
- SCS began excavation from STA 9+45 (Sump # 4) to STA 11+83 (HP) then to STA 12+79 (start of 42" RCP at yard waste road crossing # 2)
- 30" header air tested. 10 psig for 1 hr. No loss in pressure
- Hyatt surveyor on site to finish cut marks for 30" header from yard waste road crossing # 2 towards flare station.
- SCS continues dewatering at Sump # 4 before connecting 30" header
- EC Electrical (Subcontractor) on site continues electrical connection at flare station
- Sod delivered today. Installation tomorrow
- 30" header, 4" and 2" SDR 9 lines placed in trench
- SCS took elevations every 25 ft. Pipe met required slope
- SCS proceeded to backfill trench from STA 9+45 to STA 12+79. Warning tape placed in trench.
- SCS left the site at 6:00 pm



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 4/30/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Don Whiting (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
82 F	72 F	Partly Cloudy		None

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	JCB Forklift
Steve Miller	Laborer / Driver	3 X Excavator – Kobelco, Komatsu
Brandon Swift	Laborer / Driver	3 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
Fred Harlan	Laborer / Driver	Bobcat
Chris Boggs	Laborer / Driver	2 X articulated dump trucks
Dustin Adams	Laborer / Driver	1 x Dozer
Josh Adams	Laborer / Driver	Water Truck
Steve	Laborer / Driver	

**Work Performed:**

<ul style="list-style-type: none"><li>SCS arrived on site at 7:00 am.</li></ul>
<ul style="list-style-type: none"><li>EC Electric installed conduit for thermocouples from control panel to stack. Prepared for electrical inspection.</li></ul>
<ul style="list-style-type: none"><li>SCS excavated trench for 30" header from Sta. 13+25+/- to 14+60+/-.</li></ul>
<ul style="list-style-type: none"><li>Installed 30" header, 4" force main and 2" air line from Sta. 13+00+/- to 14+55+/-.</li></ul>
<ul style="list-style-type: none"><li>Placed and compacted limerock at road crossing at approx. Sta. 13+00+/-.</li></ul>
<ul style="list-style-type: none"><li>Subcontractor placed sod on east slope of landfill.</li></ul>
<ul style="list-style-type: none"><li>SCS pot-holed adjacent to road at approx. Sta. 16+00+/- and 18+30+/- to locate existing 6" leachate forcemain.</li></ul>
<ul style="list-style-type: none"><li>Existing forcemain not in location of gas header.</li></ul>
<ul style="list-style-type: none"><li>Placed and compacted backfill and limerock around condensate sump S-4 at approx. Sta. 9+50+/-.</li></ul>
<ul style="list-style-type: none"><li>SCS backfilled over 30" header, 4" force main and 2" air line from Sta. 13+00+/- to 14+60+/-.</li></ul>
<ul style="list-style-type: none"><li>EC Electric indicated the County Building Inspector completed electrical inspection of the flair station.</li></ul>



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/1/2010	Day: Saturday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Don Whiting (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
85 F	74 F	Partly Cloudy		None

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	JCB Forklift
Steve Miller	Laborer / Driver	3 X Excavator – Kobelco, Komatsu
Ray Perez	Laborer / Driver	3 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Chris Boggs	Laborer / Driver	Bobcat
Dustin Adams	Laborer / Driver	2 X articulated dump trucks
Josh Adams	Laborer / Driver	1 x Dozer
Steve	Laborer / Driver	Water Truck

**Work Performed:**

- SCS arrived on site at 7:00 am.
- Subcontractor placed sod along swale adjacent to 30" header south of Phase 1 landfill from approx. Sta. 3+00+/- to 8+50+/-.
- SCS installed extensions on 18" and 24" header valve pits located at the southeast corner of Phase 1 landfill.
- Subcontractor placed sod on east slope of Phase 1 landfill.
- SCS departed site at approx. 11:30 AM.



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/3/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Don Whiting (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
90 F	75 F		Partly Cloudy	None

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 x Forklift
Steve Miller	Laborer / Driver	3 X Excavator – Kobelco, Komatsu
Ray Perez	Laborer / Driver	2 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Chris Boggs	Laborer / Driver	Bobcat
Josh Adams	Laborer / Driver	2 X Articulated dump trucks
Dustin Adams	Laborer / Driver	1 x Dozer
Steve	Laborer / Driver	Water Truck

**Work Performed:**

- SCS arrived on site at 7:00 am
- Backfilled around header valve pits and installed tabs for locking bars on pit extensions at southeast corner of Phase 1 landfill.
- 8:25 am - Ardaman on site to check densities at header road crossings (Sta. 8+30+/- & 13+00+/-) and adjacent to S-4 at Sta. 9+50+/- . All density tests passed.
- Sub installed sod on east and south slopes of Phase 1 landfill.
- 9:30 am – Barricades were relocated, traffic was detoured and SCS began excavation for header road crossing at Sta. 18+31+/-.
- 10:30 am – SCS severed phone line buried approx. 3 ft. deep on south side of road. SCS notified the County immediately and the County contacted Verizon to schedule repair work. Phone service to Maintenance bldg's. and C&D facility was interrupted.
- SCS continued excavation across road until noon.
- 1:30 pm – Verizon arrived on site to repair phone line
- Trench bottom at road crossing became saturated in the afternoon with ground water making conditions too wet to begin installation of 48" RCP. SCS decided to partially backfill excavation for the evening.
- 2:40 pm - Jack Gibson (County) on site to observe trench excavation operation. HDR discussed trench conditions with Mr. Gibson.
- SCS fusing 30" HDPE pipe and fittings in yard north of flare station.
- Watering new sod along swale adjacent to 30" header from Sta. 3+00+/- to 9+50+/-.
- SCS removed silt fence along south toe of Phase 1 landfill slope.

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/4/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Itza Rivera-Frisco (HDR)	

## Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
88F	76F	Sunny		

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 x Forklift
Steve Miller	Laborer / Driver	3 X Excavator – Kobelco, Komatsu
Ray Perez	Laborer / Driver	2 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Chris Boggs	Laborer / Driver	Bobcat
Dustin Adams	Laborer / Driver	2 X Articulated dump trucks
Steve	Laborer / Driver	1 x Dozer
	Laborer / Driver	Water Truck

## Work Performed:

- SCS arrived on site at 7:00 am.
- Dewatering trench and over excavating saturated soil (approx. 4' deeper) in order to find more stable ground and will backfill with broken concrete prior to placing 48" RCP in trench.
- SCS obtained 5 loads of broken concrete from WCA.
- SCS placed approx. 4 loads (28 cy articulated dump truck) of broken concrete on north and south side of road crossing.
- Fusing 36" HDPE pipe, 90-degree elbow and reducer.
- SCS installed four 4' section of 48" RCP in road crossing.
- SCS asked whether 90' of 36" HDPE had to be pressure tested. HDR replied that 36" pipe had to be air tested but the air test could be performed outside of trench. HDR also noted that 36" pipe could be air tested with 90-degree bend attached.
- SCS extended road crossing area 4' further east and west in order to stabilize the slopes for SCS personnel to be inside the trench area when installing the pipe.
- SCS backfilled over the 48" RCP.
- SCS Subcontractor sodding on from the valve pits on east side of Phase I Landfill to southeast corner of Phase I landfill.
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## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/5/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Itza Rivera-Frisco (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
86F	75F			

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 x Forklift
Steve Miller	Laborer / Driver	3 X Excavator – Kobelco, Komatsu
Ray Perez	Laborer / Driver	2 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Josh Adams	Laborer / Driver	Bobcat
Dustin Adams	Laborer / Driver	2 X Articulated dump trucks
Steve	Laborer / Driver	1 x Dozer
	Laborer / Driver	Water Truck

**Work Performed:**

- SCS arrived on site at 7:00am.
- SCS continues to fuse 36" HDPE pipe and 90-degree elbow.
- SCS continues to backfill and compacting over 48" RCP.
- Continue to dewater trench on north and south sides of road crossing at Flare Station.
- SCS placed and compacting limerock over road crossing.
- Nordarse (SCS CQC firm) on site (2:00pm) to check densities on road crossing at Flare Station, header road crossings (Sta. 8+30+/- & 13+00+/-) and adjacent to S-4 at Sta. 9+50+/- . All tests passed.
- Performed air test on 90' of 36" HDPE pipe and 90-degree elbow. Started test at 2:53pm and concluded test at 3:53pm. Starting pressure = 10 psi. Finish pressure = 10 psi.
- Disassembled 36"HDPE for instillation tomorrow.
- SCS Subcontractor completed sodding on southeast corner of Phase I landfill. County to approve.
-



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/6/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Itza Rivera-Frisco (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
85 F	73 F	Sunny		

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 x Forklift
Steve Miller	Laborer / Driver	3 X Excavator – Kobelco, Komatsu
Ray Perez	Laborer / Driver	2 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Josh Adams	Laborer / Driver	Bobcat
Dustin Adams	Laborer / Driver	2 X Articulated dump trucks
Steve	Laborer / Driver	1 x Dozer
	Laborer / Driver	Water Truck

**Work Performed:**

- SCS arrived on site at 7:00am.
- Ardaman on site at 7:45am to check densities on limerock at road crossing. Test passed.
- SCS installed 90' of 36" HDPE pipe and 90-degree elbow.
- Dewatering on north and south sides of road crossing.
- Per SCS' request 2" drain line installed at same elevation as 36" HDPE and will tie in to sump S-5 around same elevation as 36" HDPE pipe tie in.
- While excavating near flare station for installation of 90-degree elbow, SCS cut ground wire. EC Electrical contractor notified of issue.
- EC Electrical contractor on site to review cut grounding wire, pulling wire from control panel to blower, and pulling wire from panel at flare to panel on east side of skid. They will return when it is time to finish installation and to repair ground wire.
- SCS requested that the configuration of bollards around the valve pits on east side of Phase I landfill be modified due to the configuration/layout of valve pits. Per the drawings each valve pit will have 4 bollards installed around it. The revised configuration will be 2 bollards around each valve pit. HDR approved revised configuration.
- SCS placed bags of quickcrete around the 36" HDPE pipe at opening of 48" RCP pipe sleeve to stop water and soil intrusion.
- Installed 90' of 2" drain line and 2" air line along side 36" HDPE pipe at road crossing.
- Backfilled south side and a portion of the north side of 36" HDPE pipe at road crossing. Repaired telephone wire was put back approx. 36" below final grade on south side of road crossing.
-



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/7/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Don Whiting (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
90 F	75 F	AM Fog	Pt. Cloudy	None

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 x Forklift
Steve Miller	Laborer / Driver	3 X Excavator – Kobelco, Komatsu
Dustin Adams	Laborer / Driver	2 X Truck F-250
Josh Adams	Laborer / Driver	Flat bed F-450
Fred Harlan	Laborer / Driver	Bobcat
Steve	Laborer / Driver	2 X articulated dump trucks
		1 x Dozer
		Water Truck

**Work Performed:**

- SCS arrived on site at 7:00 am.
- Excavated for condensate sump S-5. SCS encountered rock approx. 14 ft. below grade. Excavated approx. 4 ft. of rock using backhoe and hoe-ram. Used 3" pump in kelly well to dewater excavation.
- SCS constructed temporary containment area, lined with plastic, east of S-5 excavation for dewatering discharge. Used water truck to pump out water and transport to leachate storage tank sump.
- SCS fused 4" saddle and 4x2 reducer to west side of S-5 (above ground) for flare station condensate line.
- 12:30 pm – Jack Gibson on-site to observe construction activity.
- SCS placed 6-12" of crushed rock bedding in excavation and set sump S-5.
- Connected 36" header to S-5, placed 10 C.Y. of concrete ballast and approx. 10 C.Y. of crushed rock around sump base.
- SCS partially backfilled around sump S-5.
- SCS discontinued work at approx. 4:00 pm.



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/8/2010	Day: Saturday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Don Whiting (HDR)	

## Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
88 F	75 F	Pt. Cloudy		None

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 X Forklift
Steve Miller	Laborer / Driver	3 X Excavator – Kobelco, Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Josh Adams	Laborer / Driver	Flat bed F-450
Fred Harlan	Laborer / Driver	Bobcat
Steve	Laborer / Driver	2 X articulated dump trucks
		1 x Dozer
		Water Truck

## Work Performed:

- SCS arrived on site at 7:00 am.
- Fusing 4" HDPE pipe in yard south of yard waste mulching area (Phase 3).
- SCS exposed south end of previously installed 30" header at approx. Sta. 14+55+/- and removed blind flange from pipe.
- SCS cut new 30" pipe to length in yard north of flare station and fused flanged fitting on end of pipe.
- Watered new sod on south slope of Phase 1 landfill and swale adjacent to 30" header from approx. Sta. 3+00+/- to 9+50+/-.
- SCS installed blind flanges on each end of new 30" pipe in yard, installed gauge, pressurized pipe to 10 psi and began pressure test. Start: 11:40 am. End: 12:40 pm. No loss of pressure observed.
- SCS broke-down equipment and reinstalled blind flange on south end of 30" header at approx. Sta. 14+55+/-.
- SCS discontinued work at approx. 1:15 pm.



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/10/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Don Whiting (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
88 F	70 F	Partly Cloudy		None

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 x Forklift
Steve Miller	Laborer / Driver	3 X Excavator – Kobelco, Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Dustin Adams	Laborer / Driver	Bobcat
Josh Adams	Laborer / Driver	2 X Articulated dump trucks
Steve	Laborer / Driver	1 x Dozer
		Water Truck

**Work Performed:**

- SCS arrived on site at 7:00 am
- 7:40 am – SCS began dewatering excavation at sump S-5 using water truck and 3" pump in kelly well.
- Approx. 9:45 am SCS began excavation of trench for 30" header at Sta. 14+55+/- heading south.
- SCS cleaning up stockpiles of excavated spoil, crushed rock and concrete in yard north of flare station.
- 4:15 pm – SCS completed excavation of trench for 30" header from Sta. 14+55+/- to sump S-5.
- Placed 30" header in trench. Pipe was approx. 2 ft. too long. SCS excavated adjacent to pipe around bend from approx. Sta. 16+00+/- to 17+50+/- to increase radius of trench to accommodate additional length of pipe.
- Approx. 7:00 pm SCS completed installation and connection of 30" header from Sta. 14+55+/- to sump S-5 at approx. Sta. 18+50+/-
- SCS was short (4) bolts for connection of 30" header to sump S-5. Missing bolts located at top third of flanged connection.
- Partially backfilled over 30" header from Sta. 14+55+/- to sump S-5 to prevent floatation over night.
- SCS discontinued backfilling at 7:55 pm and departed the site at 8:00 pm.
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Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/11/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Itza Rivera-Frisco (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
88 F	73 F	Sunny		

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 x Forklift
Steve Miller	Laborer / Driver	3 X Excavator – Kobelco, Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Dustin Adams	Laborer / Driver	Bobcat
Josh Adams	Laborer / Driver	2 X Articulated dump trucks
Steve	Laborer / Driver	1 x Dozer
	Laborer / Driver	Water Truck

### Work Performed:

- SCS laid 4" and 2" HDPE lines along side 30" HDPE pipe from Sta. 14+50 to Sump S-5.
- SCS backfilled and graded trench for 30", 4", and 2" pipes.
- SCS (Johnny) stated that they already installed the warning tape, 2 ft. below grade from S. of the 1<sup>st</sup> road crossing to Sump S-3 to next yard waste road crossing..
- FPL on-site to install/connect meter.
- SCS fused 14", 90 degree elbow to 14" HDPE pipe section.
- EC Contractors (Electrical Subcontractor) on-site to repair cut ground wire just north of flare station.
- R. Siemering (HDR) on-site reviewed the location of 2" drain line, drip traps, actuator valve connection to air compressor, and location of propane tank concrete slab with SCS.
- SCS installed flow meter. SCS will need to have electrical sub make electrical connection to flow meter.
- SCS finished bolting 30" HDPE pipe to Sump S-5.
- SCS installed 1" drain line from flame arrestor to drip trap and 1" drain line from flare to drip trap.
- SCS completed backfilling and compacting around Sump S-5 and over 30", 4", and 2" pipes on north side of road crossing.
- 
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# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/12/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Itza Rivera-Frisco (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
90 F	70 F	Sunny		

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 x Forklift
Steve Miller	Laborer / Driver	3 X Excavator – Kobelco, Komatsu
Fred Harlan	Laborer / Driver	2 X Truck F-250
Steve	Laborer / Driver	Flat bed F-450
	Laborer / Driver	Bobcat
	Laborer / Driver	2 X Articulated dump trucks
	Laborer / Driver	Water Truck
	Laborer / Driver	

**Work Performed:**

- Air tested 12 ft. section of 14" HDPE from 36"x14" reducer to Knock out pot by flare station (includes tee for future connection). Air test started at 8:15am and lasted for an hour. Starting pressure = 10 psi; Finish pressure = 10 psi. Test Passed.
- SCS installed 12 ft. section of 14" HDPE from 36"x14" reducer to Knock out pot by flare station.
- SCS graded swale from Sta. 14+50 to Sump S-5.
- SCS completed backfilling and grading of south side of road crossing to flare station.
- Air tested 4" HDPE from Wye to Sump S-5. Air test started at 10:15am and lasted for an hour. Starting pressure = 10 psi; Finish pressure = 10 psi. Test Passed.
- Air tested 2" HDPE from Wye to Flare Station connection. Air test started at 11:20am and lasted for an hour. Starting pressure = 10 psi; Finish pressure = 10 psi. Test Passed.
- SCS cleaning up area north of the sump S-5.
- SCS grading around flare station.
- SCS forming 5 ft. sq. x 6" thick concrete slab for the propane tanks. This slab is to be located approx. 2 ft. south of the blower slab and its eastern edge even with the blower slab's eastern edge.
- SCS installed 44 ft. of 2" HDPE drain line to flare from knock out pot.

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/13/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Itza Rivera-Frisco (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
90 F	70 F		Partly Cloudly	

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 x Forklift
Steve Miller	Laborer / Driver	3 X Excavator – Kobelco, Komatsu
Brandon Swift	Laborer / Driver	2 X Truck F-250
Fred Harlan	Laborer / Driver	Flat bed F-450
Ray Perez	Laborer / Driver	Bobcat
Steve	Laborer / Driver	2 X Articulated dump trucks
	Laborer / Driver	Water Truck
	Laborer / Driver	

### Work Performed:

- EC Contractors (Electrical Subcontractor) (2 people) on-site making connection to flow meter.
- Fred Derr (Bollard Contractor) (5 people) on-site to start installing bollards on northwest side of Phase I landfill. Completed boring holes and pouring 14 bollards (4 around leachate cleanout; U-trap U-3; and 3 valve pits on west side). There was confusion as to which structures/pipes along the slopes get bollards installed around them. Sarasota County/HDR/SCS will need to have a discussion, on Monday, May 17, 2010, about which structures/pipes along the slope will get bollards and which will not.
- SCS poured 5 ft. sq. x 6" thick concrete slab for the propane tanks.
- SCS installed the sump pumps into condensate sumps S-2, S-3, S-4 and S-5. SCS noted that QED will be out on Monday, May 17, 2010 to complete the installation of the pumps.
- Hyatt Surveyors on-site to as-built remaining portion of system.
- SCS watering sod on south slope.
- SCS continued to install 2" drain line around flare station.
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## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/14/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Jason Timmons (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	none
89 F	74 F	Sunny		

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	2 X Truck F-250
Steve Miller	Laborer / Driver	Flat bed F-450
Brandon Swift	Laborer / Driver	Bobcat
Fred Harlan	Laborer / Driver	Water truck
Ray Perez	Laborer / Driver	Utility Cart (John Deere)
	Laborer / Driver	
	Laborer / Driver	
	Laborer / Driver	

**Work Performed:**

- HDR arrived onsite @7:30AM
- Met with SCS (J. Meier) @ 9:00AM. Discussed preliminary punch list items.
- SCS began cleaning containment area at leachate storage tank loading pad @ 9:30AM. Removed sediment from sump and cleaned pad. Completed @ 10:30AM. Superintendent and 2 laborers.
- SCS installed remaining wellheads (2 laborers) including remote wellheads for leachate collection cleanouts (LCO-2S and 1S). Started at 9:45AM. Completed at 10:30AM.
- HDR requested flare/flame arrestor drain line be moved underneath air line at northwest corner of skid to allow positive drainage from flare drain. Drain pipes installed at grade. SCS moved drain to underneath air line. SCS stated that drain line did not require positive drainage.
- SCS installed ½" copper tube/propane line from flare stake to propane tank pad on east side of flare skid. Used flared end connectors at ends and at union approximately 18'-2" from east end of flare skid concrete pad. Line completed by 11:30AM.
- SCS break for lunch at 11:30AM.
- HDR returned to site at 12:30PM. SCS returned at 1:30PM.
- Sarasota County filled and delivered two propane tanks to the site.
- SCS anchoring skid to concrete pad using epoxy anchor bolts and sealing space between skid and concrete.
- SCS planned to complete air lines and anchoring skid.
- HDR left site at 2:00PM.



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/15/2010	Day: Saturday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Jason Timmons (HDR)	

## Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	None
88F	74 F	Sunny		

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 X Excavator – Kobelco
Steve Miller	Laborer / Driver	2 X Truck F-250
Brandon Swift	Laborer / Driver	Flat bed F-450
Fred Harlan	Laborer / Driver	Bobcat
Ray Perez	Laborer / Driver	2 X Articulated dump trucks
		1 x Dozer
		Water Truck
		Utility Cart (John Deere)

## Work Performed:

- HDR arrived @ 7:45AM
- Work Completed on 5/14/ after 2:00PM. Installed steel air lines from air header at west side of flare skid to the automatic shutoff valves at the knockout pot and at the flare header. Completed flare skid anchor and sealant at base.
- SCS arrived at flare skid @ 8:00AM.
- SCS completed mounting propane tanks on concrete pad.
- SCS connected propane tanks and tested propane lines for leaks using soap spray. Found two leaks at each end of connection, tightened connections, applied Teflon tape at propane tank line connection. Union located at 18'-2" from east side of flare skid was tested with soap spray, no signs of leak.
- SCS began mounting QED pump control boxes at condensate sumps using 4"x4"x8' treated wood posts and steel mounts. Started at 8:45AM. Completed mounting boxes @ 10:15AM
- SCS watering east side of Phase I sod with water truck.
- SCS began removing soil piles from 30" main header trench installation and hauling to Class I working face (1 excavator, 2 off-road trucks (JD and JBC), 1 dozer. SCS began at 10:20AM through the remainder of the day for site cleanup and prep for Monday walkthrough.
- Electrician (E&C Electrical Contractors – Mike) arrived onsite at 9:00AM. Completed power wire pulls for flare and flow meter from control box to flare. Installed seal offs. Complete electrical connections at air compressor panel.
- SCS (J. Meier) stated that they would complete soil removal and site cleanup for the remainder of the day.
- HDR confirmed Shaw would complete thermocouple installation for flare. SCS and EC Contractors could not locate thermocouple on skid.
- HDR left site at 10:45AM.





# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/17/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
83 F	73 F	Partly Cloudy	Rain	0.05 inches

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 x Forklift
Steve Miller	Laborer / Driver	1 X Truck F-250
Brandon Swift	Laborer / Driver	Flat bed F-450
Ray Perez	Laborer / Driver	

**Work Performed:**

<ul style="list-style-type: none"><li>SCS arrived on site at 7:30 am</li></ul>
<ul style="list-style-type: none"><li>SCS started replacing the handwheel stem extensions for 18" and 24" header valve pits at the southeast corner. Extensions for the sample port lines to be done at a later date</li></ul>
<ul style="list-style-type: none"><li>Shaw on site for adjustments at flare station before start-up</li></ul>
<ul style="list-style-type: none"><li>QED on site to test pumps at Sumps # 2,3,4,5</li></ul>
<ul style="list-style-type: none"><li>SCS installed 1" orcemain and airline ball valves at GW-26. GWs were designed with a 3/4" NPT Plug for water level access. HDR approved change to 1" ball valves.</li></ul>
<ul style="list-style-type: none"><li>Subcontractor on site continues installing bollards on north and east slope</li></ul>
<ul style="list-style-type: none"><li>SCS left the site at 4:00 pm</li></ul>
❖ During Progress Meeting #17, the following was addressed:
<ul style="list-style-type: none"><li>SCS stated that rain last night did not affect work progress</li></ul>
<ul style="list-style-type: none"><li>SCS to start with punch list items</li></ul>
<ul style="list-style-type: none"><li>SCS to install caps for sample ports at all header valve pits</li></ul>
<ul style="list-style-type: none"><li>HDR to review truck loads</li></ul>
<ul style="list-style-type: none"><li>SCS to provide checklist of spare / extra parts to County</li></ul>

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/18/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

### Weather Conditions:

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
82 F	75 F	Partly Cloudy		

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 X Excavator – Kobelco, Komatsu
Steve Miller	Laborer / Driver	1 X Truck F-250
Brandon Swift	Laborer / Driver	Flat bed F-450
Ray Perez	Laborer / Driver	2 X Articulated dump trucks

### Work Performed:

- SCS arrived on site at 7:30 am
- SCS started replacing the QED flange connectors and installing bubbler system for Sumps # 3,4,5. Sump # 2 QED flange Connector and bubbler system to be replaced at a later date
- Shaw on site continues adjustments at flare station before start-up this afternoon
- HDR proceeded to take initial gas readings at all GWs. Wellheads left open before flare station start up
- HDR informed SCS that airline ball valves at GW 26 / 18 were leaking. Also noted that valves at forcemain valve pit (southeast Comer – along the 24" header) and valve at the airline valve pit (north slope) were in the opposite direction. SCS will correct
- Shaw completed the flare station start up. Flare running around 2:00 pm
- SCS started moving excess backfill north of the flare station to Phase I
- Subcontractor finished installing bollards on north and east slope
- SCS left the site at 4:30



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/19/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
83 F	73 F	Sunny		

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Brandon Swift	Laborer / Driver	1 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450

**Work Performed:**

• SCS arrived on site at 7:30 am
• Started adding hydrated bentonite for airline valve pits at southeast corner
• Check valve at forcemain valve pit (southeast corner – along 24" header) placed in correct direction. HDR verified.
• Subcontractor on site continues installing bollards on south slope
• HDR continued with additional gas readings and adjusting GWs
• Shaw on site continues adjusting flare station
• SCS removing hay bales at downchutes and picking up trash
• HDR informed SCS that GWs 13 / 15 / 16 were not connected to the forcemain line instead of lateral line. SCS made changes
❖ SCS started moving crushed gravel to the flare station. Gravel to be placed on Friday
❖ SCS started placing labels for all GWs.
❖ SCS left the site at 4:30 pm

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/20/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
86 F	73 F		Partly Cloudly	

[illegible]

**Work Performed:**

- SCS arrived on site at 7:00 am
- Subcontractor continues installing bollards on south slope and around Sumps
- Shaw provided training on flare operations to County and HDR
- SCS continues installing 1" ball valves for forcemain and airline risers at each GW
- HDR continued with additional gas readings and adjusting GWs
- SCS cleaned north perimeter swale
- SCS connected 2" drain line from blower (at flare station) to the main drain line heading to Sump # 5
- SCS removed remaining RCPs from yard waste area and started moving remaining backfill to the maintenance building area
- SCS left the site at 4:30 pm



**Weather Conditions:**

[illegible]

<ul style="list-style-type: none"> <li>SCS arrived on site at 7:30 am</li> </ul>
<ul style="list-style-type: none"> <li>Started placing fabric around flare station then gravel on top</li> </ul>
<ul style="list-style-type: none"> <li>Shaw on site to adjust the auto dialer system at the flare station. System is working .</li> </ul>
<ul style="list-style-type: none"> <li>SCS started connecting 1" ball valves to 2"x1" and 4"x1" reducers for remaining risers. Installation at wells to be conducted tomorrow Saturday</li> </ul>
<ul style="list-style-type: none"> <li>HDR continued with additional gas readings and adjusting GWs</li> </ul>
<ul style="list-style-type: none"> <li>SCS left the site at 4:30 pm</li> </ul>

- SCS scheduled to install 1" ball valves for forcemain and airline risers to remaining GWs
- HDR will verify connections next week



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/24/2010	Day: Monday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
88 F	72 F	Sunny		

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 x excavator
Brandon Swift	Laborer / Driver	1 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450
		1x dump truck
		1x skidster

**Work Performed:**

- SCS removed LCO-4S solar flare. Lateral for remote wellhead not installed. LCO riser was capped.
- SCS continues dressing up area along the 30" header (east of yard waste area)
- SCS placed pipe markings for 30" header
- SCS continues adjusting leaks found in the airline ball valves.
- SCS installing 1" ball valves for forcemain and airline risers at each GW





Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/25/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
88 F	68 F	Partly Cloudy	Rain PM	

[illegible]**Work Performed:**

- SCS replaced QED flange adapter and installed bubbler system at Sump # 2
- AJAX (Subcontractor) on site to measure road crossings requiring pavement
- Sod company on site continues sodding east perimeter swale
- SCS started cleaning staging area
- SCS added soil underneath downchute – south slope
- HDR conducted LFG training and presentation to County



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/26/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
84 F	69 F	Sunny		

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	
Brandon Swift	Laborer / Driver	1 X Truck F-250
Ray Perez	Laborer / Driver	Flat bed F-450

**Work Performed:**

- Sod company on site continues sodding east perimeter swale, Phase I southeast corner, few areas on south slope needing additional sod
- HDR and County conducted well tuning training
- Subcontractor on site continues installing locator bollards for end of pipe, start/ end of CMPs
- Sarasota Fencing (Subcontractor) on site to measure fence required around flare station
- SCS continues fixing small air / forcemain leaks at sumps – southeast corner
- SCS installed and completed all 1" ball valves for forcemain / airline risers at each GW



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/27/2010	Day: Thursday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
87 F	74 F			

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 x Forklift
Brandon Swift	Laborer / Driver	1 X Truck F-250
Ray Perez	Laborer / Driver	1 x dump truck

**Work Performed:**

- SCS continues fixing small air / forcemain leaks at sumps – southeast corner. HDR informed SCS that system will not be accepted if leaks are found. SCS contacted Lee Supply (valve pit manufacturer) for butterfly valves. SCS will replace the ball valves at Air and Forcemain sumps with butterfly valves using flange adapters. No additional cost to County. HDR approved
- SCS installed 1" pvc caps for ball valves at forcemain / airline risers at each GW
- Sarasota Fencing (Subcontractor) on site started fence installation around flare station
- HDR continues adjusting GWs
- SCS cleaning staging area.
- SCS proceeded to water sod along the east perimeter swale, Phase I southeast corner

- ❖ SCS will not be on site Friday May 28, Saturday May 29, Monday May 31. SCS Will return on Tuesday June 1, 2010
- SCS scheduled to complete asphalt paving, well / sump labels, replace/fix leaking valves at sumps

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 6/1/2010	Day: Tuesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
88 F	75 F	Sunny		

[illegible]**Work Performed:**

- SCS started replacing flange adapters with access ports for each GW
- Sarasota Fence (Subcontractor) completed installation of the fence around flare station
- SCS installed LCO labels
- SCS installed quick connects at 18" header sump (north slope)

## Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 6/2/2010	Day: Wednesday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
88 F	75 F	Sunny		

[illegible]

**Work Performed:**

- Ajax (Subcontractor) on site paving road crossings. A mix desing S-1-R used for pavement instead of SP-9.5 as specified. HDR approved change. A 4" thick pavement placed at all road crossings. Existing pavement was 2" thick. Ajax sprayed limerock with tack coat and placed 2x2" lifts. Each lift compacted with rollers
- SCS continues stencil of sumps and cleaning staging area



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1		Date: 5/26/2010	Day: Thursday
Project Owner: Sarasota County		Contractor: SCS Field Services	
HDR Project No. 096-124466		CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
87 F	77 F		Partly Cloudy	

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 X Truck F-250
Brandon Swift	Laborer / Driver	1 X Truck F-450

**Work Performed:**

- SCS fixing air leaks at 2" airline valve pits (southeast corner) and all airline risers for GWs on north and east slopes
- HDR and SCS inspected construction before final walk through



# Daily Field Report

Project Name: CCSWDC Phase I LFG Construction - Sequence 1	Date: 5/27/2010	Day: Friday
Project Owner: Sarasota County	Contractor: SCS Field Services	
HDR Project No. 096-124466	CQA: Carlos Restrepo (HDR)	

**Weather Conditions:**

Temperature		Weather		Precipitation
Max.	Min.	Clear	Other	
88 F	78 F		Partly Cloudy	

Contractor's Employees / Title		Equipment Used
Johnny Meier	Superintendent	1 X Truck F-250
Brandon Swift	Laborer / Driver	1 X Truck F-450

**Work Performed:**

- Hydroseeding (subcontractor) on site. Hydroseeding along the shoulder of yard waste access road, area south of yard waste, and around chain link fence at flare station
- HDR and SCS conducted one more inspection of site
- SCS replaced ball valves at airline valve pits (southeast corner). No air leaks present
- SCS completed all punch list items. As-builts and close out documents are still pending.
- HDR conducted well tuning

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
AUG 13 2010  
SOUTHWEST DISTRICT  
TAMPA

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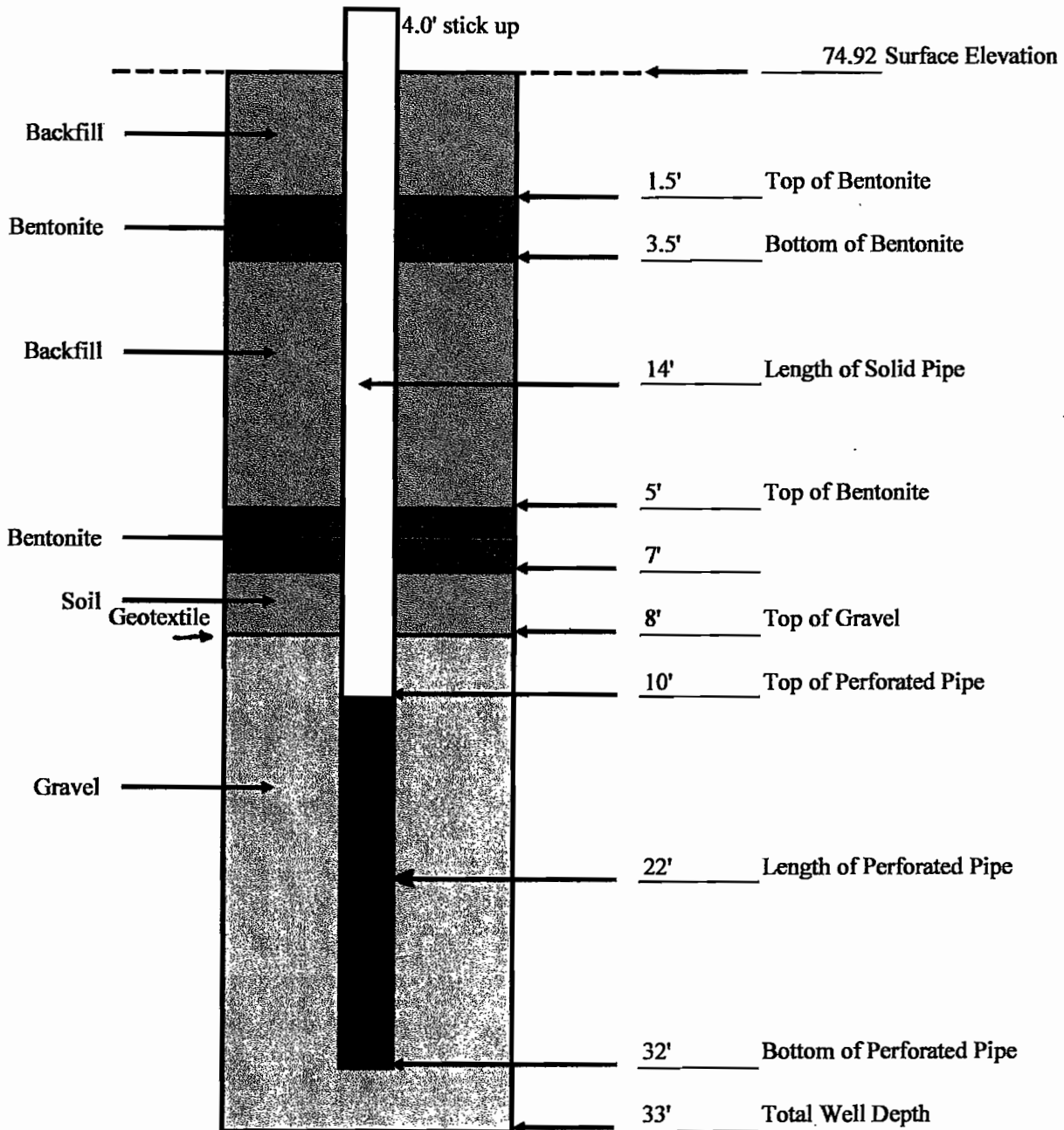
**ATTACHMENT C  
GAS EXTRACTION WELL INSTALLATION AND  
DRILLING LOGS**

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**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

<b>Date</b>	02/04/10	<b>Boring Depth</b>	33'
<b>Project Name</b>	SARASOTA COUNTY	<b>Boring Diameter</b>	36"
<b>Project Number</b>	12209031	<b>Pipe Spec.</b>	SDR-11
<b>Well Number</b>	GW-1	<b>Pipe Diameter</b>	6"

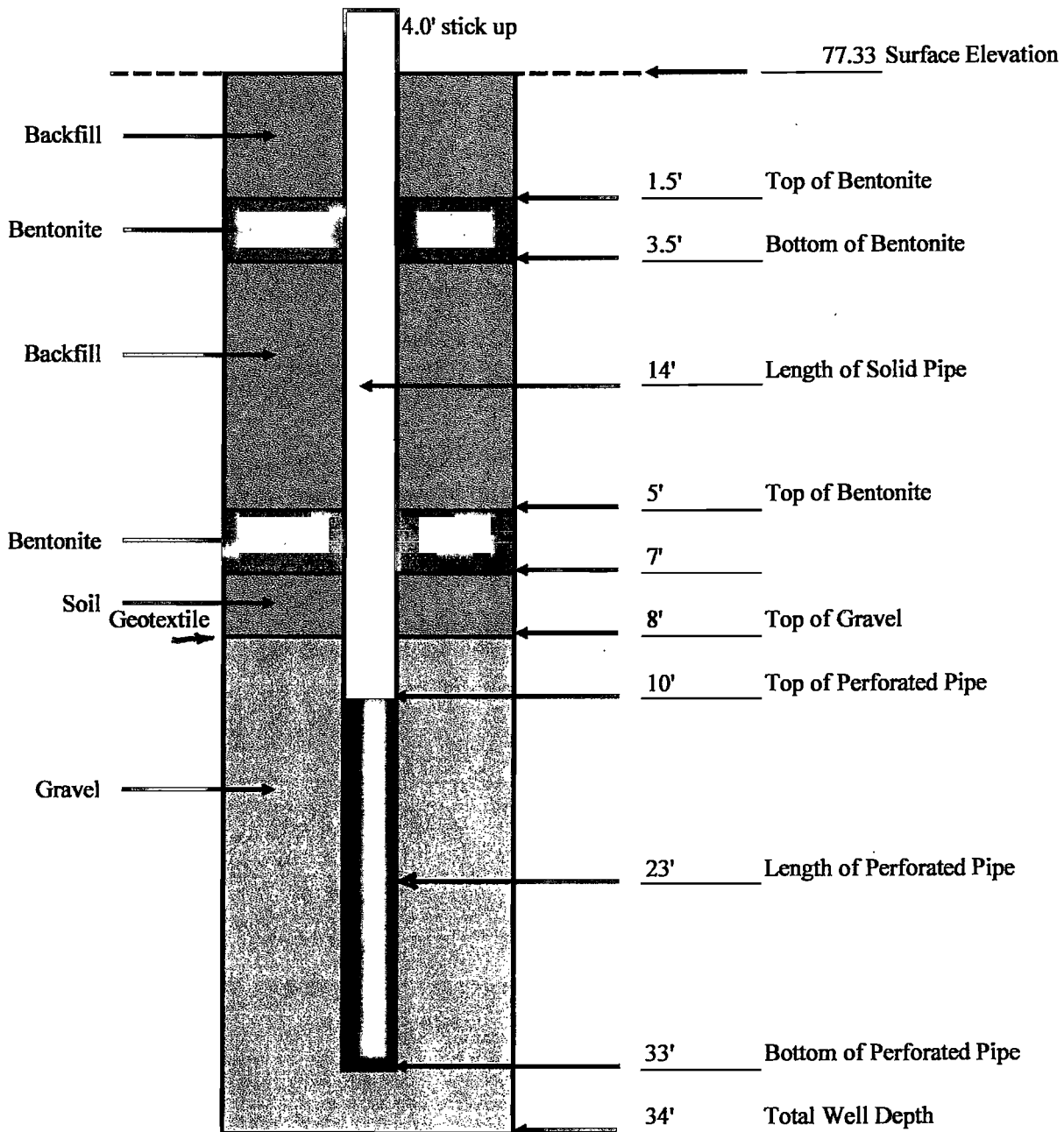


NOTES:

# SCS Field Services

## GAS EXTRACTION WELL INSTALLATION RECORD

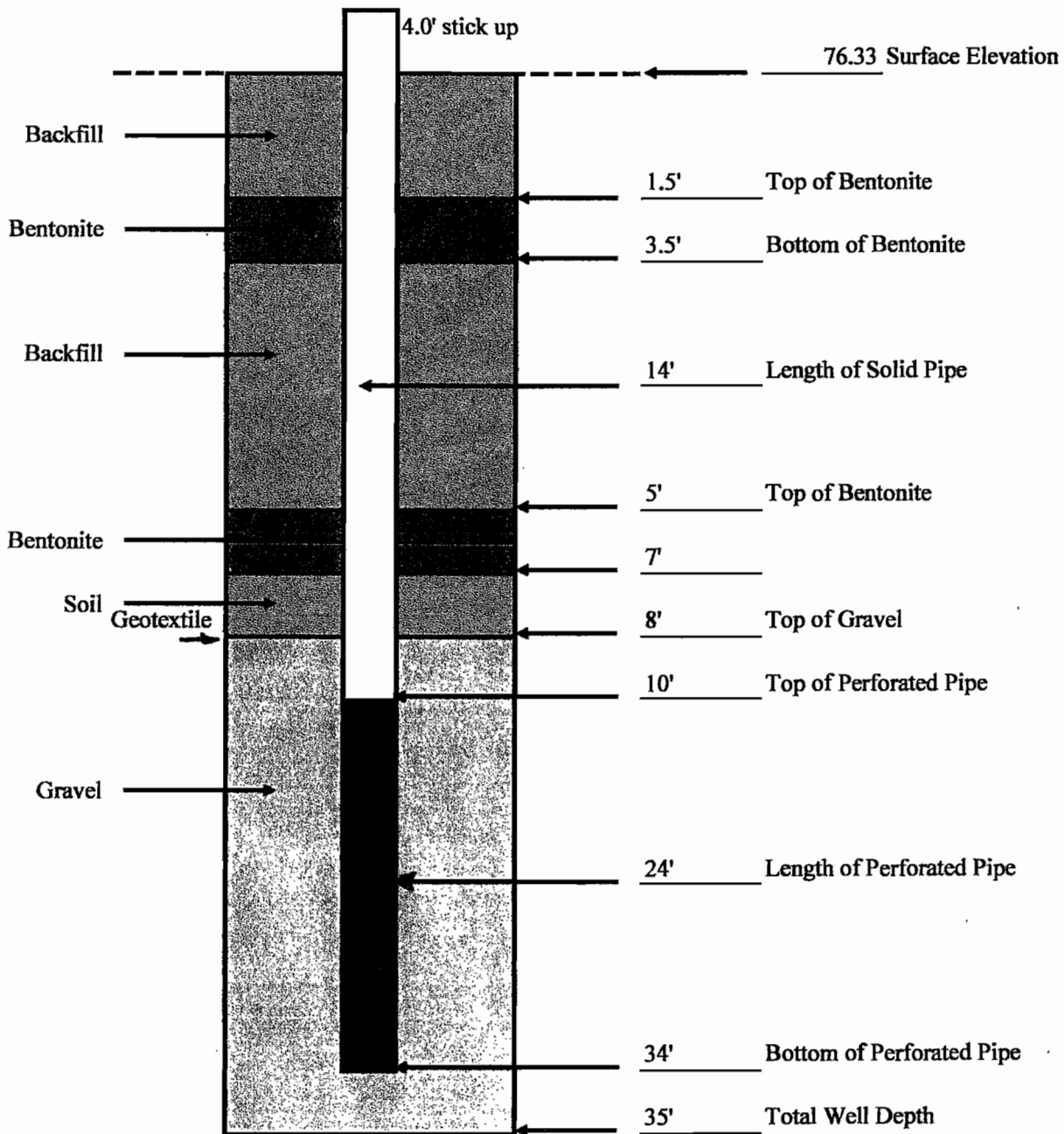
Date	02/04/10	Boring Depth	34'
Project Name	SARASOTA COUNTY	Boring Diameter	36"
Project Number	12209031	Pipe Spec.	SDR-11
Well Number	GW-2	Pipe Diameter	6"



NOTES:

# SCS Field Services GAS EXTRACTION WELL INSTALLATION RECORD

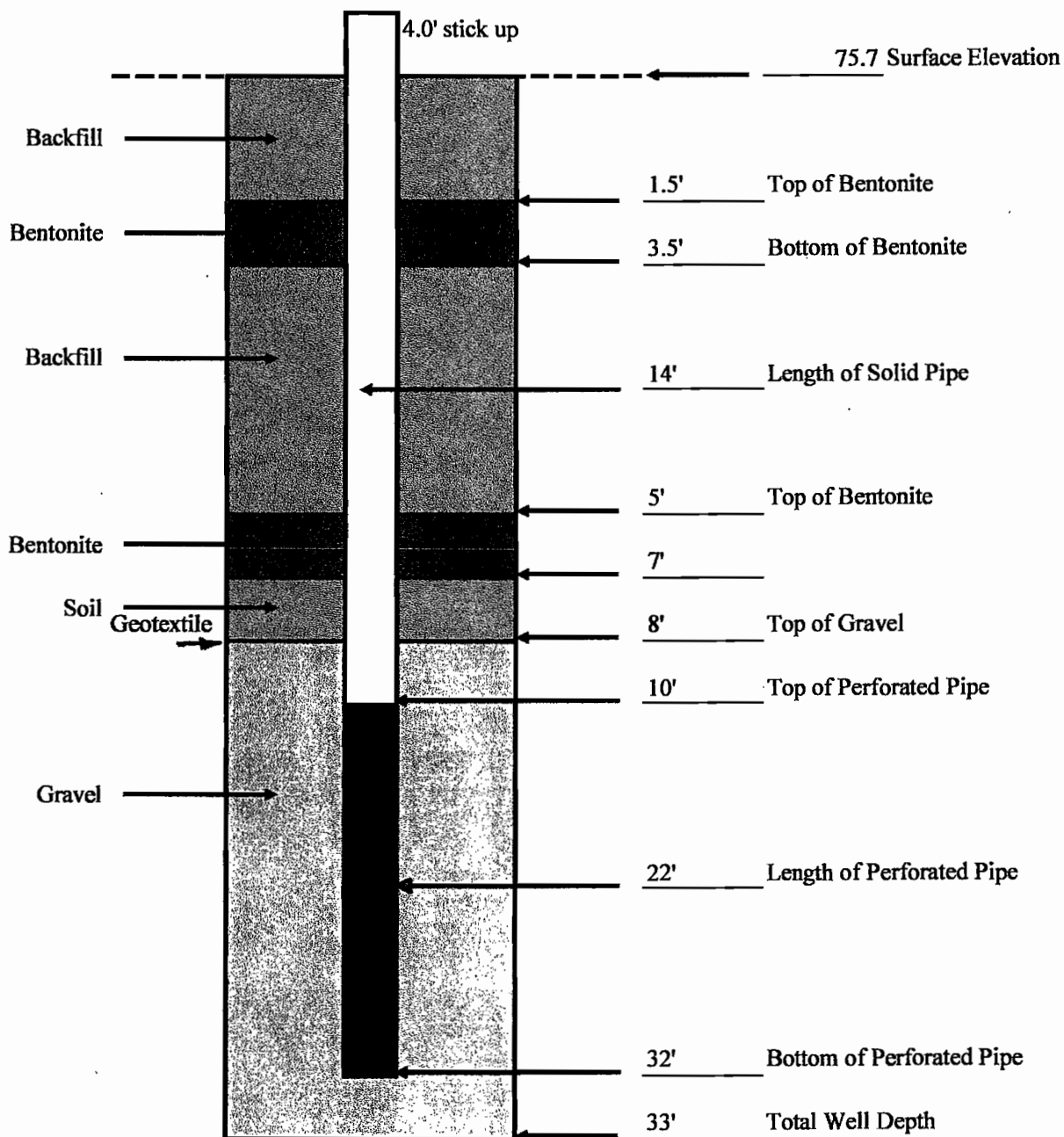
Date	02/05/10	Boring Depth	35'
Project Name	SARASOTA COUNTY	Boring Diameter	36"
Project Number	12209031	Pipe Spec.	SDR-11
Well Number	GW-3	Pipe Diameter	6"



NOTES:

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

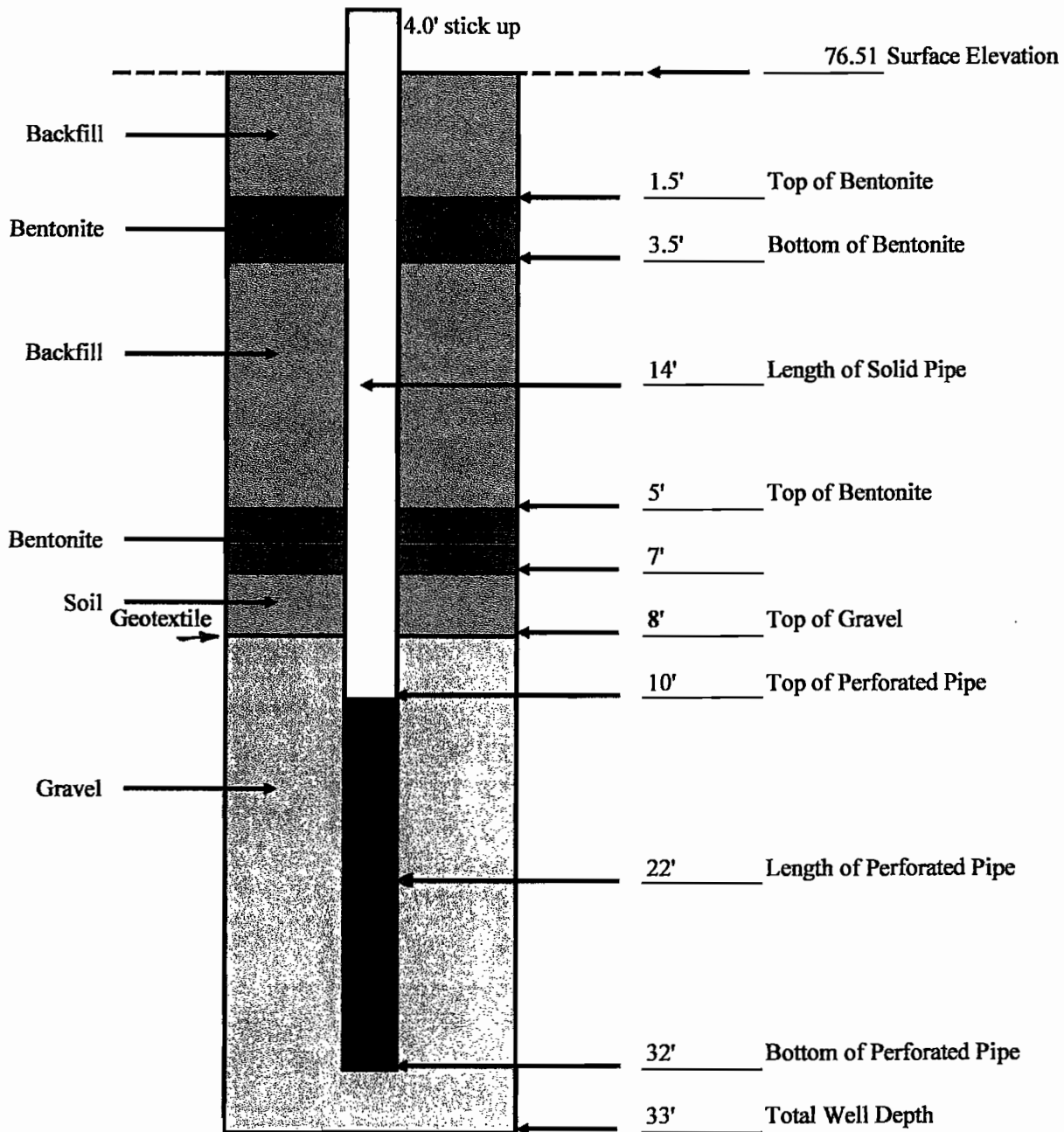
Date	02/05/10	Boring Depth	33'
Project Name	SARASOTA COUNTY	Boring Diameter	36"
Project Number	12209031	Pipe Spec.	SDR-11
Well Number	GW-4	Pipe Diameter	6"



NOTES:

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

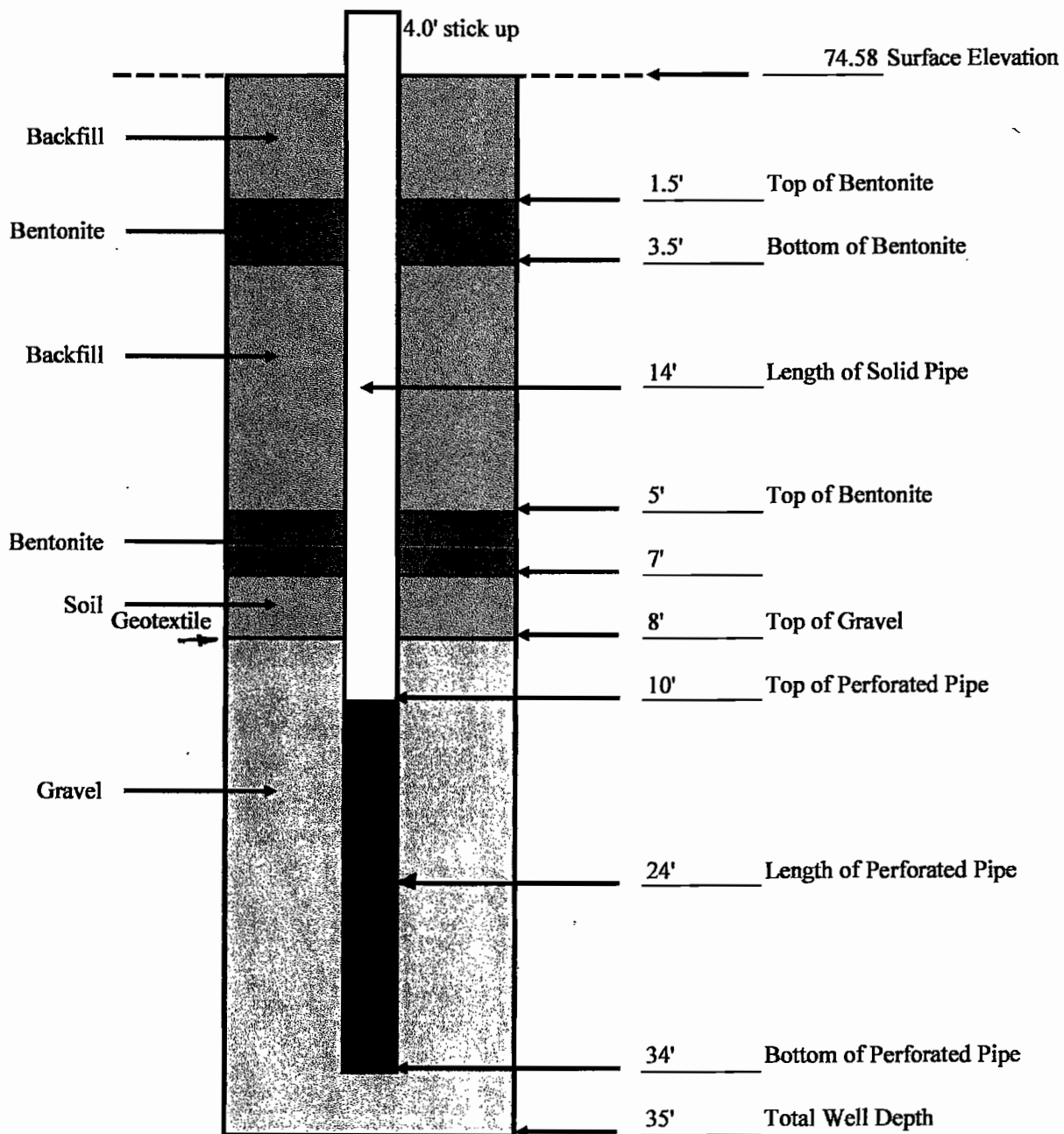
<b>Date</b>	02/05/10	<b>Boring Depth</b>	33'
<b>Project Name</b>	SARASOTA COUNTY	<b>Boring Diameter</b>	36"
<b>Project Number</b>	12209031	<b>Pipe Spec.</b>	SDR-11
<b>Well Number</b>	GW-5	<b>Pipe Diameter</b>	6"



**NOTES:**

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

<b>Date</b>	02/05/10	<b>Boring Depth</b>	35'
<b>Project Name</b>	SARASOTA COUNTY	<b>Boring Diameter</b>	36"
<b>Project Number</b>	12209031	<b>Pipe Spec.</b>	SDR-11
<b>Well Number</b>	GW-6	<b>Pipe Diameter</b>	6"

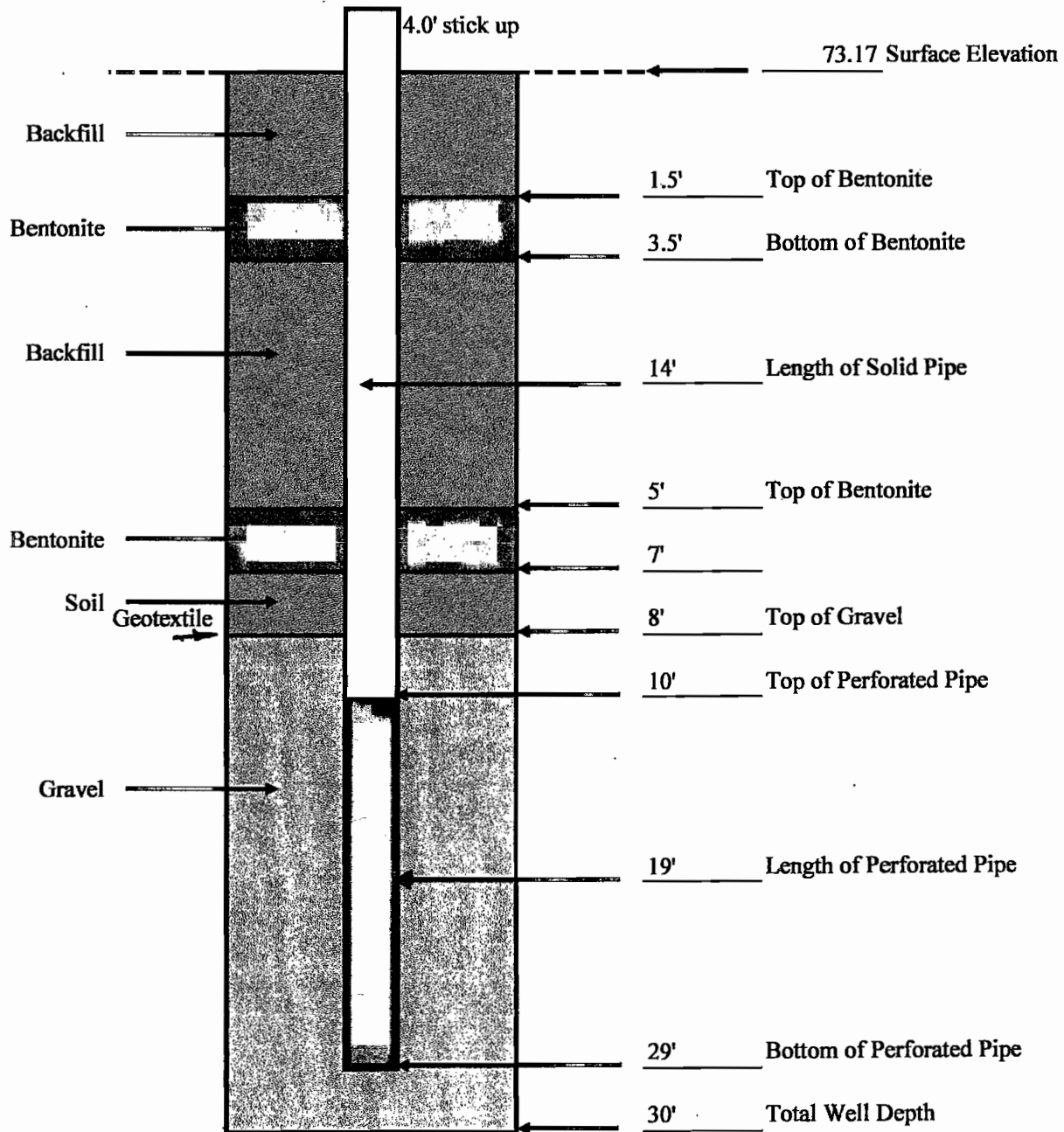


NOTES:

# SCS Field Services

## GAS EXTRACTION WELL INSTALLATION RECORD

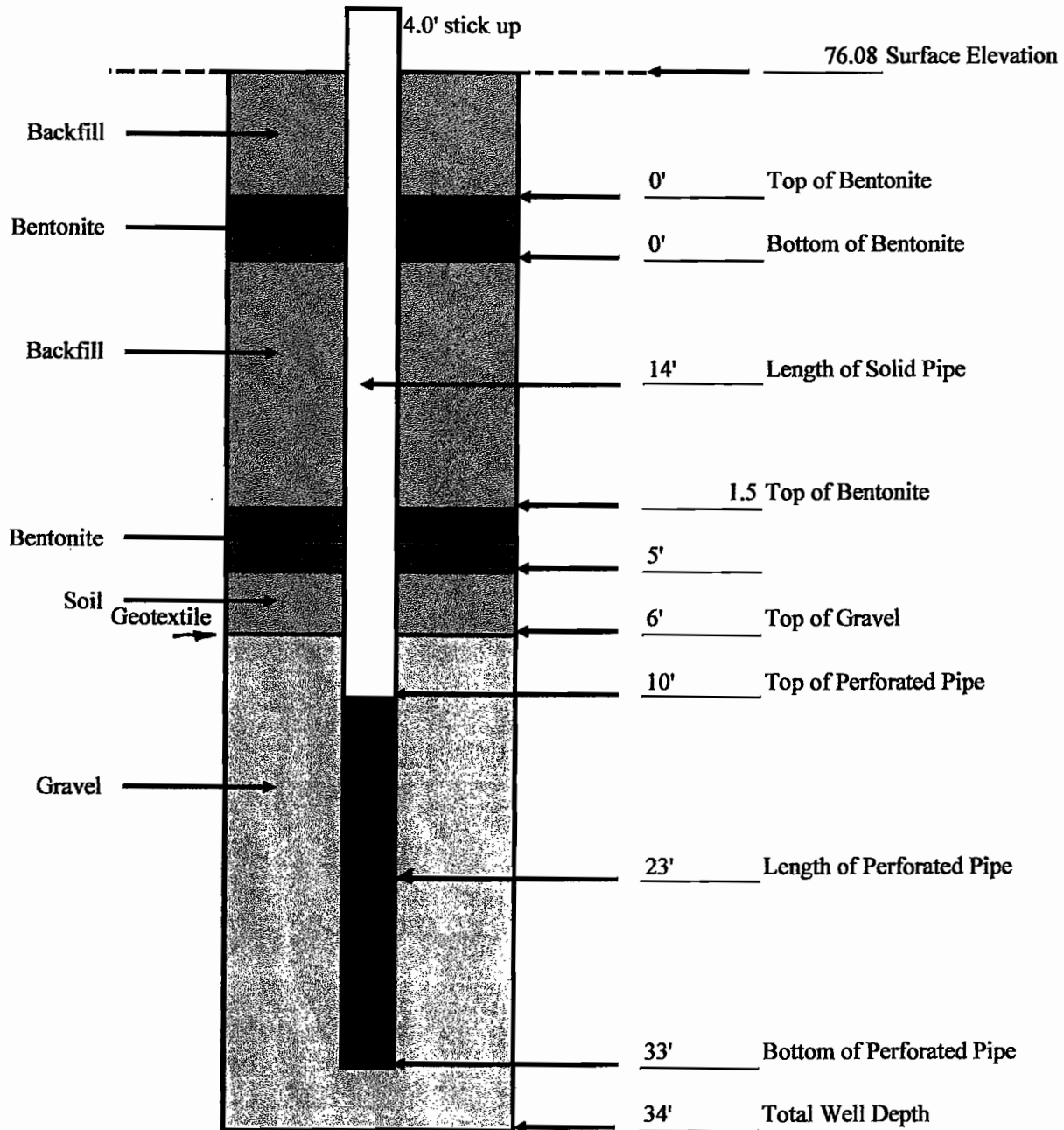
Date	02/03/10	Boring Depth	30'
Project Name	SARASOTA COUNTY	Boring Diameter	36"
Project Number	12209031	Pipe Spec.	SDR-11
Well Number	GW-7	Pipe Diameter	6"



NOTES:

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

Date	02/03/10	Boring Depth	34'
Project Name	SARASOTA COUNTY	Boring Diameter	36"
Project Number	12209031	Pipe Spec.	SDR-11
Well Number	GW-8	Pipe Diameter	6"

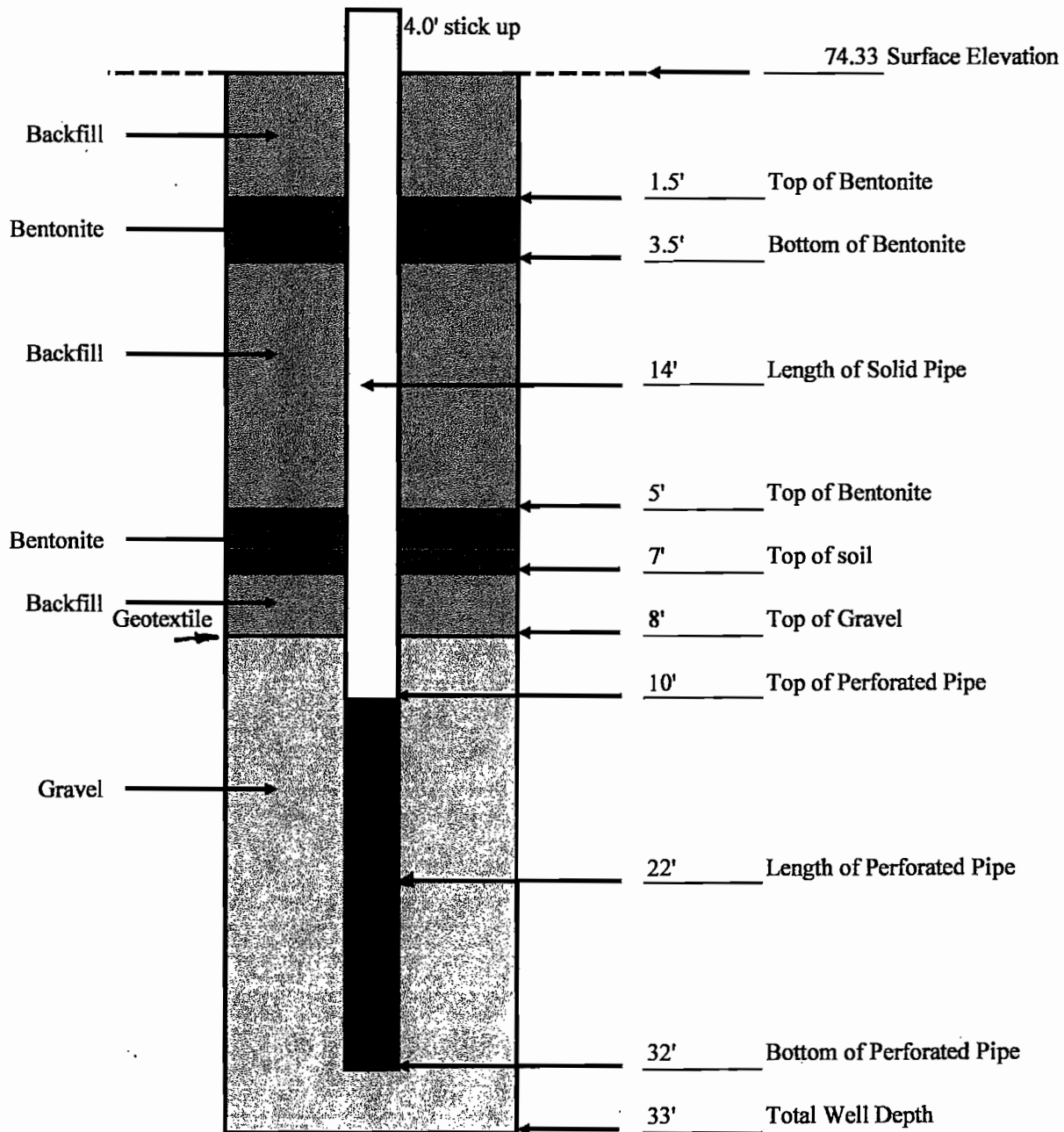


NOTES:



**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

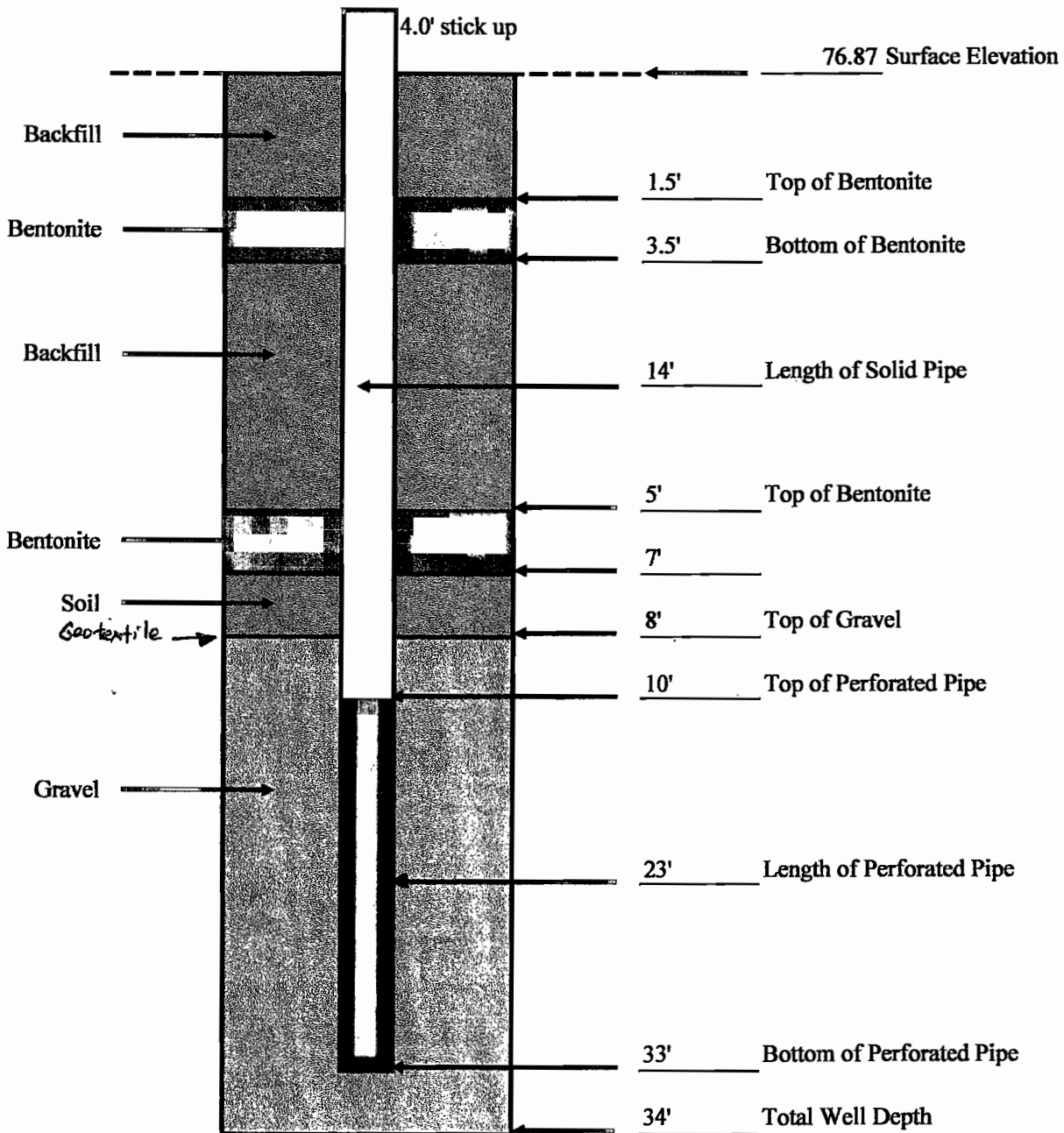
<b>Date</b>	01/28/10	<b>Boring Depth</b>	33'
<b>Project Name</b>	Sarasota County	<b>Boring Diameter</b>	36"
<b>Project Number</b>	12209031	<b>Pipe Spec.</b>	SDR 11
<b>Well Number</b>	GW-9	<b>Pipe Diameter</b>	6"



**NOTES:**

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

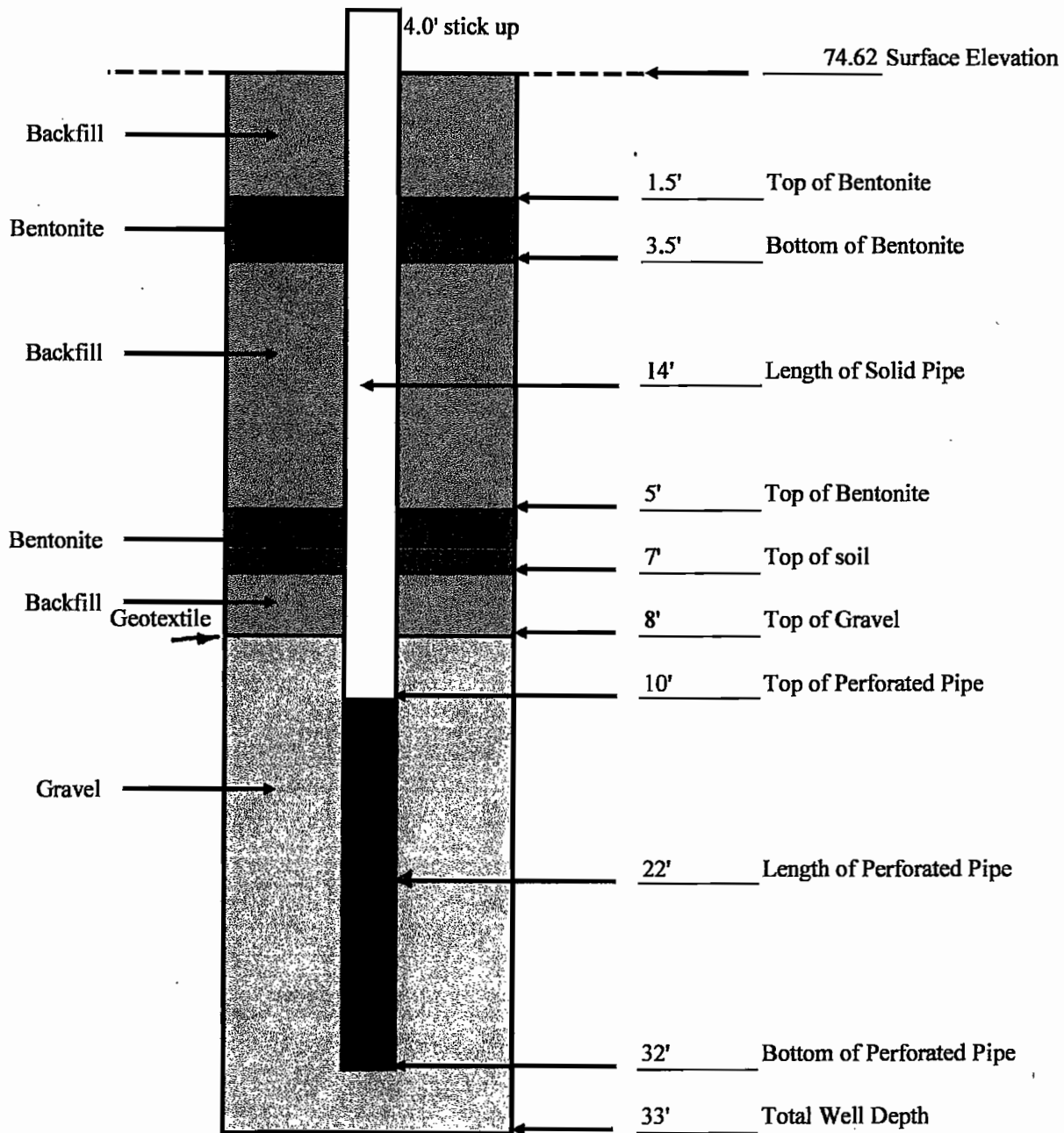
Date	01/28/10	Boring Depth	34'
Project Name	SARASOTA COUNTY	Boring Diameter	36"
Project Number	12209031	Pipe Spec.	SDR-11
Well Number	GW-10	Pipe Diameter	6"



NOTES:

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

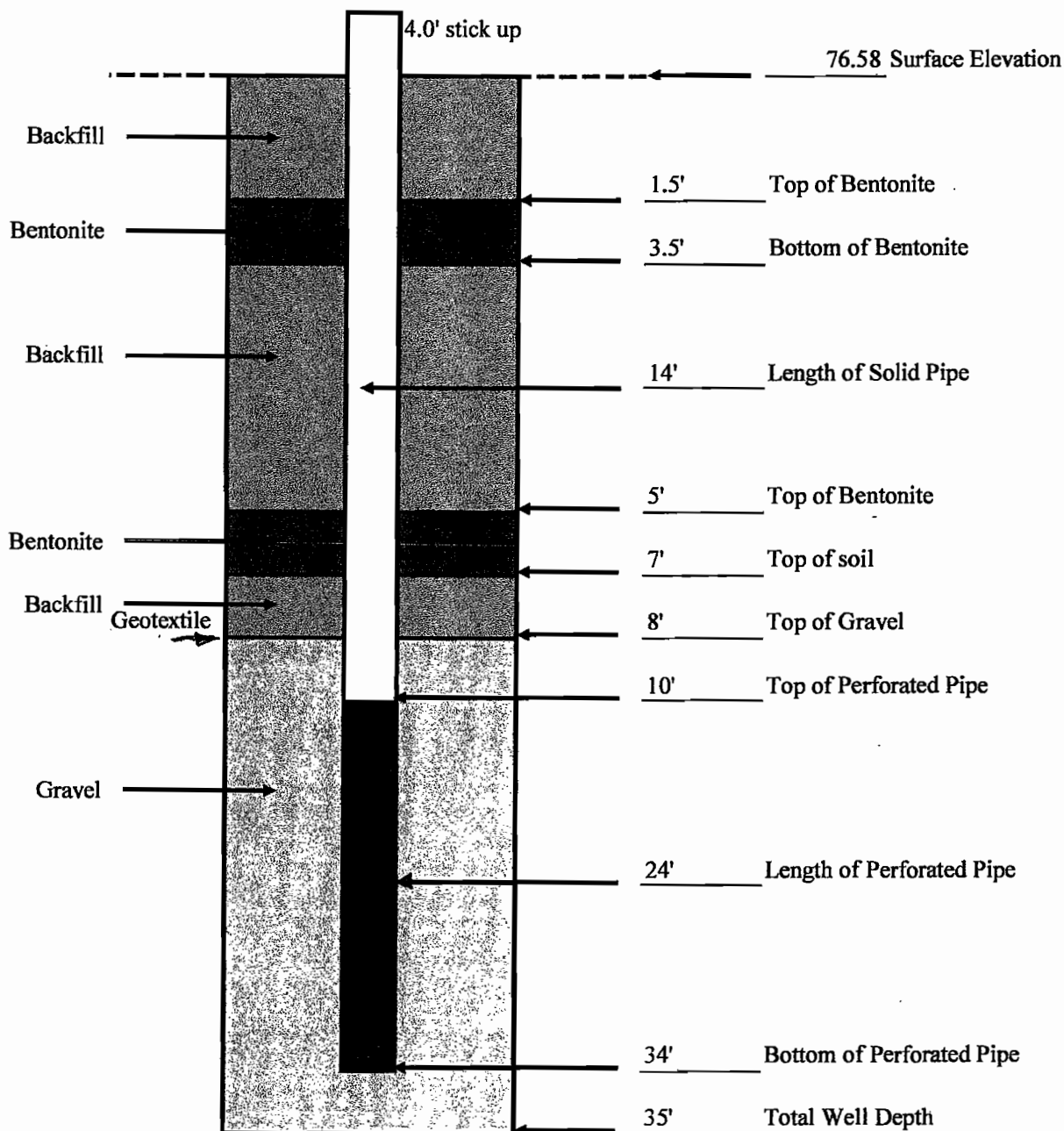
Date	01/29/10	Boring Depth	33'
Project Name	Sarasota County	Boring Diameter	36"
Project Number	12209031	Pipe Spec.	SDR 11
Well Number	GW-11	Pipe Diameter	6"



NOTES:

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

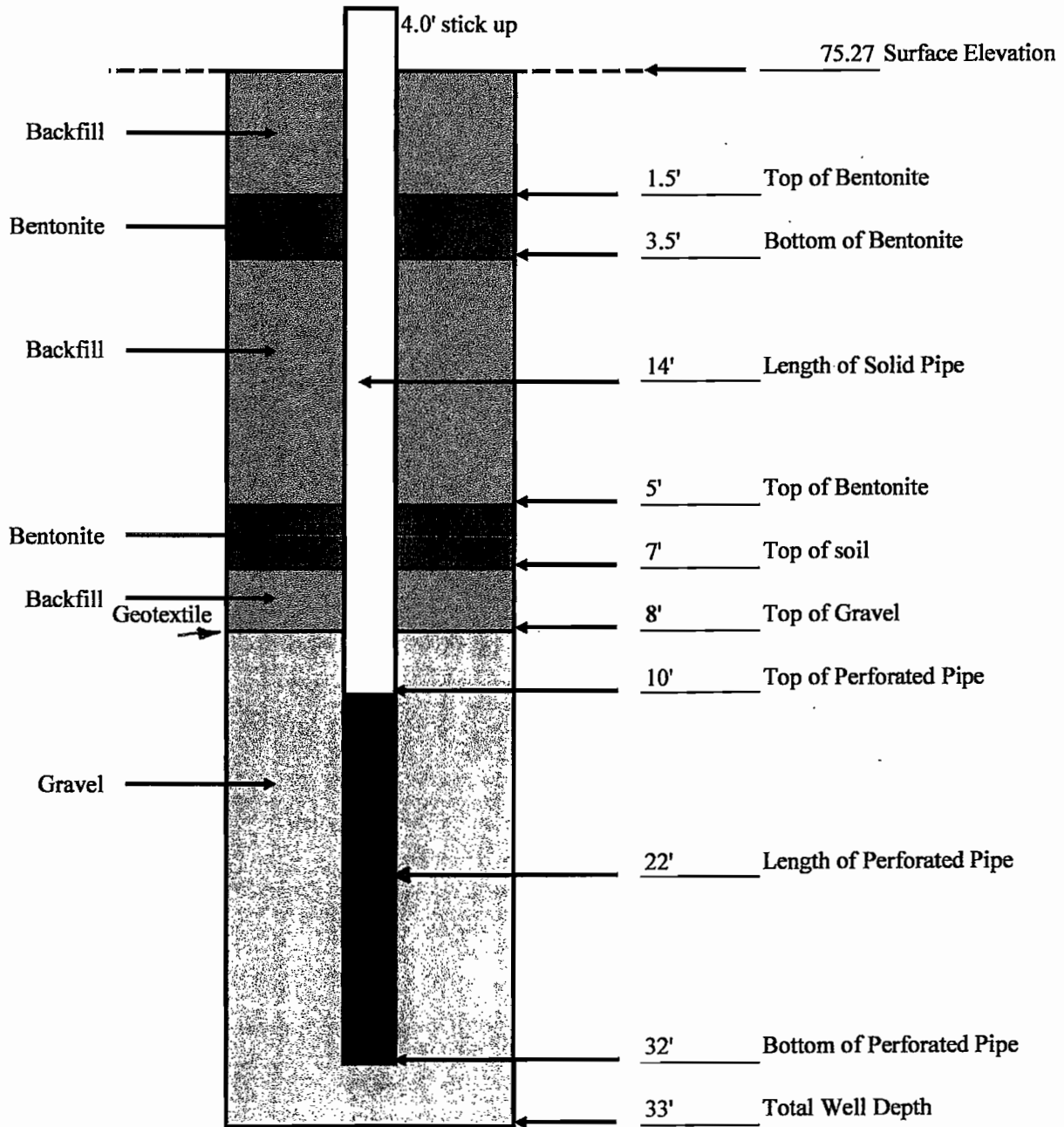
<b>Date</b>	01/29/10	<b>Boring Depth</b>	35'
<b>Project Name</b>	Sarasota County	<b>Boring Diameter</b>	36"
<b>Project Number</b>	12209031	<b>Pipe Spec.</b>	SDR 11
<b>Well Number</b>	GW-12	<b>Pipe Diameter</b>	6"



**NOTES:**

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

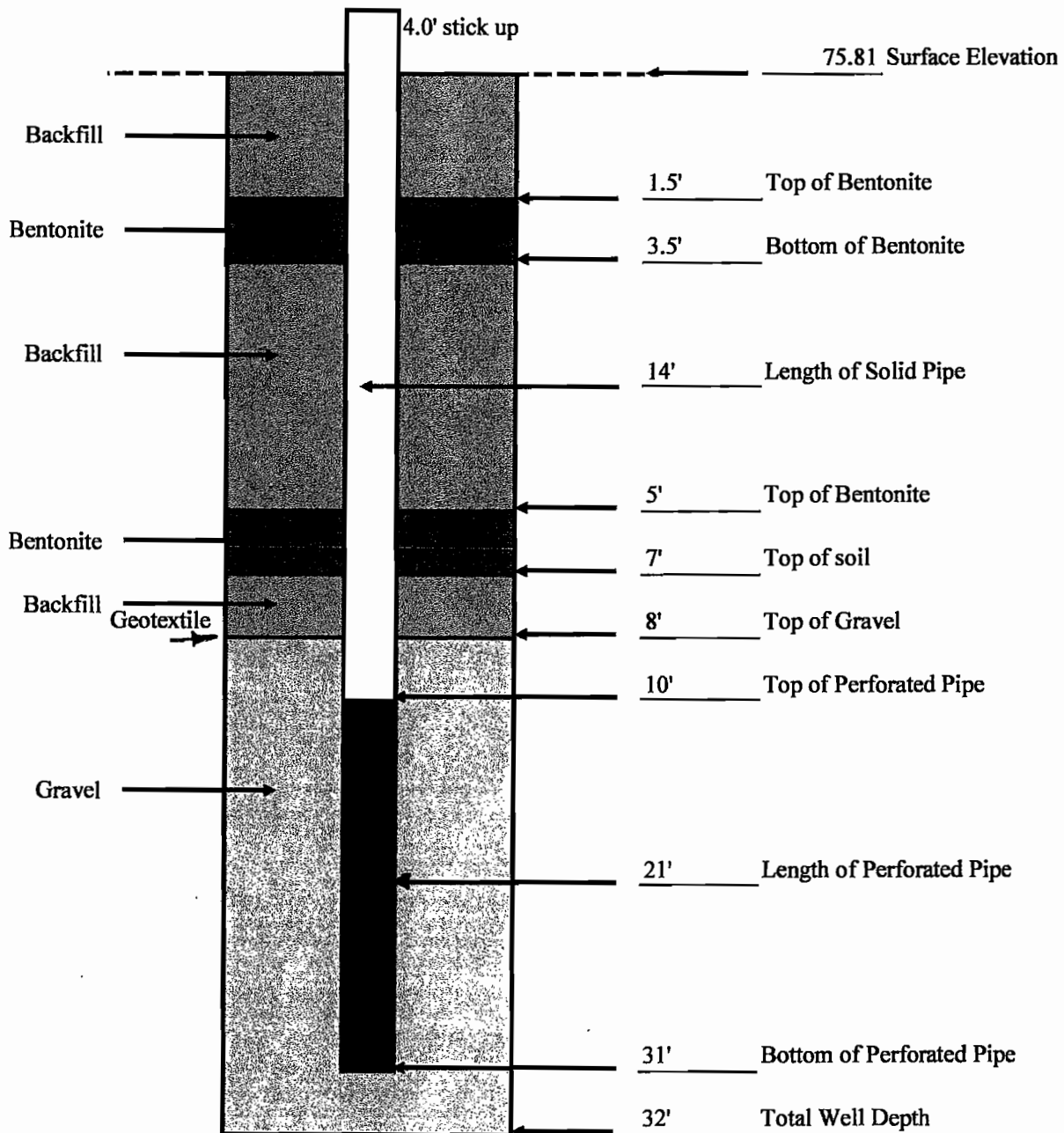
Date	01/29/10	Boring Depth	33'
Project Name	Sarasota County	Boring Diameter	36"
Project Number	12209031	Pipe Spec.	SDR 11
Well Number	GW-13	Pipe Diameter	6"



NOTES:

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

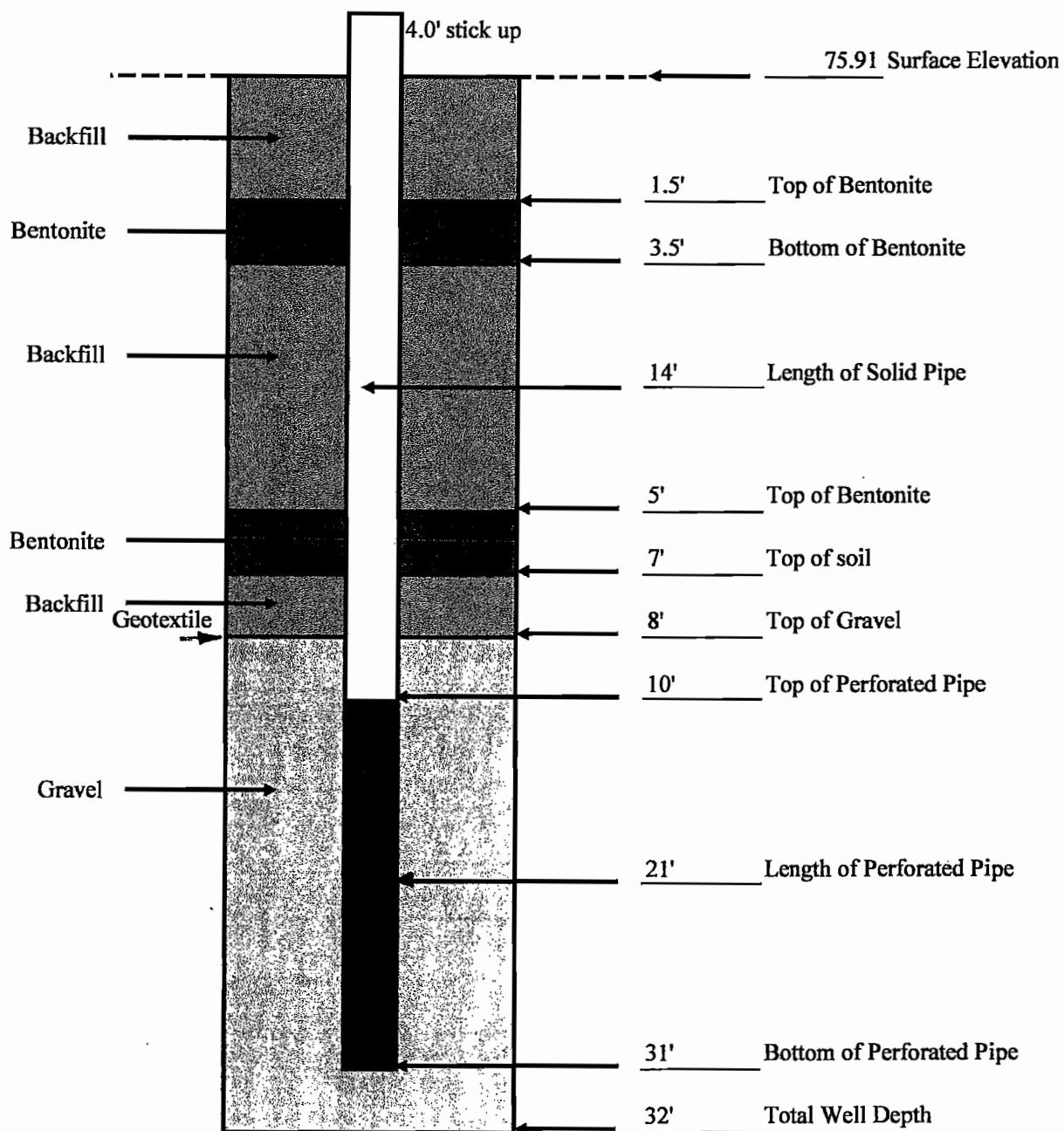
<b>Date</b>	<u>01/28/10</u>	<b>Boring Depth</b>	<u>32'</u>
<b>Project Name</b>	<u>Sarasota County</u>	<b>Boring Diameter</b>	<u>36"</u>
<b>Project Number</b>	<u>12209031</u>	<b>Pipe Spec.</b>	<u>SDR 11</u>
<b>Well Number</b>	<u>GW-14</u>	<b>Pipe Diameter</b>	<u>6"</u>



**NOTES:**

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

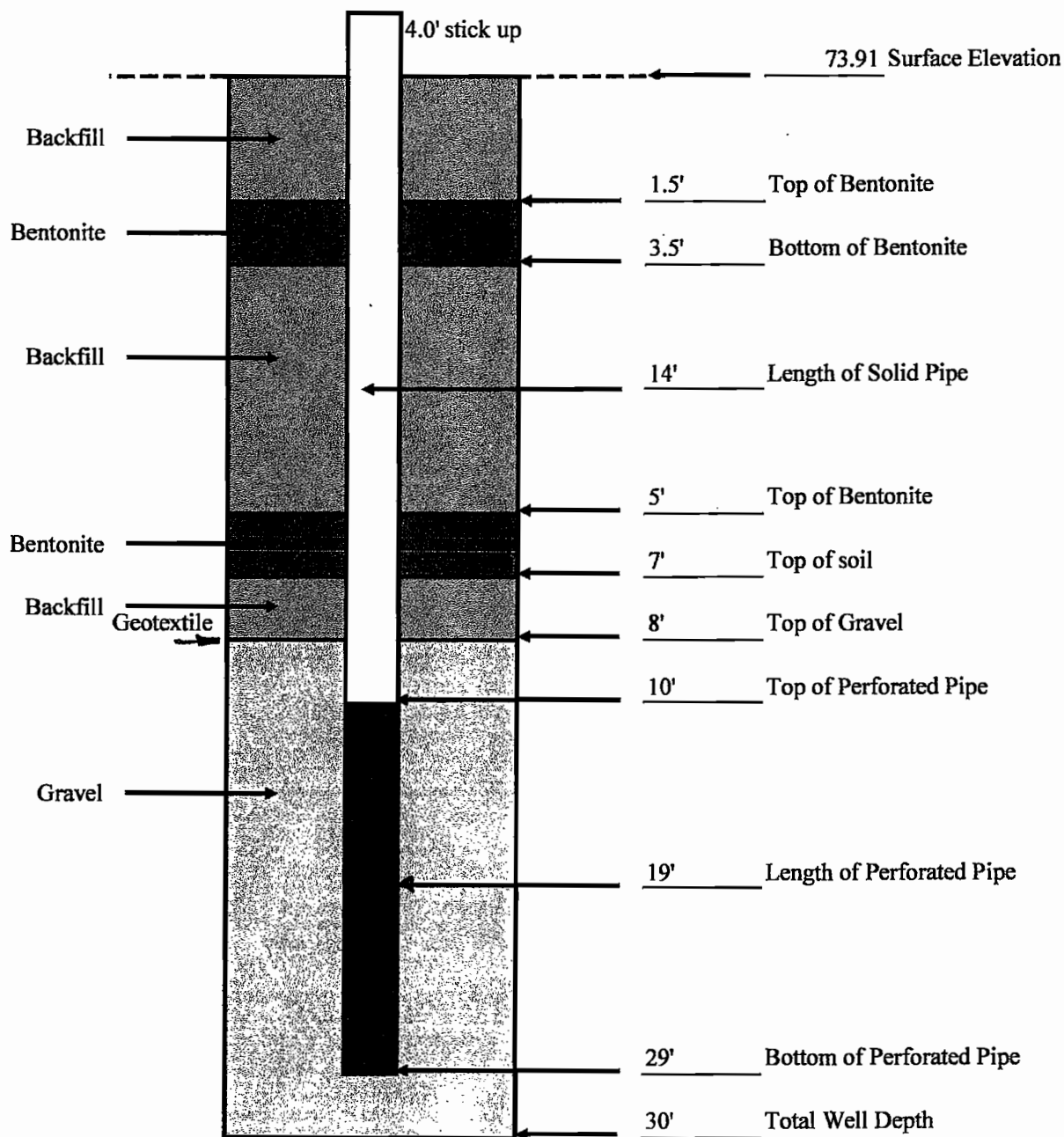
<b>Date</b>	01/29/10	<b>Boring Depth</b>	32'
<b>Project Name</b>	Sarasota County	<b>Boring Diameter</b>	36"
<b>Project Number</b>	12209031	<b>Pipe Spec.</b>	SDR 11
<b>Well Number</b>	GW-15	<b>Pipe Diameter</b>	6"



**NOTES:**

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

Date	01/30/10	Boring Depth	30'
Project Name	Sarasota County	Boring Diameter	36"
Project Number	12209031	Pipe Spec.	SDR 11
Well Number	GW-16	Pipe Diameter	6"

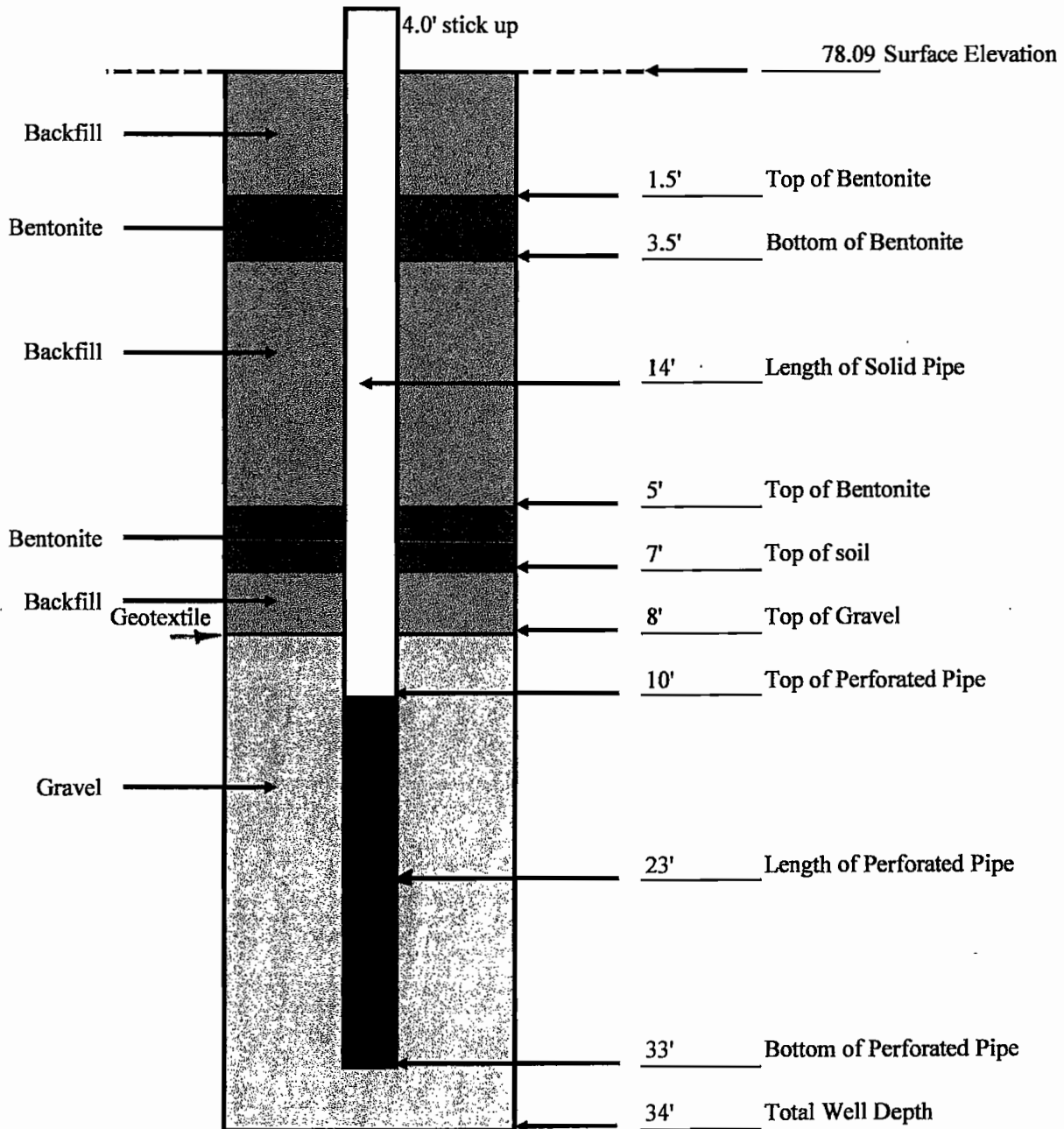


NOTES:



**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

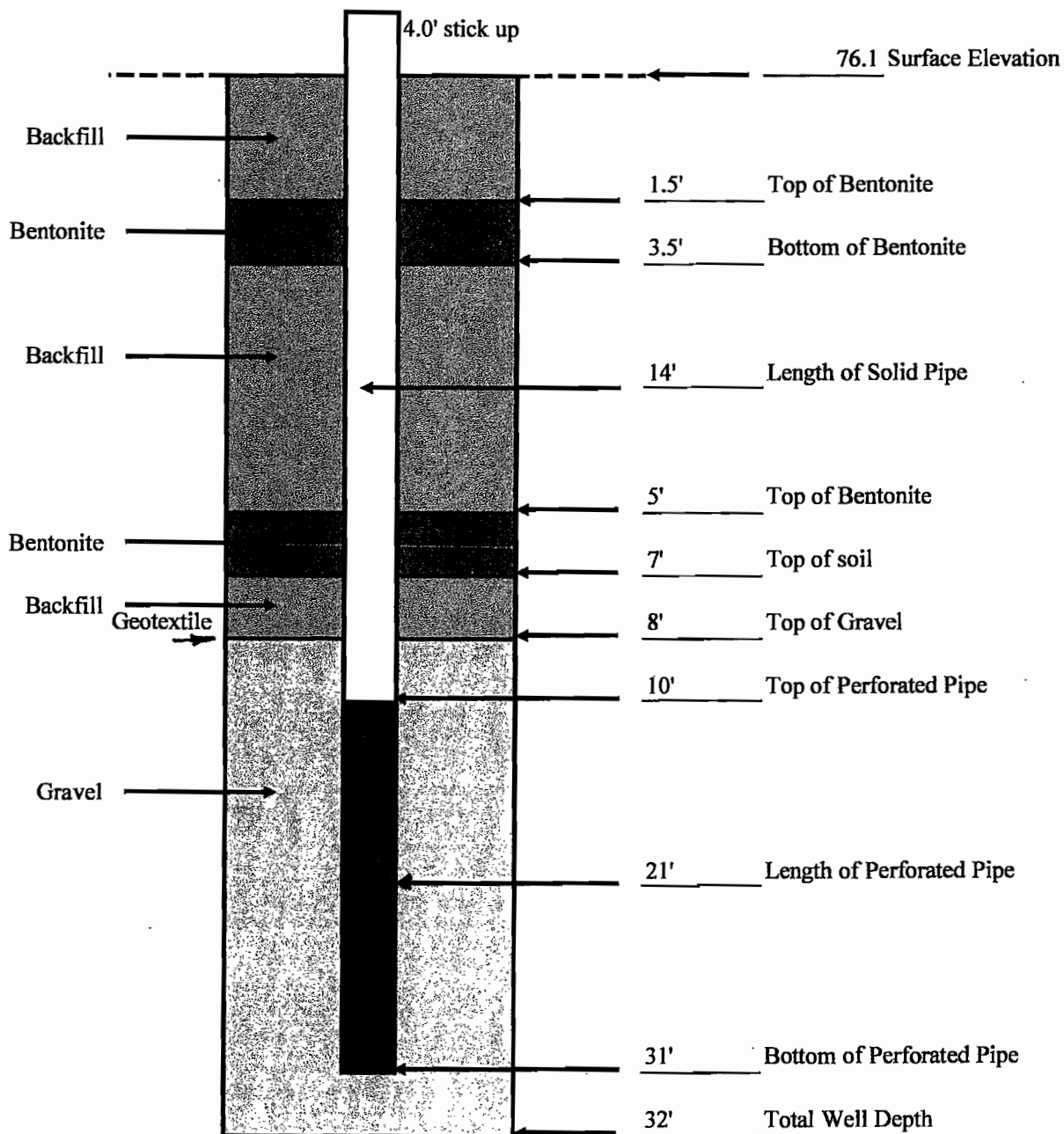
<b>Date</b>	01/30/10	<b>Boring Depth</b>	34'
<b>Project Name</b>	Sarasota County	<b>Boring Diameter</b>	36"
<b>Project Number</b>	12209031	<b>Pipe Spec.</b>	SDR 11
<b>Well Number</b>	GW-17	<b>Pipe Diameter</b>	6"



NOTES:

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

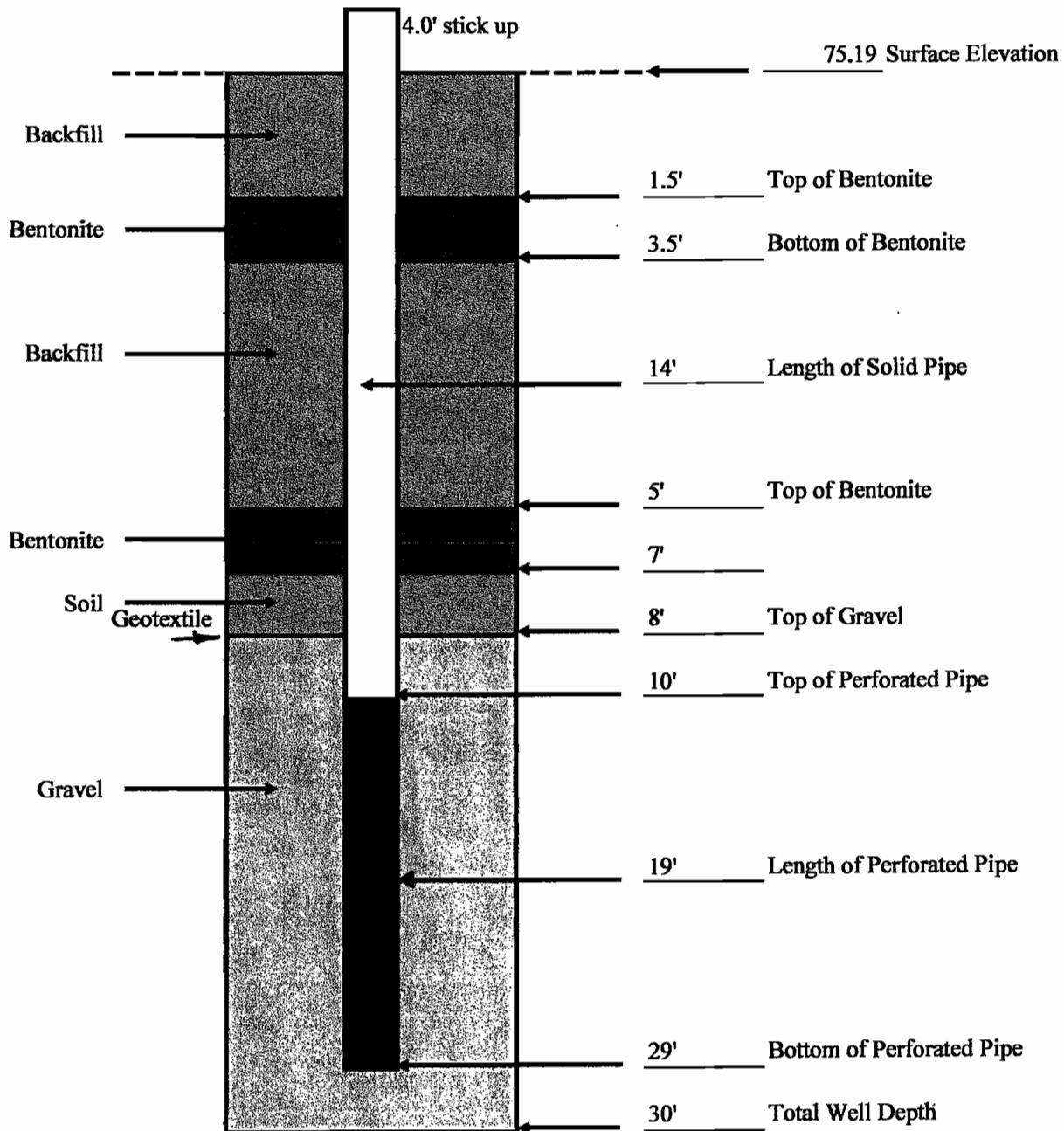
<b>Date</b>	01/30/10	<b>Boring Depth</b>	32'
<b>Project Name</b>	Sarasota County	<b>Boring Diameter</b>	36"
<b>Project Number</b>	12209031	<b>Pipe Spec.</b>	SDR 11
<b>Well Number</b>	GW-18	<b>Pipe Diameter</b>	6"



**NOTES:**

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

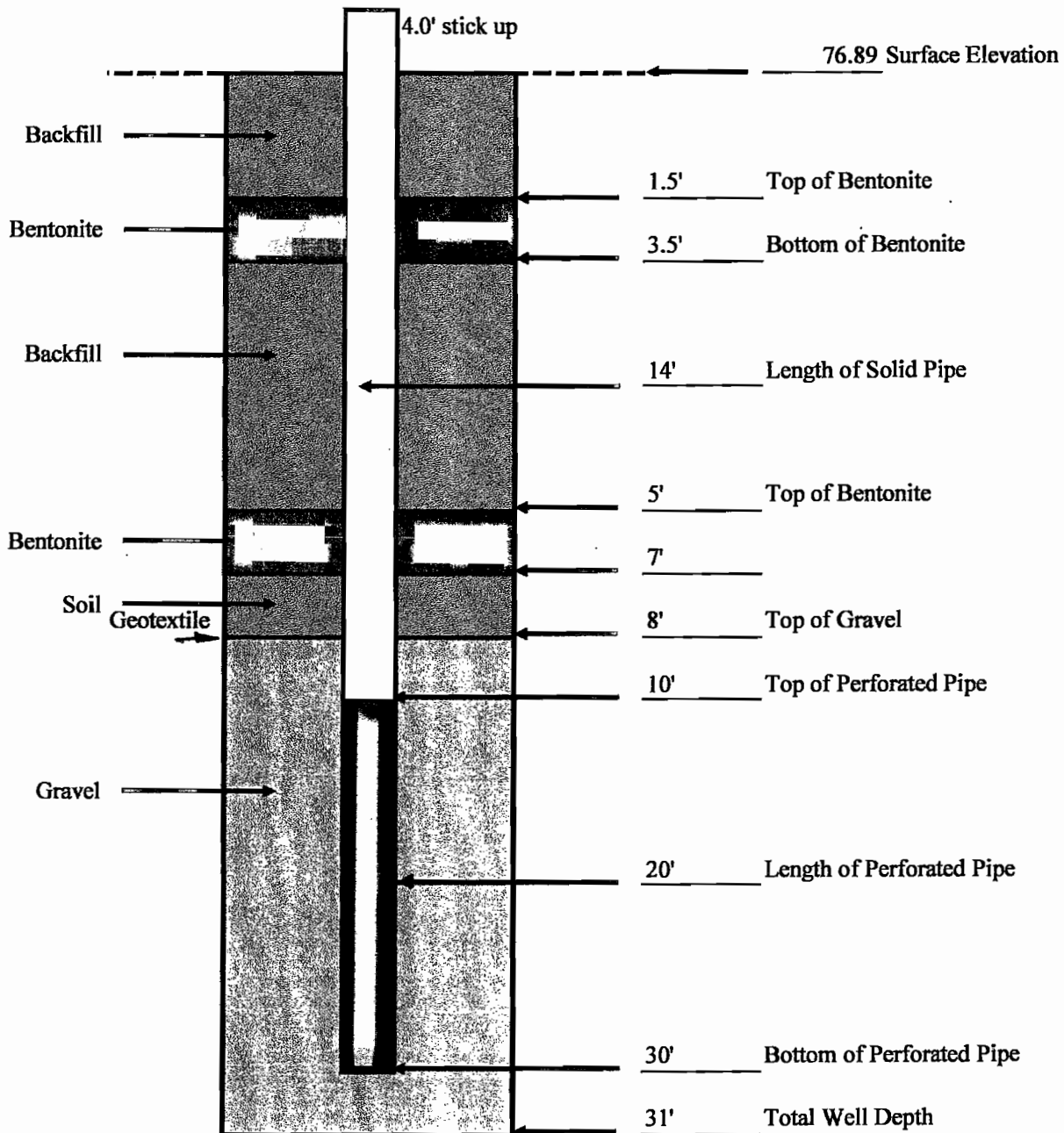
<b>Date</b>	02/04/10	<b>Boring Depth</b>	30'
<b>Project Name</b>	SARASOTA COUNTY	<b>Boring Diameter</b>	36"
<b>Project Number</b>	12209031	<b>Pipe Spec.</b>	SDR-11
<b>Well Number</b>	GW-19	<b>Pipe Diameter</b>	6"



**NOTES:**

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

<b>Date</b>	02/03/10	<b>Boring Depth</b>	31'
<b>Project Name</b>	SARASOTA COUNTY	<b>Boring Diameter</b>	36"
<b>Project Number</b>	12209031	<b>Pipe Spec.</b>	SDR-11
<b>Well Number</b>	GW-20	<b>Pipe Diameter</b>	6"

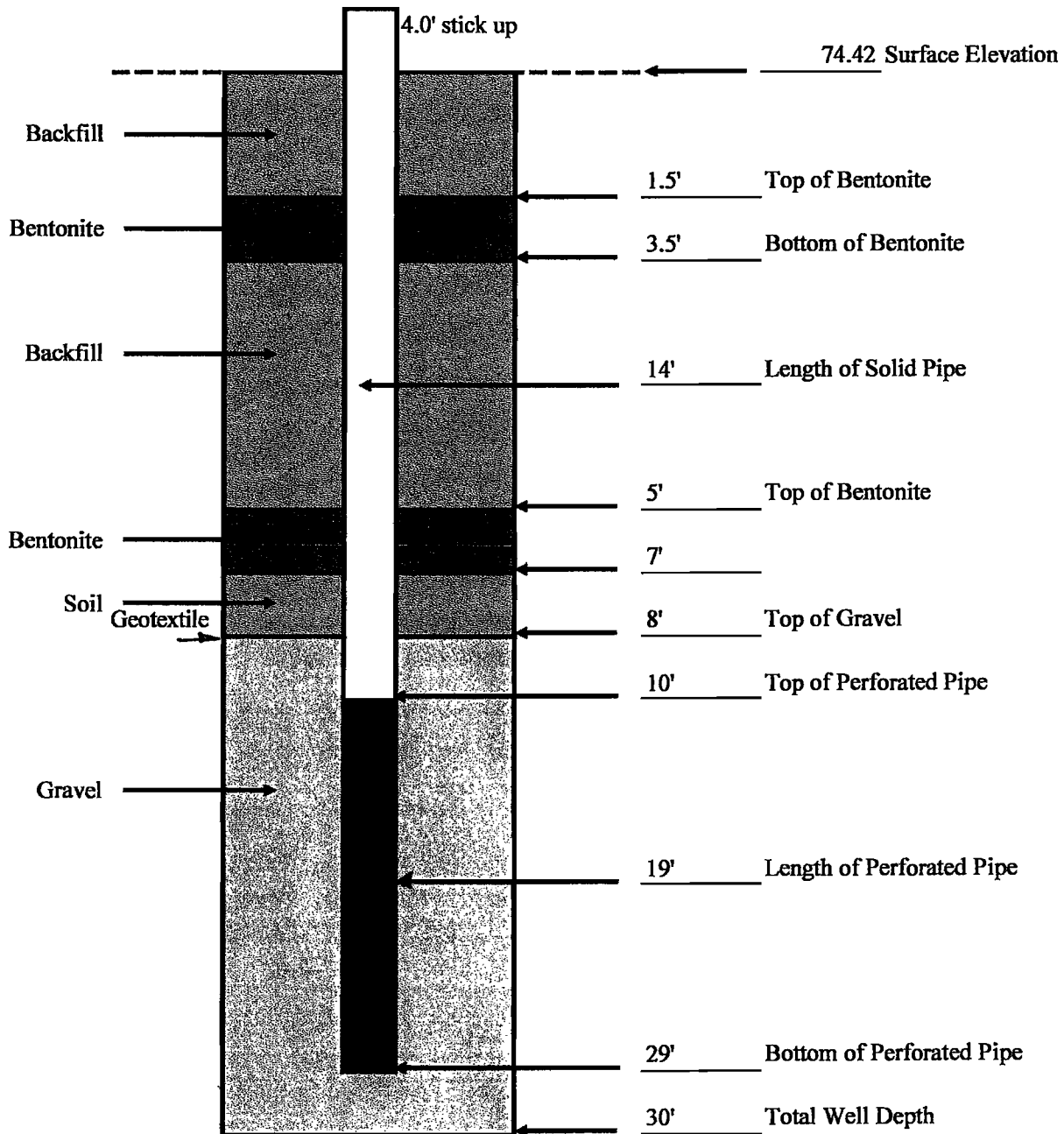


**NOTES:**

# SCS Field Services

## GAS EXTRACTION WELL INSTALLATION RECORD

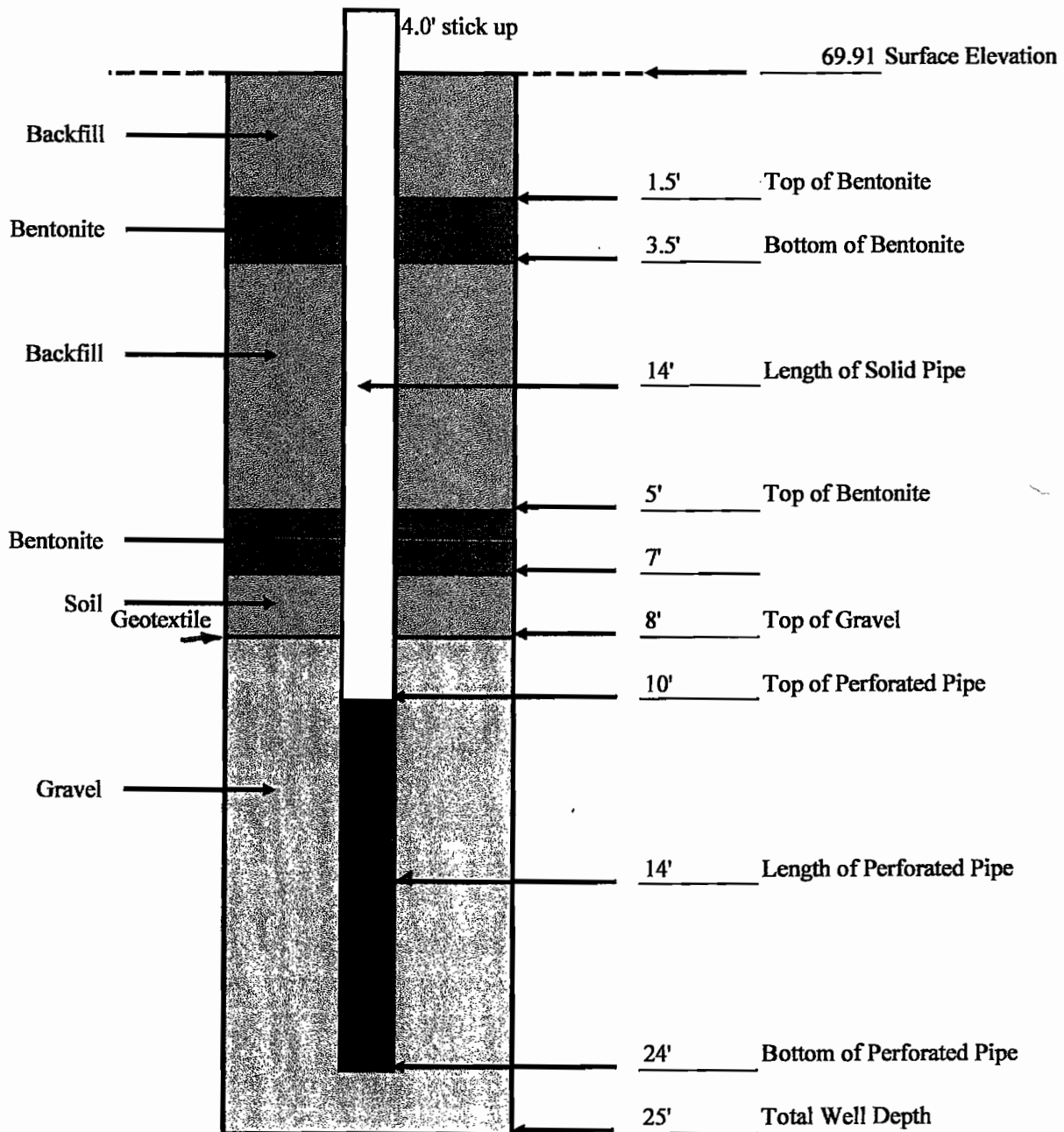
Date	02/04/10	Boring Depth	30'
Project Name	SARASOTA COUNTY	Boring Diameter	36"
Project Number	12209031	Pipe Spec.	SDR-11
Well Number	GW-21	Pipe Diameter	6"



NOTES:

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

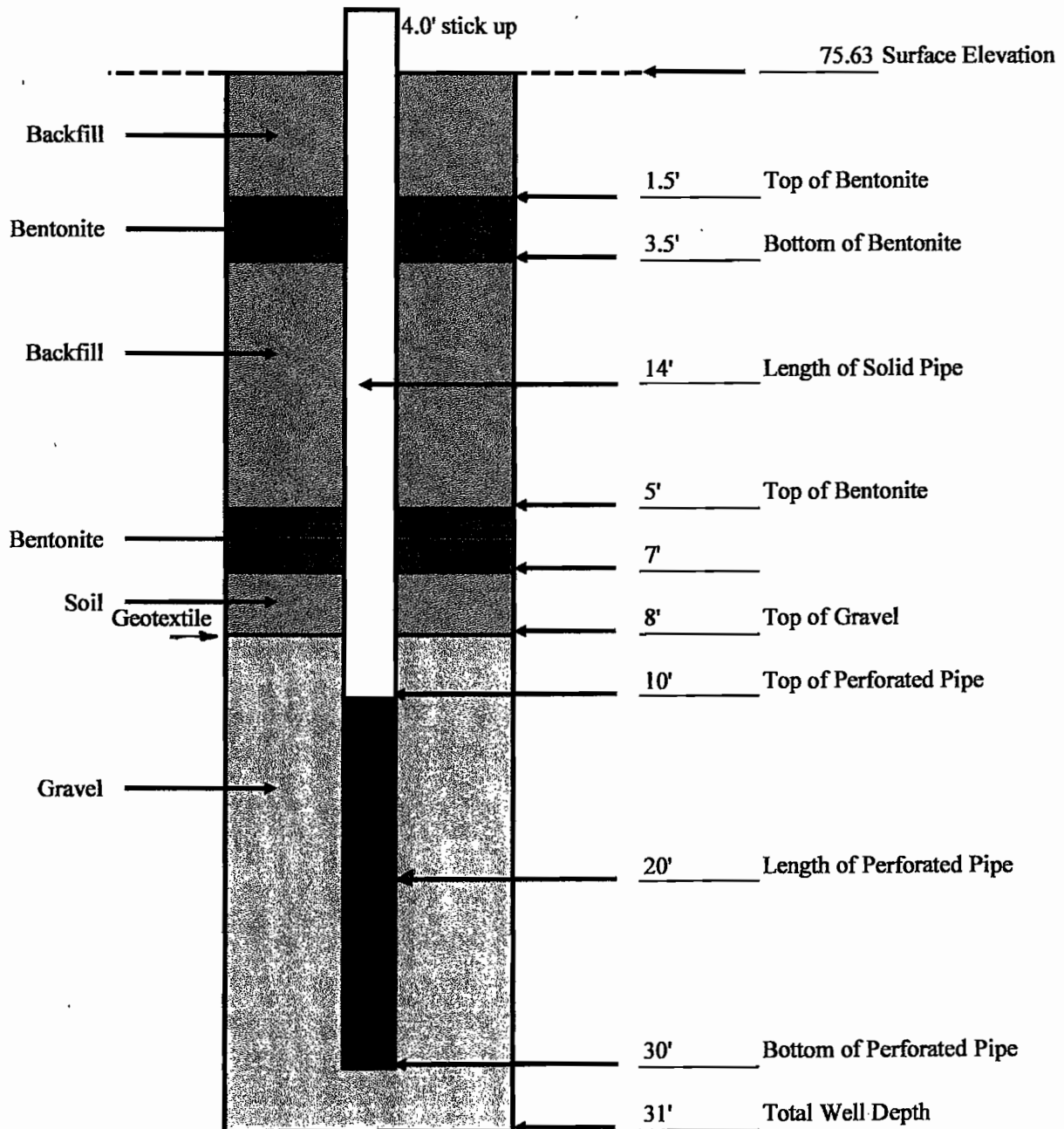
<b>Date</b>	02/03/10	<b>Boring Depth</b>	25'
<b>Project Name</b>	SARASOTA COUNTY	<b>Boring Diameter</b>	36"
<b>Project Number</b>	12209031	<b>Pipe Spec.</b>	SDR-11
<b>Well Number</b>	GW-22	<b>Pipe Diameter</b>	6"



NOTES:

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

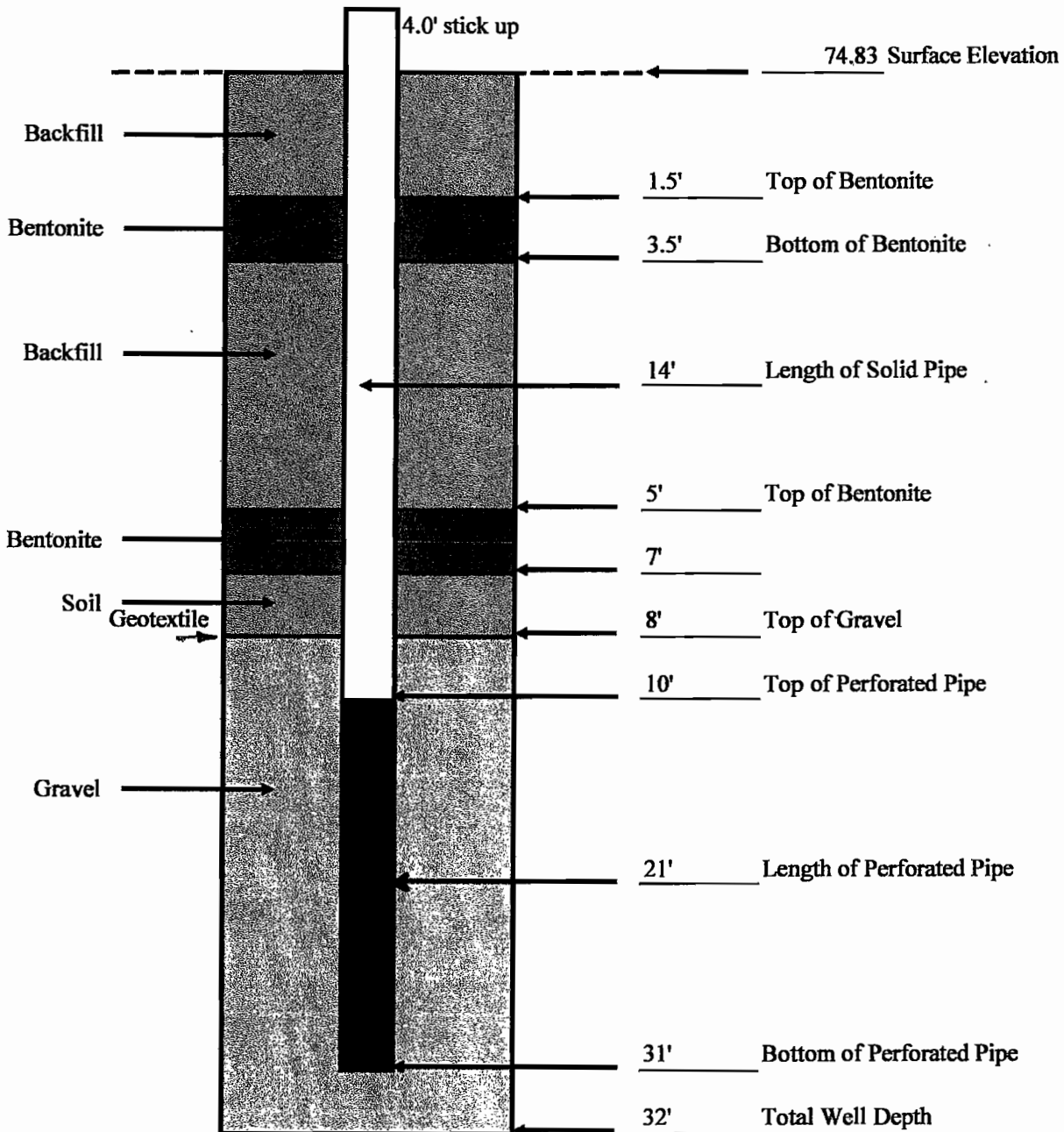
Date	02/03/10	Boring Depth	31'
Project Name	SARASOTA COUNTY	Boring Diameter	36"
Project Number	12209031	Pipe Spec.	SDR-11
Well Number	GW-23	Pipe Diameter	6"



NOTES:

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

<b>Date</b>	02/03/10	<b>Boring Depth</b>	32'
<b>Project Name</b>	SARASOTA COUNTY	<b>Boring Diameter</b>	36"
<b>Project Number</b>	12209031	<b>Pipe Spec.</b>	SDR-11
<b>Well Number</b>	GW-24	<b>Pipe Diameter</b>	6"

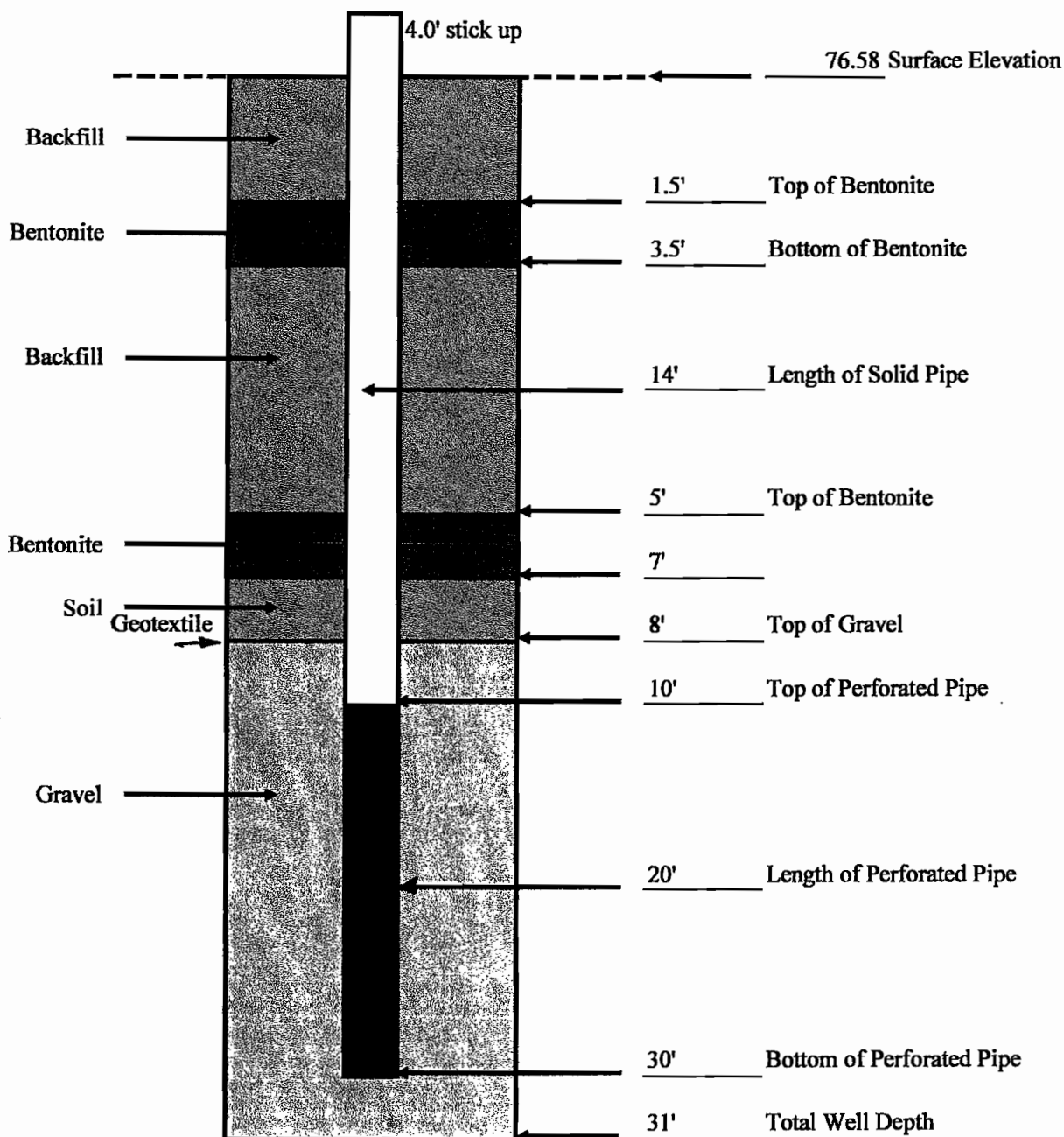


**NOTES:**



**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

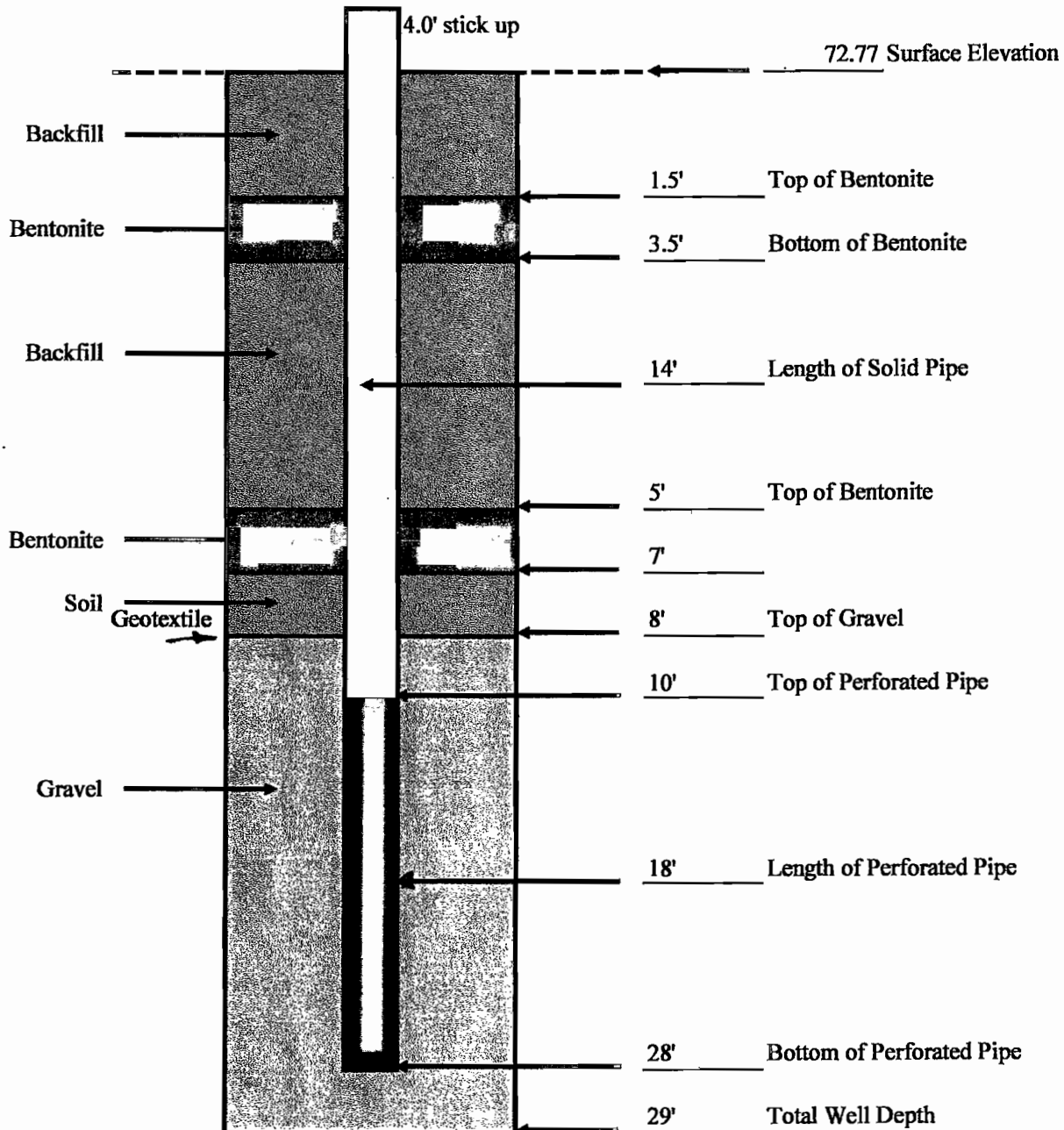
<b>Date</b>	02/03/10	<b>Boring Depth</b>	31'
<b>Project Name</b>	SARASOTA COUNTY	<b>Boring Diameter</b>	36"
<b>Project Number</b>	12209031	<b>Pipe Spec.</b>	SDR-11
<b>Well Number</b>	GW-25	<b>Pipe Diameter</b>	6"



**NOTES:**

**SCS Field Services**  
**GAS EXTRACTION WELL INSTALLATION RECORD**

<b>Date</b>	02/04/10	<b>Boring Depth</b>	29'
<b>Project Name</b>	SARASOTA COUNTY	<b>Boring Diameter</b>	36"
<b>Project Number</b>	12209031	<b>Pipe Spec.</b>	SDR-11
<b>Well Number</b>	GW-26	<b>Pipe Diameter</b>	6"



**NOTES:**

**B&H Drilling Service, Inc.**

1424 S.E. 15th St., Suite 44 ■ Ft. Lauderdale, FL 33316

954 522-4969 ■ Fax: 954 522-5264

**DAILY DIARY**PROJECT NAME: SARASOTA CO. 4/F  
CLIENT: SCSDATE: 2-5-10  
CREW: BIB**DRILLING**138 LINEAR FEET OF DRILLING  
0 LINEAR FEET OF DRILLING - ABANDONMENTLINEAR FEET OF PIPE INSTALLED:  
BELOW GROUND SURFACEPERFORATED PIPE - DIA 6"  
SOLID PIPE - DIA \_\_\_\_\_

COMPLETION (WELL NUMBER(S)):

GW-3, 4, 5, 6**GENERAL INFORMATION**

WEATHER CONDITIONS:

73° CLOUDY

START TIME:

7:00 A

STOP TIME:

11:00 ACOMMENTS: DRILLED + SET PIPE ON GW-3 AT 35', GW-4 AT 30',  
GW-5 AT 33', GW-6 AT 35', END DAY + TOB

DATE

CLIENT REPRESENTATIVE  
(NAME & TITLE)

DATE

B&amp;H DRILLING SITE SUPERVISOR

DATE

CLIENT REPRESENTATIVE  
(NAME & TITLE)ALL BORE HOLES DRILLED TO SPECIFIED OR APPROVED  
DEPTHS OF OWNER/CLIENT REPRESENTATIVE.

**B&H Drilling Service, Inc.**Site Location: SARASOTA CO. <sup>L</sup>/FDate: 2-<sup>5</sup>-10Well Number: GW-3

Depth	Composition	Degree of Decomposition	Moisture	Comments
35				
0-8	SOIL COVER	NA	DRY	
8-10	MSW	NONE	DRY	78°
10-20	MSW/DIRT	SLIGHT	DRY	93°
20-30	11	11	11	102°
30-35	MSW/DIRT/WOOD	SLIGHT	DRY	98°
	BOB			
33	GW-4			
0-7	SOIL COVER	NA	DRY	
7-10	MSW/DIRT	SLIGHT	DRY	77°
10-20	11	11	11	82°
20-33	MSW/DIRT	SLIGHT	DRY	93°
	BOB			
33	GW-5			
0-7	SOIL COVER	NA	DRY	
7-10	MSW	NONE	DRY	82°
10-20	MSW/DIRT/WOOD	SLIGHT	DRY	90°
20-33	MSW/DIRT	SLIGHT	DRY	103°
35	GW-6			
0-8	SOIL COVER	NA	DRY	81°
8-20	MSW/DIRT	SLIGHT	DRY	91°
20-30	11	11	11	99°
30-35	MSW/WOOD/DIRT	SLIGHT	DRY	102°

BOB

B&amp;H Drilling Representative

Owner/Owner's Representative

Bill Barter

B&H Drilling Services, Inc.  
 1424 SE 15<sup>th</sup> Street, Fort Lauderdale, FL 33316  
 Phone: (954) 522-4969 Fax: (954) 522-5264

NWSP= Newspaper  
 HHG= Household Garbage  
 CD= Construction Debris  
 PPR/PLST= Paper/Plastic

**B&H Drilling Service, Inc.**

1424 S.E. 15th St., Suite 44 ■ Ft. Laud., FL 33316

954 522-4969 ■ Fax: 954 522-5264

**DAILY DIARY**PROJECT NAME: SARASOTA CO. 4/F  
CLIENT: SCSDATE: 1-28-10  
CREW: BB**DRILLING**99 LINEAR FEET OF DRILLING  
0 LINEAR FEET OF DRILLING - ABANDONMENTLINEAR FEET OF PIPE INSTALLED:  
BELOW GROUND SURFACEPERFORATED PIPE - DIA 6" PE  
SOLID PIPE - DIA \_\_\_\_\_

COMPLETION (WELL NUMBER(S)):

GW-9, 14, 10**GENERAL INFORMATION**WEATHER CONDITIONS: 73° SUNNYSTART TIME: 10:30 ASTOP TIME: 2:00 PCOMMENTS: FIRST DAY OF DRILLING. DRILLED GW-9 TO 33',  
GW-14 TO 32', GW-10 TO 34'. END DAYFOOTAGE DRILLED = 836'

DATE

CLIENT REPRESENTATIVE  
(NAME & TITLE)

DATE

B&amp;H DRILLING SITE SUPERVISOR

DATE

CLIENT REPRESENTATIVE  
(NAME & TITLE)ALL BORE HOLES DRILLED TO SPECIFIED OR APPROVED  
DEPTHS OF OWNER/CLIENT REPRESENTATIVE.

## ***E & H Drilling Service, Inc.***

Site Location: SARASOTA CO. <sup>L</sup>/F  
Well Number: Giv-9

**Date:** 1-28-1

[illegible]

**B&H Drilling Representative**

**Owner/Owner's Representative**

**B&H Drilling Services, Inc.**  
**1424 SE 15<sup>th</sup> Street, Fort Lauderdale, FL 33316**  
**Phone: (954) 522-4969 Fax: (954) 522-5264**

**NWSP= Newspaper**  
**HHG= Household Garbage**  
**CD= Construction Debris**  
**PPR/PLST= Paper/Plastic**

**B&H Drilling Service, Inc.**

Site Location: SARASOTA CO. <sup>L</sup>/F  
Well Number: GW-14

**Date:** 1-28-10

[illegible]

**B&H Drilling Representative**

**Owner/Owner's Representative**

**B&H Drilling Services, Inc.**  
**1424 SE 15<sup>th</sup> Street, Fort Lauderdale, FL 33316**  
**Phone: (954) 522-4969 Fax: (954) 522-5264**

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**HHG= Household Garbage**  
**CD= Construction Debris**  
**PPR/PLST= Paper/Plastic**

**B&H Drilling Service, Inc.**

1424 S.E. 15th St., Suite 44 ■ Ft. Lauderdale, FL 33316

954 522-4969 ■ Fax: 954 522-5264

**DAILY DIARY**PROJECT NAME: SARASOTA CO. 4/F  
CLIENT: SCSDATE: 1-29-10  
CREW: BARTEIR**DRILLING**133

LINEAR FEET OF DRILLING

0

LINEAR FEET OF DRILLING - ABANDONMENT

LINEAR FEET OF PIPE INSTALLED:  
BELOW GROUND SURFACE1

PERFORATED PIPE - DIA

SOLID PIPE

- DIA 6" PE

COMPLETION (WELL NUMBER[S]):

GW-11, 12, 13, 15**GENERAL INFORMATION**

WEATHER CONDITIONS:

75° SUNNY

START TIME:

7:30 A

STOP TIME:

1:30 PCOMMENTS: DRIILLED GW-11 TO 33', GW-12 TO 35', GW-13 TO 33',  
GW-15 TO 32', END DAY.

DATE

CLIENT REPRESENTATIVE  
(NAME & TITLE)

DATE

1-29-10 Bill Barter  
B&H DRILLING SITE SUPERVISOR

DATE

CLIENT REPRESENTATIVE  
(NAME & TITLE)ALL BORE HOLES DRILLED TO SPECIFIED OR APPROVED  
DEPTHS OF OWNER/CLIENT REPRESENTATIVE.



# B&H Drilling Service, Inc.

Site Location: SARASOTA CO. L/F  
Well Number: GW-11

Date: 1-29-10

Depth	Composition	Degree of Decomposition	Moisture	Comments
33				
0-4	SOIL COVER	NA	DRY	
4-10	MSW / DIRT	NONE	DRY	77°
10-20	MSW	SLIGHT	DRY	94°
20-33	MSW / DIRT	SLIGHT	DRY	87°
	BOB			
35	GW-12			
0-6	SOIL COVER	NA	DRY	
6-10	MSW	NONE	DRY	83°
10-20	DIRT / MSW	SLIGHT	DRY	84°
20-35	MSW / WOOD	SLIGHT	DIRY	97°
	BOB			
33	GW-13			
0-6	SOIL COVER	NA	DIRY	
6-10	MSW	NONE	DRY	88°
10-20	DIRT / MSW	SLIGHT	DRY	95°
20-33	MSW / DIRT / WOOD	SLIGHT	DRY	98°
	BOB			

B&H Drilling Representative

Owner/Owner's Representative

B&H Drilling Services, Inc.  
1424 SE 15<sup>th</sup> Street, Fort Lauderdale, FL 33316  
Phone: (954) 522-4969 Fax: (954) 522-5264

NWSP= Newspaper  
HHG= Household Garbage  
CD= Construction Debris  
PPR/PLST= Paper/Plastic

***B&H Drilling Service, Inc.***

Site Location: SARASOTA CO. E/F  
Well Number: GW-15

**Date:** 1-29-10

[illegible]

**B&H Drilling Representative**

**Owner/Owner's Representative**

**B&H Drilling Services, Inc.**  
1424 SE 15<sup>th</sup> Street, Fort Lauderdale, FL 33316  
Phone: (954) 522-4969 Fax: (954) 522-5264

**NWSP= Newspaper**  
**HHG= Household Garbage**  
**CD= Construction Debris**  
**PPR/PLST= Paper/Plastic**

**B&H Drilling Service, Inc.**

1424 S.E. 15th St., Suite 44 ■ Ft. Laud., FL 33316

954 522-4969 ■ Fax: 954 522-5264

**DAILY DIARY**PROJECT NAME: SARASOTA CA 4/F  
CLIENT: SCSDATE: 1-30-10  
CREW: B13**DRILLING**96 LINEAR FEET OF DRILLING  
0 LINEAR FEET OF DRILLING - ABANDONMENTLINEAR FEET OF PIPE INSTALLED:  
BELOW GROUND SURFACE/ PERFORATED PIPE - DIA  
SOLID PIPE - DIA 6"

COMPLETION (WELL NUMBER(S)):

GW-16, 17, 18**GENERAL INFORMATION**WEATHER CONDITIONS: 75° SUNNYSTART TIME: 7:00ASTOP TIME: 10:30ACOMMENTS: DRILLED + SET PIPE ON GW-16 AT 30', GW-17 AT 34',  
GW-18 AT 32'. END DAY.

DATE \_\_\_\_\_ CLIENT REPRESENTATIVE (NAME &amp; TITLE) \_\_\_\_\_ DATE \_\_\_\_\_ B&amp;H DRILLING SITE SUPERVISOR \_\_\_\_\_

DATE \_\_\_\_\_ CLIENT REPRESENTATIVE (NAME &amp; TITLE) \_\_\_\_\_

ALL BORE HOLES DRILLED TO SPECIFIED OR APPROVED  
DEPTHS OF OWNER/CLIENT REPRESENTATIVE.

**B&H Drilling Service, Inc.**

**Site Location:** SARASOTA CO. 4/E

**Date:** 1-30-10

Well Number: 6W-15

Depth	Composition	Degree of Decomposition	Moisture	Comments
30	GW-16 1-30-10			
0-3	SOIL COVER	NA	DRY	
3-10	DIRT / MSW	NONE	DRY	78° WET-4-5'
10-20	MSW	SLIGHT	DIRY	83°
2-30	MSW / WOODS	SLIGHT	DRY	86°
	BOB			
34	GW-17			
0-5	SOIL COVER	NA	DRY	
5-10	MSW / DIRT	SLIGHT	DRY	77°
10-20	il	il	il	81°
20-34	DIRT / MSW	SLIGHT	DRY	96°
	BOB			

**B&H Drilling Representative**

**Owner/Owner's Representative**

**B&H Drilling Services, Inc.**  
1424 SE 15<sup>th</sup> Street, Fort Lauderdale, FL 33316  
Phone: (954) 522-4969 Fax: (954) 522-5264

**NWSP= Newspaper**  
**HHG= Household Garbage**  
**CD= Construction Debris**  
**PPR/PLST= Paper/Plastic**

**B&H Drilling Service, Inc.**

Site Location: SARASOTA CO. 7/E

Date: 1-30-10

Well Number: 6W-18

[illegible]**B&H Drilling Representative****Owner/Owner's Representative**

**B&H Drilling Services, Inc.**  
**1424 SE 15<sup>th</sup> Street, Fort Lauderdale, FL 33316**  
**Phone: (954) 522-4969 Fax: (954) 522-5264**

**NWSP= Newspaper**  
**HHG= Household Garbage**  
**CD= Construction Debris**  
**PPR/PLST= Paper/Plastic**

**B&H Drilling Service, Inc.**1424 S.E. 15th St., Suite 44 • Ft. Laud., FL 33316  
954 522-4969 • Fax: 954 522-5264**DAILY DIARY**PROJECT NAME: SARASOTA CO. 4F  
CLIENT: SCSDATE: 2-3-10  
CREW: BB**DRILLING**214 LINEAR FEET OF DRILLING  
0 LINEAR FEET OF DRILLING - ABANDONMENTLINEAR FEET OF PIPE INSTALLED:  
BELOW GROUND SURFACEPERFORATED PIPE - DIA 6"  
SOLID PIPE - DIA \_\_\_\_\_

COMPLETION (WELL NUMBER(S)):

GW-8, 7, 25, 24  
23, 20, 22**GENERAL INFORMATION**WEATHER CONDITIONS: 70° SUNNYSTART TIME: 7:00 ASTOP TIME: 3:00 PCOMMENTS: DRILLED+SET PIPE ON GW-8 AT 34', GW-7 AT 30',  
GW-25 AT 31', GW-24 AT 32', GW-23 AT 31', GW-20 AT 31'  
GW-22 AT 25'. END DAY.

DATE

CLIENT REPRESENTATIVE  
(NAME & TITLE)

DATE

2-3-10 Bill Barter  
B&H DRILLING SITE SUPERVISOR

DATE

CLIENT REPRESENTATIVE  
(NAME & TITLE)ALL BORE HOLES DRILLED TO SPECIFIED OR APPROVED  
DEPTHS OF OWNER/CLIENT REPRESENTATIVE.

**B&H Drilling Service, Inc.**Site Location: SARASOTA CO. L/EDate: 2-3-10Well Number: GW-8

Depth	Composition	Degree of Decomposition	Moisture	Comments
34				
0-4	SOIL COVER	NA	DRY	
4-10	MSW	NONE	DRY	790
10-20	MSW / DIRT	SLIGHT	DRY	840
20-34	MSW / DIRT	SLIGHT	DRY	
	BOB			
30	GW-7			
0-8	SOIL COVER	NA	DRY	
8-10	MSW	NONE	DRY	780
10-20	MSW	SLIGHT	DRY	850
20-30	MSW / DIRT	SLIGHT	DRY	870
	BOB			
31	GW-25			
0-4	SOIL COVER	NA	DRY	
4-10	MSW	SLIGHT	DRY	800
10-20	II	II	II	890
20-31	MSW / WOODS	SLIGHT	DRY	940
	BOB			

B&amp;H Drilling Representative

Bill Barter

Owner/Owner's Representative

B&H Drilling Services, Inc.  
 1424 SE 15<sup>th</sup> Street, Fort Lauderdale, FL 33316  
 Phone: (954) 522-4969 Fax: (954) 522-5264

NWSP= Newspaper  
 HHG= Household Garbage  
 CD= Construction Debris  
 PPR/PLST= Paper/Plastic

**B&H Drilling Service, Inc.**Site Location: SARASOTA CO. L/FDate: 2-3-10Well Number: GW-24

Depth	Composition	Degree of Decomposition	Moisture	Comments
32				
0-4	SOIL COVER	NA	DRY	
4-10	MSW / DIRT	NONE	DRY	82°
10-20	MSW / DIRT	SLIGHT	DRY	94°
20-32	MSW	SLIGHT	DRY	93°
	BOB			
31	GW-23			
0-4	SOIL COVER	NA	DRY	
4-10	MSW / DIRT	SLIGHT	DRY	84°
10-20	"	"	"	86°
20-31	MSW / MULCH	SLIGHT	DRY	100°
	BOB			
31	GW-20			
0-4	SOIL COVER	NA	DRY	
4-10	MSW	NONE	DRY	80°
10-20	MSW / DIRT	SLIGHT	DRY	89°
20-31	MSW	SLIGHT	DRY	92°
	BOB			
	GW-22			
0-4	SOIL COVER	NA	DRY	
4-10	MSW	NONE	DRY	
10-25	MSW / DIRT	SLIGHT	DRY	
	BOB			

B&amp;H Drilling Representative

Owner/Owner's Representative

Bill Barter

214

B&H Drilling Services, Inc.  
 1424 SE 15<sup>th</sup> Street, Fort Lauderdale, FL 33316  
 Phone: (954) 522-4969 Fax: (954) 522-5264

NWSP= Newspaper  
 HHG= Household Garbage  
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**B&H Drilling Service, Inc.**

1424 S.E. 15th St., Suite 44 • Ft. Laud., FL 33316

954 522-4969 • Fax: 954 522-5264

**DAILY DIARY**PROJECT NAME: SARASOTA  
CLIENT: SCSDATE: 2-4-10  
CREW: BIB**DRILLING**156 LINEAR FEET OF DRILLING  
0 LINEAR FEET OF DRILLING - ABANDONMENTLINEAR FEET OF PIPE INSTALLED:  
BELOW GROUND SURFACEPERFORATED PIPE - DIA         
SOLID PIPE - DIA 6"

COMPLETION (WELL NUMBER(S)):

GW-21, 19, 26,  
1, 2**GENERAL INFORMATION**WEATHER CONDITIONS: 78° SUNNYSTART TIME: 9:00A STOP TIME: 4:00PCOMMENTS: DRIILLED+ SET PIPE ON GW-21 AT 30', GW-19 AT 30',  
GW-26 AT 29', GW-1 AT 33', GW-2 AT 34'. END DAY.

DATE

CLIENT REPRESENTATIVE  
(NAME & TITLE)

DATE

2-4-10 Bill Barter  
B&H DRILLING SITE SUPERVISOR

DATE

CLIENT REPRESENTATIVE  
(NAME & TITLE)ALL BORE HOLES DRILLED TO SPECIFIED OR APPROVED  
DEPTHS OF OWNER/CLIENT REPRESENTATIVE.

**B&H Drilling Service, Inc.**
 Site Location: SARASOTA CO. <sup>L</sup>/F  
 Well Number: GW-21
Date: 2-<sup>4</sup>8-10

Depth	Composition	Degree of Decomposition	Moisture	Comments
30				
0-7	SOIL COVER	NA	DRY	
7-10	MSW	NONE	DRY	79°
10-20	MSW/DIRT	SLIGHT	DRY	91°
20-30	MSW	SLIGHT	DRY	101°
	BOB			
30	GW-19			
0-6	SOIL COVER	NA	DRY	
6-10	MSW	SLIGHT	DRY	82°
10-20	II	II	II	90°
20-30	MSW/WOOD	SLIGHT	DRY	91°
	BOB			
29	GW-26			
0-5	SOIL COVER	NA	DRY	
5-10	MSW	NONE	DRY	80°
10-20	MSW/DIRT	SLIGHT	DRY	83°
20-29	MSW/WOOD	SLIGHT	DRY	102°
	BOB			

B&amp;H Drilling Representative

Bill Barter

Owner/Owner's Representative

 NWSP= Newspaper  
 HHG= Household Garbage  
 CD= Construction Debris  
 PPR/PLST= Paper/Plastic

 B&H Drilling Services, Inc.  
 1424 SE 15<sup>th</sup> Street, Fort Lauderdale, FL 33316  
 Phone: (954) 522-4969 Fax: (954) 522-5264

**B&H Drilling Service, Inc.**

Site Location: SARASOTA CO. <sup>L</sup>/F  
Well Number: Gw-1

**Date:** 2-<sup>4</sup>~~8~~-10

[illegible]

**B&H Drilling Representative**

**Owner/Owner's Representative**

156 Bill Barton

**B&H Drilling Services, Inc.**  
**1424 SE 15<sup>th</sup> Street, Fort Lauderdale, FL 33316**  
**Phone: (954) 522-4969 Fax: (954) 522-5264**

**NWSP= Newspaper**  
**HHG= Household Garbage**  
**CD= Construction Debris**  
**PPR/PLST= Paper/Plastic**

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
AUG 13 2010  
SOUTHWEST DISTRICT  
TAMPA

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**ATTACHMENT D**  
**CONDENSATE SUMP LEAK TEST REPORT**

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# INFINITY PLASTICS, LLC

1124 Horicon Street  
Mayville, WI 53050  
Phone: 920-387-0200  
Fax: 920-387-0300

---

Week of March 8, 2010

SCS Field Services  
Sarasota County Central L/F  
4000 Knights Trail Rd  
Nokomis, FL 34275

Re: Air Test on Lee Po# POCH024959

To Whom It May Concern:

An air test was performed on the 36" DR17 sump #3 testing was conducted on the week of March 8, 2010. Sump #3 was pressured to 5 psi for 8 hours. No leak down was detected. The sump is certified leak free.



Andy Zipperer  
Quality Control

# **INFINITY PLASTICS, LLC**

**1124 Horicon Street  
Mayville, WI 53050  
Phone: 920-387-0200  
Fax: 920-387-0300**

---

**Week of March 8, 2010**

**SCS Field Services  
Sarasota County Central L/F  
4000 Knights Trail Rd  
Nokomis, FL 34275**

**Re: Air Test on Lee Po# POCH024959**

**To Whom It May Concern:**

**An air test was performed on the 36" DR17 sump #4 testing was conducted on the week of March 8, 2010. Sump #4 was pressured to 5 psi for 8 hours. No leak down was detected. The sump is certified leak free.**



**Andy Zipperer  
Quality Control**

**INFINITY PLASTICS, LLC**

**1124 Horicon Street  
Mayville, WI 53050  
Phone: 920-387-0200  
Fax: 920-387-0300**

---

---

**Week of March 8, 2010**

**SCS Field Services  
Sarasota County Central L/F  
4000 Knights Trail Rd  
Nokomis, FL 34275**

**Re: Air Test on Lee Po# POCH024959**

**To Whom It May Concern:**

**An air test was performed on the 48" DR17 sump #5 testing was conducted on the week of March 8, 2010. Sump #5 was pressured to 5 psi for 8 hours. No leak down was detected. The sump is certified leak free.**



**Andy Zipperer  
Quality Control**

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

AUG 13 2010

SOUTHWEST DISTRICT  
TAMPA

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**ATTACHMENT E**  
**PROGRESS PHOTOGRAPHS**

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## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 1-20-10

Comments:

Fusing 18" SDR 17 (header) at  
Phase I



Date: 1-21-10

Comments:

Fusing 4" SDR 9 (condensate) at  
Phase I



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 1-25-10

Comments:

STP boring at flare pad location  
(Ardaman) – 50 FT boring



Date: 1-27-10

Comments:

Construction of U-traps



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 1-28-10

Comments:

Silt fence installation on  
northwest corner



Date: 1-28-10

Comments:

Temporary stockpile of soil to be  
used as backfill in gas wells





## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 1-28-10

Comments:

Drill rig at GW-9



Date: 1-28-10

Comments:

Pouring gravel on GW-9



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 1-29-10

Comments:

GW-14 – looking south



Date: 2-1-10

Comments:

Existing bottom liner anchor trench of Phase I found



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 2-3-10

Comments:

GW-23, GW-24, GW-25



Date: 2-4-10

Comments:

Placing bentonite at GW-21





## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 2-5-10

Comments:

GW-1 and GW-2, looking east



Date: 2-8-10

Comments:

10' x 20' gravel access ramp at staging area



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 2-8-10

Comments:

Ramp access for excavator  
before header installation on  
north slope



Date: 2-8-10

Comments:

U-trap. 4" tee for drain line  
looking west. Elbow needed to  
connect U-trap to LCO





## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 2-10-10

Comments:

Header pipe and lateral  
connection for GW-2



Date: 2-10-10

Comments:

4" SDR 11 lateral, 4" SDR 9  
(condensate), 2" SDR 9 (airline)  
for GW-3



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 2-17-10

Comments:

Access Point installation



Date: 2-19-10

Comments:

Framing and crushed gravel at  
Flare Station



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 2-19-10

Comments:

Framing and crushed gravel at Flare Station



Date: 2-22-10

Comments:

FD&C (Subcontractor) pouring concrete at Flare Station





## Photographic Record

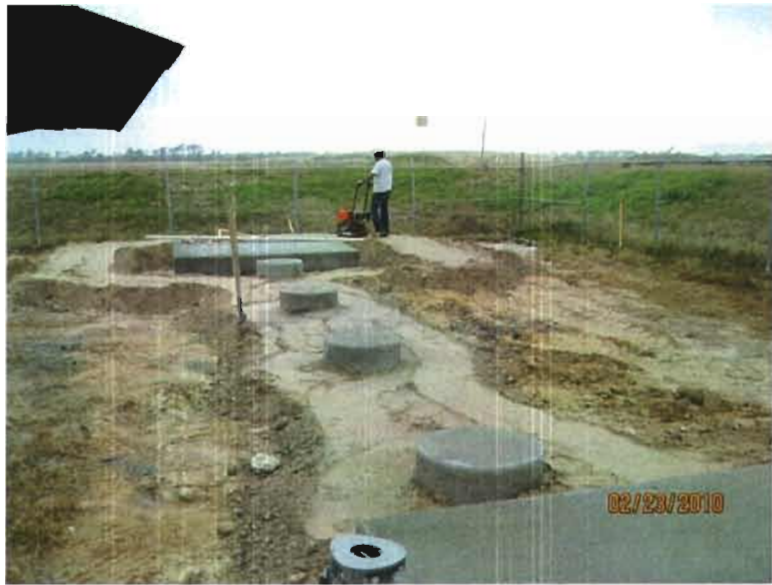
Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 2-23-10

Comments:

Concrete pads at Flare Station.  
FD&C compacting soil around  
concrete.



Date: 2-25-10

Comments:

Trench towards U-1.



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 3-1-10

Comments:

Flare / Stack delivered.



Date: 3-3-10

Comments:

Header isolation and condensate valve pits installed.



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 3-4-10

Comments:

Installation of Sump # 2.



Date: 3-4-10

Comments:

Header isolation, Condensate, and airline valve pits (west of U-3) installed.





## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 3-6-10

Comments:

Completed condensate riser for proposed remote wellhead at LCO-5N.



Date: 3-9-10

Comments:

U-3 drainline and remote wellhead connection to LCO-5N.



(Pic-11)

## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 3-11-10

Comments:

CMP installed (80 LF).



Date: 3-17-10

Comments:

Wellhead installed (GW-1).



(Pic-11)



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 3-17-10

Comments:

Installing hydrated bentonite to  
airline valve pit (north slope).



Date: 3-18-10

Comments:

Installation of 18" header on  
south slope.



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 3-30-10

Comments:

EC Electrical – Trenching from  
Power Pole to Flare Station.



Date: 3-31-10

Comments:

Gravel pad at southeast corner.



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 3-31-10

Comments:

EC Electrical – Trenching from Flare Station to maintenance building ( telephone line).



Date: 3-31-10

Comments:

FD & C grading area for compressor pad.





## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 4-1-10

Comments:

Ardaman and Associates  
conducting compaction test at  
compressor pad.



Date: 4-2-10

Comments:

24" SDR 17 header installation –  
east slope.



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 4-3-10

Comments:

U-2 lateral to LCO-3N  
connection.



Date: 4-3-10

Comments:

GW-15 laterals and extension.



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 4-7-10

Comments:

Placing flare station and stack  
onto concrete pads.



Date: 4-8-10

Comments:

Installing 18" x 24" x 30" wye –  
east slope.





## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 4-15-10

Comments:

Installing 42" RCP at road crossing.



Date: 4-15-10

Comments:

Bench grading – east slope.



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 4-27-10

Comments:

Sump # 4 installation.



Date: 4-29-10

Comments:

30" header inside RCP at yard waste road crossing # 2.





## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 5-01-10

Comments:

Installing extension on 18" header valve pit at southeast corner of Phase 1 landfill.



Date: 5-01-10

Comments:

Welding extension on valve pit for 18" header.



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 5-3-10

Comments:

Backfilling around valve pits at southeast corner of Phase 1 landfill.



Date: 5-3-10

Comments:

Density testing backfill at header road crossing by Ardaman Tech.



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 5-3-10

Comments:

Placing sod on east slope of  
Phase 1 landfill.



Date: 5-3-10

Comments:

Verizon repair work of severed  
phone line.





## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 5-4-10

### Comments:

Excavating trench on south side of road crossing by Flare station for installation of 48" RCP.



Date: 5-4-10

### Comments:

Placing broken concrete on bottom of trench on south side of road crossing by Flare station prior to installing 48" RCP.



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 5-4-10

Comments:

Installation of 48" RCP.



Date: 5-5-10

Comments:

Backfilling and compacting fill over 48" RCP.



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 5-6-10

Comments:

Inserting 36" HDPE Pipe in 48" RCP.





## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 5-6-10

Comments:

Installation of 36", 90 degree elbow and reducer.



Date: 5-7-10

Comments:

Rock excavation for sump S-5.



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 5-7-10

Comments:

Partial backfill around sump S-5.



Date: 5-8-10

Comments:

Pressure testing new section of 30" header.





## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 5-8-10

Comments:

10 psi held for one hour. No change in pressure.



Date: 5-10-10

Comments:

Excavating trench for 30" header from Sta. 14+55+/- heading south.



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 5-10-10

Comments:

Placing 30" header in trench.



Date: 5-10-10

Comments:

Connection of 30" header to flange on sump S-5.



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 5-11-10

Comments:

FPL installing meter at flare station.



Date: 5-11-10

Comments:

Completing backfilling of 30", 4", 2", and Sump S-5.





## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 5-11-10

Comments:

Installing 1" drain line and drip trap at flame arrestor.



Date: 5-12-10

Comments:

Installing 14" HDPE to knock out pot.



## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 5-13-10

Comments:

Sump S-3 complete with sump pump.



Date: 5-14-10

Comments:

Washing truck loading containment area and cleaning sump.





## Photographic Record

Project Name: CCSWDC Phase I LFG Construction

Owner: Sarasota County

Date: 5-15-10

Comments:

Propane tanks and mounting bracket installed. Propane lines tested using soap spray at each joint.



Date: 5-19-10

Comments:

Bollards around U-1 (North Slope).



FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

AUG 13 2010

SOUTHWEST DISTRICT  
TAMPA

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**ATTACHMENT F**  
**SUBSURFACE SOIL EXPLORATION AND LABORATORY**  
**TEST RESULTS**

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**SUBSURFACE SOIL EXPLORATION FOR GAS CONTROL  
STRUCTURE BY ARDAMAN AND ASSOCIATES, INC.**

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**SUBSURFACE SOIL EXPLORATION,  
ANALYSIS AND RECOMMENDATIONS  
FOR PROPOSED  
"CCSWDC PHASE 1 LANDFILL  
GAS CONTROL STRUCTURE,"  
KNIGHTS TRAIL ROAD,  
SARASOTA COUNTY, FLORIDA**



**Ardaman & Associates, Inc.**

**OFFICES**

**Orlando**, 8008 S. Orange Avenue, Orlando, Florida 32809, Phone (407) 855-3860

**Bartow**, 1525 Centennial Drive, Bartow, Florida 33830, Phone (863) 533-0858

**Cocoa**, 1300 N. Cocoa Boulevard, Cocoa, Florida 32922, Phone (321) 632-2503

**Fort Myers**, 9970 Bavaria Road, Fort Myers, Florida 33913, Phone (239) 768-6600

**Miami**, 2608 W. 84<sup>th</sup> Street, Hialeah, Florida, 33016, Phone (305) 825-2683

**Port Charlotte**, 740 Tamiami Trail, Unit 3, Port Charlotte, Florida 33954, Phone (941) 624-3393

**Port St. Lucie**, 460 NW Concourse Place, Unit #1, Port St. Lucie, Florida 34986-2248, Phone (772) 878-0072

**Sarasota**, 78 Sarasota Center Boulevard, Sarasota, Florida 34240, Phone (941) 922-3526

**Tallahassee**, 3175 West Tharpe Street, Tallahassee, Florida 32303, Phone (850) 576-6131

**Tampa**, 3925 Coconut Palm Drive, Suite 115, Tampa, Florida 33619, Phone (813) 620-3389

**West Palm Beach**, 2511 Westgate Avenue, Suite 10, West Palm Beach, Florida 33409, Phone (561) 687-8200

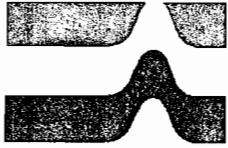
**MEMBERS:**

**A.S.F.E.**

**American Concrete Institute**

**American Society for Testing and Materials**

**Florida Institute of Consulting Engineers**



Ardaman & Associates, Inc.

Geotechnical, Environmental and  
Materials Consultants

February 17, 2010  
File No. 09-7375

TO: HDR Engineering, Inc.  
5426 Bay Center Drive, Suite 400  
Tampa FL 33609-3444

Attention: Richard Siemering

SUBJECT: Subsurface Soil Exploration, Analysis and Recommendations for Proposed  
"CCSWDC Phase 1 Landfill Gas Control Structure," Knights Trail Road, Sarasota  
County, Florida

---

Dear Mr. Siemering:

As requested, our firm has completed a subsurface soil exploration program for an equipment foundation pad for the project referenced above. The purpose of this program was to assess subsurface soil conditions and prepare foundation design recommendations for the proposed pad.

This report documents our findings and conclusions. It has been prepared for the exclusive use of HDR Engineering and their consultants for specific application to the subject project, in accordance with generally-accepted geotechnical engineering practices. No other warranty, expressed or implied, is made.

### **SCOPE**

The scope of our services has included the following items:

1. Conducting one (1) Standard Penetration Test boring to determine the nature and condition of the subsurface soils.
2. Reviewing each soil sample obtained in our field testing program by a geotechnical engineer in the laboratory for further investigation, classification and assignment of laboratory tests.

3. Performing laboratory tests on selected samples.
4. Analyzing the existing soil conditions with respect to the proposed construction.
5. Preparing this report to document the results of our field testing program, engineering analyses and recommendations.

### **SITE LOCATION**

The subject site is located near the southeast corner of Section 3, Township 38 South, Range 19 East, in Sarasota County, Florida. As shown on Figure 1, the site is located near the northwest corner of the landfill maintenance yard.

### **FIELD EXPLORATION PROGRAM**

Our field exploration program consisted of conducting one (1) Standard Penetration Test boring at the location shown on the attached Figure 1. This boring was performed to determine the nature and condition of the subsurface soils to a maximum depth of 50 feet below the existing ground surface. The test boring depth, location and number were determined by HDR Engineering, Inc.. The test boring was located in the field utilizing available landmarks and a 100-foot tape. Test boring locations should be considered accurate only to the degree implied by the method used. Should more accurate locations be required, a registered land surveyor should be retained. The equipment and procedures used in the boring are described in the appendix of this report.

### **GENERAL SUBSURFACE CONDITIONS**

The general subsurface conditions encountered during the field exploration program are shown on the soil boring log, included in the appendix of this report. Soil stratification is based on examination of recovered soil samples and interpretation of field boring logs. The stratification lines represent the approximate boundaries between the soil types, while the actual transitions



may be gradual. A generalization of the subsurface soil conditions encountered in the boring is described below:

DEPTH		SOIL	DESCRIPTION
FROM (feet)	TO (feet)		
0	14	medium dense fine sand with silt	
14	22	dense to very dense silt	
22	32	medium dense silt, hard limerock layer in lower part	
32	42	stiff lean clay	
42	50	layers of very dense silt and hard limerock	

On the date of our field exploration program, the water table was encountered at a depth of 3.1 feet below the existing ground surface. The water table is anticipated to fluctuate due to seasonal rainfall variations and other factors.

#### LABORATORY TESTING PROGRAM

Representative soil samples obtained during our field sampling operation were packaged and transferred to our office and, thereafter, examined by a geotechnical engineer to obtain more accurate descriptions of the existing soil strata. Laboratory testing was performed on selected samples as deemed necessary to aid in soil classification and to further define the engineering properties of the soils. The laboratory tests included determining the fines (silt and clay) content and water content of selected samples. The test results are presented on the soil boring logs (in the Appendix) at the depths from which the samples were recovered. The soil descriptions shown on the soil boring logs are based on the laboratory test results and a visual classification procedure in general accordance with the Unified Soil Classification System (ASTM D-2487 or D-2488).



## **ANALYSIS AND RECOMMENDATIONS**

We understand that the proposed foundation consists of a 20' x 55' concrete mat (at least 10" thick) supporting 25,000 pounds (lb) of pumping and related equipment. The average soil bearing pressure would, therefore, be approximately 23 pounds per square foot without the weight of the concrete mat or approximately 145 pounds per square foot including the weight of a 10-inch thick concrete mat. These average bearing pressures assume a perfectly even load distribution. We recognize, however, that some load concentrations will generally occur.

### **Soils Analysis**

The soils encountered at the subject site are well suited to support these loads on a conventionally designed reinforced concrete mat foundation. Assuming that the soils are prepared in accordance with the soil preparation recommendations of this report, and that foundation loads are no greater than those indicated, we anticipate that settlement of the mat will not exceed 0.5 inch. Due to the granular nature of the materials at the site, this settlement will occur primarily during construction.

### **Foundation Design**

We recommend that the mat foundation be designed such that point loads, eccentric loads or live loads do not result in a contact pressure greater than 2000 psf at any location. In addition, we recommend that the average bearing pressure over any 20 foot by 20 foot area be no greater than 600 psf, including the weight of the concrete mat. Please contact our office for more detailed analyses if either of these conditions are not met.

A minimum soil cover of eight inches, as measured from the bottom of the mat foundation system to outside adjacent finished grade, should be provided.



### **Soil Preparation Recommendations**

The following soil preparation recommendations are made as a guide to the design professionals, parts of which should be incorporated into the project's general specifications:

1. The mat area, plus a margin of 5.0 feet outside its perimeter lines, should be cleared and grubbed of all surface vegetation and organic debris.
2. The cleared and grubbed elevation should be compacted with a vibratory roller having a static weight of at least 8,000 pounds. Each pass should overlap the preceding pass by at least 30%. Sufficient passes should be made over the area, plus the 5.0 foot margin, to produce a density of at least 95% of Modified Proctor (ASTM D-1557) maximum density to a depth of 1.0 foot below the compacted surface. Extreme care should be used when vibratory compaction is used next to existing structures. A representative of Ardaman & Associates should be present during initial compaction efforts.
3. After compaction and testing to verify that the desired compaction has been achieved at this elevation, fill consisting of clean fine sands containing no more than 10% passing the No. 200 sieve, and having a Unified Soil Classification (ASTM D-2487) of "SP" or "SP-SM," can be placed in level lifts not exceeding 12 inches loose thickness and compacted with the equipment described above. Each lift should be compacted to at least 95% of Modified Proctor maximum density prior to the placement of subsequent lifts.
4. A geotechnical engineer or his representative from Ardaman & Associates, Inc., Sarasota office, should inspect and test the compacted excavated elevation and each layer of fill to verify compliance with the above recommendations. In addition, a representative should inspect and test the foundation contact soils immediately prior to concrete placement.

### **GENERAL COMMENTS**

The analysis and recommendations submitted in this report are based upon the data obtained from one (1) test boring performed at the locations indicated on the attached Figure 1. This report does not reflect any variations which may occur outside boring locations. While the borings are representative of the subsurface conditions at their respective locations and within their respective vertical reaches, local variations characteristic of the subsurface materials of the region are anticipated and may be encountered. The nature and extent of variations may not become evident until during the course of a ground improvement program, if such a program is



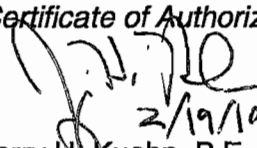
undertaken. If variations then appear evident, it will be necessary to reevaluate the recommendations of this report, after performing on-site observations during the construction period and noting the characteristics of any variations. The boring logs and related information are based upon the driller's logs and visual examination of selected samples in the laboratory. The delineation between soil types shown on the logs is approximate, and the description represents our interpretation of the subsurface conditions at the designated boring location on the particular date drilled.

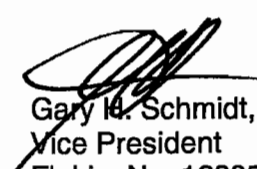
The water table depths shown on the boring logs represent the groundwater surfaces encountered on the dates shown. Fluctuation of the water table should be anticipated throughout the year.

It has been a pleasure to be of assistance to you with this project. Please contact us when we may be of further service to you, or should you have any questions concerning this report.

Very truly yours,

ARDAMAN & ASSOCIATES, INC.  
*Certificate of Authorization No. 5950*

  
2/19/10  
Jerry H. Kuehn, P.E.  
Senior Project Engineer  
Fl. Lic. No. 35557

  
Gary M. Schmidt, P.E.  
Vice President  
Fl. Lic. No. 12305

JHK/GHS:nh



## **APPENDIX**



## SOIL BORING, SAMPLING AND TESTING METHODS

### Standard Penetration Test

The Standard Penetration Test (SPT) is a widely accepted method of in situ testing of foundation soils (ASTM D-1586). A 2-foot long, 2-inch O.D. split-barrel sampler attached to the end of a string of drilling rods is driven 18 inches into the ground by successive blows of a 140-pound hammer freely dropping 30 inches. The number of blows needed for each 6 inches of penetration is recorded. The sum of the blows required for penetration of the second and third 6-inch increments of penetration constitutes the test result or N-value. After the test, the sampler is extracted from the ground and opened to allow visual examination and classification of the retained soil sample. The N-value has been empirically correlated with various soil properties allowing a conservative estimate of the behavior of soils under load. The following tables relate N-values to a qualitative description of soil density and, for cohesive soils, an approximate unconfined compressive strength ( $Q_u$ ):

Cohesionless Soils:	<u>N-Value</u>	<u>Description</u>
	0 to 4	Very loose
	4 to 10	Loose
	10 to 30	Medium dense
	30 to 50	Dense
	Above 50	Very dense

Cohesive Soils:	<u>N-Value</u>	<u>Description</u>	<u><math>Q_u</math> (ton/ft<sup>2</sup>)</u>
	0 to 2	Very soft	Below 0.25
	2 to 4	Soft	0.25 to 0.50
	4 to 8	Medium stiff	0.50 to 1.0
	8 to 15	Stiff	1.0 to 2.0
	15 to 30	Very stiff	2.0 to 4.0
	Above 30	Hard	Above 4.0

The tests are usually performed at 5-foot intervals. However, more frequent or continuous testing is done by our firm through depths where a more accurate definition of the soils is required. The test holes are advanced to the test elevations by rotary drilling with a cutting bit, using circulating fluid to remove the cuttings and hold the fine grains in suspension. The circulating fluid, which is a bentonitic drilling mud, is also used to keep the hole open below the water table by maintaining an excess hydrostatic pressure inside the hole. In some soil deposits, particularly highly pervious ones, NX-size flush-coupled casing must be driven to just above the testing depth to keep the hole open and/or prevent the loss of circulating fluid.

Representative split-spoon samples from each sampling interval and from every different stratum are brought to our laboratory in air-tight jars for further evaluation and testing, if necessary. Samples not used in testing are stored for at least six months prior to being discarded. After completion of a test boring, the hole is kept open until a steady state groundwater level is recorded. The hole is then sealed, if necessary, and backfilled.

## **Laboratory Test Methods**

Soil samples returned to our laboratory are examined by a geotechnical engineer or geotechnician to obtain more accurate descriptions of the soil strata. Laboratory testing is performed on selected samples as deemed necessary to aid in soil classification and to further define engineering properties of the soils. The test results are presented on the soil boring logs at the depths at which the respective sample was recovered, except that grain size distributions or selected other test results may be presented on separate tables, figures or plates as described in this report. The soil descriptions shown on the logs are based upon a visual-manual classification procedure in general accordance with the Unified Soil Classification System (ASTM D-2488-84) and standard practice. Following is a list of abbreviations which may be used on the boring logs or elsewhere in this report.

- 200 - Fines Content (percent passing the No. 200 sieve); ASTM D-1140
- DD - Dry Density of Undisturbed Sample; ASTM D-2937
- Gs - Specific Gravity of Soil; ASTM D-854
- k - Hydraulic Conductivity (Coefficient of Permeability)
- LL - Liquid Limit; ASTM D-423
- OC - Organic Content; ASTM D-2974
- pH - pH of Soil; ASTM D-2976
- PI - Plasticity Index (LL-PL); ASTM D-424
- PL - Plastic Limit; ASTM D-424
- Qp - Unconfined Compressive Strength by Pocket Penetrometer;
- Qu - Unconfined Compressive Strength; ASTM D-2166 (soil), D-2938 (rock)
- SL - Shrinkage Limit; ASTM D-427
- USCS - Unified Soil Classification System; ASTM D-2487, D-2488
- w - Water (Moisture) Content; ASTM D-2216

## Soil Classifications

The soil descriptions presented on the soil boring logs are based upon the Unified Soil Classification System (USCS), which is the generally accepted method (ASTM D-2487 and D-2488) for classifying soils for engineering purposes. The following modifiers are the most commonly used in the descriptions.

For Sands:	<u>Modifier</u>	<u>Fines, Sand or Gravel Content*</u>
	"with silt" or "with clay"	5% to 12% fines
	"silty" or "clayey"	12% to 50% fines
	"with gravel" or "with shell"	15% to 50% gravel or shell

For Silts or Clays:	<u>Modifier</u>	<u>Fines, Sand or Gravel Content*</u>
	"with sand"	15% to 30% sand and gravel; and % sand > % gravel
	"sandy"	30% to 50% sand and gravel; and % sand > % gravel
	"with gravel"	15% to 30% sand and gravel; and % sand < % gravel
	"gravelly"	30% to 50% sand and gravel; and % sand < % gravel

\* may be determined by laboratory testing or estimated by visual/manual procedures. Fines content is the combined silt and clay content, or the percent passing the No. 200 sieve.

Other soil classification standards may be used, depending on the project requirements. The AASHTO classification system is commonly used for highway design purposes and the USDA soil textural classifications are commonly used for septic (on-site sewage disposal) system design purposes.

BORING LOCATION: see Figure 1

CLIENT: HDR Engineering, Inc.

DATE DRILLED: 1/25/10 START:

FINISH:

PROJECT: CCSWDC Phase 1 Landfill Gas Control System

GROUND SURFACE ELEVATION:

LOCATION: Knights Trail Road,  
Sarasota County, Florida

WATER TABLE DEPTH: 3.1 TIME: DATE: 1/25/10

DRILL CREW: DP/MO

LOGGED BY: DP

DRILL MAKE &amp; MODEL: CME-45 BIT: 2-3/8" tricone DRILLING RODS: AW

DRILLING METHOD: rotary with SPT WEATHER CONDITIONS:

DEPTH, FT.	SPT N-VALUE	SAMPLE NO.	GRAPHIC LOG	USCS	SOIL DESCRIPTION	WATER CONTENT (%)	PERCENT FINES	ORGANIC CONTENT	LIQUID LIMIT	PLAST. INDEX
0	15	1		SP-SM	dark grayish brown fine sand with silt (fill)					
		2		SM	pale grayish brown silty fine sand (fill)		13			
32		3		SP-SM	dark gray fine sand with silt					
29		4		SP-SM	gray fine sand with silt		5.2			
5		5		SP-SM	dark brown fine sand with silt					
22		6								
14		7								
12		8								
10	14	9		SP-SM	gray fine sand with silt					
		10								
15	56	11		ML	light gray to white calcareous silt (trace shell)					
				ML	light gray sandy silt (trace shell & phosphate)					
20	36	12					56			
				ML	olive brown sandy silt					
25	15	13				51	68			
		14		ROCK	gray limerock					
30	50/3"	15		ML	light gray sandy silt (trace shell & phosphate)					
				CL	dark gray lean clay					
35	10	16				53	98			

PAGE 1 OF 2






Ardaman &amp; Associates, Inc.

Geotechnical, Environmental and  
Materials Consultants

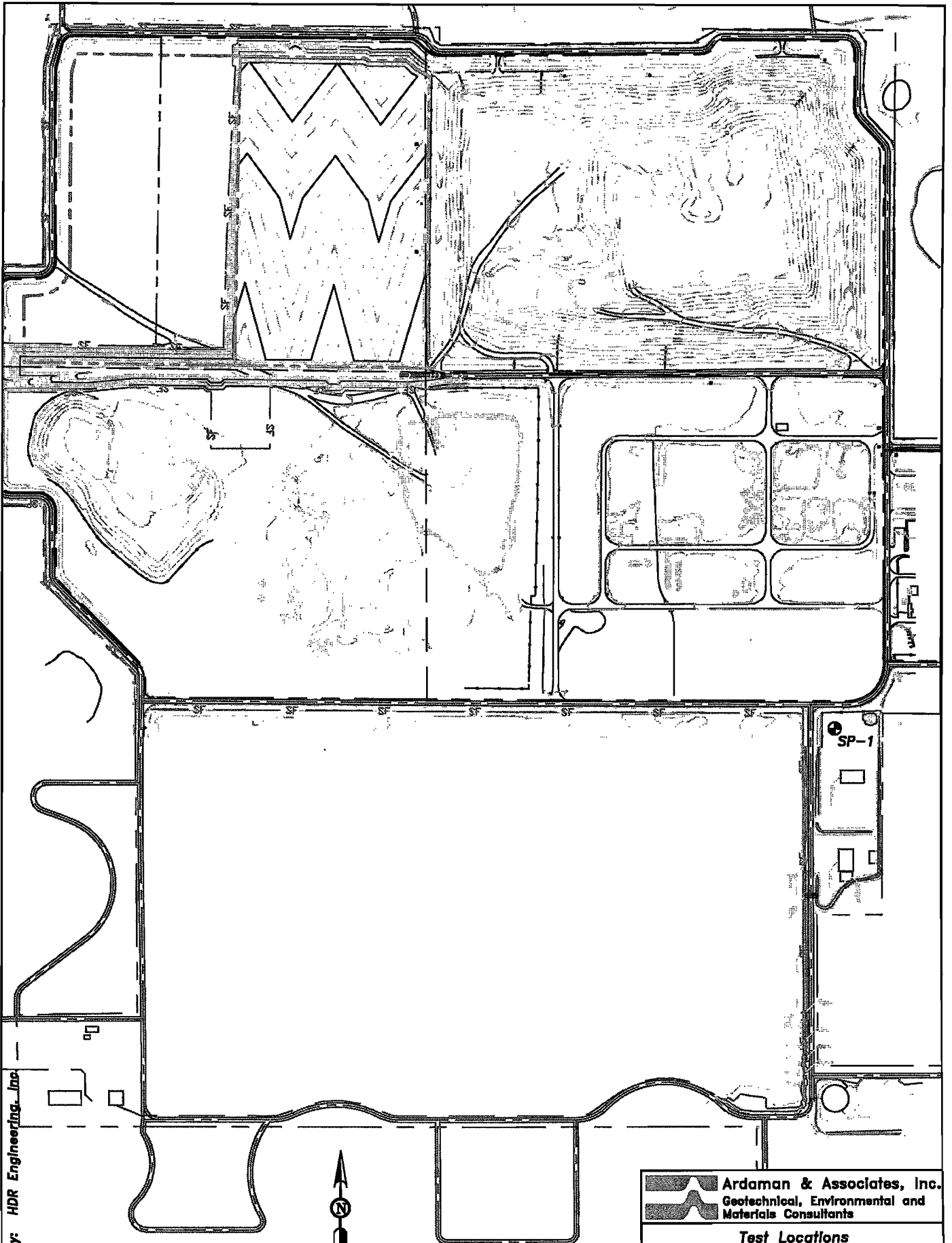
REVIEWED BY: Jerry H. Kuehn, P.E.

FILE NO: 09-7375

BORING NO.: SP-1


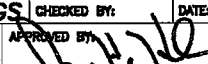
DEPTH, FT.	SPT N-VALUE	SAMPLE NO.	GRAPHIC LOG	USCS	SOIL DESCRIPTION	WATER CONTENT (%)	PERCENT FINES	ORGANIC CONTENT	LIQUID LIMIT	PLAST. INDEX
40	8	17		CL	dark olive gray lean clay					
				ML	pale brown silt					
45	88/9"	18		ROCK	pale brown limerock					
				MH	pale brown elastic silt					
50	50/4"	19		ROCK	pale brown limerock					
					end of boring					
55										
60										
65										
70										
75										
80										

Base Drawing By: HDR Engineering, Inc.



SCALE: 1"=600'

● TEST BORING LOCATIONS

 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
<b>Test Locations</b> <b>Gas Control System</b> <b>Sarasota County Landfill</b> <b>Sarasota County, Florida</b>			
DRAWN BY: <b>KGS</b>		CHECKED BY:	DATE: <b>2/15/10</b>
FILE NO. <b>09-7375</b>	APPROVED BY: 	FIGURE: <b>1</b>	

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## **SOIL COMPACTION TEST RESULTS**

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## REPORT OF MOISTURE-DENSITY RELATIONS

**CLIENT:** HDR Engineering, Inc.  
 5426 Bay Center Drive  
 Suite 400  
 Tampa FL 33609-3444

PAGE 1 OF 1

**PROJECT:** Landfill Gas Control System  
 4000 Knights Trail Road  
 Nokomis, Florida

**PROJECT NO.:** 10-7037  
**REPORT NO.:** 2964  
**DATE OF SERVICE:** 01/25/2010  
**AUTHORIZATION:** PPA  
**REPORT DATE:** 02/05/2010

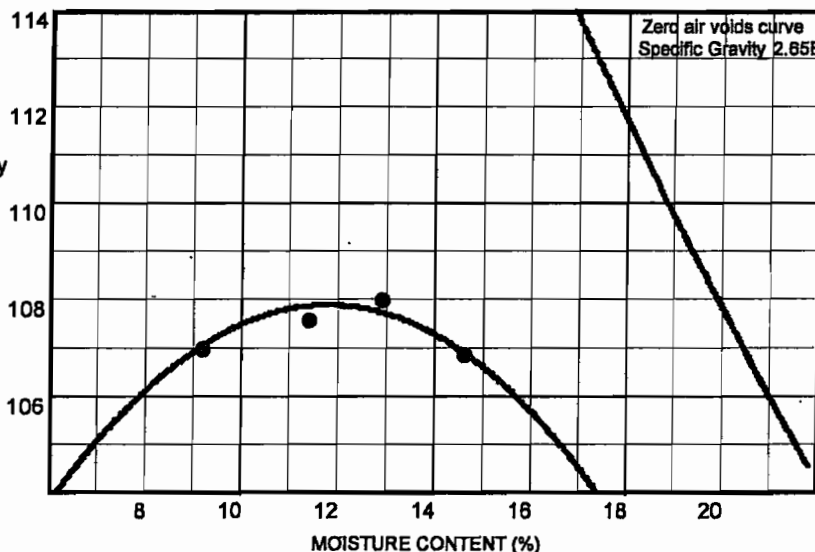
**SERVICES:** Obtain sample of material used for construction, prepare samples and perform moisture-density relations test to establish the maximum density and optimum moisture of the material.

### PROJECT DATA

**CONTRACTOR:**  
**DATE SAMPLED:** 01/22/2010  
**SAMPLED BY:** SCS  
**TEST FOR:** Backfill/bedding  
**SAMPLE LOCATION:** south of Phase II, east side  
 of future Phase IV  
**MATERIAL PREPARATION METHOD:** Dry  
**CLASSIFICATION:** SP-S

**TEST DATE:** 01/29/2010  
**MATERIAL:**  
 Mottled grayish brown/pale  
 brown slightly silty fine sand  
 with trace yellowish brown  
 clayey sand  
**RAMMER TYPE:** Mechanical  
**METHOD OF TEST:** AASHTO T180, Meth. D

### REPORT OF TESTS



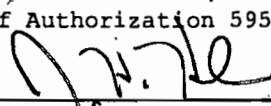
**MAXIMUM DENSITY, PCF:** 107.9  
**OPTIMUM MOISTURE (%):** 11.9

**% PASSING 3/4:** 100.0  
**% PASSING 3/8:** 100.0  
**% PASSING #4:** 99.9  
**% PASSING #40:** 97.1  
**% PASSING #200:** 7.4

**ADDITIONAL COMMENTS:**  
 See Plate 1 for grain size curve

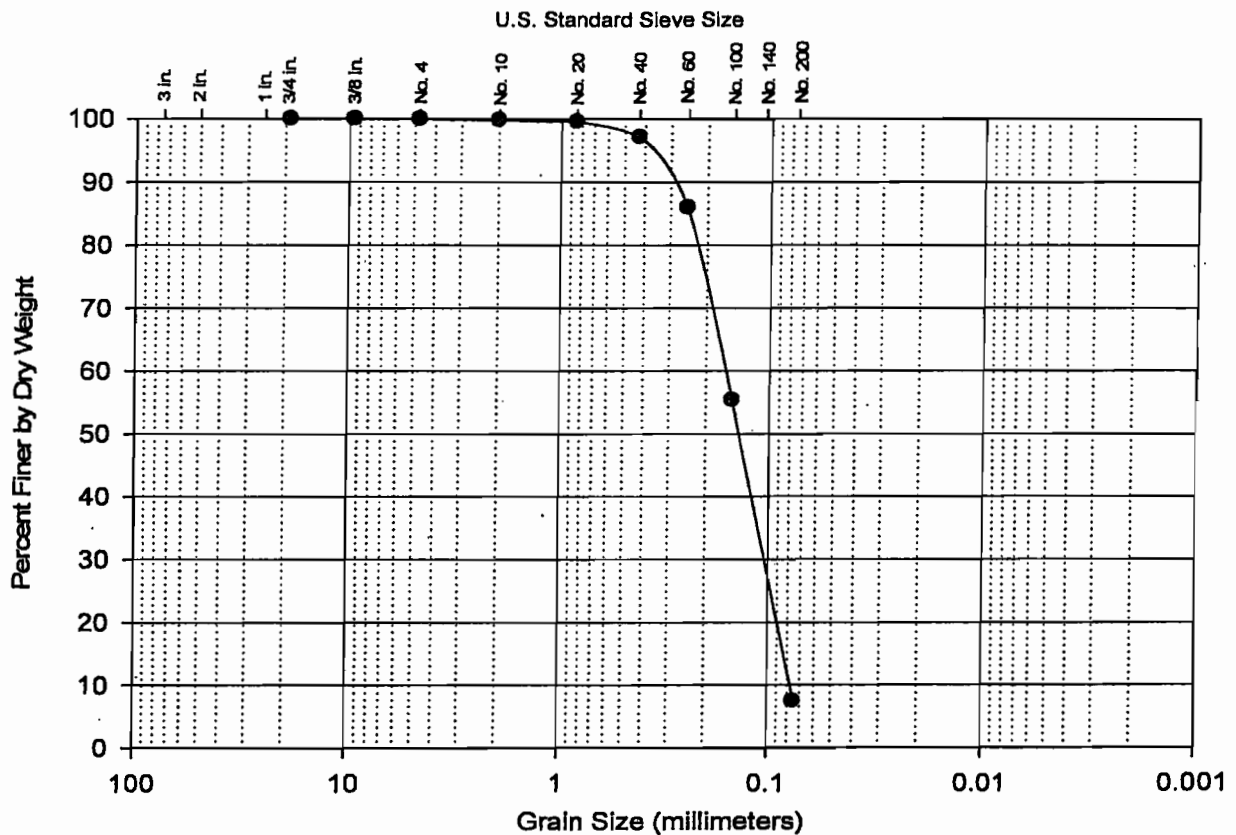
**Technician:** Chris Oberhoff, Lab Technician  
**Report Distribution:**  
 (2) HDR Engineering, Inc.

**ARDAMAN & ASSOCIATES, INC.**  
 Cert. of Authorization 5950

  
 Jerry Kuehn  
 Project Eng, PE #35557



# GRAIN SIZE DISTRIBUTION CURVE



Gravel		Sand			Silt	Clay
Coarse	Fine	Coarse	Medium	Fine		

## SAMPLE DATA:

Sample No.: 3861

Sampling Date: 1/22/10

Soil Description: Mottled grayish brown/pale brown slightly silty  
fine sand with trace yellowish brown clayey sand

## SIEVE ANALYSIS:

Sieve Size	Percent Finer
3/4 in.	100.0
3/8 in.	100.0
No. 4	99.9
No. 10	99.8
No. 20	99.5
No. 40	97.1
No. 60	85.9
No. 100	55.4
No. 200	7.4

<b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Landfill Gas Control System 4000 Knights Trail Road Nokomis, Florida			
DRAWN BY: MA	CHECKED BY: JWK	DATE: 2/5/10	
FILE NO.: 10-7037	APPROVED BY: <i>[Signature]</i>	PLATE: 1	

## REPORT OF IN-PLACE DENSITY

**CLIENT:** HDR Engineering, Inc.  
 5426 Bay Center Drive  
 Suite 400  
 Tampa FL 33609-3444

PAGE 1 OF 1

**PROJECT:** Landfill Gas Control System  
 4000 Knights Trail Road  
 Nokomis, Florida

**PROJECT NO.:** 10-7037  
**REPORT NO.:** 3438  
**DATE OF SERVICE:** 04/01/2010  
**AUTHORIZATION:** PPA  
**REPORT DATE:** 04/09/2010

**SERVICES:** Perform in-place density and moisture content tests to determine the degree of field compaction.

### PROJECT DATA

**CONTRACTOR:**

**GAUGE:** Troxler 3430

**GAUGE SERIAL NO.:** 063

	DENSITY	MOISTURE
<b>METHOD OF TEST:</b> ASTM D2922		ASTM D6938
<b>SPECIFICATION:</b> 95% T-180		

**STANDARD COUNTS**

**MOISTURE - CURRENT:** 27 **PREVIOUS:** 23

**DENSITY - CURRENT:** 2409 **PREVIOUS:** 2371

**TEST MODE:** Direct Transmission

**PROBE DEPTH:** 12

M/D #	TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS		REFERENCE REPORT
			OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	
1.	Backfill/bedding	Gr br ssfs w/tr br clayey sand	11.9	107.9	2964

### REPORT OF TESTS

TEST NO	LOCATION	PROBE DEPTH	LIFT/ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf)		MAXIMUM DENSITY (pcf)	DENSITY (% max)
							WET	DRY		
1.	Compressor pad	12	Grade	1	12.0	11.9	115.2	102.9	107.9	95.4

Test results on this report meet project specifications as noted above.

ADDITIONAL COMMENTS:

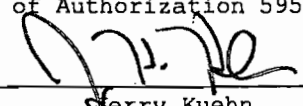
**Technician:** Sal Serbin, Field Technician

**Report Distribution:**

(2) HDR Engineering, Inc.

**ARDAMAN & ASSOCIATES, INC.**

Cert. of Authorization 5950

  
 Jerry Kuehn  
 Project Eng, PE #35557

## REPORT OF IN-PLACE DENSITY

**CLIENT:** HDR Engineering, Inc.  
 5426 Bay Center Drive  
 Suite 400  
 Tampa FL 33609-3444

PAGE 1 OF 2

**PROJECT:** Landfill Gas Control System  
 4000 Knights Trail Road  
 Nokomis, Florida

**PROJECT NO.:** 10-7037  
**REPORT NO.:** 3595  
**DATE OF SERVICE:** 04/16/2010  
**AUTHORIZATION:** PPA  
**REPORT DATE:** 04/29/2010

**SERVICES:** Perform in-place density and moisture content tests to determine the degree of field compaction.

### PROJECT DATA

**CONTRACTOR:**

**GAUGE:** CPN

**GAUGE SERIAL NO.:** 8413

**METHOD OF TEST:** DENSITY ASTM D2922

MOISTURE ASTM D6938

**STANDARD COUNTS**

**SPECIFICATION:** 95% T-180

**MOISTURE - CURRENT:** 10673 **PREVIOUS:** 10944

**DENSITY - CURRENT:** 44691 **PREVIOUS:** 44739

**TEST MODE:** Direct Transmission

**PROBE DEPTH:** 12

M/D #	TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS		REFERENCE REPORT
			OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	
1.	Backfill/bedding	Gr br ssfs w/tr br clayey sand	11.9	107.9	2964

### REPORT OF TESTS

TEST NO	LOCATION	PROBE DEPTH	LIFT/ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf)		MAXIMUM DENSITY (pcf)	DENSITY (% max)
							WET	DRY		
2.	Road cut for 42" RCP at SE corner of Phase I (east side of pipe)	12	Springline	1	12.1	11.9	121.0	107.9	107.9	100.0
3.	Road cut for 42" RCP at SE corner of Phase I (west side of pipe)	12	Springline	1	12.4	11.9	121.5	108.1	107.9	100.2

Test results on this report meet project specifications as noted above.

Report of Tests continued on page 2

PROJECT NO.: 10-7037 HDR Engineering, Inc.

DATE OF SERVICE: 04/16/2010

TEST NO	LOCATION	PROBE DEPTH	LIFT/ ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET DRY	MAXIMUM DENSITY (pcf)	DENSITY (% max)
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ADDITIONAL COMMENTS:

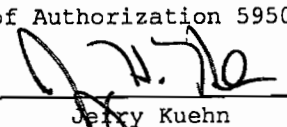
Technician: Clifford Stratton, Field Technician

Report Distribution:

(2) HDR Engineering, Inc.

**ARDAMAN & ASSOCIATES, INC.**

Cert. of Authorization 5950

  
Jerry Kuehn

Project Eng, PE #35557

## REPORT OF IN-PLACE DENSITY

**CLIENT:** HDR Engineering, Inc.  
 5426 Bay Center Drive  
 Suite 400  
 Tampa FL 33609-3444

PAGE 1 OF 1

**PROJECT:** Landfill Gas Control System  
 4000 Knights Trail Road  
 Nokomis, Florida

**PROJECT NO.:** 10-7037  
**REPORT NO.:** 3648  
**DATE OF SERVICE:** 04/23/2010  
**AUTHORIZATION:** PPA  
**REPORT DATE:** 04/29/2010

**SERVICES:** Perform in-place density and moisture content tests to determine the degree of field compaction.

### PROJECT DATA

**CONTRACTOR:**

**GAUGE:** CPN

**GAUGE SERIAL NO.:** 6797

	<u>DENSITY</u>	<u>MOISTURE</u>
<b>METHOD OF TEST:</b> ASTM D2922		ASTM D6938
<b>SPECIFICATION:</b> 95% T-180		

**STANDARD COUNTS**

**MOISTURE - CURRENT:** 9798 **PREVIOUS:** 9876

**DENSITY - CURRENT:** 34244 **PREVIOUS:** 34332

**TEST MODE:** Direct Transmission

**PROBE DEPTH:** 12

M/D #	TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS		REFERENCE REPORT
			OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	
1.	Base	Light gray silty limerock	12.0	118.7	3650

### REPORT OF TESTS

TEST NO	LOCATION	PROBE DEPTH	LIFT/ ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf)		MAXIMUM DENSITY (pcf)	DENSITY (% max)
							WET	DRY		
4.	Road cut for 42" RCP at SE corner of Phase I	12"	+4' TOP	1	14.7	12.0	129.5	112.9	118.7	95.1
5.	Same as above	12"	+4' TOP	1	15.8	12.0	130.7	112.9	118.7	95.1

Test results on this report meet project specifications as noted above.

**ADDITIONAL COMMENTS:**

TOP = top of pipe

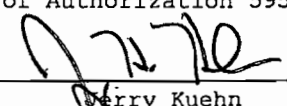
**Technician:** Mike Marcouiller, Field Technician

**Report Distribution:**

(2) HDR Engineering, Inc.

**ARDAMAN & ASSOCIATES, INC.**

Cert. of Authorization 5950

  
 Jerry Kuehn  
 Project Eng, PE #35557

**REPORT OF  
MOISTURE-DENSITY RELATIONS**

**CLIENT:** HDR Engineering, Inc.  
5426 Bay Center Drive  
Suite 400  
Tampa FL 33609-3444

PAGE 1 OF 1

**PROJECT:** Landfill Gas Control System  
4000 Knights Trail Road  
Nokomis, Florida

**PROJECT NO.:** 10-7037  
**REPORT NO.:** 3650  
**DATE OF SERVICE:** 04/23/2010  
**AUTHORIZATION:** PPA  
**REPORT DATE:** 04/29/2010

**SERVICES:** Obtain sample of material used for construction, prepare samples and perform moisture-density relations test to establish the maximum density and optimum moisture of the material.

**PROJECT DATA**

**CONTRACTOR:**  
**DATE SAMPLED:** 04/23/2010  
**SAMPLED BY:** Mike M.  
**TEST FOR:** Base  
**SAMPLE LOCATION:** Stockpile, Ph. I, SE corner

**TEST DATE:** 04/26/2010  
**MATERIAL:**  
Light gray silty limerock

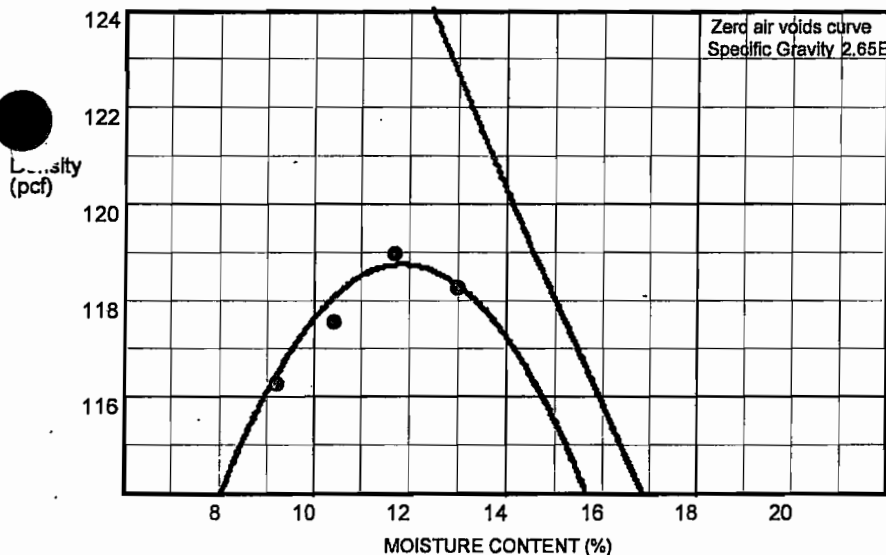
**MATERIAL PREPARATION METHOD:** Dry

**RAMMER TYPE:** Mechanical

**CLASSIFICATION:** SM with gravel

**METHOD OF TEST:** AASHTO T180, Meth. D

**REPORT OF TESTS**



**MAXIMUM DENSITY, PCF:** 118.7  
**OPTIMUM MOISTURE (%):** 12.0

**ADDITIONAL COMMENTS:**

See Plate 1 for gradation

**Technician:** Chris Oberhoff, Lab Technician

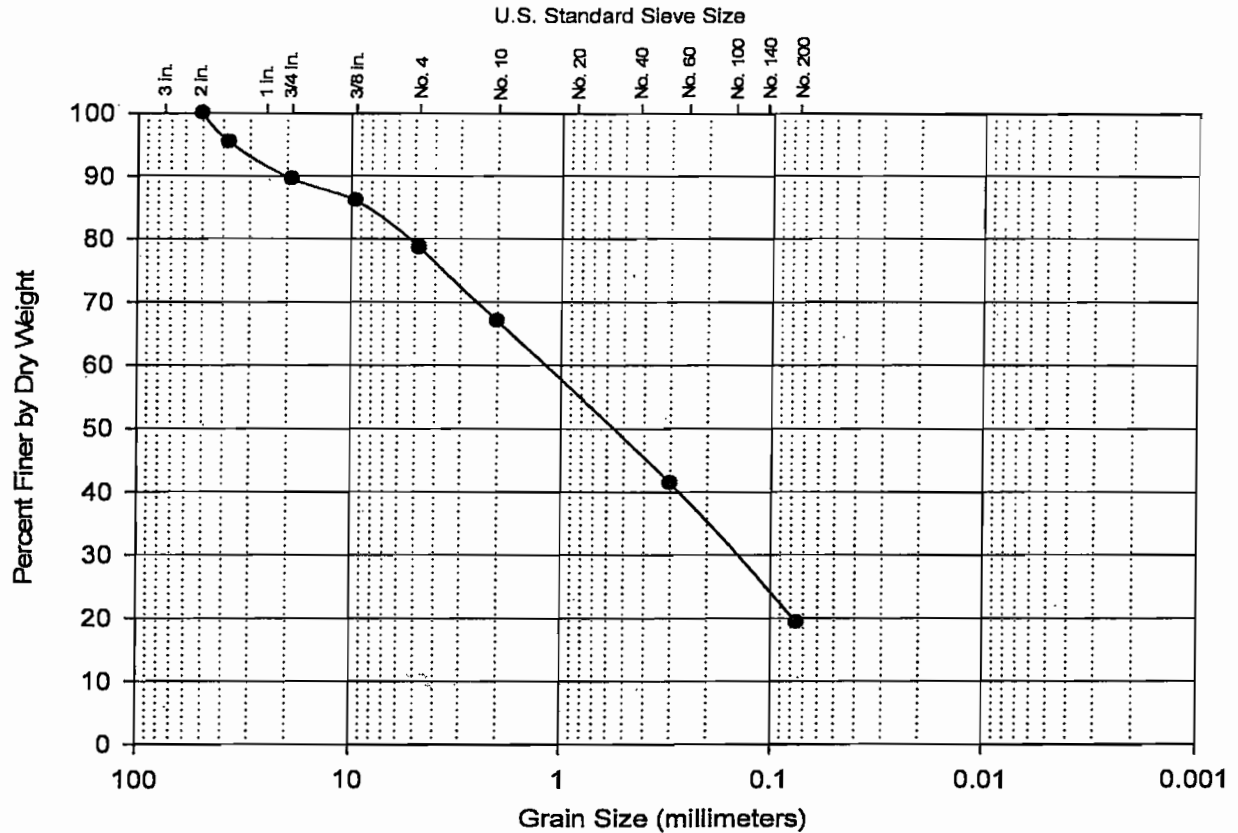
**1 Distribution:**

Ardaman Engineering, Inc.

**ARDAMAN & ASSOCIATES, INC.**  
Cert. of Authorization 5950

*[Signature]*  
Jerry Kuehn  
Project Eng, PE #35557

# GRAIN SIZE DISTRIBUTION CURVE



Gravel		Sand			Silt	Clay
Coarse	Fine	Coarse	Medium	Fine		

## SAMPLE DATA:

Sample No.: 3958

Sampling Date: 4/23/10

Soil Description: Light gray moderately silty fine sand with limerock

## SIEVE ANALYSIS:

Sieve Size	Percent Finer
2 in.	100.0
1-1/2 in.	95.4
3/4 in.	89.5
3/8 in.	86.1
No. 4	78.6
No. 10	67.0
No. 50	41.4
No. 200	19.3

<b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
Landfill Gas Control @ CCSWDC 4000 Knights Trail Road Sarasota County, Florida			
DRAWN BY: MA	CHECKED BY: JHK	DATE: 4/29/10	
FILE NO.: 10-7037	APPROVED BY: <i>[Signature]</i>	PLATE: 1	

## REPORT OF IN-PLACE DENSITY

**CLIENT:** HDR Engineering, Inc.  
 5426 Bay Center Drive  
 Suite 400  
 Tampa FL 33609-3444

PAGE 1 OF 2

**PROJECT:** Landfill Gas Control System  
 4000 Knights Trail Road  
 Nokomis, Florida

**PROJECT NO.:** 10-7037  
**REPORT NO.:** 3708  
**DATE OF SERVICE:** 05/03/2010  
**AUTHORIZATION:** PPA  
**REPORT DATE:** 05/18/2010

**SERVICES:** Perform in-place density and moisture content tests to determine the degree of field compaction.

### PROJECT DATA

**CONTRACTOR:**

**GAUGE:** Troxler 3430

**GAUGE SERIAL NO.:** 063

	DENSITY	MOISTURE
<b>METHOD OF TEST:</b> ASTM D2922		ASTM D6938
<b>SPECIFICATION:</b> 95% T-180		

**STANDARD COUNTS**

**MOISTURE - CURRENT:** 30 **PREVIOUS:** 24

**DENSITY - CURRENT:** 2431 **PREVIOUS:** 2511

**TEST MODE:** Direct Transmission

**PROBE DEPTH:** 12

M/D #	TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS		REFERENCE REPORT
			OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	
1.	Base	Light gray silty limerock	12.0	118.7	3650

## REPORT OF TESTS

TEST NO	LOCATION	PROBE DEPTH	LIFT/ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf)		MAXIMUM DENSITY (pcf)	DENSITY (% max)
							WET	DRY		
6.	Road crossing, Sta. 8+30, 42" RCP header	12	Grade	1	9.9	12.0	128.7	117.1	118.7	98.7
7.	Road crossing, Sta. 9+50, 30" sump header	12	Grade	1	10.0	12.0	130.7	118.8	118.7	100.1
8.	Road crossing, Sta. 13+00, 42" RCP header	12	Grade	1	9.7	12.0	130.4	118.9	118.7	100.2

Test results on this report meet project specifications as noted above.

Report of Tests continued on page 2



PROJECT NO: 10-7037 HDR Engineering, Inc.

DATE OF SERVICE: 05/03/2010

TEST NO	LOCATION	PROBE DEPTH	LIFT/ ELEV	M/D NO	FIELD	OPTIMUM	FIELD DENSITY		MAXIMUM	DENSITY
					MOISTURE	MOISTURE	(pcf)	DENSITY	(% max)	
					(%)	(%)	WET	DRY	(pcf)	

ADDITIONAL COMMENTS:

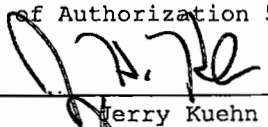
Technician: Sal Serbin, Field Technician

Report Distribution:

(2) HDR Engineering, Inc.

**ARDAMAN & ASSOCIATES, INC.**

Cert. of Authorization 5950

  
Terry Kuehn  
Project Eng, PE #35557

## REPORT OF IN-PLACE DENSITY

**CLIENT:** HDR Engineering, Inc.  
 5426 Bay Center Drive  
 Suite 400  
 Tampa FL 33609-3444

PAGE 1 OF 1

**PROJECT:** Landfill Gas Control System  
 4000 Knights Trail Road  
 Nokomis, Florida

**PROJECT NO.:** 10-7037  
**REPORT NO.:** 3714  
**DATE OF SERVICE:** 05/06/2010  
**AUTHORIZATION:** PPA  
**REPORT DATE:** 05/18/2010

**SERVICES:** Perform in-place density and moisture content tests to determine the degree of field compaction.

### PROJECT DATA

**CONTRACTOR:**

**GAUGE:** CPN

**GAUGE SERIAL NO.:** 8413

	DENSITY	MOISTURE
<b>METHOD OF TEST:</b> ASTM D2922		ASTM D6938
<b>SPECIFICATION:</b> 95% T-180		

**STANDARD COUNTS**

**MOISTURE - CURRENT:** 10933 **PREVIOUS:** 11388

**DENSITY - CURRENT:** 44909 **PREVIOUS:** 45433

**TEST MODE:** Direct Transmission

**PROBE DEPTH:** 12

#### MOISTURE/DENSITY RELATIONS

M/D #	TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS		REFERENCE REPORT
			OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	
1.	Base	Light gray silty limerock	12.0	118.7	3650

## REPORT OF TESTS

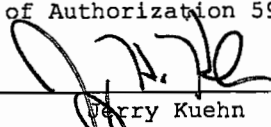
TEST NO	LOCATION	PROBE DEPTH	LIFT/ ELEV	M/D NO	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf)		MAXIMUM DENSITY (pcf)	DENSITY (% max)
							WET	DRY		
9.	Road cut at sleeve "C", Sta. 18+51	12	Grade	1	10.7	12.0	131.7	119.0	118.7	100.3

Test results on this report meet project specifications as noted on page 1.

ADDITIONAL COMMENTS:

**Technician:** Clifford Stratton, Field Technician  
**Report Distribution:**  
 (2) HDR Engineering, Inc.

**ARDAMAN & ASSOCIATES, INC.**  
 Cert. of Authorization 5950

  
 Perry Kuehn  
 Project Eng, PE #35557

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## CONCRETE STRENGTH TEST RESULTS

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## REPORT OF CONCRETE COMPRESSIVE STRENGTH

**CLIENT:** HDR Engineering, Inc.  
 5426 Bay Center Drive  
 Suite 400  
 Tampa FL 33609-3444

PAGE 1 OF 1

**PROJECT:** Landfill Gas Control System  
 4000 Knights Trail Road  
 Nokomis, Florida

**PROJECT NO.:** 10-7037  
**REPORT NO.:** 3139  
**DATE OF SERVICE:** 02/22/2010  
**AUTHORIZATION:** PPA  
**REPORT DATE:** 03/22/2010

**SERVICES:** Sample concrete at location of placement, perform required field tests, prepare and test concrete compressive strength specimens.

### PROJECT DATA

**CONTRACTOR:**  
**CONCRETE SUPPLIER:** Tarmac  
**PLANT:** 684  
**CLASS OF CONCRETE:**  
**SPECIFICATION REQUIREMENTS**  
**STRENGTH:** 4000psi @ 28 DAYS  
**SLUMP:** 5 **AIR:**  
**METHOD OF TEST**  
**SAMPLING:** ASTM C-172  
**MOLDING & CURING:** ASTM C31  
**SLUMP:** ASTM C143  
**TEMPERATURE:** ASTM C1064  
**AIR CONTENT:**  
**UNIT WEIGHT:**  
**CAPPING/PADS:** ASTM C1231  
**TESTING:** ASTM C39

**MIX DESIGN NUMBER:** 8JOXOB  
**DATE OF PLACEMENT:** 02/22/2010  
**TIME SAMPLED:** 7:55 **BY:** Geoff Sandell  
**BATCH TIME:** 7:25  
**TEMPERATURE (DegF) - AIR:** 60 **CONCRETE:** 64  
**WEATHER:** Clear  
**MEASURED SLUMP (in.):** 6.00  
**AIR CONTENT (%):** **UNIT WT (pcf)**  
**TRUCK NO:** 1646 **TICKET NO:** 840201  
**WATER ADDED @ SITE (gal)** 5  
**LOCATION OF PLACEMENT**  
 Equipment slab

### REPORT OF TESTS

#### CONCRETE COMPRESSIVE STRENGTH - 4 x 8 CYLINDERS

CYLINDER MARKED		DATE TESTED	AGE (days)	DIAMETER (in.)	AREA (sq.in.)	MAXIMUM LOAD (lbs. force)	COMPRESSIVE STRENGTH (psi)	FRACTURE TYPE	REMARKS
SET	MARK								
1	LG1	03/01/2010	7	4.050	12.88	51920	4030	TYPE 2	
1	LG2	03/08/2010	14	4.060	12.95	58400	4510	TYPE 2	
1	LG3	03/22/2010	28	4.050	12.88	65940	5120	TYPE 2	
1	LG4	Hold							

28 day compressive strength results comply with specified strength.

**Technician:** Geoff Sandell, Field Technician  
**Report Distribution:**  
 (2) HDR Engineering, Inc.

**ARDAMAN & ASSOCIATES, INC.**  
 Cert. of Authorization 5950

Type 1	Type 2	Type 3	Type 4	Type 5	Type 6
Cone	Cone	Columnar	Shear	Side	Top
				Fracture	Fracture



Craig Obrecht  
 Project Eng, PE #55451

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

AUG 13 2010

SOUTHWEST DISTRICT  
TAMPA

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**ATTACHMENT G**  
**PHASE I LANDFILL GAS COLLECTION AND CONTROL**  
**SYSTEM AS-BUILT DRAWINGS**

*Full size drawings are provided as a separate bound document*

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