The Whiskey Gap Uranium Project

Alberta Permit Numbers

093 9305050704, 093 9305050703, 093 9306031154, 093 9305050705, 093 9305061001, 093 9305061000, 093 9305060998, 093 9305060999, 093 9305060997, 093 9305060996, 093 9305060995, 093 9305060994, 093 9306011156,

Part B

Summery of Exploration

And

Diamond Drilling

NTS 83H

For

North American Gem Ltd

And

International Ranger Corp

By

G.S. Hartley P.Geol.

April 30, 2007

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1.0 Executive Summery

This report was prepared to document the Exploration program conducted by North American Gem Ltd of Vancouver on lands optioned from International Ranger Corp of Vancouver.
The target is Roll Front, Sandstone hosted Uranium Mineralization. In the US sandstone Uranium orebodies vary from 400 to 4000 ppm U.
The best intersection during this 37 hole drill program was 132 ppm Uranium. Given the Grass roots nature of the play, this is very encouraging.

1.1 Lands

The project lands totaling 107726.2 hectares are located immediately north of the US Canada border near Delbonita Alberta.
International Ranger conducted Radon sampling of domestic water wells in the area, during August 2005, outlining an area of high radon occurrence up to a maximum of 5000 picocuries / liter Radon.
North American Gem and Ranger entered in to an option agreement on the property, October 5, 2005.

1.2 The Phase 1 Drill Program

Hard Core Diamond Drilling of Salmon Arm B.C. was contracted Nov 7 2005, to drill 1342.6 meters of NQ drilling in a maximum of 15 diamond drill holes.
Electro Log Services of Calgary provided total count bore hole radiometric logging for the drill program.
Dolman Water Well Services of Pincher Creek was contracted to drill and complete several non-core holes, as water wells, for the land owner.

1.3 The Phase 2 Drill Program

On February 25th 2006, Dolman was contracted to conduct Phase Two exploration drilling on the property, to provide further data and radiometric logs for additional 25 holes surrounding the Phase One program , and to test a priority two zone located to the west of zone one on the Mike Gunninger farm and zone three on Floyd Stewart's farm.

1.4.0 Results

1.4.1 Observed Alteration

Most of the drill holes contained strongly oxidized hematite rich zones, reducing conditions were encountered in DDH 05-02, containing a dark carbonaceous mudstone with gastropods, and DH 06-20 containing zones of massive to disseminated pyrite. Both holes were enriched in Uranium and Heavy metals.

1.4.2 Radioactive intersections

Anomalous radioactivity was encountered in 31 of 37 exploration holes. Thickness of the zones varied from less than 1 meter to 5 meters in width, in some holes two radioactive intersections were “stacked” separated by narrow zones of weak radioactivity. All radioactive zones had associated heavy metal enrichment.

1.4.3 Heavy metal enrichment

Anomalous, to very strong Heavy Metals enrichment was associated with the radioactive zones. Heavy metals included, Arsenic, Copper, Molybdenum Antimony, Selenium, and Barium. The maximum values of heavy metals occurring in the radioactive zones were: Arsenic 593 ppm, Copper 62 ppm
Antimony 18 ppm, Selenium 12 ppm Barium 3740 ppm Molybdenum 79 ppm. Uranium mineralization, in all instances, occurred within an “envelope” of heavy metals

1.4.4 Uranium mineralization

No economic grades of Uranium mineralization were encountered. The best assay of both Phase 1 and 2 drill programs was 136 ppm Uranium over a 30 centimeter interval in DDH 05-02.

1.4.5 Recommendations

Uranium mineralization up to .9% U308 occurs within rare organic fossil debris within the Willow Creek section west of the Whiskey Gap Property (Firestone Ventures news release).
This exploration program, confirms that processes capable of uranium transport and deposition, responsible for the formation of Sandstone Uranium deposits are active in the Project area.

The Uranium and associated heavy metals assay data indicate that the weak Uranium mineralization intersected during drilling has been later oxidized and remobilized leaving behind arsenic and copper enrichment (Harshman 1974).

This suggests that the Willow Creek Formation, in the area tested by drilling, lacks a major reducing zone, required for the concentrating Uranium from solution and capable of stabilizing it from further transport.

This also suggests that this relative lack of reductants in the Upper Willow Creek formation may contribute to the formation of large Sandstone Uranium deposits elsewhere on the property.

It is suggested that any further work on the project be directed toward the location and definition strongly reducing conditions within the stratigraphic sequence.

Exploration targets should be: 1. Peripheral to known coal in the section 2. Peripheral to sulphate in water anomalies . 3. Zones of massive to disseminated Pyrite. These conditions all occur on the Priority Two, Gunninger farm location occurring in, or near DH 06-20.

2.0 Introduction

Ignored as an exploration model in Canada, Sandstone hosted Uranium deposits have been mined for many years in the USA

Sandstone deposits constitute about 18% of world uranium resources. Ore bodies of this type are commonly low to medium grade (0.05 - 0.4% U_3O_8) and individual ore bodies are small to medium in size (ranging up to a maximum of 50 000 t U_3O_8). The main primary uranium minerals are uraninite and coffinite. Conventional mining/milling operations of sandstone deposits have been progressively undercut by cheaper in situ leach mining methods.

The United States has large resources in sandstone deposits in the Western Cordillera region, and most of its uranium production has been from these deposits, recently by in situ leach (ISL) mining. The Powder River Basin in Wyoming, the Colorado Plateau and the Gulf Coast Plain in south Texas are major sandstone uranium provinces.

The Smith Ranch uranium mine located in the Powder River Basin is the newest and largest uranium production centre in the United States, and today is producing at a rate of 580 tU (1.5 million lbs U_3O_8) per year.

International Ranger's exploration concept is that the Tertiary and Cretaceous sediments in Southern Alberta are analogous to sediments in parts of the USA that host economically viable Uranium deposits.

In order to test this analogy, Ranger conducted regional water sampling of domestic water sources in the area during August 2005. Survey results are detailed in the report by this Author entitled "Radon Sampling on the Whiskey Gap Property" dated September 10, 2005.

The highest priority exploration target, identified during the Ranger program , was a radon in water anomaly of 5000 picocuries per liter collected from a domestic water well located in Sec 34,TWP1, RGE 23 west of the 4th meridian, known as the Thomson ranch.
North American Gem (NAG) and Ranger entered in to an option agreement on the property, October 5, 2005.

NAG negotiated surface access agreements with land owner Mr. Melvin Thomson and applied for Provincial approval to conduct diamond drilling on the Thomson Ranch.

Hard Core drilling of Salmon Arm B.C. was contracted to drill a minimum of 1300 meters of NQ Diamond Drilling to test the Thomson Ranch, all Diamond Drill holes where geophysically logged by Electro Log services of Calgary.

Dolman drilling of Pincher creek was engaged to drill water wells on the Thomson ranch in exchange for surface access to the ranch, all Dolman wells were gamma logged by Electro Log Services.

Dolman Drilling was subsequently engaged for the Phase two drilling program, in which a further 25 holes were completed on the Thompson Ranch and approximately 4 miles to the west on lands owned by Mike Gunninger. (the Gunninger farm) and Floyd Stewart (the Stewart farm).

3.0 Disclaimer

This Report is directed solely for the development and presentation of data with recommendations to allow for North American Gem and International Ranger. to reach informed decisions.
This report is intended to be read as a whole, and sections should not be read or relied upon out of context.

The author personally collected the core, cuttings and water samples for analysis, or supervised their collection during this project.

The author assumes that all the analytical work conducted by the SRC (Saskatchewan Research Council) is technically sound and accurately reported.

All diamond drill cores were geologically described and sampled by Project manager Lester Vanhill, under the supervision of the author.

Radiometric logs were provided by Electro Log Services of Calgary, Logging tools were calibrated regularly, Logging depths accurately determined and all sampling intervals of drill core were determined, using, radiometric log information. Cores were split using a diamond saw and shipped to the Saskatchewan Research Council (SRC) for chemical analysis. Cuttings from non core holes from the Dolman Drilling program, were collected on1 to 5 foot intervals, split and shipped to the SRC using the Radiometric logs to determine the sampled interval and relative level of Radioactivity

4.0 Property Location and Access

The Whiskey Gap Property consists of 2 metallic mineral permits, each containing approximately an area of 36 square miles of favorable fluvial sandstone.
The property lies along the Alberta Montana border.

Access thorough the property is by paved Alberta highways #501 and #2, graveled grid roads traverse the property lands and service the local farming community.

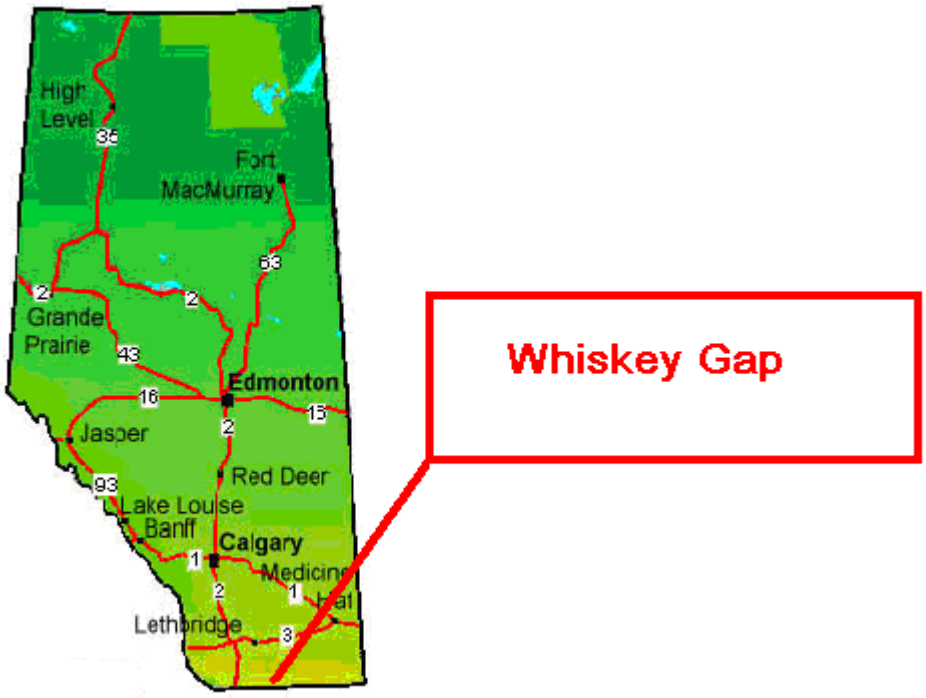


Figure 1. Location of the Whiskey Gap Property

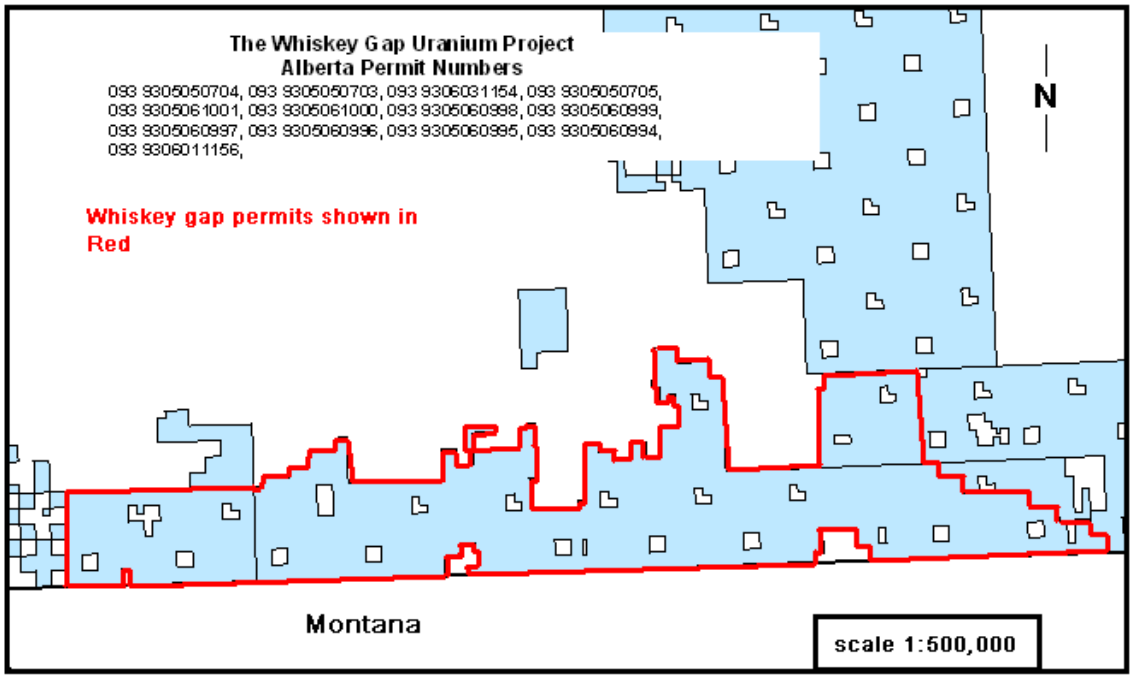


Figure 2 Whiskey Gap lands

5.0 Physiography

The permits are flat to gently rolling farm and ranch land. Drainage is mature, and bedrock exposures are poor excepting along major drainage and in occasional road cuts

Figure3. Typical physiography near the center of Ranger Permits

6.0 History

The permits were acquired through the purchase of a private company, for $30,000 and the issuance of 1 million shares of Ranger stock.

7.0 Geology

The geology of the area is characterized by poorly exposed bedrock subcrops of upper Cretaceous sandstones and shales (Bear Paw, Blood Reserve, St Mary River, and Willow Creek Formations, The Bear paw is the oldest and stratigraphically lowest formation and the Willow Creek is the youngest and stratigraphically highest formation. The Paleocene Del Bonita gravels lie in the eastern half of Permit 2

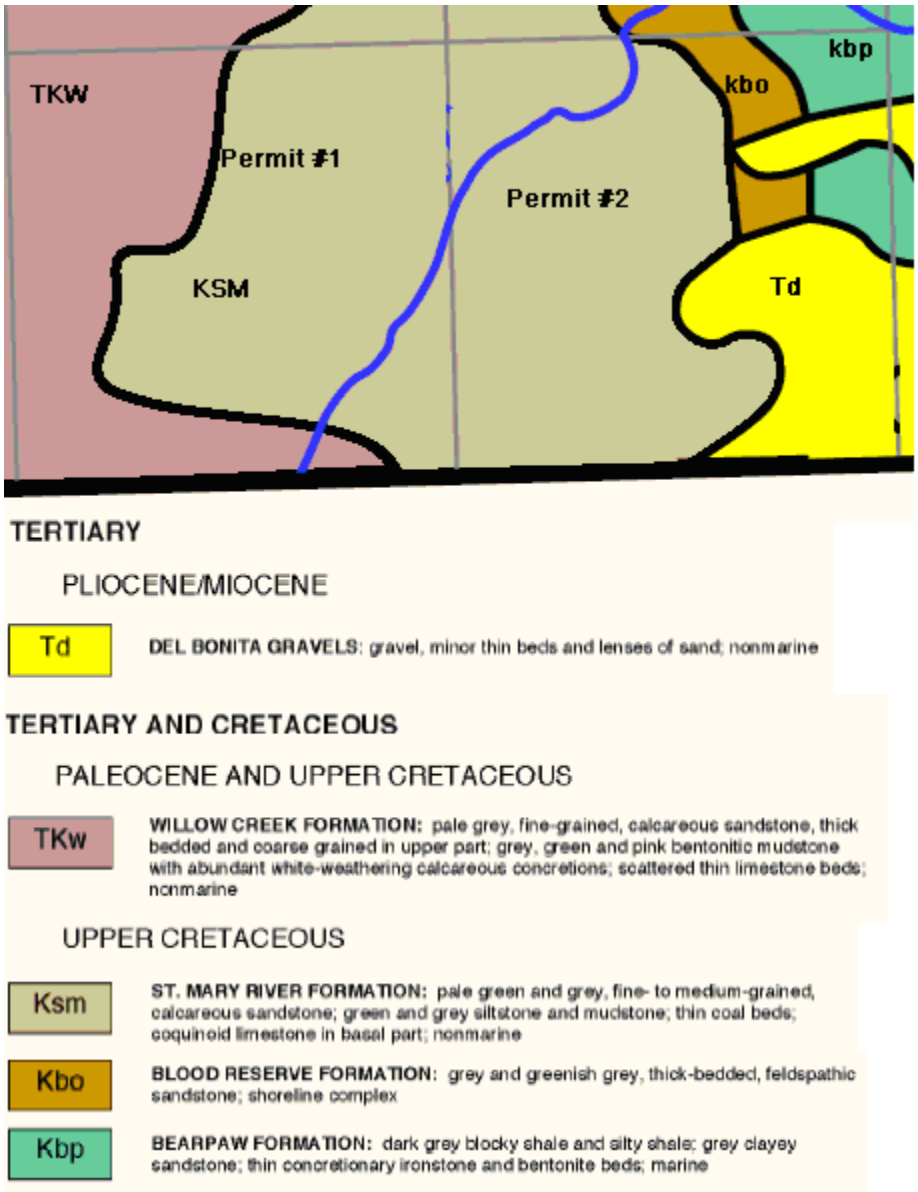


Figure 4 Geological map of the Drilling area, Whiskey Gap

7.1 The Willow Creek Formation

This formation overlies the Knee hills tuff zone and is comprised of about 1200 ft of in part volcanically derived shale and sandstones The Willow creek formation can easily be identified by alternating red and white , hemititic and strongly oxidized sandstones of non marine origin.

7.2 The St Mary River Formation

The St Mary river formation is a fluvial sandstone sequence that overlies the marine Bear Paw shale deposited as the Bear paw Sea regressed eastward across Saskatchewan and parts of Manitoba.

The formation consists of approximately 1500 feet of fluvially derived greenish sands and siltstones; the Formation is overlain by the volcanic Knee Hills Tuff zone.

7.3 The Blood Reserve Formation

This formation is comprised of grey to green thick bedded feldspathic sandstones deposited as a shore line complex .Both marine and non marine in origin.

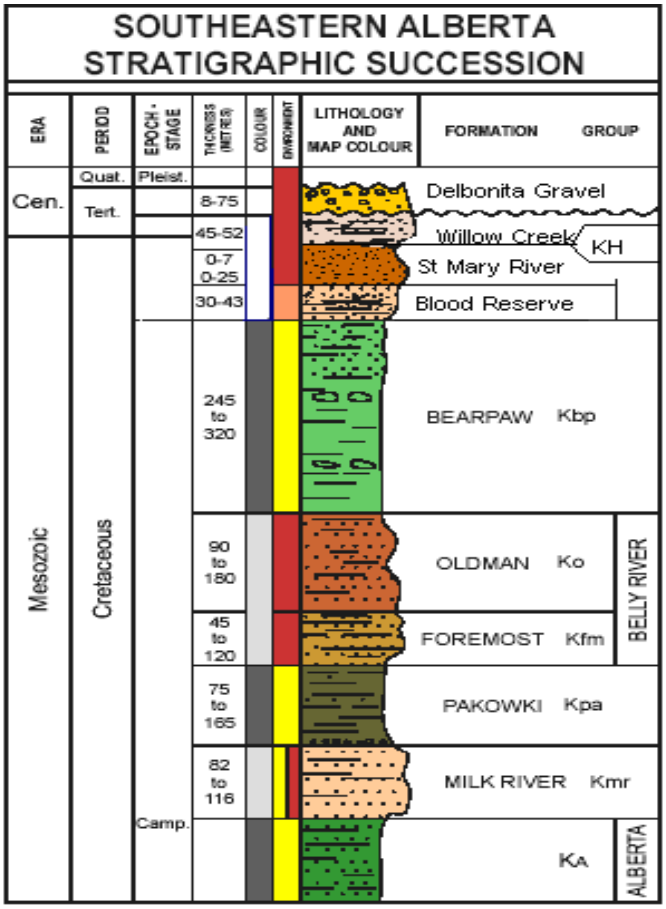


Figure 5. Stratigraphic succession south east Alberta

8.0 Field Geology

The Writer examined well information for 118 water wells drilled on the Ranger permits, on file with Alberta Environment, (the data can be viewed at Http://www.telusgeomatics.com/tgpub/ag_water/menue/drillingreport.asp).
The data yielded positive information strong hematite alteration was noted to be present in some bore holes drilled in the Willow Creek formation. Locations of highly oxidized lithology were recorded and integrated in to the geological interpretation.

Figure 6 Strongly oxidized out crop of Willow Creek Formation

Figure 7 Radioactive limonitic mudstones

Initial investigation of outcrops a Urtec UG 135 was used to measure total count radioactivity, Three radioactive outcrops were located in place radioactivity up to 235cps (about 4X background). Radioactivity occurs in a carbonaceous mud stone with trace to strong limonite.

9.0 Exploration Concept

Uranium mineralization occurs within strongly oxidized porous fluvial sandstones often spatially associated with volcanic rocks in the Midwestern states, where these sandstones are saturated with ground water, Radon gas has successfully been used to indicate exploration targets.

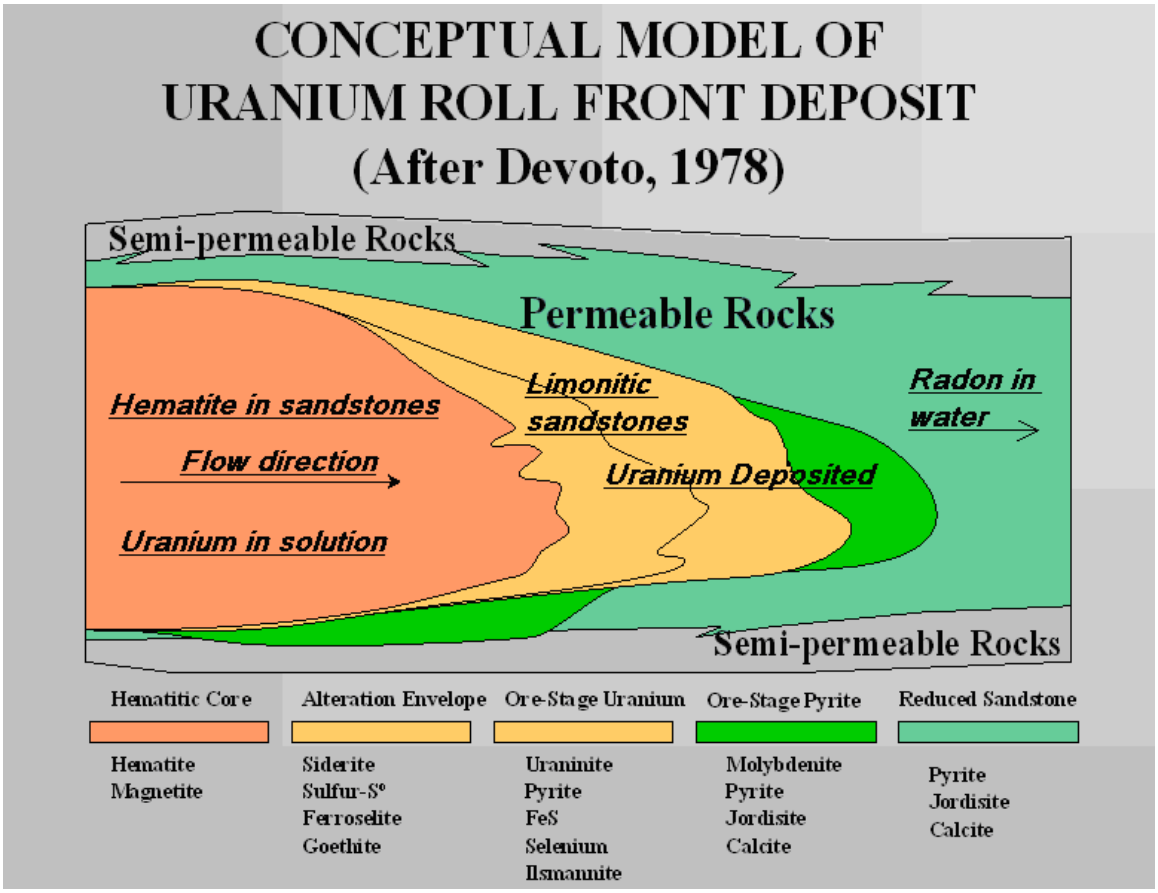
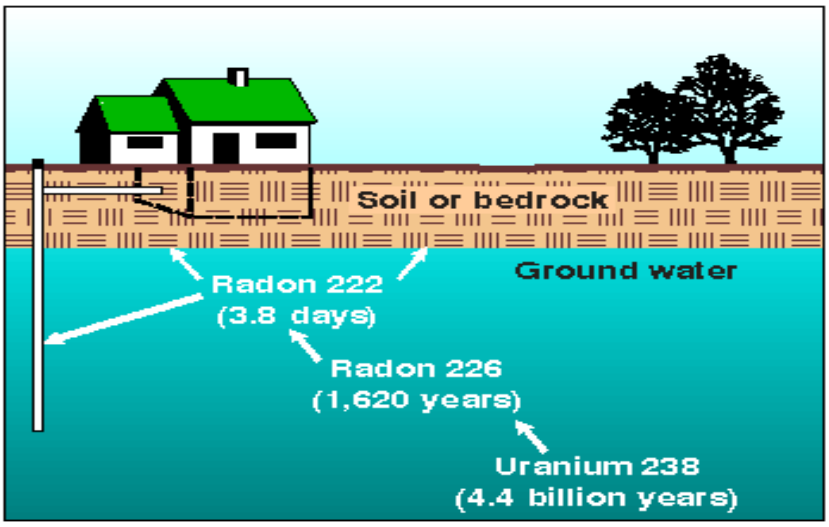


Figure 8. Conceptual model of a Uranium Roll Front Deposit

9.1 Radon Uranium and Sulphate in Water data

Radon is a naturally occurring, colorless, odorless, radioactive gas produced by the radioactive decay of the element radium, as part of the Uranium decay series, Uranium mineralization decays to Radium 226 that in turn emits radon 222, a gas that is dissolved, and transported in ground water.
Radon 222 decays very quickly thus its presence and distribution in ground water is a function of the amount of Radium 226 present, rate of ground water movement and porosity of the aquifer.
A common exploration technique is sampling untreated well waters, and measuring the amount of dissolved radon gas in a fixed volume of water.
Radon gas has a very short half life (3.8 days) thus high radon content of domestic well waters, may indicate that a sandstone uranium ore body may be in close proximity**.**



Modified from Clark and Briar, 1993

Figure 9 Radon Generation

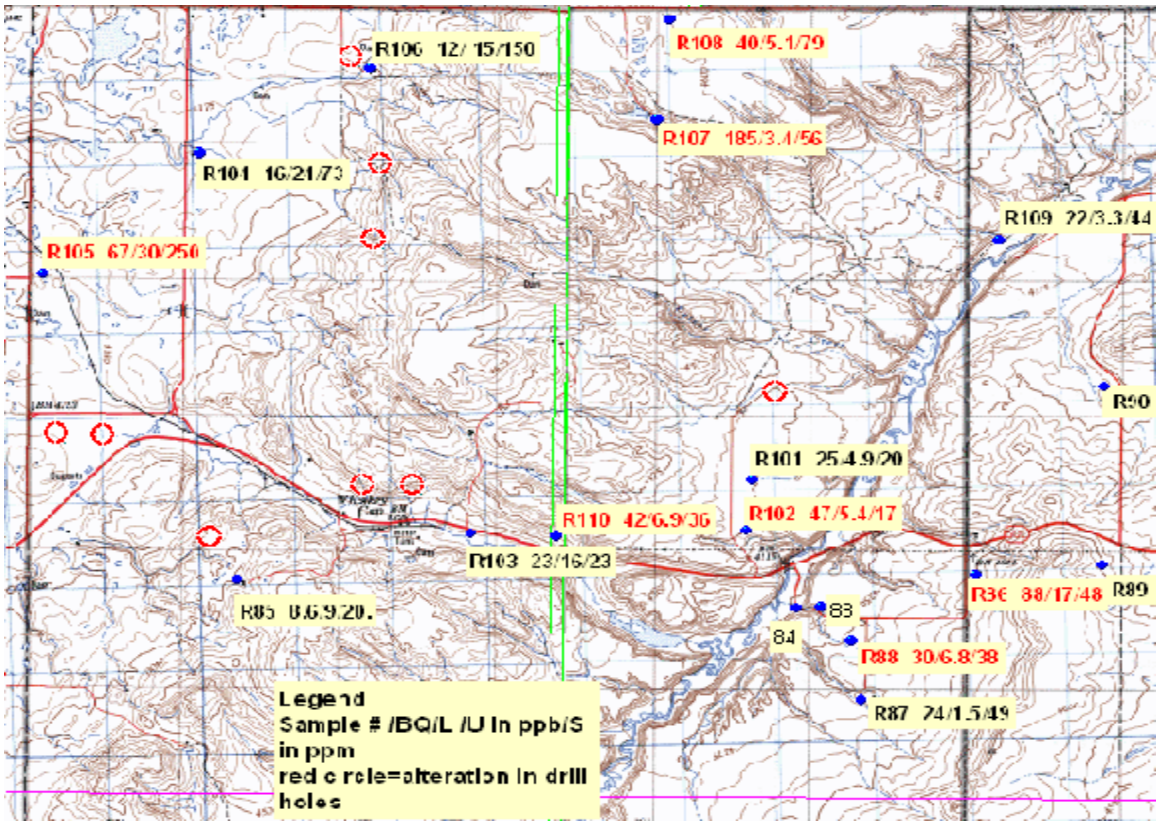
9.1.1 Radon Data

A total of 26 water samples were collected and sent to the SRC Saskatchewan research Council for analysis, all samples were analyzed for Radon, Uranium and Sulphate.
Radon values ranged from less than 1 bequeral/liter to185 bequerals/liter
The mean radon value was 32 Bq/l or 880 picocuries/liter.

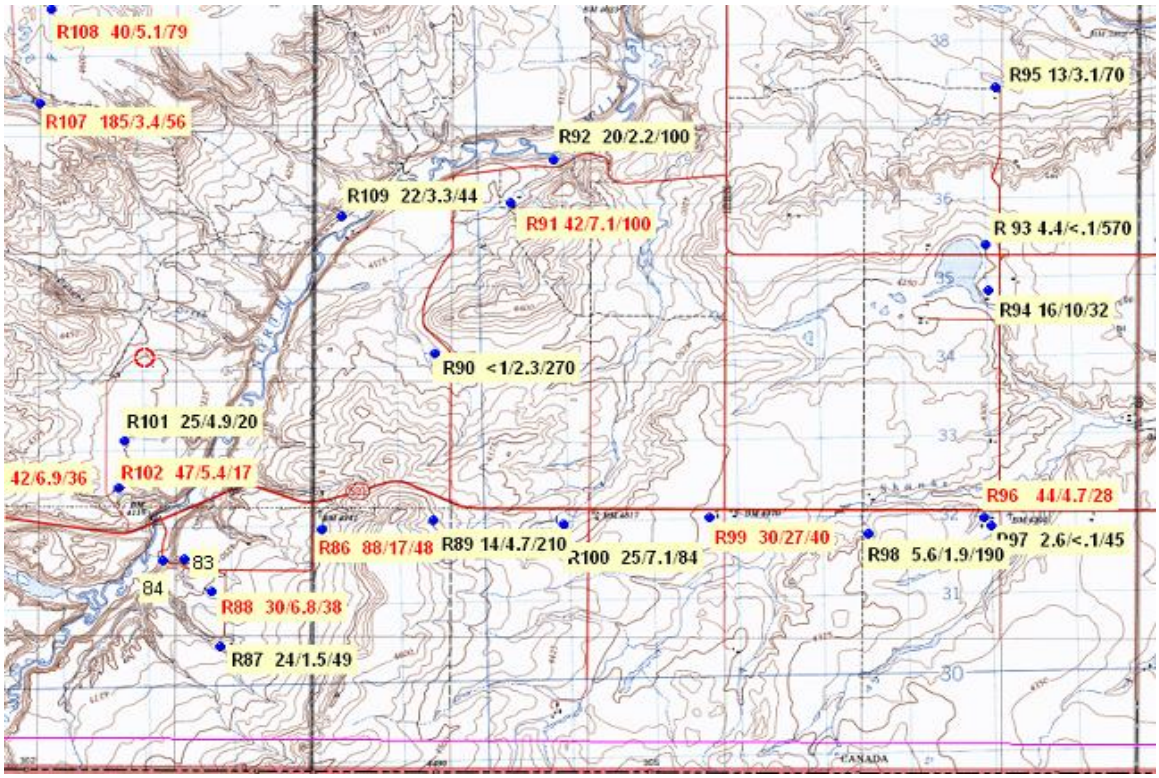
Summary inspection of the radon data shows that eight of 26 samples returned values greater than 1000 picocuries/ liter or about 37 bequerals/liter , Two of those samples exceeded 2000 picocuries /liter (88 Bq/Liter) and One sample exceeded 5000 picocuries / liter (185 Bq/liter.)
If the very low and high radon values are removed from the data set the means become 27 Bq/l and 687 Picocuries/l.

Sample #	SRC #	BQ/L	Picocuries/liter	Uranium ppb	Sulphate ppm
85	11735	8.6	232.46	9	20
86	36	88	2378.64	17	48
87	37	24	648.72	1.5	49
88	38	30	810.90	6.8	38
89	39	14	378.42	4.7	210
90	40	1	27.03	2.3	270
91	41	42	1135.26	7.1	100
92	42	20	540.60	2.2	100
93	43	4.4	118.93	<.1	570
94	44	16	432.48	10	32
95	45	13	351.39	3.1	70
96	46	44	1189.32	4.7	28
97	47	2.6	70.28	<.1	45
98	48	5.6	151.37	1.9	190
99	49	30	810.90	27	40
100	50	25	675.75	7.1	84
101	51	25	675.75	4.9	20
102	11790	47	1270.41	5.4	17
103	91	23	621.69	16	23
104	92	16	432.48	24	73
105	93	67	1811.01	30	250
106	94	12	324.36	15	150
107	95	185	5000.55	3.4	56
108	96	40	1081.20	5.1	79
109	97	22	594.66	3.3	44
110	98	42	1135.26	6.9	36
	Averages	32.58	880.76	11.53846154	

Table 1 Whiskey Gap Well sample data



Map 1 Sample Locations Whiskey Gap permit 1(West Permit)



Map 2 Sample Locations Whiskey Gap permit 2 (East permit)

9.1.2 Uranium in Water

Water collected on the property averaged 11 ppb Uranium and the data set contained values from 2.2 to 30 ppb, these very high concentrations suggest that the processes of Uranium transportation and deposition by reduction are active in the Willow Creek formation.
This must also be regarded as an extremely positive indication of the potential, for the occurrence of Uranium mineralization, as a sandstone hosted deposit, within the Willow Creek formation.

Uranium values in waters exceeding 4ppb are considered to be of exploration interest, in American sandstone hosted uranium deposits.

9.1.3 Sulphate in Water

Sulphate concentration represents the relative conditions of oxidation and reduction, present in the aquifer. Uranium ions are transported in water as U+6 under oxidizing conditions and precipitated as U+4 under reducing conditions.
The boundary between oxidation and reduction contains the best grade of Uranium mineralization.
On the property data sulphate ranges from 17 to 570 ppm, indicating that some ground waters in the permits are much more reducing than others.

10.0 Drill Targets

The project lands are underlain by the Willow creek formation the Kneehills Tuff zone and the St Mary River formation.
The non marine Willow Creek Formation stratigraphically overlies the Knee hills tuff zone and is comprised of about 1200 ft of in part volcanically derived shale and sandstones of non marine origin.

The Willow Creek Formation is poorly exposed however several outcrops on the property near Whiskey Gap and litho logs from some farm water wells in the area exhibit strong hemitization, this was interpreted as a the strongly oxidized trailing zone of alteration that generally accompanies Sandstone Uranium depositional processes.

On the Whiskey Gap property, strongly oxidized sandstones, variable Uranium in water values and extremely anomalous radon in water, must be seen as very positive indications of the presence of Uranium mineralization in the area.

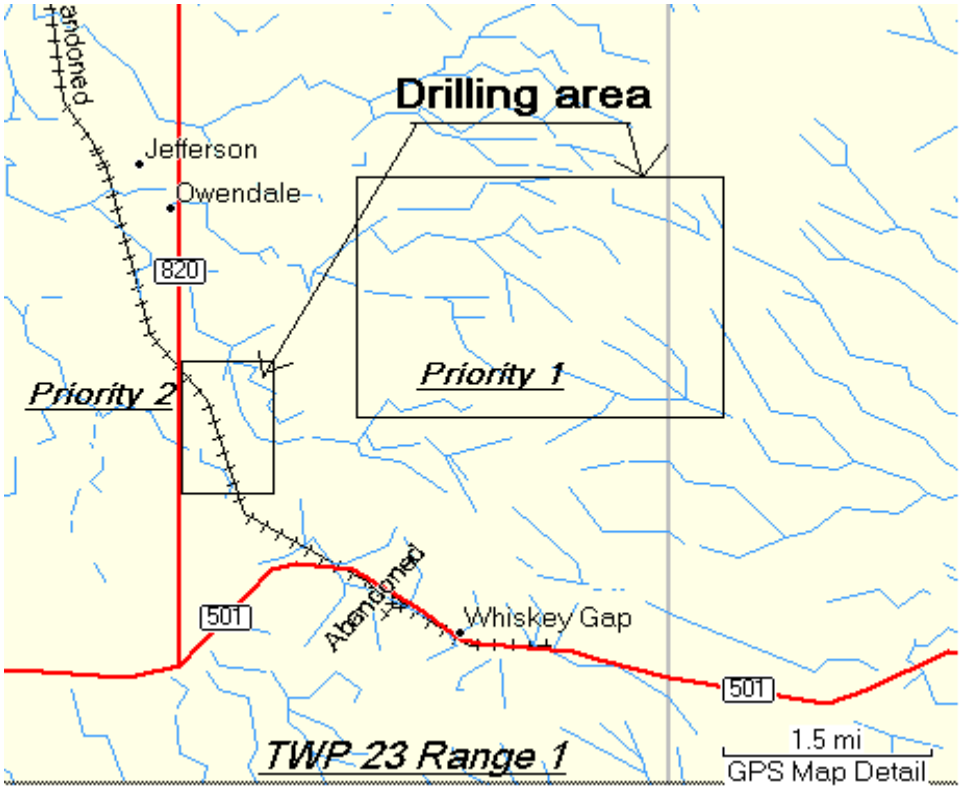
10.1 Priority One

Location 107, the Thomson Ranch (site of the Phase 1and 2 drilling) and location 86, the Remington Ranch, must be considered highly prospective. These locations contain very high radon values (5000 Picocuries/liter and 2378 Picocuries/liter), low sulphate values and medium to very high Uranium concentrations (3.4 and 17ppb U respectively), these locations may contain an oxidizing Uranium accumulation in the Up flow direction of the aquifer.

10.2 Priority Two

Location 105, the Gunninger farm, contains High suphate (250 ppm), the highest Uranium in water value of this survey, (30 ppb) and high radon values (1811 to 3000 Picocuries/liter).
This area must be considered extremely prospective. This target received only limited testing during the phase 2 drilling program due to early spring break-up.

The highest sulphate value (location 93) was recorded near a very small abandoned Coal mine, waters contained the very lowest value of uranium indicating that the boundary of oxidation and reduction in the aquifer was distal, and “Up flow” from that location. The presence of coal in the sequence acts as a strong reducing agent.



Map 3 Drilling areas

11.0 Phase One Diamond Drilling

Hard Core Diamond Drilling of Salmon Arm B.C. was contracted Nov 7 2005, to drill a minimum of 1300 meters of NQ drilling in a maximum of 15 diamond drill holes. The drill was a conventional Boyles Brothers 25A diamond drill mounted on a wheeled trailer frame that could be easily moved between sites using locally available farm tractors. The actual total of NQ drilling conducted under this contract was of 1342.6 meters in 12 holes.

Figure 10 Boyles 25A diamond drill

11.1 Operations and Logistics

Drilling was conducted on a 12 hour shift basis; the crew was accommodated on site. The Ranch owner operates a seasonal guest ranch and were able to provide meals, accommodation and off shift recreation in excellent facilities at a reasonable cost to the project.
Drilling operations were managed by Mr. L. Vanhill, who provided day to day project management and direction to the drill crew as well as core logging, sampling and environmental restoration.
Water for drilling was available on site from farm dugouts. All drill holes were sealed using bentonite chips as stipulated by Government regulation.
Prior to drilling the area was swept for buried cable pipelines etc by commercial line locators from Lethbridge.
Survey control on all drill collar locations was provided by Martin Geomatics on completion of the drill program.

On reaching total depth, drilling operations were suspended; the hole was radiometrically logged by Electro log services of Calgary. The Gamma probe was

calibrated then lowered inside the drill rods, Dual trace Gamma logs were recorded while pulling out of the hole. The drill string was pulled following completion of gamma logging.

Hole #	Location	Depth (ft)	Depth (m)	Cored (m)	Casing (ft)	Casing (m)
NWG-0501	100 S	450	137.2	130.8	21.0	6.4
NWG-0502	500 S	490	149.4	134.2	49.9	15.2
NWG-0503	500 S & 500 W	485	147.9	140.3	24.9	7.6
NWG-0504	600 S	345	105.2	89.4	51.8	15.8
NWG-0505	400 S	326	99.4	86.6	42.0	12.8
NWG-0506	500 S & 100 E	326	99.4	82.6	55.1	16.8
NWG-0507	500 S & 50 w	326	99.4	84.2	50.0	15.2
NWG-0508	550 S	328	100.0	84.8	50.0	15.2
NWG-0509	100 N	346	105.5	94.2	37.0	11.3
NWG-0510	0 N & 100 W	327	99.6	84.4	50.0	15.2
NWG-0511	500 N	327	99.7	84.5	50.0	15.2
NWG-0512	0 N & 500 E	328	100.0			
Total Depth		**4404**	**1342.6**	**1095.8**	**481.7**	**146.8**

(See table 5 for GPS locations)

Drill cores were transported from the drill site to a secure trailer parked at the guest ranch lodge, described and split using a small Diamond saw.

11.2 Reverse Circulation Drilling

In return for diamond drill access to the Thomson and Algate farms, three water wells were drilled and radiometrically logged. These water wells were drilled at locations chosen by the land owners.

These three water wells were cased and completed by Dolmans Water Well Services Ltd, utilizing a reverse circulation drill, chip samples were collected at regular intervals and the wells were gamma logged by Electrolog Services of Calgary.

Hole #	Hole Location	Depth (ft)	Depth (m)
NAG-WW-1	500 S & 700 E	340	103.7
NAG-WW-2		160	48.8
NAG-WW-3	Algate yard	250	76.2
Total Depth		**750.0**	**228.7**

(See Table 5 for GPS locations)

Figure 11 Guest facilities on the Thomson Ranch

Samples for assay were selected of the basis the down hole gamma response recorded in the drill logs. The sample interval for the diamond drill program was one foot (30.4 cm). The selected interval was cut with a diamond saw and placed in numbered plastic sample bags for shipment to the SRC, the other half retained in the core box for reference.
Sample numbers for Hole 2 begin at 265 feet (81 meters) and were taken at 1 foot (30.4 cm) intervals, and were numbered NWG 05-02-1 through NWG 05-02-29.
In order to simplify sampling the number sequence was changed for all other Diamond Drill Holes. For the remainder of the program samples were collected on a one foot (30.4cm) interval with numbers that directly relate to the top of the one foot sample interval(example NWG 0505-262 was collected from the interval 262 to 263 feet in Drill Hole NGW05-05.
Split samples were checked for radiation and shipped in secure containers to the Saskatchewan Research Council (SRC) for chemical analysis.

11.3 Targets

A Radon value of 5000 picocuries per liter occurs in well waters on the Thomson ranch. The direction of regional ground water flow was unknown, however flow was suspected to be in a north easterly direction. A 500 meter grid with baseline at 045 degrees was surveyed and picketed on the Thomson ranch. The location of the anomalous water well is at the baseline and 0 north.
The locations of reconnaissance diamond drill holes 1 through 12 were determined in the field using a synthesis of data from the previous drill holes.

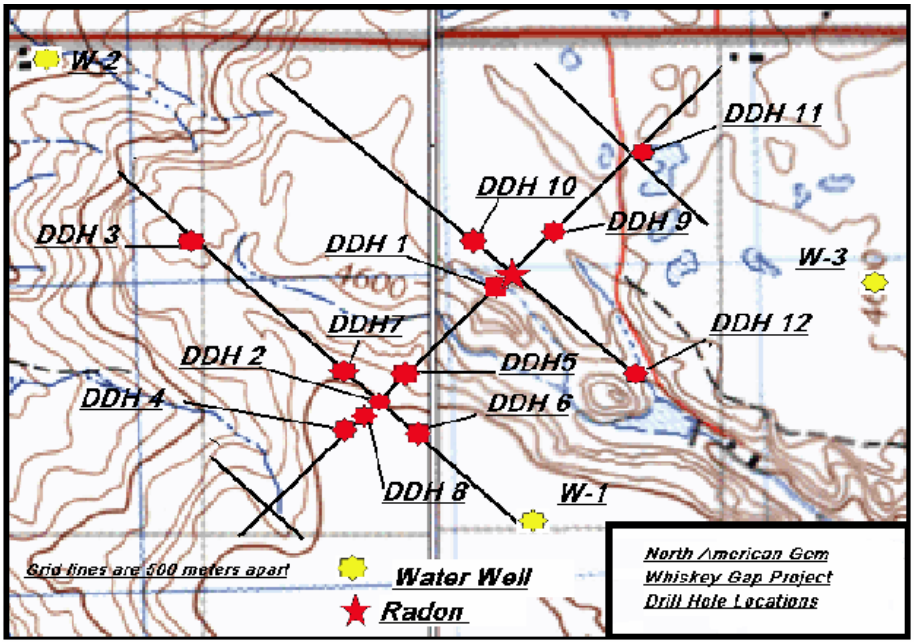


Figure 12. Location of Diamond drill holes on the Thompson Ranch

Twelve NQ core holes were drilled during the Phase One Program, anomalous radioactivity occurs in seven of the twelve holes the best radioactivity occurs along a sandstone carbonaceous mudstone contact. The grey to black mudstone contains gastropods, and is clearly reducing.

The geological section contains thick strongly oxidized hematitic intersections of mudstone and sandstones

The strongest radioactivity (to 640 API units) and the best Uranium mineralization was encountered in DDH-05 -02. Here a one foot sample returned 132 ppm Uranium, the strongly radioactive zone was also enriched in Arsenic to 127 ppm over 4 feet, Copper to 31 ppm over a width of 8 feet, Antimony to10 ppm, Selenium to 3.4ppm , Barium was over a 3 foot width to a maximum of 3050 ppm, and Molybdenum to 109 ppm over 1 foot .

Description	As ppm	Cu ppm	Sb ppm	Se ppm	Ba ppm	Mo ppm	U, ppm
NWG-0502-9	1.2	6.3	2.9	0.2	303	1	6
NWG-0502-10	1.3	5	6.5	<0.2	383	1	7
NWG-0502-11	2.3	5.6	0.8	0.8	1700	1	7
NWG-0502-12	4.2	8.9	3.5	2.8	3050	2	13
NWG-0502-13	24.7	31.1	<0.2	3.4	1210	6	136
NWG-0502-14	127	21.8	10	1.3	853	19	38
NWG-0502-15	56.8	14.4	5.4	<0.2	525	109	21
NWG-0502-16	17.7	17.5	<0.2	1.4	619	2	13
NWG-0502-17	6.8	26	<0.2	1.1	591	1	8
NWG-0502-18	2.7	28.1	<0.2	0.6	521	1	15
NWG-0502-19	2.5	27.6	1.1	0.5	436	1	14
NWG-0502-20	2.7	22.2	<0.2	0.4	418	1	18
NWG-0502-21	2.8	13.1	0.3	0.2	485	1	14
NWG-0502-22	3	5.3	0.4	0.2	577	1	14

Table 4 Selected Assay values from DDH 05-02 (one foot sample intervals)

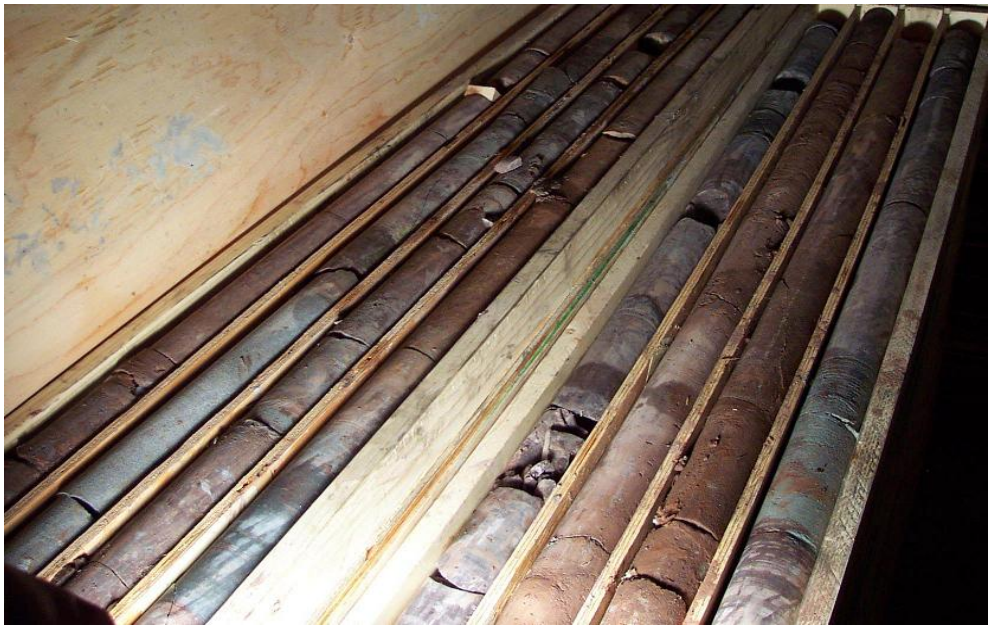


Figure 12 Typical highly oxidized Core from DDH 05-04

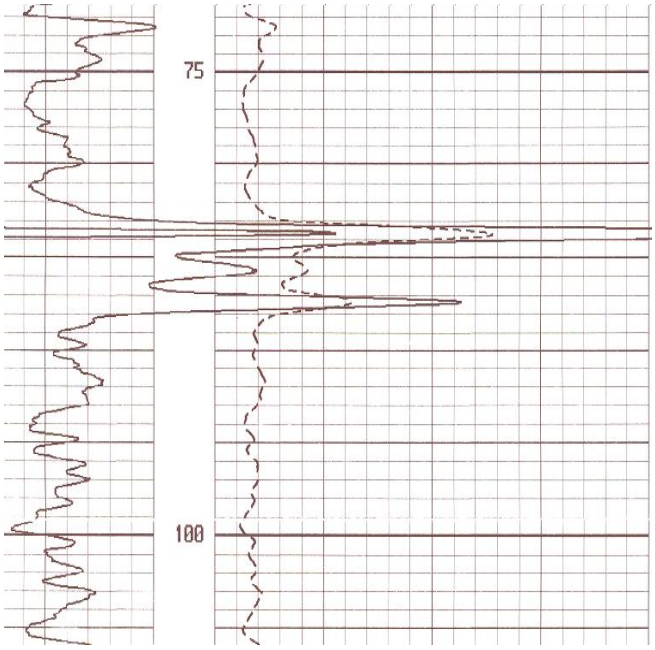


Figure 13 Radioactive zone from DDH 05-02 Maximum recorded counts are 640 API (Right log is 50 API per division) (Depth is in meters)

North American Gem Ltd
Drill Hole Locations 2005
Martin Geomatics Ltd

HOLE	Northing	Easting	Elevation
NWG 05-01	5438155.51	354070.26	1392.72
NWG 05-02	5437876.35	353793.63	1404.15
NWG 05-03	5438200.90	353455.03	1387.63
NWG 05-04	5437804.44	353718.45	1408.37
NWG 05-05	5437947.77	353833.83	1402.78
NWG 05-06	5437800.25	353856.21	1408.87
NWG 05-07	5437914.39	353765.02	1403.96
NWG 05-08	5437844.63	353760.55	1406.56
NWG 05-09	5438289.16	354212.66	1401.11
NWG 05-10	5438291.85	354067.31	1405.25
NWG 05-11	5438569.04	354494.68	1402.06
NWG 05-12	5437879.15	354506.02	1379.82
well	5438204.92	354149.73	1403.93
WW1	5437393.46	354274.26	1409.13
WW2	5437964.45	355589.92	1401.10
WW3	5438965.66	352618.12	1328.22
GPS Base Pt	5438085.92	354662.52	1408.63

Table 5 Survey locations of Phase One Drill holes

12.0 Phase Two Reverse Circulation Drilling

Dolman Water Well Drilling of Pincher Creek Alberta was contracted to drill a non specified number of reverse circulation holes on the Thompson and Gunninger properties in early 2006. The drill was a Bycrus Erie 1200 mounted on a Kenworth W-900 .
Actual total of reverse circulation Drilling was 2546.6 meters feet (8355 feet) in 25 holes

Figure14 Dollmans Reverse Circulation Drill

12.1 Operations and Logistics

Drilling was conducted on a 6 to 10 hour shift basis, depending on the prevailing winter conditions. The drill crew commuted from Pincher Creek to the drill site each day. Drilling operations were managed by Mr. L Vanhill who provided day to day project management and direction to the drill crew the Geophysical logging contractor and environmental restoration.

Drill cuttings were generally returned wet due to the high water table. Cuttings were bagged and the lithology noted at 1 foot (30.4cm) or 5 foot(1.52m) intervals by the driller, Sheldon Dolman. Cuttings were dewatered on a screen and placed in labeled sample bags. Freezing conditions were problematic.

It should be noted that although a good deal of care was taken with the samples, only the chips were assayed thus any fine material was lost to the drill fluid.
Geophysical logs provide the best information on drill intersections encountered under these difficult winter drilling conditions.

Figure 15 Sample collection procedures in spring conditions

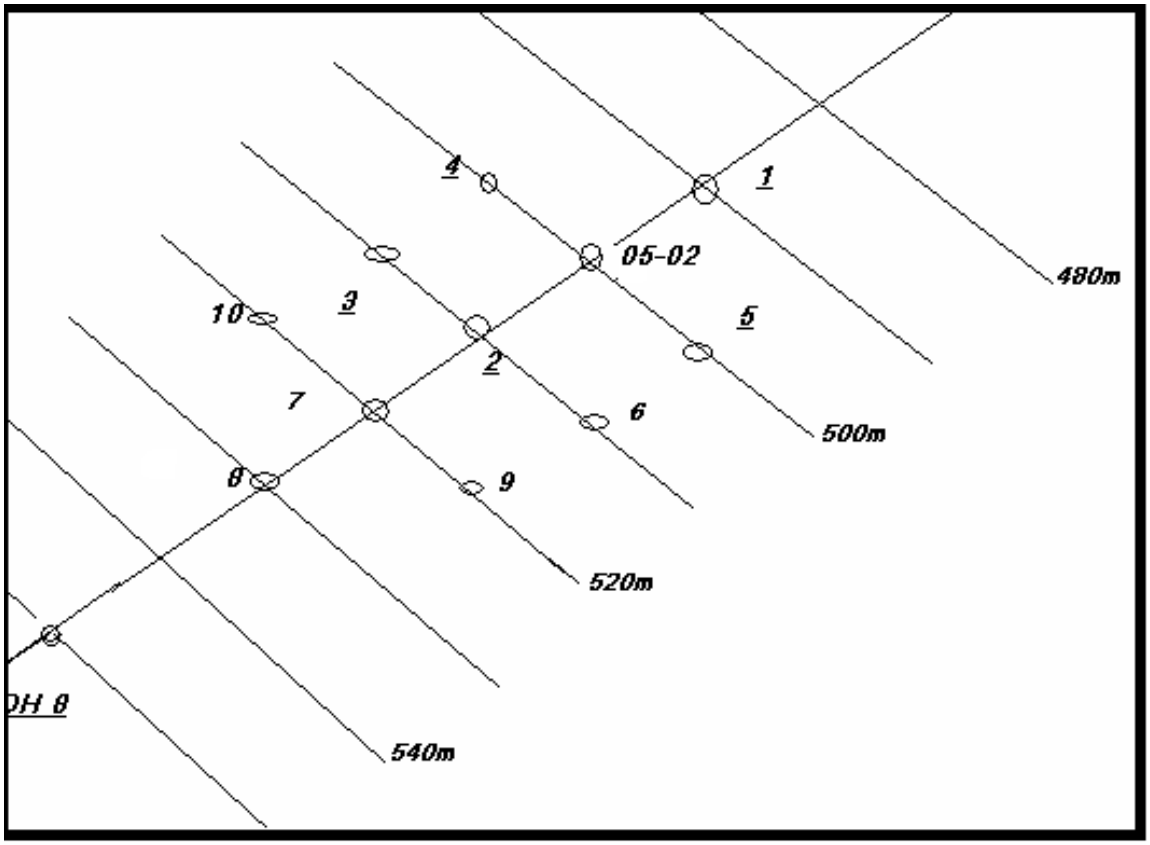


Figure 16 Reverse Circulation drill hole locations on the Thomson Grid

12.2 Water wells

During the Phase 2 drill program one water well was completed the Rodger Thomson lands immediately east of the DDH 05 grid, samples were collected and the hole was geophysically logged the only difference to other Phase 2 holes was that it was completed with plastic casing as a domestic water source.

12.2 Phase 2 Targets and Sampling procedures

Three areas were tested during the Phase 2 Program.

Target 1. Ten holes were drilled at 10 meter centers surrounding core hole DDH 05-02 to, better understand the local ground water flow direction local oxidation and reduction, and uranium and heavy metal deposition. Four additional holes were drilled to test areas north and east of the Radon discovery well on the Thomson Ranch.

Target 2. Eight Holes were drilled on the Gunninger Farm ( ) to test a priority 2 Radon anomaly in water of 1800 picocuries per liter.
Spring conditions and flooding limited access to most of the prospective target 2 lands. One hole (DH-11) was lost due to thick overburden.

Target 3. Three holes were drilled approximately ½ mile (900 meters North east of target 2) on the Floyd Stewart farm ( ) to test the area east of a radon value of 3000 picocuries per liter

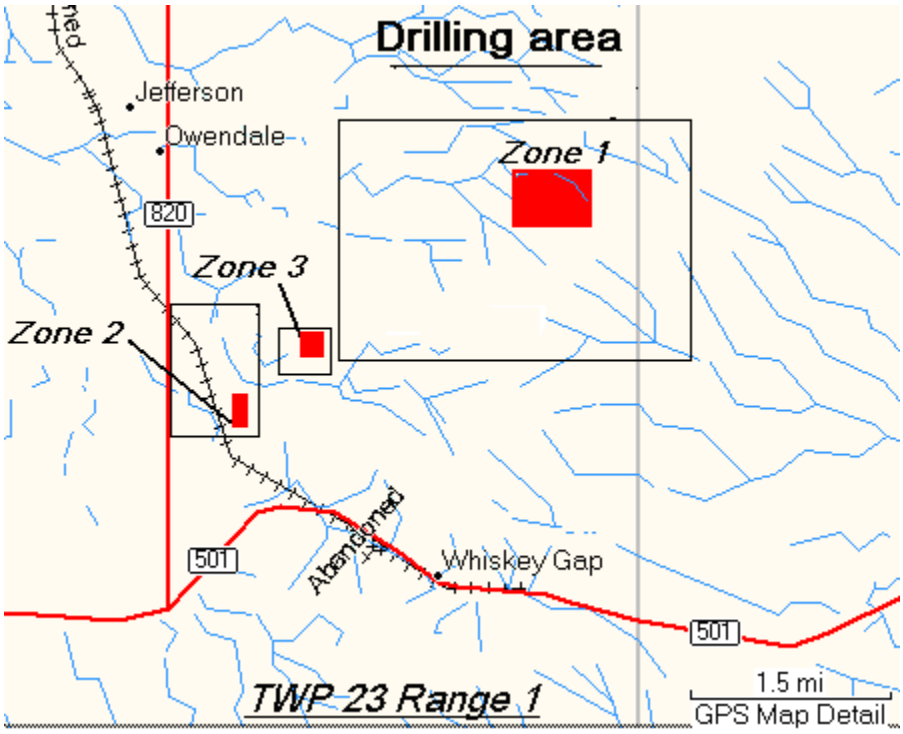


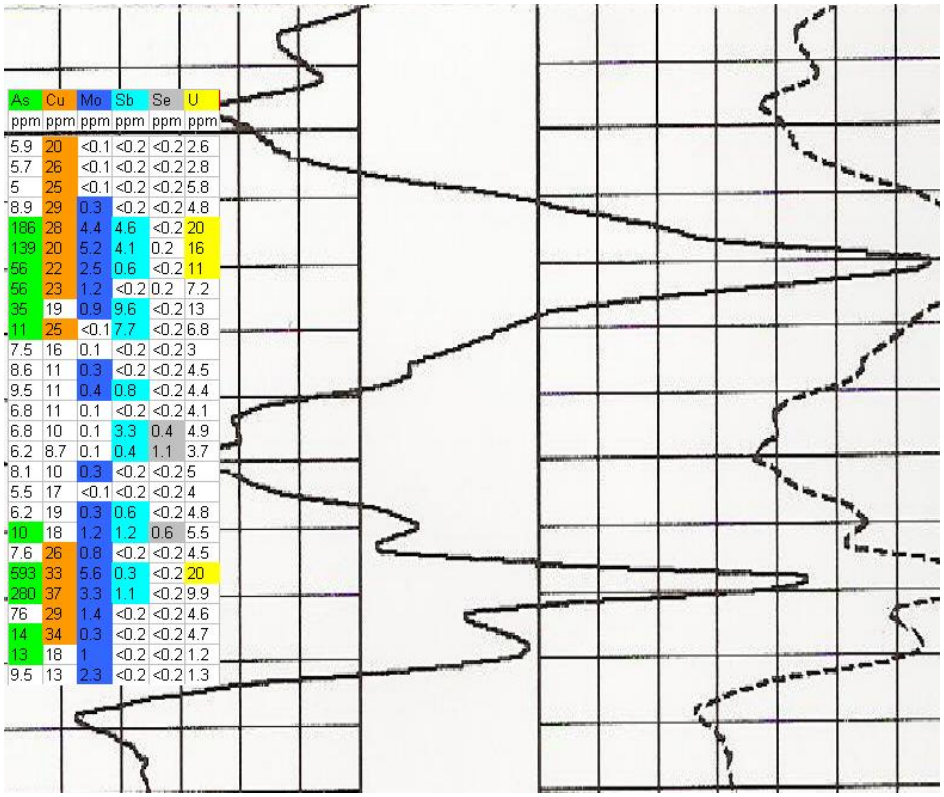
Figure 17 Phase 2 Drill Target locations

Samples for the Phase two program were collected using a screen over the discharge water, most holes were “Wet” due to ground water egress. The sample interval for the Phase two drill program ranged from one foot (30.4 cm). at depths where radioactivity was anticipated from proximal holes, to a maximum of 5 feet (1.52meters) intervals where radioactivity was unknown.
Samples for assay were selected of the basis the down hole gamma response recorded in the drill logs. The intervals were numbered as collected, Gamma logging was done after the hole was drilled. Samples from various intervals were split and placed in numbered plastic sample bags for shipment to the SRC, the other half retained in the for reference.
In all cases the Sample numbers, on the Assay sheets, include the Hole ID and the depth (in feet) at the top of the interval (example NWG-06-10-282), in this case the next sample has the number NWG-06-283 , thus, in this case, the samples were collected at 1 ft(30.4 cm intervals) for that portion of the hole.
Split Phase 2 samples were checked for radiation and shipped in secure containers to the Saskatchewan Research Council (SRC) for chemical analysis.

Phase Two Drill Hole Locations

Zone 1 Thomson Grid (Target 1)

Hole #	Depth (ft)	Depth (m)	Easting	Northing	Elevation (m)
NWG-0601	340	103.7	353800	5437883	1404.0
NWG-0602	340	103.7	353786	5437869	1404.5
NWG-0603	340	103.7	353778	5437876	1404.5
NWG-0604	340	103.7	353786	5437883	1404.0
NWG-0605	340	103.7	353800	5437869	1404.0
NWG-0606	340	103.7	353793	5437861	1404.5
NWG-0607	340	103.7	353778	5437861	1405.0
NWG-0608	340	103.7	353771	5437854	1405.5
NWG-0609	340	103.7	353786	5437854	1405.0
NWG-0610	340	103.7	353771	5437869	1405.0
Zone 2 Gunninger Farm (Target 2)					
NWG-0611	490	149.4	348959	5435068	1268.0
NWG-0612	290	88.4	348959	5435066	1268.0
NWG-0613	405	123.5	348937	5434887	1267.0
NWG-0614	345	105.2	348922	5434699	1266.0
NWG-0615	345	105.2	348990	5434696	1268.0
NWG-0616	340	103.7	348896	5434695	1265.0
Zone 1 Thomson Grid (Target 1)					
NWG-0617	360	109.8	354475	5438133	1401.0
NWG-0618	340	103.7	354525	5438306	1407.0
NWG-0619	320	97.6	354805	5437775	1407.0
NWG-0620	260	79.3	348914	5434697	1266.0
NWG-0621	340	103.7	348928	5434800	1271.0
NWG-0622	340	103.7	354775	5437780	1402.0
Zone 3 Stewart Farm (Target 3)					
NWG-0623	480	146.3	349881	5435732	1287.0
NWG-0624	340	103.7	350136	5435752	1295.0
NWG-0625	340	103.7	350118	5435554	1298.0



As	Cu	Mo	Sb	Se	U
ppm	ppm	ppm	ppm	ppm	ppm
5.9	20	<0.1	<0.2	<0.2	2.6
5.7	26	<0.1	<0.2	<0.2	2.8
5	25	<0.1	<0.2	<0.2	5.8
8.9	29	0.3	<0.2	<0.2	4.8
186	28	4.4	4.6	<0.2	20
139	20	5.2	4.1	0.2	16
56	22	2.5	0.6	<0.2	11
56	23	1.2	<0.2	0.2	7.2
35	19	0.9	9.6	<0.2	13
11	25	<0.1	7.7	<0.2	6.8
7.5	16	0.1	<0.2	<0.2	3
8.6	11	0.3	<0.2	<0.2	4.5
9.5	11	0.4	0.8	<0.2	4.4
6.8	11	0.1	<0.2	<0.2	4.1
6.8	10	0.1	3.3	0.4	4.9
6.2	8.7	0.1	0.4	1.1	3.7
8.1	10	0.3	<0.2	<0.2	5
5.5	17	<0.1	<0.2	<0.2	4
6.2	19	0.3	0.6	<0.2	4.8
10	18	1.2	1.2	0.6	5.5
7.6	26	0.8	<0.2	<0.2	4.5
593	33	5.6	0.3	<0.2	20
280	37	3.3	1.1	<0.2	9.9
76	29	1.4	<0.2	<0.2	4.6
14	34	0.3	<0.2	<0.2	4.7
13	18	1	<0.2	<0.2	1.2
9.5	13	2.3	<0.2	<0.2	1.3

Figure 18 Favorable Radioactivity and Geochemistry from Zone 2 in DH 06-20

13.0 Reclamation

After Geophysical logging, casing was pulled and the hole sealed with Bentonite chips as stipulated in the exploration permit. Cuttings were removed or harrowed and the area reseeded with native grass. Local farmers expressed approval of the reclamation program and in particular, the efforts of Mr.Vanhil who preformed the reclamation work.

14.0 Interpretation

14. 1 Geochemistry of Roll Front Deposits

Analysis of closely spaced samples taken (15 cm to 2 meters apart) through Mesozoic and Tertiary Sandstone Uranium ore bodies, in five major sandstone uranium regions of the USA, were studied by E. Harshman, of the USGS, and presented at an International Atomic Energy Agency Symposium on the Formation of Uranium Ore Deposits in Athens in 1974 (Harshman 1974)
Ore bodies included Karnes and Live Oak counties Texas, the Gas Hills and Shirley Basin of Wyoming, and the Black Hills of South Dakota.

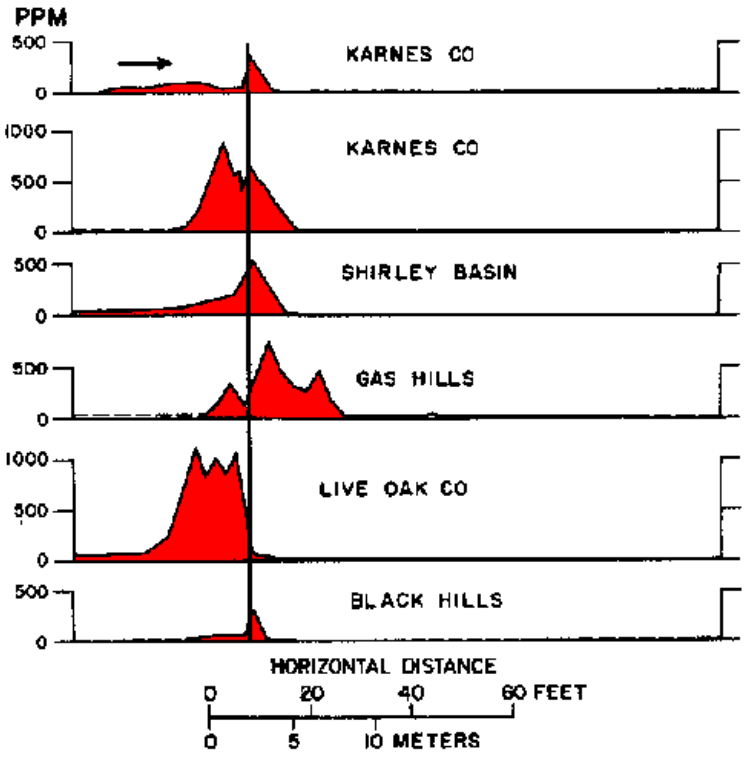
Harshman showed that elements were added or removed from the host sandstone in consistent zones near Roll Front Uranium ore bodies, and that their distribution, about the oxidation front was directly associated with their redox potentials
.
Uranium Selenium Vanadium and Molybdenum are deposited outward from the edge of the altered tongue. Elements like copper are mobile under acidic conditions and generally not present in the ore in significant amounts. Copper's presence may be controlled by adsorption on oxidized iron, or the presence of significant pyrite in the formation.

14.2 Geochemistry of Radioactive Zones at Whiskey Gap

Selenium

Weak Selenium enrichment (greater than 0.4 ppm) occurring within Whiskey Gap radioactive zones was noted in most drill holes on the Thomson Ranch, this suggests that Selenium (and Uranium) have been mobalized through the sandstones there.

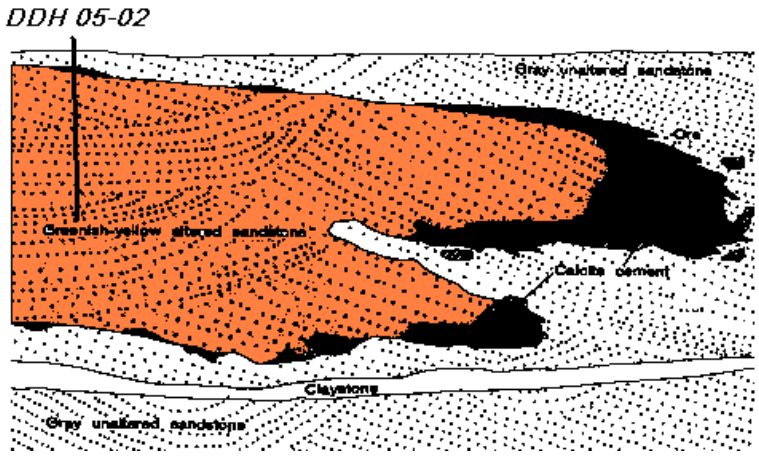
The maximum selenium value of 12 ppm occurred in DH06-06 with associated Molybdenum, Arsenic and Uranium. Low Copper values (less than 20 ppm) may indicate that the sample was not oxidized by later fluids, this supports the suggestion that Hole DDH 05-02 (about 12 meters distant and containing the highest Uranium values) intersected a remnant of a mineralized roll front system.



Whiskey Gap Selenium ranges from .4 to 4 ppm near mineralization

Maximum value was 12 ppm

Suggested position of DDH 05-02
Relative to a Roll front system

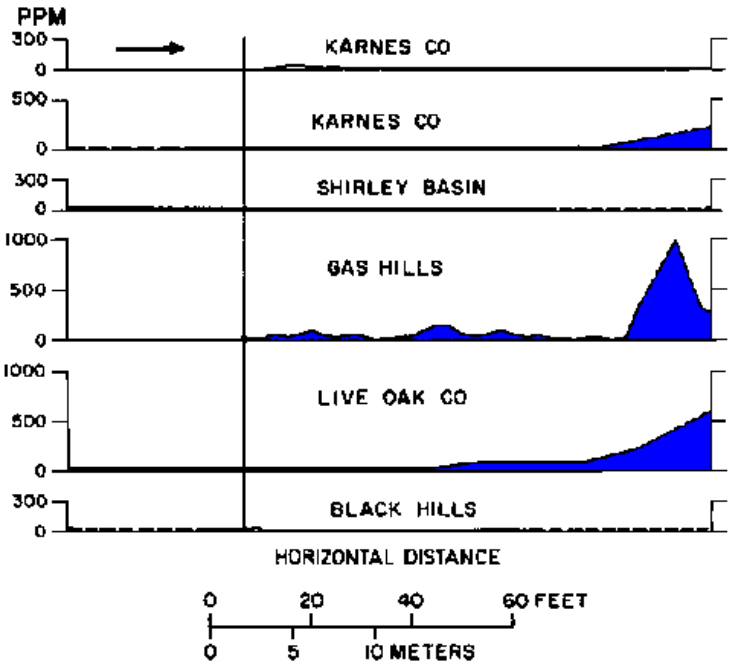


Molybdenum

Harshman (1974) suggests that the redox potential of Molybdenum dictates that it will be deposited on the slightly ahead of the leading edge of the redox front that controls the Uranium deposit, essentially no molybdenum will remain on the trailing edge of the deposit.

Weak Molybdenum values (greater than 0.3 ppm) were present in the radioactive zones within a few drill holes.

The maximum value of 79 ppm occurs in DDH 05-02, this value is very high compared to molybdenum values everywhere else, again suggesting that a unoxidized remnant of a roll front system was intersected in DDH 05-02.



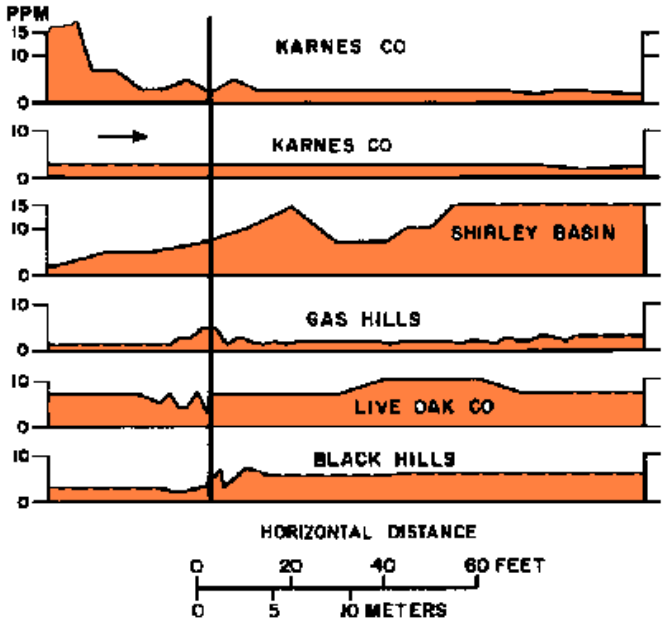
Whiskey Gap Molybdenum values range from 0.3 to 5 ppm with Uranium Mineralization Maximum value was 79 ppm

Copper

Harshman's data suggested that copper that is transported under acidic conditions and is not deposited with Uranium. From the data no clear relationship is observed. The levels of copper enrichment in the Whiskey Gap drill holes, exceed all of the deposits studied. This may be indicative of an unusually high copper background in the region or strongly acidic conditions, in the aquifer.

The presence of copper enrichment associated with trace Uranium further suggests that the Uranium that was previously deposited, could have been remobilized as conditions became strongly oxidizing, allowing copper to be introduced to the system.

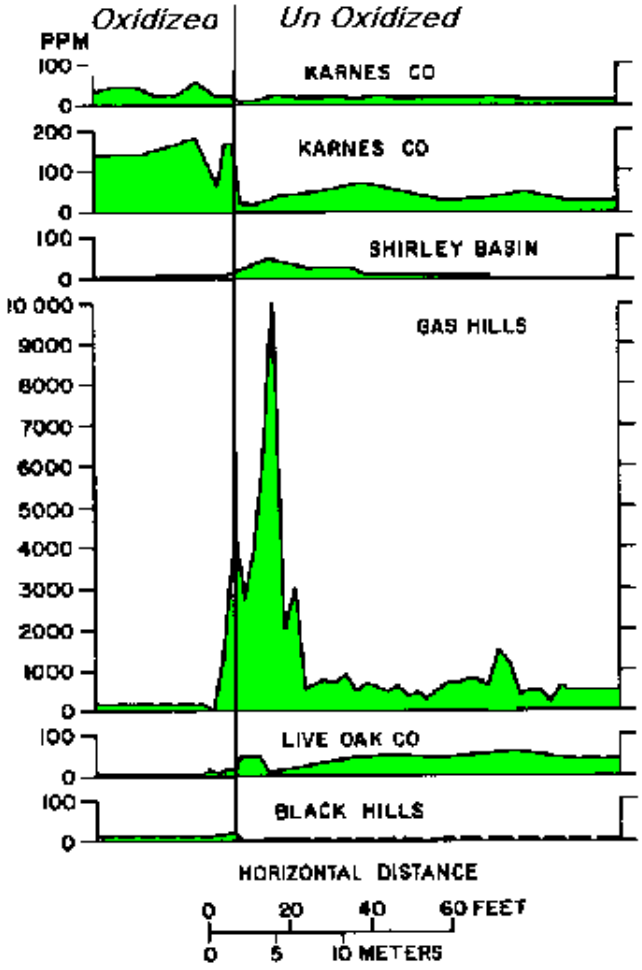
The maximum copper value or 62 ppm was returned from DH 06-10 approximately 20 meters distant from DDH 05-02 and DH 06-06.
This further supports the conclusion that a roll front system was present and was later remobilized by strongly oxidizing conditions.



Whiskey Gap Copper values range from 20 to 36 ppm with Uranium mineralization.
The Maximum value is 62 ppm

Arsenic

The Harshman study showed no consistent pattern of distribution of arsenic in Roll Front Uranium deposits. Arsenic values could be related to the presence of pyrite in one deposit and associated with oxidized Iron in two other cases. The maximum value of Arsenic (593 ppm) from the Whiskey Gap program occurred in DH 06-20 in association with strong pyrite mineralization. Weak arsenic values were observed in 4 of 5 Uranium districts studies, further drilling should be conducted in the Zone 2 area to better understand the distribution of the extremely strong arsenic values observed in Hole 06-20.



Whiskey Gap Arsenic values 10 to 30 ppm with Uranium values
Maximun Value 593 ppm

15.0 Recommendations and Conclusions

Uranium mineralization up to 7640 ppm (.901%U3O8) was previously documented within the Willow Creek formation, occurring within fossil bone fragments (Firestone Ventures news release May 3, 2005)
.
This exploration program, confirms that processes, capable of uranium transport and deposition of Sandstone Uranium deposits, are active in the Project area.

The Uranium and associated heavy metals assay data indicate that the weak Uranium mineralization intersected during drilling on the Thomson Ranch has been later oxidized and remobilized leaving behind arsenic and copper enrichment (Harshman 1974).

This suggests that the Willow Creek Formation, in the area tested by drilling, lacks a major reducing zone, required for the concentrating Uranium from solution and capable of stabilizing it from further transport.

This also suggests that this relative lack of reductants in the Willow Creek formation could produce large Sandstone Uranium deposits where sufficient reductants exist.

It is suggested that any further work on the Project be directed toward the stratigraphically lower members of the formation, as are present on the Gunninger farm.
In DH 06-20 a mineralized package of weak Uranium mineralization, heavy metals, and pyrite occur in the presence of organic trash (thin coals) over a combined Stratigraphic thickness of 28 feet. The presence of strongly reducing conditions within the sequence, here is highly encouraging.

Exploration targets should be: 1. Peripheral to known coal zones 2. Peripheral to sulphate in water anomalies. 3. Zones of massive to disseminated Pyrite, similar to or occurring in, and along strike of DH 06-20.

16.0 CERTIFICATE/QUALIFICATIONS

I, Glenn S. Hartley of 7302-118a street Edmonton, hereby state that:

1. I am a graduate of the University of Alberta, Department of Geology (B.Sc. 1977).

2. I am a registered Professional Geologist in the Province of Alberta. I am the “Qualified person” for this project

3. Since 1970, I have been employed by various mineral exploration firms, and have conducted field programs is Alberta, British Columbia, Saskatchewan, Northwest Territories and the Yukon.

Respectfully submitted

Glenn S Hartley P. Geol.

17.0 Certificate of Exploration Expenditure

The following financial information summery was extracted from data provided by the Accounts department of North American Gem Ltd. following and independent Audit by the financial firm Mackay LLP.

North American Gem Ltd
Whiskey Gap Project Expenditure
ALL costs are from independent Company audit figures done by Mackay LLP (As of December 31, 2006)

Category	Cost
Surface Access (land costs)	**29,081.00**
Geological Field work	**97,205.76**
Drilling and Geophysical Logging	**429,231.80**
Assay Costs	**13,612.57**
Field Equipment	
Total Whiskey Gap Exploration	**569,131.13**

I have been supplied with these exploration expense figures by North American Gem Ltd and believe them to be a true representation of Exploration Expenditure on the Whiskey gap Project.

Glenn S. Hartley P. Geol.
April 30 2007

18.0 REFERENCES

Alberta Environment Website, http://www.telusgeomatics.com/tgpub/ag_water/
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Beaman, M.and Tissot, P, (2004) **Radon in ground water of the South Texas Uranium district, ERSI Conference, San Francisco**

Harshman E.N.(1974) **Distribution of Elements in Some Roll-Type Uranium Deposits**. **FORMATION OF URANIUM ORE DEPOSITS, International Atomic Energy Agency, Vienna 1974.**

Stantec Consulting, (2002) **Regional Assessment of Potable Water in County of Warner #5, Nov 2, 2002, 1-02-15277.**