Project Name:	Canafric - food development WIN	**Start Date:**	2023-02-01
Project Number:	2302	**Completion Date:**	2023-10-31

Project Details:

Scientific or Technological Objectives:

Measurement	Current Performance	Objective	Has results?
Shelf life (days)	5	10	Yes
reduce salt (%)	(not set)	(not set)	No
increase protein (%)	(not set)	(not set)	No
maintain taste (%)	(not set)	(not set)	No
freeze / thaw credibility (%)	(not set)	(not set)	No
Cooking time (%)	100	80	Yes
Use of chemical preservatives (%)	30	0	Yes

This project description is based on the Tax Court of Canada judgment of CANAFRIC INC., Appellant, and HIS MAJESTY THE KING, Respondent. TCC 2023 108 Date: July 26, 2023

[1] This is an appeal by Canafric Inc. (“Canafric”) disallowing Scientific Research and Experimental Development (“SR&ED”) expenditures and the corresponding Investment Tax Credits (“ITCs”) for the 2013, 2014, 2015 and 2016 taxation years

[2] Canafric operates a food manufacturing business specialized in developing frozen pies mainly for the Canadian and the United States markets. During the Taxation Years, Canafric carried on various projects and activities aimed at developing new or advancing pre-existing products.

The 2013 SR&ED Claim included five projects, two of which, projects 1304 and 1306, were selected for a joint technical and financial review. These two projects were discussed at length during the September 14, 2015, on-site meeting.

Canafric’s customers outlined specific targets which included a higher shelf life without artificial preservatives, reducing salt and fat contents, increasing protein levels, maintaining product integrity during the freeze / thaw process. These targets were to be achieved without affecting the taste of the product. During his examination in chief, Mr. Zhou acknowledged that projects 1304 and 1306 posed a technological uncertainty.

[92] The 2014 SR&ED Claim included projects 1306, 1401 and 1402. Projects 1401 and 1402 were new products with specific requirements including salt and fat reduction, the replacement of potato flakes with “real potatoes”, using free from antibiotics meat, reducing cooking time.

[93] The 2015-2016 SR&ED Claim included seven projects, two of which, projects 1501 and 1502, were discussed during the March 8, 2018, meeting. The main challenges were to conceive a thicker filling, use a flaky pie crust that is compatible with all the fillings, reduce fat and salt contents, achieve a 21-day shelf life without any artificial preservatives and use halal products while preserving the taste profile of the products.
[

Field of Science/Technology:

Food and beverages (2.11.01)

Project Details:

Intended Results:	Develop new processes, Develop new materials, devices, or products
Work locations:	Research Facility
Key Employees:	Suvrut Pandya (Unknown - No technology background ? / CEO)
Evidence types:	Test protocols, test data, analysis of test results, conclusions; Samples, prototypes, scrap or other artefacts; Design of experiments; Records of trial runs

Scientific or Technological Advancement:

Uncertainty #1: Technological uncertainty

PER THE JUDGE:

[94] Based on the challenges described by Mr. Pandya, projects 1304, 1306, 1401, 1402, 1501 and 1502 posed a technological uncertainty which could not be resolved by routine engineering or standard procedures. Canafric attempted to create recipes in order to meet client objectives for their products. Each project consisted of a new or improved product which meant there was no information available on how to achieve these goals.

A major source of disagreement for all SR&ED Claims was David Zhou's (CRA) position that each breakthrough was transferrable from one product to the other. For example, Mr. Zhou said that salt and fat reduction techniques could be replicated in different products.

Mr. Pandya clearly demonstrated that this was not the case because the ingredients will react differently when used in different products. Canafric was unable to achieve all of its targets.

The most significant underlying key variables are:

methods to reduce fat & salt, transferability of methods, cooking techniques to reduce time, effects of no anitbiotics on meats

Technology or Knowledge Base Level:

Activity #1-1: 2013 - 2/5 projects denied (Fiscal Year 2023)

Methods of experimentation:

2013 Taxation Year
[50] The 2013 SR&ED Claim was not completely denied. Some of the projects were accepted as filed. Only projects 1304 and 1306 were selected for a joint technical and financial review. Mr. Papadopoulos admitted that projects 1304 and 1306 had "some potential for SR&ED eligible activities" but they lacked the necessary supporting documentation accounting for the work performed.

[3] For the 2013 taxation year, Canafric claimed SR&ED in respect of five projects (the "2013 SR&ED Claim"):

i.1302: Mortimer's brand Saffron Garden
ii.1303: Loblaw's PC Scotch beef pie
iii. 1304: Metro Irresistible Asian Style dinners - X
iv.1306: Costco deli chicken pie fill - X
v.1307: Costco crustless quiche

[4] Projects 1304 and 1306 were selected for a joint technical and financial review by the Minister. By Notice of Reassessment dated May 13, 2016, the Minister disallowed SR&ED expenditures in the aggregate amount of $90,682 and corresponding ITCs in the aggregate amount of $22,183 in relation to these two projects.

2013 Taxation Year
[18] For the 2013 taxation year, the CRA reviewed projects 1304 and 1306.

(1) Project 1306
[19] Project 1306 was a pie filling developed for Costco, which was meant to follow a specific cooking process. Canafric would boil the filling to 165 degrees Fahrenheit to eliminate all bacteria. Canafric would then freeze the filling and pack it in 10 pound bags which were sent to Costco. Costco would make its own pies using the filling and bake it in the oven before displaying it in its refrigerator.

[20] In addition to the usual fat and salt reduction requirements, Costco wanted a pie filling that could achieve a 10-day shelf life including transportation time without using artificial or chemical preservatives. The challenges were to maintain product integrity and taste after three bakes, one freeze and two filling phases, achieve the targeted shelf life without artificial preservatives and increase protein levels in the filling by 35%.

[21] Canafric was unable to achieve a 10-day shelf life. Mr. Pandya testified that product samples were sent to an external laboratory for testing. The results established the product became unsafe for human consumption after six days. No plant trials took place for project 1306.

(2) Project 1304
[22] Mr. Pandya testified that "Metro Irresistibles Asian Style dinner" was not a new product. The customer simply wanted improvements to an existing product.

[23] Mr. Pandya described the main challenges as reducing salt and fat contents while preserving the taste profile of the items, maintaining the freeze / thaw credibility as well as maintaining shelf life without using artificial preservatives. According to Mr. Pandya, these improvements made the product “as good as new”.

Results:

- Shelf life: 6 days (20% of goal)
- Use of chemical preservatives: 20 % (33% of goal)

[25] Mr. Pandya testified that all the challenges relating to projects 1304 and 1306 were described to David Zhou during the meeting. David Zhou told Canafric’s representatives, including Mr. Pandya, that reducing fat and salt contents was not a technical challenge since salt and fat reduction techniques are transferrable from one product to another.

Conclusion:

Significant variables addressed: methods to reduce fat & salt, transferability of methods

Documentation:

- Offline Documents: docs

Activity #1-2: 2014 - 3/3 projects denied (Fiscal Year 2023)

Methods of experimentation:

For the 2014 taxation year, Canafric claimed SR&ED expenditures and ITCs in respect of the following three projects (the “2014 SR&ED Claim”):

i.1306: Costco deli chicken pie fill - X
ii.1401: Costco and Metro Irresistible Shepard’s Pies - X
iii. 1402: Loblaw’s Free from Chicken & Beef Pot Pies - X

[6] By Notice of Reassessment dated July 28, 2017, the Minister disallowed the entirety of the claimed SR&ED expenditures and corresponding ITCs in relation to Project 1306, Project 1401 and Project 1402.

2014 Taxation Year
[29] For the 2014 taxation year, the CRA reviewed projects 1306, 1401 and 1402.
[30] Mr. Pandya explained that Project 1306 ran into the 2014 taxation year because of the potentially lucrative contract it could have led to if Canafric could overcome the challenges.

(1) Project 1401
[31] In project 1401, the main challenges were to replace potato flakes with “real potatoes”, use leaner beef (from 75% muscle and 25% fat to 85% muscle and 15% fat) as well as the usual fat and salt reduction. Project 1401 was successful.

(2) Project 1402
[32] Regarding project 1402, he described the main challenges as using “free from antibiotics” animals and reducing cooking time by 20 to 50%.

Mr. Pandya explained that the elimination of antibiotics created challenges with the “quality of the protein”. Since each animal has different immunity levels, chickens and whole cattle beef differed in quality and in texture. As for the cooking time, it led to microbiology concerns since it was not sufficient to reach the usual 165 degrees Fahrenheit, which ensures elimination of bacteria.

Results:

- Cooking time: 85 % (75% of goal)

Conclusion:

Significant variables addressed: cooking techniques to reduce time, effects of no anitbiotics on meats

Activity #1-3: 2015 - 3/7 projects denied (Fiscal Year 2023)

Methods of experimentation:

[7] For the 2015 taxation year, Canafric claimed SR&ED expenditures and ITCs in respect of the following seven projects (the “2015 SR&ED Claim”):

i.1303: Loblaw’s PC Scotch beef pie

ii.1307: Costco crustless quiche.
iii. 1401: Costco and Metro Irresistible Shepard's Pies - X
iv.1501: Mortimer's Hand Held Pies "On the Go" - X
v.1502: Mortimer's Halal Kitchen Frozen Entrée - X
vi.1503: National Foods Frozen Dinner Entrée
vii. 1504: Swiss Chalet & Cara Foods Frozen Entrée

[8] By Notice of Reassessment dated August 9, 2019, the Minister disallowed SR&ED expenditures totalling $97,895 and the corresponding ITCs totalling $15,476 in relation to projects 1401, 1501 and 1502.

The Minister conducted a joint review for the 2015 and 2016 SR&ED Claims.
(1) Project 1501

[34] Project 1501 aimed to develop twelve pocket-sized frozen pies that could be safely consumed after being heated in a microwave or an oven.

[35] The main challenges were to conceive a thicker filling, use a flaky pie crust that is compatible with all the fillings, reduce fat and salt contents and achieve a 21-day shelf life without any artificial preservatives.

[36] Mr. Pandya also outlined the challenges relating to the packaging of the product. He explained that Canafric had to use paper coated with chemicals to ensure the product could be microwaved in a minute. The lamination inside the paper allowed the microwave heat to be transferred 100 times faster than it would have been with normal paper.

[37] Mr. Pandya explained that project 1501 was not successful because the product was not firm enough to be hand-held. This was mainly due to the filling leaking moisture into the pastry. Canafric was also unable to achieve the required shelf life.

(2) Project 1502
[38] Project 1502 involved the development of a series of halal products. In cross-examination, Mr. Pandya admitted that this was not their first experience with halal products since Project 1501 also involved some halal products. Mr. Pandya explained that the halal requirement created challenges regarding the raw materials which had to be halal-based and the shortenings which could not be animal based.

Results:

CRA POSITION:

[41] The challenges were described to David Zhou during a March 8, 2018, on-site meeting that took place regarding the 2015-2016 SR&ED claims. Mr. Pandya testified that the meeting was originally meant to review two projects (1501 and 1502), but David Zhou chose to focus on project 1501.

[42] During the meeting, David Zhou took the position that only the first product in project 1501 (the butter chicken) created a technical challenge because he was of the view that Canafric could apply the knowledge it gained during the product development for that product to overcome the similar challenges it encountered for the eleven other products.

Conclusion:

Activity #1-4: 2016 - 3/6 projects denied (Fiscal Year 2023)

Methods of experimentation:

For the 2016 taxation year, Canafric claimed SR&ED expenditures and ITCs in respect of the following six projects (the "2016 SR&ED Claim"):

i.1501: Mortimer's Hand Held Pies "On the Go" - X
ii.1502: Mortimer's Halal Kitchen Frozen Entrée - X
iii. 1503: National Foods Frozen Dinner Entrée
iv.1504: Swiss Chalet & Cara Foods Frozen Entrée
v.1601: Alimentation Couche-tard Chilled Pies
vi.1602: Longo's Savoury Pies - X

[10] By Notice of Reassessment dated August 9, 2019The Minister disallowed SR&ED expenditures totalling $154,872 and the corresponding ITCs totalling $23,304 in relation to projects 1501, 1502 and 1602.

(3) Project 1602
[39] Project 1602 aimed to develop nine meat and vegetable pies for Longo's. The customer specified the pastry should not contain lard. At least 10% of the shortening had to be made of real butter. The customer also wanted the pies to come in two sizes, which meant Canafric had to elaborate a different heating process for each pie. Salt and fat content reduction was not

a requirement for this project.

[40] Mr. Pandya testified that David Zhou rejected the claim regarding project 1602 saying, “a pie is a pie what is the big deal about it”.

Results:

Conclusion:

Activity #1-5: Judges ruling and rationale (Fiscal Year 2023)

Methods of experimentation:

Results:

JUDGE'S RULING & RATIONALE: 5 criteria per NW Hydraulics case:

I) TECHNOLOGICAL UNCERTAINTY
[87] The first criteria, whether there is a technological risk or uncertainty, stems from the words of paragraph 248(1) ITA, namely the requirement for a technological advancement. A technological advancement is needed when it is unknown or uncertain whether a certain objective can be accomplished, due to a lack of scientific knowledge.

II) HYPOTHESIS
[102] Mr. Pandya described Canafric’s development process as follows:
i.The client requests a product with specific features.
ii.Canafric elaborates a recipe designed to meet the client’s requirements.
iii.The recipe is tested to ensure it meets the requirements.
iv.The product is sent to a “taste panel” to evaluate its taste.

[104] This process meets the second criterion. Canafric formulated hypothesis specifically aimed at achieving its various goals.

III) SCIENTIFIC METHOD
As for the third criterion, whether the process accorded with the scientific method, the CRA’s position was that Canafric relied on a “trial and error” approach by trying various recipes to reach its targets and without attempting to explain or analyze the reason why each recipe did not work.

I disagree with this position. When it found a recipe could not meet client requirements, Canafric’s main takeaway was not simply that it did not work. Canafric conducted analyses in order to understand which requirement was not met and modified specific parts of the recipe in order to address the issue. In doing so, Canafric was limited by its clients’ demands regarding which ingredients to use.

IV) TECHNOLOGICAL ADVANCEMENT [NOT CITED IN JUDGEMENT]

V) RECORDS & NATURE OF SUPPORTING DOICUMENTATION

[105] The fifth criterion, whether the claimant kept a detailed record of the hypotheses tested and results as the work progressed

[110] Documentary evidence is not mandatory. Testimonial evidence may be presented in support of a claim. In this case, Canafric provided both documentary and testimonial evidence in support of its various claims.

[111] On September 14, 2015, an on-site meeting took place regarding the 2013 SR&ED Claim and specifically projects 1304 and 1306. Mr. Pandya testified that all the technical information regarding these projects was explained orally to Mr. Zhou during the meeting. This was corroborated by Mr. Zhou himself.

Mr. Papadopoulos and Mrs. Hassanein, while they could not speak to the specifics of the discussion, confirmed that a “lengthy technical discussion” took place between Canafric’s representatives and Mr. Zhou.

Conclusion: