

Head 48 — GOVERNMENT LABORATORY

Controlling officer: the Government Chemist will account for expenditure under this Head.

Estimate 2008–09	\$329.0m
Establishment ceiling 2008–09 (notional annual mid-point salary value) representing an estimated 404 non-directorate posts as at 31 March 2008 rising by five posts to 409 posts as at 31 March 2009	\$173.1m
In addition, there will be an estimated six directorate posts as at 31 March 2008 rising by one post to seven posts as at 31 March 2009.	
Commitment balance	\$41.9m

Controlling Officer's Report

Programmes

Programme (1) Statutory Testing	This programme contributes to Policy Area 2: Agriculture, Fisheries and Food Safety (Secretary for Food and Health) and Policy Area 15: Health (Secretary for Food and Health).
Programme (2) Advisory and Investigative Services	This programme contributes to Policy Area 2: Agriculture, Fisheries and Food Safety (Secretary for Food and Health), Policy Area 9: Internal Security (Secretary for Security), Policy Area 23: Environmental Protection, Conservation, Power and Sustainable Development (Secretary for the Environment) and Policy Area 32: Environmental Hygiene (Secretary for Food and Health)
Programme (3) Forensic Science Services	This programme contributes to Policy Area 9: Internal Security (Secretary for Security).

Detail

Programme (1): Statutory Testing

	2006–07 (Actual)	2007–08 (Original)	2007–08 (Revised)	2008–09 (Estimate)
Financial provision (\$m)	78.6	119.4	114.8 (–3.9%)	144.8 (+26.1%)
				(or +21.3% on 2007–08 Original)

Aim

- 2 The aim is to carry out statutory functions as referee analyst under a number of ordinances and regulations.

Brief Description

3 The Government Chemist discharges statutory functions as referee analyst under various ordinances and regulations. The work involves the analysis of food products for regulatory compliance, the examination of western and Chinese medicines for registration and quality control, the classification of dangerous goods for compliance with the Dangerous Goods Ordinance, the testing of dutiable commodities for tariff classification, the assessment of toys, children's products and consumer articles for health and safety hazards, the determination of tar and nicotine yields in cigarettes, the assay of gold and platinum articles for fineness and the verification of products and equipment for compliance with the Weights and Measures Ordinance. The Government Laboratory provides 24-hour on-call service to assist the Fire Services Department and the Labour Department at scenes of accidents involving hazardous chemicals.

4 Additional resources were allocated to the Laboratory in 2007 to address the increasing workload in food testing, including those related to food complaint cases. To bring about better utilisation of the new resources, the operations pertaining to food analyses were re-organised from the original three functional sections into five. Furthermore, a Food Safety Laboratory will be commissioned in early 2008 to cope with the expanding analytical service on food. In another area of health concern, the Laboratory continued to provide full support for the investigation into the cases of adverse reaction arising from the consumption of proprietary Chinese medicines found containing western drug ingredients, and intoxication incidents related to substitution or contamination of herbs in Chinese herbal medicines.

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5 The key performance measures in respect of statutory testing are:

Targets

	Target	2006 (Actual)	2007 (Actual)	2008 (Plan)
<i>Testing of:</i>				
samples relating to food poisoning within one working day (%)#.....	100	100	100	100
food samples for regulatory compliance purposes within target reporting time averaging 19 working days (%)#.....	95	98	97	95
food complaint samples within target reporting time averaging 25 working days (%)#.....	80	75	80	82
pharmaceuticals (quality control) within target reporting time averaging 14 working days (%)#.....	95Ω	99	98	95
pharmaceuticals (registration) within target reporting time averaging 30 working days (%)#.....	90	93	91	90
Chinese medicines within target reporting time averaging 30 working days (%)#....	95	96	95	95
dangerous goods within target reporting time averaging 14 working days (%)#....	95	97	98	95
dutiable and other commodities within target reporting time averaging ten working days (%)#.....	95φ	99	99	95
toys and children's products within target reporting time averaging 15 working days (%)#.....	95	96	97	95
consumer goods within target reporting time averaging 35 working days (%)#....	95	97	99	95

Different samples require different analytical procedures, thus different target reporting time applies. The quoted number of working days required represents an average of target reporting time for the different samples within the category.

Ω The target has been revised from 92% to 95% with effect from 2007.

φ The target has been revised from 90% to 95% with effect from 2007.

Indicators

The key indicators for statutory testing are the number of tests performed on the various samples submitted.

	2006 (Actual)	2007 (Actual)	2008 (Estimate)
<i>Tests performed</i>			
food samples for regulatory compliance purposes.....	112 421	158 735	130 000
food complaint samples.....	14 604	26 469	20 000
pharmaceuticals (quality control).....	21 878	20 750	23 000
pharmaceuticals (registration).....	19 748	20 139	19 000
Chinese medicines.....	56 076	53 442	60 000
dangerous goods.....	6 064	4 928	6 000
dutiable and other commodities.....	23 325	22 530	23 000
cigarette samples.....	14 064	12 960	13 000
toys and children's products.....	9 687	11 901	17 000
consumer goods.....	14 530	14 464	16 000

Matters Requiring Special Attention in 2008–09

6 During 2008–09, the Laboratory will:

- continue to provide analytical support to other government departments for further enhancement of food safety efforts in Hong Kong;
- provide professional advice and develop testing methods in support of the legislative amendments on the control of nutritional labelling as well as the residues of pesticides and veterinary drugs in food;

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- provide analytical support to further strengthen the regulatory system for Chinese medicines and continue to participate in the development of the Hong Kong Chinese Materia Medica Standards;
- provide services to support the anticipated implementation of the amended Toys and Children's Products Safety Ordinance;
- continue to develop testing methods to cater for the implementation of the Dangerous Goods (Amendment) Ordinance 2002; and
- explore the feasibility to outsource some of the tests to the commercial sector so as to better utilise the resources.

Programme (2): Advisory and Investigative Services

	2006–07 (Actual)	2007–08 (Original)	2007–08 (Revised)	2008–09 (Estimate)
Financial provision (\$m)	53.0	59.7	61.9 (+3.7%)	66.6 (+7.6%)
				(or +11.6% on 2007–08 Original)

Aim

7 The aim is to provide a wide range of primarily chemical testing and advisory services to other government departments and public institutions.

Brief Description

8 The Laboratory provides comprehensive analytical and advisory services to the Government in the management and monitoring of the environment and in the enforcement of various pollution control measures. Chemical testing of air, water and waste samples for a variety of pollution indicators constitutes the main activity under this programme. Specific incidents of emission or leakage of gaseous substances into the environment involve the Laboratory in on-site investigations. Analytical support is provided to the Hong Kong Observatory's Environmental Radiation Monitoring Programme as well as the Daya Bay Contingency Plan. Other activities include the examination of seepage and swimming pool water samples for the Food and Environmental Hygiene Department, evaluation of workplace exposure of occupational hazards for the Labour Department, testing of government supplies for conformity to tender specifications and identifying products made from endangered species.

9 In 2007, the Laboratory continued to render analytical support and professional advice to the Government in improving the quality of the environment of Hong Kong and engage in scientific research to further extend its analytical capabilities in environmental analysis. In addition to its routine commitments, the Laboratory was actively involved in various environmental impact studies and ad-hoc projects including the analysis of environmental samples for organic pollutants under the Toxic Substances Monitoring Programme. To support the implementation of the Air Pollution Control (Volatile Organic Compounds) Regulation, the Laboratory commenced to provide analytical services for determining the content of volatile organic compounds in regulated consumer products.

10 The key performance measures in respect of advisory and investigative services are:

Targets

	Target	2006 (Actual)	2007 (Actual)	2008 (Plan)
<i>Testing of:</i>				
air monitoring samples within target reporting time averaging 20 working days (%)β	95	99	99	95
other field investigation samples within target reporting time averaging 12 working days (%)β	96Δ	100	100	96
air samples for litigation purposes within target reporting time averaging 18 working days (%)β	97	100	99	97
water monitoring samples within target reporting time averaging 20 working days (%)β	96	100	99	96
waste monitoring samples within target reporting time averaging 27 working days (%)β	95	97	99	95
waste samples for litigation purposes within target reporting time averaging 12 working days (%)β	97α	100	100	97

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	Target	2006 (Actual)	2007 (Actual)	2008 (Plan)
radioactivity monitoring samples				
within target reporting time averaging				
12 working days (%)β	95	97	99	95
pesticides formulation samples				
within target reporting time averaging				
36 working days (%)β@.....	93¶	95	100	93
seepage and swimming pool water				
samples within target reporting time				
averaging ten working days (%)β	96§	99	100	96
other samples within target reporting time				
averaging 25 working days (%)β.....	90	98	99	90

β Different samples require different analytical procedures, thus different target reporting time applies. The quoted number of working days required represents an average of target reporting time for the different samples within the category.

Δ The target has been revised from 95% to 96% with effect from 2007.

α The target has been revised from 95% to 97% with effect from 2007.

@ The target reporting time was averaging 38 working days before 2008.

¶ The target has been revised from 90% to 93% with effect from 2008.

§ The target has been revised from 95% to 96% with effect from 2008.

Indicators

The key indicators for advisory and investigative services are the number of tests performed on the various samples submitted.

	2006 (Actual)	2007 (Actual)	2008 (Estimate)
<i>Tests performed</i>			
air monitoring samples.....	78 237	66 555	67 000
air samples for litigation purposes	1 849	2 924	2 900
field investigation samples.....	434	464	450
water samples.....	128 126	123 825	125 000
waste monitoring samples.....	17 622	15 477	15 000
waste samples for litigation purposes	242	133	200
pesticides formulation samples	299	62	200
seepage and swimming pool water samples.....	33 096	20 773	18 000
miscellaneous			
radioactivity monitoring samples.....	4 366	4 389	4 700
other samples	14 683	11 351	11 700

Matters Requiring Special Attention in 2008–09

11 During 2008–09, the Laboratory will:

- continue to provide analytical services in support of the implementation of the Air Pollution Control (Volatile Organic Compounds) Regulation and the Air Pollution Control (Motor Vehicle Fuel) Regulation;
- provide support to government departments in pursuing action items proposed under the Hong Kong Special Administrative Region Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants;
- provide analytical services to government departments in support of the implementation of the Hazardous Chemicals Control Ordinance;
- continue to provide analytical support to other government departments in their preparation for the implementation of the planned amendments to the Pesticides Ordinance; and
- continue to provide analytical and advisory services to government departments in support of the implementation of the Chemical Weapons (Convention) Ordinance and the Import and Export (Strategic Commodities) Regulations under the Import and Export Ordinance.

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Programme (3): Forensic Science Services

	2006-07 (Actual)	2007-08 (Original)	2007-08 (Revised)	2008-09 (Estimate)
Financial provision (\$m)	103.1	107.2	111.7 (+4.2%)	117.6 (+5.3%)
				(or +9.7% on 2007-08 Original)

Aim

- 12 The aim is to provide comprehensive and unbiased forensic science services to the criminal justice system.

Brief Description

13 The Laboratory provides comprehensive forensic science services to law enforcement departments, which include mainly the Hong Kong Police Force, the Customs and Excise Department, the Immigration Department and the Independent Commission Against Corruption. Additionally, urinalysis monitoring is conducted for the Department of Health (Methadone Maintenance Scheme), the Social Welfare Department, the Correctional Services Department, the Hong Kong Police Force and other organisations requiring this service.

14 The services are grouped into two main work areas: criminalistics and quality management; and drugs, toxicology and documents. A 24-hour service is also provided for the scientific examination of crime scenes. It covers general crime scenes and scenes requiring specialist knowledge, such as fire investigation, traffic accident reconstruction, blood pattern analysis and illicit drug manufacturing.

15 A majority of the performance targets have been met. On the other hand, advancement in technology, which enabled analysis of more complicated biochemical grouping cases, has added to the complexity and workload on the cases and thus affecting the turnaround time. On areas where targets were not met, the Laboratory is striving to enhance efficiency to improve the situation.

- 16 The key performance measures in respect of the forensic science services are:

Targets

Targets are defined as the number of working days required to complete 80 per cent of cases in each category to accommodate the wide variations experienced in forensic casework.

	Target Working Days Per Case	2006 (Actual)	2007 (Actual)	2008 (Plan)
biochemical grouping (DNA profiling) -				
routine cases	88	68	87	80
complicated cases	154	140	176	170
DNA database (DNA profiling)	22	21	21	22
parentage testing (DNA profiling)∇	22	23	22	22
trace evidence	66	71	66	66
accident reconstruction	66	71	66	70
routine illicit drug seizures	11	11	11	11
major drug seizures and manufacturing	44	59	57	55
analytical toxicology	33	42	35	35
drug urinalysis -				
methadone clinics	11	6	9	10
judicial-confirmation	22	21	20	21
drink-driving	11	11	11	11
handwriting examination	66	84	84	78
counterfeiting/forgery	33	31	26	32
express counterfeiting/forgery service	1	1	1	1

- ∇ The figures represent the number of working days lapsed between the reception by the Laboratory of samples for genetic testing and the issuing of genetic data after completion of DNA analysis of these samples within the Laboratory.

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Indicators

Key indicators for the forensic science services are the number of cases investigated, urinalysis samples tested, statutory certificates or technical reports/witness statements issued and crime scenes attended.

	2006 (Actual)	2007 (Actual)	2008 (Estimate)
<i>Criminalistics and Quality Management Group</i>			
samples tested			
DNA database	4 298	4 833	5 000
cases investigated			
biochemical sciences -			
routine	3 206	2 543	3 200
complicated	691	1 066	680
parentage testing	2 672	2 385	2 500
chemical sciences	820	883	850
physical sciences	858	790	800
Total	8 247	7 667	8 030
<i>Drugs, Toxicology and Documents Group</i>			
cases investigated			
controlled drugs	6 450	7 563	7 600
analytical toxicology	2 400	2 562	2 500
drink-driving	118	121	130
questioned documents	2 154	1 791	1 800
Total	11 122	12 037	12 030
test conducted			
drug urinalysis -			
methadone clinics	14 279	14 682	15 000
judicial-confirmation	64 266	80 682	70 000
Total	78 545	95 364	85 000
<i>Forensic Science Division</i>			
statutory certificates issued	6 698	7 868	8 000
technical reports/statements	14 787	13 983	14 000
crime scenes attended	451	515	450

Matters Requiring Special Attention in 2008–09

17 During 2008–09, the Laboratory will endeavour to enhance the efficiency in service areas where targets were not met, by refining methodology and administration.

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ANALYSIS OF FINANCIAL PROVISION

Programme	2006-07 (Actual) (\$m)	2007-08 (Original) (\$m)	2007-08 (Revised) (\$m)	2008-09 (Estimate) (\$m)
(1) Statutory Testing	78.6	119.4	114.8	144.8
(2) Advisory and Investigative Services	53.0	59.7	61.9	66.6
(3) Forensic Science Services	103.1	107.2	111.7	117.6
	234.7	286.3	288.4 (+0.7%)	329.0 (+14.1%)
				(or +14.9% on 2007-08 Original)

Analysis of Financial and Staffing Provision

Programme (1)

Provision for 2008-09 is \$30.0 million (26.1%) higher than the revised estimate for 2007-08. This is mainly due to increased requirement for procurement of capital equipment, additional provision for creating five posts to enhance the regulation of Chinese medicines, and supporting the enforcement of the updated Toys and Children's Products Safety Ordinance, partly offset by reduced requirement for specialist stores.

Programme (2)

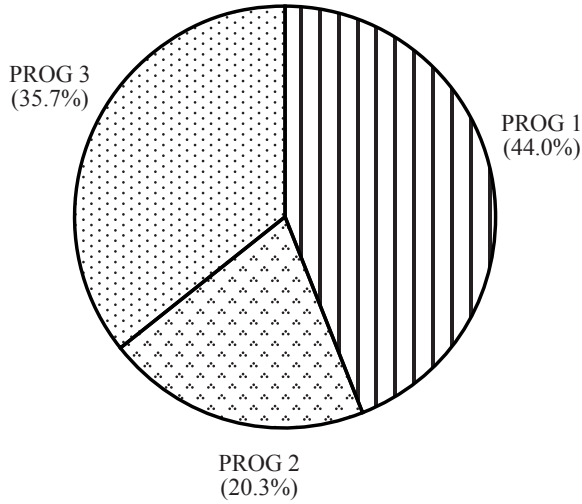
Provision for 2008-09 is \$4.7 million (7.6%) higher than the revised estimate for 2007-08. This is mainly due to increased requirement for procurement of capital equipment and specialist stores.

Programme (3)

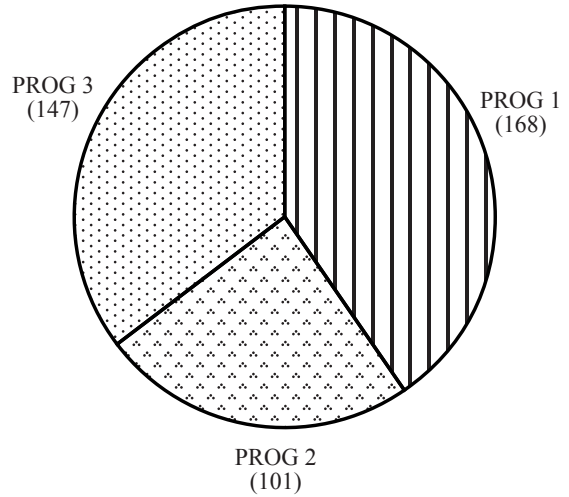
Provision for 2008-09 is \$5.9 million (5.3%) higher than the revised estimate for 2007-08. This is mainly due to increased requirement for procurement of capital equipment, additional provision for creating one post in 2008-09 to meet operational needs, partly offset by reduced requirement for specialist stores.

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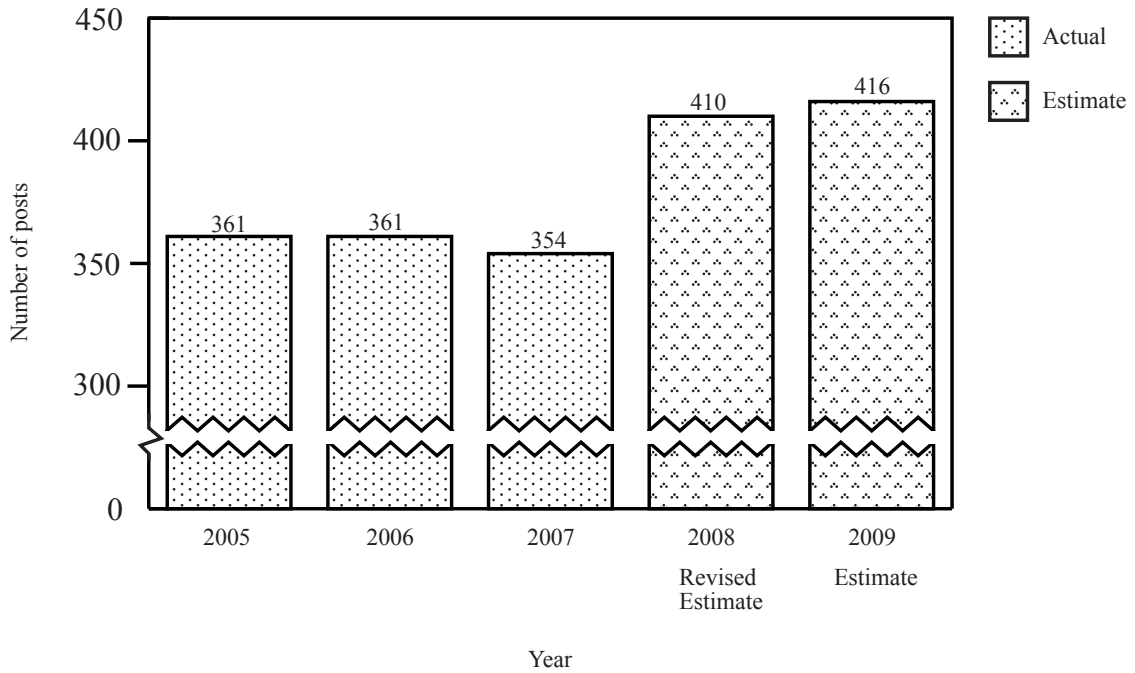
*Allocation of provision
to programmes
(2008-09)*



*Staff by programme
(as at 31 March 2009)*



*Changes in the size of the establishment
(as at 31 March)*



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Sub-head (Code)	Actual expenditure 2006-07	Approved estimate 2007-08	Revised estimate 2007-08	Estimate 2008-09	
	\$'000	\$'000	\$'000	\$'000	
Operating Account					
Recurrent					
000	Operational expenses	215,852	243,434	256,569	259,093
	Total, Recurrent	215,852	243,434	256,569	259,093
	Total, Operating Account	215,852	243,434	256,569	259,093
Capital Account					
Plant, Equipment and Works					
603	Plant, vehicles and equipment	9,465	21,155	10,147	41,857
661	Minor plant, vehicles and equipment (block vote)	9,359	21,693	21,693	28,099
	Total, Plant, Equipment and Works	18,824	42,848	31,840	69,956
	Total, Capital Account	18,824	42,848	31,840	69,956
	 Total Expenditure	 234,676	 286,282	 288,409	 329,049

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Details of Expenditure by Subhead

The estimate of the amount required in 2008–09 for the salaries and expenses of the Government Laboratory is \$329,049,000. This represents an increase of \$40,640,000 over the revised estimate for 2007–08 and of \$94,373,000 over actual expenditure in 2006–07.

Operating Account

Recurrent

2 Provision of \$259,093,000 under *Subhead 000 Operational expenses* is for the salaries, allowances and other operating expense of the Government Laboratory.

3 The establishment as at 31 March 2008 will be 410 permanent posts. It is expected that there will be a net increase of six permanent posts in 2008–09. Subject to certain conditions, the controlling officer may under delegated power create or delete non-directorate posts during 2008–09, but the notional annual mid-point salary value of all such posts must not exceed \$173,113,000.

4 An analysis of the financial provision under *Subhead 000 Operational expenses* is as follows:

	2006–07 (Actual) (\$'000)	2007–08 (Original) (\$'000)	2007–08 (Revised) (\$'000)	2008–09 (Estimate) (\$'000)
Personal Emoluments				
- Salaries	157,672	168,824	178,910	186,486
- Allowances	857	1,024	1,073	1,073
Personnel Related Expenses				
- Mandatory Provident Fund contribution	379	625	555	805
- Civil Service Provident Fund contribution	361	1,106	1,324	2,206
Departmental Expenses				
- General departmental expenses	56,583	71,855	74,707	68,523
	215,852	243,434	256,569	259,093

Capital Account

Plant, Equipment and Works

5 Provision of \$28,099,000 under *Subhead 661 Minor plant, vehicles and equipment (block vote)* represents an increase of \$6,406,000 (29.5%) over the revised estimate for 2007–08. This is mainly due to more replacement and new items required in 2008–09.

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Commitments

Sub-head (Code)	Item (Code)	Ambit	Approved commitment	Accumulated expenditure to 31.3.2007	Revised estimated expenditure for 2007-08	Balance
			\$'000	\$'000	\$'000	\$'000
Capital Account						
603		<i>Plant, vehicles and equipment</i>				
	805	Acquisition of a scanning electron microscope	3,500	—	2,500	1,000
	806	Acquisition of a high resolution gas chromatograph - high resolution mass spectrometer	4,680	—	4,447	233
	838	Acquisition of a high resolution inductively coupled plasma - mass spectrometer	5,775	—	—	5,775
	854	Acquisition of a set of instruments to support the enforcement of the legal requirements on nutritional labelling.....	7,823	—	—	7,823
	855	Acquisition of a set of instruments to support the enforcement of the Chinese Medicine Ordinance	8,700	—	—	8,700
	859	Acquisition of a set of instruments for biodiesel testing.....	7,326	—	—	7,326
	860	Acquisition of an integrated gas chromatograph and liquid chromatograph - tandem mass spectrometer system	7,000	—	—	7,000
	861	Replacement of an integrated high performance liquid chromatograph - tandem mass spectrometer system.....	4,000	—	—	4,000
		Total	48,804	—	6,947	41,857
			48,804	—	6,947	41,857