REGULAR MEETING OF DALMENY TOWN COUNCIL MONDAY, APRIL 13, 2020, 7:00 P.M. DALMENY TOWN OFFICE – TOWN COUNCIL CHAMBERS

AGENDA:

CALL TO ORDER - 7:00 p.m.

ADOPTION OF AGENDA – additions/deletions

MINUTES OF THE PREVIOUS MEETING

a. March 23, 2020 Regular Council Meeting

BUSINESS ARISING FROM THE MINUTES:

а.

ACCOUNTS FOR APPROVAL

- a. Approval of Current Accounts
- b. Approval of Payroll (2)
- c. Fire Rescue Department
- d. Council Per Diems

FINANCIALS

a. Tax Comparisons for the Month of March

CORRESPONDENCE

a.

DELEGATION

а.

REPORTS

- a. EMO Coordinator's Report
- b. Fire Chief's Report
- c. Public Works Manager's Report
- d. Recreation Manager's Report
- e. Chief Administrative Officer's Report

NEW BUSINESS

a. Application for Approval of Plans Under The Agricultural Operations Act

BYLAWS

а.

QUESTIONS FROM THE PUBLIC

ROUND TABLE DISCUSSION/IN CAMERA

ADJOURN

Next Regular Meeting: April 27, 2020

2020 Regular Council Meeting Schedule: January 13,27; February 10;24; March 9,23; April 13,27; May 11,25; June 8,22; July 13; August 17; September 14,28; October 19.

Committee of Whole Meetings: 6:30 p.m. prior to Regular Council Meetings; and 7:00 p.m. on alternate Mondays from council meetings, when required:

Next Dalmeny Police Commission Meeting: April 20, 2020 commencing at 5:00 p.m.

2020 Dalmeny Police Service Meeting Schedule: April 20, May 25, June 15, September 21.

PRESENT: Mayor Jon Kroeker, Councillors Ed Slack, Anna-Marie Zoller, Christa-Ann Willems, Greg Bueckert and Karly Russin were all present through video conferencing due to Covid-19 Pandemic. Also present was CAO Jim Weninger.

ABSENT: None.

CALL TO ORDER

Mayor Jon Kroeker called the Regular Council Meeting to order at 7:00 p.m., a quorum being present.

ADOPTION OF AGENDA

111/20 – Zoller/Willems – That the agenda for the Regular meeting of Council of the Town of Dalmeny for March 23, 2020 be adopted as presented.

Carried.

MINUTES

112/20 – **Zoller/Bueckert** – That the Minutes of the March 9, 2020 Regular Council meeting be approved as circulated.

Carried.

SKYWEST POULTRY FARMS- LIVESTOCK APPLICATION

113/20 – **Zoller/Willems** – That Council advise Jeremy Dela Cruz, Planner II from the Rural Municipality of Corman Park that the Town still has the following concern with regards to Skywest Poultry Farms latest Intensive Agriculture Operation – Livestock application:

• Council has a concern with manure being spread only 1 mile north of Town due to prevailing wind patterns.

Carried.

Councillor Jon Redekop arrive to the meeting at 7:08 p.m.

PUBLIC MEETING

A Public Meeting was held at 7:20 p.m. pertaining to the Discretionary Use Notice for a proposed Storage Garage Development that was mailed on February 26, 2020 to all residents within a 75metre radius of Lot 8, Block 20, Plan 79S39264 and known civically as 522 – Second Avenue South. The property is presently owned by Saskatoon Summer Players Inc. who have an Offer to Purchase from Ken Perlitz. Due to the Covid-19 Pandemic, Realtor Christian Didur from "the Executives Didur & Associates" attended the Public Meeting by cell phone to answer any concerns or questions. However, there were no concerns or questions.

There were no oral or written representations regarding this Bylaw.

There were no members of the public that attended the meeting to speak to the Bylaw.

As there were no concerns or questions, Realtor Christian Didur left the Public Meeting at 7:23 p.m. by thanking Council that he was able to attend the meeting by cell phone.

ACCOUNTS PAYABLE

114/20 – **Bueckert/Russin** – That the accounts as detailed on the attached cheque listing and amounting to \$105,349.71 for the period ending March 20, 2020 and representing cheque numbers 15503 to 15529 be approved by Council.

Carried.

PAYROLL

115/20 – Slack/Bueckert – That the payroll listing in the amount of \$24,368.53 for the period ending March 9, 2020 be approved by Council.

Carried.

CORRESPONDENCE

116/20 – Slack/Willems – That the following correspondence be filed:

A. FCM Optional Contribution towards a Travel Fund

Carried.

CAO REPORT

117/20 – Bueckert/Redekop – That the Chief Administrative Officer's Report as presented by the Chief Administrative Officer Jim Weninger for March 23, 2020 be accepted by Council.

Carried.

DISCRETIONARY USE PERMIT- KEN PERLITZ

118/20 - Russin/Zoller - That

WHEREAS:

- A. Ken Perlitz (the "Applicant") has advised the Town that he has an interest in acquiring ownership of Lot 8, Block 20, Plan 79S39264 (the "Land").
- B. The Applicant has, with the permission of the present owner of the Land, applied for discretionary use approval in accordance with the application attached hereto (the "Application").

- C. The Applicant is familiar with the present state of the Land including, but not being limited to the present lack of a constructed roadway and is aware that the Land is not serviced by the water and sewer utility operated by the Town of Dalmeny (the "Town") and understands and acknowledges that the Town has no plans at present or in the foreseeable future to connect the Land to those utilities.
- D. Council has given consideration to those matters referenced in section 3.9.3 and 3.9.4 of the Bylaw 2-2016 of the Town of Dalmeny (the "Zoning Bylaw").
- E. Council has considered the matter of development standards appropriate and applicable to the proposed discretionary use, being the storage of motor vehicles owned by the owner of the property, and certain activities ancillary and in connection therewith, being minor mechanical and body repair and the restoration and refurbishment of the vehicles stored on the site by the owner of the property.

BE IT RESOLVED THAT THE APPLICATION BE APPROVED, SUBJECT TO THE FOLLOWING CONDITIONS AND DEVELOPMENT STANDARDS:

- 1. The Applicant shall acquire title and become the sole registered owner of the Land within six months of this approval.
- 2. The use approved is that of a storage garage for motor vehicles personally owned by an individual registered owner of the Land. In the event that there should be two or more owners on title, the use approved shall extend only to vehicles personally owned by the individual named first on title and to no other owner unless otherwise approved in writing by Council.
- 3. The approved use shall extend to and for the conduct of activities ancillary and in connection with the ownership and storage of the vehicles on the Land, being the delivery of vehicles to and from the storage garage, and the minor mechanical and body repair and restoration and refurbishment of motor vehicles stored on the Land in accordance with this discretionary use approval.
- 4. The approved use shall not extend to any business activities and shall be restricted to personal storage activities only conducted without remuneration or reward.
- 5. All repair and refurbishment and other activities shall be conducted within an enclosed building.
- 6. No activities shall be conducted in a manner that creates noise, dust, odor, pollution, or other nuisance which may impact negatively on surrounding businesses and residences;
- 7. No sandblasting shall occur on the Land or within any enclosed building, and no other paint removal processes shall occur other than in an enclosed building;
- 8. Activities associated with the use shall occur only after 7:00 am and before 10:00 pm.
- 9. All outside storage shall be fenced and otherwise screened from view by adjacent properties and roadways.

- 10. All existing trees will be retained and replaced as circumstances require.
- 11. All outside lighting shall be by way of low light pollution fixtures that shall otherwise comply with the development standards set out in the Zoning Bylaw and no direct light shall be pointed at adjoining residential properties;
- 12. All other development standards applicable to the Land shall be those applicable to a C2-Highway Commercial District as such requirements at the date of approval.
- 13. The owner of the Land shall be responsible for meeting all water and sewage disposal needs in accordance with municipal and provincial law.
- 14. The terms and conditions of this approval, as provided for in *The Planning and Development Act, 2007*, run with the land and bind all subsequent owners.

Carried.

2020 CONFIRMED EDUCATION MILL RATES

119/20 – Slack/Bueckert – That the 2020 Confirmed Education Property Tax Mill Rates be acknowledged by Council:

Agricultural Property 1.43 mills Residential Property 4.12 mills Commercial/Industrial 6.27 mills Resource (oil and gas, mines and pipelines) 9.68 mills

Carried.

IN-CAMERA

120/20 – Zoller/Willems – That Council move into the Committee of the Whole and that the session be "in camera" at 7:38 p.m.

Carried.

RECONVENE

121/20 – Slack/Willems - That Council reconvene and report at 7:51 p.m.

Carried.

UTILITY PENALTY AND INTEREST SWITCHES OFF

122/20 – Redekop/Russin – That the penalty and interest switches for the Utility Bills be turned off immediately for a period of four (4) months and that Council revisit this decision at their July 13, 2020 Regular meeting. Cost to the Town of Dalmeny is estimated at \$2,500.00.

Carried.

TAX PENALTY AND INTEREST SWITCHES OFF

123/20 – Bueckert/Slack – That the penalty and interest switches for Property Tax Arrears be turned off immediately for a period of four (4) months and that Council revisit this decision at their July 13, 2020 Regular meeting. Cost to the Town of Dalmeny is estimated at \$6,000.00.

Carried.

GREAT PLAINS COLLEGE AGREEMENT

124/20 – **Slack/Russin** – That the Town of Dalmeny advise Regional Manager Fritz Eckstein of Great Plains College Heavy Equipment Operator Program that the Town is in agreement to their proposal in the amount of \$13,000.00. Over and above this cost, the Town would be responsible for a man and trucking at an estimated cost of \$4,000.00.

Defeated.

ADJOURN 125/20 – Zoller/Bueckert – That the meeting be adjourned. Time 8:10 p.m.

Carried.

(seal)

Mayor

Chief Administrative Officer

Report Date 3/20/2020 11:45 AM

Dalmeny Accounts for Approval As of 3/20/2020 Batch: 2020-00016

Payment #	Date	Vendor Name Invoice #	Reference	Invoice Amount	Payment Amount
Bank Code: A	P - AP-GENER	AL OPER			
Computer Cheo	ques:				
15503	3/23/2020	ALL-NET.ca Inc. 101712	2020 WEBSITE	4,434.45	4,434.45
15504	3/23/2020	Anna Zoller 9	SUMA CONVENTION PER DIEM	818.20	818.20
15505	3/23/2020	Bluewave Energy 20652/220653	ZAMBONI PROPANE	131.17	131.17
15506	3/23/2020	Christa Willems 19	SREDA FORUM PER DIEM	236.30	236.30
15507	3/23/2020	Dalmeny Daycare 1	DONATIONS TO DATE	3,100.00	3,100.00
15508	3/23/2020	Dalmeny Sabres S 4	enior Hockey 2019/20 COMMUNITY GRANT	1,500.00	1,500.00
15509	3/23/2020	Jenson Publishing 300056002	ASSESSMENT AD	144.87	144.87
15510	3/23/2020	Jim Weninger 66	TRAVEL AND FOOD EXPENSES	105.43	105.43
15511	3/23/2020	Loraas Disposal S 124	ervices FEB GARBAGE/COMPOST PICKUP	14,714.27	14,714.27
15512	3/23/2020	Mathew Halcro 23	MILEAGE 144KM	64.80	64.80
15513	3/23/2020	Millsap Fuel Distri 889660-891535	b utors Ltd. PW-GAS/DIESEL	2,073.70	2,073.70
15514	3/23/2020	Minister of Finance 4	e ASSESSMENT AD-QUEENS PRINTER	30.00	30.00
15515	3/23/2020	MuniCode Service 005/004/003/843	s Ltd. BUILDING INSPECTIONS	1,495.61	1,495.61
15516	3/23/2020	Nor-Tec Linen Ser 181134	vices OFFICE/POLICE/ARENA MATS	97.13	97.13
15517	3/23/2020	Petty Cash 197	PETTY CASH REPLENISH	344.31	344.31
15518	3/23/2020	Pitney Bowes Glob 3201390528	al Credit Ser OFFICE POSTAGE CONTRACT	210.49	210.49
15519	3/23/2020	Pitney Works 87	OFFICE POSTAGE	1,529.11	1,529.11
15520	3/23/2020	Princess Auto 9215193/667/153	TRUCK LIGHTS/LIFT STAT/SHOP	562.38	562.38
15521	3/23/2020	RA Auto Repair LT 35883	D POLICE FORD OIL CHANGE	219.40	219.40
15522	3/23/2020	Reed Security 1474667	SECURITY CAMERAS	471.75	471.75

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Report Date 3/20/2020 11:45 AM

Dalmeny Accounts for Approval As of 3/20/2020 Batch: 2020-00016

Payment #	Date	Vendor Name Invoice #	Reference	Invoice Amount	Payment Amount
15523	3/23/2020	Robertson Stromb 621207/621208	erg LEGAL/DISCRETIONARY USE	1,612.48	1,612.48
15524	3/23/2020	Sask Research Co 6169/5928/6124	uncil WATER LAB TESTING	364.61	364.61
15525	3/23/2020	Sask Water SW066268	BULK WATER	38,340.87	38,340.87
15526	3/23/2020	Saskatoon CO-OP 1154	POLICE/FIRE/HANDIVAN GAS	888.25	888.25
15527	3/23/2020	SaskEnergy Corp. 224	SASKPOWER/ENERGY PMT	19,683.84	19,683.84
15528	3/23/2020	SaskTel CMR 353	SASKTEL PMT	1,741.14	1,741.14
15529	3/23/2020	SVP Envoyer paier 6429672	nent a 24 NEW METERS	10,435.15	10,435.15
				Total for AP:	105,349.71

Certified Correct This March 20, 2020

Mayor

Administrator

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Originator ID: 2288945575 Originator Name: Town of Dalmeny Currency: CAD Current System Date: 2020-Mar-09 UserID: CUPSSD3380

Payor/Payee's List Ready for Manual Release

Page 1 of 1	Back to Manual	Release
Payor/Payee Name	Rec Type	Amount
Anderson, Scott	с	1667.91
Attwater, Dylan	С	73.75
Berrecloth, Donald	с	162.51
Bonin, Edmund	С	1239.76
Cowley, Cody	С	951.22
Cynthia, Keet	c	388.61
Dorner, Tyler	· C	1514.66
Dunlop, Jamie	С	144.28
Dyck, Bradley	С	1586.04
Elder, Rick	С	1222.23
Furi, Bonnie	С	170.13
Halcro. Mathew	С	1310.61
Hoare. Danni	С	38.47
Honeker, Sheila	С	369.42
Janzen, Kelly	С	1318.44
Johnson, Jeffrey	С	1655.86
Johnson, Phoebe	С	143.65
Johnson, Marina	С	230.84
<u>Klein, Marlys</u>	С	823.09
Neufeld, Nathan	C	86.57
Richter, Cressyn	С	189.16
Roberts, Karen	С	147.18
Rowe, Scott	С	2260.81
Splawinski, Scott	C	1489.90
Trayhorne, Laurelea	c	557.45
Van Meter, Christine	c	2015.04
Villafuerte, Carlos	С	162.51
Weninger, Jim	С	2448.43
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Report Date 4/08/2020 10:54 AM

Dalmeny Drop OSC Accounts for Approval As of 4/08/2020 Batch: 2020-00018 to 2020-00020

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Payment #	t # Date Vendor Name Invoice # Reference		Invoice Amount	Payment Amount	
Bank Code: AF	P - AP-GENER	AL OPER			
Computer Cheq	ues:				
15530	3/31/2020	M.E.P.P. 206	MARCH MEPP PAYMENT	12,137.28	12,137.28
15531	3/31/2020	Minister of Finance 25	MARCH SCHOOL TAXES COLLECTED	23,289.68	23,289.68
15532	4/13/2020	Access Communi 6	ications ARENA CABLE	47.63	47.63
15533	4/13/2020	Accu-Sharp Inc. 231650	DDCC-ZAMBONI ICE KNIFE	43.29	43.29
15534	4/13/2020	Anderson's Trans	mission & Auto FIRE R24 TRANSMISSION	4,192.84	4,192.84
15535	4/13/2020	Bluewave Energy 799170876	ZAMBONI PROPANE	66.24	66.24
15536	4/13/2020	Canadian Nationa 91514975		296.00	296.00
15537	4/13/2020	Crestline Coach L 127212	.td. FIRE MEDICAL SUPPLIES	277.24	277.24
15538	4/13/2020	Earthworks Equip		36.76	36.76
15539	4/13/2020	Elijah Allen 1	JJ LOEWEN RENTAL REFUND	446.25	446.25
15540	4/13/2020	Expert Locksmith 96750		182.04	182.04
15541	4/13/2020	Federation of Can 31896-P3Z3S9		95.86	95.86
15542	4/13/2020	Fluent IMS	ANNUAL SUBSCRIPTION/RENTAL	1,155.00	1,155.00
15543	4/13/2020	Frontier Plumbing		387.17	387.17
15544	4/13/2020	GMR Electric Mot		1,799.31	1,799.31
15545	4/13/2020	hbi office plus ∪41289	OFFICE SUPPLIES	394.83	394.83
15546	4/13/2020	Jayna Snider TD-021820	STAY LOCAL LOGO/DESIGN	416.25	416.25
15547	4/13/2020	John Brooks Com 2344906		2,726.36	2,726.36
15548	4/13/2020	Loblaws Inc. 17811/52361	ARENA BOOTH SUPPLIES	413.21	413.21
15549	4/13/2020	M.D.C. 1005673	POLICE SUPPLIES	40.59	40.59

Report Date 4/08/2020 10:54 AM

Dalmeny Proposed - Accounts for Approval As of 4/08/2020 Batch: 2020-00018 to 2020-00020

Payment #	Date	Vendor Name Invoice #	Reference	Invoice Amount	Payment Amount
15550	4/13/2020	Maxill			24.44
		601333	FIRE MEDICAL SUPPLIES	81.11	81.11
15551	4/13/2020	MuniCode Services 50058/50068	BUILDING INSPECTIONS	942.40	942.40
15552	4/13/2020	Praxair Distributior 95513257/13258	PW-SHOP SUPPLIES	271.95	271.95
15553	4/13/2020	Princess Auto 2430042/2430219	PW DRAINAGE/SHOP SUPPLIES	56.62	56.62
15554	4/13/2020	Redhead Equipmer	nt Ltd. MACK TRUCK ELBOW FITTING	37.35	37.35
15555	4/13/2020	Reed Security	SECURITY CAMERAS	471.75	471.75
15556	4/13/2020	Sask Research Cou		411.70	471.70
19990	4/13/2020	6486/6882/6729	WATER LAB TESTING	82.68	82.68
15557	4/13/2020	Sask. Assoc. of Ch			
		2020-06	20/21 POLICE MEMBERSHIP	250.00	250.00
15558	4/13/2020	SaskTel CMR 354	SASKTEL PMT	1,164.51	1,164.51
15559	4/13/2020	SCPC 35426	2020 GMC POWERCOAT RACKS	222.00	222.00
15560	4/13/2020	Sea Hawk Specializ			
		3755	FIRE CONSUMABLES	1,109.36	1,109.36
15561	4/13/2020	Sigma Safety Corp 10885/10884	TRUCK 21/24 LOCKING SWING ARM	736.38	736.38
15562	4/13/2020	Stevenson Industri	al		
		18682	ICE PLANTSHUTDOWN	1,176.39	1,176.39
15563	4/13/2020	Swish-Kemsol 267730/268413	ARENA/JJ JANITORIAL	636.19	636.19
15564	4/13/2020	The Bolt Supply Ho	ouse Ltd.		
			FIRE VEHICLE SUPPLIES	130.94	130.94
15565	4/13/2020	The Wireless Age 218535-92	FIRE RADIO	29.53	29.53
15566	4/13/2020	Trans-Care Rescue			
		389/392/393/486	FIRE-BALLISTIC VESTS/SUPPLIES	3,355.50	3,355.50
15567	4/13/2020	Twin River Music F 20	estival 2019/20 COMMUNITY GRANT	1,329.20	1,329.20
15568	4/13/2020	Vallen Canada Inc. 29763501-00	FIRE MEDICAL/FIRE SUPPLIES	2,451.92	2,451.92
15560	111212020	Wilbur Hueser		2,401.02	2,701.02
15569	4/13/2020	43	EMO SUPPLIES	106.53	106.53
15570	4/13/2020	Zak's Home Hardwa 5895/5817/5823	are PW-SHOP SUPPLIES	321.63	321.63

Report Date 4/08/2020 10:5	i4 AM	Proposed-	Dalmeny Accounts for Approval As of 4/08/2020 Batch: 2020-00018 to 2020-00020		Page 3
Payment #	Date	Vendor Name Invoice #	Reference	Invoice Amount	Payment Amount

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Total for AP: 63,407.77

Currency: CAD Current System Date: 2020-Mar-23 UserID: CUPSSD3380

Payor/Payee's List Ready for Manual Release

Page 1 of 1	Back to Manua	l Release
Payor/Payee Name	ес Туре	Amount
Anderson, Scott	с	1839.36
Berrecloth, Colleen	С	452.36
Berrecloth, Donald	C	59.71
Bonin, Edmund	\ C	1239.76
Cowley, Cody	С	951.22
Cynthia, Keet	с	101.79
Derksen, Crystal	с	250.45
Dorner, Tyler	с	1332.48
Dunlop, Jamie	С	67.33
Dyck, Bradley	С	1769.21
Elder, Rick	с	1208.17
Furi, Bonnie	С	328.78
Halcro, Mathew	С	1310.61
Hoare, Danni	С	38.47
Honeker, Sheila	С	238.62
Janzen, Kelly	С	1318.44
Janzen, Jayce	С	41.68
Johnson, Jeffrey	С	1655.86
Johnson, Phoebe	С	35.26
Johnson, Marina	С	80.15
Klein, Mariys	С	823.09
Richter, Cressyn	С	38.47
Rowe, Scott	С	1968.19
Splawinski, Scott	C	1364.04
Trayhorne, Laurelea	C	557.45
Van Meter, Christine	С	1549.48
Weninger, Jim	, c	2448.43
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\$3,068.86

Payor/Payee's List Ready for Manual Release

Page 1 of 1	Back to Manual Release		
Payor/Payee Name	ес Туре	Amount	
Anderson, Scott	С	1681.11	
Bonin, Edmund	С	1239.76	
Cowley, Cody	С	1541.25	
Dorner, Tyler	С	1358.15	
Dyck, Bradley	С	1709.67	
Elder, Rick	С	1187.37	
<u>Furi, Bonnie</u>	С	285.52	
Haicro, Mathew	С	1310.61	
Honeker, Sheila	С	238.62	
Janzen, Kelly	С	1318.44	
Johnson, Jeffrey	С	1655.86	
Klein, Marlys	С	823.09	
Rowe, Scott	С	1968.19	
Splawinski, Scott	С	1364.04	
Trayhome, Laurelea	С	557.45	
Van Meter, Christine	С	1549.48	
Weninger, Jim	С	2448.43	
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Current System Date: 2020-Apr-02 UserID: CUPSSD3380

Payor/Payee's List Ready for Manual Release.

Payor/Payee Name	Back to Manual Release		
	кес Туре	Amour	
Anderson, Alicia	С	3147.30	
Baxter, Thomas	С	150.41	
<u>Croteau, Terry</u>	С	331.25	
Dylan, McGregor	С	8.00	
Eckes, Chad	С	113.00	
Elder, Joanne	С	418.72	
Finch, Ed	С	38.00	
Fire Association, Dalmeny	С	843.00	
Hueser, Wilbur	С	1281.62	
Hyland, Brian	С	212.45	
Hyland, Nikki	С	237.15	
King, Devin	с	312.43	
Klassen, Darlene	с	203.61	
Klassen, Connie	С	154.80	
Moody, Thomas	с	321.73	
Dlynick, Braden	С	198.50	
Paul, Keelan	С	125.61	
Peters, Colten	С	379.44	
Pollock, Brandon	С	255.63	
Rathgeber, Kyle	С	26.75	
Rodwin, Will	С	79.81	
Ross, Collin	С	53.00	
Sawyer, Derek	С	53.00	
Shand, Frank	с	133.41	
/illafuerte. Carlos	С	175.22	
Vodden, Patrick	с	436.16	
Woodland, Duwayne	с	8.00	

Originator ID: 2288945575 Originator Name: Town of Dalmeny Currency: CAD

Current System Date: 2020-Mar-30 UserID: CUPSSD3380

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Payor/Payee's List Ready for Manual Release

Page 1 of 1					Back to	o Manual	Release	
Payor/Payee Name	Account Number	Inst. ID Route	Transit	Due Date	Trans Type	Rec Type	Amount	
Anderson, Alicia							174.10	
Bueckert, Greg						-	308.04	
<u>Hueser, Wilbur</u>							174.10	
<u>Kroeker, Jonathan</u>							686.21	
<u>Redekop.</u> Jonathan	(308.04	
<u>Russin, Karly</u>							308.04	
Slack, Edward							308.04	
<u>Willems, Christa-</u> <u>Ann</u>							60.40	
Zoller, Anna-Marie							308.04	
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March Outstanding Municipal and School Property Taxes, along with Frontage Taxes

2020 TIPPS	\$60,825.46/month
2019 TIPPS	\$54,529.98/month
2018 TIPPS	\$49,612.37/month

2020	Current	 Arrears	Total
Municipal	\$ (155,914.19)	\$ 272,925.05	\$ 117,010.86
School	\$ (57,254.77)	\$ 58,785.10	\$ 1,530.33
Frontage	\$ (106.44)		\$ (106.44)
Totals	\$ (213,275.40)	\$ 331,710.15	\$ 118,434.75

2019	Current	Arrears	Total
Municipal	\$ (133,473.60)	\$ 192,965.62	\$ 59,492.02
School	\$ (49,173.52)	\$ 47,842.37	\$ (1,331.15)
Frontage	\$ (203.41)		\$ (203.41)
Totals	\$ (182,850.53)	\$ 240,807.99	\$ 57,957.46

2018	Current	 Arrears	Total
Municipal	\$ (119,085.05)	\$ 190,683.75	\$ 71,598.70
School	\$ (44,870.60)	\$ 46,296.59	\$ 1,425.99
Frontage		 	\$ -
Totals	\$ (163,955.65)	\$ 236,980.34	\$ 73,024.69

2017	Current	Arrears	Total
Municipal	\$ (108,649.17)	\$ 217,725.07	\$ 109,075.90
School	\$ (42,873.88)	\$ 63,327.61	\$ 20,453.73
Frontage			\$ -
Totals	\$ (151,523.05)	\$ 281,052.68	\$ 129,529.63

2016	Current	Arrears	Total
Municipal	\$ (99,551.77)	\$ 174,240.93	\$ 74,689.16
School	\$ (39,479.69)	\$ 51,306.89	\$ 11,827.20
Frontage			\$ -
Totals	\$ (139,031.46)	\$ 225,547.82	\$ 86,516.36



DALMENY FIRE DEPARTMENT

Alicia Anderson, EMO Coordinator

Q1 2020 Report - March 31, 2020

Good Evening,

What a busy couple of weeks!

We had a nice slow start to the year. Lots of time for updating contact information, catching up on education, and participating in training in preparation for Wildfire season. EMO Coordinator Anderson hosted an evening with some members of the Town Council committee, and important Town stakeholders. We went over their roles in an emergency procedure, what an EOC is, when to declare a state of emergency, and other important planning. We really appreciate the effort that council is putting into our emergency procedures. This support does not go unnoticed.

Covid-19 update:

Things have since escalated in Dalmeny starting March 11, 2020. With the COVID-19 virus making its way to Canada, we had a lot to put in place and initiate to protect the Town of Dalmeny employees, along with our community. This meant our EMO Coordinator got bumped up from the usual 15-20 hours a month to over 110+. This COVID-19 virus is unlike anything we've ever dealt with. Our usual involvement is usually in fires, floods, or snowstorms, and are over within a week maximum. This COVID-19 virus is expected to take months to deal with, and then there will still be residual issues in the years following. It is quite complex as we also don't know exactly what the future looks like. We can only prepare and wait.

To assist the community and the Town of Dalmeny, we have initiated a personalized Town of Dalmeny Pandemic Emergency Plan. This protocol outlines workplace practices to maintain the health of the employees, when to call in sick based on the signs and symptoms of the virus, the different phases the Town is responsible for, and business continuity. This plan can be adapted to any future worldwide pandemics and is made accessible on the Dalmeny EMO plan online.

We had a great meeting with Town Council members and stakeholders to brief everyone on the Pandemic Emergency Plan, and to make sure we are together as leaders during this crisis. It went over great, and the Mayor of Langham attended as well. We have been working together with other Towns to make sure they are covered as they have been reaching out to us to ask for guidance and pandemic planning. This has started a group of us Rural EMO Coordinators to band together and help each other out whether it be for resources, plans, or brainstorming.

We have started a Situational Awareness Update. This is a weekly briefing of all departments in the Town and will provide a heads up on weather, and events in the Town. During a time of heightened awareness such as what we are currently dealing with, this update will go out daily. There is a Department Daily Update part in the briefing that allows each manager to provide any struggles or





victories within their department. This is being sent out the day prior to allow it to filter down to every employee ASAP to allow everyone to be informed.

We have updated the EMO manual and it is available online for stakeholders to access.

We have continued with online training and education through Webinars, or free classes offered through Sask Poly Tech and JIBC. These are very helpful when it comes to plan writing, effective documentation and communication skills, and a broader understanding of the COVID-19 virus as it unfolds.

Have been reaching out to stakeholders and having meetings via video. This allows them to be informed of new regulations from provincial and federal levels and allows the EMO Coordinator to be up to date in their changed protocols depending on the governing body (ie: Funeral and Cremation Services Council of Saskatchewan).

We feel like we are keeping up with the times and have been flexible with changes made to the Emergency Pandemic Plan, and the EMO manual to accommodate for our daily changes. We feel like the community is responsive to the bylaws and recommendations put in place by the provincial and federal government, and it is prevalent in the small amount of cases so far in Dalmeny. Going forward, positive reinforcement is needed to keep us assisting in "flattening the curve" and not have drop their guards and causing a spike in cases. We will continue to work closely with the Town of Dalmeny, Town Council members, and Dalmeny Fire & Rescue to ensure our community is well informed and to keep the trust in us as leaders.

Hours for Q1 2020: January: 15 hours February: 26 hours March 1-10: 6 hours March 11-31: 107 hours

Prepared by:

Alicia Anderson, EMO Coordinator



R. L. (Rick) Elder, Fire Chief



- Medical
 - o CPR recertification (yearly)
 - o Medical Emergencies signs/symptoms, treatment and protocol review
 - o Firefighter Rehab review procedures and baseline vitals
- Rescue
 - Rope Rescue mechanical advantage haul system review hands on, Airbag lifting system hands on
 - Vehicle extrication theory and equipment review, traffic control
- Dangerous Goods
 - o Incident Command System Tabletop scenarios

Special Training

- Chief Elder online NFPA certified Active Shooter/Hostile Environment Training; planning, response and recovery from the incident
- Wildland Fire Training Weekend training hosted by DFR and attended by Dalmeny, Borden, and Martensville

 Certified Course by Province
- PCP Medical training
 - o 2 sessions held at Saskatoon SIMS for Scope of Practice Review theory/hands on
- Fire School
 - Hosted locally for new firefighter recruits. Dalmeny supplied Fire Service Instructors and attended by Borden, Langham and Dalmeny recruits
- Highway 16 Commission Fire Training
 - D/C Hueser and Chief Elder instructed two weekend training sessions hosted by Borden Fire Department (Borden, Radisson, Mayfield and Langham FD in attendance).

Maintenance

- Rescue 24 required a transmission rebuild. This apparatus is the single most utilized apparatus in the Department's fleet and received immediate attention by Anderson Transmission.
- Competition Muffler provided minor exhaust work on U21 (Chief's Truck) and the portable pump on the new Brush Truck – installed a short riser and elbow to deflect the produced heat away from the plastic water tank.

Inspections

The Department was actively involved in the Fire Safety Inspection process (new inspection and re-inspections of outstanding items from previous inspections). Generally, the inspections are well received, and owner/occupants are willing to comply with all requests. The Department views inspections as a means to drastically increase the safety of the facilities and residents of the Town of Dalmeny; ultimately reflecting on the Fire Service Underwriter's scoring of the Town of Dalmeny in a positive manner.



DALMENY FIRE DEPARTMENT

R. L. (Rick) Elder, Fire Chief



2020 Q1 Fire Chief's Report

2020 Expended Hours (January to March)

	DFR	ELDER
Adminitration	326	289
EMO	136	11
False Alarm	10	2
Fire	54	10
Hwy 16 Training	48	24
Inspection	31	31
Maintenance	99	66
Medical	81	12
Public Relations	5	0
Regular Training	543	30
Special Training	74	25
Per Diem	208	8
TOTAL	1613	507

2020 Incident Breakdown (January to March)

	Jan	Feb	March	YTD
Fire			1	1
Medical	3	2	8	13
Inspecitions	2	2	1	5
Rescue			1	1
DG	1	1		2
False Alarm	1			1
Cancelled Call	1	2		3
TOTAL	8	7	11	26

Training

Weekly training highlights.

- Fire
 - Self-Contained Breathing Apparatus Mandatory recertification for Firefighters, search maze, review and practice of Mayday procedures and Rapid Intervention Team – procedures/equipment.
 - $\circ\quad$ Wildland Fire review Theory and equipment review



R. L. (Rick) Elder, Fire Chief



Administration

- EMO Coordinator Anderson and Chief Elder began the preliminary planning process for the impending COVID crisis March 12,2020. Within a few days, a significant amount of work was accomplished by our personnel in ensuring we had formulated a calculated direction that moving forward was based on best practices. D/C Hueser and EMO Coordinator Anderson and Elder met on the Sunday March 15,2020 to review the Pandemic Planning Process (formalized documentation, state of readiness, operational procedures and PPE requirements and procurement).
- Regular training was cancelled March 18, 2020 for the immediate future with alternative processes of continued training in place and consistently evolving
 - Shared online folders for departmental personnel access with videos, PowerPoint and other material being provided
 - Subscription based Action Video Training available to our personnel (this was an existing service and will continue to be utilized)

Operations

- Policies and Procedures are constantly evolving, and the department is making best attempts to evolve with these processes as they become available
- o PPE is in place
- o Crew status is healthy and ready to respond
- The department is experiencing a reduced number of incidents than those normally experienced. However, this is not unique to Dalmeny and is consistent with our Regional Partners.

Respectfully Submitted

R.L. Elder Chief

Public Works Managers Quarterly Report

ROADS AND STREETS

Sanding and Snow removal will be completed when needed. Snow removal is slowing down, but still ongoing.

The section of road from First Street and Railway Avenue to HWY 305 W is gravel until spring, not including the asphalt that CN installed. Then it will be paved. The Public Works staff will maintain the gravel patches to keep it drivable.

A Section of Third Street South will be repaired under warranty in the Spring. This is due to a water main break because of a faulty repair on the 50mm water main. This is by the carwash.

With the spring thaw has come frozen storm drains. The Public Works staff will thaw out frozen culverts with the Hotsy, and pump water when needed.

WATER

The Public Works Department has installed the 100 water meters from 2019. The Public Works Department has purchased 54 water meters, of the 100 budgeted for in 2020. Approximately 28 of these water meters have been installed. There will be a pause in meter installation due to the Covid 19 pandemic.

On December 31, 2019, the motor for the regional water fill station at the Water Pumphouse quit. The motor was brought to GMR to diagnose the problem. The Variable Frequency Drive (VFD), also needed to be replaced. This was initially completed on January 17, 2020. Due to problems with the initial VFD a replacement was installed on January 22, 2020.

On February 21, 2020 the PSI gauge on the SaskWater supply line maxed out. Public Works Manager Jeff Johnson and Operator 2 Tyler Dorner installed a new PSI gauge and it did the same thing. Public Works Manager Jeff Johnson called the SaskWater contact Kevin Orchard and informed him of what was going on. Kevin Orchard came out on March 3, 2020 and rectified the problem. Kevin adjusted his inflow valves in the Water Pumphouse and at their booster station.

WASTEWATER

Completed the Lagoon summary for Environmental Project Officer (EPO) Lee Reinhart and e-mailed it to him.

January 21, 2020 110 2nd Street sewer was backing up. Roto-Rooter was called, and they got the sewer flowing again.

January 29, 2020 110 2nd Street sewer backed up again. Roto-Rooter was called again and they cameraed the sewer line. The first 10 feet of the sewer line is bad and looks like a lot of tree roots with mud. Roto-Rooter used the 4-inch cutter head instead of the normal 3-inch cutter head and cleaned the sewer line very well. Public Works Manager Jeff Johnson informed the homeowner that pressure washing the line might help, but he did not want to do that. The homeowner will keep an eye on it.

February 22, 2020 112 Bitner Avenues sewer was backed up. Public Works Manager Jeff Johnson went and snaked the line, and everything drained away.

March 3, 2020 at Lift Station #1 the mechanical seal on pump #2 broke. Public Works staff installed the back-up rotary assembly in pump #2 and got it back into service on the same day. The rotary assembly that was removed was fixed and a complete back up is available again.

March 7, 2020 the air release valve on pump #2 at Lift Station #1 had to be replaced. The inside rubber diaphragm had a tear in it. A new rubber diaphragm will be ordered, so we will have a spare air release valve again.

PARKS/PONDS

The walking paths at the ponds will be cleared when needed.

VEHICLES/EQUIPMENT

2020 GMC Sierra 4x4 Half-ton Unit #1

The fuel pump stopped working at 1200 km. The truck is at Wheaten GM in Saskatoon getting fixed. The cost of the leased vehicle from Driving Force is being paid by General Motors.

2020 GMC Sierra 4x4 Half-Ton Unit #2

Nothing to report. It is running well.

Mack Truck

Has been running well, nothing to report. A safety inspection was completed.

<u>Bobcat</u>

Bought a new set of tires

It has been running well, nothing to report.

Ford Gravel Truck

The driver's side leaf spring is starting to go. A new leaf spring will be needed soon. Public Works Manager Jeff Johnson will investigate it.

The sanding conveyor got jammed and broke a few links. Public Works Department fixed the conveyor.

A safety inspection is not needed on this vehicle as per SGI.

The throttle cable we had machined did not work as planned. It was too stiff of a cable, and after use it kinked up in the sleeve, not allowing the use of the gas pedal. We bought some aircraft cable and made up a throttle cable that works now.

Fixing this truck is getting harder and harder because they do not make parts for it anymore. We suggest that this truck be replaced as soon as possible. Numerous spots have been patched on the cab of the truck because it is rusting out. When we replace this truck, a sand spreader will also need to be purchased. There is only so much that we can do to patch this truck up any more than it has been.

Sweeprite Streetsweeper

This piece of equipment is Inoperative (INOP).

The sweeper is in its third year of duty. This is an old machine; 1987 I do believe, and it is showing its age now. It picks up most of the gravel on the streets, but it leaves lines because the skirting around the back main broom is worn out. The sweeper does the best that it can do, but it will not completely clean the streets.

The three-spool control valve manifold is leaking in numerous spots. With these leaks, the sweeper cannot be used because it leaves lines of hydraulic oil behind it on the road. The manifold was taken into HyPower to get assessed, and the said that the metal seals inside of the manifold are most likely worn out from time. I have ordered another three-spool control valve manifold to get the sweeper up and running again.

The hopper that holds the sweepings was rusted out in a few places. We lined the inside with puck board so sweepings don't fall out all over the road.

It is the Public Works Department recommendation that a replacement is found as soon as possible, or to contract out the street sweeping. The sweeper does not do an optimal job, and will constantly cost us money on repairs that could be better used elsewhere.

A hydraulic leak was found in the hydrostatic transmission. We tried replacing O-rings with no luck. The transmission would have to be repaired by a mechanic. The amount of money it would take for the transmission to be fixed would cost more than we spent on the sweeper. It is parked at the Public Works Shop.

Champion Grader

The grader seems to be holding up relatively well considering its age. The Public Works Team recommends that this be replaced in about 5 years. We are not sure if parts will get harder to find for this old of a grader. A newer grader will be easier to maintain and get parts for.

GMC Work Trucks

2007 GMC Sierra (White)

This piece of equipment is INOP

This truck is starting to show its age. The wheel wells are rusting out pretty bad. The tire monitor sensor needs to be looked at. The parking assist sensor system needs to be looked at. Occasionally the ABS and traction control comes on in the dash display. Usually, you just need to turn the truck off for a couple of minutes and it goes away. I think we could get a couple more years out of it.

The leaf spring on the passenger side broke and the rear wheel ABS sensor. Took to Dalmeny Heavy Iron to get fixed.

Fixed the cracked windshield from the hail last year.

There was a miss in the engine and the driver's side ABS speed sensor needed replacement. Took to Heavy Iron to get fixed. Heavy Iron replaced the coil on the #6 cylinder and the ABS speed sensor. The

truck worked for 4 hours and the same things happened again. Heavy Iron said maybe the ECM is going and taking the truck to GM for a diagnostic check with their equipment would be the best course of action. If the computer is going that is a significant amount of money to repair.

Parked it at the Public Works Shop, and the registration has been canceled.

2011 GMC Sierra (Grey)

This truck seems to be holding up relatively well. The only real concern I have is that the CV axles keep failing, and we have to replace them. Also, there is some electrical or sensor problem. The dash lights sometimes flicker on and off. The truck loses power randomly and won't rev up properly. When this happens, we turn the truck off for a minute and the electrical resets and everything is fine. The engine light is always on and we cannot find out why. It was brought to the Auto Barn years ago and then Town Foreman Lyle Bates wasn't provided an answer, as to why.

I would recommend that it gets replaced as soon as possible.

The shifter cable broke and the ignition. The Public Works Team fixed both problems.

Fixed the cracked windshield from the hail last year.

Mowers

<u>Hustler</u>

There was a short in the electrical. The blades stopped without warning. The hustler was taken into Mini Tune to be repaired under warranty.

John Deere Mower

The front deck is bent. We have adjusted it so it does a decent job of mowing. It is an alright mower for making the initial pass where there is long grass. It is getting worn out from years of mowing.

<u>Kubota</u>

This piece of equipment is INOP.

This mower is pretty much worn out. It gets harder and harder to keep this machine going each year. It spends more time in the shop than it does mowing grass. The Public Works Team recommends that this mower be replaced as soon as possible.

The gears in the gearbox broke. Parts to replace the gearbox is \$500. A new gearbox is \$1000. As of right now, it is retired.

The recommendation would be to purchase a 72-inch mower from Hustler.

Mobile Pump

It does its job to an acceptable degree. The clutch was weak last year and may need to be rebuilt this year. We will have to wait and see how it holds up.

Working well so far this year.

Will be checked out before Spring.

<u>Oiler</u>

Nothing to report.

<u>Tampo</u>

We only really use this once or twice a year. It works alright for what we need it for. It is old and rusting out, and should be replaced/updated in the future.

The Public Works Team put a new water tank on. The old tank was rust filled and clogging up the water lines.

Ford Tractor

It works alright. It doesn't get much use because it doesn't have the power to do much. We use it to harrow the blue ball diamond and sometimes fill the gravel trucks. We also use it to pack the cold mix in the potholes.

Fixed the cracked windshield form the hail storm last year.

Bought 2 new front tires.

Payloader

I do believe a Payloader would be a huge asset to the Public Works equipment fleet. It would make snow removal easier, quicker and more efficient. It can clear streets alongside the Grader if a heavy snowfall occurs. It frees up the Bobcat for other smaller jobs that can be done with it.

I would just like to keep this on the radar for the 2021 budget, if at all possible.

Sewage Lift Stations Pumping Amounts

Sewage Lift Station #1		
	2020	Imperial Gallons
January		2,133,340
February		2,000,240
March		2,235,640
Total		6,369,220

Sewage Lift Station #2		
	2020	Imperial Gallons
January		867,020
February		864,380
March		1,008,920
Total		2,740,320

Sewage Lift Station #1	ľ	
	2019	Imperial Gallons
October		2,288,220
Novenber		2,179,980
Decenber		2,207,700
Total		6,675,900

Sewage Lift Station #2		
	2019	Imperial Gallons
October		921,800
November		887,040
December		903,980
Total		2,712,820

Water Pumphouse Statistics January-March 2020

Amount SaskWater Pumped to Dalmeny	Imperial Gallons
January	2,203,300
February	2,119,480
March	2,391,180
Total	6,713,960

SaskWater Average Chlorine Level	
January	1.77
February	1.79
March	1.78

SaskWater Average Turbidity Level	
January	0.12
February	0.15
March	0.14

Dalmeny Water Usage	Imperial Gallons		
January	1,813,460		
February	1,715,120		
March	1,930,060		
Total	5,458,640		

Dalmeny Average Chlorine Level	
January	1.69
February	1.72
March	1.73

Dalmeny Average Turbidity Level	
January	0.12
February	0.12
March	0.13

Dalmeny Pumphouse Average Pressure	P.S.I		
January	57		
February	57		
March	57		

Dalmeny Pumphouse Chemical Usuage		Ammonia Sulfate
January	0	0
February	0	0
March	0	0

Farmers Pump Amount	Imperial Gallons		
January	35,000		
February	87,200		
March	112,200		
Total	234,400		

Recreation Department Report

April 13th, 2020

Dalmeny Days

Not cancelled officially yet, however very unlikely there will be Dalmeny Days this year. Planning has begun for Dalmeny Days which is being held June 5-7. This year's events and activities are in the process of being booked and either have been confirmed or are awaiting quotes/availability.

Events include: Parade, Live Music, Bouncy house/interactives, pony rides, petting zoo, Slow-pitch tournament, plus new this year we will have entertainment from Dr. Von Houligan. He comes with a tent that is over 3500 square feet and reaching up above 22 feet tall. He will perform juggling, balancing, magic and fire breathing in his show and will bring up people from the audience to assist with different things. It makes for a great family show. He will be performing three 60 minute shows.



Grants

Sask Lotteries – Final reports are starting to be submitted from grants disbursed for 2019/20. Our application has been sent to the RM for the grant period 2020/21.

Investing in Canada Infrastructure Program Grant – Submitted on March 26th.

Canadian Dermatology Association's Shade Structure Grant Program. **Submitted**. The program provides funding to schools, daycares, city parks and not-for-profit organizations to purchase or construct permanent shade structures in order to create a safe outdoor environment that protects people from the sun's harmful ultraviolet radiation. Grant recipients may receive up to \$18,000 towards the cost of

materials and installation. The CDA will then provide a permanent sign that provides sun-safe tips to be installed on or near the shade structure.

My idea is to convert the old tennis court at Centennial Park into a picnic shelter as there is a lack of concession seating for events.



2020 Hockey Draft

Cancelled. The 2020 5th Annual Kevin Johnson Memorial NHL Playoff Hockey Draft was to be held on Saturday April 4th at 7pm at the Dalmeny Arena. There were still teams wanting to contribute a donation this year in spite of everything.

Archery Program

Cancelled until further notice. This past February we introduced an archery program provided by Kincade's Custom Archery. He was able to acquire 10 registrations thus being able to begin the program. It will be once a week for 10 weeks. Participants will learn about range safety and rules while learning and practicing the basic steps of archery. As the course progresses, you will also learn about competing in the sport of archery. All the equipment is provided.

Ball Hockey

Cancelled until mid May for now. I will be updated as our situation progresses. This upcoming April, May and June, Dalmeny will be playing host to the Saskatoon Ball Hockey League for the fourth consecutive season at the Dalmeny Arena. We accommodate 100+ games which are held in the

evenings Sunday through Thursday. Also, from July 22-26 we will be a venue for the Canadian Ball Hockey Championships.

Centennial Park Playground

In discussions with Playquest, we have narrowed it down to two options. The two pictured below would be approximately \$23,000 including freight to Dalmeny. We could also remove things to bring the cost down. Also, when they do an actual quote, they will get a freight quote and will more then likely be able to tighten up the price. These would be easy community installs, so we would be saving approximately \$4,000 for installation. With a group of volunteers, along with the supervision and assistance of Justin and Joel from Playquest, we can have this built in 1-2 days. It is my understanding that this project will be moved to 2021.





Minor Sports

As of right now everything is on hold but not officially cancelled. Will keep everyone updated with any changes as they come in.

Stay Local Campaign

The social media side of things is going well and according to our website analytics, this is generating quite a bit of traffic. Here is a chart indicating our page views by sessions. Things really picked up as the COVID -19 notices were posted.

March 23 – 48 views	April 1 - 38
March 24 - 37	April 2 – 53 (Stay Local Campaign Kick off)
March 25 - 40	April 3 - 30
March 26 - 39	April 4 - 20
March 27 - 33	April 5 - 23
March 28 - 29	April 6 – 13 (as of noon)
March 29 - 31	
March 30 - 31	

Here are the latest poll question results from the website.

Poll Question - How often would you like your compost picked up during the winter months?

CURRENT ANSWERS	TOTAL VOTE PERCENTAGE
As it is now - Every 2 weeks	19.2%
Every 3 weeks	5.5%
Every 4 weeks	49.3%
Not at all.	26%

1. Assessment Notices:

The assessment notices for 2020 were mailed on Wednesday, March 18, 2020. The last day to present your appeal notice is April 20, 2020.

2. Municipal Revenue Sharing:

In 2020, the Town of Dalmeny will receive \$415,422.00 in Municipal Revenue Sharing, as compared to \$374,600.00 in 2019 from the Provincial Government.

3. Working Remotely:

Everything continues to move along, as some of us work from home. We are trying to limit the number of individuals in the Town Office at the same time. It remains closed to the Public

4. Rolling Island Cabinet for Vault:

Geoff McBain of Sask Valley Cabinetry & Millworks has completed the cabinet for additional storage of records and he installed this cabinet on April 7, 2020.

5. First Street CN Crossing Tender:

The Tender for the First Street CN Crossing was to be issued during the week of March 22, 2020. However, due to circumstances, this tender will be issued on April 9, 2020.

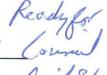
Jim Weninger, Chief Administrative Officer

New Bersine's "A"

Ministry of Agriculture

Saskatchewan 💋

Memorandum ,



From:	Darren Stovin, Provincial Environmental Engineer	Date:	March 30, 2020	
	Livestock Branch	Phone:	(306) 787-6591	
	Ministry of Agriculture	Fax:	(306) 787-1315	
	202 - 3085 Albert Street, REGINA, SK S4S 0B1	File:	ILO RM No. 344	

To: Jim Weninger, Administrator Town of Dalmeny Box 400, DALMENY, SK S0K 1E0

Re:

Application for Approval of Plans Under The Agricultural Operations Act

Pursuant to The Agricultural Operations Act we have received an application for approval of plans from:

NAME: Legend Dairy LOCATION: SW 10 39 06 W3 FOR: Dairy

Dalmeny RM of Corman Park - No. 344 600 Animal Units

The attached application for approval of plans was prepared jointly by the applicant and our specialist. This does not imply approval by the Ministry of Agriculture. We would appreciate any comment or information that you consider to be relevant to this proposal, including:

- a) regulatory requirements of your agency;
- b) environmental sensitivities that are not addressed; and,
- c) additional information that may be required.

Please contact me as soon as possible if there is additional information required to complete the review of this project prior to the referral deadline. Please return a copy of this memo with your reply by May 11, 2020. After this date, the Ministry of Agriculture will make a decision based on the information received, even if some referral agencies have not responded. It would be appreciated if you could respond earlier.

Darren Stovin, Provincial Environmental Engineer

Attachments

cc: Bryce Sundbo, Saskatoon, (306) 227-9593

PLEASE RETURN WITH YOUR COMMENTS:

Signature:

Date:

Position:

Saskatchewan 💋

Memorandum

From:	Darren Stovin, Provincial Environmental Engineer	Date:	March 30, 2020
	Livestock Branch	Phone:	(306) 787-6591
	Ministry of Agriculture	Fax:	(306) 787-1315
	202 - 3085 Albert Street, REGINA, SK S4S 0B1	File:	ILO RM No. 344

To: John Guenther, Director Community Planning Ministry of Government Relations 122 - 3rd Avenue North, SASKATOON, SK S7K 2H6

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Darren Stovin, Provincial Environmental Engineer

Attachments

cc: Bryce Sundbo, Saskatoon, (306) 227-9593

PLEASE RETURN WITH YOUR COMMENTS:

Signature:

Date:

Position: _____

Saskatchewan 💋

Memorandum

From: Darren Stovin, Provincial Environmental Engineer Livestock Branch Ministry of Agriculture 202 - 3085 Albert Street, REGINA, SK S4S 0B1 Date:March 30, 2020Phone:(306) 787-6591Fax:(306) 787-1315File:ILO RM No. 344

To: Corman Park Municipal Council c/o Adam Tittemore, Administrator Rural Municipality of Corman Park No. 344 111 Pinehouse Dr., SASKATOON, SK S7K 5W1

Re: Application for Approval of Plans Under The Agricultural Operations Act

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NAME: Legend Dairy LOCATION: SW 10 39 06 W3 FOR: Dairy Dalmeny RM of Corman Park - No. 344 600 Animal Units

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PLEASE RETURN WITH YOUR COMMENTS:

Signature:

Date:

Position:

Application under *The Agricultural Operations Act* Dairy SW 10-39-06 W3

Andrew Vanderkooi

RM 344

March 2020



Summary - Waste Storage Plan & Waste Management Plan

Name: Andrew Vanderkooi SW 10 39 06 W3

Capacity

# Confined	Livestock type Dairy Cattle	Animal units
340	Milking Cows	340
80	Dry Cows	80
240	Replacement heifers	120
240	Calves	60
	Total AU	600

If actual animal units (AU) exceed total AU new approval may be required.

Audit

Operations with approved plans are subject to compliance audits. These waste storage and management plans must be implemented and followed according to the application plans and amendments.

Waste Storage Plan

Runoff Control Plan:

Not required provided manure and animals are completely enclosed and not exposed to weather effects.

Liquid Manure Storage Plan:

Type of storage	Tank	
Freeboard	Minimum of 15 cm	
Days of Storage	264 days	
Maintenance requirements	Visually inspect structure	
	Repair erosion, leaks, breaches, equipment, structural, or rodent damage	
	 Control vegetation and burrowing rodents 	
	 Sufficient capacity to avoid winter application 	

The earthen manure storage must be managed below freeboard and emptied as required to prevent breaching.

Solid Manure Storage Plan:

Type of storage	Concrete bunker
Location	Attached to side of barns

Waste Management Plan

	Solid Manure	Liquid Manure
Application rate	36.3 tons/acre	6946 gallons/acre
Yearly land required	153 acres	452 acres
Method of application	Not incorporated	Not incorporated
Acres required long term	458 acres	452 acres
Frequency of application to a parcel of land	Every 3 years	Every 1 year
Spill reporting	N/A	Call 1-800-667-7525 in the event of a spill
Record keeping	Maintain records of application dates, quantity & type of manure applied, field locations	

- Soil sampling is a beneficial management practice.
- Significant deviation from the application rate must have supporting information.
- Maintain reasonable separation distances from watercourses when spreading manure.
- If emergency winter manure spreading is necessary, contact your Regional Engineer for guidance.

Mortality Management Plan:

Normally Occurring Mortalities		
Carcass disposal method	Composting	
Bulking agent required	agent required 197 m ³ /yr	
Compost maintenance	Regular turning of compost pile required	
Disposal location	South east of the existing EMS near the bush	
Interim storage	N/A	
Record keeping Dates, number of deaths, disposal method, location		

Large Mortality Events		
Burial		
Disposal location South East of the composting site		
4 meters		
Dates, number of deaths, disposal method, location		

If you experience greater than normal death loss, inform your Regional Engineers immediately.

Agricultural Operations Contacts

Saskatoon Region:

3735 Thatcher Ave, Saskatoon SK S7K 2H6

Regional Engineers: (306) 221-6245 or (306) 227-9593

I hearby confirm implementation of these plans upon reciept of an Approval under the *The Agricultural Operations Act* and I acknowledge that I, as the applicant, have read the contents of this summary report and the supporting documentation and am in the agreement with the statements made herein.

Andrew Vanderkooi

2020

Page ii

EXECUTIVE SUMMARY

Andrew Vanderkooi is proposing to expand his existing dairy to 600 AU. He has two existing Approvals No. 1946 & No. 1973 for his dairy; both issued in 1997 that add up to 299 AU. This application will replace both of the existing approvals. He has expanded above his approved amount and is operating at approximately 368 AU. He will decommission his existing EMS and construct a concrete manure storage tank. The entire dairy herd is housed in-barns and he will have concrete manure storage areas adjacent to barns that store solid manure. Day-to-day mortalities will be composted. The mass mortality plan will involve burial.

They own/rent a total of 1129 acres for manure spreading, 460 of these acres are under irrigation. The cropping rotation is corn, wheat and canola in the dark brown soil zone. Liquid and solid manure will be spread with no incorporation in the spring and fall. They require 910 acres for long term sustainability. The recommended annual liquid manure application rate is 6,946 gal/acre for irrigated land and the three year recommended solid manure application rate is 36.3 tons/acre for dry land. The proposed dairy will produce an estimated 5,557 tons and 3.1 million gallons of manure per year.

The closest watercourse is 3.6 km from the site. The Dalmeny Aquifer is a regional aquifer beneath the site at a depth of 29 m (95 ft). There were no surficial aquifers identified.

The manure storage and manure management plans provided herein are adequate for the protection of water resources.

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1.0 INTRODUCTION

Andrew Vanderkooi is proposing to expand his existing dairy. Plan approval under *The Agricultural Operations Act* is required because the operation is confining over 300 animal units (AU). The sources of water for the dairy are a well and a city of Saskatoon water line. The well location is identified on the site plan in Figure 2.

The purpose of this report is to provide all of the necessary information required in support of an application for approval under the *Agricultural Operations Act, 1995*.

2.0 DESKTOP SITE DESCRIPTION

The proposed ILO is located on SW 10-39-06 W3 in RM 344. Please refer to Appendix A and reference Figures 1-3. The nearest neighbour is located about 0.5 km to the northeast. The nearest town is Dalmeny located about 0.5 km to the northeast.

2.1 Topography

The site is located in a region that is relatively flat with pocket sloughs. The closest watercourse is located about 3.6 km to the northeast. The nearest surface water receptor is 441 m south of the site and is the form of a pocket slough. Refer to Figure 5 and 6 for surface water maps of the area.

2.2 Surficial Geology

The site is located on an area that is classified as glaciolacustrine delta or morainal plain with very low potential for locating deposits of mixed sand and gravel as seen in Figure 9. This is an area of glacial till. Figure 10 shows a map indicating the suitability potential for burial and it suggests the site has a low suitability potential for burial.

2.3 Geologic and Groundwater Resources

The Saskatchewan Research Council maps of the Geological and Groundwater Resources of the Saskatoon area (Map 73B) are included in Figures 12, 13 and 14, attached in Appendix A. Figure 12 shows the cross section and test hole locations and indicates that the site is located closest to geological cross section J-J'. Figure 13 shows cross section J-J'. This cross section indicates the site is located in an area of glacial till. The cross section indicates approximately 35 m of till overlying the Dalmeny Aquifer. Figure 14 shows a map of the AVI (Aquifer Vulnerability Index) and it shows that the site is located in an area of high vulnerability. Figure 11 identifies surficial aquifers in the region and there are no mapped surficial aquifers at the site, but there is one located a half a mile to the west.

2.4 Well Records

A well record search was conducted for the site and surrounding area using the Saskatchewan Ground Water Resource GIS web mapping application found on the Saskatchewan Water Security Agency website (www.wsask.ca). There are 16 well records for the site and surrounding area which are summarized in a well log plot which can be referenced in Figure 15. Appendix D contains the wells records. One well record was available for the site. This well record shows clay till to a depth of 95 feet which is underlain but a large sand interval from 95 feet to 140 feet. This sand interval is likely the Dalmeny Aquifer which the well is completed in. Most wells in the area are completed in this aquifer at a similar depth. A review of the well record search showed no shallow wells.

2.5 Desktop Summary

Based on desktop information that has been presented, indications are that water resources will not be impacted from the operations of this livestock operation.

Information indicates there is 29 m (95 ft) of a clay till aquitard which offers significant natural protection of the aquifer beneath it.

3.0 SITE INVESTIGATION

There was no additional test pitting performed for this application as the client is operating in a manner that will mitigate risk to ground and surface water. A site investigation was completed for the previous application and results are referenced below.

In 1997, three test holes were excavated in the area of the existing earthen manure storage (EMS) and six soil samples were submitted for testing. Soil lithology and lab results are displayed in Appendix C. Clay till soils were encountered below topsoil to a depth of about 4.2 m (14 ft) in all three test holes. There was some thin layers of silty sand encountered. Average clay content was 20.5%, average fines-52% and average plasticity index was 14%. The six soil samples taken are classified as clay with low plasticity and silty sand.

3.1 Topographic Survey and Runoff Controls

There was no topographic survey or runoff control plan developed because the client is housing his entire dairy herd in barns and solid manure will be stored on concrete manure storage areas.

4.0 **APPLICATION**

A completed application for approval is attached in Appendix E.

4.1 Manure Management Plan

Solid manure will be stored in concrete manure storage areas at the end of barns with a solid manure pack. The heifer barn has a solid manure pack that is cleaned out twice per year in the spring and fall. This manure will be hauled directly from the barn to the field. The barn has a scrapper that accumulates manure from the feed bunks that is stored in the solid manure storage area on the east side of the barn. The concrete manure storage area is designed to hold six months of manure production and is 8 feet tall by 100 feet wide and 50 feet deep. The concrete pad will be sloped to the rear of the storage area so that runoff is contained.

The proponent is planning to build a calf barn that will house 60 calves. The manure from this barn will be cleaned out monthly and stored in the concrete solid manure storage area adjacent to the heifer barn.

Vanderkooi is planning to build another barn for his cows with half the barn housing 80 dry cows on a solid manure system and the other half will hold 100 milking cows on a liquid manure system. The existing barn for milking cows holds 240 cows on a liquid manure system. The solid manure from the new dry cow barn will be cleaned out monthly and stored in the concrete solid manure storage area located adjacent to this barn. The concrete manure storage area is designed to hold six months of manure production and is 8 feet tall by 60 feet wide and 40 feet deep. The concrete pad will be sloped to the rear of the storage area so that runoff is contained.

There will be 340 cows on a liquid manure system that will generate 14.3 million L of liquid manure per year. Manure production for 240 days is expected to be around 9.4 million liters. Vanderkooi is proposing to construct one rectangular tank which measures 240 feet by 160 feet and 10 feet tall. The volume at the full service level (FSL) of the tank is 10.3 million liters. An additional 15 cm (6 inches) of freeboard is required. The proposed storage will have 264 days of storage for 340 cows. The tank design drawing can be found in Appendix B. Separation distances for the proposed tank can be found in Figures 7 and 8 in Appendix A.

They own or rent a total of 1,129 acres for manure spreading. The cropping rotation is corn, wheat and canola and the site is located in the dark brown soil zone. Liquid and solid manure will be spread with no incorporation in the spring and fall. They require 910 acres are required for long term sustainability of manure application. The manure management plan has been developed so the liquid manure will be applied to irrigated land and the solid manure will be applied to dry land. The recommended annual liquid manure application rate is 6,946 gal/acre on irrigated land and the three year recommended solid manure application rate for dry land is 36.3 tons/acre. If liquid manure is to be applied to dry land the application rate should be 4479 gal/acre. The proposed dairy will produce an estimated 5,557 tons of solid and 3.1 million gallons of liquid manure per year. Refer to Figure 4 for a map of the land that is available for manure spreading. Of the total land base, 460 acres are irrigated. Vanderkooi has a soil testing program and works with an agrologist to assist him with his manure application rates. The nitrogen uptake for the cropping rotation on the irrigated land was taken from a 2020 document produced by the Irrigation Crop Diversification Corporation titled "Irrigation Economics and Agronomics". This document was produced for the Outlook area that is in the dark brown soil zone.

4.2 Mortality Management Plan

This operation is expected to generate approximately 24.6 animal units of annual death losses. The day-to-day mortalities will be managed by composting. Dead animals will be composted as they occur so no interim storage plans will be necessary. The client also uses a pickup service for cull animals. The proposed location for the composting site is located on the site plan in Figure 3. No runoff controls are proposed for the composting site because surface water is located at a distance greater than 300m. Test pit information and well records indicate the composting site has adequate clay till for the protection of groundwater.

In the event of a mass mortality event, mortalities will be disposed of by burial, see Figure 2 in Appendix A for the location. The calculated area needed for this is 24

m by 29 m. In a mass mortality event it was calculated that 392,000 kg of carcasses will need to be disposed of. Test holes located around the existing EMS and well records indicate burial is acceptable for this site. The nearest well is located 350 m from the proposed location and will not be impacted by burial or composting practices.

5.0 CONCLUSION

This report was prepared for Andrew Vanderkooi's dairy operation located southwest of Dalmeny, Saskatchewan. The site will house a maximum of 600 animal units. Waste storage and waste management plans have been developed to adhere to the provisions in *The Agricultural Operations Act*. Site conditions provide adequate protection to ground and surface water.

Bryce Sundbo, P.Eng.

Appendix A

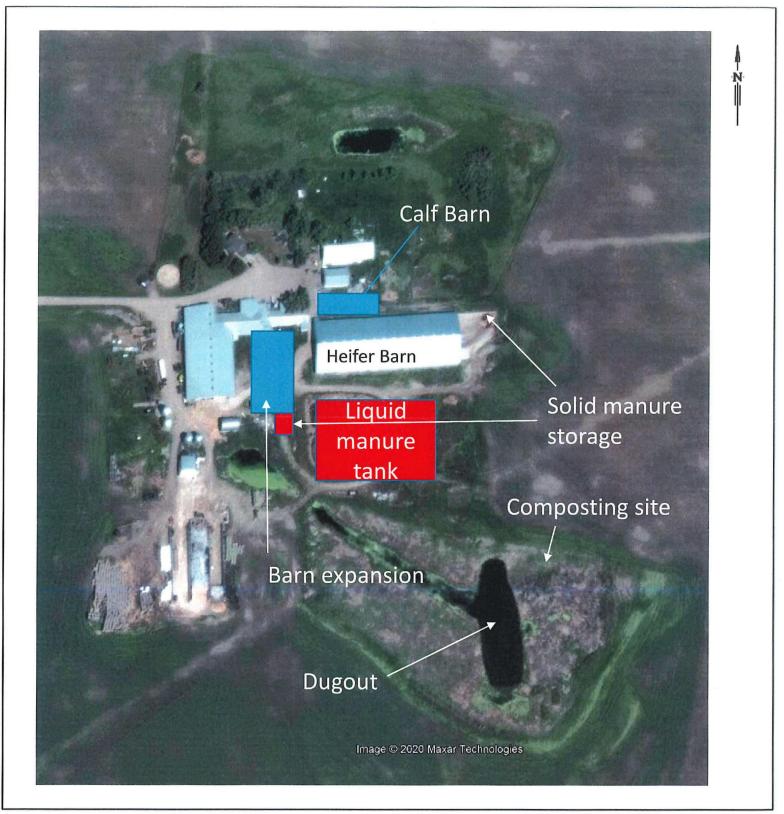
Figures



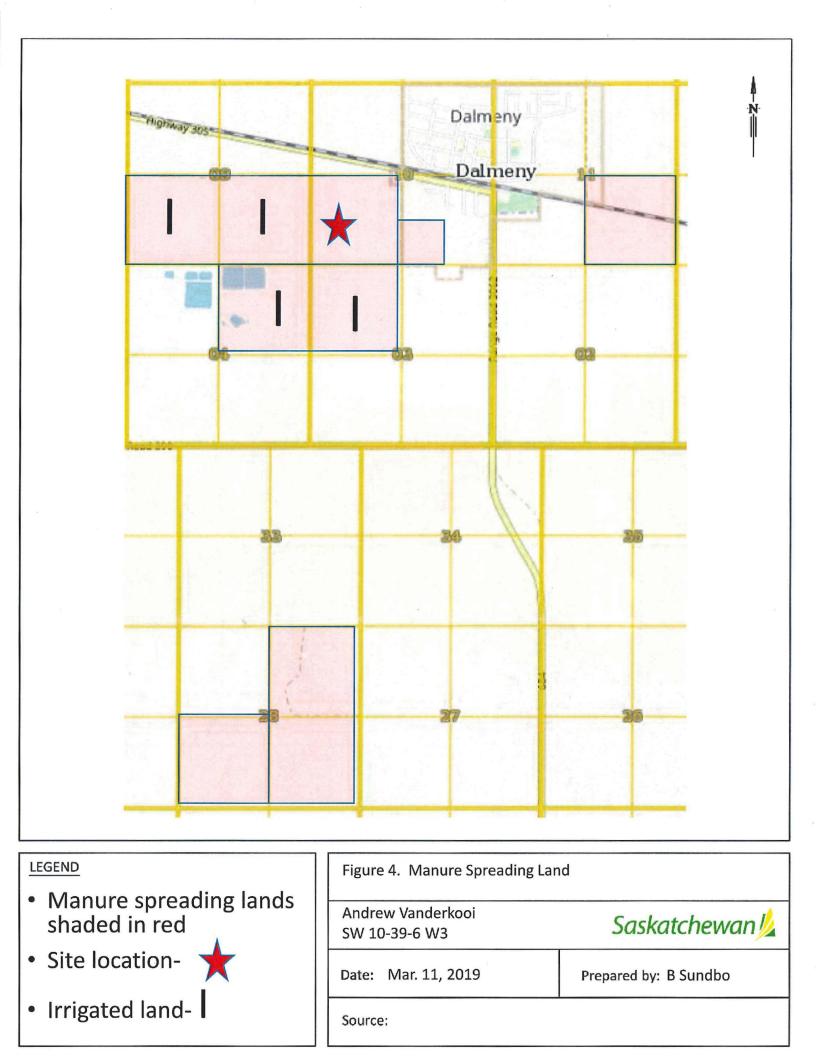
Source: Livestock Burial Site Application

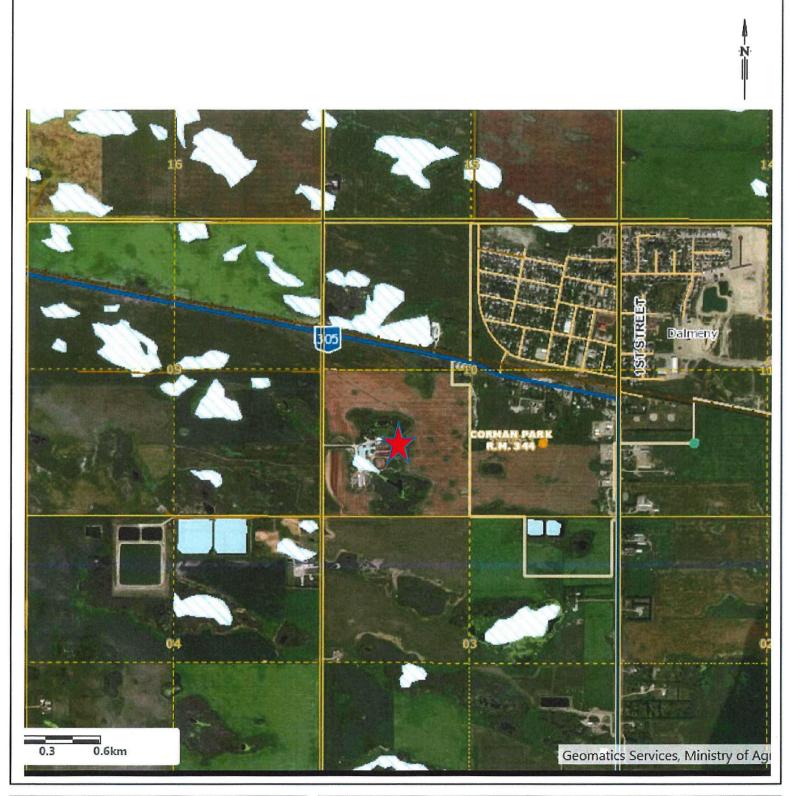


LEGEND	Figure 2 Aerial Phote	Figure 2 Aerial Photo	
	Andrew Vanderkooi SW 10-39-6 W3	Saskatchewan 🖄	
	Date: Mar. 11, 2019	Prepared by: B Sundbo	
	Source: Google Ear	rth Pro	



LEGEND	Figure 3. Site Plan	
	Andrew Vanderkooi SW 10-39-6 W3	Saskatchewan 💋
	Date: Mar. 11, 2019	Prepared by: B Sundbo
	Source:	





LEGEND	Figure 5. Surface Water Map	
 Site location- 	Andrew Vanderkooi SW 10-39-6 W3	Saskatchewan 🎉
	Date: Mar. 11, 2019	Prepared by: B Sundbo
	Source: Livestock Burial Site A	pplication

10-05-3 - -Dalmeny aca o 38-06-3 . Mart MA 7.4 2km 9.0 Geomatics Services Ministry of Agriculti 10.0 3.0

• Site location-

Figure 6. Regional Surface Water MapAndrew Vanderkooi
SW 10-39-6 W3SaskatchewaniDate:Mar. 11, 2019Prepared by: B SundboSource:Livestock Burial Site Application



LEGEND

• Manure Storage Tank-

Figure 7. Map Showing setback from tank property lines, roads		
and surface water		
Andrew Vanderkooi	Carlinstel and I	
SW 10-39-6 W3	Saskatchewan 💋	

SW 10-39-6 W3

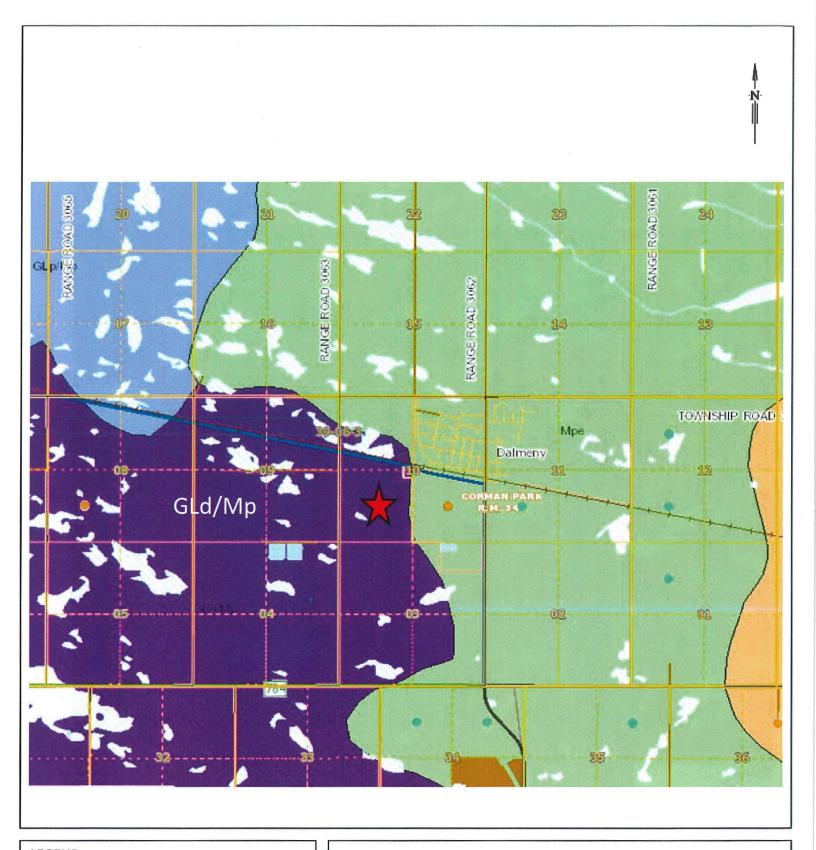
Date: Mar. 11, 2019

Prepared by: B Sundbo

Source: Livestock Burial Site Application



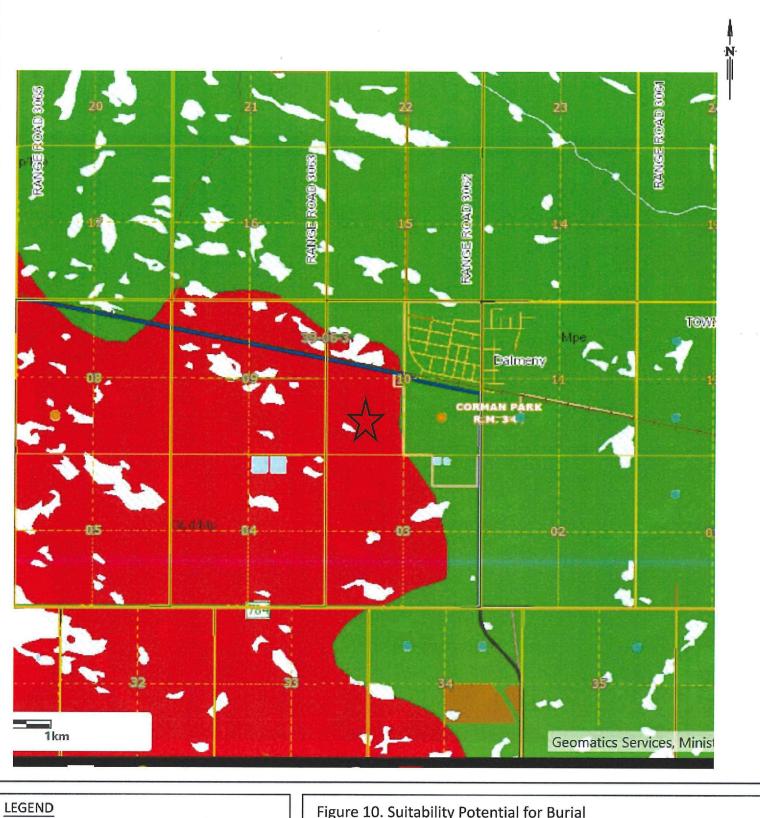
LEGEND	Figure 8. Map Showing setback from tank to watercourse			
 Site location- 	Andrew Vanderkooi SW 10-39-6 W3	Saskatchewan 🎉		
	Date: Mar. 11, 2019	Prepared by: B Sundbo		
	Source: Livestock Burial Site Application			



LEGEND

• Site location-

Figure 9. Surficial Geology Map				
Andrew Vanderkooi SW 10-39-6 W3	Saskatchewan 焰			
Date: Mar. 11, 2019	Prepared by: B Sundbo			
Source: Livestock Burial Site Application				



		4
•	Site	location-

Figure 10. Suitability Potential for Burial

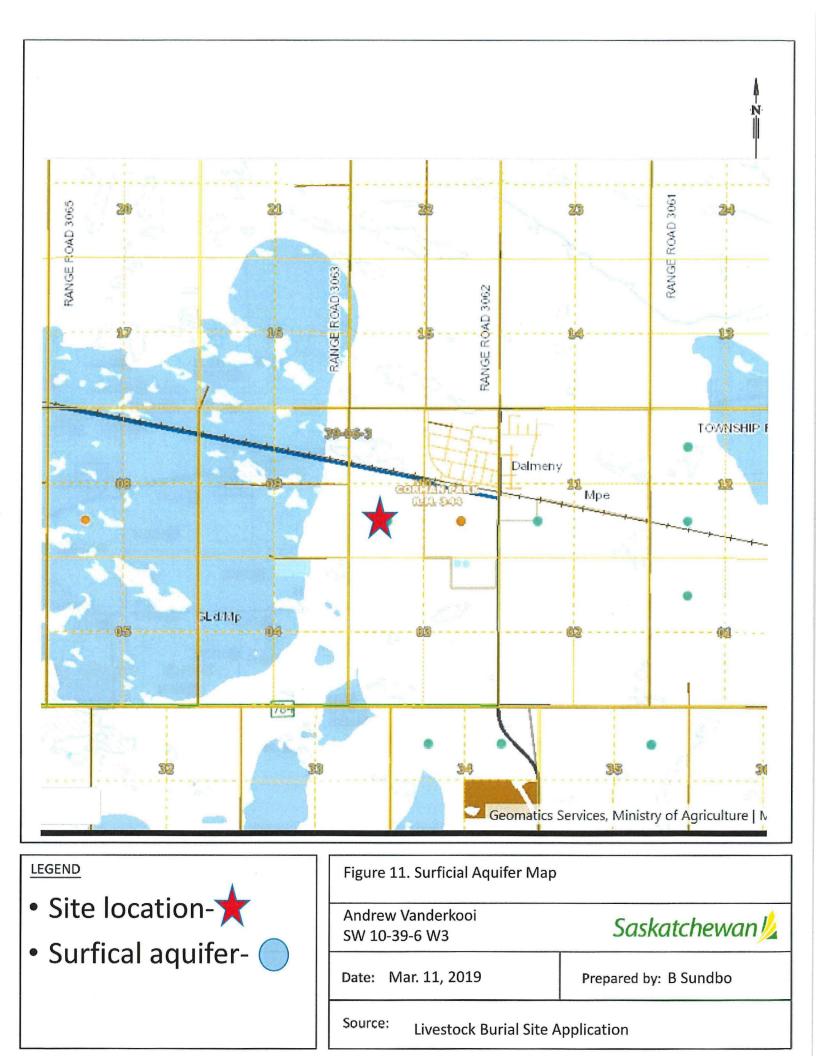
Andrew Vanderkooi SW 10-39-6 W3

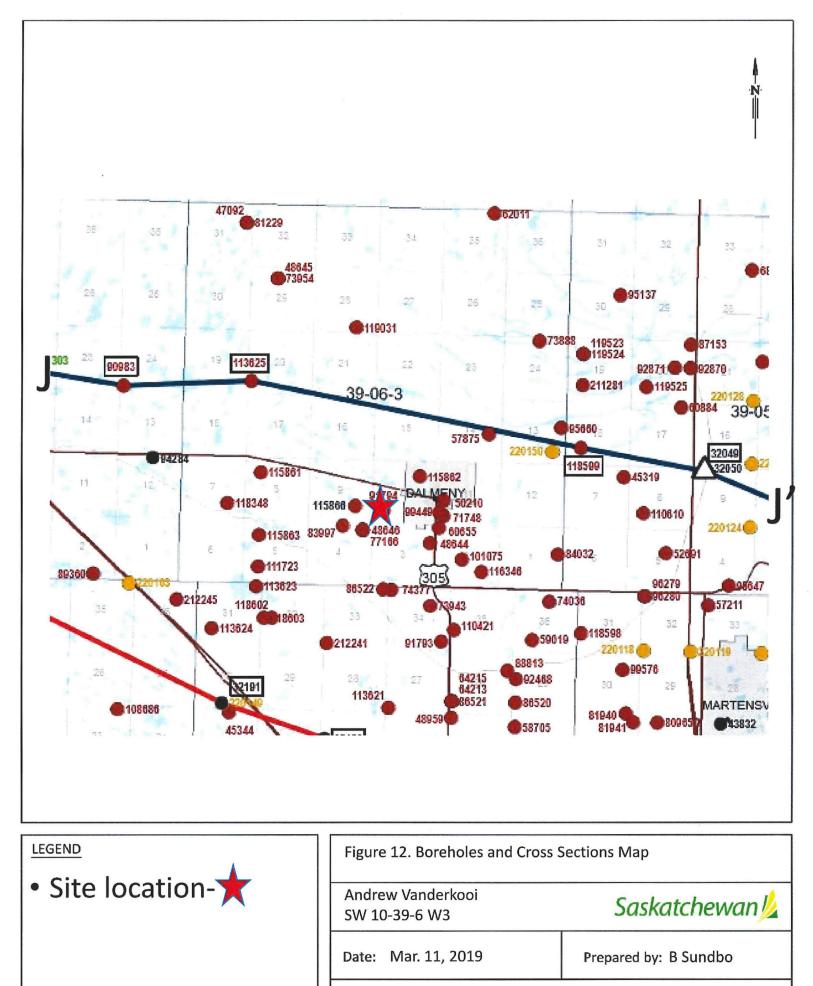
Date: Mar. 11, 2019

Prepared by: B Sundbo

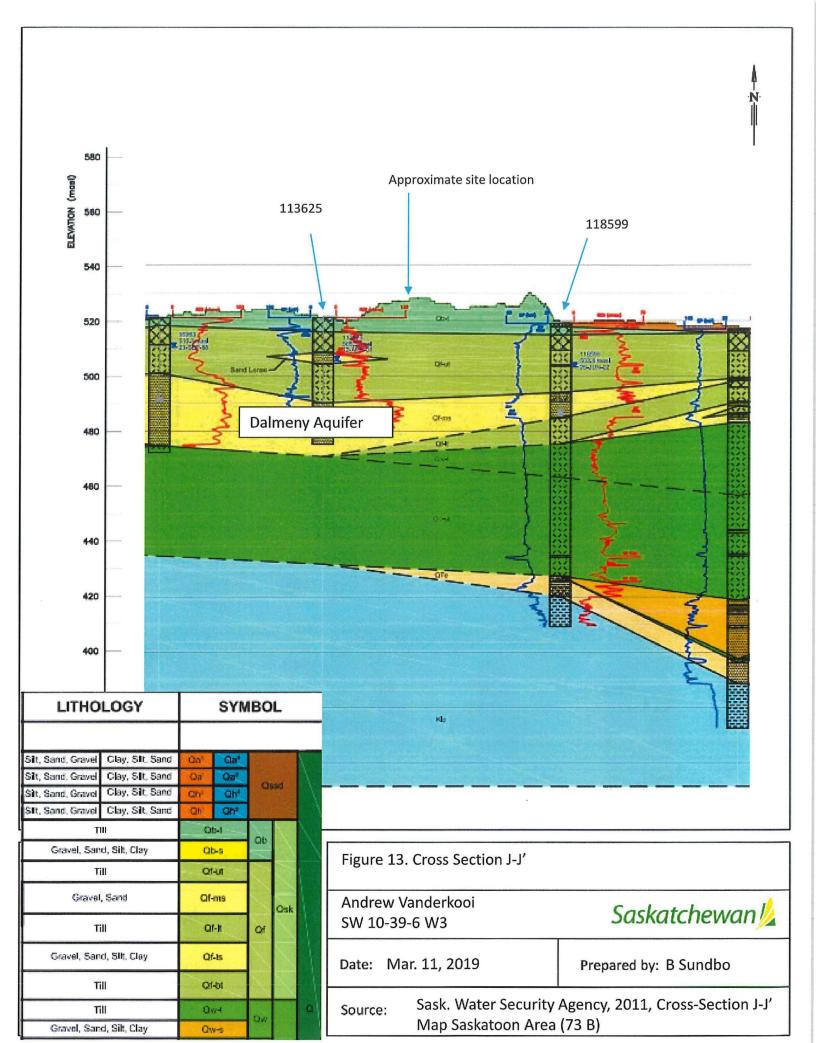
Saskatchewan 💋

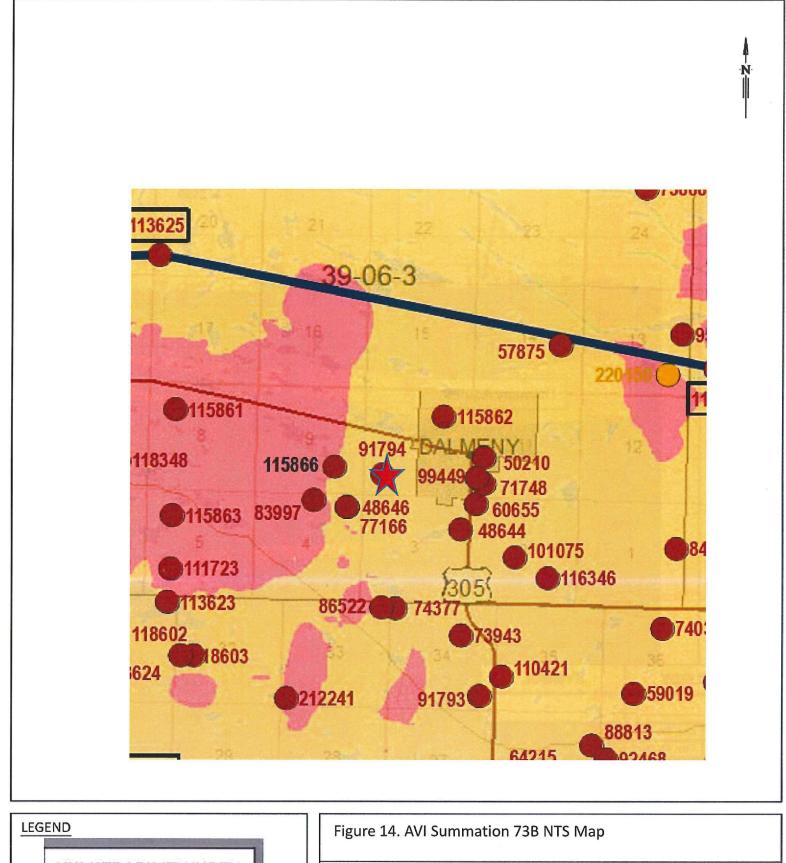
Source: Livestock Burial Site Application





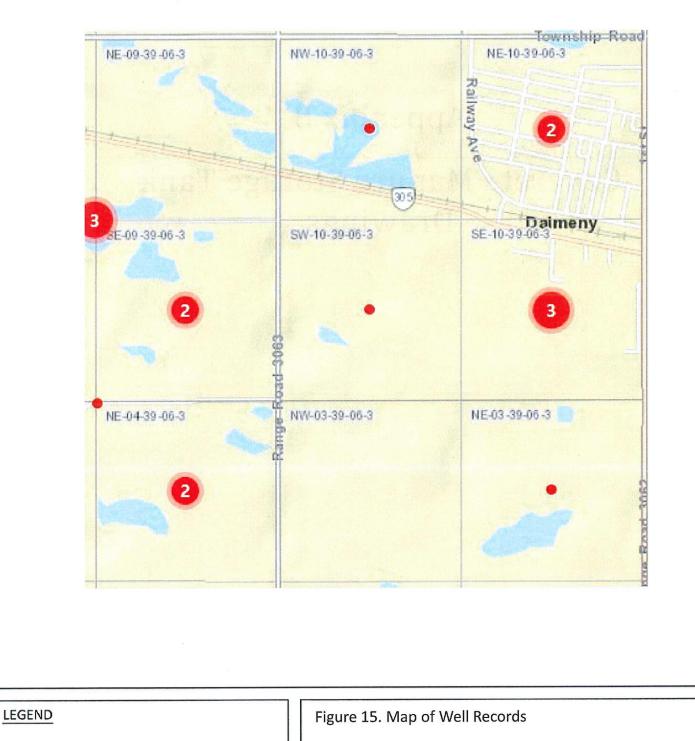
Source: Sask. Water Security Agency, 2011, Borehole locations and Cross-Section Map Saskatoon Area (73 B)





VUI	LNERABILITY INDEX
	VERYHIGH
	HIGH
	MODERATE
	LOW
	VERY LOW
-	

Andrew Vanderkooi SW 10-39-6 W3		Saskatchewan 🎉		
Date: Ma	ır. 11, 2019	Prepared by: B Sundbo		
Source:	Agency, 2011, AVI Summation (73 B)			



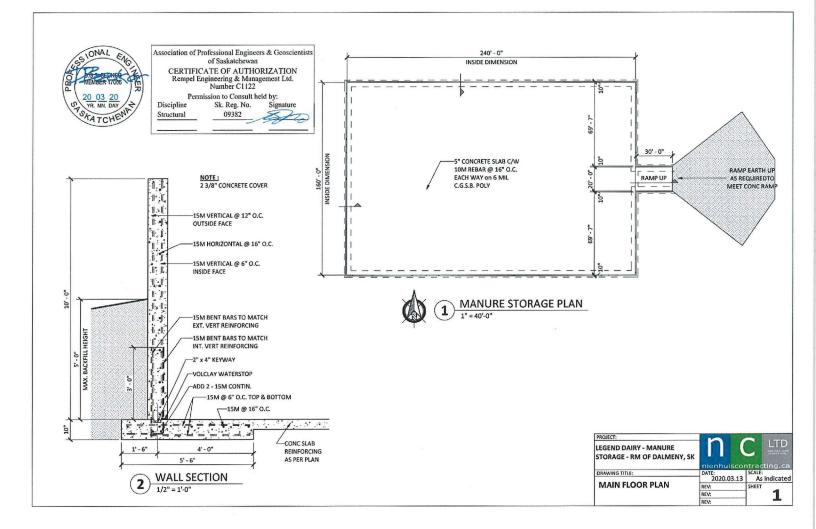
Well locations shown by red dots

Andrew Y SW 10-39	Vanderkooi 9-6 W3	Saskatchewan 🎉		
Date: M	ar. 11, 2019	Prepared by: B Sundbo		
Source:				

Ň

Appendix B

Concrete Manure Storage Tank Drawings



STRUCTURAL GENERAL NOTES : GENERAL SPECIFICATIONS, NATIONAL BUILDING CODE OF CANADA, 2015.

IONAL

CONTRACTOR TO READ STRUCTURAL DRAWINGS IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL AND EQUIPMEN MANUFACTURER'S DRAWINGS.

UNLES NOTED OTHERWISE, TYPICAL DETAILS APPLY THROUGHOUT.

CONTRACTOR TO CONFIRM ALL EXISTING CONDITIONS AND SITE MEASUREMENTS. REPORT DISCREPANCIES TO ENGINEER BEFORE PROCEEDING.

CONFIRM SIZE AND LOCATION OF OPENINGS WITH MECHANICAL AND ELECTRICAL CONTRACTORS. REPORT ANY DISCREPANCIES TO ENGINEER BEFORE PROCEDING. REFER TO EACH DRAWING FOR RELATED NOTES

PRIOR TO REMOVAL OF EXISTING LOAD BEARING ELEMENTS. PROVIDE MEASUREMENTS. REPORT ANY DISCREPANCIES TO REMPEL ENGINEERING AND MANAGEMENT BEFORE PROCEEDING.

THESE DRAWINGS SHOW THE COMPLETED STRUCTURE ONLY. PROVIDE TEMPORARY BRACING AND SHORING FOR THE CONSTRUCTION LOADING CONDITIONS, ENVIRONMENTAL LOADING CONDITIONS AND STABILITY OF THE STRUCTURE DURING CONSTRCTION. CONSTRUCTION LOADS SHALL NOT EXCEED DESIGN LOADS.

Association of Professional Engineers & Geoscientists

of Saskatchewan

CERTIFICATE OF AUTHORIZATION

CAST-IN-PLACE CONCRETE :

1. PERFORM CAST-IN-PLACE CONCRETE WORK IN ACCORDANCE WITH CAN/CSA-A23.1 - "CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION". CEMENT TO CSA AS - "PORTLAND CEMENTS" AND AGGREGATES TO CAN/CSA-

- FOR ALL CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION".
 FOR ALL CONCRETE IN CONTACT WITH SOIL USE SYMBOL (GU)(HS) CEMENT.
- GROUT TO BE PREMIXED NON-SHRINK, NON-METALIC GROUT WITH MINIMUM STRENGTH AT 3 DAYS OF 20 MPa AND AT 28 DAYS OF 40 MPa. 5. CONCRETE TO BE IN ACCORDANCE WITH THE FOLLOWING TABLE:

LOCATION	STRENGTH Fc (MPa)		CLASS OF EXPOSURE		SLUMP (mm)	TOTAL AIR %
WALLS IN CONTACT WITH SOIL	35	HS	A-2	20	50 to 100	4 to 7
GRADE SUPPORTED SLABS	35	HS	A-2	20	50 to 80	4 to 7

MAXIMUM FREE WATER/CEMENT RATION TO CAN/CSA-A23.1. TABLES 7. 8. 9 AND 10 FOR SPECICIED CLASS OF EXPOSURE

FOOTINGS :

- 1. FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING CAPACITY OF 75KPa. 2. UNDERSIDE OF FOOTINGS TO BE MIN OF 300mm INTO SUITABLE
- UNDISTURBED BEARING STRATUM.
- DISTORED BEARING STRATOM. BOTTOM 150mm OF FOOTING EXCAVATION TO BE EXCAVATED BY HAND. DO NOT CAST FOOTINGS ON FROZEN SOIL DO NOT ALLOW THE SOIL BELOW THE FOOTING TO FREEZE AFTER CASTING. 4.

PROOFDOL SUBGRADE TO DELIVER E AND SOFT AREAS. ANY SOFT AREAS TO BE EXCAVATED AND RECOMPACTED. BENEATH THE SLAB PROVIDE MINUMUM 150mm GRAVEL FILL COMPACTED TO 98 PERCENT OF STANDARD PROCTOR DENSITY.

1.

4. WHER MORE THAN ISOmm OF GRANULAR FILL IS REQUIRED, FILL IS TO BE PLACED IN 150mm UFTS, EACH LIFT BEING COMPACTED TO 96 PERCENT OF STANDARD PROCTOR DENSITY BEFORE PLACEMENT OF NEXT LIFT.

PROOFROLL SUBGRADE TO DELINEATE AND SOFT AREAS. ANY SOFT AREAS TO BE

CAST SLAB ON 0.15mm POLYETHYLENE VAPOUR BARRIER 5.

REMOVE ALL ORGANIC AND DELETERIOUS MATERIAL.

- SAN OUT SLAB AS LOCATED ON DRAWINGS TO DEPTH OF 30mm WITHIN 24 HOURS OF CASTING. CAULK WITH JOINT SEALANT.
 DO NOT CAST SLAB ON DESSICATED, FROZEN OR WET SOIL OR BASE.
- DO NOT CAST SLAB ON DESSICATED, FROZEN OR WET SOIL OR BASE.
 DO NOT ALLOW THE SOIL BENEATH THE SLAB TO FREEZE AFTER CASTING.

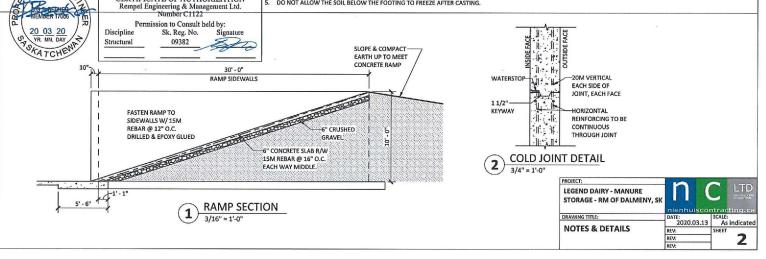
REINFORCING STEEL:

SLAB-ON-GRADE / FOOTING :

1. TO CSA STANDARD G.30.18, GRADE 400, PLAIN FINISH FOR ALL BARS UNLESS NOTED OTHERWISE. MINIMUM SPLICE FOR 10M BARS TO BE 450mm. MINIMUM LAP SPLICE FOR ALL OTHER BARS TO BE 36 BAR DIAMETER OR 700mm, WHICHEVER IS GREATER.

- COLUMN TIES AND BEAM STIRRUPS SHALL CONFORM TO THE CURRENT CSA
 G30.18, GRADE 400.
 WELDED WIRE MESH TO CSA G30.5, SPLICE AS PER TYPICAL DETAIL

- A. OFTAIL CONCETER ERIPORCING STEEL IN ACCORDANCE WITH LATEST EDITION OF ACI 315, "STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", S. SUBMIT SHOP DRAWINGS TO REM FOR REVIEW PRIOR TO FABRICATION.
- 6. PERFORM CONCRETE REINFORCING WORK IN ACCORDANCE WITH CAN/CSA-A23.1 "DESIGN OF CONCRETE STRUCTURES".



Appendix C

Soil Lithology and Soil Lab Results

REPORT FOR PLAN APPROVAL UNDER THE AGRICULTURAL OPERATIONS ACT

Operator: Da	ll-Haven Dairi	es Ltd	Phone: 254-4306			
Address:Box	35, Dalmeny,	Sask	Fax	c :		
Contact: Rus	ontact: Russell Buhler			Postal Code: S0K 1E0		
	SW	10	39	6	W3	344
Location	Quarter	Section	Township	Range	Meridian	RM#

Date: 09/19/97

Description of Project: This application is to expand an existing dairy operation and to enlarge an existing earthen manure storage to accommodate the expanded herd and to reduce frequency of manure application. In 1984 this dairy applied for a permit to expand from 30-60 milking cows. No permit was required at that time. Plan approval #1946 was issued 07/25/97 for 210 a.u. comprised of 123 dairy cows (100 milking), 52 feeder cattle, 30 replacement heifers and 78 calves. The existing earthen manure storage was large enough to accommodate this operation with 2x per year spreading. The applicant wishes to enlarge his storage so manure spreading only has to occur once per year and also wishes to have plan approval in place for additional milking cows and the associated replacements. This application is for 299 a.u. consisting of 185 dairy cows (150 milking), 91 feeder cattle, 45 replacement heifers, 117 calves. Construction has started on the facilities given plan approval in July 1997. Mr. Buhler is uncertain that his feeder cattle herd will increase beyond its current size as the resources on the farm may not be available to handle the additional cattle. No new outdoor facilities are planned as there is sufficient capacity for the animals listed on this application.

Waste Storage Plan: The earthen manure storage (EMS) currently in use will be expanded to provide storage for 400 days. This will be accomplished by extending the EMS to the south and the east. The existing EMS has 2:1 side slopes and the expanded portion will be constructed with 3:1 side slopes. Only the manure from the milking herd and wash water from parlor and milk house goes to the EMS. The manure from the remaining animals is handled as a solid. A volume of 3720 m³ is required for 400 days storage. As a portion of the storage will have 2:1 side slopes the storage based on 3:1 side slopes has a volume of 4,162 m³, which should accommodate storage lost with the reduced sides slopes in a portion of the EMS.

On August 25, 1997 three test holes were dug near the existing EMS to evaluate soil conditions for the EMS expansion. There is a clay borrow pit immediately south of the existing EMS. This borrow pit will be incorporated into the expanded EMS. This borrow pit had water in it at time of soil investigation. The applicant says it is snow melt water and if it is pumped out it would stay dry. At

DALHAVE3.WPD

Page 1

REPORT FOR PLAN APPROVAL UNDER THE AGRICULTURAL OPERATIONS ACT

time of soil investigation the water level in the borrow pit was 1.9' lower than in the EMS. On September 17, the borrow pit had been pumped out and there was a little water in it likely from rains earlier in the week.

Test Hole #1 - east side of borrow pit.

0-6" topsoil

6"-1' layer of coarse brown material pebbles and smaller sizes.

1'- 5.5' Clay till soil Sample #1 5.5!*

5.5'-14' Stained clay till, moist . Some rocks (6"-8") scattered throughout the profile. Sample #2 @10'* and sample #3 @12.5*, End of hole at 14'. Some seepage evident at 10' from a very narrow granular seam. Approximately 1.5 hour after digging there was 6" of water in the hole.

Test Hole #2 - east of existing EMS

0"-6" topsoil

6"-1' layer of coarse material with some rocks present

1'-14' Clay till soil stained and moisture with depth. Sample #4* was taken at 2.5'. A 2" thick coarse layer was encountered at 4'. There was some seepage evident. Rocks were scattered throughout the profile of this hole. Sample #5@8' and sample#6 @14'** Approximately one hour after digging no water had accumulated in the bottom of the hole although some wetness was evident along the sides.

This water was left open to check for water. This hole was left open for a few days and some water had accumulated in it. Water covered about 2/3 of the bottom of the hole. Depth was estimated at $6^{"}$.

Test Hole #3 - was dug midway between previous holes and further east.

0-6" topsoil

6"-1.5' coarse material

1.5'-14' Clay till stained. Sample#7 9'* ,Sample #814'*. This hole was dry with no evidence of moisture .75 hours after digging.

* Sample sent to PFRA for analysis. Results of analysis are attached. The soil results indicate that the soils analyzed are clay till soils with low to medium plasticity. The soils classified as poorly graded sand had low plasticity clay as the fines portion and had over 45% fines.

** Sample sent to ETL for analysis. Results of analysis are attached. Charles Maule says the EC, Cland K+ ion concentration values are still background but are getting close to the limit.

Soil conditions observed in these holes were very similar to conditions observed at barn where concrete cistern was being installed during time of call. Applicant says in trenching done in yard small pockets of coarse material are found but they are localized and can be dug out.

A 2' compacted clay liner is recommended in the new portion of the EMS. EMS construction specifications and liner construction details are attached.

The applicant plans to empty the existing EMS and then construct as much of the new EMS as

REPORT FOR PLAN APPROVAL UNDER THE AGRICULTURAL OPERATIONS ACT

possible before breaching the walls between the existing and the new portion of the storage. A small portion of this old wall area may not have a compacted liner installed as once walls are breached manure will overflow to the new portion.

Well logs for the area are attached. Most wells in the area are 60'-160' deep with water struck at 57'-90'. The static water levels in the well are in the 30'-60' range.

Manure Utilization Plan: There are two manure handling systems for this application; liquid for the milking herd and solid for the dry cows, feeders, replacement heifers and calves. There is 36,680 lbs of manure N available. The plan will utilize 37,130 lbs of N with manure application to 157 acres of cereal silage land per year. The applicant has 580 acres listed for manure application and has other land available as well.

Liquid manure application at a rate of 9532 gals/acre will occur once per year if storage plan is approved. This application will occur late in the fall. The nutrient management plan is based on liquid manure injection as this conserves the most N and requires the largest land base. Equipment to apply the liquid manure is rented and manure will be injected when injection equipment is available for rent. If injection equipment is not available, manure will be surface applied and incorporated (provided ground not frozen). Applicant applies as late in the fall as possible to reduce odor nuisance to Town of Dalmeny.

Solid manure will be spring and fall applied. If applied in spring, incorporation will occur during the seeding operation. Fall application may not be incorporated depending on soil conditions and time of application. Planned application rate is 34 tons/acre. Application of solids was based on incorporation within 24 hours as this method retains the most N and requires the larger land base.

Dead Animal Disposal: Dead animals are hauled to or picked up by Saskatoon Processing as deaths occur.

Site Separation Distances: This site has a separation distance from the Town of Dalmeny of approximately 2400'. Our preferred separation distance for the establishment of a new operation is 1 mile (5280'). Nearest rural residence is approximately 2100' from the site. Our preferred separation distance is 450m (1476'). The Town of Dalmeny has several livestock operations in close proximity. The EMS was completely crusted over with very little odor during the August 25,1997 site visit. On September 17, 1997 the crust was partially submerged likely caused by recent rainfall. Odor from the EMS was still minimal in my estimation.

Public Process: Mr. Buhler understands the importance of applying manure in a manner so as not to cause problems for the town residences. We have no written complaints on file about this operation. Mr. Buhler said when he is applying liquid manure he often works around the clock which shortens the duration of application. If plan approval is obtained for this proposal, the frequency of application will also be reduced from 2x/year to once/ year. The late fall application should also reduce the potential for nuisance concerns.

DALHAVE3,WPD

Page 3

REPORT FOR PLAN APPROVAL UNDER THE AGRICULTURAL OPERATIONS ACT

Additional: If plan approval is secured early enough, Mr. Buhler hopes to proceed with this project this fall.

Recommendations: I recommend this application for plan approval. It should be sent to the Town of Dalmeny as well as the regular referral agencies.

Ken McKnight Regional Specialaist Saskatchewan Agriculture and Food Livestock and Veterinary Operations 3735 Thatcher Avenue Saskatoon, Sask S7K 2H6

DALHAVE3. WPD

306 933 5715

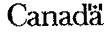
то_А сомра		ANT SAGE	on reali reali míni	ure et mentali stration des P	Front - Do Front - Do Hally Language spoken	Micki Nicki verj	wigh And	A A Poss	Date Superiore	FICHE DE SERVICE 7 Z Z/37 Extension Poule
FAX NC FROM_ NO. OF RE_UZ	McKniyl PAGES 2	LF Dairre			Anglais Preaze call Prieze d'appel Action Action Comments Comments As requiseded		med your call a mpoolé Approval Drah reph Projat de Signature	ion Y rápon ye	Note Note Note	Wants to see you Desire yous you and rotum ret resourcer and forward ret faire suivre and file
3735 T Saskat S7K 2 Attent Dear I Re: So	ion: Ken McK	night s for Dal-H	ayen Dairi	5	Floton - No codo A591- Ken - T Striccle lated - Porivies he taba		fin J/37 ngec now		venty - Mars	t classer t a t a letter dyven t F in the the
The te	st results are s	ummarized	as follows	تہ : 	+ pkpe	This ,	ADED		Tirand	le. H.
TP No	Sample No.	Depth, ft.	Soil Type	w, %	WL-WP-IP	Gravel, %	Sand, %	Silt, %	Ciay, %	
1	1 (field#1)	5.5	CL,till	13,6	28-12-16	3	42	33	22	
1	2 (field#2)	10	CL,till	11.8	26-12-14	3	42	33	22	
1	3 (field#3)	12.5	SM, * fine to coarse	11.3	23-12-11	2	53	28	17	
1							47	33	23	1
2	1 (field#4)	2.5	CICL, till	14.0	30-13-17	2	42			
2 3	1 (field#4) 1 (field#7)	2.5 9		14.0 11.3	30-13-17 25-12-13	2	42 37	30	18	

Note:

w, % - water content

WL - liquid limit WP - plastic limit

IP - plasticity index Clay, % - percentage clay size particles (<0.002 mm) * - Since these samples have over 50% retained on the 0.074 mm sieve, the Unified Soil Classification System requires they be classified as granular soils (SM - silty sand). Due to the high fines content this soil will still act as a fine grained soil. Note that Atterberg limits are performed on material passing the 0.425 mm (#40) sieve. The limits indicate the fine portion of both of these soils are classified as a CL. These soils likely represent a sandy part of the till unit at the site.



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P.01

-2-

Enclosed please also find the gradation curves for the samples tested. If you have any questions, please contact me.

Yours truly,

, ¬

*. .

Hurry Filson

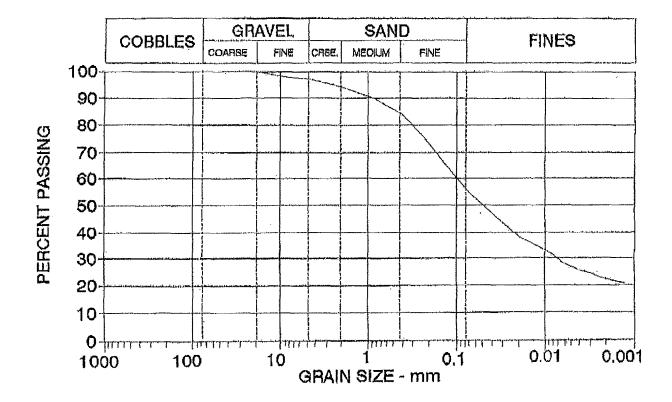
Harvey Filson Senior Geotechnical Engineer

HF/hf

Enclosure

PROJECT:	DAL-HAV	EN DAIE	RIES LTD		SEPT	ŝ
SITE;	SW 10-3	9-6-W3				
HOLE:	TP-1		,			
MPLE:	l (fiel	d# 1)				
DEPTH:	1.67 m	(5.5 ft	:)	_		
D60=	0.100	D3,0=	0.0077	TILL, CL, stiff.	olive brown	
D10=	0.005	C¢≕	0.118			
Cu=	20.243	D15=	0.003	limits (28-12-16	3) 22% day	
hurr Bratt the contract of the		D85=	0.466			

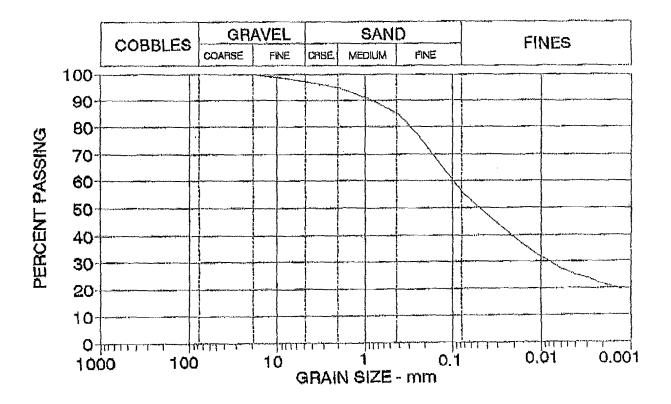
	GRAV	EL		SAN		
	COARSE	FINE	CRSE	MED	FINE	FINES
0	Ó	3	3	10	29	55



3,1997 -

1 I									
PROJECT:	dal-hav	EN DAIF	SEPT 3,1997						
SITE:	SW 10-3	SW 10-39-6-W3							
HOLE:	TP-1								
SAMPLE:	2 (fiel	a# 2)							
DEPTH:	3.04 m	(10 ft)							
D60=	0.099	D30=	0.0084	TILL, CL, hard, olive brown					
D10=	0,005	¢a⊨	0.153	loints oxidized					
Cu=	21.302	D15=	0.002	Ilmits (26-12-14) 22% doy					
		D85=	0.434						

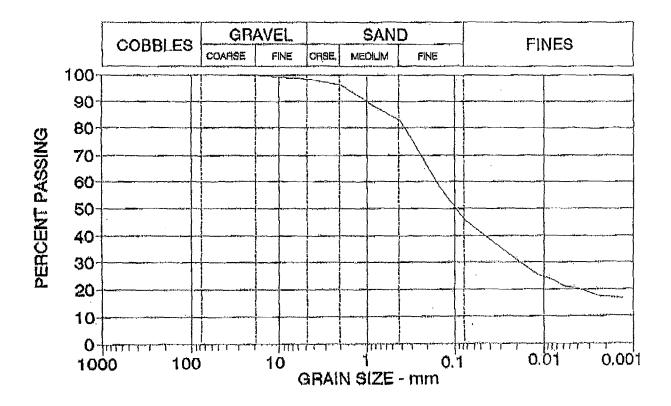
	GRAV	el		SAN	D	
	COARSE	FINE	CRSE	MED	FINE	FINES
0	0	3	2	10	30	55



1				
PROJECT:	DAL-HAV	EN DAIT	RIES LTD	SEPT 3,1997
SITE:	SW 10-3	9-6-W3		
HOLE:	TP-1			
SAMPLE:	3 (fiel	d# 3)		
DEPTH:	3.81 m	(12.5 i	Et)	-
D60≖	0.164	D30≓	0.0189	TILL, CL, hard, olive brown
D10=	0,003	Cc=	0,662	joints oxidized
Cum	50.336	D15=	0.002	limits (23-12-11) 17% day
		D85=	0.559	

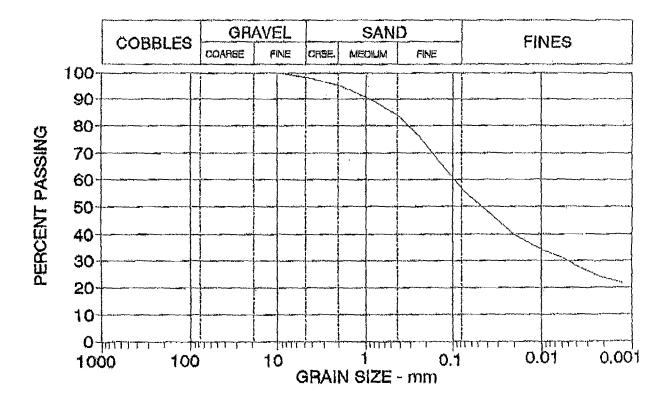
`

	GRAV	EL		SAN		
COBBLES	COARSE	FINE	CRSE	MED	FINE	FINES
0	0	2	2	13	38	45



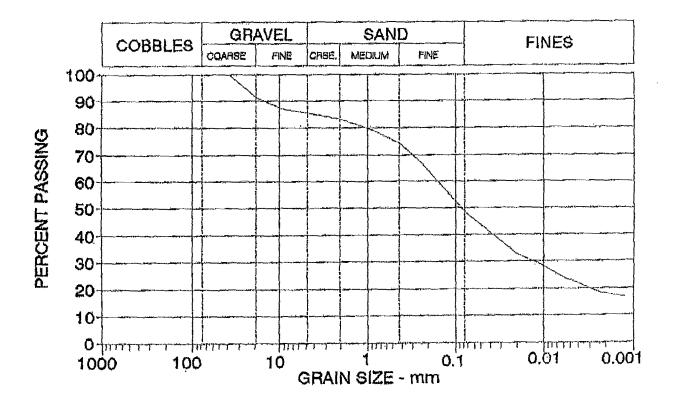
t							
PROJECT:	dal-hav	EN DAII	RIES LTD			SEPT	3,19
SITE:	SW 10-3	9-6-W3					
HOLE:	TP-2						
SAMPLE:	1 (fiel	d# 4)					
Depth:	.76 m (2.5 ft)					
D60=	0.098	D30=	0.0053	TILL, CICL,	stiff,	oliva brown	
D10=	0.005	Co⇔	0.052				
Cu=	17,800	D1.5≓	0.003	limits (30-	13-17) 23% clay	
		D85=	0.499				

	GRAV	EL		SAN	0	
COBBLES	COARSE	FINE	CRSE	MED	FINE	FINES
0	0	2	3	11	28	56



PROJECT:	DAL-HAV	en daif	RIES LID	SEPT 3,1997					
SITE;	SW 10-3	9~6-W3							
HOLE:	TP-3	ቢ <mark>ዮ</mark> ~3							
SAMPLE:	1 (fiel	1 (field# 7)							
DEPTH:	2.74 m	(9 ft)							
D60=	0,163	D30=	0.0133	TILL, CL, hard, olive brown					
D10=	0.004	CQ=	0.293	numeruos (oints oxidized					
Cu=	44.418	D15=	0.002	limits (25-12-13) 18% day					
		D85=	4.211						

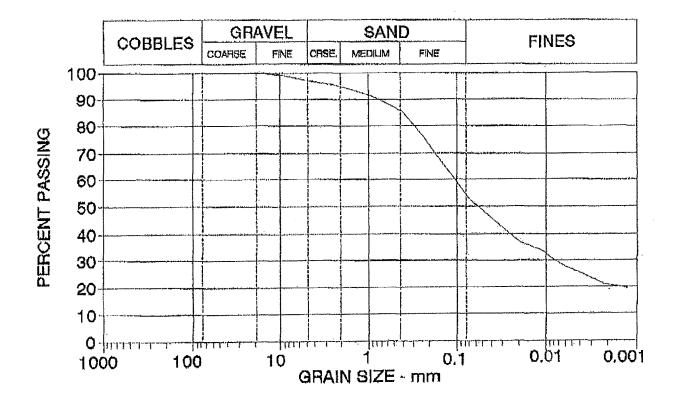
	GRAV	EL	· · · · · · · · · · · · · · · · · · ·	SANI		
COBBLES	COARSE	FINE	CRSE	MED	FINE	FINES
0	9	6	2	9	26	48



'PROJECT: SITE: HOLE:	DAL-HAV SW 10-3 TP-3		IES LTD	SEPT 3,1997
AMPLE: DEPTH:	2 (fiel 4.27 m	d∦ 8) (14 ft)		
D60=	0.108	D30=	0.0083	TILL, CL, hard, allve brown
D10=	0.005	Ċc=	0.141	numeruos joints axidized
Cu=	23.807	D15=	0.002	limits (25-12-13) 21% doy
		D85=	0.417	

	GRAV	el		SAN	D			
COBBLES	COARSE	FINE	CRSE	MED	FINE	FINES		
Q	0	3	2	10	32	53		

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Appendix D

Well Records



19-Mar-2020 WSaskWWDR01

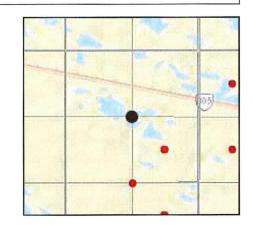
(c) Water Security Agency

Well Name:	DALMENY	WWDR #: 112842
		Well Location
Land Location	-09-039 -06 -W3	Location of Well (in Quarter)
LSD	00	1 ft from N/S Boundary S
Reserve		1 ft from E/W Boundary W
RM:	344	
NTS Map:	73B07	Major Basin: 07
Elevation (ft)	1700	SubBasin: 29
Aquifer		

	Well Inform	nation					
				Well Ca	isings		
Driller	ELK POINT DRILLING CORP	Lengt		Btm (ft)	Dia (in)	Material	
Completion Date	1985.05.11		136 3	136 0	8 10	Plastic Steel	
Hole #	PW1		0	0	0	Steel	
Install Method	Drilled						
Borehole Depth (ft)	170	Length (ft) B	ottom (ft)	Well Sc Dia (in)	reens Slot (in)	Material	
Bit Dia (in)	11	19 Longari (19) D	155		35	Stainless Steel	
Water Level	42	0	0	0	0		
Flowing Head	0	0	0	0	0		
Water Use	Irrigation			Pump	Test		
Well Use	Water Test Hole	Dra	w Down		0	ft	
Completion Method	Well Screen And Gravel	Dur	ation		24	hrs	
	Pack	Pun	nping Rate	Э	176		
E-Log	Yes	Ten	perature		0	deg. F	
		Rec	. Pumping	g Rate	0	igpm	

Litho	loav	List
	- 35	

Depth (ft):	Material	Colour	Description
4	Sand	Brown	Organics
10	Sand	Brown	Silty
35	Clay	Grey	Sandy
80	Clay	Grey	Silty
84	Sand	Grey	Clayey
93	Sand	Grey	Silty
100	Clay	Unknown	Sandy
111	Sand	Unknown	Silty
112	Silt	Unknown	Unknown
116	Sand	Unknown	Unknown
119	Silt	Unknown	Clayey
126	Sand	Unknown	Clayey
134	Clay	Unknown	Silty
158	Sand	Unknown	Unknown



Page 2 of 2



19-Mar-2020 WSaskWWDR01 (c) Water Security Agency

170 Clay

Unknown

Silty



95

108

110

115

117

128

135

162

Clay

Sand

Clay

Sand

Clay

Sand

Sand

Till

Unknown

Unknown

Unknown

Unknown

Unknown

Unknown

Unknown

Unknown

Page 1 of 2

19-Mar-2020 WSaskWWDR01 (c) Water Security Agency

Well Name: D	ALMENY					W	NDR #:	115864	
~		Well Lo	cation						
Land Location	-09-039 -06 -W3			Loca	ation of We	ll (in Quarter)		
LSD	00			(0 ft from N	I/S Boundary			
Reserve				(0 ft from E	W Boundary	/		
RM:	344								
NTS Map:	73B07			Major I	Basin:	07			
Elevation (ft)	1706			SubBa	isin:	29			
Aquifer									
		Well Informa	ation						
					Well C	Casings			
Driller	HI-RATE DRILLIN	G (1985) LTD	Leng	gth (ft)	Btm (ft)	Dia (in)			
Completion Date	1967.11.10			0 0	0	4			
Hole #	004			0	0	0			
Install Method	Drilled								
Borehole Depth (f				D 11		Screens	N 4 - 4 7 - 1		
Bit Dia (in)	0		Length (ft) 0	Bottom (ft (Material		
Water Level	0		0	(
Flowing Head	0		0	(0 0	0			
Water Use	0 Municipal				Pum	o Test			
Well Use	Observation		Dr	aw Down	run) ft		
The second s				ration) hrs		
Completion Metho			Pu	mping Ra	ite		0 igpm		
E-Log	Yes			mperature			0 deg.F		
			Re	c. Pumpir	ng Rate		0 igpm		
		Lithology L	ist					-	
Depth (ft):	Material	Colour	Des	scription					
4	,	Unknown		dized		The second second		1 March	
23		Unknown		dized known		-	-		bas!
70 78		Grey Unknown		known Ivel Strea	aks	1.01		-	P
88		Unknown	Silt						
92		Unknown	Un	known				•	182.00

Unknown

Unknown

Unknown

Unknown

Unknown Unknown

Unknown

Unknown

Water Security Water Well Driller's Report

19-Mar-2020 WSaskWWDR01 (c) Water Security Agency

174 Till

Unknown

.

Unknown



Water Security Water Well Driller's Report

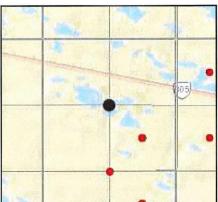
Page 1 of 1

19-Mar-2020 WSaskWWDR01 (c) Water Security Agency

Well Name: DALMENY WWDR #: 115865 Well Location Land Location -09-039 -06 -W3 Location of Well (in Quarter) LSD 00 0 ft from N/S Boundary 0 ft from E/W Boundary Reserve RM: 344 Major Basin: 07 NTS Map: 73B07 SubBasin: 29 Elevation (ft) 1706 Aquifer Well Information Well Casings Length (ft) Btm (ft) Dia (in) Material Driller HI-RATE DRILLING (1985) LTD 0 0 0 **Completion Date** 1967.11.16 0 0 0

Hole #	005			0		0		0	
Install Method	Drilled					Well Sc	roons		
Borehole Depth (ft)	168	Length ((ft) E	Bottom (f	ït) [Dia (in)	Slot (ir	n)	Material
Bit Dia (in)	0		0		0	0		0	
Water Level	0		0		0	0		0	
Flowing Head	0		0		0	0		0	
Water Use	Municipal					Pump	Test		,
Well Use	Withdrawal		Dra	w Down				0	ft
Completion Method	Unknown		Dur	ation				0	hrs
			Pur	nping Ra	ate			0	igpm
E-Log	Yes		Ter	nperatur	e			0	deg. F
			Red	c. Pumpi	ng R	ate		0	igpm

		Lithology List		
Depth (ft):	Material	Colour	Description	
4	Clay	Unknown	Oxidized	
30	Till	Unknown	Oxidized	and the second second
80	Till	Grey	Unknown	
92	Sand	Unknown	Unknown	
104	Clay	Unknown	Unknown	Read Charles
111	Sand	Unknown	Clay Streaks	
126	Sand	Unknown	Unknown	and the second
130	Clay	Unknown	Unknown	
132	Till	Unknown	Unknown	1.657
155	Sand	Unknown	Unknown	
168	Till	Grey	Unknown	





0'2

39-06-3

19-Mar-2020 WSaskWWDR01 (c) Water Security Agency

Well Name: B	ARTSCH					W	WDR #: 048644	
		Well Lo	cation					-
Land Location NE-03-039 -06 -W3				Loc	ation of We	ell (in Quarter)		
LSD 00				80	0 ft from N	N/S Boundary	Ν	
Reserve				120	0 ft from E	E/W Boundary	Ε	
RM:								
NTS Map:	73B00			Major	Basin:	06		
Elevation (ft)	1725			SubBa	asin:	30		
Aquifer								
		Well Informa	tion					
					Well (Casings		
Driller	MITCHELL DRILLI	NG (1979) LTD		Length (ft)	Btm (ft)	Dia (in)	Material	
Completion Date	1976.12.16	()		0	112	4.5	Black Iron	
Hole #	001			0	0 0	0		
Install Method	Drilled			Ŭ	0	0		
Borehole Depth (fl						Screens		
			Length	n (ft) Bottom (f 10 11			Material Stainless Steel	
Bit Dia (in)	6.2				0 0		Stamless Steel	
Water Level	38				0 0			
Flowing Head	0				-			
Water Use	Domestic					p Test		
Well Use	Withdrawal			Draw Down Duration			5 ft 4 hrs	
Completion Metho	d Well Screen			Pumping Ra	ate		igpm	
E-Log	SCANNED			Temperatur			2 deg. F	
				Rec. Pumpi	ng Rate	1:	2 igpm	
		Lithology Li	ist				Painten	
Depth (ft):	Material	Colour		Description			and the second	+
20	Till	Brown		Unknown		1 S.	ALL AND A	
56 75	Till	Grey		Unknown				1
75 138	Clay Sand	Grey Unknown		Unknown Till Streaks				



19-Mar-2020 WSaskWWDR01 (c) Water Security Agency

Et it io
ENNS

WWDR #: 077166

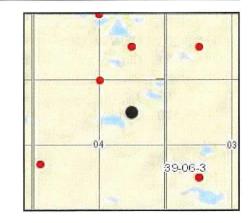
	Well Lo	cation						
Land Location	NE-04-039 -06 -W3	Location of Well (in Quarter)						
LSD	00 0 ft from N/S Boundary							
Reserve	0 ft from E/W Boundary							
RM:	404							
NTS Map:	TS Map: 73B07 Major Basin: 07							
Elevation (ft) 1725 SubBasin: 29								
Aquifer								
	Well Informa	ation						
				Well Ca	sings			
Driller	MITCHELL DRILLING (1979) LTD	Length (Btm (ft)	Dia (in)	Material		
Completion Date	1982.07.24	11	10 0	110 0	5 0	Plastic		
Hole #	0000001		0	0	0			
Install Method	Drilled							
Borehole Depth (f	t) 130	Longth (ft) Dott	om (ft)	Well Sc		Matarial		
Bit Dia (in)	6.2	Length (ft) Bott 10	120	Dia (in) 4	Slot (in) 20	Material Stainless Steel		

Water Level	35	0	0	0	0	
Flowing Head	0	0	0	0	0	
Water Use	Domestic			Pump Test		
Well Use	Withdrawal	Draw D	own		0	ft
Completion Method	Well Screen	Duration	n		0	hrs
		Pumpin	g Rate		0	igpm
E-Log	SCANNED	Temper	ature		0	deg. F
		Rec. Pu	Imping Ra	ate	0	igpm

Depth (ft): Material 43 Till 83 Till 130 Sand

Lithology List

Colour Brown Grey Unknown Description **Gravel Streaks** Boulders Fine-medium



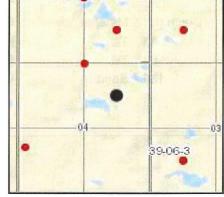


19-Mar-2020 WSaskWWDR01

(c) Wate - 0 urity Ac

							(c) W	later Security Agency
Well Name: E	RMS					W	VDR #: 04	48646
		Well Lo	cation					
Land Location	NE-04-039 -06 -W3			Locat	ion of We	I (in Quarter)	(
LSD	00			450	ft from N	/S Boundary	S	
Reserve				800	ft from E	/W Boundary	E	
RM:								
NTS Map:	73B00			Major B	asin:	06		
Elevation (ft)	1700			SubBas	in:	30		
Aquifer								
		Well Informa	ation					
					Well C	asings		
Driller	MITCHELL DRILL	ING (1979) LTD	Leng	th (ft)	Btm (ft)	Dia (in)	Material	
Completion Date	1976.10.28			0 0	100 0	4.5 0	Black Iro	n
Hole #	001			0	0	0		
Install Method	Drilled							
Borehole Depth (f	t) 120		Length (ft) E	attom (ft)	Well S Dia (in)		Material	
Bit Dia (in)	6.2		12 Length (It)	112	(۱۱۱) 4	20	Plastic	
Water Level	42		0	0	0	0		
Flowing Head	0		0	0	0	0		
Water Use	Domestic				Pump	Test		
Well Use	Withdrawal		Dra	w Down		28	} ft	
Completion Metho	d Well Screen			ation			hrs	
E-Log	SCANNED			nping Rate	e		igpm	
				nperature c. Pumping	Rate		2 deg. F) igpm	
		Lithology L	ist					
Depth (ft):	Material	Colour		cription				of sec
21	Clay	Brown	Stor	-				1000
30	Silt	Brown		nown				-
02	Till	Grov	Ink	nown			A POINT A	

- 92 Till 120 Sand
- Grey Unknown
- Unknown **Clay Streaks**





Silt

Silt

Sand

Sand

Sand

Sand

Clay

Till

Grey

Grey

Grey

Grey

Brown

Unknown

Unknown

Unknown

95

100

115

118

126

134

157

160

Page 1 of 2

39-06-3

.

19-Mar-2020 WSaskWWDR01 V

							(c	:) Water Secu	irity Agenc
Well Name: E	ENNS	-e.				W	VDR #:	083997	
		Well Lo	ocation						
Land Location	NE-04-039 -06 -W3			Locat	ion of Well	l (in Quarter)			
LSD	15			0	ft from N/	/S Boundary			
Reserve				0	ft from E/	W Boundary			
RM:	344								
NTS Map:	73B00			Major B		06			
Elevation (ft)	1712			SubBas	in:	30			
Aquifer									
		Well Inform	ation						
					Well Ca	-			
Driller	ELK POINT DRILL	ING CORP	Leng	th (ft) 139	Btm (ft) 136	Dia (in) 8.6	Materia P.V.C.	al	
Completion Date	1985.05.31			0	0	0.0	F.V.C.		
Hole #	0000001			0	0	0			
Install Method					Well So				
Borehole Depth (ft) 168		Length (ft)	Bottom (ft)	Dia (in)	Slot (in)	Material		
Bit Dia (in)	4.8		19	155	8.6	30	Stainles	s Steel	
Water Level	44		0	0	0	0			
Flowing Head	0		0	0	0	0			
Water Use	Domestic				Pump	Test			
Well Use	Withdrawal			aw Down		69) ft		
Completion Methe	od			ration		2	hrs		
E-Log	SCANNED			mping Rate	•) igpm) deg. F		
				c. Pumping	g Rate) igpm		
		Lithology l	_ist					and an and a second	
Depth (ft):	: Material	Colour	Des	cription		1,00		-	05
6		Unknown		nown					
28 30		Brown	Stor	ney nown				•	1
30		Grey Unknown		nown)	
79		Grey		nown			i sarri	Service and	
93	8 Sand	Unknown	Fine	9			No and		

Unknown

Fine

Clean

Unknown

Unknown

Unknown

Clay Streaks

Medium-coarse



19-Mar-2020 WSaskWWDR01 (c) Water Security Agency

168 Till

Grey

Unknown



Reserve		0 ft from	E/W Boundary
RM:	344		
NTS Map:	73B07	Major Basin:	07
Elevation (ft)	1706	SubBasin:	29
Aquifer			

Well Casings

0

0

0

Dia (in)

0

0

0

Material

Btm (ft)

0

0

0

Well Information Length (ft) Driller HI-RATE DRILLING (1985) LTD **Completion Date** 1967.11.03 Hole # 002 Drilled Install Method

Install Method	Drilled	Well Screens					
Borehole Depth (ft)	180	Length (ft)	Bottom (f	ft)	Dia (in)	Slot (in)	Material
Bit Dia (in)	0	0	t.	0	0	0	
Water Level	0	0		0	0	0	
Flowing Head	0	0		0	0	0	
Water Use	Municipal				Pump To	est	
Well Use	Water Test Hole	D	raw Down	1		0	ft
Completion Method	Unknown	D	uration			0	hrs
		P	umping Ra	ate		0	igpm
E-Log	Yes	Τe	emperatur	re		0	deg. F
		R	ec. Pumpi	ing R	Rate	0	igpm

		Lithology List		
Depth (ft):	Material	Colour	Description	a Marca golan .
16	Till	Unknown	Oxidized	
18	Gravel	Unknown	Oxidized	
30	Till	Unknown	Oxidized	
96	Till	Grey	Boulders	
109	Sand	Unknown	Unknown	
112	Clay	Unknown	Unknown	10 Dalmeny
123	Sand	Unknown	Medium-coarse	
125	Clay	Unknown	Unknown	A REAL PROPERTY AND A
138	Sand	Unknown	Unknown	Color and Colorest
148	Clay	Unknown	Unknown	
172	Sand	Unknown	Unknown	
180	Till	Unknown	Unknown	

Page 1 of 1

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72 Clay

102 Clay

160 Clay

Sand & Gravel

145

Unknown

Unknown

Unknown

Unknown

Page 1 of 1

19-Mar-2020 WSaskWWDR01 (c) Water Security Agency

Well Name: D	ALMENY					WV	VDR #: 03	32198
	Well Location							
Land Location	NE-10-039 -06 -W3		Location of Well (in Quarter)					
LSD	00			0	ft from N	/S Boundary		
Reserve			0 ft from E/W Boundary					
RM:								
NTS Map:	73B00			Major E	lasin:	06		
Elevation (ft)	1725			SubBas	sin:	30		
Aquifer								
		Well Informat	lion					~
					Well C	asings		
Driller	INTERNATIONAL	WATER SUPPL	y Le	ength (ft)	Btm (ft)	Dia (in)	Material	
Completion Date	LTD 1961.10.02			0	0	4	Steel	
Hole #	1001110102			0	0	0		
Install Method	Drilled			Ū	-			
Borehole Depth (creens		
Bit Dia (in)	0			t) Bottom (ft) 31 143			Material Other	
Water Level	60			0 0			other	
Flowing Head	0			0 0	0	0		
Water Use	Municipal				Pumr	Test		
Well Use	Withdrawal			Draw Down	rum	C) ft	
	od Perforated Casing			Duration		3		
×	-	ł		Pumping Rat) igpm	
E-Log	No			Temperature) deg. F	
				Rec. Pumpin	g Rate	t) igpm	
		Lithology Li	st				4	
Depth (ft):	Material	Colour	D	Description			Matur	P ritae 0.
6		Unknown		loulders			ास, आत	1
22		Yellow		Inknown				
27 68		Brown Grey		loulders loulders				-

Stoney

Hard

Stoney

Boulders

05

Dalmeny

10

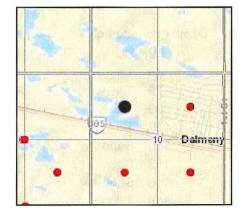
	Water Security V Agency 🖉	Water W	ell Driller	's Repo	ort	(0	Page 1 of 1 19-Mar-2020 WSaskWWDR01 c) Water Security Agency
Well Name: SC	CHULTZ				WV	VDR #:	118601
	Well Lo	cation					
Land Location	NW-10-039 -06 -W3		Locat	ion of Well	(in Quarter)		
LSD (00		1200	ft from N/	S Boundary	Ν	
Reserve			100	ft from E/	W Boundary	W	
RM:	344						
NTS Map: 7	73B07		Major B	asin:	07		
Elevation (ft)	1716		SubBas	in:	29		
Aquifer							
	Well Informa	ition					
				Well Ca	asings		
Driller	MITCHELL DRILLING (1979) LTD	Le	ngth (ft)	Btm (ft)	Dia (in)	Materia	al
Completion Date	2002.04.20		117 0	115 0	5 0	P.V.C.	
Hole #	001		0	0	0		
Install Method	Drilled						
Borehole Depth (ft)) 140	Lenath (ft) Bottom (ft)	Well So Dia (in)	creens Slot (in)	Material	
Bit Dia (in)	5.1	2		5	20	P.V.C.	
Water Level	55		0 0	0	0		
Flowing Head	0		0 0	0	0		
Water Use	Domestic			Pump	Test		
Well Use	Withdrawal	Γ	Draw Down		48	ft	
Completion Method	d Well Screen And Gravel		Duration			hrs	
E-Log	Pack Yes	٦	Pumping Rate Temperature Rec. Pumping		44	igpm deg. F igpm	

Depth (ft): Material 26 Till 112 Till 135 Sand 140 Till

Lithology List

Colour Brown Grey Unknown Grey

Description Cobblestones Cobblestones Fine-medium Firm





19-Mar-2020 WSaskWWDR01 (c) Water Security Agency

Well Name: D	DALMENY				W	NDR #: 115866	
	Well L	ocation					
Land Location	SE-09-039 -06 -W3		Locat	ion of Well	(in Quarter)		
LSD	00		0	ft from N/	S Boundary		
Reserve			0	ft from E/	W Boundary		
RM:	344						
NTS Map:	73B07		Major B	asin:	07		
Elevation (ft)	1706		SubBas	in: 2	29		
Aquifer				1			
Well Information							
				Well Ca			
Driller	HI-RATE DRILLING (1985) LTD	Len	gth (ft)	Btm (ft)	Dia (in)	Material	
Completion Date	1967.11.19		0 0	0 0	0		
Hole #	0000006		0	0	0		
Install Method	Drilled						
Borehole Depth (ft) 169	Length (ft)	Bottom (ft)	Well So Dia (in)	slot (in)	Material	
Bit Dia (in)	0	0	0	0	0		
Water Level	0	0	0	0	0		
Flowing Head	0	0	0	0	0		
Water Use	Municipal			Pump	Test		
Well Use	Observation	Di	aw Down		() ft	
Completion Meth	od Unknown	Duration 0 hrs					
E-Log	Yes	Pumping Rate 0 igpm Temperature 0 deg. F					
			ec. Pumping	g Rate) igpm	
	Lithology	liot					
	Littology	LISU					

Donth (ft):	Material
Depth (ft):	Material
2	Silt
38	Till
79	Till
90	Till
99	Till
110	Sand
112	Clay
116	Sand
118	Till
123	Sand
128	Till
158	Sand
169	Till

Colour

Grey

Grey

Grey

Unknown

Unknown

Unknown

Unknown

Unknown

Unknown

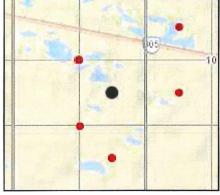
Unknown

Unknown

Unknown

Grey

Description Oxidized Oxidized Rocky Soft Rocky Unknown Unknown Unknown Unknown Unknown Unknown Unknown Unknown





Well Name: DALMENY

Water Security Water Well Driller's Report

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19-Mar-2020 WSaskWWDR01 (c) Water Security Agency

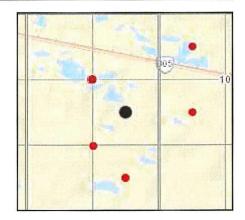
WWDR #: 032197

		Well Location
Land Location	SE-09-039 -06 -W3	Location of Well (in Quarter)
LSD	00	0 ft from N/S Boundary
Reserve		0 ft from E/W Boundary
RM:		
NTS Map:	73B00	Major Basin: 07
Elevation (ft)	1725	SubBasin: 29
Aquifer	Glac	

in .	Well Inform	nation					
				Well Ca	sings		
Driller	HALL DRILLING	Length (ft)		Btm (ft)	Dia (in)	Material	
Completion Date	1968.09.01	0		149	6	Steel	
Hole #	1000.00.01	0		0 0	0 0		
	5 W 1	0		0	0		
Install Method	Drilled			Well Scr	eens		
Borehole Depth (ft)	159	Length (ft) Botton	n (ft)	Dia (in)	Slot (in)	Material	
Bit Dia (in)	6	10	159	6	35	Unknown	
Water Level	48	0	0	0	0		
Flowing Head	0	0	0	0	0		
Water Use	Municipal			Pump ⁻	Test		
Well Use	Withdrawal	Draw Do	wn		39	ft	
Completion Method	Well Screen And Gravel	Duration			10	hrs	
	Pack	Pumping	Rate	•	62	igpm	
E-Log	No	Tempera	iture		42	deg. F	
		Rec. Pur	nping	Rate	30	igpm	

Lithology List

Depth (ft):	Material	Colour	Description
4	Sandy Clay	Unknown	Oxidized
24	Till	Unknown	Oxidized
70	Till	Grey	Unknown
78	Till	Grey	Gravelly
80	Boulders	Unknown	Unknown
89	Till	Grey	Unknown
92	Sand	Unknown	Fine
95	Clay	Grey	Unknown
108	Sand	Unknown	Fine
110	Clay	Unknown	Unknown
115	Sand	Unknown	Fine
116	Clay	Grey	Unknown
128	Sand	Unknown	Fine
135	Till	Grey	Unknown



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19-Mar-2020 WSaskWWDR01 (c) Water Security Agency

160 Sand Till 161

Unknown Grey

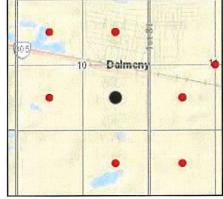
Fine-medium Unknown



19-Mar-2020 WSaskWWDR01 (c) Water Security Agency

							., , , ,
Well Name: B	OEHR					WV	VDR #: 056565
		Well Loc	ation				
Land Location	SE-10-039 -06 -W3			Locati	on of We	ll (in Quarter)	
LSD	00			0	ft from N	/S Boundary	
Reserve				0	ft from E	/W Boundary	
RM:							
NTS Map:	73B00			Major Ba	asin:	06	
Elevation (ft)	1700			SubBasi	n:	30	
Aquifer							
		Well Informat	ion				
					Well C	asings	
Driller	DAVIES WATER W	/ELL DRILLING	Lengt		Btm (ft)	Dia (in)	Material
Completion Date	1978.09.13			120 0	120 0	5 0	Black Iron
Hole #	001			0	0	0	
Install Method	Drilled						
Borehole Depth (f	ft) 130		Length (ft) B	ottom (ft)	Well S Dia (in)	creens Slot (in)	Material
Bit Dia (in)	6.2		10 Longth (10) L	130	3		Stainless Steel
Water Level	40		0	0	0	-	
Flowing Head	0		0	0	0	0	
Water Use	Domestic				Pum	o Test	
Well Use	Withdrawal		Dra	w Down		80	ft
Completion Metho	od Well Screen			ation		8	
E-Log	No			nping Rate nperature	9) igpm) deg. F
				. Pumping	Rate		igpm
	у.	Lithology Li	st				
Depth (ft):	Material	Colour	Des	cription		. data se	The state of the s
1		Unknown		nown		005	
						(Provide States)	Stand in the second stand in the second stand in the second stand in the second stand stand stand stand stand st

- 40 Clay 110 Clay 130 Sand & Gravel
- Yellow Grey Unknown
- Unknown Boulders Coarse





19-Mar-2020 WSaskWWDR01

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Well Name:	REDDEKOPP				WWD)R #:	066390
		Well Location	1				
Land Location	SE-10-039 -06 -W3		Loca	ation of Well (i	n Quarter)		
LSD	00		() ft from N/S	Boundary		
Reserve			() ft from E/W	Boundary		
RM:							
NTS Map:	73B00		Major	Basin: 06	3		
Elevation (ft)	1725		SubBa	sin: 30)		
Aquifer					8		
	W	Vell Information					
				Well Cas	ings		
Driller	PRAIRIE WATER LT	כ	Length (ft)	Btm (ft)	Dia (in) 🛛 🕅	Materia	l

Driller	PRAIRIE WATER LTD	Le	ength (ft)	Btm (ft)	Dia (in)	Material
			62	62	36	Porous Concrete
Completion Date	1981.05.27		0	0	0	
Hole #	001		0	0	0	
Install Method	Bored			Well Scr		
Borehole Depth (ft)	62					Madaziat
		Length (1	ft) Bottom (ft)	Dia (in)	Slot (in)	Material
Bit Dia (in)	36		0 0	0	0	
Water Level	0		0 0	0	0	
Flowing Head	0		0 0	0	0	,
Water Use	Domestic			Pump 7	Fest	16
Well Use	Withdrawal		Draw Down		0	ft
Completion Method			Duration		0	hrs
			Pumping Rate)	0	igpm
E-Log	No		Temperature			deg. F
			Rec. Pumping	Rate	0	igpm

		Lithology List		
Depth (ft):	Material	Colour	Description	Deterter attended
1	Fill	Unknown	Unknown	105
2	Topsoil	Unknown	Unknown	10 Dalmeny
5	Clay	Brown	Unknown	ALL
7	Sand	Brown	Unknown	1
37	Clay	Brown	Unknown	
57	Clay	Grey	Unknown	
62	Sand	Brown	Unknown	

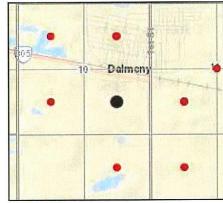


19-Mar-2020 WSaskWWDR01 (c) Water Security Agency

Well Name: R	EDEKOPP				WW	/DR #: 0536	316
	Well Lo	cation					
Land Location	SE-10-039 -06 -W3		Locati	ion of Well	(in Quarter)		
LSD	00		200	ft from N/S	S Boundary	S	
Reserve			300	ft from E/\	N Boundary	W	
RM:							
NTS Map:	73B00		Major Ba	asin: ()6		
Elevation (ft)	1725		SubBas	in: 3	30		
Aquifer							
	Well Informa	ation					
Well Casings							
Driller	MITCHELL DRILLING (1979) LTD	Leng	th (ft)	Btm (ft)	Dia (in)	Material	
Completion Date	1977.05.06		65 0	0 0	4.5 0	Black Iron	
Hole #	001		0	0	0		
Install Method	Drilled						
Borehole Depth (i	ft) 100	Length (ft)	Bottom (ft)	Well Sc Dia (in)	reens Slot (in)	Material	
Bit Dia (in)	6.2	5	75	(۱۱۱) 4	20	Material	
Water Level	28	0	0	0	0		
Flowing Head	0	0	0	0	0		
Water Use	Domestic			Pump	Test		
Well Use	Withdrawal	Dra	aw Down			ft	
Completion Meth		Du	ration		12	hrs	
E-Log	No		mping Rate	e	18		
	NU		mperature c. Pumping	n Rate		deg. F igpm	
		ite	o. r umping	g raig	10	.95.11	
	Lithology L	.ist			20 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -		of the second
					and the second se	William Strate and a strate of the strate of	I LIT I BUT F. B. Barning W. Cold

Depth (ft): Material 18 Till Till 69 100 Sand

Colour Brown Grey Unknown Description Unknown Stoney Clay Streaks





19-Mar-2020 WSaskWWDR01

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Well Name: D	EL-HAVEN DAIRIES				WV	VDR #: 091794	
	Well Lo	ocation					
Land Location	SW-10-039 -06 -W3		Loca	ation of Well	(in Quarter)		
LSD	00	900 ft from N/S Boundary S					
Reserve		900 ft from E/W Boundary W					
RM:							
NTS Map:	73B00		Major	Basin: (07		
Elevation (ft) 1725 SubBasin: 29							
Aquifer							
	Well Inform	ation					
Well Casings							
Driller	MITCHELL DRILLING (1979) LT	5 L	ength (ft)	Btm (ft)	Dia (in)	Material	
Completion Date	1988.09.28		113 0	113 0	5 0	P.V.C.	
Hole #	1		0	0	0		
Install Method	Drilled						
Borehole Depth (f	t) 140	Longth (t) Bottom (ft	Well So) Dia (in)	creens Slot (in)	Material	
Bit Dia (in)	4.7	Length (5 11		25 SIGE (III)	Stainless Steel	
Water Level	36		0	0 0	0		
Flowing Head	0		0 0	0 C	0		
Water Use	Domestic			Pump	Test		
Well Use	Withdrawal		Draw Down		28	3 ft	
Completion Metho	d Well Screen And Gravel		Duration		2	2 hrs	
E-Log	Pack SCANNED		Pumping Ra			2 igpm	
L 109	oo, aate		Temperature	9	41	deg. F	

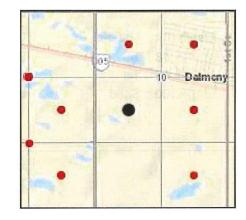
Lithology List

Depth (ft): Material 28 Till 95 Till 140 Sand

Colour

Brown Grey Unknown Description Unknown Unknown Fine-medium

Rec. Pumping Rate



15 igpm

Appendix E

Application

Saskatchewan Agriculture

Agricultural Operations Section

3085 Albert St. Regina SK S4S 0B1 (306) 787-6591

Application for Approval of Plans under the Intensive Livestock Provisions of The Agricultural Operations Act.

Applicant	Legend Dair	y	1/10 - Page - Marcola - Marcola - Marcola					
Address	Box 599							
City/Town	Dalmeny				Postal Cod	de SOK 1E	0	
Contact Person	Andrew Va	anderkooi					and the second	
Phone No.			(Busine	ss)			(Home)	
		-	(Fax)	(306) 716-0104		(Cellular)	
Location of ILO		SW	10	39	06	3	344	
7	LSD	Quarter	Section	Township	Range	Meridian	RM#	
Type of ILO	Dairy				No	o. of Animal	Units 260	
Proposal is: A	ddition to exi	sting						hand) a south of
		-		Was	te Managem	ient Summa	ry Sheet for:	hanna a second second
Attached Docum	nents Includ	-			te Managem ure Utilizatior		ry Sheet for:	innerse of the
Attached Docum Animal Inventory	nents Includ	-		Man		n 6	2	Line (
Proposal is: A Attached Docum Animal Inventory Manure Productio Site plan	nents Includ	-		Man	ure Utilization I Animal Mar	n 6	2	teneritation of the
Attached Docum Animal Inventory Manure Productio Site plan Air photo	nents Includ on V V	-		Manu Dead Othe	ure Utilization I Animal Mar r	n S nagement S	2	hand a south and a south
Attached Docum Animal Inventory Manure Productio Site plan Air photo Fopographic map	nents Includ on V V	-		Mana Dead Othe Was t	ure Utilizatior I Animal Mar r te Storage S	n gement g Dagement g Cummary Sh	eets for:	Security and Security Security
Attached Docun Animal Inventory Manure Productio Site plan	nents Includ on V V	-		Manu Deac Othe Was t Earth	ure Utilization I Animal Mar r te Storage S nen Manure S	n gement g Gummary Sh Storage Area	eets for:	Second Second source sources
Attached Docum Animal Inventory Manure Productio Site plan Air photo Fopographic map	nents Includ	-		Manu Deac Othe Was Earth Hold	ure Utilization I Animal Mar r te Storage S nen Manure S ing Pond Are	n gement g Gummary Sh Storage Area	eets for:	
Attached Docum Animal Inventory Manure Productio Site plan Air photo Topographic map Manure Map	nents Includ	-		Manu Deac Othe Was Earth Hold	ure Utilization I Animal Mar r te Storage S nen Manure S	n gement g Gummary Sh Storage Area	eets for:	

I hereby apply for approval of the Waste Storage and/or Waste Management Plan attached to and forming part of this application, with respect to the intensive livestock operation described therein. By signing this application form, I am consenting to the use and disclosure of all information contained in the application, including all attachments and any plan approval by Saskatchewan Agriculture to any person and for any purpose that Saskatchewan Agriculture sees fit.

Other

Liquid Manure Storage Area

~

 \Box

(Signature of applicant or person authorized to act on behalf of the applicant.)

March 27, 2020 March 27, 2020 Date: Date:

Recommended for referral by:

(Regional Specialist, Agricultural Operations Section, Agriculture)

SW 10 39 06 W3 Animal unit Number of Equals one Kind and type of animal animals confined animal unit Cows or bulls Beef Cattle Beef Cattle Feeder cattle Beef Cattle Replacement heifers Beef Cattle Calves 80 Cows or bulls 80 1.0 Dairy Cattle Feeder cattle Dairy Cattle 120 240 2.0 Replacement heifers Dairy Cattle 240 4.0 60 Dairy Cattle Calves Boars or gestating sows Hogs Hogs Nursing sows Gilts Hogs Feeder pigs Hogs Weanling pigs Hogs Hens, cockerels, capons Poultry Chicks, broilers Poultry Hen turkeys, geese, ducks Poultry Poultry Heavy tom turkeys Ewes or rams Sheep Lambs Sheep Does or bucks Goats Kids Goats Mares or Studs Horses Horses Replacements Horses Foals Bison cows or bulls Bison Bison Bison calves Elk Elk cows or bulls Elk calves Elk Deer Deer Deer fawns Deer Sow barn Hogs Nursery barn Hogs Farrow-to-finish Hogs Feeder barn Hogs 260 Totals

Animal Inventory

Manure Production Worksheet

SW 10 39 06 W3

Beef CattleRBeef CattleCDairy CattleCDairy CattleRDairy CattleRDairy CattleCHogsBHogsGHogsFeHogsWPoultryHPoultryHPoultryH	Feeder cattle Replacement heifers Calves Cows or bulls Feeder cattle Replacement heifers Calves	80	365				
Beef Cattle R Beef Cattle C Dairy Cattle C Dairy Cattle R Dairy Cattle R Dairy Cattle R Dairy Cattle C Hogs B Hogs R Hogs G Hogs Fe Hogs W Poultry C	Replacement heifers Calves Cows or bulls Feeder cattle Replacement heifers Calves		365				
Beef Cattle C Dairy Cattle C Dairy Cattle F Dairy Cattle R Dairy Cattle C Hogs B Hogs N Hogs G Hogs F Hogs W Poultry H	Calves Cows or bulls Feeder cattle Replacement heifers Calves		365	(5.0			
Dairy Cattle C Dairy Cattle F Dairy Cattle R Dairy Cattle C Hogs B Hogs G Hogs G Hogs F Hogs W Poultry H Poultry C	Cows or bulls Feeder cattle Replacement heifers Calves		365	(5.0			
Dairy Cattle Fa Dairy Cattle R Dairy Cattle C Hogs B Hogs G Hogs Fa Hogs W Poultry H Poultry H	Feeder cattle Replacement heifers Calves		365	66.0			
Dairy Cattle R Dairy Cattle C Hogs B Hogs G Hogs F Hogs W Poultry H Poultry C Poultry H	Replacement heifers Calves	240		65.0	1,898,000	0	0
Dairy Cattle R Dairy Cattle C Hogs B Hogs G Hogs F Hogs W Poultry H Poultry C Poultry H	Replacement heifers Calves	240					
Hogs B Hogs N Hogs G Hogs Fe Hogs W Poultry H Poultry C Poultry H			365	31.0	2,715,600	0	0
Hogs N Hogs G Hogs Fe Hogs W Poultry H Poultry C Poultry H		240	365	5.0	438,000	0	0
Hogs G Hogs Fe Hogs W Poultry H Poultry C Poultry H	Boars or gestating sows						
Hogs Fe Hogs W Poultry H Poultry C Poultry H	Jursing sows						
Hogs W Poultry H Poultry C Poultry H	Filts						
Poultry H Poultry C Poultry H	leeder pigs						
Poultry ^{CI} Poultry ^{HI}	Weanling pigs						
Poultry H	Iens, cockerels, capons						
-	Chicks, broilers						
Poultry H	Ien turkeys, geese, ducks						
	leavy tom turkeys						
Sheep Ex	lwes or rams						
Sheep La	ambs						
Goats D	Does or bucks			····			
Goats K	Lids						<u></u>
Horses	fares or Studs			đ			
Horses Re	Replacements						
Horses Fo	oals	····					
Bison Bi	Bison cows or bulls						
Bison Bi	Bison calves						
Elk El	llk cows or bulls						
Elk El	llk calves						
Deer De	Deer						
Deer De	Deer fawns						
Hogs Sc	ow barn						
Hogs Nu	lursery barn						
	arrow-to-finish						
-	eeder barn						

Comments:

1. Average daily production (from Appendix A) with normal use of bedding and wash water. Adjust if higher volumes are used.

2. Multiply number of animals x days confined per year x daily manure production.

3. Carry total manure production forward to the Nitrogen, Phosphate and Potassium Production Worksheets.

Manure Utilization Summary Sheet

SW 10 39 06 W3

I.	Summary:	Solid	Manure	
A.	Total Adjusted Annual Manure Nitrogen:	(from Nitrogen Production Worksheet)	52,279	lbs of Nitrogen
В.	Total Nitrogen utilized annually:	(from Nitrogen Utilization Worksheet)	52,739	lbs of Nitrogen
C.	Total Phosphate production:	(from Phosphate Production Worksheet)	23,030	lbs of Phosphate
D.	Total Potassium production:	(from Potassium Production Worksheet)	59,743	lbs of Potassium
E.	Land areas for application of manure:	(from Land Areas Available for Manure L from Nitrogen Utilization Worksheet)	Itilization Summa	ry Worksheet and
	Total cultivated land available	(ownership and/or agreements):	609	acres
	Total forage land available	(ownership and/or agreements):	60	acres
	Total land available to receive manure	(ownership and/or agreements):	669	acres
	Land area used annually for spreading r Land area required for sustainable, long		153 458	acres
F.	Method of applying manure to the land:	Not Incorporated		
G.	Actual manure application rate:	(from Nitrogen Utilization Worksheet)	36.4	tons/acre
H.	Seasons of manure application:	Spring, Fall		
11.	Comments:			
	The attached manure utilization plan wa	as prepared with the professional assis	tance of:	
	Name:			
	Address:			
	Tel:			

This document summarizes the WASTE STORAGE PLAN as submitted by the applicant for approval under the Intensive Livestock Provisions of The Agricultural Operations Act. The complete WASTE STORAGE PLAN includes and reports, documents, drawings or plans included with the application, along with any terms or conditions which may form part of any approval.

Solid Manure Nitrogen, Phosphate and Potassium Production Worksheet

SW 10 39 06 W3

Nitrogen

Type of animal	Number of animals	Daily nitrogen production (kg)	Total days per year confined	Total Nitrogen produced/year (kg)	Storage retention factor	Application retention factor	Adjusted annual manure Nitrogen (kg/year)
Calves	240	0.096	365	8,410	0.8	0.75	5,046
Replacement heifers	240	0.2475	365	21,681	0.8	0.75	13,009
Cows or bulls	80	0.6517	365	9,515	0.8	0.75	5,709
Totals	560			39,605			23,763
Total Nitrogen pro	duced		23,76	3 kg		52,279	lbs
Total volume of m	anure produc	ed	5,05	2 tonnes		5,557	tons
Concentration of N	litrogen		4.1	70 kg/tonnes		9.41	lbs/tons

Phosphate

Type of animal	Number of animals	Daily Phosphate production (kg)	Total days per year confined	Annual manure Phosphate (kg/year)
Cows or bulls	80	0.147	365	2,146
Replacement heifers	240	0.068	365	5,957
Calves	240	0.027	365	2,365
Totals	560			10,468
Total Phosphate produced	10),468 kg		23,030 lbs
Total volume of manure produced	5	i,052 tonnes		5,557 tons
Concentration of Phosphate		2.07 kg/tonne		4.14 lbs/ton

Potassium

Type of animal	Number of animals	Daily Potassium production (kg)	Total days per year confined	Annual manure Potassium (kg/year)
Cows or bulls	80	0.306	365	4,468
Replacement heifers	240	0.185	365	16,206
Calves	240	0.074	365	6,482
Totals	560			27,156
Total Potassium produced	2	7,156 kg		59,743 lbs
Total volume of manure produce	d	5,052 tonnes		5,557 tons
Concentration of Potassium		5.38 kg/tonn	e	10.75 lbs/ton

Nitrogen Utilization Worksheet

SW 10 39 06 W3

Soil Climatic Zone ⁽¹⁾										
Brown/dry brown	✓ Dark brown	Moist dark brown	Black	Moist black	Grey					
Frequency of m	anure applica	ation to a parcel	of land:							

manure is applied every year

manure is applied every second year

manure is applied every third year

manure is applied every fourth year

manure is applied in a manner other than those listed. Explain

Nitrogen utilization plan: Solid manure

Crop	Percent of crop in rotation	Annual seeded acres	Crop Nitrogen required (2)	Manure Nitrogen applied (3)	Manure Nitrogen utilized (4)	Long term average manure application rate per crop (6)
		(acres)	(lbs/acre)	(lbs/acre)	(lbs)	(tons/acre)
Corn	33%	151	84.0	105.0	15,870	11.2
CPS Wheat	34%	156	104.0	130.0	20,244	13.8
Canola	33%	151	88.0	110.0	16,625	11.7
Total		458			52,739	

General manure application rate:

36.4 tons/acre

This value is the result of the total amount of manure⁽⁵⁾ produced by the operation divided by the total number of cropped acres receiving manure annually.

- 1) From figure 1 Soil Climatic Zones of Southern Saskatchewan
- 2) From Appendix B Crop Nitrogen Requirements
- To account for Nitrogen mineralization in the manure, the crop Nitrogen requirement is increased by 25%. Manure Nitrogen applied = crop Nitrogen required x 1.25
- 4) Manure Nitrogen applied = manure Nitrogen applied x annual seeded acres
- 5) From the Manure Production Worksheet

6) Long term average manure application rate per crop = manure Nitrogen applied divided by the concentration of Nitrogen in the manure. The concentration of the Nitrogen in the manure is obtained from the Nitrogen Production Workheet.

Land Areas for Manure Utilization Summary Sheet

Control		Legal land description			Acres a	vailable	
code	Quarter	Section	Township	Range	Meridian	Cultivated	Forage
1	NW	03	39	06	3	26	
1	SW	10	39	06	3	125	
1	NE	04	39	06	3	13	
1	SW	09	39	06	3	26	
1	SE	09	39	06	3	4	
1	NE	28	38	06	3	100	60
2	SW	28	38	06	3	70	
2	SE	28	38	06	3	120	
2	SE	11	39	06	3	90	
1	SE	10	39	06	3	35	
					Totals	609	60

SW 10 39 06 W3

* Control codes:

1 - Owned by applicant

2 - Leased or rented by applicant

3 - Written consent to apply manure given by land owner. Attach supporting documentation

Dead Animal Management Summary Sheet

SW 10 39 06 W3

1. Expected Annual Death Losses: (refer to Appendix A)

(A) Type of Animal	(B) Facility capacity	(C) Death Loss Per Cycle (%)	(D) Cycles/year	(BxCxD) Annual death loss (animal units)
Replacement heifers	120	4.0	1.0	4.8
Cows or bulls	80	4.0	1.0	3.2
Calves	60	5.0	1.0	3
	1)	Total	11

2. Method of Mortality Disposal:

A. Burial:

B. Rendering:

C. Composting:

Location:		SW	10	39	06	3		
	LSD	Quarter	Section	Township	Range	Meridian		
Distance to	water cour	se or body	of water	440	meters	Distance to well	300	meters
Surface runoff control/diversion provided					Frequency of Disposal:	as required		
Comments	and Obse	rvation						

D. Incineration:

3. Interim Storage Procedure:

This document summarizes the WASTE MANAGEMENT PLAN as submitted by the applicant for approval under the Intensive Livestock Provisions of The Agricultural Operations Act. The complete WASTE MANAGEMENT PLAN includes any reports, documents, drawings, or plans included with the application, along with any terms or conditions which may form part of any approval.

Animal Inventory

SW 10 39 06 W3

	Kind and type of animal	Number of animals confined	Equals one animal unit	Animal unit
Beef Cattle	Cows or bulls			1
Beef Cattle	Feeder cattle			
Beef Cattle	Replacement heifers			1
Beef Cattle	Calves			
Dairy Cattle	Cows or bulls	340	1.0	340
Dairy Cattle	Feeder cattle			
Dairy Cattle	Replacement heifers			
Dairy Cattle	Calves			
Hogs	Boars or gestating sows			e e
Hogs	Nursing sows			
Hogs	Gilts			
Hogs	Feeder pigs			
Hogs	Weanling pigs			
Poultry	Hens, cockerels, capons			
Poultry	Chicks, broilers			
Poultry	Hen turkeys, geese, ducks			
Poultry	Heavy tom turkeys			
Sheep	Ewes or rams			
Sheep	Lambs			·····
Goats	Does or bucks			
Goats	Kids			
Horses	Mares or Studs			
Horses	Replacements			
Horses	Foals			
Bison	Bison cows or bulls			
Bison	Bison calves			
Elk	Elk cows or bulls			
Elk	Elk calves			
Deer	Deer			
Deer	Deer fawns			
Hogs	Sow barn			
Hogs	Nursery barn			
Hogs	Farrow-to-finish			
Hogs	Feeder barn			· · · · · · · · · · · · · · · · · · ·
	Totals		·	340

		Days	Solid Man	ure Prod.	Liquid Manure Prod.		
Kind and type of animal				Annual	Daily (L) Annual		
	animals	per yr.	per animal	(kg)	per animal	Litres	
Cows or bulls							
Feeder cattle							
Replacement heifers							
Calves							
Cows or bulls	340	365	0	0	115.0	14,271,500	
Feeder cattle							
Replacement heifers							
Calves							
Boars or gestating sows							
Nursing sows							
Gilts							
Feeder pigs							
Weanling pigs							
Hens, cockerels, capons							
Chicks, broilers		-					
Hen turkeys, geese, ducks		-					
Heavy tom turkeys							
Ewes or rams							
Lambs		-					
Does or bucks		-					
Kids							
Mares or Studs							
Replacements							
Foals							
Bison cows or bulls							
Bison calves							
Elk cows or bulls							
Elk calves							
Deer							
Deer fawns							
Sow barn							
Nursery barn							
Farrow-to-finish							
Feeder barn							
	Cows or bulls Feeder cattle Replacement heifers Calves Cows or bulls Feeder cattle Replacement heifers Calves Boars or gestating sows Calves Boars or gestating sows Gilts Feeder pigs Weanling pigs Hens, cockerels, capons Chicks, broilers Hen turkeys, geese, ducks Heavy tom turkeys Ewes or rams Lambs Does or bucks Kids Mares or Studs Replacements Foals Bison cows or bulls Bison calves Elk calves Deer Deer fawns Sow barn Nursery barn Farrow-to-finish	ype of animalof animalsCows or bulls-Feeder cattle-Replacement heifers-Calves340Feeder cattle-Replacement heifers-Calves-Calves-Calves-Boars or gestating sows-Gilts-Feeder pigs-Weanling pigs-Hens, cockerels, capons-Chicks, broilers-Heavy tom turkeys-Ewes or rams-Lambs-Does or bucks-Kids-Mares or Studs-Replacements-Foals-Bison calves-Elk calves-Deer-Deer fawns-Sow barn-Farrow-to-finish-	animalsper yr.Cows or bullsIFeeder cattleIReplacement heifersICalves340Cows or bulls340GalvesIReplacement heifersICalvesIReplacement heifersICalvesIBoars or gestating sowsISolars or gestating sowsIGiltsIFeeder pigsIWeanling pigsIHens, cockerels, caponsIChicks, broilersIHen turkeys, geese, ducksIHeavy tom turkeysIEwes or ramsILambsIDoes or bucksIKidsIMares or StudsIPison calvesIElk calvesIDeerIDeer fawnsISow barnINursery barnIFarrow-to-finishI	ype of animalsof animalsconfined per yr.Daily (kg) per animalsCows or bullsIIIIFeeder cattleIIIIReplacement heifersIIIICalvesIIIIICows or bulls3403650IIFeeder cattleIIIIIReplacement heifersIIIIICalvesIIIIIIBaars or gestating sowsIIIIINursing sowsIIIIIIGiltsIIIIIIFeeder pigsIIIIIIWaanling pigsIIIIIIHens, cockerels, caponsIIIIIIChicks, broilersIIIIIIIHeavy tom turkeysIIIIIIIIDoes or bucksIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII <td>syme of animal animalsconfined per animalDaily (kg)Annual per animalCows or bullsIIIIIKIFeeder cattleIIIIIReplacement heifersIIIIICalvesIIIIIICalves34036500IIFeeder cattleIIIIIIReplacement heifersIIIIIICalvesIIIIIIIBaars or gestating sowsIIIIIIINursing sowsIIIIIIIIGiltsIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII<td>ype of animal animalsof singly per animalAnnualDaily (Ly) per animalCows or bullsIIIIIFeder cattleIIIIIIReplacement heifersIIIIIICalvesIIIIIIICalvesIIIIIIIS.0IIFeder cattleIIIIIIIS.0IIFeder cattleIIIIIIIS.0IIIIS.0Feder cattleIIIIIIS.0IIIIS.0IIIIS.0Feder cattleIIIIIS.0IIIS.0IIIS.0IIIS.0IIIS.0IIIS.0IIIS.0Replacement heifersIIIIS.0IIIS.0IIIIS.0IIIIS.0IIIIS.0IIIIS.0IIIIS.0IIIIS.0IIIIS.0IIIIIS.0IIIIIS.0IIIIIS.0IIIIIS.0IIIIIS.0IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII</td></td>	syme of animal animalsconfined per animalDaily (kg)Annual per animalCows or bullsIIIIIKIFeeder cattleIIIIIReplacement heifersIIIIICalvesIIIIIICalves34036500IIFeeder cattleIIIIIIReplacement heifersIIIIIICalvesIIIIIIIBaars or gestating sowsIIIIIIINursing sowsIIIIIIIIGiltsIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII <td>ype of animal animalsof singly per animalAnnualDaily (Ly) per animalCows or bullsIIIIIFeder cattleIIIIIIReplacement heifersIIIIIICalvesIIIIIIICalvesIIIIIIIS.0IIFeder cattleIIIIIIIS.0IIFeder cattleIIIIIIIS.0IIIIS.0Feder cattleIIIIIIS.0IIIIS.0IIIIS.0Feder cattleIIIIIS.0IIIS.0IIIS.0IIIS.0IIIS.0IIIS.0IIIS.0Replacement heifersIIIIS.0IIIS.0IIIIS.0IIIIS.0IIIIS.0IIIIS.0IIIIS.0IIIIS.0IIIIS.0IIIIIS.0IIIIIS.0IIIIIS.0IIIIIS.0IIIIIS.0IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII</td>	ype of animal animalsof singly per animalAnnualDaily (Ly) per animalCows or bullsIIIIIFeder cattleIIIIIIReplacement heifersIIIIIICalvesIIIIIIICalvesIIIIIIIS.0IIFeder cattleIIIIIIIS.0IIFeder cattleIIIIIIIS.0IIIIS.0Feder cattleIIIIIIS.0IIIIS.0IIIIS.0Feder cattleIIIIIS.0IIIS.0IIIS.0IIIS.0IIIS.0IIIS.0IIIS.0Replacement heifersIIIIS.0IIIS.0IIIIS.0IIIIS.0IIIIS.0IIIIS.0IIIIS.0IIIIS.0IIIIS.0IIIIIS.0IIIIIS.0IIIIIS.0IIIIIS.0IIIIIS.0IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	

Manure Production Worksheet

SW 10 39 06 W3

Comments:

1. Average daily production (from Appendix A) with normal use of bedding and wash water. Adjust if higher volumes are used.

2. Multiply number of animals x days confined per year x daily manure production.

3. Carry total manure production forward to the Nitrogen, Phosphate and Potassium Production Worksheets.

Manure Utilization Summary Sheet

SW 10 39 06 W3

I.	Summary:	Liqui	d Manure	
A.	Total Adjusted Annual Manure Nitrogen	(from Nitrogen Production Worksheet)	80,067	lb of Nitrogen
В.	Total Nitrogen utilized annually:	(from Nitrogen Utilization Worksheet)	80,880	lb of Nitrogen
C.	Total Phosphate production:	(from Phosphate Production Worksheet)	40,134	lb of Phosphate
D.	Total Potassium production:	(from Potassium Production Worksheet)	83,544	Ib of Potassium
E.	Land areas for application of manure:	(from Land Areas Available for Manure from Nitrogen Utilization Worksheet)	Utilization Summa	ary Worksheet and
	Total cultivated land available	(ownership and/or agreements):	460	acres
	Total forage land available	(ownership and/or agreements):		acres
	Total land available to receive manure	(ownership and/or agreements):	460	acres
	Land area used annually for spreading I	manure:	452	acres
	Land area required for sustainable, long	term application of manure:	452	acres
F.	Method of applying manure to the land:	Not Incorporated		
G.	Actual manure application rate:	(from Nitrogen Utilization Worksheet)	6,946	gallons/acre
H.	Seasons of manure application:	Spring, Fall		
11.	Comments:			
	The attached manure utilization plan wa	as prepared with the professional assi	stance of:	
	Name:	, , , , , , , , , , , , , , , , , , ,		
	Address:			
	Tel:			

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Liquid Manure Nitrogen, Phosphate and Potassium Production Worksheet

SW 10 39 06 W3

Nitrogen							
Type of animal	Number of animals	Daily nitrogen production (kg)	Total days per year confined	Total Nitrogen produced/year (kg)	Storage retention factor	Application retention factor	Adjusted annual manure Nitrogen (kg/year)
Cows or bulls	340	0.6517	365	80,876	0.60	0.75	36,394
Totals	340			80,876			36,394
Total Nitrogen p	oduced		36,3	94 kg		80,067 I	bs
Total volume of manure produced		14,271,500 litres		3,139,730 gallons		gallons	
Concentration of Nitrogen		2.55 kg/1000 L			25.50 I	bs/ 1000 gal	

Phosphate

Type of animal	Number of animals	Daily Phosphate production (kg)	Total days per year confined	Phosp	ll manure bhate g/year)
Cows or bulls	340	0.147	365	1	8,243
Totals	340			1:	8,243
Total Phosphate produced	18,2	243 kg		40,134	lbs
Total volume of manure produced	14,271,5	500 litres	3,	139,730	gallons
Concentration of Phosphate		1.28 kg/1000 li	tres	12.78	lbs/1000 gal

Potassium

Type of animal	Number of animals	Daily Potassium production (kg)	Total days per year confined	Pota	ual manure Issium kg/year)
Cows or bulls	340	0.306	365		37,975
Totals	340				37,975
Total Potassium produced	37,9	75 kg	8	3,544	lbs
Total volume of manure produced	14,271,5	00 litres	3,13	9,730	gallons
Concentration of Potassium	2	.66 kg/1000 litre	s	26.61	lbs/1000 ga

Nitrogen Utilization Worksheet

SW 10 39 06 W3

Soil Climatic Zone (1)										
Brown/dry brown	Dark brown	Moist dark brown	Black	Moist black	Grey					
Frequency of m	anure applic	ation to a parcel	of land:							

manure is applied every year

manure is applied every second year

manure is applied every third year

manure is applied every fourth year

manure is applied in a manner other than those listed. Explain

Nitrogen utilization plan: Liquid manure

Crop	Percent of crop in rotation	Annual seeded acres	Crop Nitrogen required (2)	Manure Nitrogen applied (3)	Manure Nitrogen utilized (4)	Long term average manure application rate per crop (6)
		(acres)	(lbs/acre)	(lbs/acre)	(lbs)	(gallons/acre)
CPS Wheat	34%	154	125.0	156.3	24,013	6,127
Canola	33%	149	150.0	187.5	27,968	7,353
Corn	33%	149	155.0	193.8	28,900	7,598
Total		452			80,880	

General manure application rate:

6.946 gallons/acre

This value is the result of the total amount of manure ⁽⁵⁾ produced by the operation divided by the total number of cropped acres receiving manure annually.

- 1) From figure 1 Soil Climatic Zones of Southern Saskatchewan
- 2) From Appendix B Crop Nitrogen Requirements
- To account for Nitrogen mineralization in the manure, the crop Nitrogen requirement is increased by 25%. Manure Nitrogen applied = crop Nitrogen required x 1.25
- 4) Manure Nitrogen applied = manure Nitrogen applied x annual seeded acres
- 5) From the Manure Production Worksheet

6) Long term average manure application rate per crop = manure Nitrogen applied divided by the concentration of Nitrogen in the manure. The concentration of the Nitrogen in the manure is obtained from the Nitrogen Production Workheet.

Land Areas for Manure Utilization Summary Sheet

Control code		Lega	Acres available				
	Quarter	Section	Township	Range	Meridian	Cultivated	Forage
1	NW	03	39	06	3	130	
1	NE	04	39	06	3	70	
1	SW	09	39	06	3	130	
1	SE	09	39	06	3	130	
		J			Totals	460	0

SW 10 39 06 W3

* Control codes:

1 - Owned by applicant

2 - Leased or rented by applicant

3 - Written consent to apply manure given by land owner. Attach supporting documentation

Dead Animal Management Summary Sheet

SW 10 39 06 W3

1. Expected Annual Death Losses: (refer to Appendix A)

(A)	(B)	(C)	(D)	(BxCxD)
Type of Animal	Facility capacity	Death Loss Per Cycle (%)	Cycles/year	Annual death loss (animal units)
Cows or bulls	340	4.0	1.0	13.6
			Total	13.6

2. Method of Mortality Disposal:

A. Burial:

B. Rendering:

C. Composting:

Location:		SW	10	39	06	3		
	LSD	Quarter	Section	Township	Range	Meridian		
Distance to	water cour	se or body	of water	440	meters	Distance to well	300	meters
Surface runoff control/diversion provided					F	requency of Disposal:	as required	-

Comments and Observation

D. Incineration:

3. Interim Storage Procedure:

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Liquid Manure Storage Area Summary Sheet For Storage of Liquid Manure

SW 10 39 06 W3

1. Manure volume	14,271,500	litres/yr equal to	14,272	m3/yr

2. (a) Storage is provided for 264 days

(b) Volume of Manure Storage Tank (excluding 15 cm freeboard, or as otherwise specified):

1 Concrete Rectangular Open Top 73.2 X 48.8 15 10,330 10,330,000 Total: 10,330 10,330,000 Rectangular Open Top 29 m Well logs exists: Image: Colspan="4">Image: Colspan="4">Colspan="4">Colspan="4">Colspan="4">Rectangular Open Top 29 m Well logs exists: Image: Colspan="4">Image: Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan= 400 Files Image: Colspan= Colspan= Colspan= Colspan="4">Colspan= Colspan= Cols	Tank #	Туре	Shape	Тор	Туре	Dimension (metre)	Fre	eboard (cm)	FSL Volume (m3)	FSL Volu (litres	1
Tank drawing exists: 3. Depth to useable groundwater 29 m 29 m Well logs exists: (a) Test Holes or pits: (a) Test Hole Type: (b) Number of Holes or Pits: (c) Min Hole Depth: (c) Min Hole Depth: m Max Hole Depth: (c) Min Hole Depth: (a) Average Clay Content: 20.5 (b) Average Fines Content: 52 (c) Average Plasticity Index: 14 % 6. Construction Details: (c) Monitoring construction: (c) Monitoring Program: Monitoring program in place: Frequency: time per year 8. Distances to: Road ditch: 281 m Water courses: 3640 m Property line: 257 m	1	Concrete	Rectangular	Oper	і Тор			15	10,330	10,330,0	000
3. Depth to useable groundwater 29 m Well logs exists: 4. Summary of test holes or pits: (a) Test Hole Type: (b) Number of Holes or Pits: (c) Min Hole Depth: 7. Construction Details: (c) Average Clay Content: 20.5 % (c) Average Plasticity Index: 14 % % % % % % % % % % % % % % % % % %								Total:	10,330	10,330,0	000
4. Summary of test holes or pits: (a) Test Hole Type: (b) Number of Holes or Pits: (c) Min Hole Depth: (c) Min Hole Depth: m 5. Engineering Soils Information: 20.5 (a) Average Clay Content: 20.5 (b) Average Fines Content: 52 (c) Average Fines Content: 52 (c) Average Plasticity Index: 14 (c) Monitoring construction:		Tank draw	ving exists:	✓							
(a) Test Hole Type: (b) Number of Holes or Pits: (c) Min Hole Depth: m Max Hole Depth: Engineering Soils Information: (a) Average Clay Content: 20.5 (b) Average Fines Content: 52 (c) Average Plasticity Index: 14 (c) Monitoring construction:	Depth to	useable groui	ndwater	2	29 m		Well	logs exist	s: 🗸		
(b) Number of Holes or Pits: m Max Hole Depth: m Max Hole Depth: (c) Min Hole Depth: 20.5 % % (b) Average Clay Content: 20.5 % % (b) Average Fines Content: 52 % % (c) Average Plasticity Index: 14 % % 3. Construction Details: (c) Monitoring construction:	Summary	of test holes	or pits:								
(c) Min Hole Depth: m Max Hole Depth: 5. Engineering Soils Information: 20.5 % (a) Average Clay Content: 52 % (b) Average Fines Content: 52 % (c) Average Plasticity Index: 14 % (c) Average Plasticity Index: 14 % 6. Construction Details: (c) Monitoring construction:	(a) T	est Hole Type									
5. Engineering Soils Information: (a) Average Clay Content: 20.5 % (b) Average Fines Content: 52 % (c) Average Plasticity Index: 14 % 5. Construction Details: (c) Monitoring construction: (c) Monitoring construction: (c) Monitoring Program: Monitoring program in place: Frequency: time per year 5. Distances to: Road ditch: 281 m Water courses: 3640 m Property line: 257 m Owner's well: 100 m	(b) N	umber of Hole	es or Pits:								
(a) Average Clay Content: 20.5 % (b) Average Fines Content: 52 % (c) Average Plasticity Index: 14 % 6. Construction Details:	(c) M	lin Hole Depth	1:				m	Max Hole	e Depth:		r
 (b) Average Fines Content: 52 % (c) Average Plasticity Index: 14 % Construction Details: (c) Monitoring construction: □ Construction Water Monitoring Program: Monitoring program in place: □ Frequency: time per year Distances to: Road ditch: 281 m Water courses: 3640 m Property line: 257 m Owner's well: 100 m 	Engineer	ing Soils Infor	mation:								
(c) Average Plasticity Index: 14 (c) Average Plasticity Index: 14 (c) Monitoring construction:	(a) A	verage Clay (Content:		20.5	i	%				
 Construction Details: (c) Monitoring construction: Construction Details: (c) Monitoring construction: Construction Details: Construction Details: Constructi	(b) A	verage Fines	Content:		52		%				
(c) Monitoring construction:	(c) A	verage Plastic	city Index:		14		%				
 Ground Water Monitoring Program: Monitoring program in place: Frequency: time per yea Distances to: Road ditch: 281 m Water courses: 3640 m Property line: 257 m Owner's well: 100 m 	Construc	tion Details:									
7. Ground Water Monitoring Program: Monitoring program in place: B. Distances to: Road ditch: 281 m Water courses: 3640 m Property line: 257 m Owner's well: 100 m	(c) M	onitoring con	struction:								
3. Distances to: Road ditch: 281 m Water courses: 3640 m Property line: 257 m Owner's well: 100 m		-	L								
B. Distances to: Road ditch: 281 m Water courses: 3640 m Property line: 257 m Owner's well: 100 m								_		1	
Road ditch:281 mWater courses:3640 mProperty line:257 mOwner's well:100 m	Ground V	Vater Monitor	ing Program:	Moi	nitoring p	program in place	:	Freque	ncy:	time pe	er year
Property line: 257 m Owner's well: 100 m	Distance	s to:									
	Road	l ditch:		281	m		Wat	er courses	:	3640	m
	Prop	erty line:		257	m		Owr	er's well:		100	m
Surface water: 438 m Neighbours well: 700 m	Surfa	ace water:		438	m		Neig	hbours we	ell:	700	m

This document summarizes the WASTE STORAGE PLAN as submitted by the applicant for approval under the Intensive Livestock Provisions of The Agricultural Operations Act. The complete WASTE STORAGE PLAN includes and reports, documents, drawings or plans included with the application, along with any terms or conditions which may form part of any approval.