DE BEERS CANADA EXPLORATION INC.

HAYES RIVER SAMPLING PROJECT
CHANTREY INLET AREA, KITIKMEOT, NU
JULY - AUGUST 2004

ANNUAL REPORT

HAYES PROJECT – ANNUAL REPORT

Introduction

Early in 2004, De Beers Canada Exploration Inc. (DBCE), a Canadian diamond exploration company with a regional office in Yellowknife, acquired from Indian and Northern Affairs Canada (INAC) 58 federal prospecting permits totalling 2,024,122.00 acres in the Chantrey Inlet area of the Kitikmeot Region, NU. As INAC requires exploratory work to be conducted on prospecting permits, DBCE undertook a glacial sediment-sampling programme, known as the ''Hayes Project", across the property in summer 2004. This represents the final annual report of this activity.

The report is comprised of: (1) report text, (2) an overview map, (3) a Tables appendix and (4) a Photos appendix.

Authorisations

On 24 June 2004, DBCE advised INAC's Kugluktuk and Iqaluit offices that a sampling programme would be undertaken on and near DBCE's prospecting permits on the mainland south of Gjoa Haven in NTS mapsheets *56M, 56N, 56L* and *56K*. No land-use permit was required for access to Crown lands, as the Hayes Project activities did not reach the INAC land-use permit threshold, i.e., no flycamp was occupied for more than 100 person-days, and fuel caches were short-term and did not exceed 16 drums per site. Similarly, no water licence was required by the Nunavut Water Board, due to the minimal use of water by the two flycamps.

Effective 20 July 2004, DBCE acquired Inuit Land-Use Licence *#KTL104C032* from the Kitikmeot Inuit Association (KIA); this Category I licence authorises prospecting and the operation of flycamps between 20 July 2004 and 19 July 2005. Access was granted to a total of 10 surface Inuit-Owned Lands (IOLs): *GH-04, GH-05, GH-06, GH-07, GH-08, GH-09, GH-10, GH-12, PB-13* and *PB-14*. IOLs comprise roughly 60% of the sampling area; the remaining 40% is solely Crown land. There was no entry onto subsurface IOLs.

On 02 November 2004, the undersigned requested an amendment to Licence *#KTL104C032* to add two additional surface IOLs – *GH-16* and *GH-29* – to the approved sampling area, as field personnel already had recovered several samples there.

Location

The closest community is Gjoa Haven, 127km north of the Hayes Project prospecting permits; Kugaaruk lies 195km northeast. The project area is an irregularly-shaped block bounded at its northeastern, eastern, southeastern, southwestern, western and northwestern corners by the following co-ordinates: 67° 45' 60" N lat. - 93° 59' 60" W long., 66° 50' 30" N lat. - 92° 30' 00" W long., 66° 45' 60" N lat. - 93° 30' 00" W long., 66° 45' 00" N lat. - 95° 60' 00" W long., 67° 07' 35" N lat. - 96° 00' 00" W long. and 67° 30' 00'' N lat. - 95° 30' 00'' W long. It should be pointed out that the map of the prospecting-permit block as originally presented to regulators has changed slightly along the southernmost row, with the addition of one prospecting permit -- *#4429* – which had been inadvertently omitted from the original database. A corrected version of the property map accompanies this report. Project activity also extended to open ground surrounding the prospecting permits.

Project Particulars

The Hayes Project sampling programme occurred between the dates of 27 July and 23 August, with mobilisation occurring on 26 July and demobilisation from the last flycamp and from Gjoa Haven occurring over part of a week after 23 August. At the end of the programme, samples were transported by air to Yellowknife, thence to De Beers' Sudbury laboratory for concentrating and sorting. In-house environmental and safety training was conducted for all field staff at the start of the programme. Fixed-wing support was provided by Air Tindi of Yellowknife, which moved samples and fuel; prior to startup, fuel was positioned in Gjoa Haven by First Air's Super Hercules aircraft. Helicopter support for the two 2-person sampling crews was via Bell 206B (Jet Ranger) aircraft supplied by Great Slave Helicopters of Yellowknife. The 9-person crew consisted of two local sampling assistants from Gjoa Haven, three geologists, project manager Gabrièle Lemieux, one helicopter pilot, one engineer and one cook/first-aid

attendant. Expediting was supplied by Kangisluk Development Corp. and accommodation, when required, by Inns North, both of Gjoa Haven.

The programme consisted of low-density, helicopter-borne hand sampling across a project area of approx. 240km x 200km (counting both open Crown land and the prospecting permits). The area covered extends to the Hayes River in the northeast, to the Adelaide Peninsula/north Chantrey Inlet in the northwest, to the Kaleet River in the southwest, and to west of Franklin Lake in the southeast (*cf. accompanying Property Overview map)*. Although most sampling occurred directly on DBCE prospecting permits, some samples also were collected on open Crown land (i.e., land not covered by either claims or prospecting permits). Samples were collected with shovels and pails from beaches, glacial tills, eskers and other glaciofluvial deposits, as well as from glaciolacustrine environment and streams, in a volume of 10L per sample. Sample density over the area was approximately one sample per 80km^2. The length of the programme was 27 days, with each sampling day being approximately 10 hours.

Jet-B helicopter fuel was cached at seven fuel caches and at the two flycamps (*cf. Table 1*). Compact spill kits of 23L (5gal) size were placed at the first four fuel caches, then moved to the remaining three; a 205L (45gal) spill kit was sited at Flycamp #1, then moved to Flycamp #2 for the final week of the field programme (*cf. Table 1 and Table 2).* No fuel drums or debris were left behind in the field when fuel caches were closed. *Table 2* represents a listing of spill kit contents.

Fuel at all camp and cache sites was stored properly, and MSDS sheets for fuels and other hazardous materials were kept in the flycamp office. Empty drums were rotated out regularly.

Each flycamp (*cf. accompanying photos*) consisted of individual Arctic pop-up tents (one-person size) and Weatherhaven tents to serve as kitchen, dry and office. Several drums of petrol (gasoline) were used to operate small gensets, with the remainder of fuel being Jet-B for fuelling the helicopters, and propane for cooking and washing. A pop-up tent was set up over hand-dug privvy pits; each pit was covered with native material at closure of each flycamp, and the site levelled, as a restorative measure. Garbage was bagged daily, burned in a burn barrel to obviate animal attraction and residue flown out regularly on sample backhauls, with the burn barrel itself removed after the end of each flycamp and at the end of the programme. Greywater from washing and cooking was directed onto tundra and away from nearby waterbodies. No fuel drums or cylinders were left behind in the field when caches and flycamps closed

Sampling was conducted in a way respectful of wildlife: There was no feeding of wildlife and no harassment of wildlife by helicopter or foot traffic; no hunting was allowed. Wildlife sightings were recorded (*cf. Table 3)* and will be provided to Government of Nunavut wildlife biologists, the KIA and the Gjoa Haven Hunters and Trappers association. The project crew also adhered to the policies and procedures of DBCE's Environmental Management System (*cf. CD-ROM already supplied to the KIA).* Since only small quantities of soil were either dug or removed per site during sample collection, there was virtually no disturbance to terrain and no potential obstacles for foraging wildlife.

During the sampling programme, 595 samples were collected, distributed by media as follows: 129 glaciofluvial, 185 beach, 141 glacial tills (including one basal till and one ablation till), 139 streams (active area of stream bed) and one glaciolacustrine. Samples were collected across 52 1:50 000 mapsheets. A total of 98 samples were collected on 10 surface IOLs (*cf. Table 4a and Table 4b)* and 497 samples on Crown land. (*Table 4a displays IOLs sampled by NTS area, as well as number of samples collected on Crown land*). Of the 10 IOLs sampled, only one was a Kugaaruk parcel (*PB-14)* and only one sample was collected on that parcel. The following surface IOLs were authorised by the KIA but not sampled: *GH-12* and *PB-13*.

Future Plans

If analytical results are favourable, followup sampling and geophysics in the programme area might occur in summer 2005. Test drilling of anomalies would then be considered. An INAC land-use permit, or KIA land-use licence, or both, would be sought, if warranted by the level of planned activity. Within the three-

year life of the Crown prospecting permits, mineral claims could be staked inside these permits, as allowed by the Canada Mining Regulations. Both the KIA and INAC will be kept apprised of future exploration plans as such become known.

Wildlife and Archaeological Observations

No suspected archaeological sites were encountered. Wildlife observations and the co-ordinates of sightings are attached (*cf. Table 3)*; locations also were plotted on the Hayes Property Overview map, which accompanies this report. The total number of animals observed was 505, of which 387 were caribou (the largest aggregation being a group of approx. 300) and 109 muskox; also encountered were 7 wolves, one fox and one "rabbit" (Arctic hare). Although the sampling crew worked in the Franklin Lake area, where large flocks of birds might have been expected, the crew followed advice provided to DBCE by the Canadian Wildlife Service in timing of entry into that area, and no large aggregations of migratory birds were observed; individual bird sightings were not recorded.

Cache Locations

Temporary fuel caches, comprised of between 16 and four drums at one time, were established to serve the sampling programme (*cf. Table 1).* Each cache was closed as activity in that area ceased. No materials were left in the field at the end of the programme.

It should be noted that personnel not associated with DBCE were also working in the area, specifically, INAC, the Geological Survey of Canada and even a movie crew; 5 yellow Jet-B drums marked with the words "DIAND" (Department of Indian Affairs and Northern Development) were noted in the field at a separate cache when our crew closed its Flycamp #2 near the Back River. On one occasion, dèbris of unknown ownership, consisting of an old 205L drum and about 7-8 drums' worth of garbage, were retrieved voluntarily by our samplers and disposed of on a backhaul.

Economic Benefits to Inuit

Two Inuit men from Gjoa Haven were employed as sampling assistants during the programme and local services were used (*cf. Page 2)*. The estimated total of direct programme expenditures in the East Kitikmeot is $44 700, including expediting, accommodation and food, wages, consultation and regulatory expenses, and local art purchased by crewmembers.

A community visit to Gjoa Haven occurred on 28 June, with the assistance of Sterling Firlotte of the hamlet office and Wally Porter of the local KIA. A community visit to Kugaaruk occurred 29-30 June, with the assistance of Vincent Ningark of the hamlet office. The date of a followup visit to Gjoa Haven, at which programme activities will be discussed, will be set in co-operation with the community.

Project Timetable and Status of Cleanup

As noted above, the Hayes Project 2004 programme is now complete. As this was a fly-in, fly-out programme, cleanup was completed successively, i.e., at each camp move or fuel cache move. As no materials were left behind at the end of the programme, no further cleanup is required.

Area of Land Use

Please refer to accompanying map for the location of the Hayes Project; locations of competitor landholdings are also shown on this map, for the convenience of regulators. Land use of both surface IOL lands and Crown lands occurred during the 2004 programme, as noted above. Specific IOL parcels sampled are also noted in this report and in the Tables appendix. Photos representative of the flycamps – both during and after use – are found in the Photos appendix.

-- Shirley Standafer-Pfister, DBCE-Yellowknife
(03 November 2004)

TABLES Appendix
Hayes Sampling Project Annual Report

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Hayes - Summer Sampling Programme 2004

Camp and Cache Locations - Kitikmeot, NU

TABLE 1

Locations	Co-ordinates (Lats/Longs)	Maximum No. Drums	Spill Kit
Flycamp #1	67° 03' 06" N - 94° 00' 15" W	16	205L (45gal)
Fuel Cache #1	67° 03' 54" N - 93° 24' 01" W	7	23L (5gal)
Fuel Cache #2	66° 35' 41" N - 94° 34' 24" W	7	23L (5gal)
Fuel Cache #3	67° 24' 07" N - 94° 24' 47" W	7	23L (5gal)
Fuel Cache #4	67° 06' 18" N - 94° 38' 03" W	7	23L (5gal)
Flycamp #2	67° 07' 43" N - 95° 18' 09" W	13	205L (45gal)
Fuel Cache #5	67° 23' 46" N - 94° 46' 16" W	3	23L (5gal)
Fuel Cache #6	66° 47' 01" N - 95° 41' 46" W	4	23L (5gal)
Fuel Cache #7	66° 54' 35" N - 96° 57' 27" W	7	23L (5gal)

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Hayes – Summer Sampling Programme 2004

Spill-Kit Contents

TABLE 2

MEP 45S – 205L (45gal) spill kit:

15 oil-absorbent pads: 0.94cm x 42.5cm x 47.5cm (3/8" x 17" x 19")
4 oil-absorbent booms: 12.5cm x 3m (5"X10')
1 oil-absorbent blanket: 0.94cm x 47.5cm x 13.3m (3/8" x 19" x 44')
1 "Plug and Dike" repair compound
1 neoprene drain cover: 97.5cm x 97.5cm x 0.15cm (39" x 39" x 1/16")
1 roll of caution tape: 5cm x 55m (2" x 180')
1 pair of splash gloves
1 pair of chemical splash goggles
1 splash suit
2 disposal bags (6ml poly)
1 set of spill-control instructions
1 list of contents

Pickup capacity: 432L (95gal)

MEP 5S – 23L (5gal) compact spill kit (4 kits used in project):

10 oil-absorbent pads: 0.94cm x 42.5cm x 47.5cm (3/8" x 17" x 19")
1 oil-absorbent sock: 7cm x 240cm (3" x 96")
1 "Plug and Dike" repair compound
1 pair of splash gloves
1 pair of chemical splash goggles
4 "Hazmat" disposal poly bags with ties
1 poly drain cover: 120cm x 120cm (48" x 48")
1 non-sparking shovel
1 37wc, static grounding cable, 3m
1 spill kit decal
1 set of spill-control instructions
1 list of contents

Pickup capacity: 45L (10gal)

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Hayes - Summer Sampling Programme 2004

Wildlife Sightings - Chantrey Inlet Area, Kitikmeot, NU

TABLE 3

Date	Observer(s)	# of Animals *	Animals Observed	Where Sighted? **	Comments
1600 -- 27 July 2004	Gabrièle Lemieux and entire crew	1	wolf	456323E, 7437252N (NAD 27, Zone15)	observed at 200m: walking, sitting
2100 – 01 Aug 2004	Pat Klengenberg	1	caribou	456323E, 7437252N (NAD 27, Zone15)	observed at 500m: sitting
time? – 01 Aug 2004	Dianne Lapierre, Jonah Kamimmalik	2	muskox	447058E, 7500072N (NAD 27, Zone15)	distance: N/A: running
1000 – 01 Aug 2004	Dianne Lapierre, Jonah Kamimmalik	1	wolf	450642E, 7498984N (NAD 27, Zone15)	observed at 100-200m: walking
1600 -- 01 Aug 2004	Dianne Lapierre, Jonah Kamimmalik	2	caribou	451436E, 7480321N (NAD 27, Zone15)	observed at 400m: mother, baby walking
1200 -- 02 Aug 2004	Gabrièle Lemieux, Geoff Owen, Leanda (cook), Colin (pilot)	300	caribou herd	456323E, 7437252N (NAD 27, Zone15)	observed at 200m: bathing, walking
time? – 02 Aug 2004	Dianne Lapierre, Pat Klengenberg	1	caribou	436028E, 7475400N (NAD 27, Zone15)	observed at 300m: walking
time? – 02 Aug 2004	Dianne Lapierre, Pat Klengenberg	1	muskox	474219E, 7473148N (NAD 27, Zone15)	distance N/A: running
time? – 02 Aug 2004	Shanif Habib, Jonah Kamimmalik	1	caribou	447983E, 7464252N (NAD 27, Zone15)	observed at 200m: curious, inspecting us
time? – 02 Aug 2004	Shanif Habib, Jonah Kamimmalik	1	fox	464813E, 7471615N (NAD 27, Zone15)	observed at 300m: scampering into foxhole
time? – 02 Aug 2004	Dianne Lapierre, Pat Klengenberg	1	caribou	440638E, 7475758N (NAD 27, Zone15)	distance N/A: walking
time? – 03 Aug 2004	Geoff Owen, Shanif Habib	1	caribou	458701E, 742738N (NAD 27, Zone15)	observed at 100m: walking, eating
1400 – 05 Aug 2004	Gabrièle Lemieux, Shanif Habib	4	muskox	480928E, 7456604N (NAD 27, Zone15)	observed at 200m: walking
0815 – 09 Aug 2004	Geoff Owen, Shanif Habib, Dianne Lapierre, Jonah Kamimmalik	1	muskox	400727E, 7443460N (NAD 27, Zone15)	observed at 300m: running
time? – 09 Aug 2004	Geoff Owen, Dianne Lapierre	1	muskox	423866E, 7413437N (NAD 27, Zone15)	observed at 400m: walking
time? – 09 Aug 2004	Geoff Owen, Dianne Lapierre	30	caribou	420620E, 7420308N (NAD 27, Zone15)	observed at 1 000m: walking
1100 – 10 Aug 2004	Gabrièle Lemieux, Geoff Owen	1	muskox	401244E, 7423423N (NAD 27, Zone15)	observed at 300m: walking

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Wildlife Sightings - Chantrey Inlet Area, Kitikmeot, NU

TABLE 3 (cont.)

Date	Observer(s)	# of Animals *	Animals Observed	Where Sighted? **	Comments
1400 – 10 Aug 2004	Gabrièle Lemieux, Geoff Owen	1	wolf	405748E, 7409290N (NAD 27, Zone15)	observed at 100m: walking
0900 – 10 Aug 2004	Dianne Lapierre, Pat Klengenberg	50	caribou	396757E, 7405493N (NAD 27, Zone15)	observed at 100m: grazing, running
time? – 10 Aug 2004	Dianne Lapierre, Pat Klengenberg	1	wolf	405691E, 7409585N (NAD 27, Zone15)	observed at 200m: walking
time? – 11 Aug 2004	Geoff Owen, Pat Klengenberg	15	muskox herd	375006E, 7405929N (NAD 27, Zone15)	observed at 500m: walking
time? – 13 Aug 2004	Geoff Owen, Jonah Kamimmalik, Dianne Lapierre, Pat Klengenberg	3	muskox	400075E, 7444409N (NAD 27, Zone15)	observed at 400m: running
time? – 13 Aug 2004	Dianne Lapierre, Pat Klengenberg	1	wolf	410093E, 7436680N (NAD 27, Zone15)	observed at 200m: walking
0900 – 13 Aug 2004	Geoff Owen, Jonah Kamimmalik	1	rabbit	396077E, 7437749N (NAD 27, Zone15)	observed at 50m: walking
1700 – 14 Aug 2004	Shanif Habib, Gabrièle Lemieux, Geoff Owen, Pat Klengenberg	25	muskox herd	412639E, 7458136N (NAD 27, Zone15)	observed at 300m: grazing, running
1715 – 14 Aug 2004	Shanif Habib, Gabrièle Lemieux, Geoff Owen, Pat Klengenberg	15	muskox herd	407230E, 7451972N (NAD 27, Zone15)	observed at 200m: grazing, running
0800 – 14 Aug 2004	Shanif Habib, Gabrièle Lemieux, Geoff Owen, Pat Klengenberg	1	muskox	406616E, 7453516N (NAD 27, Zone15)	observed at 200m: sleeping
time? – 15 Aug 2004	Dianne Lapierre, Pat Klengenberg	40	muskox herd	N/A (NAD 27, Zone15)	observed at 400m: grazing
time? – 15 Aug 2004	Dianne Lapierre, Pat Klengenberg	2	wolves	385186E, 7435028N (NAD 27, Zone15)	observed at 200m: walking
Total Estimate:		**505.00**			

** For reporting purposes, caribou numbers >100 = a herd and muskox numbers of 15 or more = herd.*

*** Only sightings with co-ordinates appear on accompanying Property Overview map.*

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Hayes - Summer Sampling Programme 2004

Sample Locations by NTS Area and IOL - Kitikmeot, NU

TABLE 4a

NTS Area	Sampling Year	Parcel Designation	No. of Samples
56L/14	2004	GH-04	2
56L/14	2004	GH-05	2
56L/13	2004	GH-05	3
56L/13	2004	GH-06	3
56L/13	2004	GH-07	5
56L/14	2004	GH-07	2
56M/03	2004	GH-07	4
56M/04	2004	GH-07	24
66P/01	2004	GH-07	1
56M/03	2004	GH-08	2
56M/04	2004	GH-08	1
56M/02	2004	GH-09	4
56M/03	2004	GH-09	2
56M/07	2004	GH-09	9
56M/08	2004	GH-09	2
56M/03	2004	GH-10	6
56M/06	2004	GH-10	8
56M/07	2004	GH-10	14
66P/16	2004	GH-16	1
67A/07	2004	GH-29	1
67A/07	2004	GH-29	1
56K/15	2004	PB-14	1
Subtotal IOLs:			**98**
	2004	Crown Land	497
Total-All Samples:			**595**

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Hayes - Summer Sampling Programmes 2004

Number of Samples per Surface IOL - Kitikmeot, NU

TABLE 4b

Parcel Designation	No. of Samples	Parcel Designation	No. of Samples
GH-04	2	GH-16	1
GH-05	5	GH-29	1
GH-06	3	PB-14	1
GH-07	37		
GH-08	3		
GH-09	17		
GH-10	28		

Total - Samples ALL IOLs:	**98**

PHOTO Appendix
Hayes Sampling Project Annual Report

PHOTO 1
Looking south and west toward Flycamp #1, during Hayes Project sampling programme, late July 2004. Co-ordinates were: 67° 03' 06'' N lat. – 94° 00' 15'' W long.

PHOTO 2
Looking south toward the pop-up tents and Weaverhavens of Flycamp #1, during Hayes Project sampling programme, late July 2004. Each of the two flycamp sites was used for no more than 11 days per site, i.e., 99 person-days.

PHOTO 3
Looking west-to-east across Flycamp #1 site after restoration of site, August 2004.

PHOTO 4
Approaching Flycamp #2, west shore of the Back River, during Hayes Project sampling programme, August 2004. Co-ordinates were: 67° 07' 43'' N lat. – 95° 18' 09'' W long.

PHOTO 5
Rainbow breaks through cold mist, Flycamp #2 site, August 2004. Propane tank was secured at cook tent.

PHOTO 6
Looking toward former location of Flycamp #2 after restoration of the site, August 2004.