



Manitoba's Designated Oil Fields & Pools 2015

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Petroleum Branch**

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FOREWORD

This annual report was compiled by P. Fulton-Regula, M.Sc., P.Geo. for the Director of the Petroleum Branch in accordance with section 11(4) of The Oil & Gas Act. This order does not include previously designated fields and pools that have been amalgamated or reassigned.

This report details the boundaries of the known oil fields and pools in Manitoba on January 1st 2015. It states the names and numerical codes used in the Manitoba Oil and Gas Information System to track the area and stratigraphic interval producing oil. Further information pertaining to the history of field or pool designations may be obtained by contacting the Petroleum Branch.

Please note that there was a change in the formal Manitoba stratigraphic nomenclature in 2013. The Three Forks has been moved from the formation to the group level and the Torquay is now the term used to describe the formation directly beneath the Bakken formation in Manitoba. This change is described by Nicolas, 2011 (Nicolas, M.P.B. 2011: Stratigraphy and regional geology of the Late Devonian–Early Mississippian Three Forks Group, southwestern Manitoba (NTS 62F, parts of 62G, K); Manitoba Innovation, Energy and Mines, Manitoba Geological Survey, Geoscientific Report GR2012-3, 92 p.).

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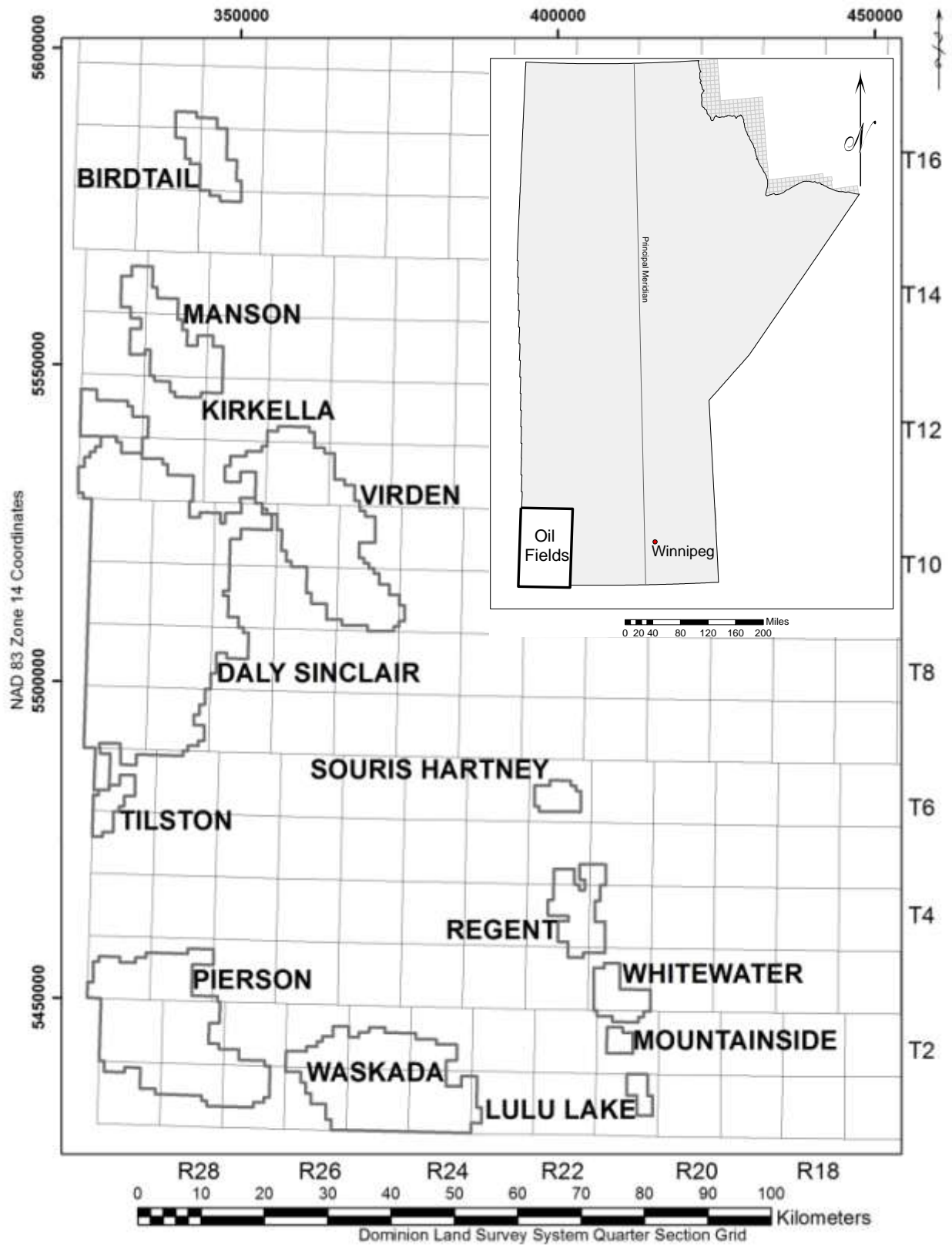


Figure 1 - Oil Field Location Map

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MANITOBA'S DESIGNATED FIELDS

Effective **January 1, 2015**, the following Fields are designated under clause 11(4)(b) of The Oil and Gas Act.

The area encompassed by each Field is outlined on the reference plats, Figure 2 to Figure 11. All Fields and Pools are drawn on the Dominion Land Survey System Grid, please see Appendix A for a description of this system.



Keith Lowdon, Director

FIELD	CODE	PLAT
Daly Sinclair Field	01	p. 9
Tilston Field	02	p. 10
Waskada Field	03	p. 11
Lulu Lake Field	04	p. 12
Virden Field	05	p. 13
Whitewater Field	06	p. 12
Pierson Field	07	p. 14
Kirkella Field	09	p. 15
Souris Hartney Field	10	p. 16
Regent Field	13	p. 16
Mountainside Field	14	p. 12
Birdtail Field	15	p. 17
Manson Field	17	p. 18

MANITOBA'S DESIGNATED FIELD PLATS

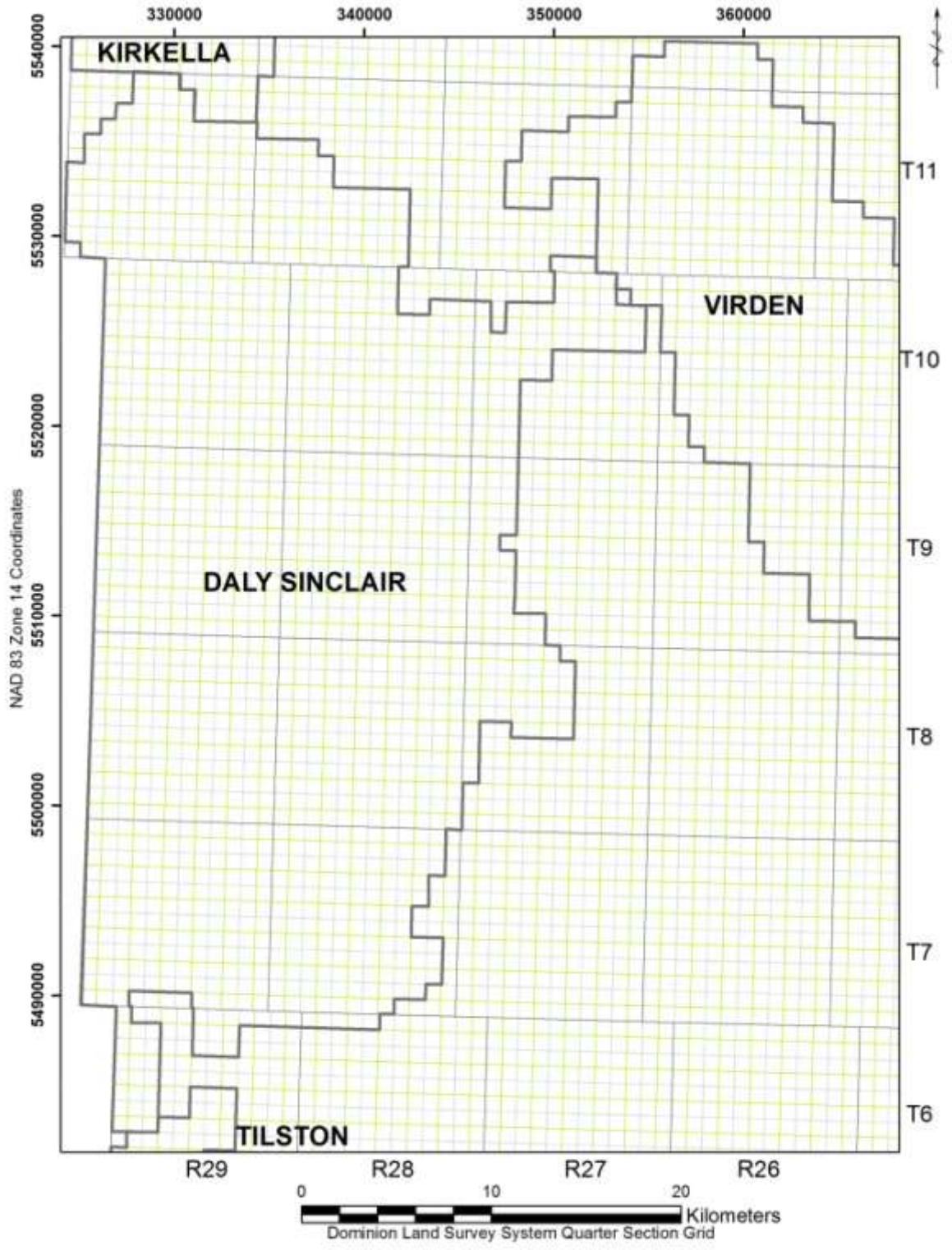


Figure 2 - Daly Sinclair (01)

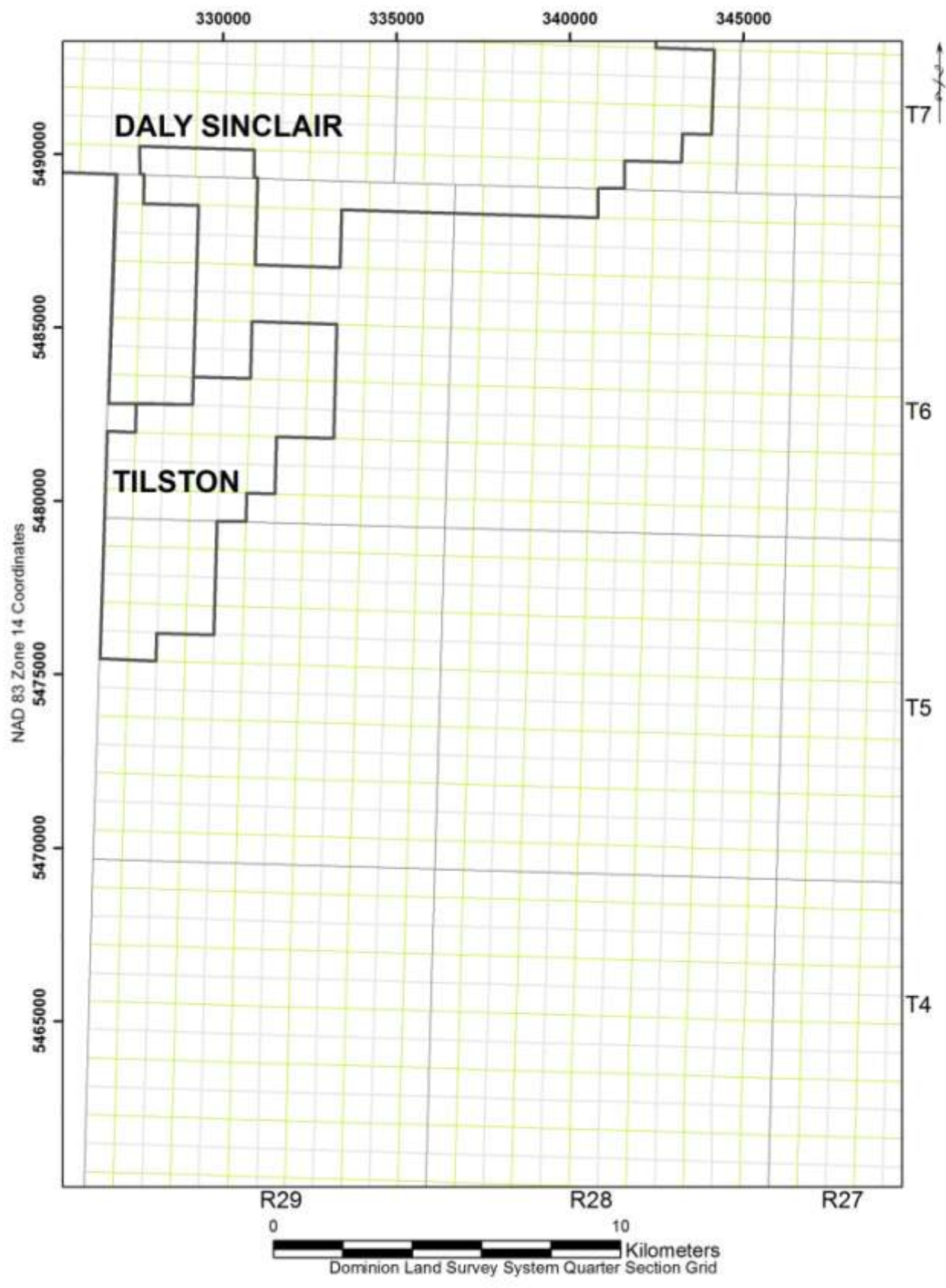


Figure 3 - Tilston Field (02)

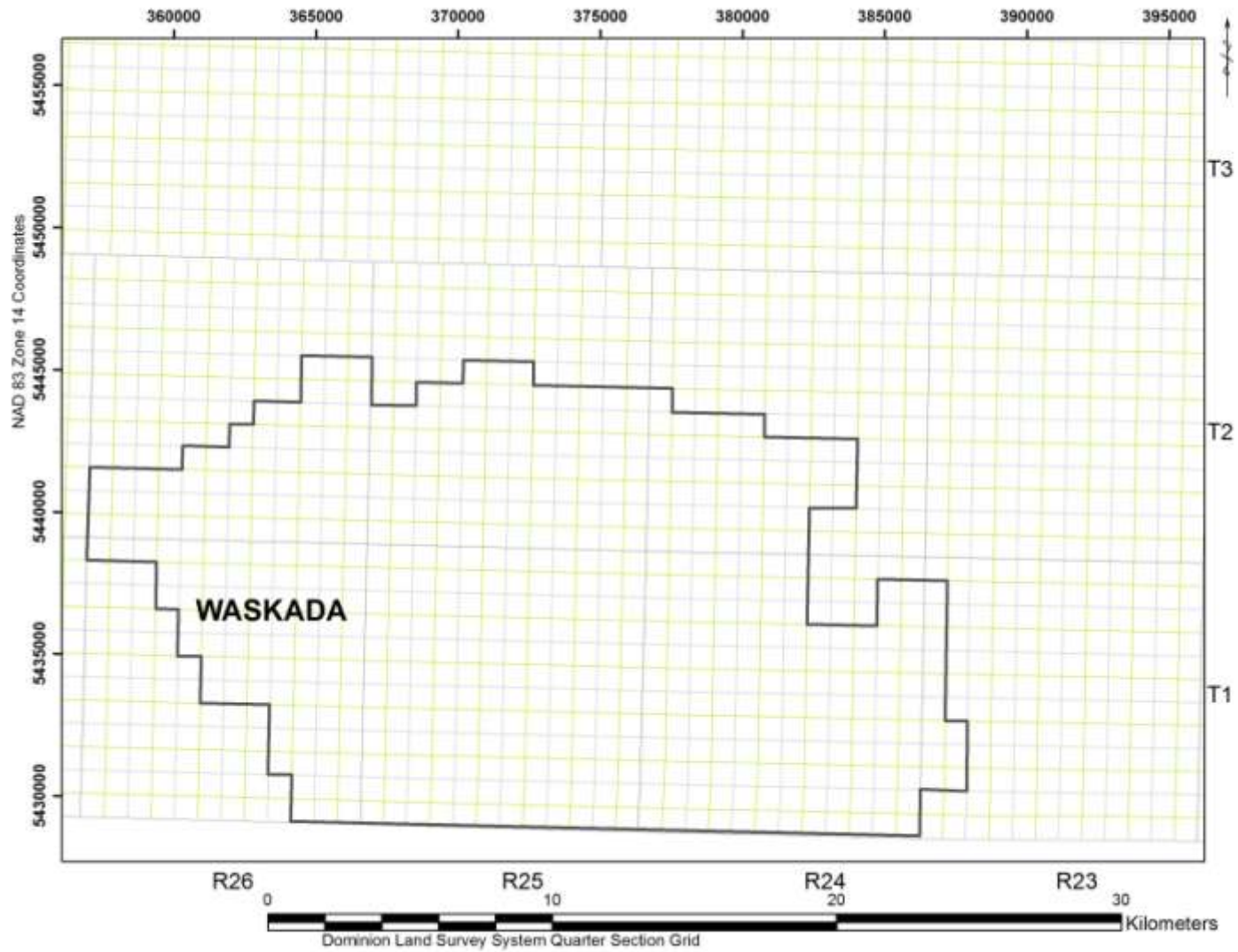


Figure 4 - Waskada Field (03)

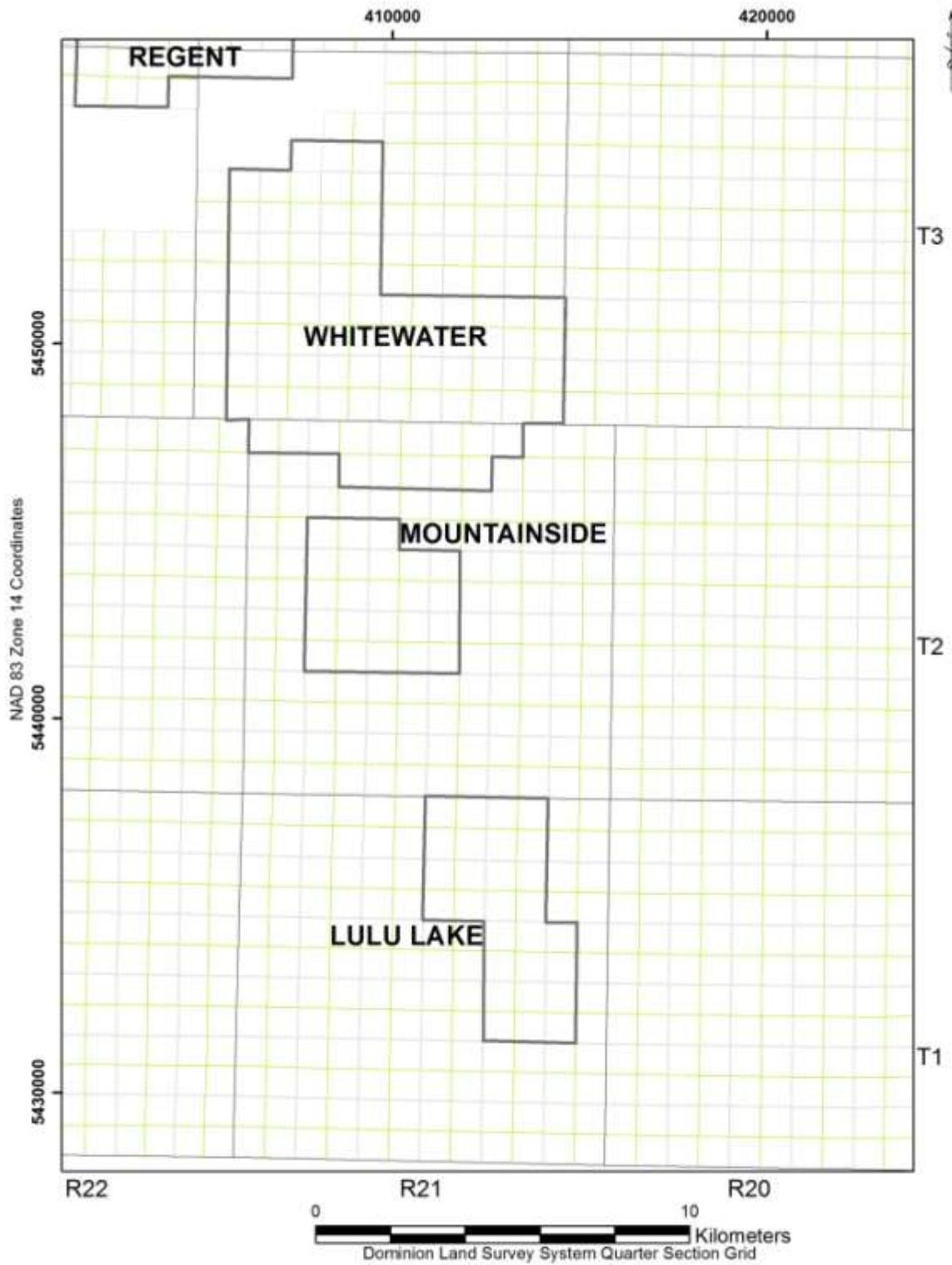


Figure 5 - Lulu Lake (04), Whitewater (06) and Mountainside (14) Fields.

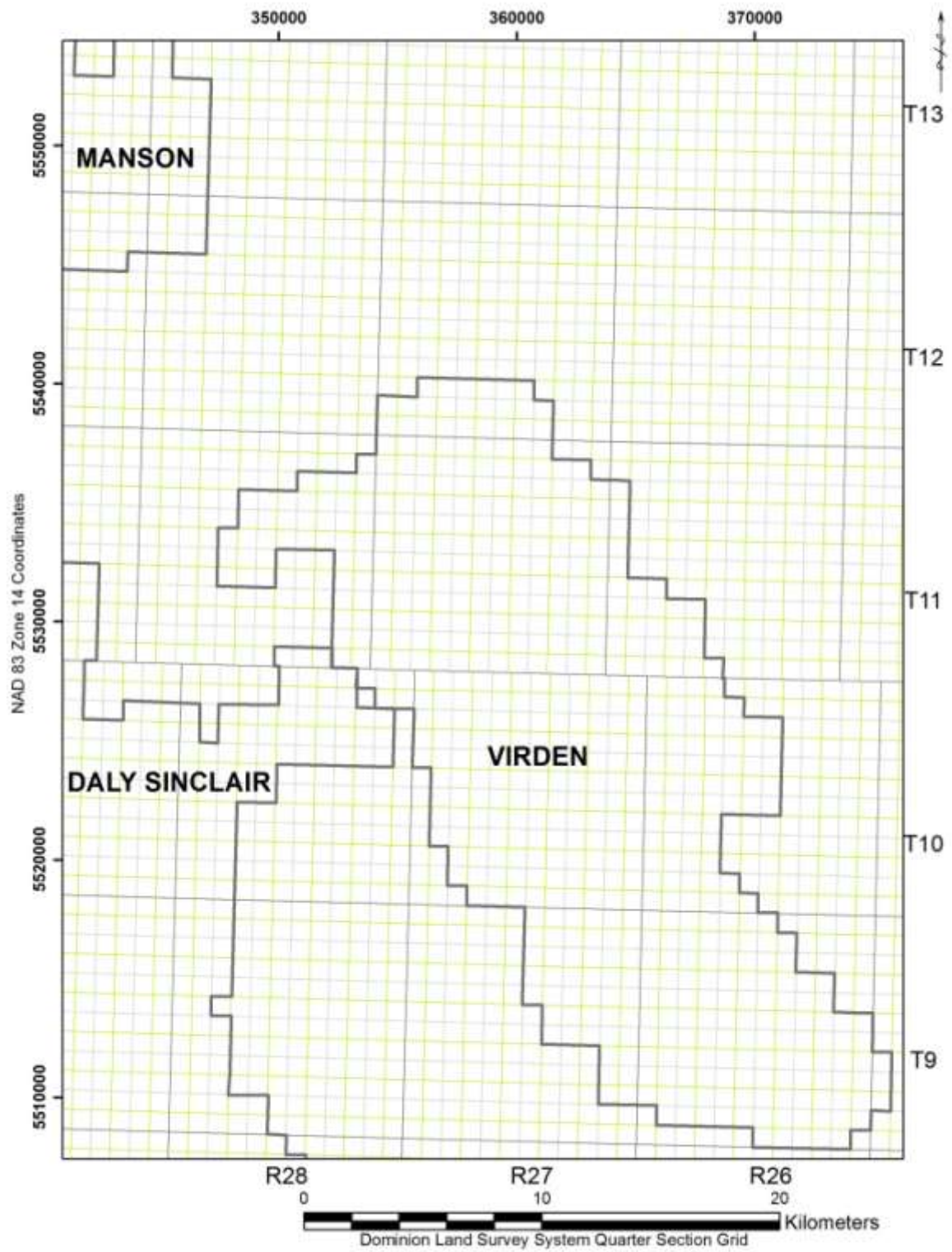


Figure 6 - Virden Field (05)

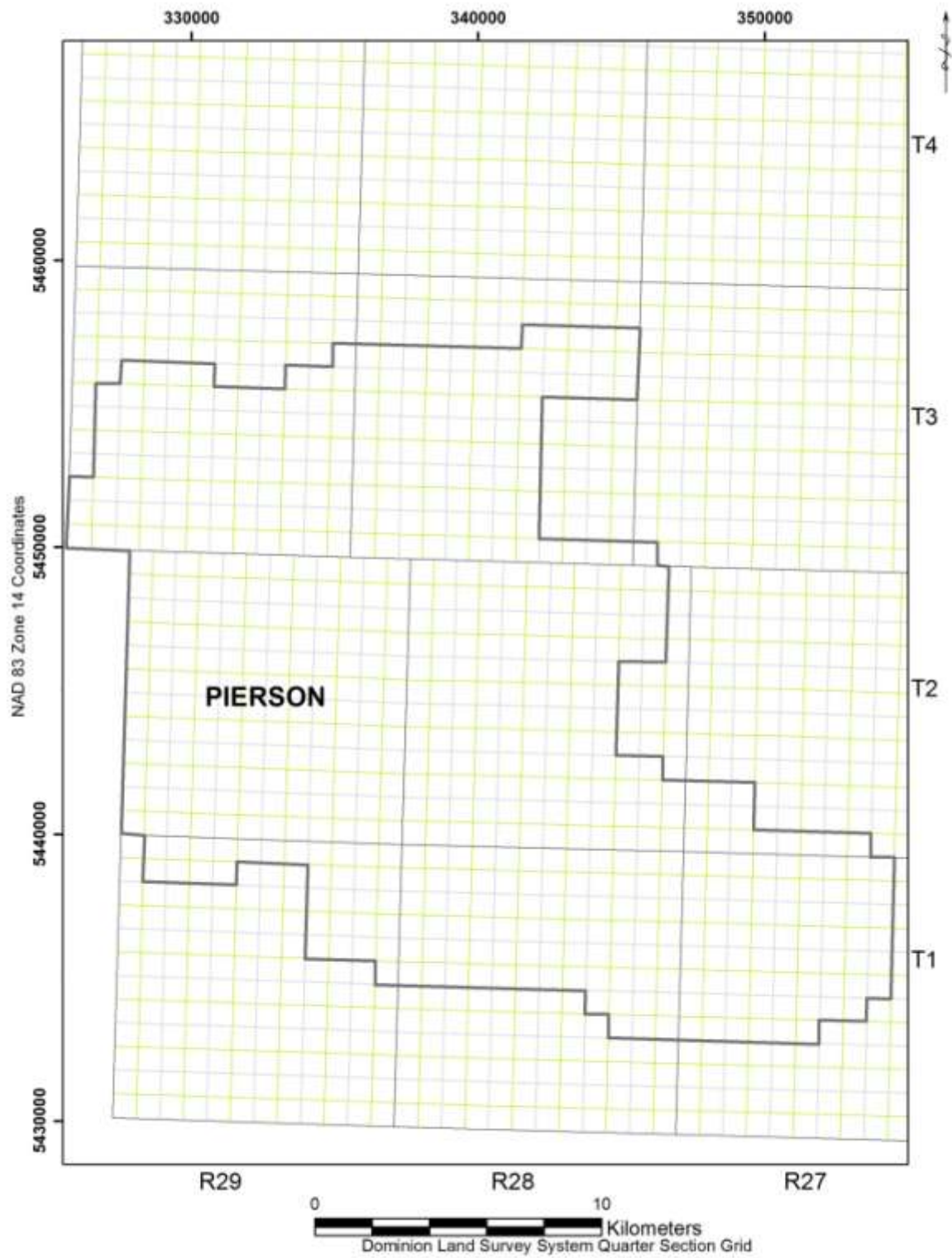


Figure 7 - Pierson Field (07)

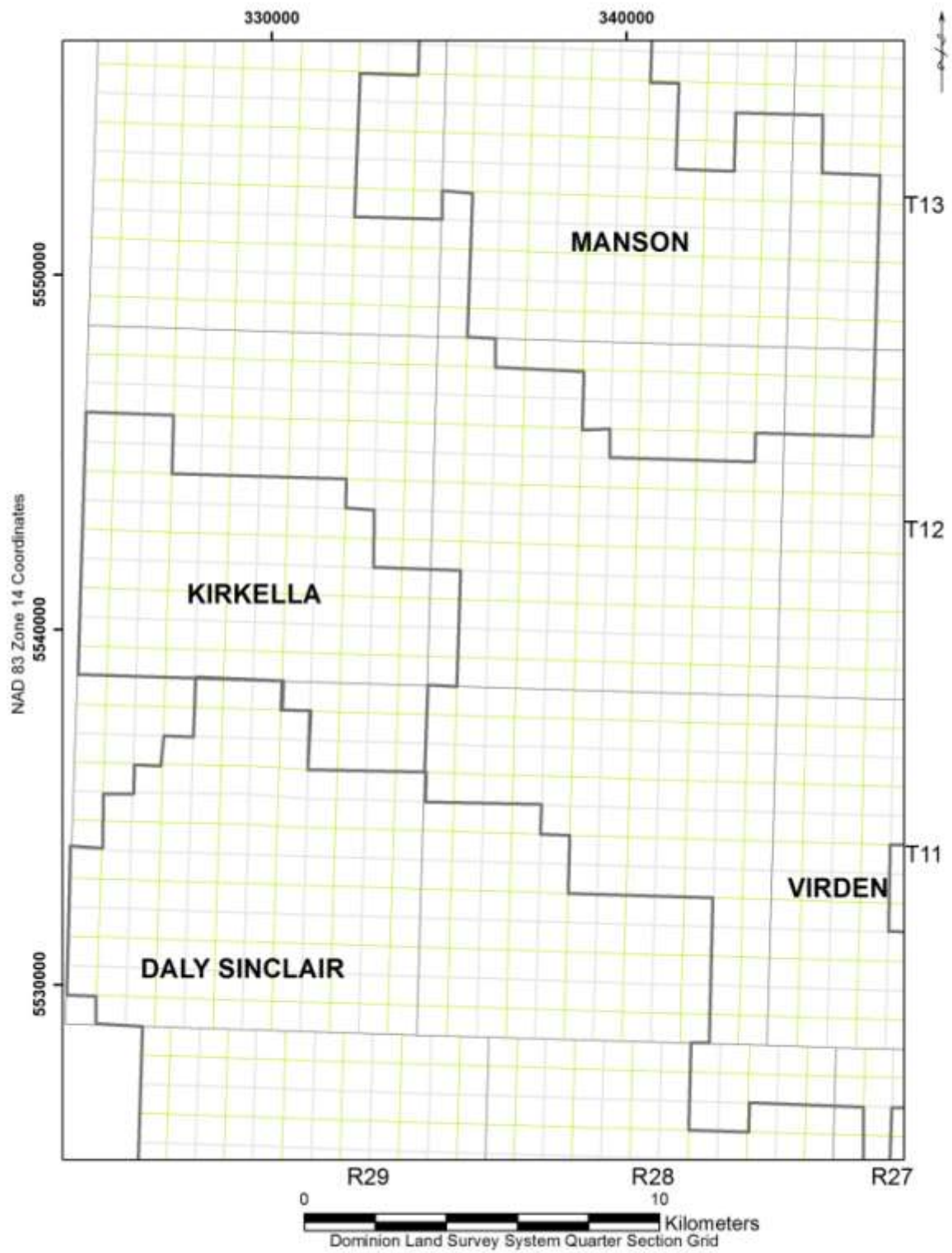


Figure 8 - Kirkella Field (09)

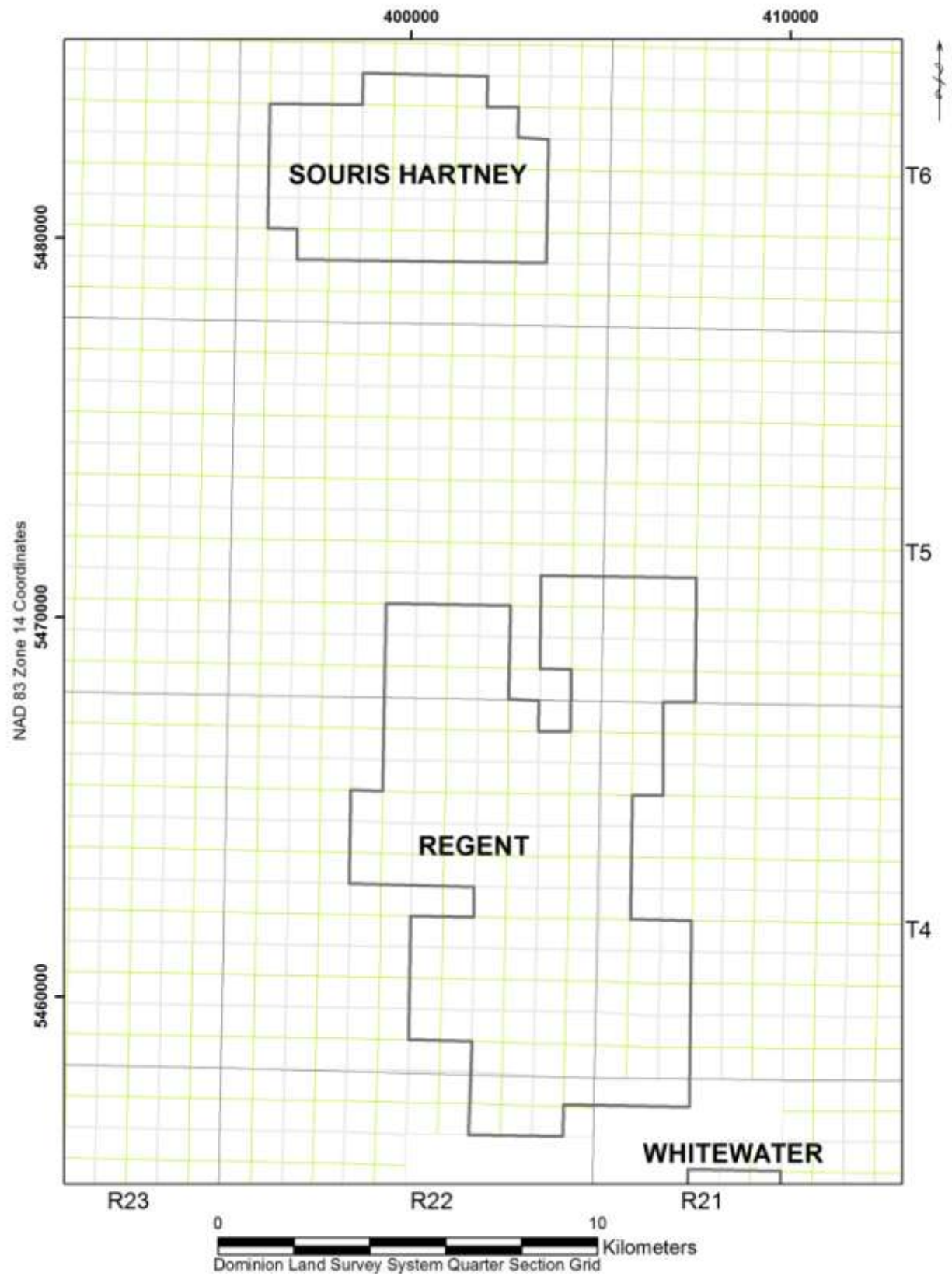


Figure 9 - Souris Hartney (10) and Regent Fields (13)

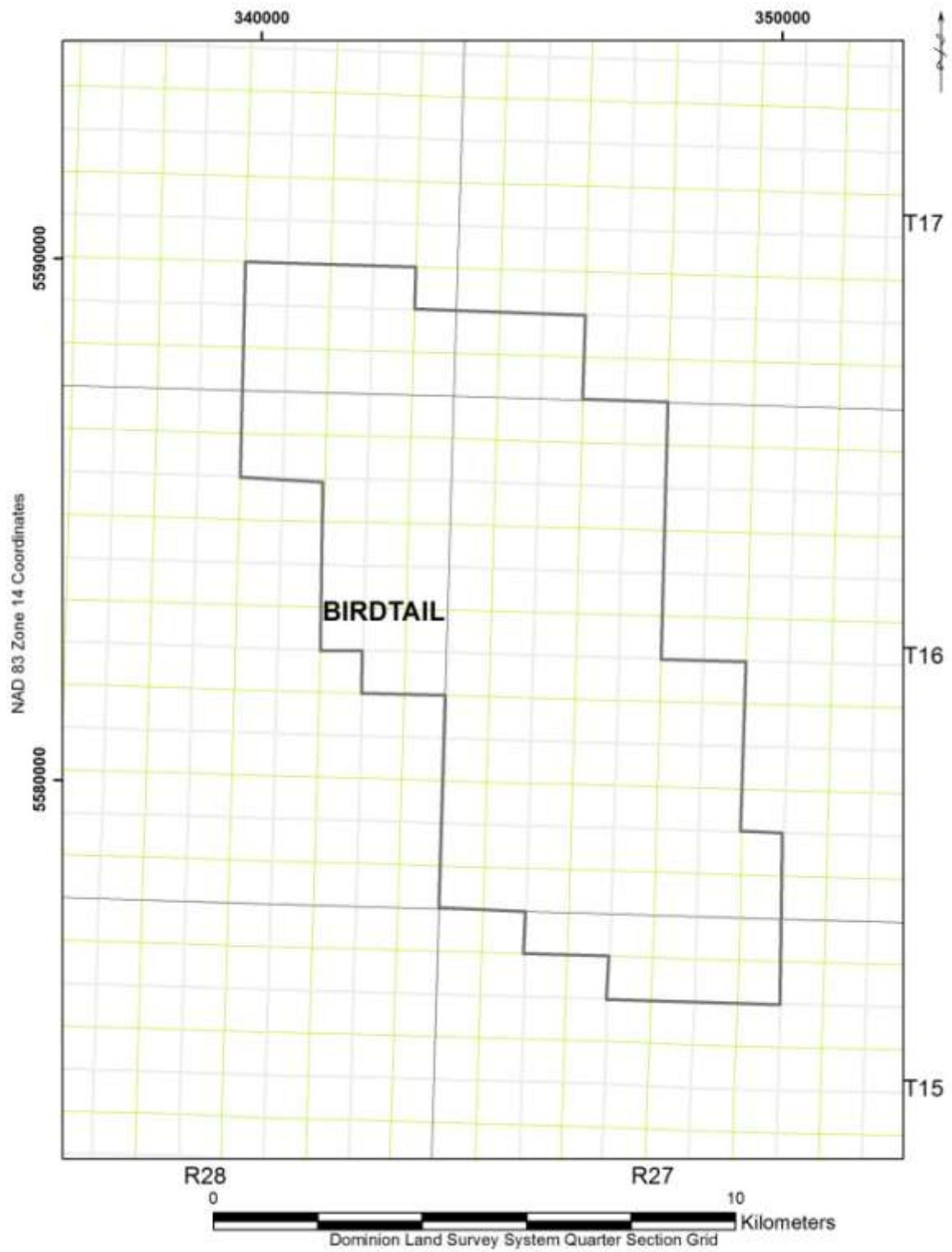


Figure 10 - Birdtail Field (15)

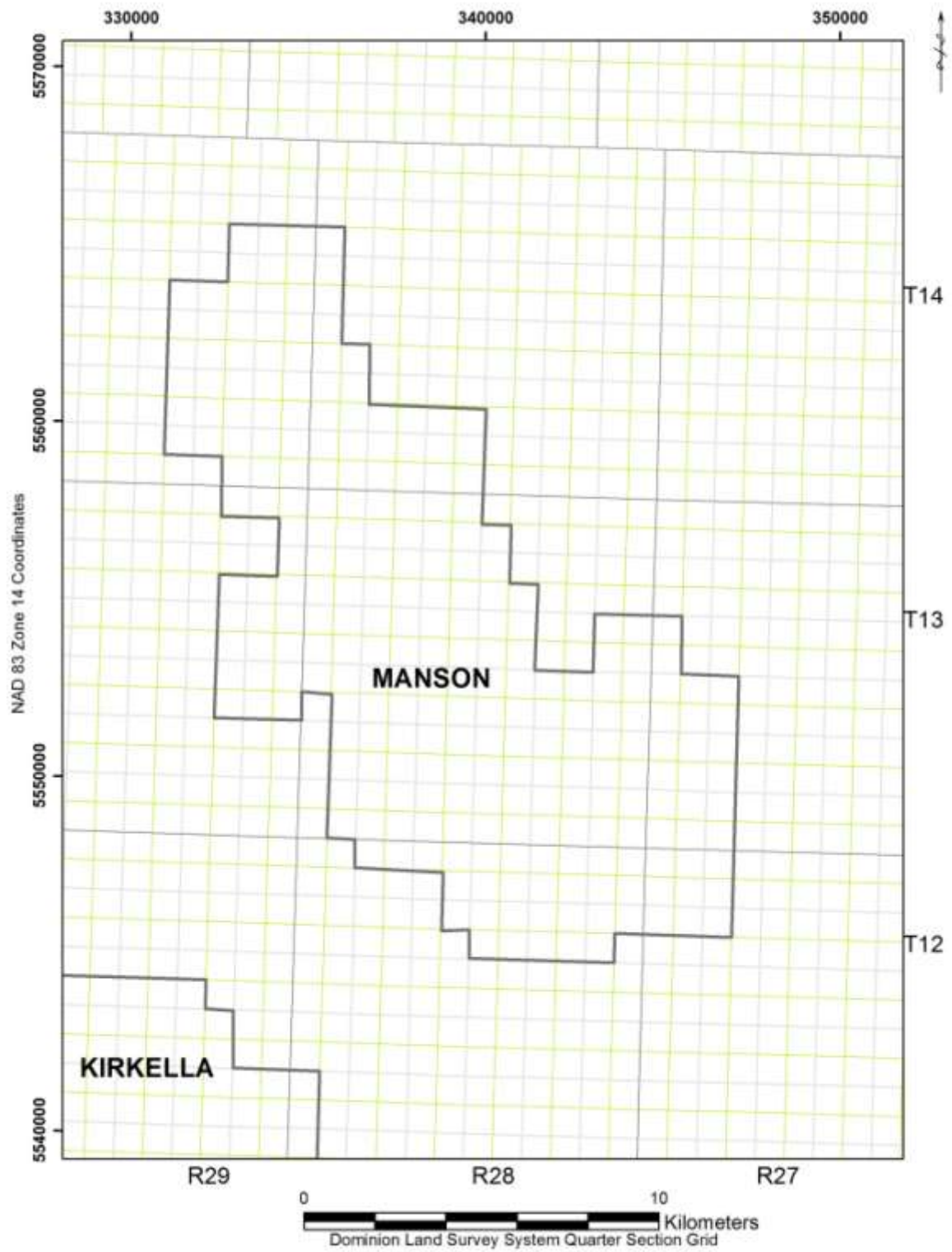


Figure 11 - Manson Field (17)

MANITOBA'S DESIGNATED POOLS

Effective **January 1, 2015** the following pools are designated under clause 11(4)(a) of the Oil and Gas Act.

The area encompassed by each pool and stratigraphic interval is described herein, or outlined on the reference plats, Figures 12 to 46. The table of Manitoba Pool Codes by Formation can be found in Appendix B.

A handwritten signature in black ink, appearing to read "Keith Lowdon". The signature is written in a cursive, flowing style.

Keith Lowdon, Director

MANITOBA'S DESIGNATED POOLS

POOL	CODE	PLAT (Page #)	REFERENCE WELL	
			UWI	TVD INTERVAL (meters KB)
DALY SINCLAIR FIELD				
Lodgepole A	01 59A	28	100/14-04-010-28W1/00	725.4-821.4
Lodgepole B	01 59B	28	100/13-14-009-28W1/00	736.4-832.7
Lodgepole C	01 59C	28	100/03-33-008-27W1/00	736.7-837.0
Lodgepole D	01 59D	28	100/07-26-009-29W1/00	783.3-883.3
Lodgepole I	01 59I	28	100/05-07-010-29W1/00	822.0-865.0
Lodgepole K	01 59K	28	100/08-30-010-29W1/00	788.0-877.5
Lodgepole P	01 59P	28	100/03-27-010-29W1/00	769.0-853.2
Lodgepole T	01 59T	28	100/08-17-010-29W1/00	808.0-813.0
Lodgepole W	01 59W	28	100/10-18-007-29W1/00	927.5-932.5
Lodgepole X	01 59X	28	100/02-21-007-28W1/00	
Lodgepole Y	01 59Y	28	100/03-03-009-29W1/00	822.5-825.5
Lodgepole Z	01 59Z	28	100/16-35-008-29W1/00	812.0-880.0
Lodgepole AA	01 59AA	28	100/06-15-008-28W1/00	778.0-888.0
Lodgepole EE	01 59EE	28	100/15-05-008-28W1/00	826.5-832.5
Lodgepole FF	01 59FF	28	100/12-11-011-29W1/00	730.5-733.5; 748.5-751
Lodgepole GG	01 59GG	28	100/06-16-011-29W1/00	744-783.3
Lodgepole HH	01 59HH	28	100/05-10-011-29W1/00	826.6-827.7
Lodgepole II	01 59II	28	100/11-27-011-29W1/00	836.5-838; 839-840
Lodgepole JJ	01 59JJ	28	102/12-34-011-29W1/00	730-748.2
Lodgepole KK	01 59KK	28	102/12-22-008-29W1/00	834.83
Lodgepole MM	01 59MM	28	102/01-14-008-29W1/00	846.93
Lodgepole NN	01 59NN	28	102/03-03-008-28W1/00	814.77-819.73
Lodgepole OO	01 59OO	28	102/09-29-008-29W1/00	871.02-877.05
Lodgepole PP	01 59PP	28	100/08-07-011-29W1/00	782.5-783.5
Bakken G	01 60G	29	100/13-06-009-27W1/00	828.0-832.0
Bakken J	01 60J	29	100/07-18-010-27W1/02	780.3-784.6
Bakken L	01 60L	29	100/16-10-010-28W1/02	809.5-813.0
Bakken- Torquay A	01 62A	29	100/01-22-010-29W1/00	859.5-866.0
Bakken- Torquay B	01 62B	29	100/04-21-009-29W1/02	917.0-927.0
Bakken- Torquay N	01 62N	29	103/04-24-010-28W1/02	814.0-917.0
Bakken- Torquay Q	01 62Q	29	100/08-30-009-27W1/00	834.0-873.0
Bakken- Torquay R	01 62R	29	100/16-31-009-27W1/02	832.5-834.5
Bakken- Torquay T	01 62T	29	100/11-07-007-29W1/00	1066-1072.4
Bakken- Torquay X	01 62X	29	100/03-34-006-29W1/00	1029-1041
Bakken- Torquay Z	01 62Z	29	100/07-16-011-29W1/00	753-757.5; 842-846
Bakken- Torquay CC	01 62CC	29	100/12-24-011-29W1/00	837-840; 842-846
Bakken- Torquay DD	01 62DD	29	100/12-34-010-27W1/00	765-774.34
Bakken- Torquay GG	01 62GG	29	102/02-30-006-29W1/00	1096.18-1106.81
Bakken- Torquay HH	01 62HH	29	102/01-26-010-27W1/00	770.22-782.03

POOL	CODE	PLAT (Page #)	REFERENCE WELL	
			UWI	TVD INTERVAL (meters KB)
Bakken- Torquay II	01 62II	29	100/16-18-006-29W1/00	1099-1105.95
Torquay B	01 65B	30	100/09-30-007-28W1/00	969.0-971.0
TILSTON FIELD				
Mission Canyon 1 A	02 44A	31	100/06-31-005-29W1/00	940.0-969.0
Mission Canyon 1 C	02 44C	31	100/02-08-006-29W1/00	925.0-940.0
Mission Canyon 1 D	02 44D	31	100/11-15-006-29W1/00	907.0-910.5
Bakken- Torquay A	02 62A	32	100/13-29-005-29W1/00	1118.7-1120.7
WASKADA FIELD				
Favel A	03 10A	33	100/01-03-002-25W1/02	479.5-841.0
Favel B	03 10B	33	100/03-27-001-25W1/02	478.0-479.5
Favel C	03 10C	33	100/10-17-001-24W1/00	481.5-484.5
Lower Amaranth A	03 29A	34	100/11-30-001-25W1/03	884.5-920.5
Lower Amaranth I	03 29I	34	100/03-01-001-25W1/00	873.7-910.0
Lower Amaranth J	03 29J	34	100/01-03-001-25W1/00	885.0-920.5
Lower Amaranth O	03 29O	34	100/13-10-002-24W1/00	869.5-879.5
Mission Canyon 3b A	03 42A	35	100/11-30-001-25W1/03	920.5-929.6
Mission Canyon 3b B	03 42B	35	100/13-27-001-26W1/00	920.0-936.5
Mission Canyon 3b C	03 42C	35	100/05-07-001-25W1/00	931.5-941.0
Mission Canyon 3b E	03 42E	35	100/04-08-001-25W1/00	936.0-948.0
Mission Canyon 3b F	03 42F	35	100/11-22-001-26W1/02	929.5-948.0
Mission Canyon 3b G	03 42G	35	100/11-05-002-26W1/00	929.0-955.5
Mission Canyon 3a A	03 43A	36	100/01-25-001-26W1/00	928.0-950.0
Mission Canyon 3a B	03 43B	36	100/12-23-001-25W1/00	904.6-912.6
Mission Canyon 3a C	03 43C	36	100/12-26-001-26W1/00	924.0-940.0
Mission Canyon 3a D	03 43D	36	100/10-30-001-25W1/00	921.0-931.0
Mission Canyon 3a E	03 43E	36	100/02-12-001-26W1/02	930.0-944.0
Mission Canyon 3a F	03 43F	36	100/15-05-001-25W1/00	931.0-941.0
Mission Canyon 3a G	03 43G	36	100/12-31-001-25W1/00	912.5-929.0
Mission Canyon 3a H	03 43H	36	100/06-18-002-251W1/00	899.0-907.0
Mission Canyon 3a I	03 43I	36	100/07-35-001-26W1/00	917.0-935.0
Mission Canyon 3a K	03 43K	36	100/06-19-001-25W1/00	924.0-934.0
Mission Canyon 3a L	03 43L	36	100/08-32-001-25W1/00	909.5-917.0
Mission Canyon 3a M	03 43M	36	100/10-10-001-25W1/00	915.0-925.0
Mission Canyon 3a N	03 43N	36	100/02-20-001-25W1/00	919.5-930.0
Mission Canyon 3a O	03 43O	36	100/10-04-001-25W1/00	931.5-933

POOL	CODE	PLAT (Page #)	REFERENCE WELL	
			UWI	TVD INTERVAL (meters KB)
Mission Canyon 1 A	03 44A	37	100/01-30-001-25W1/00	917.4-947.9
Mission Canyon 1 B	03 44B	37	100/09-13-001-26W1/00	920.5-967.4
Mission Canyon 1 C	03 44C	37	100/02-22-001-25W1/00	908.3-943.0
Mission Canyon 1 D	03 44D	37	100/04-09-002-25W1/00	986.0-912.0
Mission Canyon 1 E	03 44E	37	100/06-33-001-25W1/00	905.5-942.0
Mission Canyon 1 F	03 44F	37	100/02-27-001-25W1/00	902.5-930.0
Mission Canyon 1 G	03 44G	37	100/04-05-001-24W1/00	910.0-937.0
Mission Canyon 1 H	03 44H	37	100/03-24-001-25W1/00	898.0-910.0
Mission Canyon 1 I	03 44I	37	100/02-14-002-25W1/00	882.0-915.0
Mission Canyon 1 I	03 44J	37	100/04-24-002-26W1/00	898.0-900.0
Mission Canyon 1 K	03 44K	37	100/02-33-001-24W1/00	871.7-900.0
Mission Canyon 1 L	03 44L	37	100/04-12-001-24W1/00	941.5-946.0
Mission Canyon 1 M	03 44M	37	100/09-25-001-24W1/00	939.5-941.5
Mission Canyon 1 N	03 44N	37	100/06-07-001-24W1/00	897.5-898.5
Mission Canyon 1 O	03 44O	37	100/13-09-002-24W1/00	865.0-873.0
Mission Canyon 1 P	03 44P	37	100/15-10-002-24W1/00	888.8-893.8
Mission Canyon 1Q	03 44Q	37	100/07-06-002-24W1/00	876.5-878.5
LULU LAKE FIELD				
Lodgepole WL A	04 52A	39	100/08-23-001-21W1/00	1008.5-1027.0
Lodgepole WL B	04 52B	39	100/15-27-001-21W1/00	1005.5-1024.0
VIRDEN FIELD				
Reston A	05 21A	41	100/08-06-012-26W1/00	569-574
Lodgepole A	05 59A	42	102/06-27-011-26W1/00	563.9-667.0
Lodgepole B	05 59B	42	100/06-28-010-26W1/00	623.0-726.0
Lodgepole C	05 59C	42	100/10-21-009-25W1/00	595.0-648.0
Lodgepole D	05 59D	42	100/07-11-009-25W1/00	598.9-655.3
Lodgepole E	05 59E	42	100/07-26-009-26W1/00	634.0-732.1
Lodgepole G	05 59G	42	100/10-01-011-27W1/00	647.0-710.0
Lodgepole K	05 59K	42	100/15-16-011-27W1/00	895.2
WHITEWATER FIELD				
Lower Amaranth A	06 29A	38	100/04-21-003-21W1/02	745.0-757.7
Lodgepole WL A	06 52A	39	100/16-17-003-21W1/00	759.6-786.1
Lodgepole WL B	06 52B	39	100/16-02-003-21W1/00	790.5-812.5
Lodgepole Virden A	06 53A	40	100/05-12-003-21W1/00	787.0-804.5

POOL	CODE	PLAT (Page #)	REFERENCE WELL	
			UWI	TVD INTERVAL (meters KB)
PIERSON FIELD				
Lower Amaranth A	07 29A	43	100/04-26-003-28W1/00	915.7-949.5
Lower Amaranth B	07 29B	43	100/12-30-002-28W1/02	955.0-992.0
Lower Amaranth L	07 29L	43	100/02-26-001-29W1/00	1000.0-1038.0
Lower Amaranth S	07 29S	43	100/02-31-002-29W1/00	
Lower Amaranth T	07 29T	43	100/15-32-001-29W1/02	
Lower Amaranth U	07 29U	43	100/11-35-002-28W1/00	962.18-964.3
Lower Amaranth V	07 29V	43	100/11-35-002-28W1/00	952.94
Lower Amaranth W	07 29W	43	100/06-07-002-29W1/00	1029.5-1032.5
Lower Amaranth X	07 29X	43	102/01-03-003-29W1/00	1000.2-1003.76
Lower Amaranth – Mission Canyon 3b A	07 35A	44	100/14-17-002-29W1/02	1023.5-1028.5; 1036.5-1038.8
Lower Amaranth – Mission Canyon 3b B	07 35B	44	100/01-35-002-28W1/00	959.0-963.0; 950.5-956.5
Lower Amaranth – Mission Canyon 3b C	07 35C	44	100/11-34-002-28W1/00	974-975; 955-961
Lower Amaranth – Mission Canyon 3b D	07 35D	44	100/15-20-002-28W1/02	975.0-979.0; 988.5-990
Mission Canyon 3 B	07 41B	45	100/14-05-002-28W1/02	1007.5-1030.0
Mission Canyon 3 C	07 41C	45	100/12-06-003-29W1/00	1165.0-1605.0 md
Mission Canyon 3 D	07 41D	45	100/07-21-001-27W1/00	
Mission Canyon 3b B	07 42B	46	100/08-07-003-28W1/00	981.5-990.6
Mission Canyon 3b C	07 42C	46	100/06-17-003-29W1/00	1002.0-1016.0
Mission Canyon 3b D	07 42D	46	100/13-32-002-29W1/00	1021.1-1033.3
Mission Canyon 3b E	07 42E	46	100/11-30-002-28W1/00	990.0-1002.0
Mission Canyon 3b F	07 42F	46	100/14-20-002-28W1/02	987.5-1003.4
Mission Canyon 3b J	07 42J	46	100/13-33-001-28W1/00	1002.0-1026.0
Mission Canyon 3b K	07 42K	46	100/05-30-001-28W1/00	1025.0-1043.5
Mission Canyon 3b L	07 42L	46	100/06-23-002-29W1/00	1012-1020
Mission Canyon 3b M	07 42M	46	100/08-06-002-27W1/00	967.7-969.7
Mission Canyon 3b N	07 42N	46	100/04-34-002-28W1/00	974.5-975.8
Mission Canyon 3b O	07 42O	46	100/09-26-002-28W1/00	963-965
Mission Canyon 3b P	07 42P	46	102/06-15-002-29W1/00	1029.49-1032.35
Mission Canyon 3b Q	07 42Q	46	100/10-29-002-29W1/00	1029.5-1031.5
Mission Canyon 3a A	07 43A	47	100/08-16-003-29W1/00	999.7-1018.0
Mission Canyon 3a B	07 43B	47	100/09-18-003-28W1/00	976.9-990.6
Mission Canyon 3a E	07 43E	47	100/06-10-003-28W1/00	970.3-985.0
Mission Canyon 3a F	07 43F	47	100/14-05-003-29W1/03	1085.0-1385.0 md
Mission Canyon 3a G	07 43G	47	100/06-36-002-29W1/02	1002.8-1003.85
Mission Canyon 3a H	07 43H	47	100/10-29-002-29W1/00	1029.5-1031.5

POOL	CODE		REFERENCE WELL	
			UWI	TVD INTERVAL (meters KB)
Mission Canyon 1 A	07 44A	48	100/04-25-003-28W1/00	948.0-980.0
KIRKELLA FIELD				
Lodgepole Dolomite A	09 51A	49	100/14-08-012-29W1/00	725.0-742.0
Lodgepole Dolomite B	09 51B	49	100/04-19-012-29W1/00	729.0-744.0
Lodgepole Daly A	09 54A	50	100/14-10-012-29W1/00	722.4-734.3
Lodgepole Daly B	09 54B	50	100/05-17-012-29W1/00	746.0-755.0
Lodgepole Daly C	09 54C	50	100/04-18-012-29W1/00	745.5-757.0
Lodgepole Daly D	09 54D	50	100/14-01-012-29W1/00	714.0-740.0
Lodgepole Daly E	09 54E	50	100/16-06-012-29W1/00	746.0-758.0
Lodgepole Crinoidal A	09 55A	51	100/10-03-012-29W1/00	758.0-761.5
Lodgepole Crinoidal B	09 55B	51	100/11-15-012-29W1/00	716.0-720.0 md
Lodgepole Crinoidal C	09 55C	51	100/15-10-012-29W1/00	715.0-729.0
Lodgepole A	09 59A	52	100/16-16-12-29W1/03	741.5-742.5; 752.5-753.5
Lodgepole B	09 59B	52	100/04-36-011-29W1/00	741.5-745
Bakken-Torquay A	09 62A	53	100/12-15-012-29W1/02	786.5-791.5
Bakken-Torquay B	09 62B	53	100/16-03-012-29W1/02	809.0-811.0
Bakken-Torquay C	09 62C	53	100/14-35-011-29W1/00	817-818.5
Bakken-Torquay D	09 62D	53	102/04-36-011-29W1/02	828.5-835
SOURIS HARTNEY FIELD				
Lodgepole Virden A	10 53A	55	100/04-16-006-22W1/00	653.2-671.8
REGENT FIELD				
Lodgepole WL A	13 52A	54	100/16-02004-22W1/00	761.5-780.0
Lodgepole WL B	13 52B	54	100/15-21-004-22W1/00	758.6-777.8
Lodgepole Virden A	13 53A	55	100/06-07-004-21W1/00	766.9-781.8
Lodgepole Virden B	13 53B	55	100/14-13-004-22W1/00	759.0-780.0
Lodgepole Virden D	13 53D	55	100/12-31-004-21W1/00	733.0-738.4
Lodgepole Virden E	13 53E	55	100/02-07-005-21W1/00	713.5-715
MOUNTAINSIDE FIELD POOL				
Lodgepole WL A	14 52A	39	103/11-16-002-21W1/00	1078.0-1451.4

POOL	CODE		REFERENCE WELL	
			UWI	TVD INTERVAL (meters KB)
BIRDTAIL FIELD				
Bakken A	15 60A	56	100/05-04-016-27W1/00	518.5-524.5
Bakken-Torquay A	15 62A	56	100/09-30-016-27W1/00	535.5-538
MANSON FIELD				
Bakken-Torquay A	17 62A	57	100/01-34-012-28W1/00	700.41-707.44
Bakken-Torquay B	17 62B	57	100/14-09-013-28W1/00	672-674
Bakken-Torquay F	17 62F	57	100/01-34-012-28W1/00	700.41-707.44
Bakken-Torquay G	17 62G	57	100/04-06-014-28W1/00	
Bakken-Torquay H	17 62H	57	100/11-04-014-28W1/00	625.7-629.2; 630.9-633.2
OTHER AREAS				
Melita A	99 19A	58	100/14-15-016-29W1/00	432.3-446.0
Melita B	99 19B	58	100/06-17-016-29W1/00	438-441
Melita D	99 19D	58	100/16-19-012-26W1/00	548-551
Reston A	99 21A	41	100.07-01-013-27W1.00	537-538.8
Reston B	99 21B	41	100.16-27-012-27W1.00	549-549.6
Reston C	99 21C	41	100.06-02-013-27W1.00	549.4-549.6; 550.1-550.7
Lower Amaranth-Lodgepole	99 40A	61	100/03-33-008-24W1/00	570.0-584.0
Mission Canyon 1 A	99 44A	37	100/08-31-002-23W1/00	812.0-843.0
Mission Canyon 1 D	99 44D	37	100/16-02-003-26W1/00	879.0-922.0
Mission Canyon 1 E	99 44E	31	100/16-06-006-28W1/00	905.0-908.0
Mission Canyon 1 G	99 44G	61	100/02-16-006-26W1/00	855.0-1229.0 md
Mission Canyon 1 H	99 44H	61	100/03-13-006-27W1/00	786.5-790.0
Mission Canyon 1 J	99 44J	31	100/11-36-005-29W1/00	923.0-927.5
Mission Canyon 1 K	99 44K	61	100/09-02-007-27W1/00	777.0-779.5
Mission Canyon 1 L	99 44L	61	100/06-03-007-27W1/00	789.7-794.0
Mission Canyon 1 M	99 44M	37	100/05-35-002-24W1/00	842.0-845.0
Mission Canyon 1 O	99 44O	37	100/14-36-001-23W1/00	944-948
Mission Canyon 1 R	99 44R	31	100/12-21-005-28W1/00	905-908; 899-902
Lodgepole WL C	99 52C	54	100/13-19-004-22W1/00	762.0-775.7
Lodgepole Virden C	99 53C	62	100/05-32-002-23W1/00	827.0-828.5
Lodgepole I	99 59I	62	100/11-35-002-24W1/00	960.0-1955 md, 1063-1308 md
Lodgepole J	99 59J	54	100/10-18-005-22W1/00	757.0-759; 764.0- 765.5

POOL	CODE	PLAT (Page #)	REFERENCE WELL	
			UWI	TVD INTERVAL (meters KB)
Lodgepole N	99 59N	59	100/01-34-12-27W1/00	556-557
Lodgepole P	99 59P	59	100/04-27-012-27W1/00	565-566
Lodgepole Q	99 59Q	59	100/01-30-012-26W1/00	582-584.5
Bakken-Torquay L	99 62L	32	100/05-08-004-29W1/00	1209.5-1214.5
Bakken-Torquay M	99 62M	32	100/10-08-006-28W1/00	1064.0-1066.0
Bakken- Torquay U	99 62U	29	100/01-11-010-27W1/00	779.7-789.4
Bakken- Torquay DD	99 62DD	60	100/15-32-017-28W1/00	511-513
Bakken- Torquay GG	99 62GG	60	100/01-34-012-27W1/00	644-645
Bakken- Torquay HH	99 62HH	60	100/08-36-013-28W1/00	606-608
Bakken- Torquay JJ	99 62JJ	60	100/08-10-012-28W1/02	740.62-759.93
Bakken- Torquay KK	99 62KK	60	100/09-23-011-28W1/00	821.11-824.91
Bakken- Torquay LL	99 62LL	60	100/04-25-015-27W1/00	527.7
Bakken-Torquay MM	99 62MM	60	100/14-21-014-28W1/00	594.5-595.5
Bakken-Torquay NN	99 62NN	60	100/03-26-018-29W1/00	478.5-486

MANITOBA'S DESIGNATED POOL PLATS

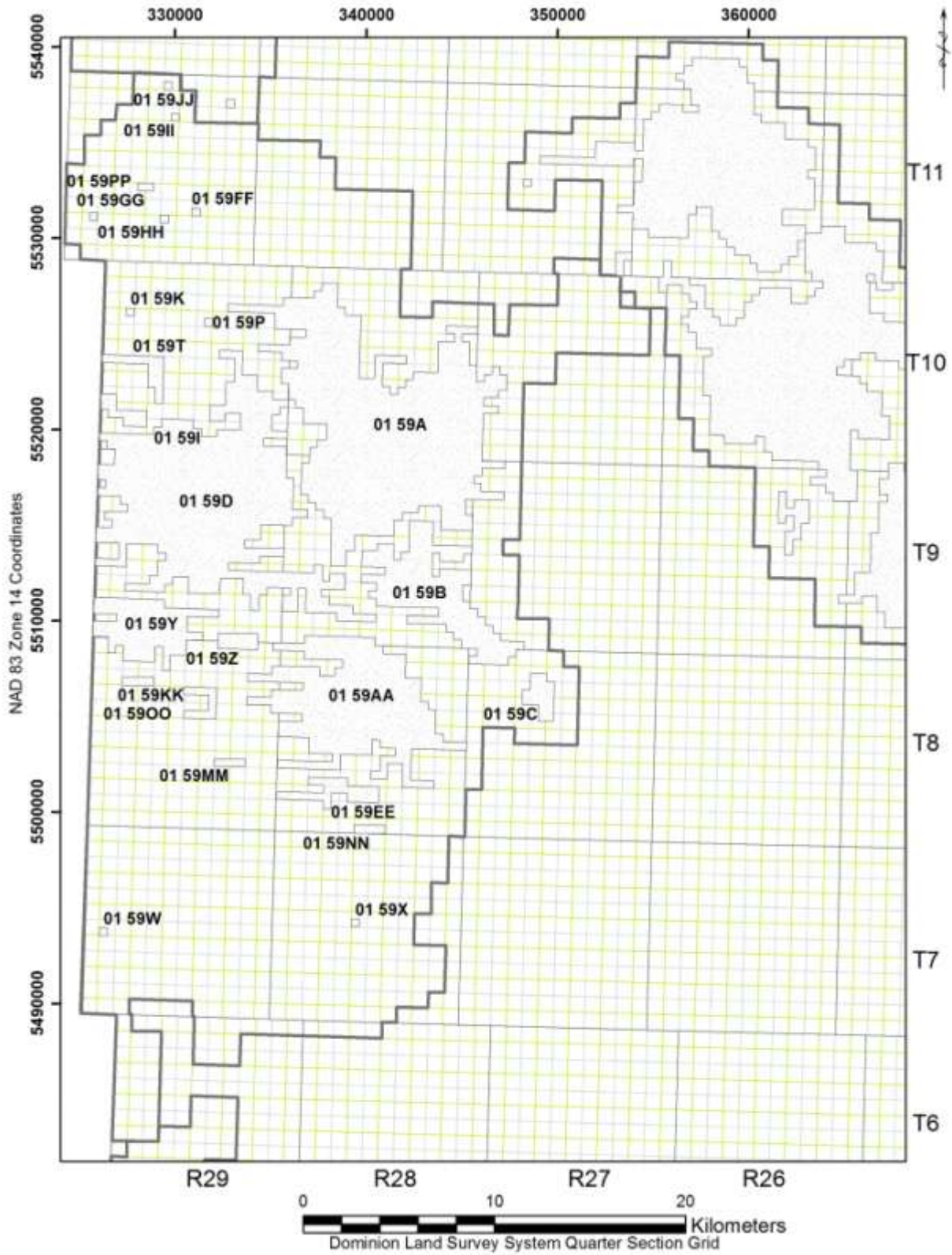


Figure 12 - Daly Sinclair Lodgepole Pools (01 59A, B, C, D, I, K, P, T, W, X, Y, Z, AA, EE, FF, GG, HH, II, JJ, KK, MM, NN, OO & PP)

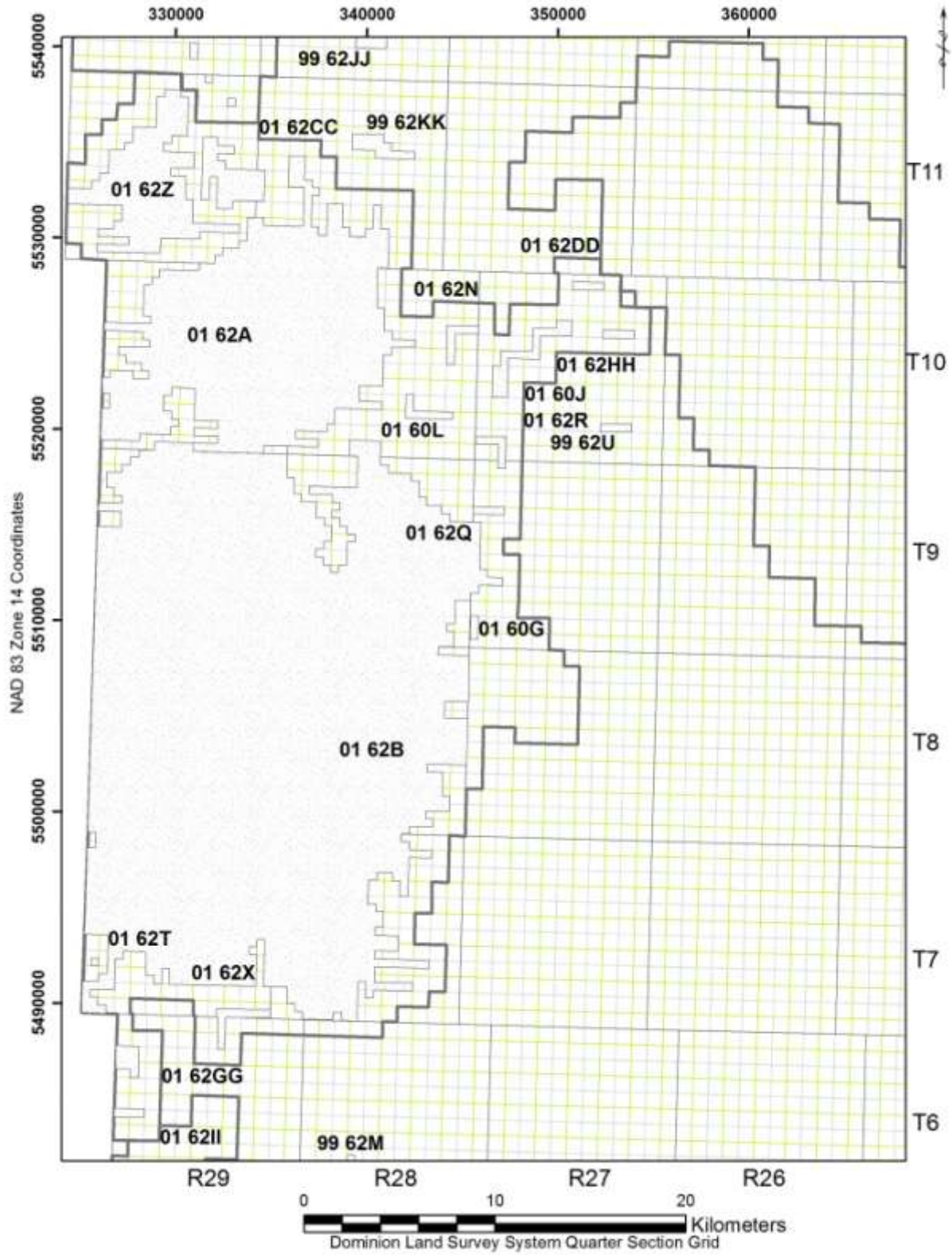


Figure 13 - Daly Sinclair Bakken & Bakken-Torquay Pools (01 60G, J, L & 01 62A, B, N, Q, R, T, X, Z, CC, DD, GG, HH & II).

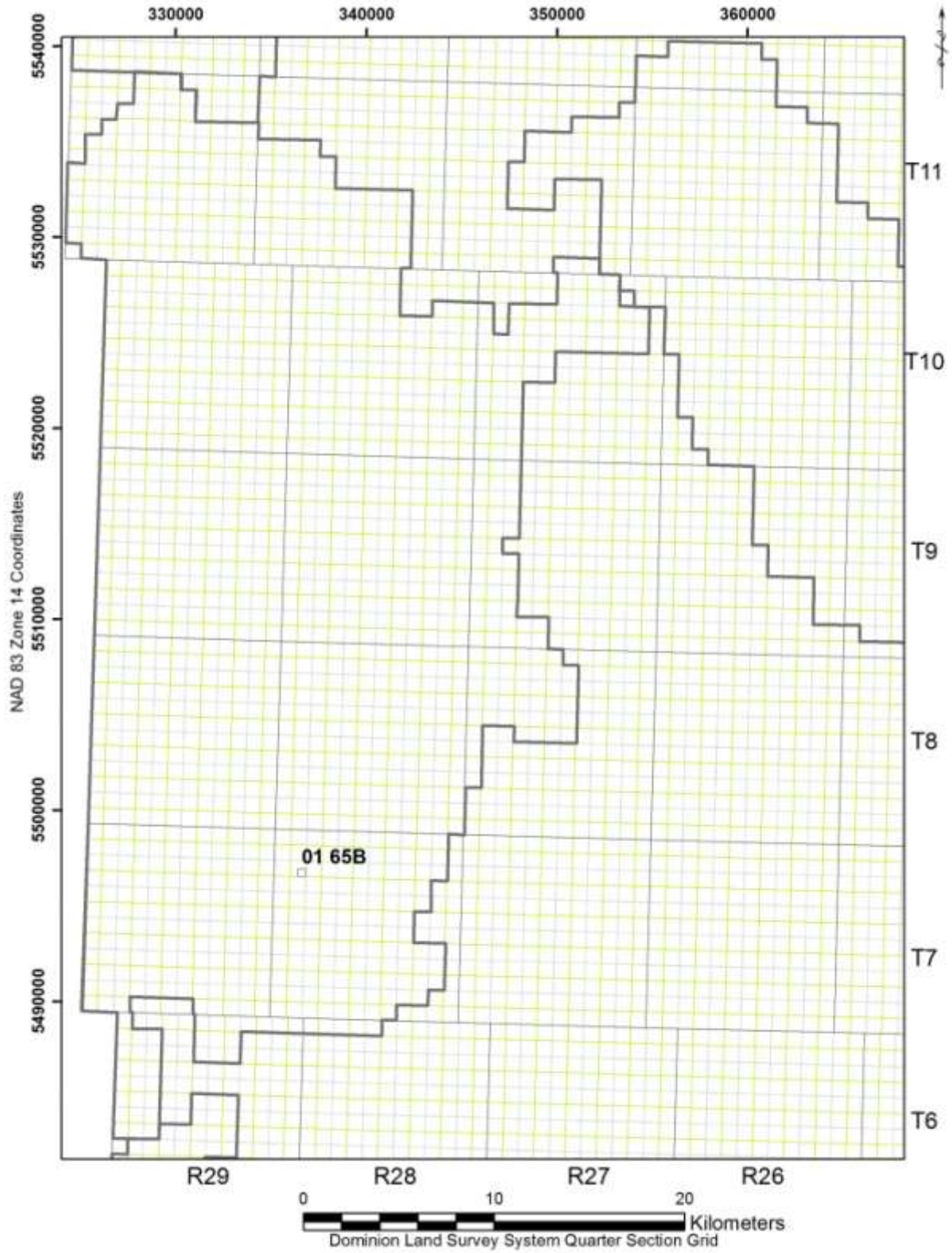


Figure 14 - Daly Sinclair Torquay Pools (01 65B)

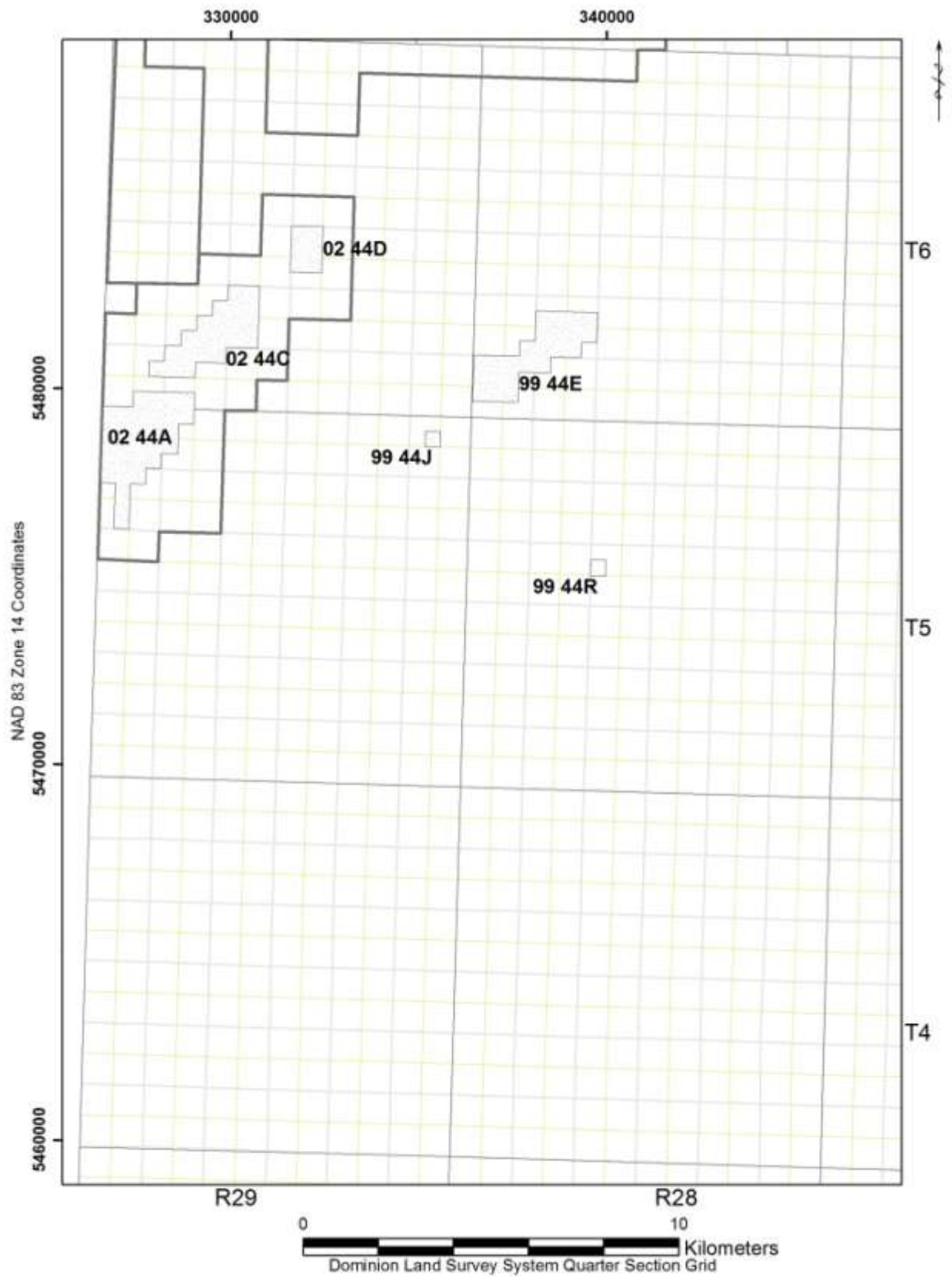


Figure 15 - Tilston & Other Areas Mission Canyon 1 Pools (02 44A, C & D & 99 44E, J & R).

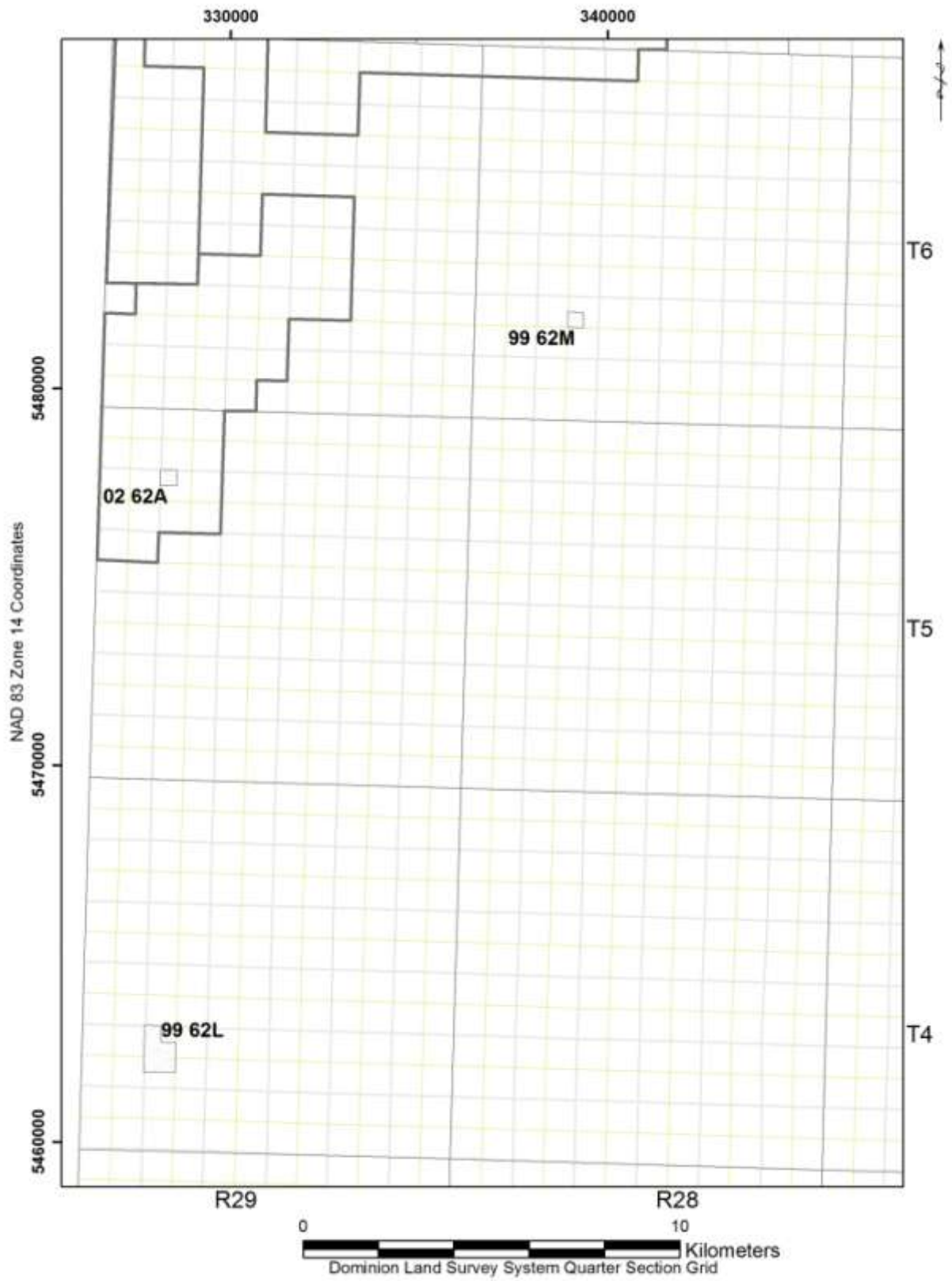


Figure 16 - Tilston & Other Areas Bakken-Torquay Pools (02 62A, 99 62L & 99 62M).

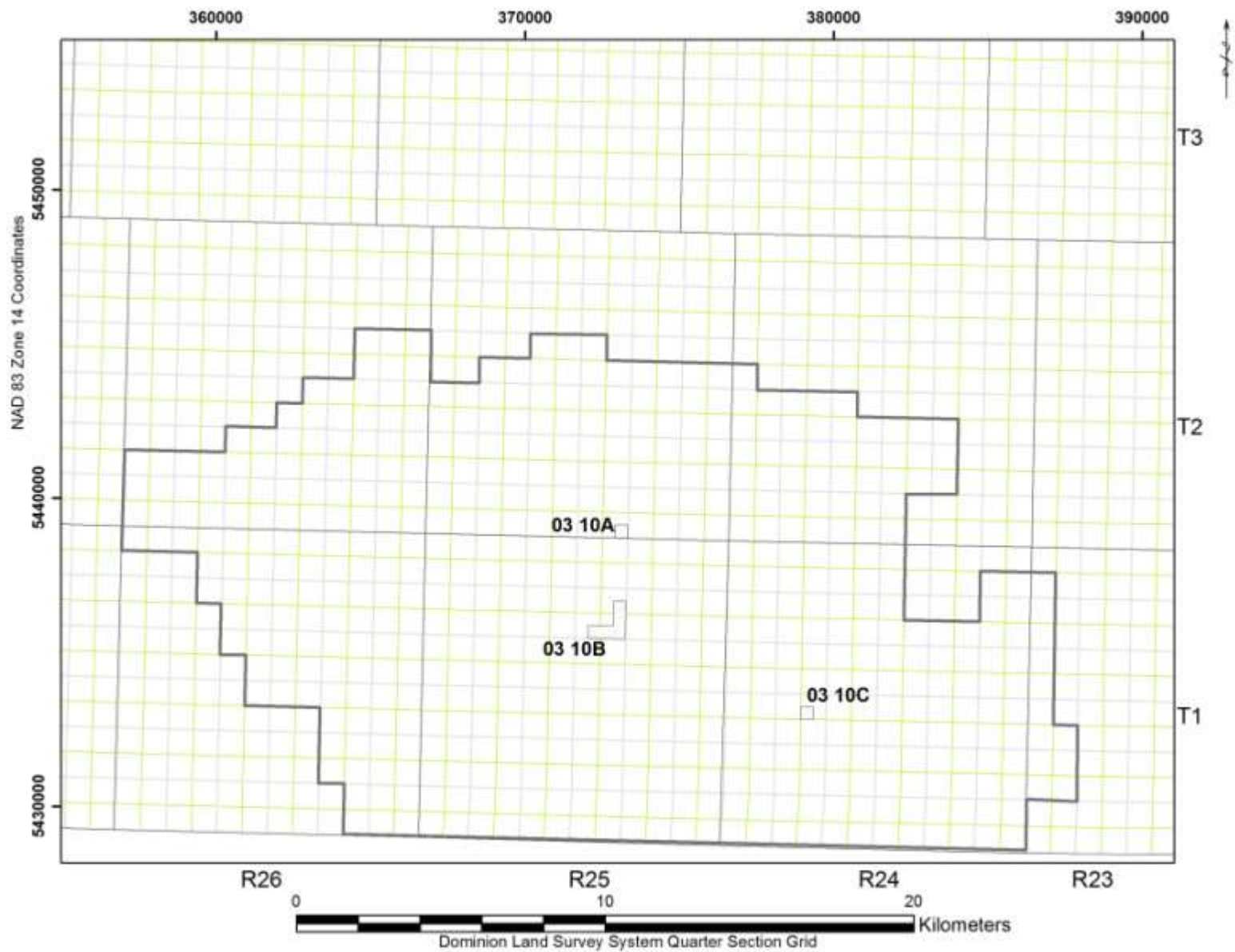


Figure 17 - Waskada Favel Pools (03 10A – 03 10C)

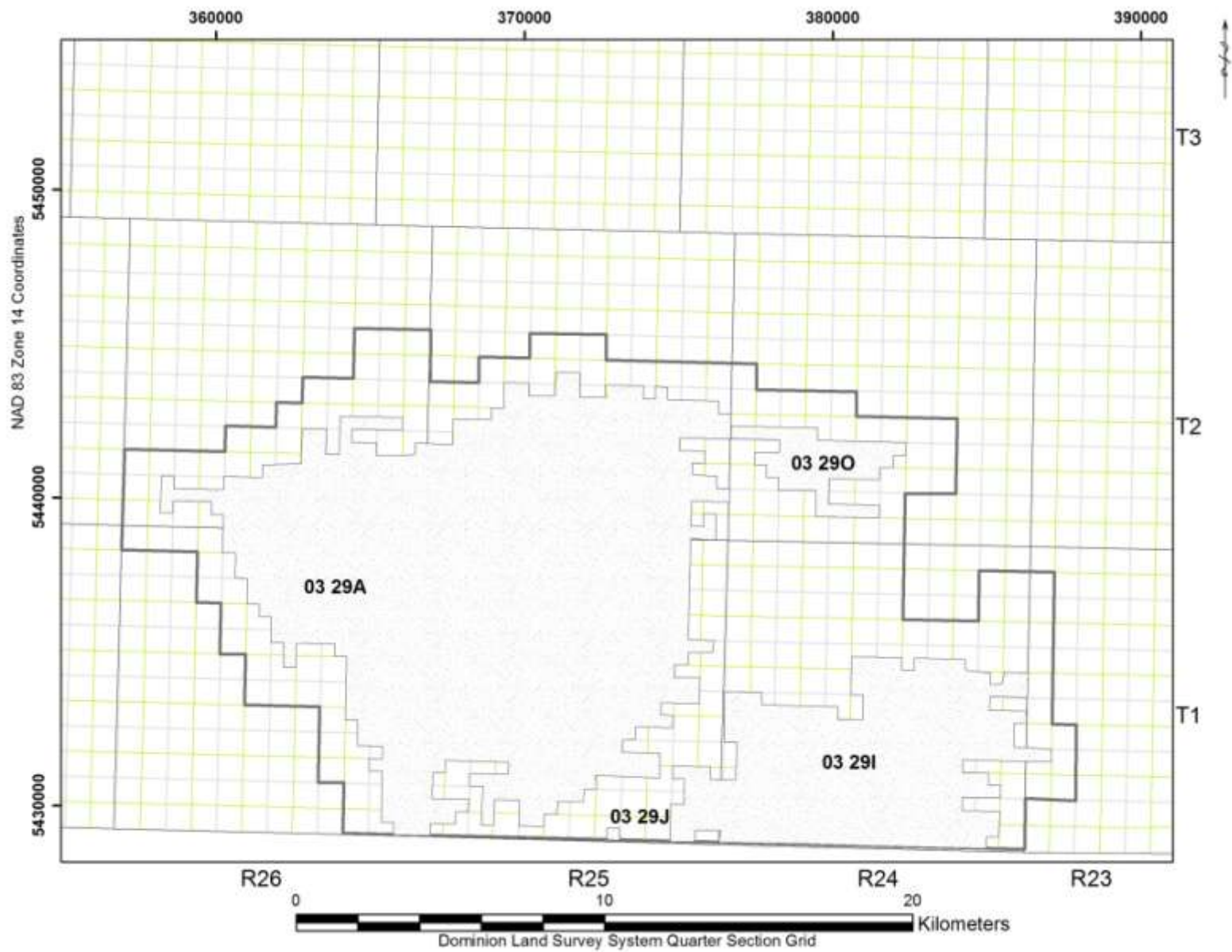


Figure 18 - Waskada Lower Amaranth Pools (03 29A, I, J, K & O)

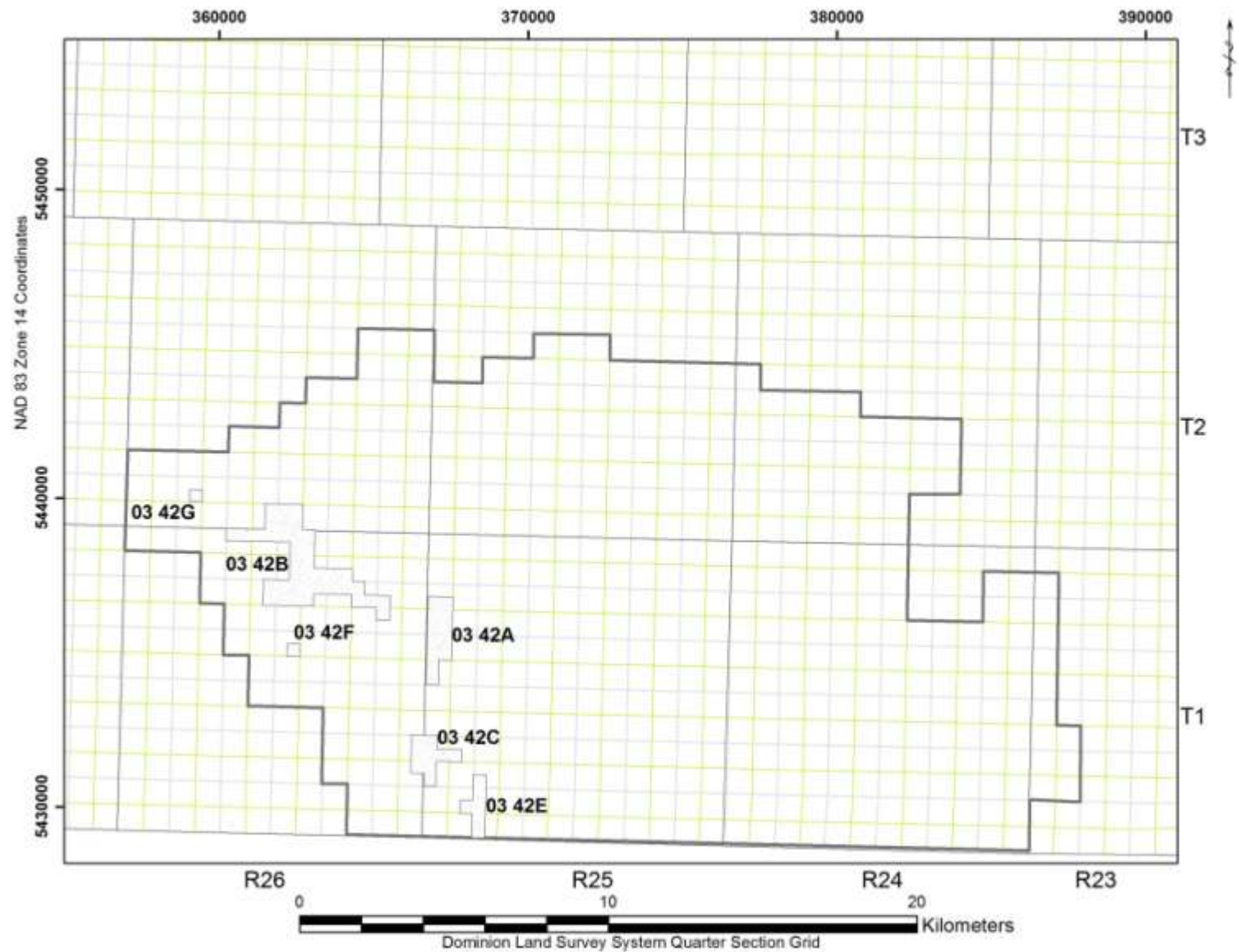


Figure 19 - Waskada Mission Canyon 3b Pools (03 42A, B, C, E, F & G)

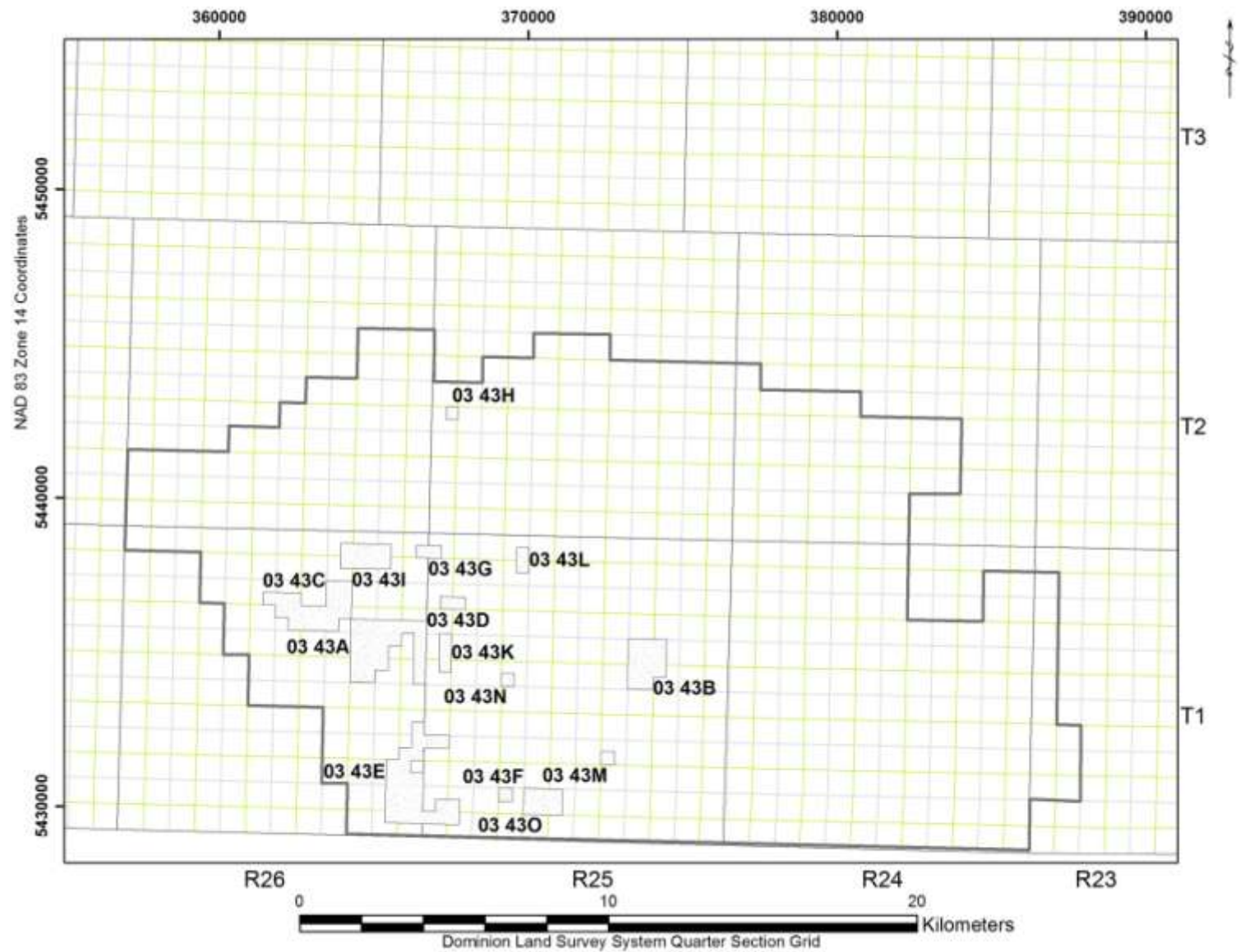


Figure 20 - Waskada Mission Canyon 3a Pools (03 43A - I, K, L, M, N & O)

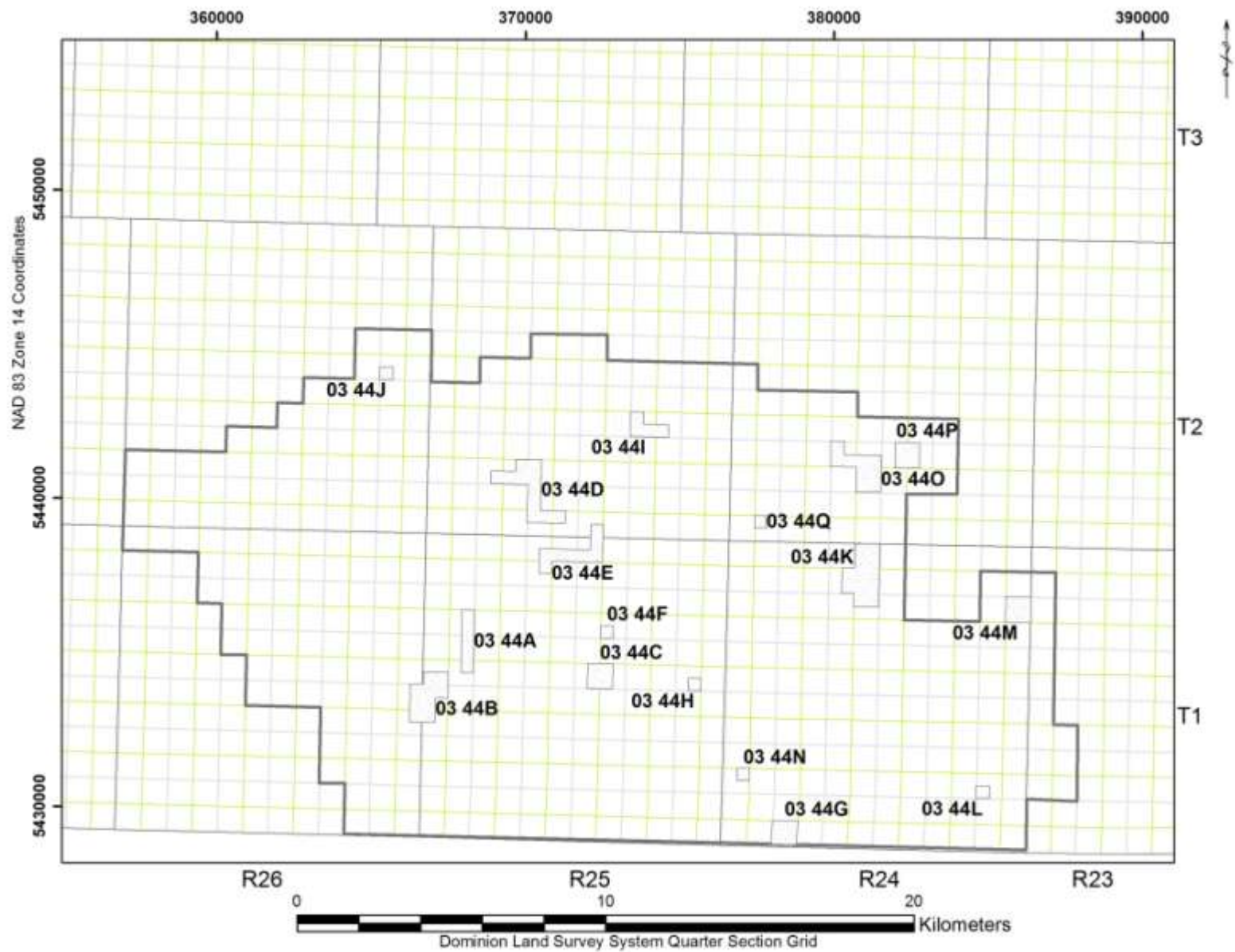


Figure 21 - Waskada & Other Areas Mission Canyon 1 Pools (03 44A – 03 44Q, 99 44A, 99 44D, 99 44M & 99 44O)

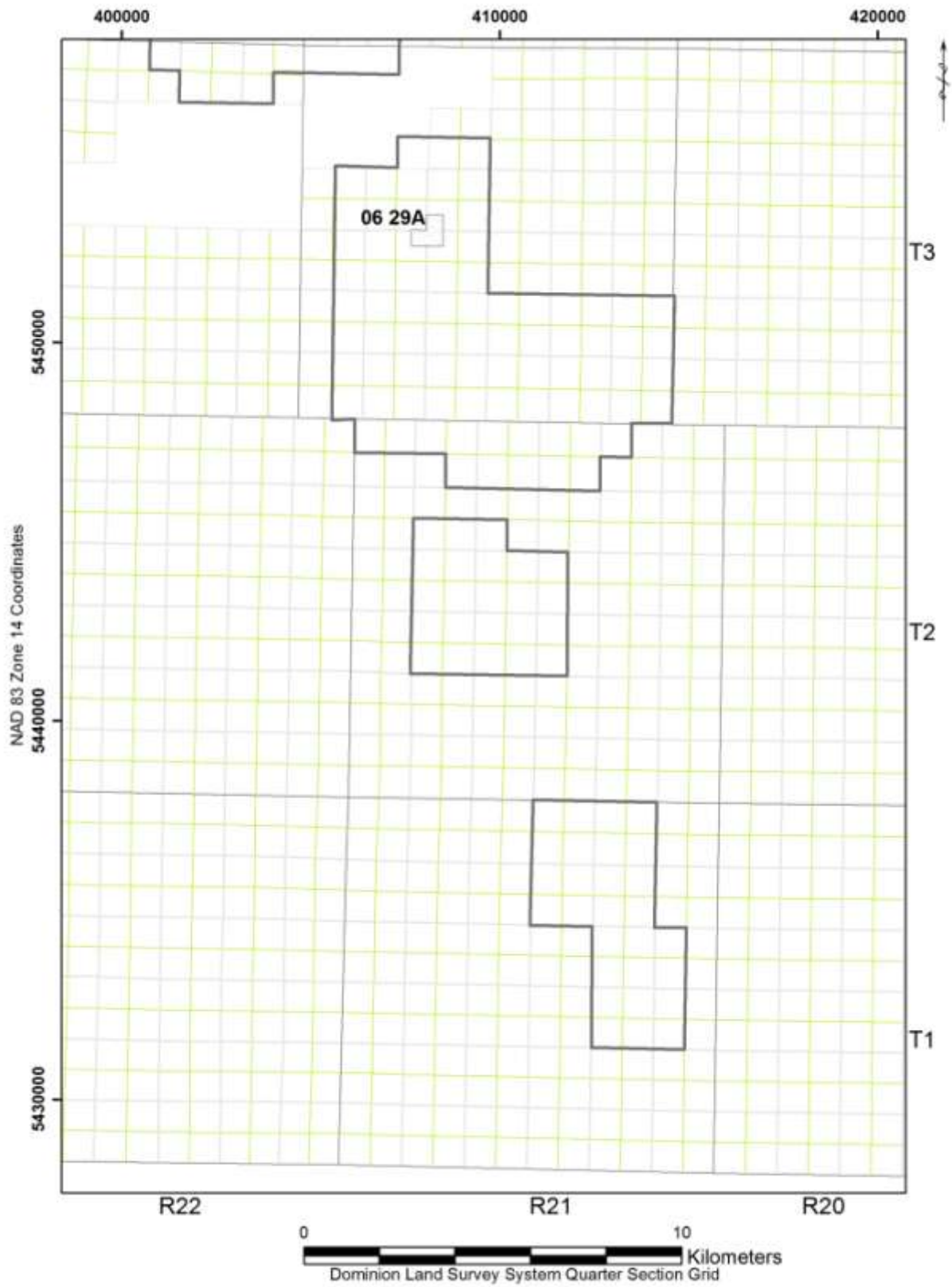


Figure 22 - Lulu Lake, Mountainside & Whitewater Lower Amaranth Pools (06 29A)

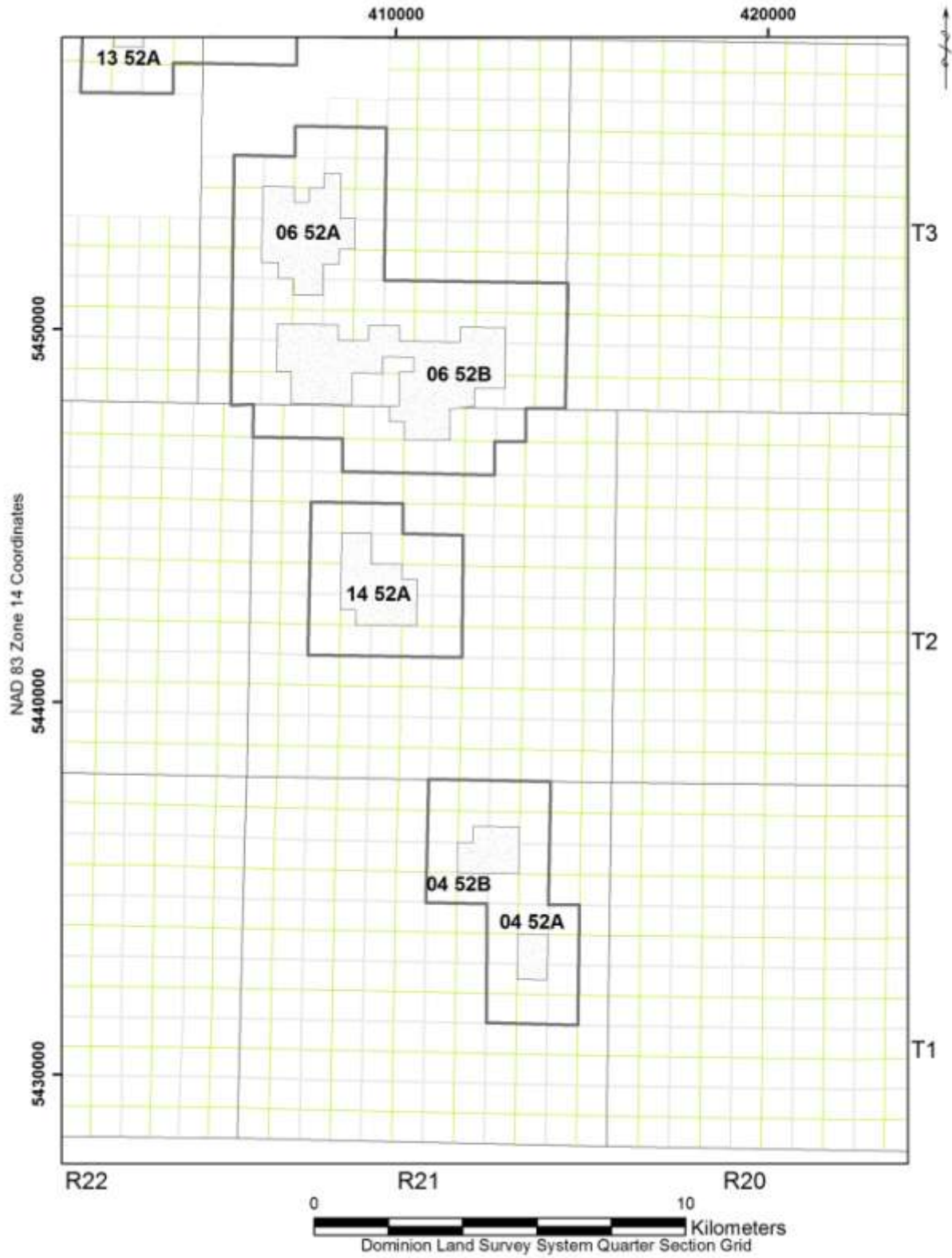


Figure 23 - Lulu Lake, Mountainside & Whitewater Lodgepole Whitewater Lake Pools (04 52A, 04 52B, 06 52A, 06 52B & 14 52A)

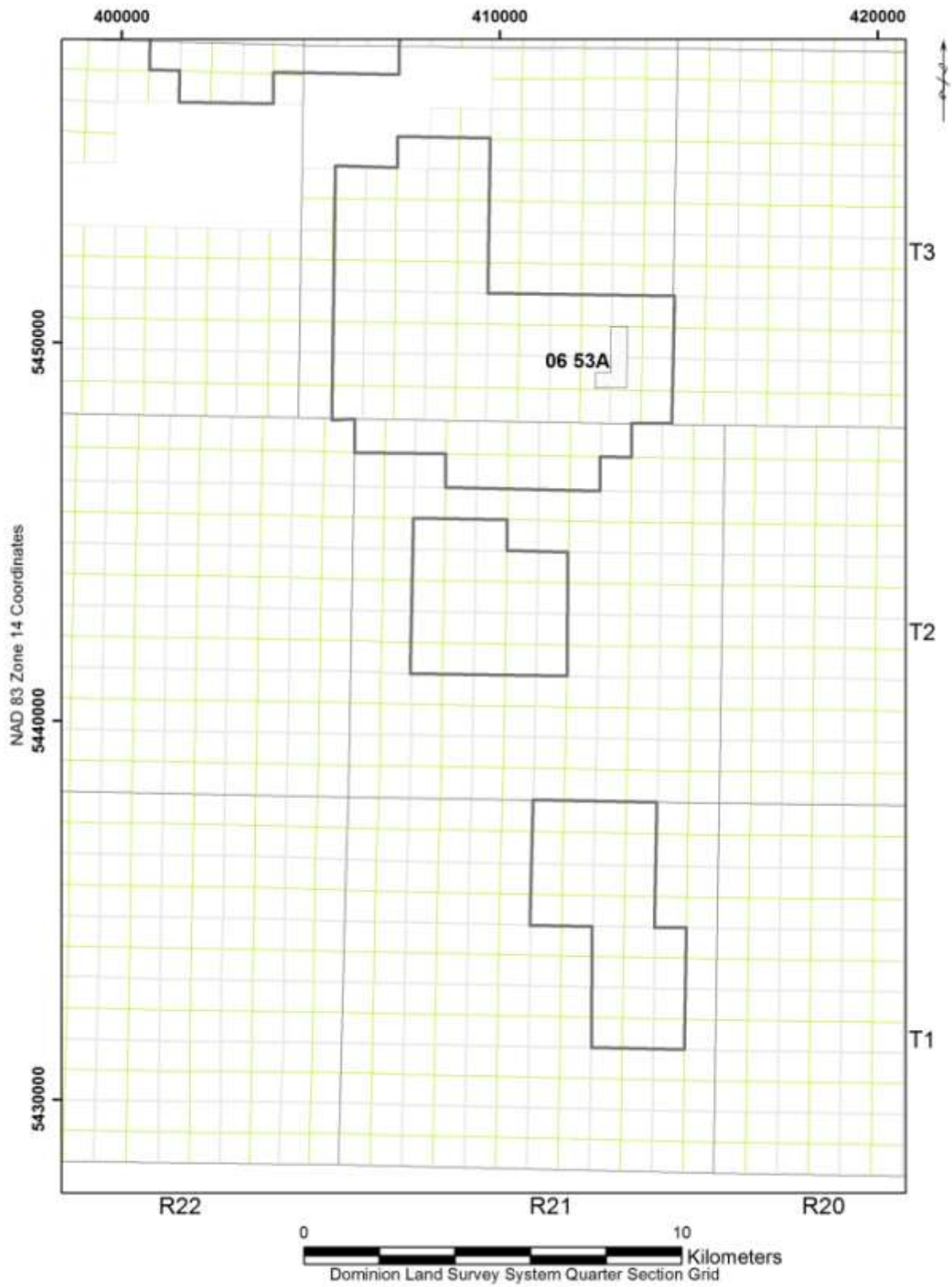


Figure 24 - Lulu Lake, Mountainside & Whitewater Lodgepole Virden Pools (06 53A)

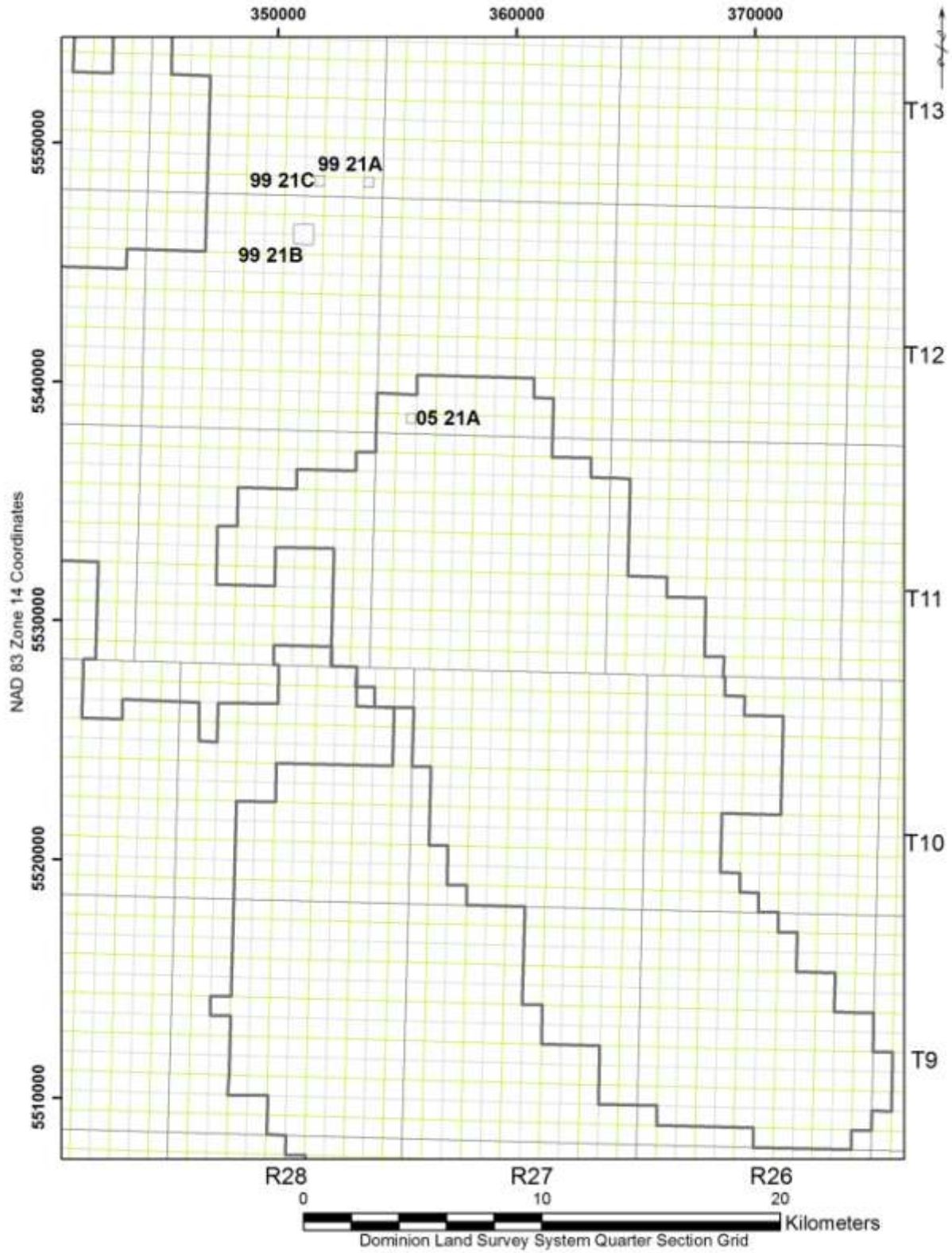


Figure 25 - Virden & Other Areas Reston Pools (05 21A & 99 21A, B & C)

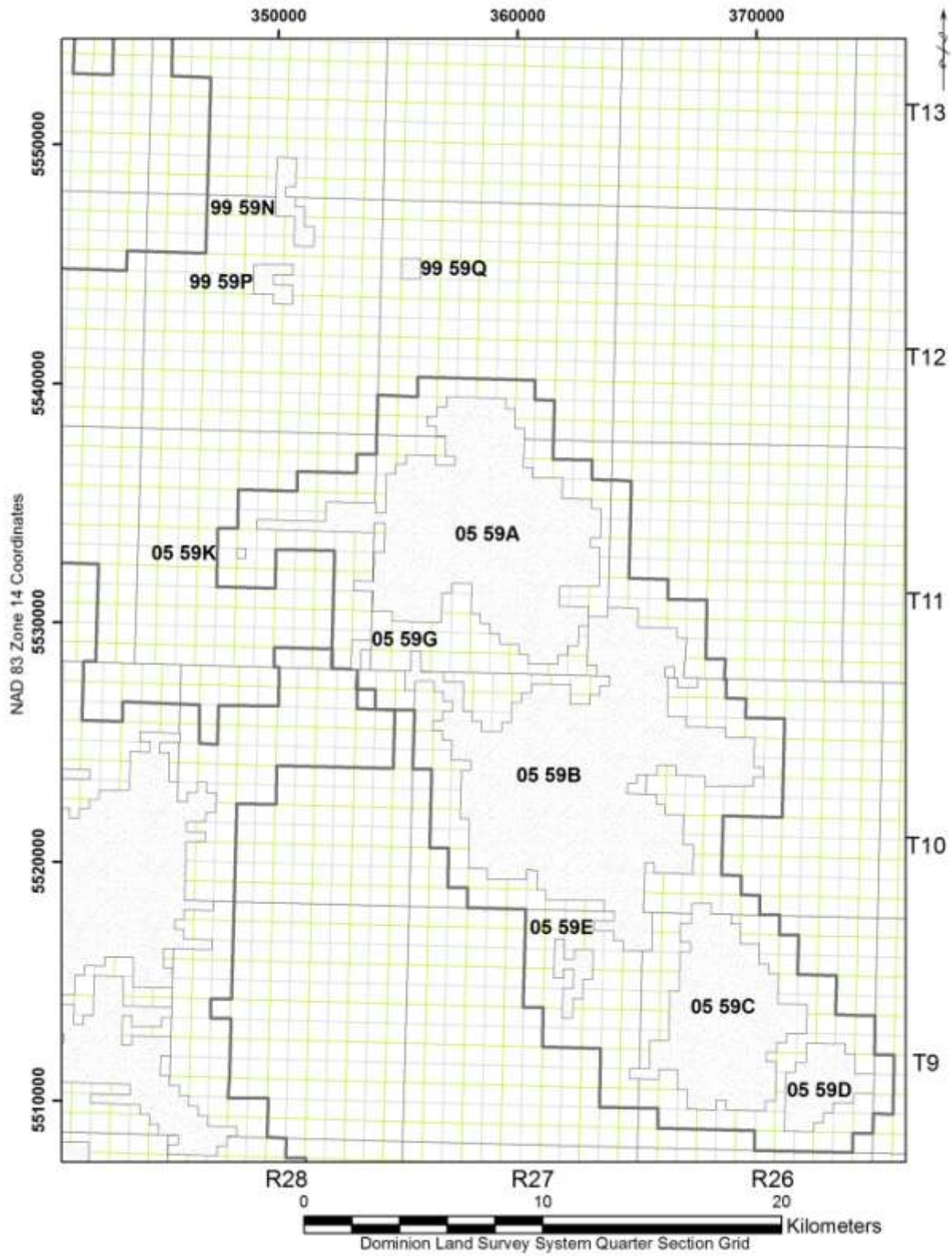


Figure 26 - Virden & Other Areas Lodgepole Pools (05 59A, B, C, D, E, G, K & 99 59N, P & Q)

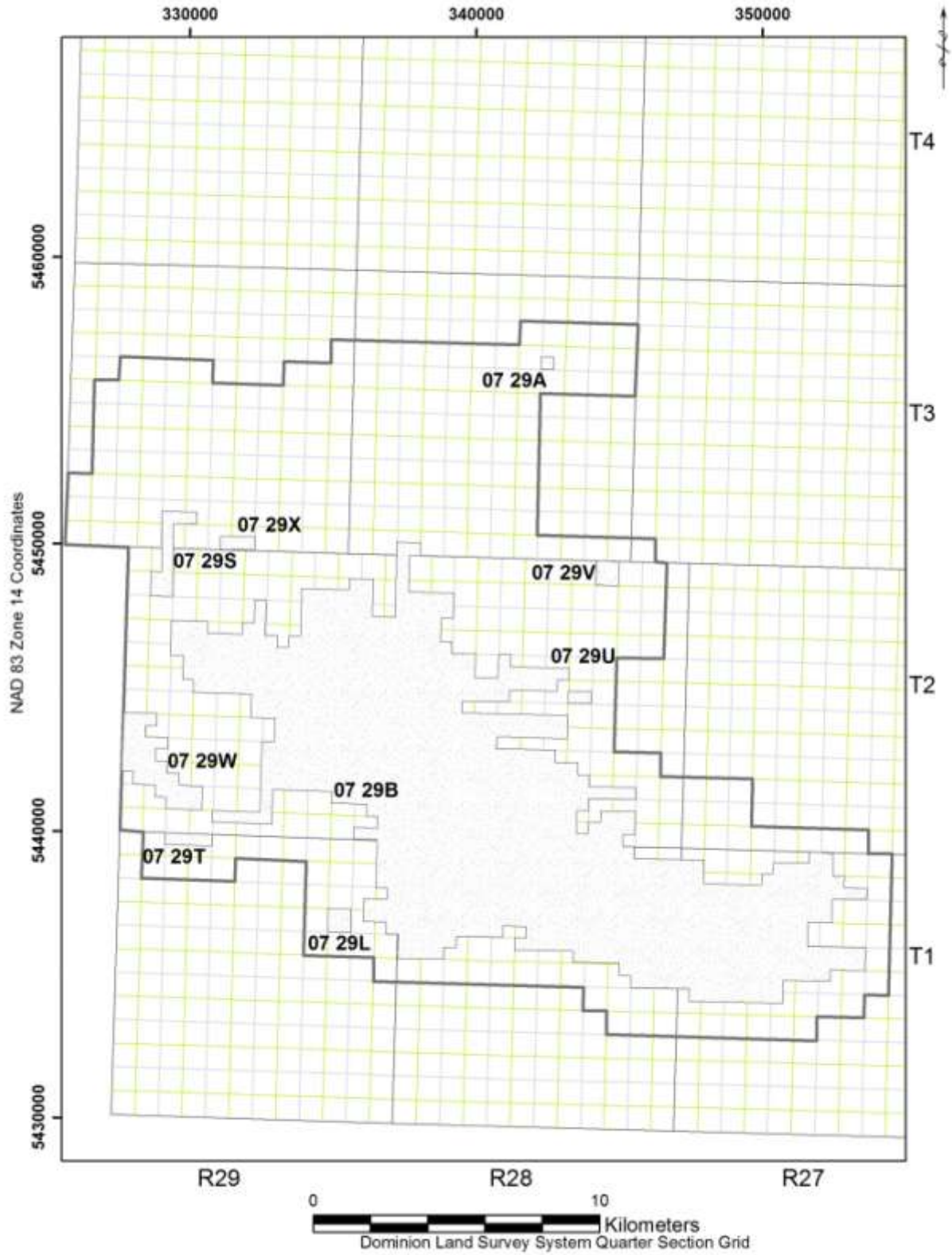
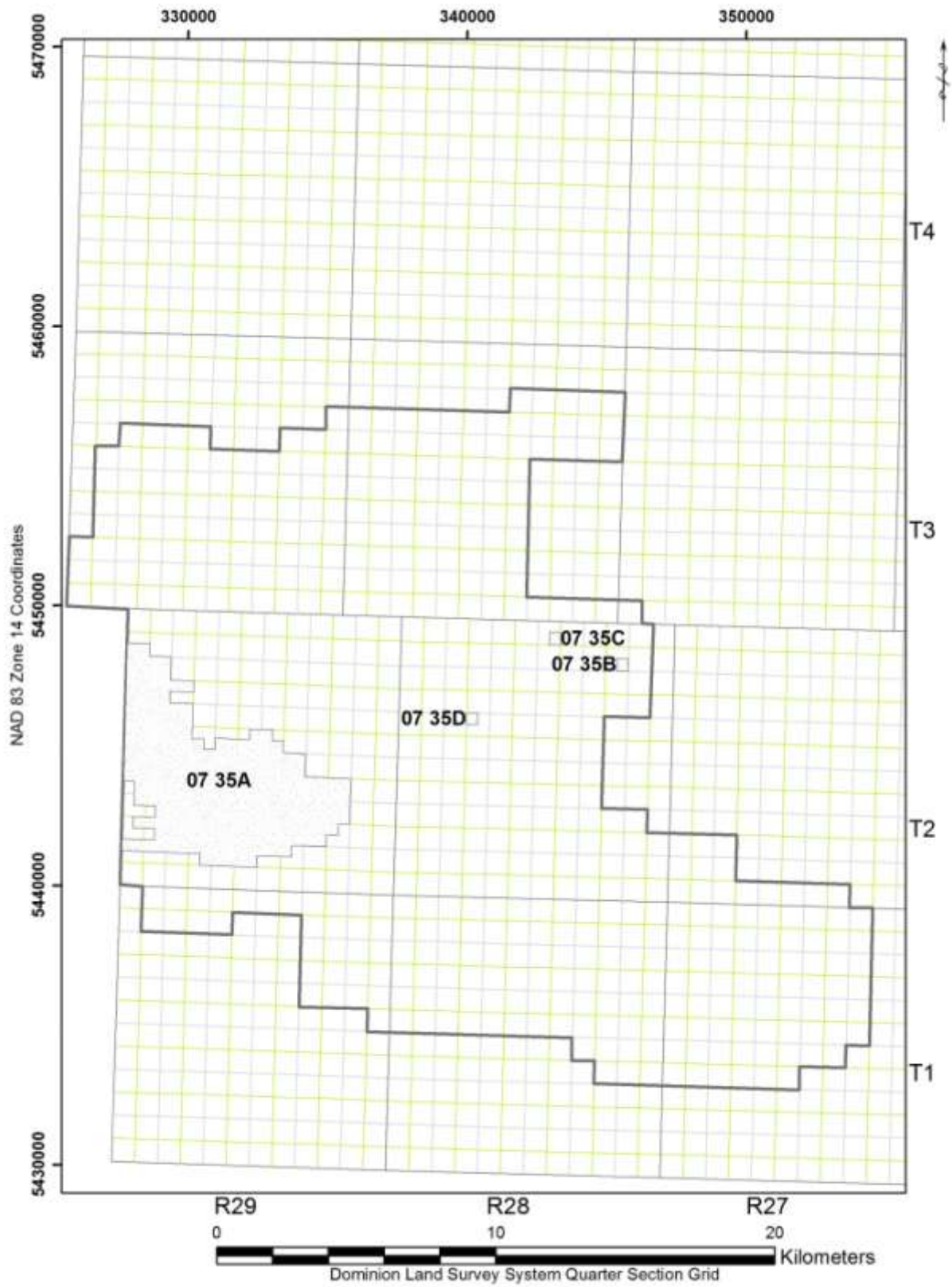


Figure 27 - Pierson Lower Amaranth Pools (07 29A, B, L, S, T, U, V, W & X)



**Figure 28 - Pierson Lower Amaranth – Mission Canyon 3b Pools
(07 35A – 07 35D)**

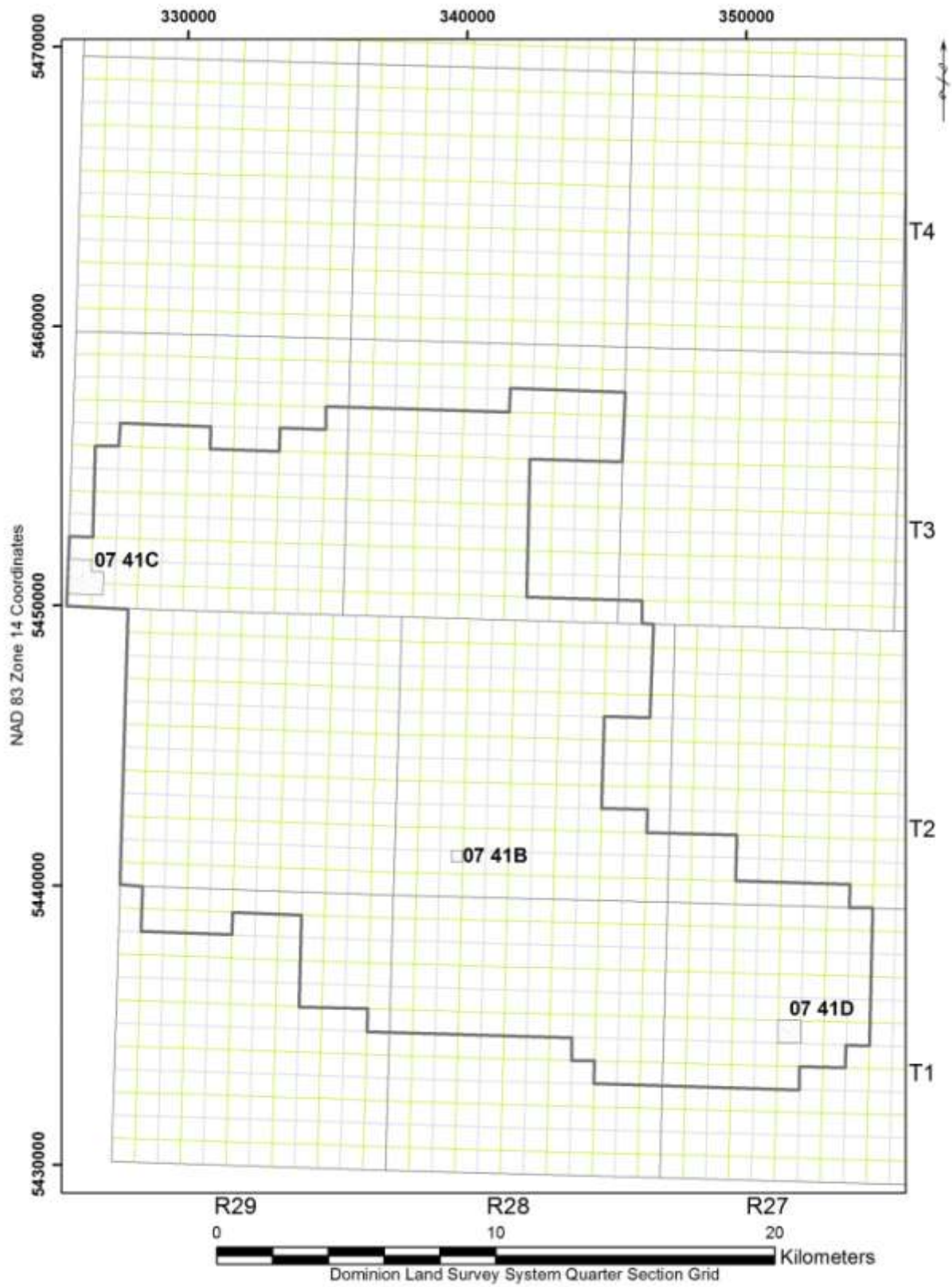


Figure 29 - Pierson Mission Canyon 3 Pools (07 41B, C & D)

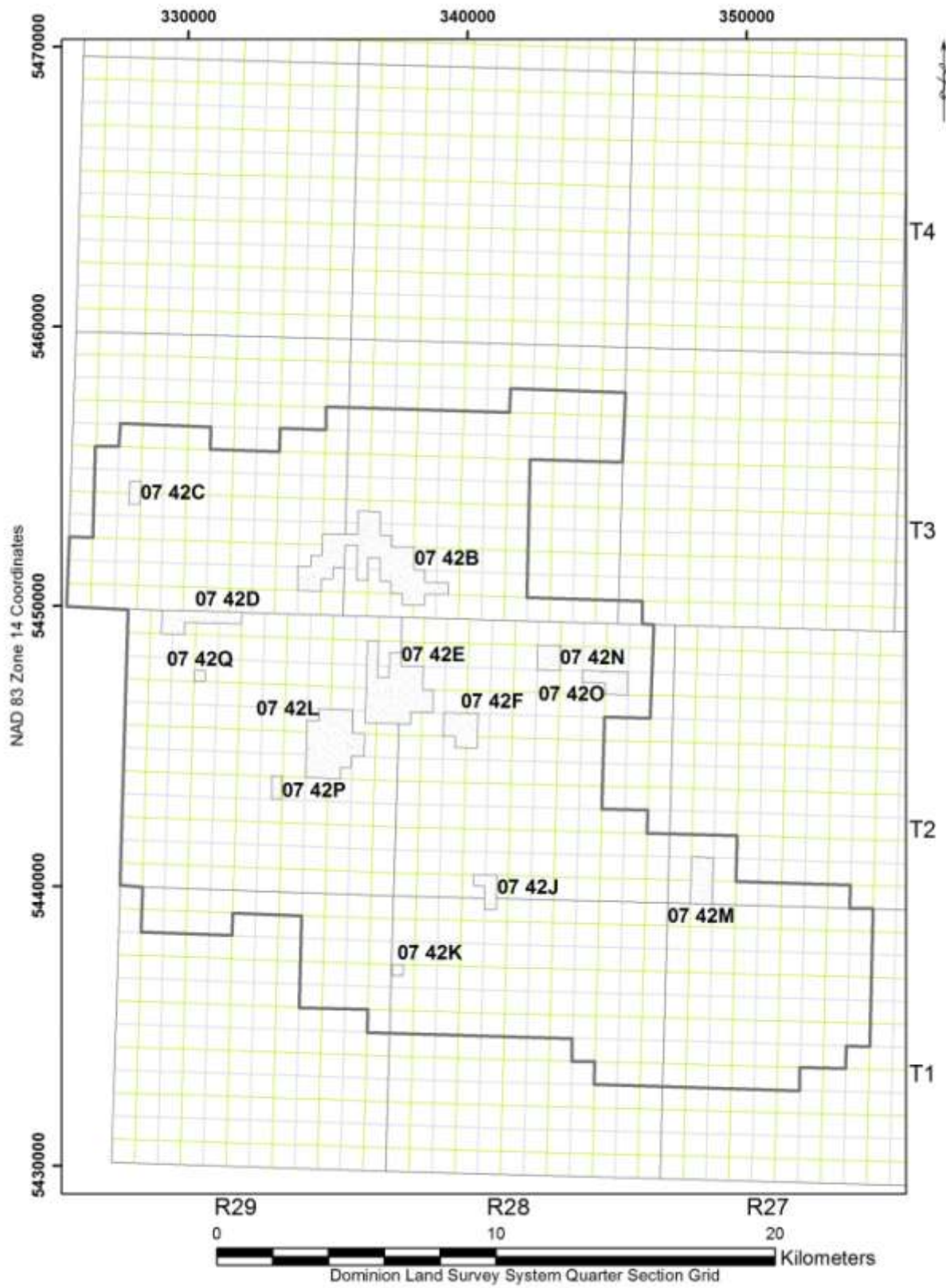


Figure 30 - Pierson Mission Canyon 3b Pools (07 42B -F & 07 42J-Q)

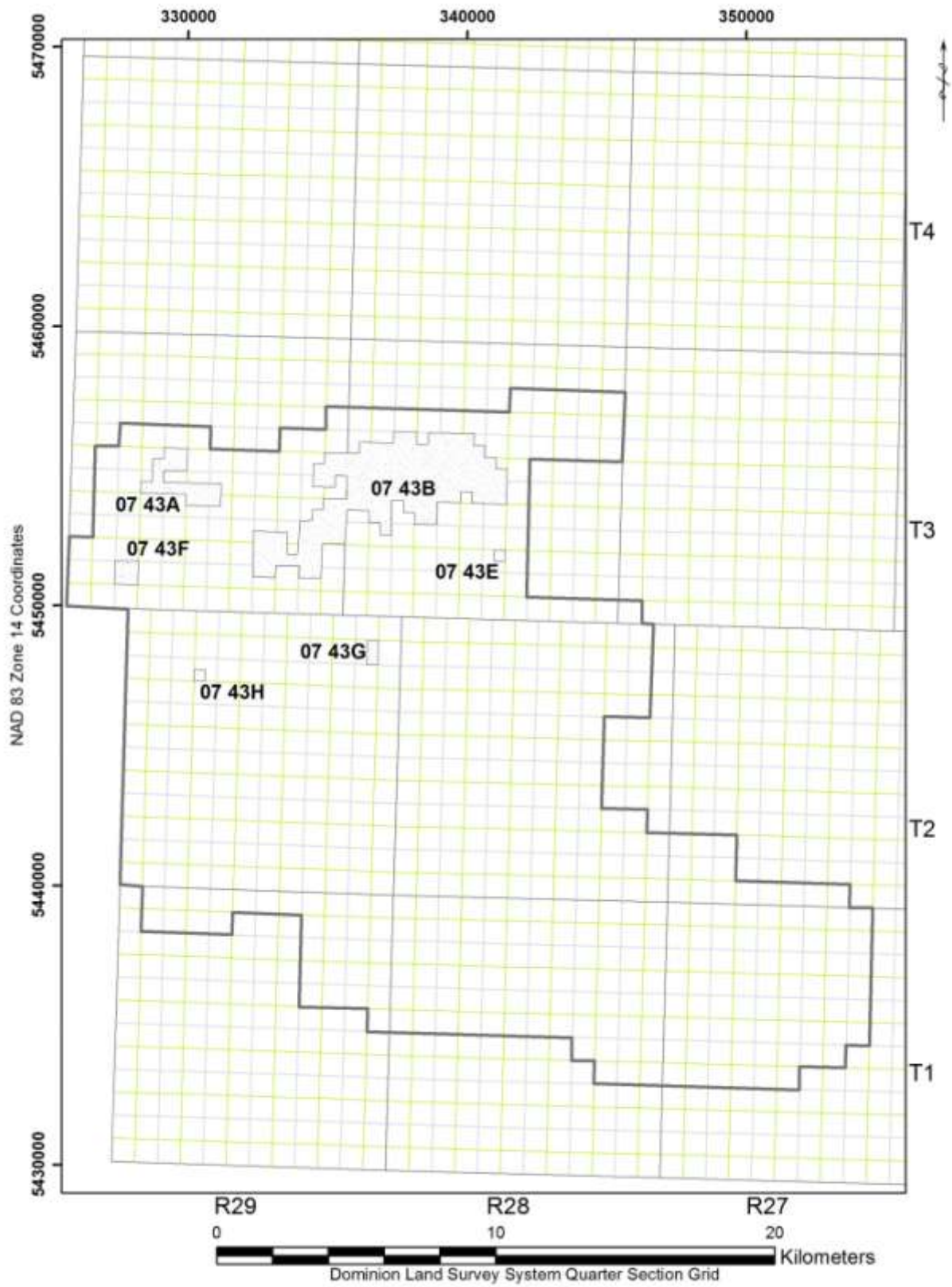


Figure 31 - Pierson Mission Canyon 3a Pools (07 43A, B, E, F, G & H)

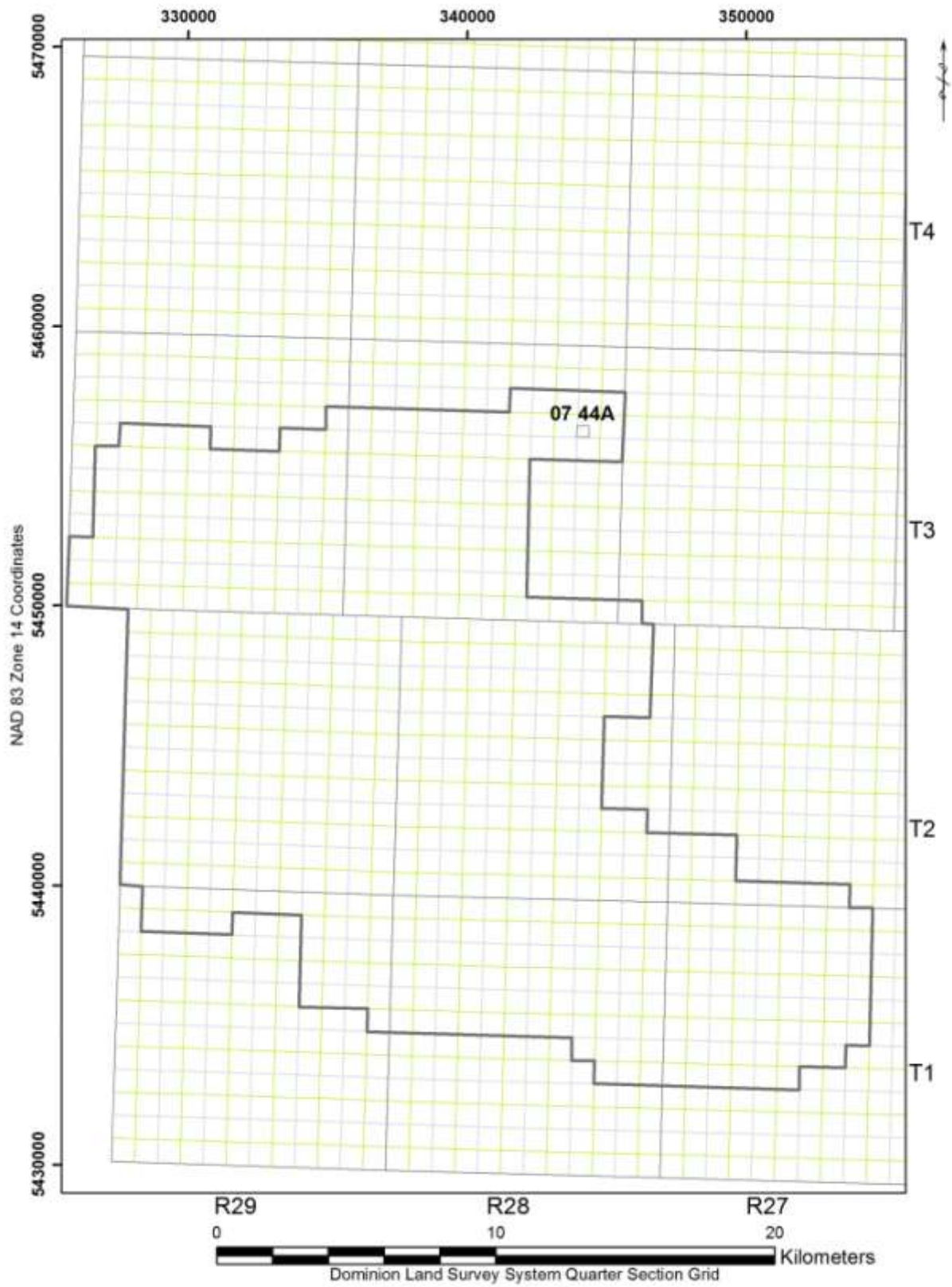


Figure 32 - Pierson Mission Canyon 1 A Pool (07 44A)

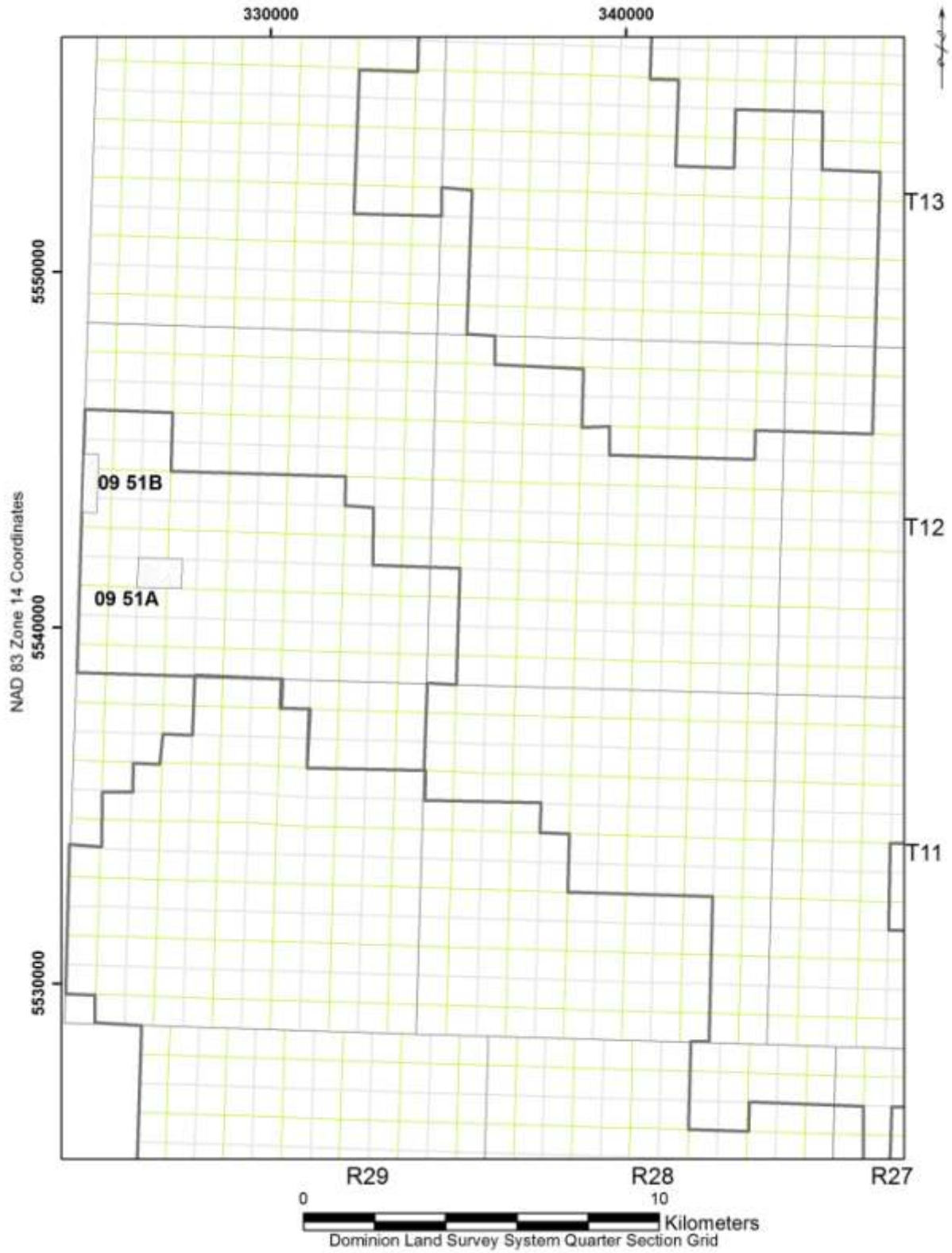


Figure 33 - Kirkella Lodgepole Dolomite Pools (09 51A – 09 51B)

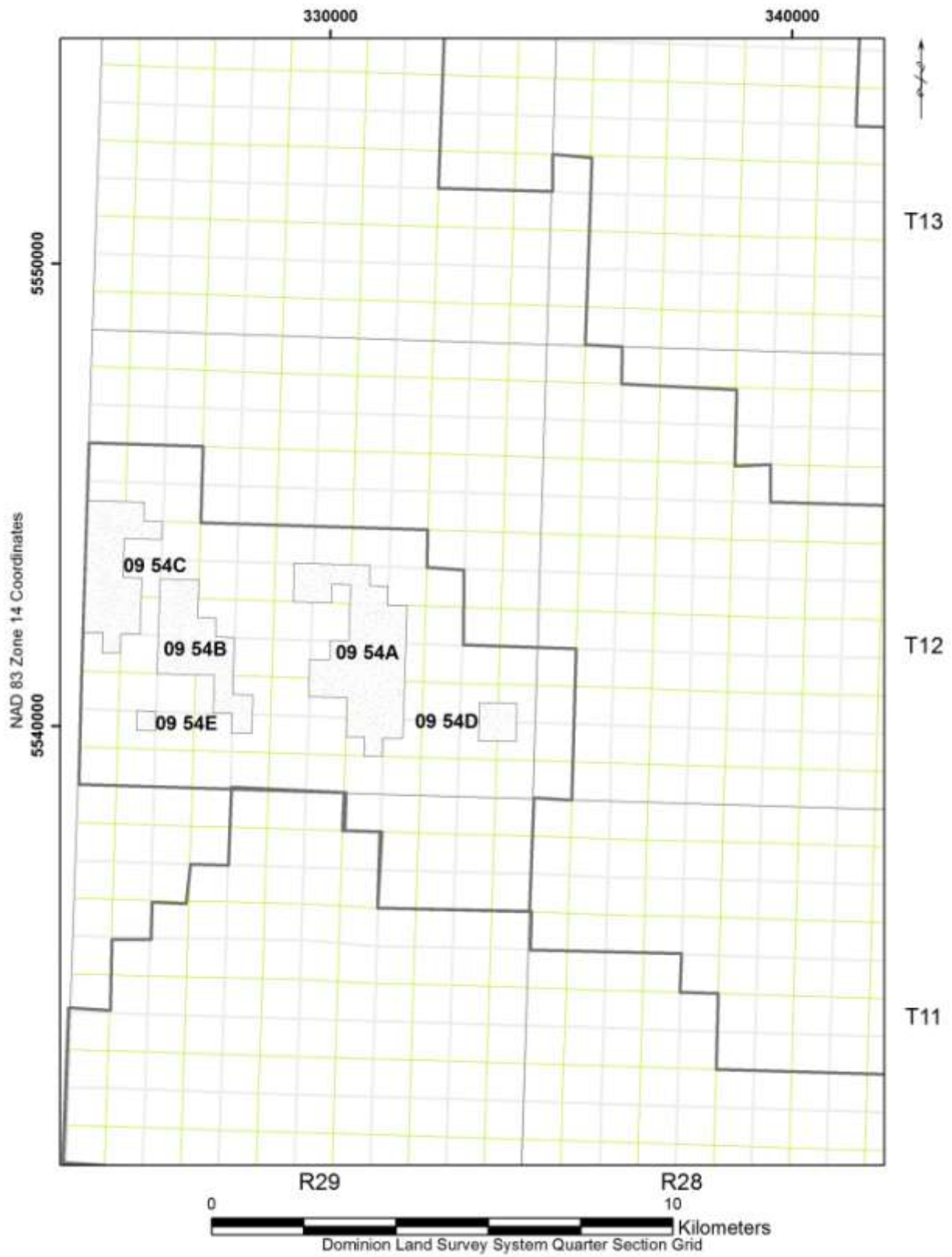


Figure 34 - Kirkella Lodgepole Daly Pools (09 54A – 09 54E)

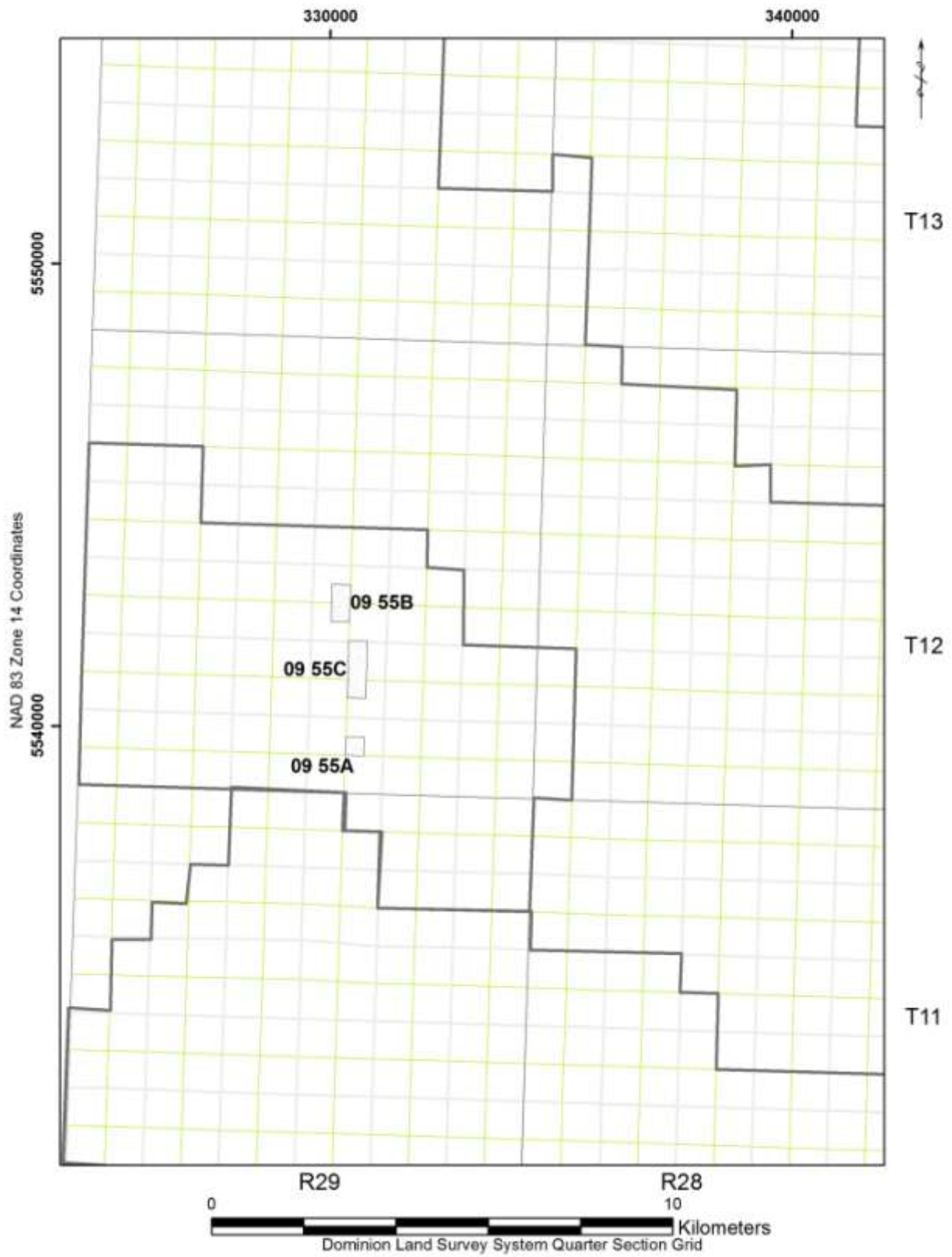


Figure 35 - Kirkella Lodgepole Crinoidal Pools (09 55A – 09 55C)

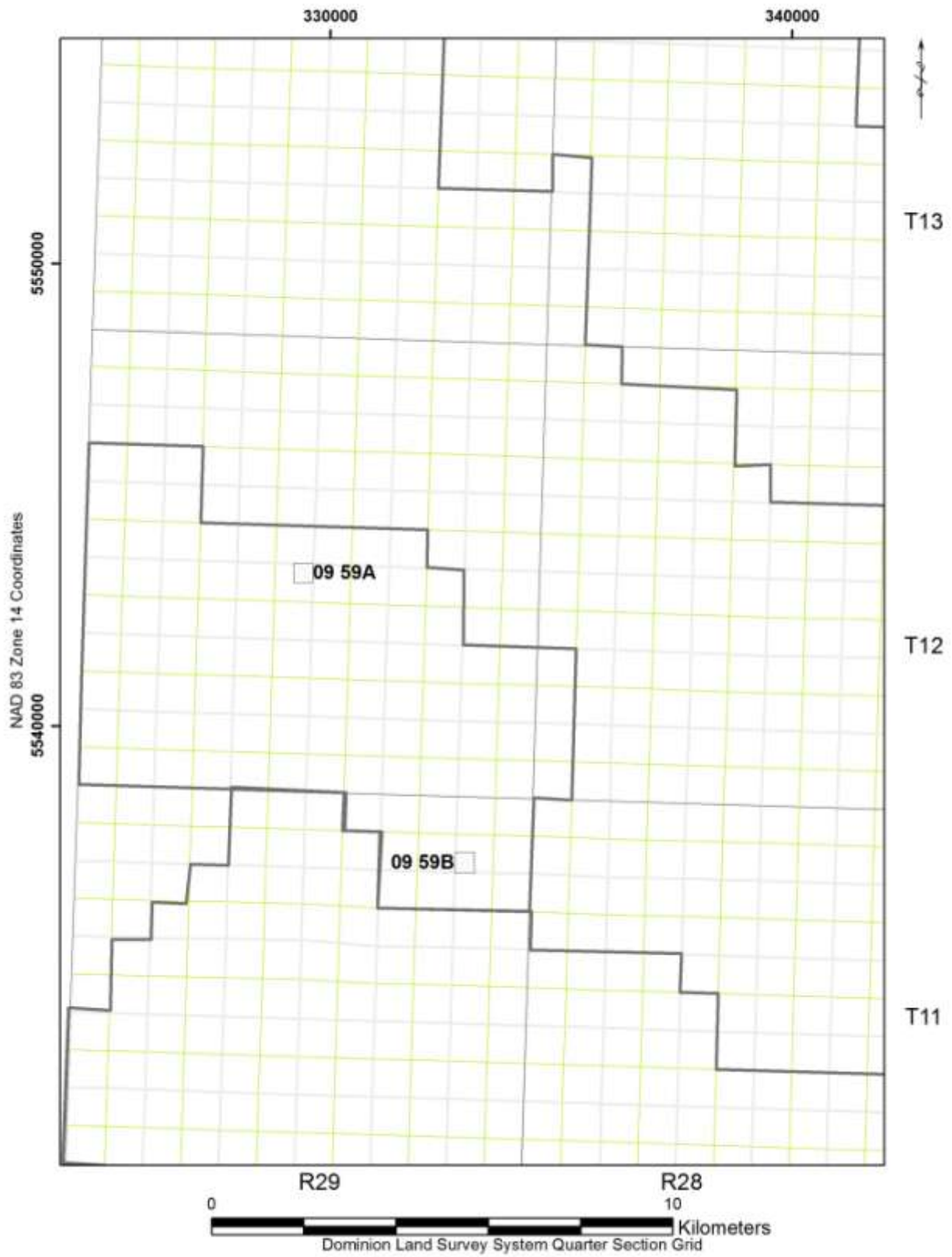


Figure 36 - Kirkella Lodgepole Pools (09 59A & 99 59B)

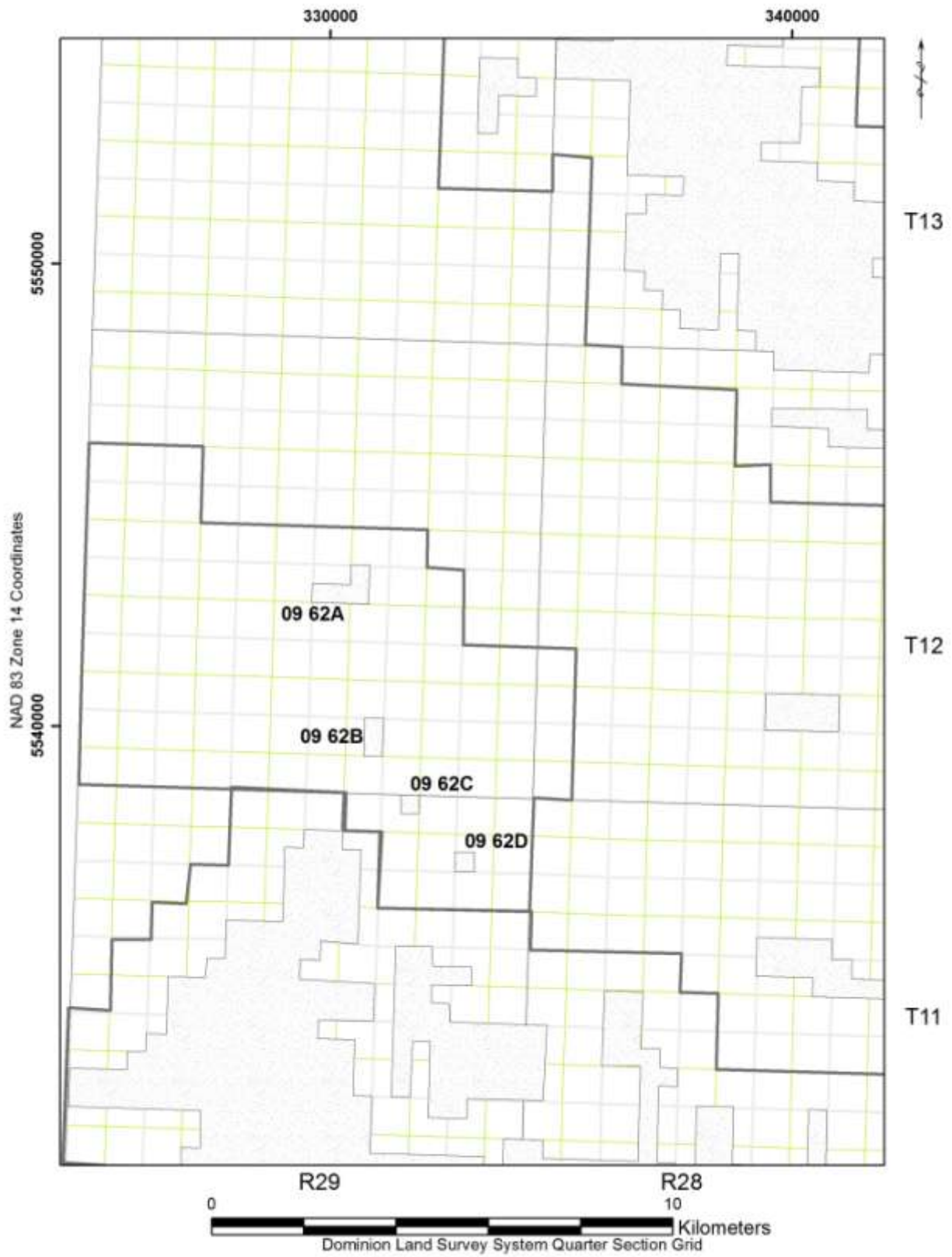


Figure 37 - Kirkella Bakken-Torquay Pools (09 62A - 09 62D)

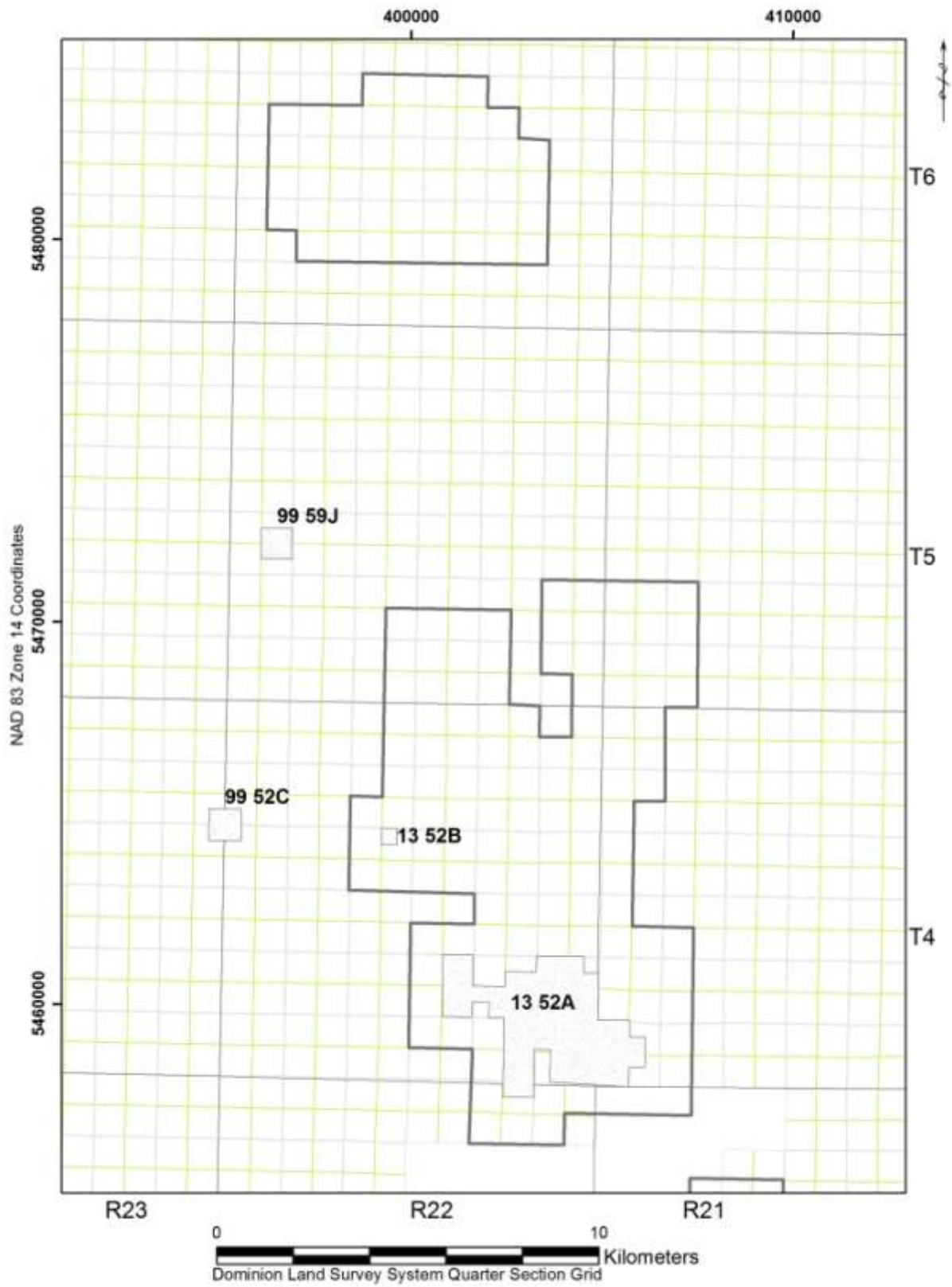


Figure 38 - Souris Hartney, Regent & Other Areas, Lodgepole Whitewater Lake Pools & Other Areas Lodgepole Pools (13 52A - B, 99 52C & 99 59J)

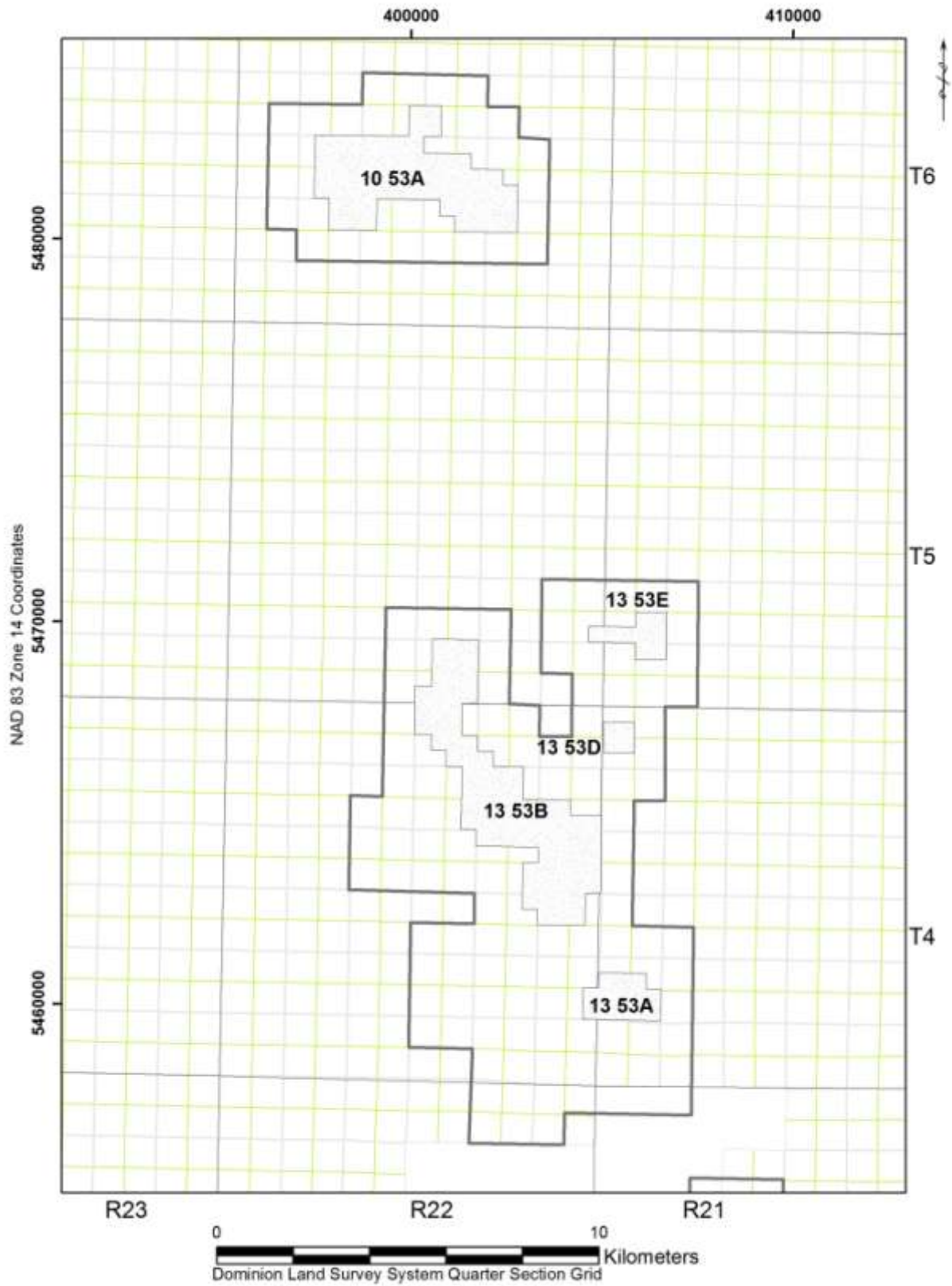
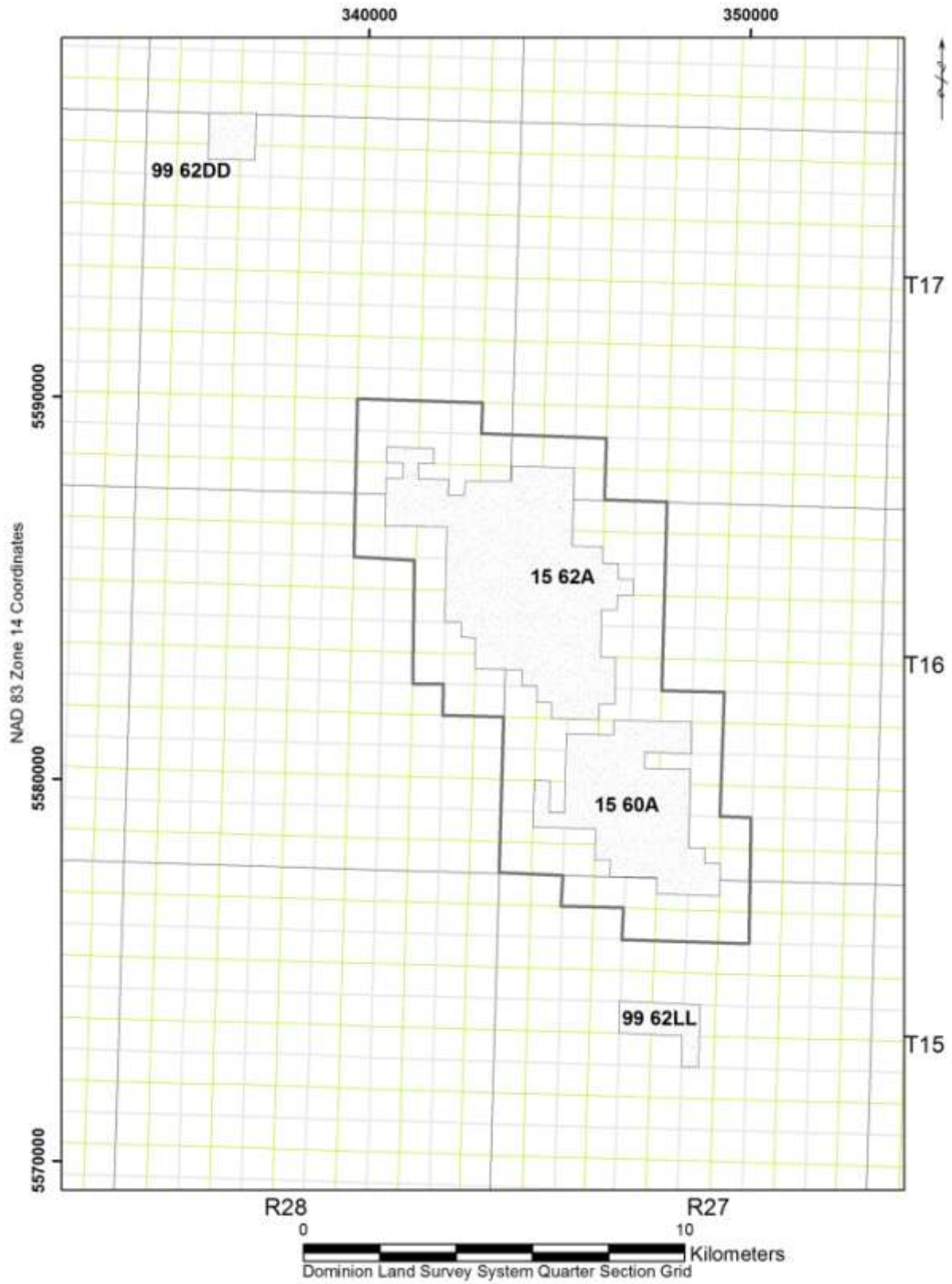
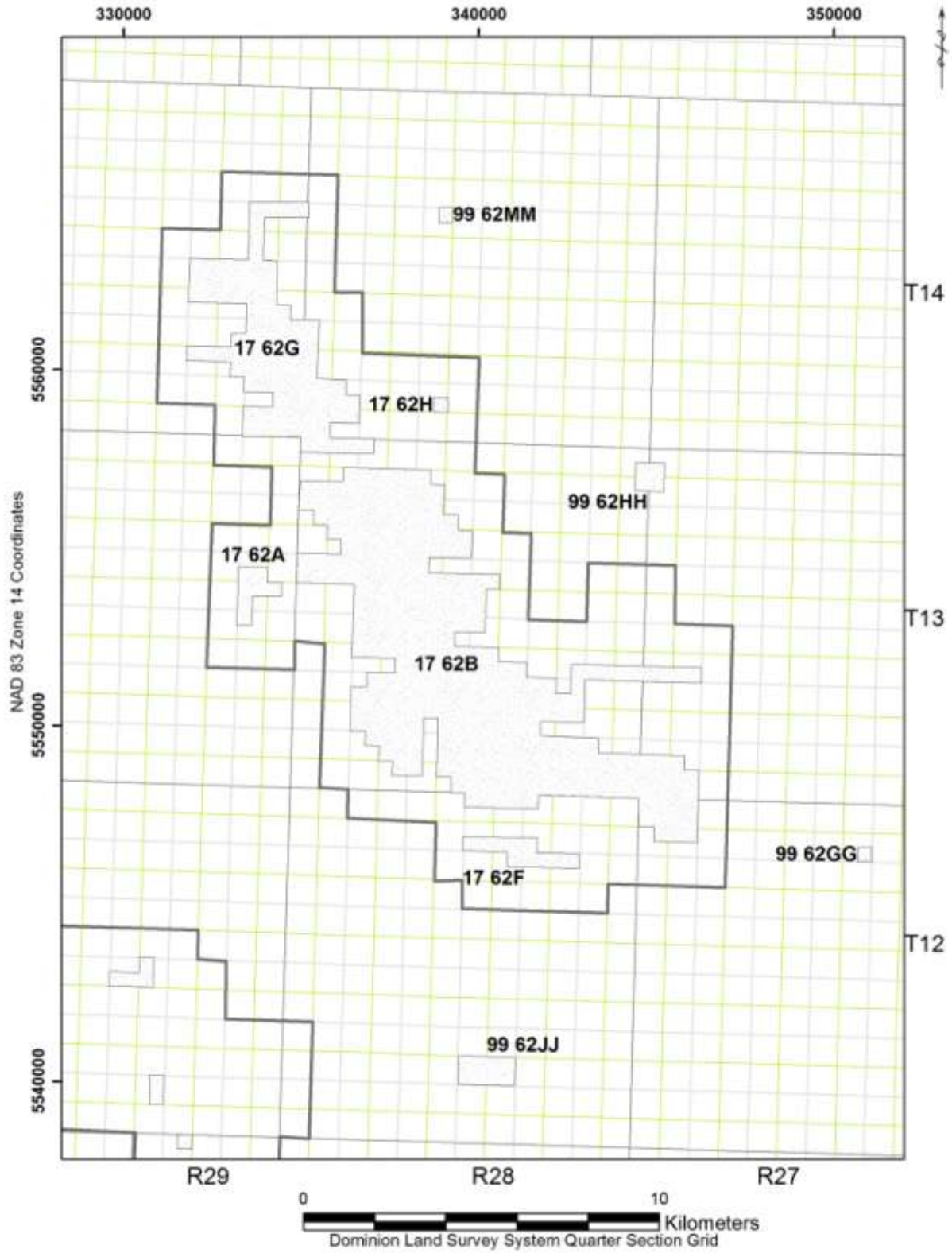


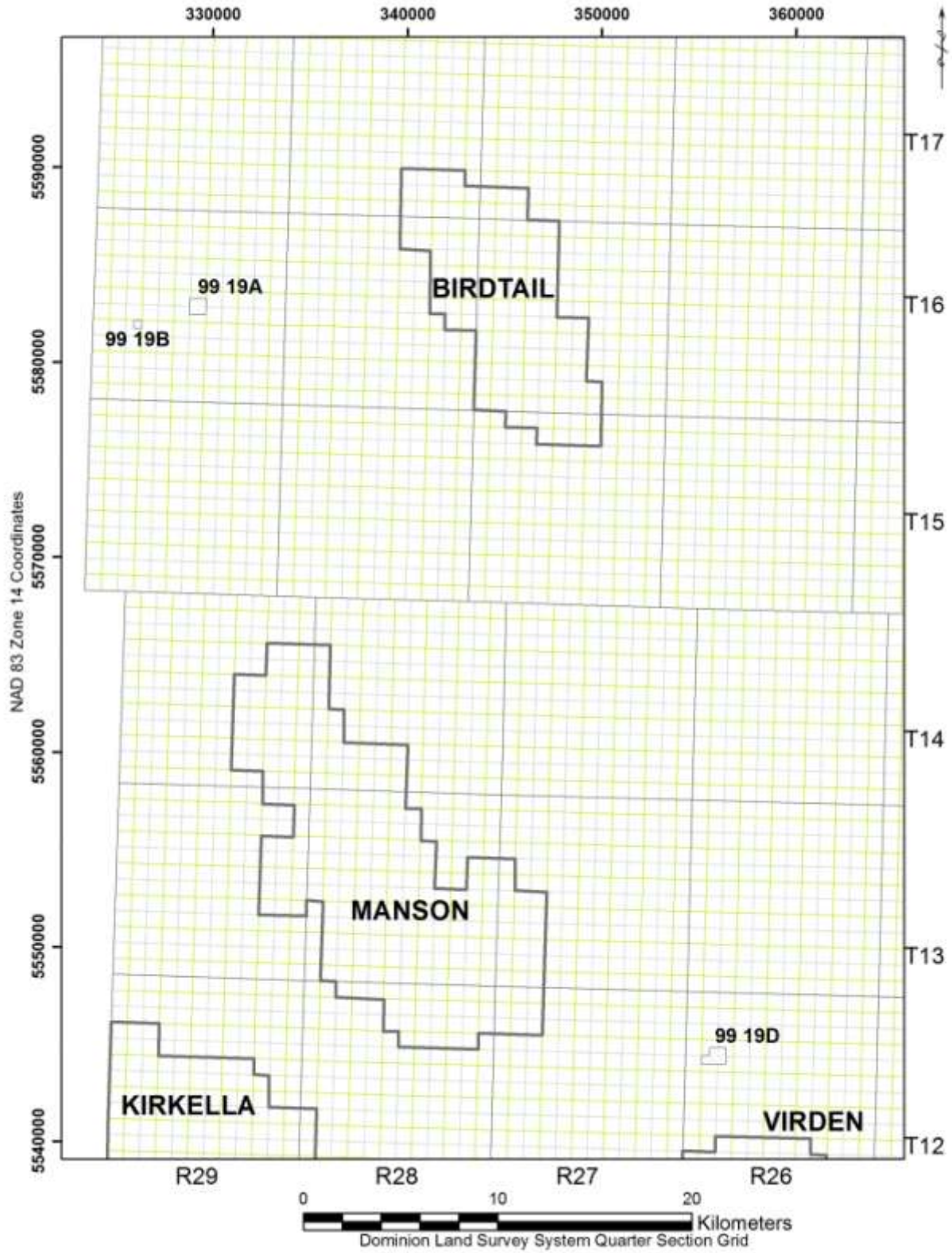
Figure 39 - Souris Hartney & Regent Lodgepole Virden Pools (10 53A, 13 53A-E)



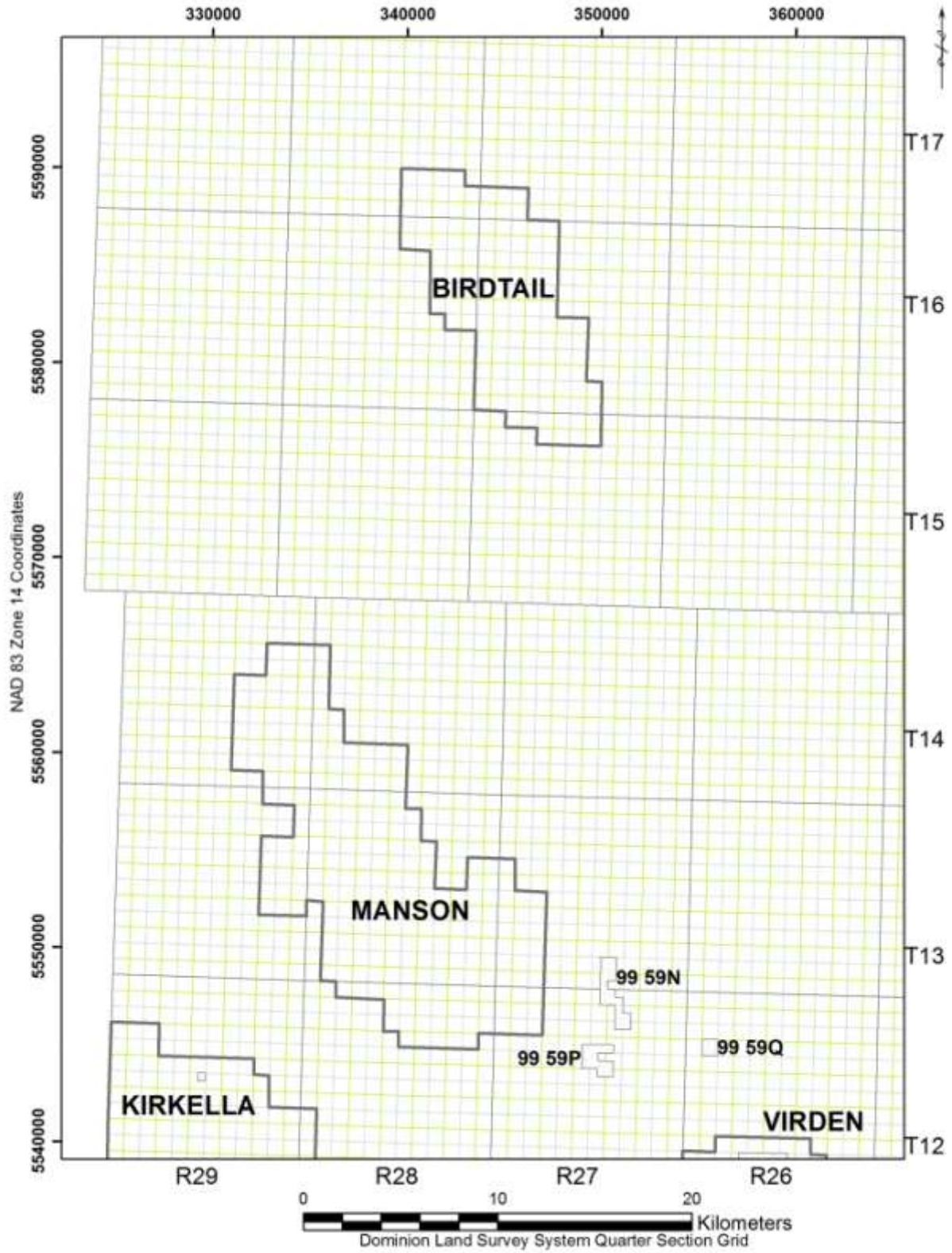
**Figure 40 - Birdtail & Other Areas Bakken & Bakken-Torquay Pools
(15 60A, 15 62A, 99 62DD & 99 62LL)**



**Figure 41 - Manson & Other Areas Bakken-Torquay Pools
(17 62A, B, F, G, H & 99 62GG, HH, JJ & MM)**



**Figure 42 - Other Areas Melita A, B & D Pools
(99 19A, 99 19B & 99 19D)**



**Figure 43 - Other Areas Lodgepole Undifferentiated N, P & Q Pools
(99 59N, 99 59P & 99 59Q)**

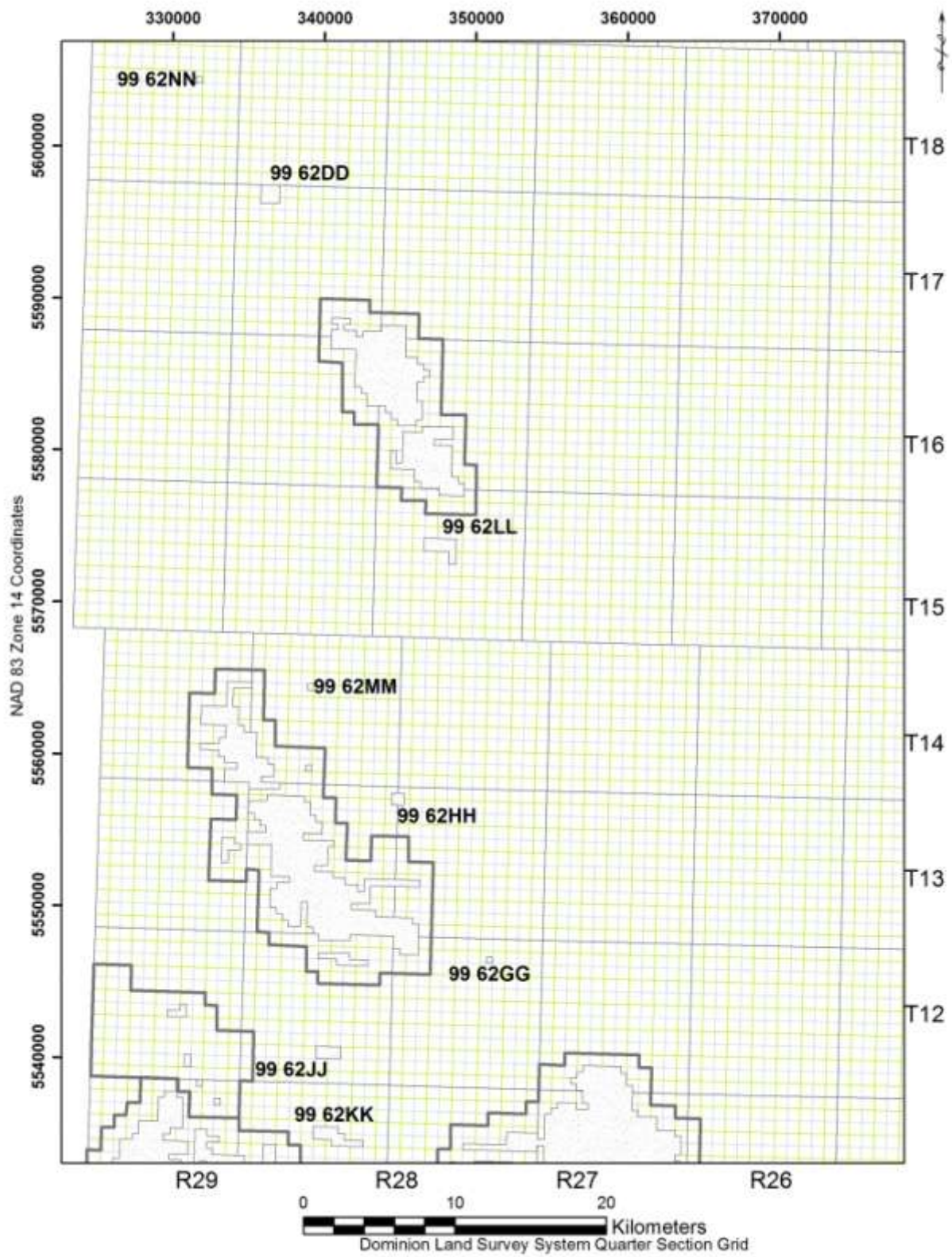


Figure 44 - Other Areas Bakken-Torquay Pools (99 62DD, GG, HH, JJ, KK, LL, MM & NN)

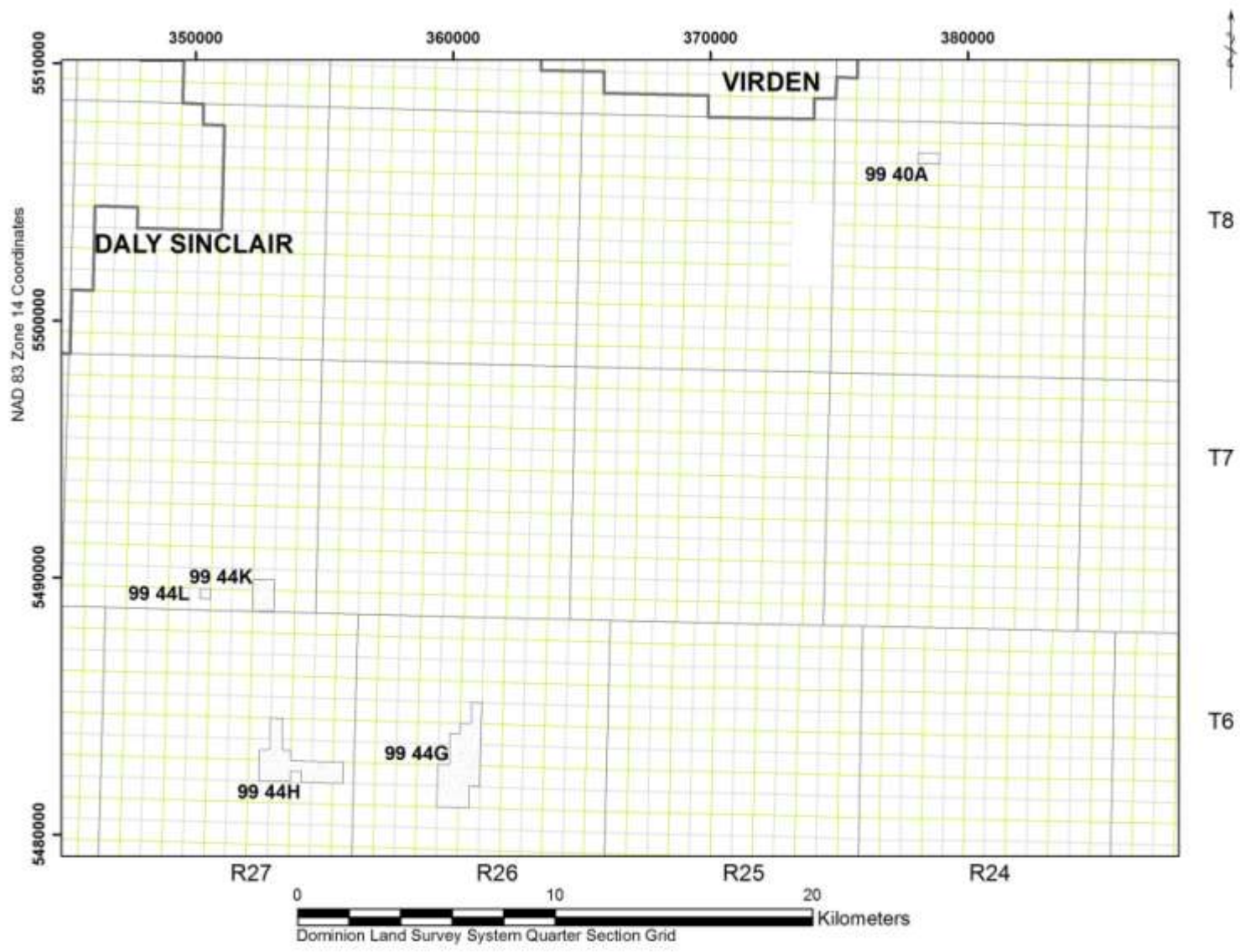


Figure 45 - Other Areas Mission Canyon 1 G, H, K, L (99 44G, H, K, L) & Other Areas Lower Amaranth-Lodgepole A Pool (99 40A)

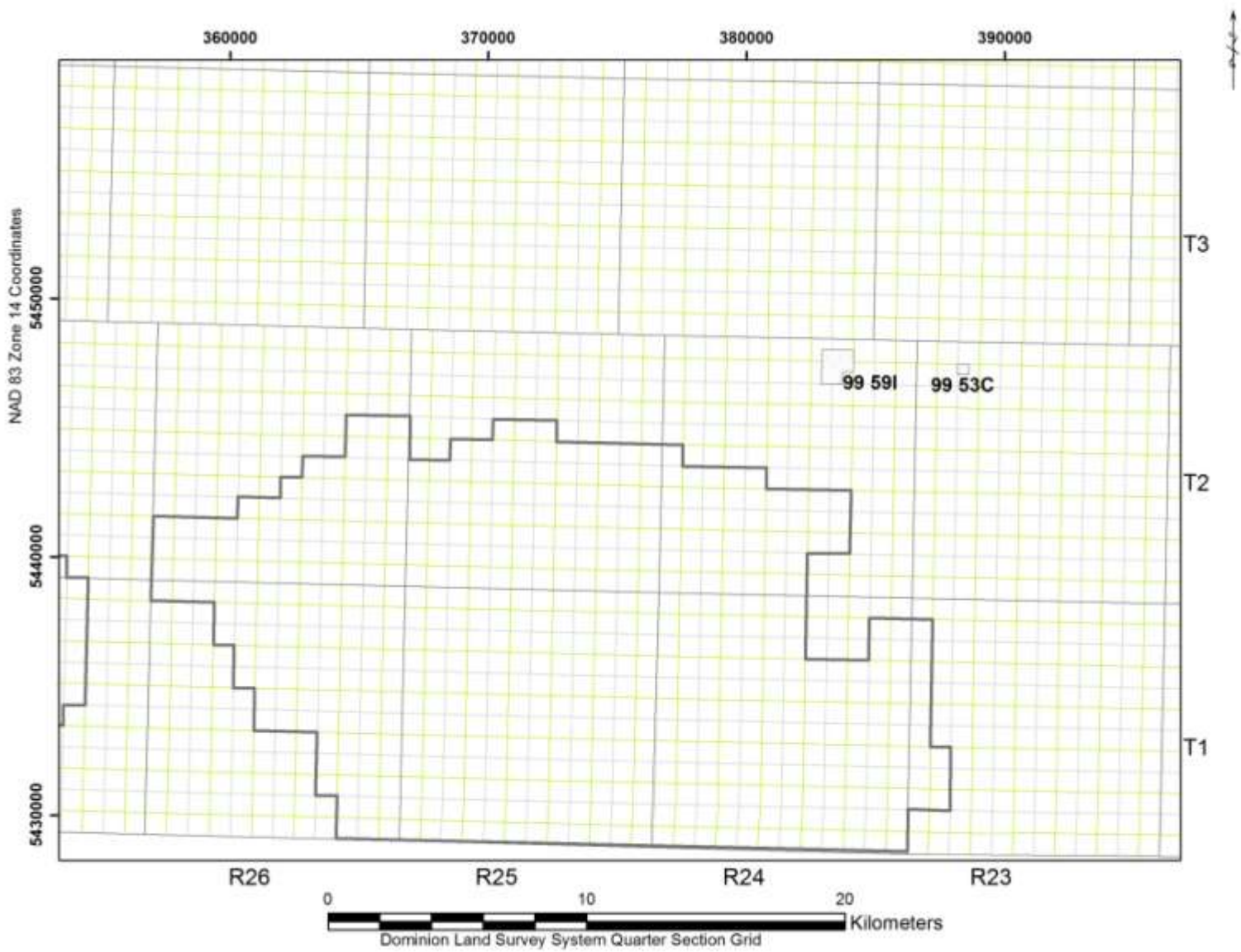


Figure 46 - Other Areas Lodgepole Virden C & Lodgepole Undifferentiated I Pools (99 53C, 99 59I)

APPENDIX A - Grid and Scale

The grid used in all the field and pool maps within this report are in the Dominion Land Survey System (DLS) for western Canada and north is always to the top of the map. The Prairie Provinces are divided north and south into 5 areas separated by meridians. The first or Principal meridian is in Manitoba and it is denoted by W1 or WPM in all Unique Well Identifiers (UWI). The area between meridians is divided into ranges (R) each 6 miles wide. These ranges are cross-divided by township lines which run east-west six miles apart, to form townships (T) six miles square. See Figure 1.

Each Township is divided into Sections (Sec) one mile square (640 acres per section) and there are 36 sections in a Township, 6 sections wide by 6 sections high. Each Section is numbered as shown in Figure 47:



Figure 47 - Sections in a township.

Each Section is divided into 16 legal subdivisions (Lsd), 4 Lsd's wide by 4 Lsd's high, each 402.36m square or 40 acres. Pool boundaries are adjusted by Lsd. Each Lsd is numbered as shown in section 1 of Figure 46. Each section can also be split into $\frac{1}{4}$ sections as shown in Figure 49. This is important to note as field boundaries are adjusted by $\frac{1}{4}$ section. Each $\frac{1}{4}$ section consists of 4 Lsd's and a $\frac{1}{4}$ section is 804.72m square or 160 acres. A map reference is given in the format of a legal survey system reference, Lsd-Sec-Township-Range W1, i.e. 02-09-010-29W1. This is incorporated into the Unique Well Identifier (UWI) a code used to identify each oil well in Manitoba. A UWI is coded as: 'Survey system code' 'Location' 'Exception code'/legal survey system/event sequence code i.e. 100/16-09-010-09W1/00. The DLS system is always represented by a designated code of 01.

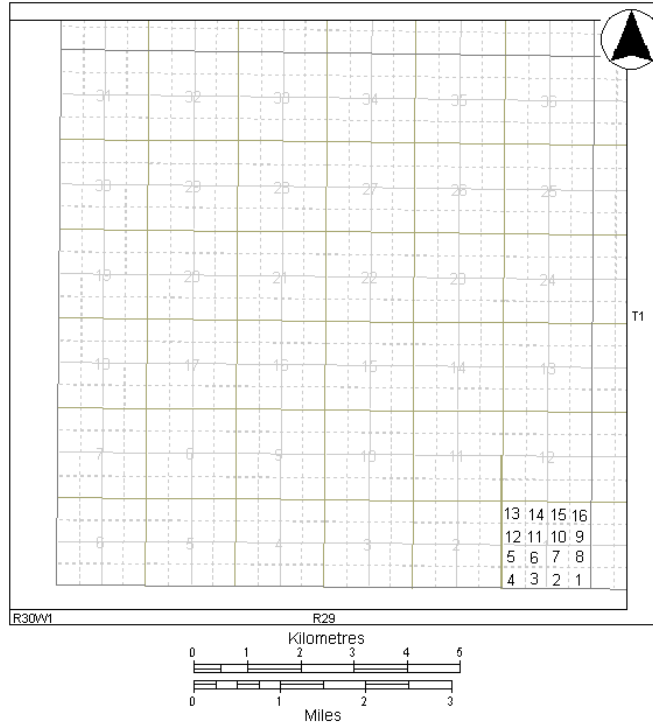


Figure 48 - Legal subdivisions in a section.

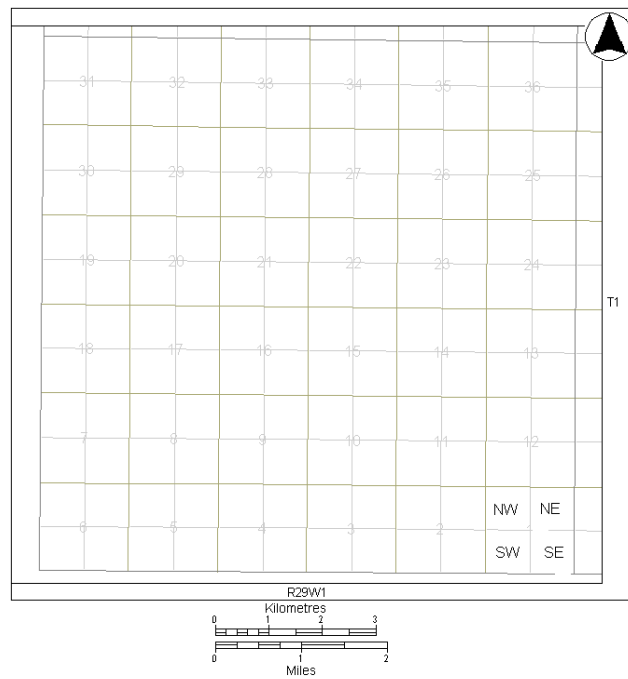


Figure 49 - Quarter section illustration.

APPENDIX B - Manitoba Pool Codes by Formation

CODE	FORMATION OR MEMBER	CODE	FORMATION OR MEMBER
10	Favel Formation	55	Lodgepole Formation, Crinoidal Cruickshank facies
11	Ashville Formation, Newcastle Member	56	Lodgepole Formation, Scallion Member(formerly 55)
15	Swan River Formation	59	Lodgepole, undifferentiated
19	Melita Formation	60	Bakken Formation
21	Reston Formation	62	Bakken – Torquay Formations
23	Upper Amaranth	65	Torquay Formation
26	Triassic, undifferentiated	71	Birdbear Formation
29	Lower Amaranth, undifferentiated	72	Duperow Formation
35	Lower Amaranth – Mission Canyon Formation, MC3b	73	Souris River Formation
39	Mississippian Undifferentiated	74	Dawson Bay Formation
40	Lower Amaranth – Lodgepole undifferentiated	75	Prairie Evaporite Formation
41	Mission Canyon Formation, MC-3 Member, undifferentiated	76	Winnipegosis Formation (formerly 75)
42	Mission Canyon Formation, MC-3b	78	Devonian, undifferentiated (formerly 79)
43	Mission Canyon Formation, MC-3a	79	Silurian, Interlake Group
44	Mission Canyon Formation, MC-1 Member	80	Stonewall Formation
49	Mission Canyon Formation, undifferentiated	81	Stony Mountain Formation
51	Lodgepole Formation, Dolomitic	82	Red River Formation
52	Lodgepole Formation, Whitewater Lake Member	85	Winnipeg Formation
53	Lodgepole Formation, Virden Member	89	Ordovician, undifferentiated
54	Lodgepole Formation, Daly Member	90	Cambrian, Deadwood Formation

January 1, 2015