Archaeological excavations near Hassan Su River crossing
CONSTRUCTION PHASE ENVIRONMENTAL AND SOCIAL STUDIES AND SURVEYS

A range of ongoing studies and surveys are proceeding in each of the three countries. These studies fall under the following categories:

1. **Host Government Related Activities**: In Georgia and Azerbaijan, the project was granted its Environmental Permit by the respective Ministries of Environment. At the same time BTC undertook to carry out a series of additional studies and extra pieces of work. In Georgia these are referred to as the so-called “ESIA Continuing Activities”.

2. **Post ESIA Studies**: ESIA Studies that are referred to in the ESAP that were still to be completed after the approval and publication of the ESIA’s

3. **Support Change Management**: Environmental and social appraisals which have taken place to support decision making in the Change Management Process (See Section 4)

4. **Third Party Facilities**: Environmental and social appraisals that are carried out prior to the use of third party facilities (such as borrow pits and concrete batching plants)

Activities that were reported as completed in the Q1 2004 report are not included in the Q2 report. Also note that items 1 and 2 above were addressed in separate chapters in the Q1 report. In this report they have been combined and are presented in this section. Items 3 and 4 are reported on for the first time in this report however, they have been ongoing since the start of construction.

### 3.1 AZERBAIJAN

#### 3.1.1 HOST GOVERNMENT RELATED ACTIVITIES

In Azerbaijan the ESIA was approved subject to BTC meeting 3 conditions as stipulated by the MENR. Two of these conditions were noted in the Q1 2004 report as closed. The third relates to the approval of the hydrotest procedure. A summary of the status of the hydrotest procedures is given below.

<table>
<thead>
<tr>
<th>Study/Survey:</th>
<th>Expected Timing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrostatic test water management plan status</td>
<td>Second quarter 2004</td>
</tr>
</tbody>
</table>

**Progress:**

In response to the letter from the Ministry of Ecology and Natural Resources dated of 1st December 2003, BTC and the construction contractor CCIC have prepared and submitted to MENR a hydrotest package which included Hydrostatic Test Wastewater Management Plan, two maps with indication of locations for evaporation ponds and hydrotest water abstraction points, two tables of flora and fauna species located at the construction sites and Hydrostatic Test Water Management Plan Presentation.

On 7th May 2004 a letter from MENR was received by which it unconditionally approved the HTWMP. It particularly stated that MENR has no objection to hydro testing of the BTC pipeline.

**Completion Status:** CLOSED
3.1.2 POST ESIA STUDIES

Five post ESIA studies continued during Q2. Details of these studies and work relating to archaeological Chance Finds are described below.

<table>
<thead>
<tr>
<th>Study/Survey:</th>
<th>Expected Timing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Data Book Registered Species Preclearance Survey. (Includes: Spur-thighed Tortoise (<em>Testudo graeca</em>), Porcupine <em>Hystrix indica</em> and ground nesting birds)</td>
<td>Prior to relevant construction</td>
</tr>
</tbody>
</table>

**Progress:**

Red Data Book (RDB) registered species pre-clearance surveys continued during Q2 2004. During April pre-clearance surveys covered the area between KP 350 and KP 380. The objective was to pre-clear the RDB species that were recorded in this section during the ESIA, namely Spur-thighed tortoises (*Testudo graeca*) and Porcupines (*Hystrix indica*). There were no surveys in May.

In June pre-clearance surveys were undertaken between KP 380 and KP 422. The aim of the surveys was to pre-clear the area of Spur-thighed tortoises, Glossy Ibis (*Plegadis falcinellus*), Death’s-head hawk moths (*Manduca atropos*), Kingfishers (*Alcedo atthis*), Purple gallinules (*Porphyrio porphyrio*), White-tailed plovers (*Chettusia leucura*), and Porcupines (*Hystrix indica*). During the survey more than 50 tortoises were carefully translocated from the pipeline ROW to a similar habitat over 8km located over 8km away. No RDB bird species, porcupine, or Manduca atropos moths were noted during the survey.

BTC is continuously updating the construction schedule and comparing it to breeding times of ground nesting birds to reduce the risk of encountering and damaging the nests by construction activities.

**Completion Status:** ONGOING

<table>
<thead>
<tr>
<th>Study/Survey:</th>
<th>Expected Timing:</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Iris acutiloba</em> pre-construction translocation and monitoring programme</td>
<td>Translocation off ROW/Arboretum: prior to relevant construction (COMPLETE) Off ROW/Arboretum Monitoring: Construction Phase (ONGOING) ROW Monitoring: Post Reinstatement/Translocation (NOT STARTED)</td>
</tr>
</tbody>
</table>

**Progress:**

Translocation of *Iris acutiloba* (Sharp-edged Darling Iris) occurred in 2003. They were translocated either to the desert habitat area at the Arboretum of the Institute of Botany of Azerbaijan National Academy of Sciences in Mardakan (32,450) or to areas adjacent to the ROW (8,000).

Regular monitoring visits are made to the arboretum and to the ROW. The monitoring schedule is monthly between March and June and quarterly from July to February.

In April-May 2004 a joint monitoring survey of the ROW translocated species was conducted by BTC and the Institute of Botany. Thirteen plots were established to monitor the irises replanted off of the ROW against those growing in a similar habitat in an adjacent area. The monitoring survey will continue for 5 years. Early indications are that the translocated species are adapting well.

Monitoring results for the Irises translocated to the Mardakan Arboretum are also being covered as per the above schedule.

It is too early to definitely predict the survival rate. Currently it looks to be in the order of about 70% for the Arboretum and close to 100% for those adjacent to the ROW.

**Completion Status:** IN PROGRESS
**Study/Survey:** Cultural heritage – Archaeology  
Phase III (data recovery) as required  

**Expected Timing:** Prior to relevant construction

**Progress:**
Through a thorough process of route refinement and archaeological survey work it was concluded that detailed archaeological excavations should be conducted at 4 sites – Borsunlu (Geranboy District), Zayamchay (Shamkir District), Samukh (Samukh District), and Kasamanli (Agstafa District).

All pre-construction archaeological excavations have been conducted by specialists from Azerbaijan Institute of Archaeology (AIOA), under supervision of international archaeologists employed by BTC.

Phase III excavations have been completed as follows:
- Borsunlu completed in November 2002 (Details in Q1 2004 Report)
- Zayamchay completed in March 2004 (Details in Q1 2004 Report)

Excavations of the ancient settlement and medieval Muslim cemetery at Goshgarchay (Samukh District) started in February 2004 and were complete within the BTC strip in April 2004. The main finding from this site was gold earrings. Other finds include skeletons, bronze and iron age pottery, bronze rings and beads.

Excavations in Kasamanli will commence in Q3 2004.

**Completion Status:** ONGOING

---

**Study/Survey:** Groundwater Monitoring Programme  

**Expected Timing:** Prior to relevant construction (Spring 2003-2004) and thereafter, throughout the operations period

**Progress:**
A Groundwater monitoring network has been established to serve the following three purposes:
1. To establish baseline water quality and water level characteristics, including whether there is any pre-existing contamination
2. To investigate possible flow pathways between the pipeline, key water users and specific groundwater sources
3. To provide new data that could be useful in spill modeling and response planning

Groundwater level monitoring of 9 wells drilled by BTC in the Karayazi area is being performed on a monthly basis in order to adequately characterize the seasonal fluctuation in water table level. Water sampling programme is being implemented on quarterly basis in order to establish water quality baseline on these wells.

Additional data have also been collected from 40 key groundwater abstractions identified along the pipeline ROW between Yevlakh and the Georgian border. The third round of baseline water sampling will be conducted in Q3 2004. Baseline water samples are being analysed in an international standard laboratory.

**Completion Status:** ONGOING

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**Study/Survey:** Identification and recording of sensitive downstream receptors  

**Expected Timing:** Prior to linefill in Azerbaijan – during development of detailed Oil Spill and Emergency Response Plans

**Progress:**
This review of available information has been undertaken and a report prepared as part of the Oil Spill Response Plan Development. The assessment covers major river crossings in Azerbaijan, with particular focus on the Kura River, as all other rivers crossed are tributaries of the Kura. To complement this study environmental data collected along the ROW are being included in the OSRP. A “special response strategy” is being prepared for the Karayazi area in accordance with the General Oil Spill Response Plan.

**Completion Status:** ONGOING
3.2 GEORGIA

3.2.1 HOST GOVERNMENT RELATED ACTIVITIES

In Georgia the project was granted its Environmental Permit by the Ministry of Environment in November 2002. At the same time BTC undertook to carry out a series of additional studies and extra pieces of work: the so-called "ESIA Continuing Activities".

BTC has undertaken the activities with extensive input from external specialists and has submitted detailed reports to the Ministry of Environment and GIOC. These are available on the project website. In reviewing the submissions, the government worked extensively with external advisors on technical and environmental issues, funded by the World Bank. On some issues, such as geohazards, a wider group of Georgian experts was extensively involved.

BTC project personnel and appointed BTC expert consultants have worked extensively with the government and its advisors, including involving them in setting scopes of work, field activities, reviews of reports and technical work, discussion, agreement on further actions, and agreement on effective closure.

The table presented in Appendix 1 summarizes the actions taken towards closing out the Continuing Activities and discusses the outstanding ones. It should be noted that the table represents BTC's view of the closure status based on the discussions held with Technical and Environmental Advisors to the government.

BTC considers all activities related to the construction phase to be closed and is therefore not proposing to issue additional updates after this report. There are three activities that are relevant for the operations phase. These are as follows:

- Activities 8 and 12: Operations Phase Management and Monitoring Plans
- Activity 9: Borjomi Zone (f) second last bullet point: Security Plan for Borjomi

3.2.2 POST ESIA STUDIES

A number of post ESIA studies were active in Q2. Details are as follows:

<table>
<thead>
<tr>
<th>Study/Survey:</th>
<th>Expected Timing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural heritage – Monuments Further Work</td>
<td>Prior to relevant construction</td>
</tr>
<tr>
<td>Translocation of Red Data Book Species</td>
<td></td>
</tr>
</tbody>
</table>

**Progress:**

Based on the recommendations of the Phase III Monuments work, the protective fencing has been provided at all sites. Although there are a few issues with fencing being stolen, BTC’s Cultural Heritage team is monitoring the situation and has not found any direct project impacts to these sites. Monitoring that the fences are in place will continue for the period of construction in that area.

**Completion Status:** COMPLETE

<table>
<thead>
<tr>
<th>Study/Survey:</th>
<th>Expected Timing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Translocation of Red Data Book Species</td>
<td></td>
</tr>
</tbody>
</table>

**Expected Timing:**

- Translocation off ROW/Botanical Garden: prior to relevant construction (COMPLETE)
- Off ROW / Botanical Garden Monitoring: Construction Phase (ONGOING)
- ROW Monitoring: Post Reinstatement/Translocation (NOT STARTED)

**Progress:**

Translocation of Red Data Book Species:

As outlined in the Ecological Management Plan, BTC committed to undertake necessary steps to ensure protection, conservation and sustainable development of seven identified endangered populations through ex-situ conservation of threatened plant populations and their further reintroduction in the wild during reinstatement. Q2 activities have included seed collection, plant cultivation and plant translocation. Early results indicate a 95% survival rate for translocated plants.

**Completion Status:** ONGOING
### Study/Survey: Late Finds Cultural Heritage surveys (Moderate-Major Levels)
#### Timing:
Identified during Construction (Q2 2004)

- Marneuli District: KP 53+200 Medieval features identified during trenching require salvage excavations; work completed June 2004. Major excavations may be required prior to SCP trenching.
- Tetritskaro District: KP 57+500 to KP 57+700: Bronze Age burials in running track and SCP line being excavated; KP 74 area Early Christian Period burials on SCP line being excavated; Borrow 76+500 Cemetery damaged by SPJV during borrowing; site damaged at KP 81, post construction compensatory funding may be required; testing will be required between KP 85 and 86 for features found in the trench and possible features revealed on ROW/running track.
- Tsalka District – KP 107 to KP 110+500; KP119 to KP 120+400; KP129+750 scattered pre-Christian graves (approximately 50 on running track or SCP line). Anomaly in BTC trench profile KP 113 appears to be non-cultural/negative. Bronze Age settlement at KP 136 may require excavations before SCP. Artifact scatter located at KP 143 requires no work in advance of SCP per CAS consultation.
- Akhaltsikhe District: Medieval period artifacts scatter and surface feature of indeterminate temporal affiliation/function identified at KP 212, CAS evaluations pending cost proposal and work plan. KP 225+300 multi-component site requiring excavations BTC and SCP trench lines, remaining site to be protected; KP 231+800 “Aqueduct” crossing ROW, pipe to be rammed beneath it for preservation; settlement with associated cemetery found at KP 241 (area noted as being a potential site during Phase I literature review); ROW preparation completed across a portion of BPGA 15 with no site damage.
- Borjomi District: Site excavations underway at KP 176+960 Bronze age burial mound in BTC line and running track. Reroute requested here but denied by CAS (construction agreed). Monuments Department requested reroute at KP 194; KP 199, and KP 201. Excavations required at KP 185 (BPGM 14); KP 194 (if no reroute, this site is extensive and will require lengthy excavations); CAS to work on sites between KP 198 and KP 201 (5 different locations).

**Completion Status:** COMPLETE

### Study/Survey: Aquifer monitoring wells – Borjomi area
#### Expected Timing:
Prior to linefill

**Progress:**
BTC Co. has committed to undertaking groundwater and drinking water monitoring for various sections of the pipeline route throughout operations phase. Specifically:
- Borjomula Catchment (KP 176-192): groundwater monitoring through the use of wells, and drinking water monitoring at selected locations
- Tsalka Lake area (KP 115-134): groundwater monitoring through the use of wells, and drinking water monitoring at selected locations
- Georgian pump stations 1 and 2: groundwater monitoring around the two pump stations. A tender was let and proposals received during Q1 2004. These proposals were evaluated during Q2 and a preferred contractor has been identified. Work will commence in Q3 2004.

**Completion Status:** ONGOING

### 3.3 TURKEY

#### 3.3.1 HOST GOVERNMENT RELATED ACTIVITIES

There are no activities, studies and submissions that have come about as part of the Host Government approval of the ESIA’s in Turkey.
3.3.2 POST ESIA STUDIES

Two post ESIA Studies were completed during Q2 and seven remain ongoing. Details are provided below.

<table>
<thead>
<tr>
<th>Study/Survey:</th>
<th>Expected Timing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape Plans for facilities</td>
<td>Construction period</td>
</tr>
</tbody>
</table>

**Progress:**
The Landscape Plan Development Reports for the Ceyhan Marine Terminal, PT1, 2 and 3 have been drafted and are currently under review. The Landscape Plans have been prepared in response to the commitments in the Turkish EIA. The Proposal for the PT4 and IPT1 is ongoing.

**Completion Status:** ONGOING

<table>
<thead>
<tr>
<th>Study/Survey:</th>
<th>Expected Timing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karst Investigation Studies verification studies along route changes in the Sivas Gypsum Karst</td>
<td>Prior to relevant construction</td>
</tr>
</tbody>
</table>

**Progress:**
The Drilling Investigation Report in the Re-route section of the Sivas Gypsum Karst was finalized in June. The report concluded that:

- There are no large near surface cavities or below surface cavities that will affect the safety of the construction or the operational integrity of the BTC Crude oil pipeline between the KP 613+161 and KP 624+030 in the Sivas Gypsum Karst Area
- The integrity of the pipeline will not be compromised, due to the future collapse of large or small cavities that the pipeline cannot safely span
- The acceptance criteria has been met and the route of the pipeline is acceptable

**Completion Status:** COMPLETE

<table>
<thead>
<tr>
<th>Study/Survey:</th>
<th>Expected Timing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water supply sustainability studies for groundwater and surface water supplies for temporary and permanent facilities</td>
<td>Prior to relevant construction</td>
</tr>
</tbody>
</table>

**Progress:**
All water sustainability studies are in place for existing temporary facilities with the exception of Koprukoy Camp in Lot A. A new well is currently being drilled for this camp and a sustainability study will be undertaken upon its completion. Hanak Camp (Lot A) and Çadirkay (Lot B) do not require studies as they use existing water mains.

Sustainability studies for operational water supply needs for AGI's are ongoing.

**Completion Status:** ONGOING

<table>
<thead>
<tr>
<th>Study/Survey:</th>
<th>Expected Timing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Area Reinstatement Method Statements (&quot;SARMS&quot;) and associated surveys</td>
<td>Prior to relevant construction</td>
</tr>
</tbody>
</table>

The Turkish section of the BTC pipeline project contains topographical, geological and ecological features that are characterised by the project as Special Areas. These require particular attention throughout construction and reinstatement. These Special Areas are classified as Ecologically Sensitive Areas (ESA's) or Other Special Areas that include side slopes, steep slopes, karstic areas and volcanic tuff.
Progress: ESA SARMS
There are a total of 54 ESA’s in Turkey as follows: 12 in Lot A; 24 in Lot B and 18 in Lot C.
In Lot A, all 12 SARMS have been completed. During the 2nd Quarter two SARMS were revised for ESA 5 and 11. All ESA surveys have been completed.
In Lot B, 10 out of 24 SARMS have been completed (3 have recently been revised and are under review), 7 have been drafted and are under review by Botaş and 7 are under preparation. ESA surveys were completed this quarter including a Forest Doormouse and the common Crane survey at ESA 33/34, a Bird Survey in ESA 12, a Fish Survey in ESA 16 and 25 and a general fauna survey in ESA 25. Surveys designated for ESA 13 will be completed in July, 2004.
In Lot C, all SARMS have been completed except for ESA 35 and 52. All ESA surveys have been completed.
At the Ceyhan Marine Terminal, all SARMS have been completed.

Progress: Other Special Areas
In Lot A, 2 ‘other special areas’ SARMS are required and have been completed.
In Lot B, 124 ‘other special area’ SARMS are required. All surveys for these SARMS have been completed and all but 24 SARMS are complete. These have been drafted and are currently under review.
In Lot C, all 15 ‘other special area’ SARMS have been completed.
At the Ceyhan Marine Terminal, all 7 ‘other special area’ SARMS have been completed.

Completion Status: ONGOING

<table>
<thead>
<tr>
<th>Study/Survey:</th>
<th>Expected Timing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-clearance surveys: identification of sensitive fauna on pipeline right of way and relocation outside of right of way</td>
<td>Prior to relevant construction</td>
</tr>
</tbody>
</table>

Progress:
Lot A – Surveys completed in this quarter included those recommended in the pre-construction faunal survey for Lot A completed in spring/summer 2003, for the following species:
- Bat species including Bechstein’s Bat, Mediterranean Horseshoe Bat, Common Pipistrelle, Whiskered Bat, Greater Mouse-eared Bat, Serotine Bat and Schreiber’s Long-fingered Bat.
- Bird species including Lammergier, Griffon Vulture, Dipper, Common Sandpiper, Mountain and Caucasian Chiffchaff, Winchat, Green Warbler, Golden Eagle, Little Ringed Plover, Lapwing, Armenian Gull, White Stork, Black Stork, Common tern, Ruddy Shelduck, Yellow Wagtail, Pied Wagtail, Oyster Catcher, Night Heron and Little Egret.
- Reptiles including the European Pond Turtle.
- Amphibians including Caucasian Salamander, Caucasian Parsley Frog and Southern Crested Newt.
- Fish species including Black Sea Salmon, Common Carp, Chub, Nose Carp, Asp, Italian Barbel, Bulatmai Barbel and Transcaucasian Barb.

The survey area was predominantly in the Posof Wildlife reserve, Çotsuyu River Crossing, Hasankale River Crossing and areas in Ardahan Forest as recommended in the previous faunal survey.
Pre-construction walk-over surveys prior to clearance are ongoing.
Lot B – On-going. Surveys undertaken in this quarter included:
- European Pond Turtle at KP611 to KP632
- Bird Surveys at Paşayurdı Creek, Karasu River, Hoşkadem River, Karasu River, Aksu River, Ilgar Creek, Acısu River, KP 675+000 - 691+000,  
- Fish Surveys at Paşayurdı Creek, Güzyurdı Creek, Buluşçayırı creek, Karasu River, Hoşkadem River, Kişlağışınsu River, Büyük Creek, Kandil Creek, Acıöz stream, Acısu Stream and Aksu River
- Mammal surveys for Beech Martin, Pipistrelle Bat, Marbled Pole Cat and Eurasian Otter.
Pre-construction walk-over surveys prior to clearance are ongoing.

**Lot C** – Formal survey completed in Quarter 1 2004. Pre-construction walk-over surveys prior to clearance were completed this quarter (clearance of ROW is complete in Lot C).

**Stations** – completed in Quarter 1 2004; no further activities undertaken in this quarter.

**Ceyhan Marine Terminal** – completed in Quarter 1 2004; no further activities undertaken in this quarter.

Completion Status: **ONGOING**

<table>
<thead>
<tr>
<th>Study/Survey:</th>
<th>Expected Timing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetation Mapping of right of way in Ecologically Sensitive Areas and PT3</td>
<td>Prior to relevant construction</td>
</tr>
</tbody>
</table>

**Progress:**

Vegetation Mapping Surveys for all ESAs along the ROW and PT3 have been completed. This information has been used to inform the ESA Construction Method Statements and the SARMS (see above).

Completion Status: **COMPLETE**

<table>
<thead>
<tr>
<th>Study/Survey:</th>
<th>Expected Timing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine turtle survey (duration of monitoring during operations to be determined)</td>
<td>Construction and operation period</td>
</tr>
</tbody>
</table>

**Progress:**

Marine Turtle surveys commenced in 2002 and are undertaken once a year. Botas are obliged under the EIA to undertake surveys at two beaches in the area, Akkum and Sugözü. This year however, Botas have extended their survey to include the Botas District Management Beaches as turtles have been observed to use this beach.

The purpose of the survey is to understand nesting patterns of female Green and Loggerhead Turtles at the above named beaches. In 2002, a total of 42 Loggerhead turtles and 13 Green turtles nested at Akkum and Sugözü beaches. In 2003, the survey recorded fewer loggerhead turtles nesting on the beaches. This does not necessarily indicate a down turn in their numbers as turtles do not nest every year, but every 3 or 4 years, and the number of turtles recorded in 2002 and 2003 may be part of a larger, 3 to 4 yearly cycle. The upcoming surveys in 2004 onwards will help to inform whether this is the case.

The 2004 Marine Turtle survey for Ceyhan Marine Terminal commenced in June and will continue throughout the nesting and hatching season until September/October.

Completion Status: **ONGOING**

<table>
<thead>
<tr>
<th>Study/Survey:</th>
<th>Expected Timing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding Cultural Heritage surveys at remaining camp locations and new access roads and chance finds.</td>
<td>Prior to relevant construction</td>
</tr>
</tbody>
</table>

**Access Roads:**

During this quarter extensive cultural heritage surveys were undertaken for the access roads for Çadırkaya Camp. No archaeological sensitivities were found however any excavations will be subject to an archaeological watching brief.

**Chance Finds:**

**Settlement Mound at KP 463+100 – 463+250.** In April an iron age settlement mound was found at KP 463+200 during an archaeological watching brief carried out by STA (Lot B) archaeologists. The area was investigated by Erzurum Museum Director, Botas and STA archaeologists and a decision was made to alter the route of the pipeline to protect the site and allow for excavations at a later date.
**Roman Bath at KP 945+084-943+296.** In April a Roman Bath was discovered during clearing and grading. A decision was made to alter the pipeline to protect the site and allow for excavation (refer to Case Study 4.1).

**Possibly Iron Age stone foundations and ceramic fragments at KP 355+360.** In May during trench excavations stone foundations and ceramic fragments were discovered. The area has been investigated by the Erzurum Museum Directorate and Gazi University and a decision is pending from the protection committee as to whether salvage excavation and a re-route is required.

**Possibly late Roman/Byzantine stone foundations at 681+600/700.** In May remains of a wall were observed during construction. Investigation by Sivas Museum Directorate and Gazi University has suggested that the site is possibly a farmstead building from the late Roman or Byzantine age. A decision is pending from the Protection Committee whether a re-route and excavations are required.

**Completion Status:** ONGOING

<table>
<thead>
<tr>
<th>Study/Survey:</th>
<th>Expected Timing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Quality Monitoring at BTC Ceyhan Marine Terminal</td>
<td>Construction</td>
</tr>
</tbody>
</table>

**Progress:**

This study has been commissioned to monitor the ambient air quality though the deployment of passive diffuser tubes at the Terminal during construction and operations. The first (of three) long term baseline air quality monitoring reports, covering the period 10 December 2003 to 24 January 2004, was completed and approved by Botaş in this quarter. The second report, covering the period 7 March to 21 April 2004 has been completed and is under review by Botaş. The monitoring results from the report completed in this quarter show that PM_{10}, VOCs and SO_{2} levels are all below project standards and that levels of NO_{x} were slightly above project standards at two (of 10) measuring points. The above standard NO_{x} levels were attributed to project traffic. The third long term baseline air quality monitoring report commenced on June 14 2004.

**Completion Status:** ONGOING