Farm Land Evaluation Report of ABC Farms Thorhild, Alberta

Prepared For XYZ Inc. Saskatchewan



February, 2015





February 25, 2015

Mr. Smith XYZ Inc.

Dear Mr. Smith

RE: FARM LAND EVALUATION REPORT OF SPECIFIC LANDS – ABC FARMS OUR FILE #11111

As requested, we have compiled specific land and market information regarding the subject properties as well as the greater subject area for the above referenced properties located in the Radway, Alberta area.

In completing the farm land evaluation package we have inspected the subject properties and gathered data from third party information sources. We have interviewed the current landowner about previous cropping practices including, crop rotation, fertility management and chemical applications for pest management.

We have also gathered data pertaining to the greater area and discussed the growing potential of the overall Redwater area. Information in terms of: crops grown, cultural practices, yields, climatic data, and soil quality have also been included.

Assessment information has not been included in this report as Serecon understands this information has already been obtained by XYZ.

If you require any further information or would like to discuss the report, please call.

Yours truly, SERECON INC.

Trevor Birchall, P.Ag. Edmonton Office

Enclosures

/da



Table of Contents

1.0 SCOPE OF THE ASSIGNMENT	1
2.0 SUBJECT AREA ANALYSIS	2
2.1 Location	2
2.2 Area Background	2
2.3 Agriculture in the Area	2
2.4 CLIMATE	2
2.5 Productivity	2
3.0 PROPERTY ANALYSIS	
3.1 LOCATION.	
3.2 AERIAL PHOTOGRAPHS	
4.0 BACKGROUND AND LAND USE HISTORY	6
4.1 Soil Quality and Physical Features	6
4.1.1 Overview	6
4.1.2 Soil Ratings	7
4.1.3 CLI Sub-Classes	9
4.1.4 Club Root	9
4.2 Surface leases, Environmental Concerns	9
5.0 SUMMARY OF THE SUBJECT FARMS	



1.0 Scope of the Assignment

Serecon has been asked to provide a Farm Land Evaluation Report for the following subject land:

Legal Description	Registered Owner ¹	Title Acres
SE 1-1-1-W4	ABC Farms	160.00
NE 1-1-1-W4	ABC Farms	161.00
NW 1-1-1-W4	ABC Farms	144.76
Total		465.76

¹ Based on information provided by XYZ. Titles for the properties have not been obtained.

The purpose of this report is to aid XYZ in making an informed investment decision, and to provide due diligence in determining the suitability of the subject property in terms of long term productivity. This includes an overview of the area, and details on the subject farm.

The following are limitations to this report:

- No soils tests have been conducted
- No plant tissue tests have been conducted, and
- No crop records have been obtained. All information on crops grown is based on a visual inspection of the production for the current year.
- During inspection the subject parcel were covered in snow which greatly limited visibility.
- The inspection took place during the winter, therefore we were unable to confirm many agronomy related issues such as weed pressure.

The subject properties were personally inspected by Trevor Birchall, P.Ag., on February 1, 2015. We have spoken with the landowner about the land use history. All information is based on this conversation as well as our own inspection, discussions with the realtor, and third party data sources.

There has been no market value information of area sales provided in this report as this information is provided in a separate "Market Sales Data Support for Radway/Thorhild, Alberta" dated December 17, 2014.



2.0 Subject Area Analysis

2013

77

60

46

44

82

2.1	Location	The subject area is considered the County of Thorhild, that portion of the municipality, around the Hamlet of Radway. Access to the subject area is via Highways #28, #63 & #827 and a network of municipal roads.								
2.2	Area Background	The subject properties are located in the County of Thorhild. Agriculture is to prevalent land use in the municipality. There is also oil and gas development forestry scattered through the area. There is large heavy industrial and upge located in Sturgeon County, adjacent to the south.						cure is the opment ar nd upgrade	most 1d ers	
		The C provid 817,4 educa Cities	County o de servio 98) and ational, r	f Thorhild h ces to the si the City of recreational	ad a 2013 ubject area Fort Saska , medical, a	population is the City tchewan (20 and religiou	of 3,417. T of Edmont 013 popula Is facilities	he nearest on (2013 pc tion of 21,7 are available	centers tha opulation c 95). Moder e within th	at of rn ese
2.3	Agriculture in the Area	The s in the subje the q and fe	ubject p south e ct area i uality of orested	roperties ar east portion s used for f land lowers land left in	re located i of Thorhil ield crop p s and a gre its natural	n the area d County. N roduction. eat deal of I state.	around the Aost of the North of th and is usec	Hamlet of land in the e immediat l for livestoo	Radway wł immediate e subject a ck producti	ich is irea ion
2.4	Climate	The climate of the area is termed continental, characterized by warm summers and cold winters. The average January temperature is -15°C. The average July temperature is 15.5°C. Average annual precipitation is approximately 450 mm to 500 mm. The length of the frost-free period is 105 to 115 days.								
		The s	ubject a	rea has app	oroximately	1,800 to 2,	.000 corn h	eat units.		
2.5	Productivity	The fo (AFSC	ollowing 2) and Al) data has b Iberta Agric	een collect ulture and	ed from Al Rural Deve	berta Finan elopment (A	cial Service: ARD).	s Corporati	ion
		Alber provi farm	ta Finan nce. The is locate	cial Services se results a d in Risk Ar	s Corporati re publishe rea #15 wh	on tracks y ed and brok ich is show	ield inform cen down b n in the fol	ation for the y "Risk Area lowing map	e entire a". The sub <u></u>	ject
		The fo #15, o	ollowing compare	chart proved to that or	ides a com f the provi	parison of nce as a wh	crop yields ole for 201	in the subje 1 –2013.	ect Risk Are	ea
				Wheat	bu/ac	Canola	bu/ac	Barley	bu/ac	
				Risk Area #15	Province	Risk Area #15	Province	Risk Area #15	Province	
			2011	58	48	39	38	71	69	
			2012	59	47	35	34	62	61	1

76



The table above indicates that typical yields in the Risk Area, that includes the subject land, were consistently similar to or greater than the provincial average yields over the past three growing seasons with the predominate crops.

The current land owners stated that their rotation consist of wheat, canola and barley. Typically they grow canola one out of every four years. Peas make up some of this difference but usually there is two years of either wheat or barley in every four year rotation.

The fertilizer and chemical application history on the subject property appears to use sound management practices and good husbandry. After studying these we don't expect there to be any unusual weed infestations or poor soil health, this is also visible in the yields provided below:

	Wheat	bu/ac	Canola	bu/ac	Barley bu/ac			
	Risk Area #15	sk Area #15		Farm	Risk Area #15	Farm		
2011	58	65	39	42	71	78		
2012	59	63	35	41	62	81		
2013	77	68	46	49	82	84		

As the chart above indicates, the farms yields have been consistently stronger than the area averages. This indicates that the land in in good condition and has been properly managed.



3.0 Property Analysis

3.1 Location

The land that is the subject of this report is located surrounding the Hamlet of Radway, approximately 1.0 km to the west, 1.0 km to the north and 1.0 km to the east.

All the properties have access along a municipal road.

	THE R	2	12 a	Silai Silai Silai	•	and a second	111	11 I	-	-	111	110	H	-		11	inene a	-	Tal.			and a
Thorts	-	The	1.1	0		141	17	I.	1	5	1	٠.	mr		-		1	1,1,10	5	ALC: NO.	1.	
	111	122	ALLEN .		74.0		143.	140		Fanal and	Farmelik			2 <u>5</u> 25	22.	R.'	241		14.4		Jam .	
副	÷	RAJAR Tax	221	-	ar.	20.	72%	į.	-t		F			Sauce .			ALC: N	÷	(There	THE.	225.	-
	HE	1	A. East H	100	are.	Ξ.		· .	127	Ξū.	le,	Table Wat	are -	222	5-	Γ.	-	100	200	Par .	tel.	
1 and 1	聖	田田	Las	-	.	844 C	1		1		and a		110	121	See. 1		-	122	1	-	-	
125	EE.		itt.		1.	1	1.		11	s [B [ti Ita	7	-	臣	H	. '		1		Billion and a state		1
L.	The last	-	int .	0.	10	(a).	37		1000	1	Ext	1 da	1	100	-	0	5	0	- 6	and the	-	iar.
			110	12	F	5-		ć.	272		in.	12122	24	111	21.	1	1	ST.	Sep.m.	Can.	in the second	m
ht .	00-1-	2	nr	L.	And a state	L	CAL.	H H	L	first.	影	Tanan and	- m	hł,	1	Real.	ttr'e	-	121	5		
11	記書	111.		1	Santa Sat	1		***	E -	A42	11	atoms*	2.00	ALL AL	in .	E.	*	ł.	11 II	181	ana .	-
1.	市市	14	11	Υ.	Į.I.	1.11	E	-	int	1.2.16	1111	215	-			in.	Salar .	1.	H.H.	Constant of the local division of the local	1	-
1.44		122	-	And Jar	E.	H.	100	227	3	2	No.	2m -	27	52. ·				35		No. 1	3	Sec. a
	Bie	Tat.		and N	1	# 7.4	1	CIT.	×;	H		1111	2	5.4	THE REAL	Torus .	1	1.	L.L.	£	+ -	12
222	1.1:	1		Ten a	Para Int	- 12		1	-	Ter-	5. A	144	居居	1		OT	1-1	LH	He L	时	134	11
I. H	1.00	Batt A		1	-	1	1	-	· ·	-	Ē	Ann	1	100	m	in l	Hł.	221		Ha ha	1.0	and and
1.12		exte	and a	1	100	Press.	No. Per	1. R.	122	12	in the	E L	4 23 6 25 1 25	а. С	1.000	5.	and the second	1	Seam.	11 01	aya .	The Real Property lies
and a	計算	hh	22.2		副	12 12	111	140.12 777.8	1	11	-	245	L	dan g	E H		11	(ages	(new	THE L	H I	12
11m	발	in.	and and	L.L.	1.E	E	I al	a la	1.1	L	227	1. 1	Sel .	E.	111	折	Anna Anna Anna Anna Anna Anna Anna Anna	-	Salar a	His I	22.	1
H-H-	-	-	Han a	I UI	117	-	10		tanta tat	122	Help.	h.L.	1.	11	AAL .	fileration 1001	1.1	0	1	a la	ar.	di la
1	2	Total State	andre lands Denser Balance Balance	11	100	O Trate	34	1-			斑	27.00	Ran .	faire .	NAL O	2.5	2.1	9	Any New	U	Andrea and Andrea	3.

Subject Properties Area Map

Subject Properties



3.2 Aerial Photographs

SE 1-1-W4

NE 1-1-1-W4 and SE 1-1-1-W4





4.0 Background and Land Use History

Land use history has been requested from the land owner but has not been received at the time the report was completed. Information on crop rotations, fertility plans and pest management has not been gathered.

The subject properties consist of primarily cultivated land

During inspection of the land the fields were covered in deep snow. This made it difficult to determine several features of the land.

Based on our inspection of the land, the following chart shows the best estimate of land use of each of the subject properties for the 2014 crop year.

	Primary Crop 2014
SE 1-1-1-W4	Canola
NE 1-1-1-W4	Cereal
NW 1-1W4	Cereal

- 4.1 Soil Quality and Physical Features
- 4.1.1 Overview

Based on a drive-by inspection of the subject properties, all the land is visually very consistent with only minor variations in topography. The following photos are considered representative of the quality of land for the subject properties.



Looking north





Looking southeast



Looking northwest

4.1.2 Soil Ratings

All the land is considered to be very good quality, lighter textured soils and above average for the area. According to the Canada Land Inventory Soil rating, soil on the subject properties is primarily a mix of Classes 1, 2 and 3. However, the following is a summary of the soil rating for specific properties.

	CLI Rating
SE 1-1-1-W4	35
NE 1-1-1-W4	80% (80% 2T, 10% 3T, 10% 6W), 20% (2X)
NW 1-1-1-W4	2X





CLI- Tawatinaw Sheet 83-I

Class 2 soils have moderate limitations that restrict the range of crops or require moderate conservation practices. Under good management these soils are moderately high to high in productivity for a fairly wide range of crops.

Class 3 soils have moderately severe limitations that restrict the range of crops or require special conservation practices. The limitations affect one or more of the following: timing and ease of tillage; planting and harvesting; choice of crops; and methods of conservation. Under good management they are fair to moderately high in productivity for a fair range of crops.

Class 4 soils have severe limitations that restrict the range of crops or require special conservation practices, or both. The limitations seriously affect one or more of the following: timing and ease of tillage; planting and harvesting; choice of crops; and methods of conservation. The soils are low to fair in productivity for a fair range of crops, but may have high productivity for a specially adapted crop.

Class 6 soils are capable only of producing perennial forage crops, and improvement practices are not feasible. These soils provide some sustained grazing for farm animals, but the limitations are so severe that improvement by use of farm machinery is impractical.

Organic soils are not placed in any capability class.



4.1.3	CLI Sub-Classes	Subclass "S" involves a combination of limitations and could include undesirable soil structure, low natural fertility, low moisture holding capacity, and/or the adverse effect of soluble salts.
		Subclass "T" refers to adverse topography where either steepness or the pattern of slopes limits agricultural use.
		Subclass "W" refers to excess water other than from flooding which limits use for agriculture. The excess water may be due to poor drainage, a high water table, seepage or runoff from surrounding areas.
		Subclass "X" refers to minor cumulative limitations which have a moderate limiting effect on the soil capability.
4.1.4	Club Root	Thorhild County is known to have club root, along with 25 other municipalities and counties in Alberta. Alberta Agriculture has a Club Root Management Plan which restricts how often Canola can be grown in order to help control the spread of this pathogen. Within the management plan it states canola should only be grown 1 in every four years, in high risk areas, which are areas with known club root, such as Thorhild County.
4.2	Surface leases, Environmental Concerns	The SW 1-1-1-W4 appears to have an active access road that runs along the north boundary, and the NW 1-1-1-W4 has a small oil and gas facility. There are also a number of abandoned oil and gas wells on the subject properties. These records have all been pulled and all the abandoned wells have been reclamation certified.
		There are a number of old yard sites on the properties. The following parcels contain old yard sites:

- SE 1-1-1-W4
- SE 1-1-1-W4
- NW 1-1-1-W4



Yard site



These old yard sites may contain some hazardous material such as old sewage systems, gas tanks and farm waists. These pose only a small risk but is still recommended they should be cleaned up, as well the yard sites are sitting on land that could be farmed, greatly increasing the efficiency of the fields. The SW 1 appears to have had an old yard site that has been partially cleaned up; there are roots visible but no other major issue.



5.0 Summary of the Subject Farms

The subject properties are located in an area that is well known for producing high yielding crops. Yields for the area are frequently reported to be similar to or above the average reported yields for the province.

We have been able to obtain much specific data about the history and past crop rotation on the land. This information helps ensure us that the land has been well maintained and is capable of producing above average crops. Also based on our visual inspection of the properties the land appears to be well managed and capable of supporting a diversity of crops.

The subject lands for the most part are wide open cultivated ground that is farmed corner to corner. These are very efficient fields and are prime for farming. There are however a few obstructions that could be removed to increase efficiency, such as the old yard site.

The County of Thorhild is known to have club root; however with proper agronomic practices the impact can be controlled. If the producer follows a proper rotation and uses club root resistant varieties then there is limited risk of wide spread infection. Most of the counties surrounding Edmonton are infected with club root and it does not appear to be a major issue.

After inspecting the subject properties and reviewing secondary data, we are not aware of any unexpected or severe limitations for crop production on the subject properties. Overall these parcels appear to be better than many parcels in the immediate subject area in terms of topography, soil characteristics and farming efficiency.

Trevor Birchall, P.Ag.

Reviewed by: Dave Weber, AACI, P.Ag.



6.0 Appraiser's Qualifications

Trevor J. Birchall, P.AG.

Education and Professional Designations

- Professional Agrologist
- Candidate Member with the Appraisal Institute of Canada
- Certified Agricultural Consultant Candidate
- Bachelor of Science, Agriculture Resource Economics, University of Alberta, 2009
- Agriculture Business Diploma, Entrepreneurship and Rural Small Business, Olds College 2004 2006

Areas of Concentration

- Agricultural Consulting
- Agricultural Real Estate Appraisals

Summary of Experience

Trevor comes from a family owned cattle operation. He has worked in farm equipment sales and as an agronomist; where he conducted crop scouting to identify weeds and diseases, recommended chemical solutions, gathered and recorded data related to chemical performance and dealt with range and pasture sales and inquiries. With Serecon he assists with consulting projects and studies that relate to farm and crop management, cost of production studies, feasibility studies and agricultural appraisals concerning mortgage, estate, expropriation, surface rights, acquisition and management and Crown lands, and Native land claims.

Professional Experience

Present	Consultant Serecon, Edmonton, Alberta
	Involved with consulting projects and studies that relate to farm and crop management, cost of production studies, feasibility studies and agricultural appraisals concerning mortgage, estate, expropriation, surface rights, acquisition and management and Crown lands, and Native land claims.
2005 – 2008	Summer Positions: Serecon Management Consulting Inc. Junior consultant
	Deer Land Equipment Sales



Parkland Agra Services

- In crop scouting, weed and disease identification
- Chemical recommendations
- Range and pasture sales and inquiries

Awards and Experiences

- 4-H Beef Club Member 8 years. Held positions of Vice-President and President. Winner of numerous public speaking competitions
- U of A, Agriculture Club, President
- U of A, FarmHouse, Vice President, Finance
- U of A, Agriculture Marketing Club, Vice President
- U of A, Faculty Students Association

Memberships, Committees and Technical Certificates

- Appraisal Institute of Canada (AIC)
- Alberta Institute of Agrologists (AIA)
- Certified Management Consultants of Alberta (CMC) (CAC)
- Alberta Expropriation Association
- U of A, Undergraduate Representative on the Hiring Committee for the Dept. of Rural Economy
- Organizing Committee, North American Consulting School, 2013
- Executive, Alberta Institute of Agrologists, Edmonton Branch
- Director at Large, FarmHouse Fraternity Alberta



David W. Weber, AACI, P.AG.

Education and Professional Designations

- Post Graduate Certificate in Real Property Valuation, University of British Columbia, Distance Education
- Post-Graduate Certificate in Agribusiness for Development, University of London, Distance Learning
- Derivative Market Specialist (DMS), Canadian Securities Institute
- Accredited Appraiser (AACI), 2008, Appraisal Institute of Canada
- Canadian Securities Course, Canadian Securities Institute
- Bachelor of Science in Agriculture (with Distinction), University of Guelph, 2000, OAC Dean's Scholarship
- Australian Agribusiness Exchange, Muresk Institute of Agriculture, 1999
- Agricultural Production Diploma (with Distinction), Olds College, 1996, Canada Scholarship in Technology

Areas of Concentration

- Agricultural Economics
- Farm Finance and Management
- Real Estate Appraisals

Summary of Experience

David provides agricultural and rural consulting services. He has completed a variety of appraisals for agricultural properties and agribusinesses, including specialized agricultural businesses, conservation easements, expropriation, and native land claims.

Professional Experience

Present	Consultant Serecon, Calgary, Alberta
2003 - 2006	Consultant AFC Agra Services, Calgary, Alberta
2001 - 2003	Elevator Assistant Pioneer Grain Co. Ltd. Conveyed marketing options to farm customers Managed distribution of crop input products Evaluated grain samples for grading factors
2000	Custom Harvester Thacker Harvesting Ltd. Lived and worked with mobile team of harvesters Harvested crops for farmers from Oklahoma to Alberta
1996 - 1999	Agronomic Assistant Agricore Co-operative (currently Agricore United) Planted, maintained, and harvested grain research trials Learned agronomic practices within a variety of soil zones





Professional Memberships

- Professional Agrologist (P.Ag.), Alberta Institute of Agrologists
- Accredited Appraiser (AACI, P.App.), Appraisal Institute of Canada
- Member, International Right of Way Association
- Member, Alberta Expropriation Association