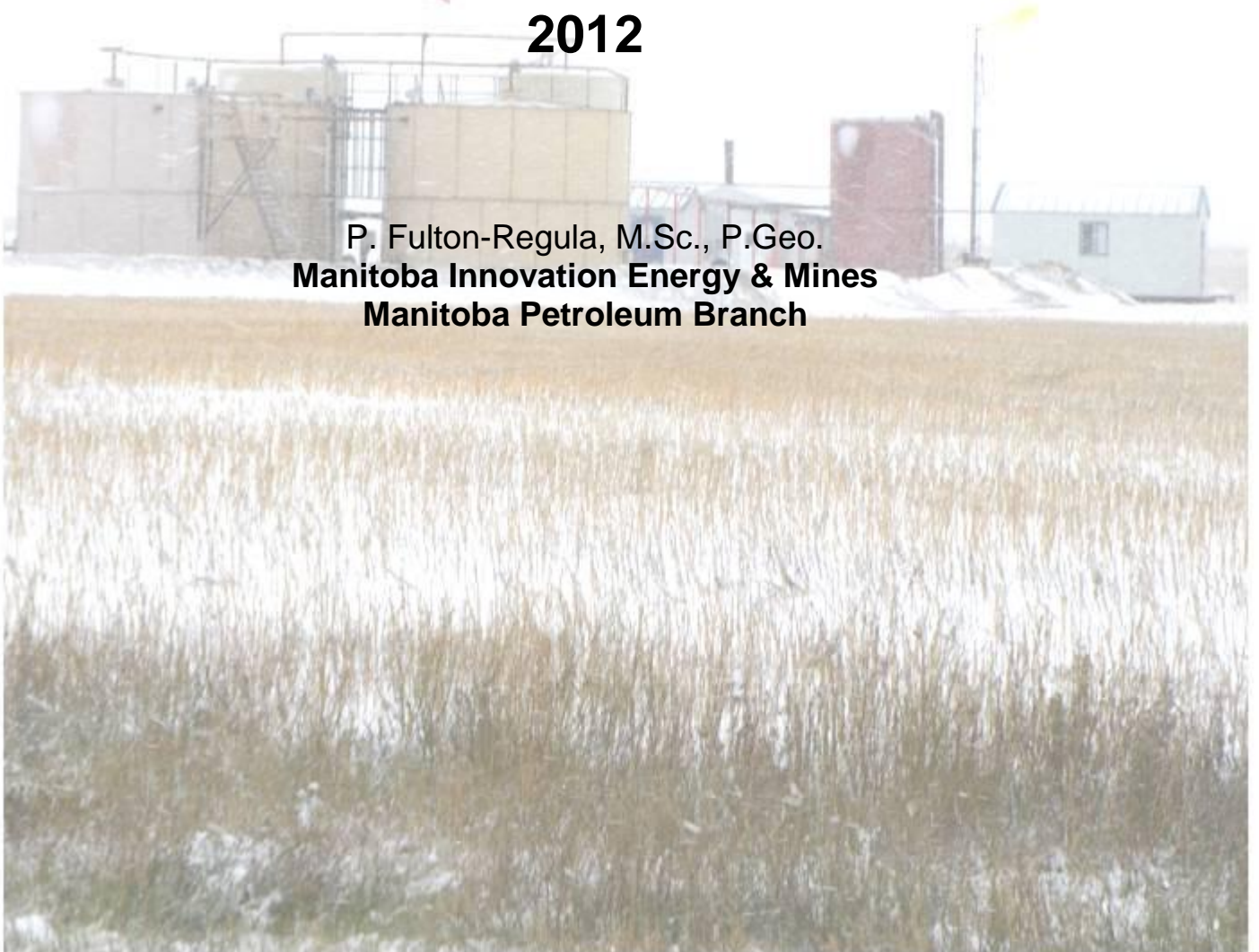




Manitoba's Designated Oil Fields & Pools 2012

**P. Fulton-Regula, M.Sc., P.Geo.
Manitoba Innovation Energy & Mines
Manitoba Petroleum Branch**



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Fulton-Regula, P.J. 2012: Manitoba's Designated Oil Fields and Pools 2012 (NTS 62F/1-3, 6-11, 14-16; 62K/1-3, 6-8); Manitoba Innovation, Energy and Mines, Manitoba Petroleum Branch.

NTS grid: NTS 62F/1-3, 6-11, 14-16; 62K/1-3, 6-8

Keywords: Manitoba; Oil; Pools; Fields; Daly; Sinclair; Daly Sinclair; Tilston; Waskada; Lulu Lake; Virden; Whitewater; Pierson; Kirkella; Souris Hartney; Regent; Mountainside; Birdtail; Manson; Other Areas; Favel; Melita; Lower Amaranth; Mission Canyon; Lodgepole; Bakken; Bakken-Three Forks; Three Forks.

Published by:

Manitoba Innovation Energy & Mines

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 2011. 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.

The Petroleum Branch is committed to providing quality service to all its clients. If you have any comments or suggestions related to the content quality or relevance of information received from the Branch, or service provided by Branch staff, please contact:



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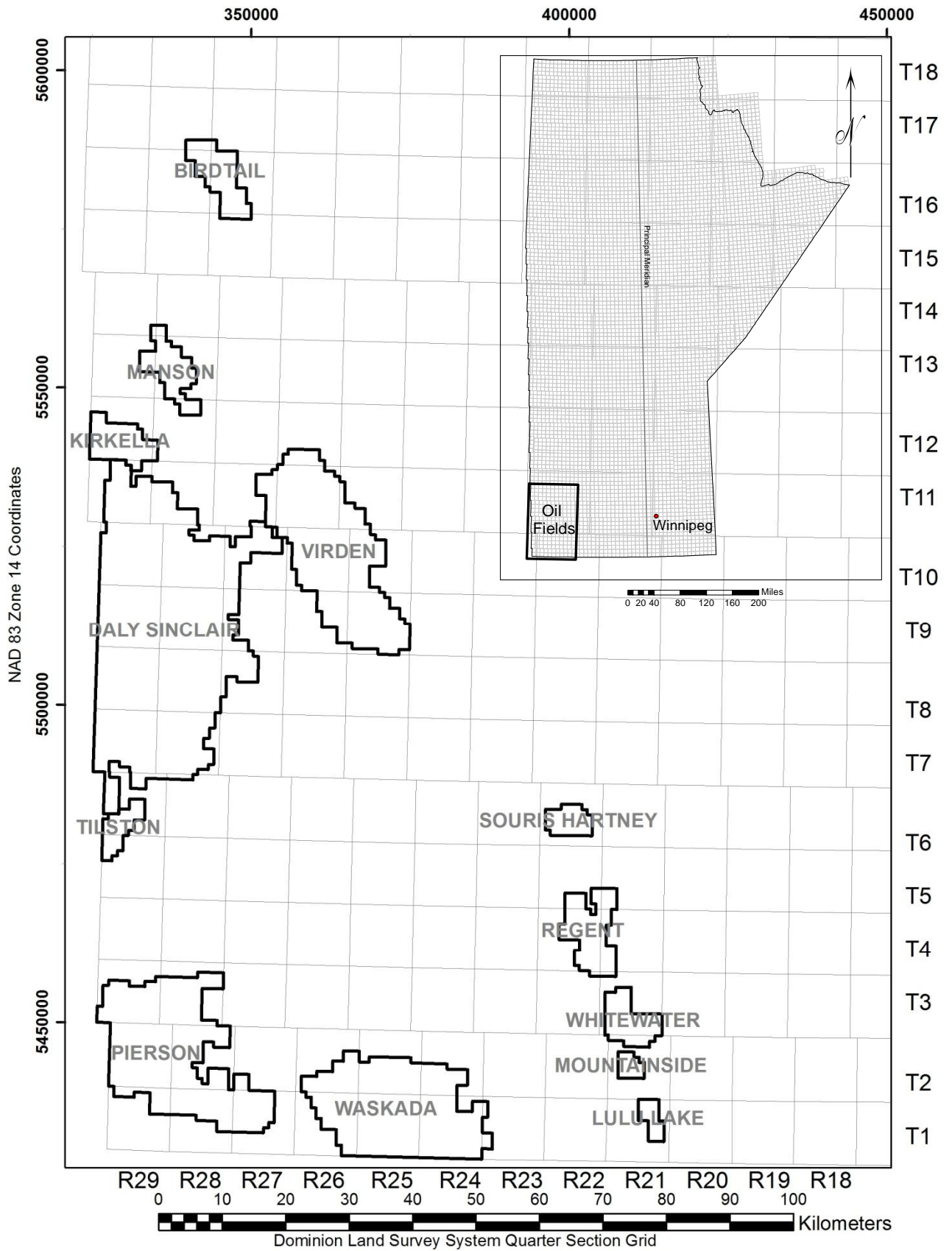


Figure 1 – Oil Field Location Map

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MANITOBA'S DESIGNATED FIELDS

Effective **January 1, 2012**, 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 listed on pages 9 to 18. All Fields and Pools are drawn on the Dominion Land Survey System Grid, a description of which can be found on page 67.



Keith Lowdon, Director

FIELD	CODE	PLAT
Daly Sinclair Field	01	p. 10
Tilston Field	02	p. 11
Waskada Field	03	p. 12
Lulu Lake Field	04	p. 11
Viriden Field	05	p. 13
Whitewater Field	06	p. 14
Pierson Field	07	p. 15
Kirkella Field	09	p. 16
Souris Hartney Field	10	p. 17
Regent Field	13	p. 18
Mountainside Field	14	p. 14
Birdtail Field	15	p. 19
Manson Field	17	p. 20

**MANITOBA'S DESIGNATED FIELDS
(FIELD PLATS)**

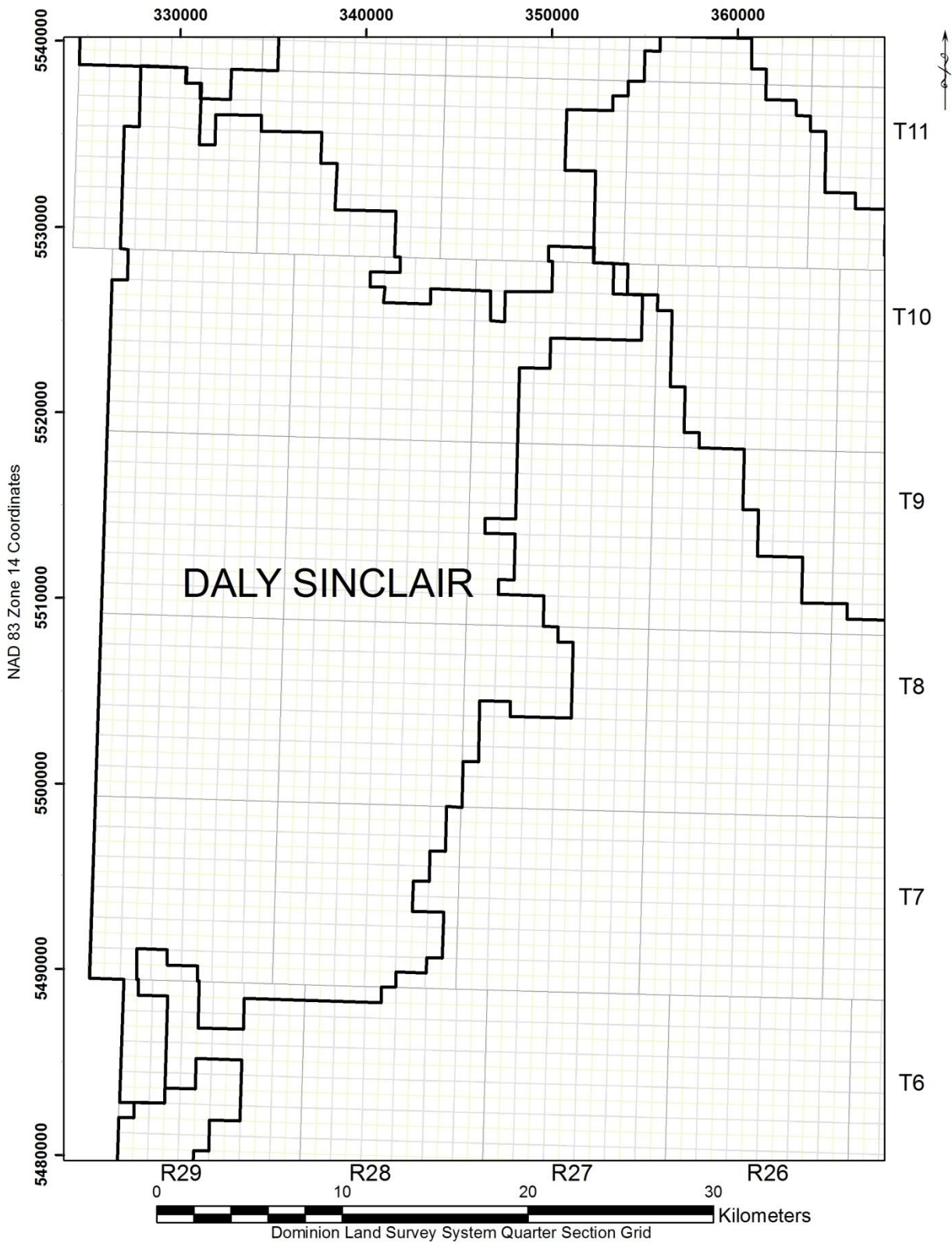


Figure 2 - Daly Sinclair Field (01)

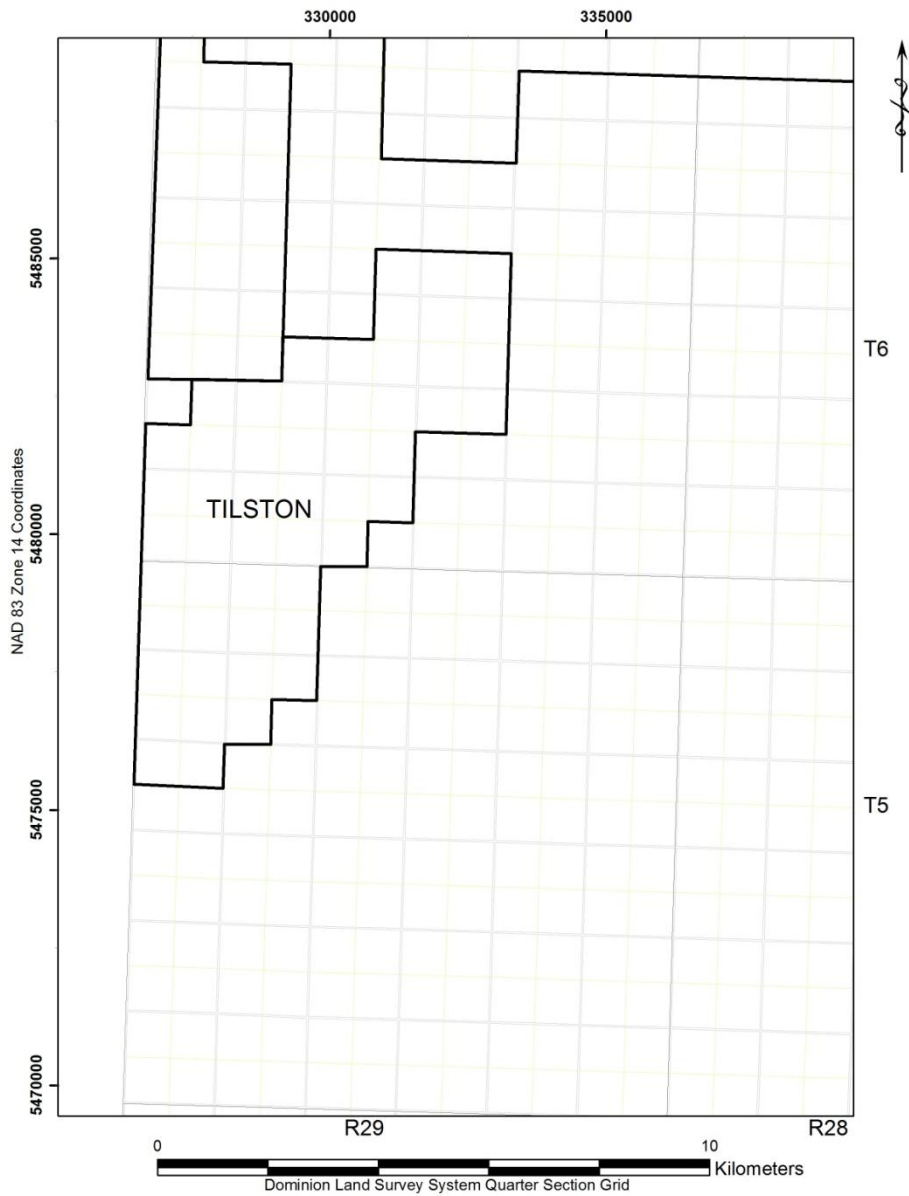


Figure 3 - Tilston Field (02)

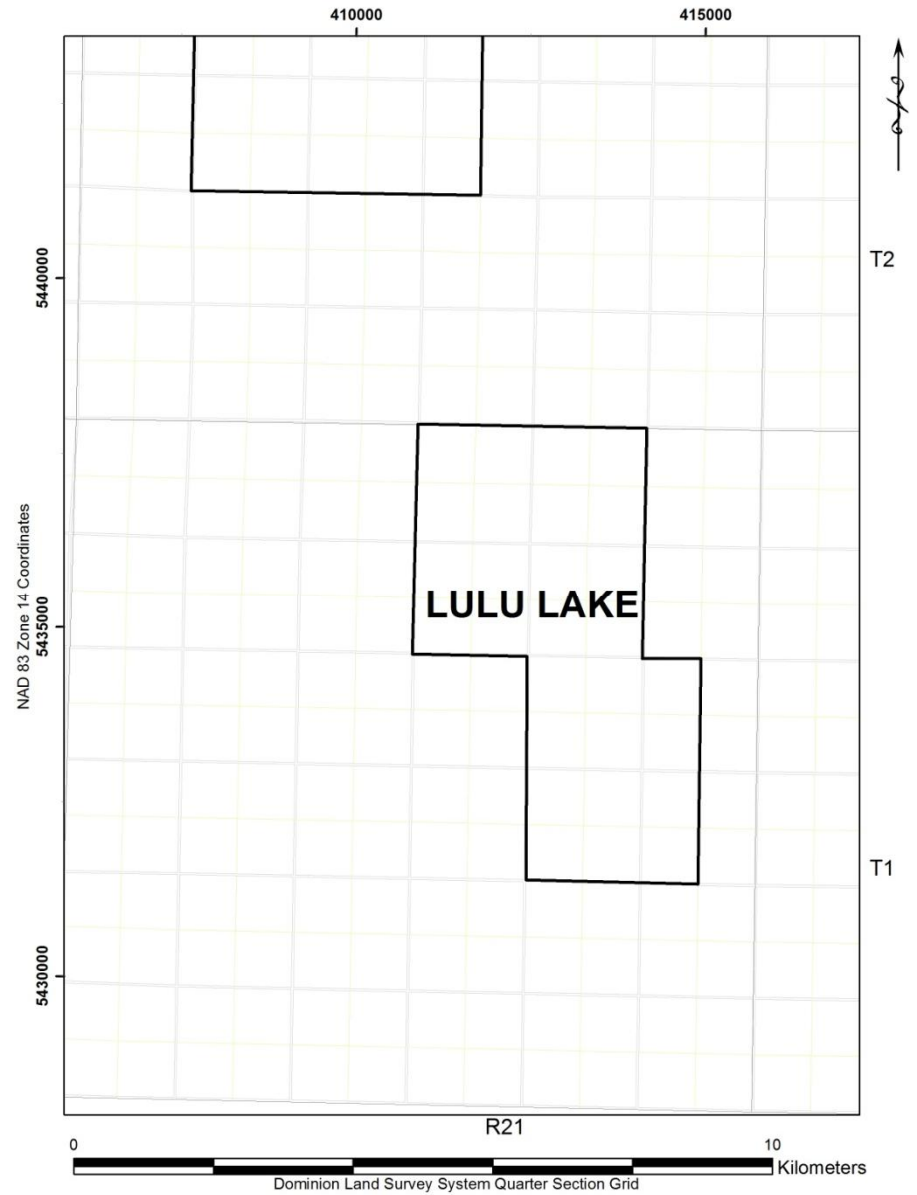


Figure 4 - Lulu Lake Field (04)

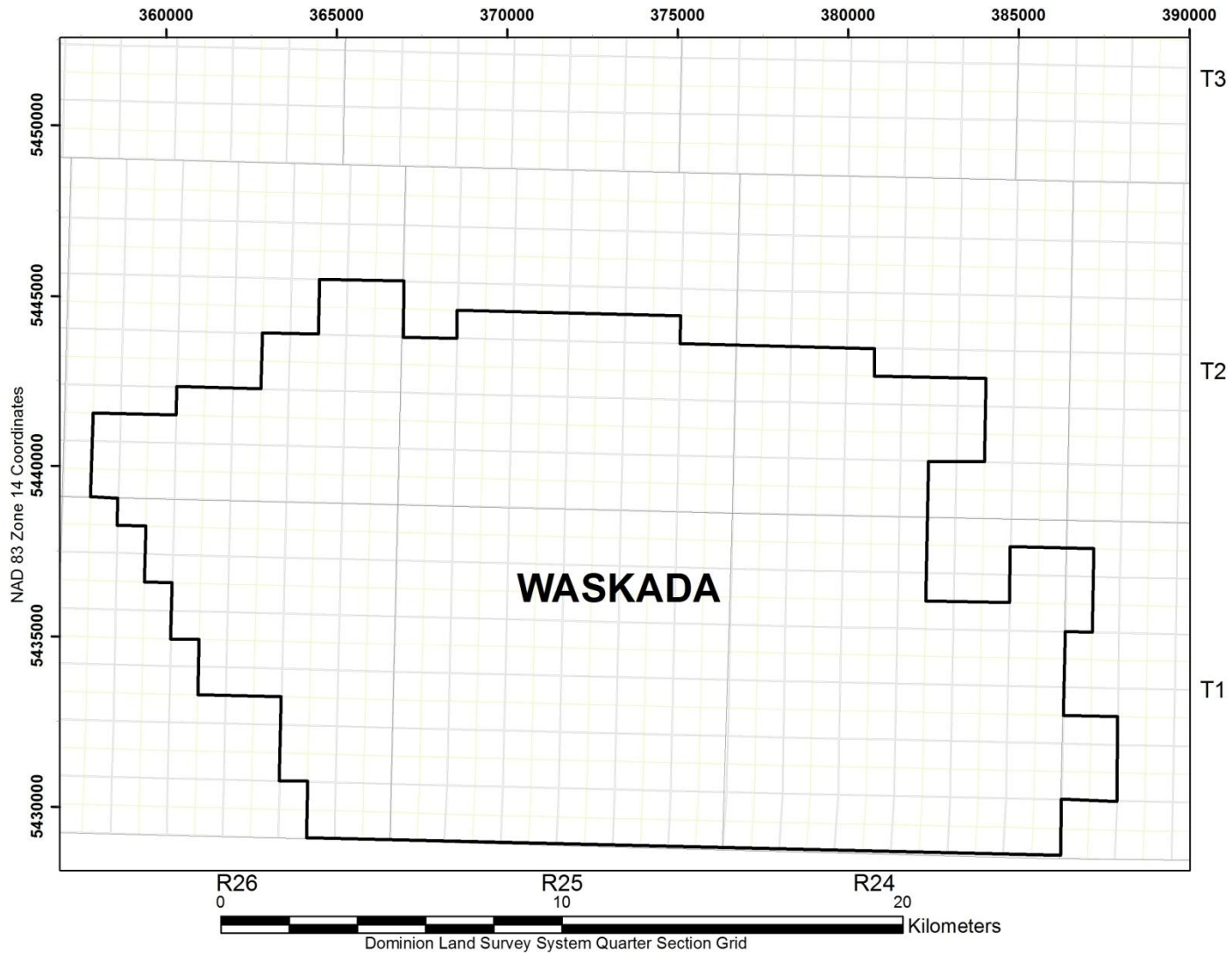


Figure 5 - Waskada Field (04)

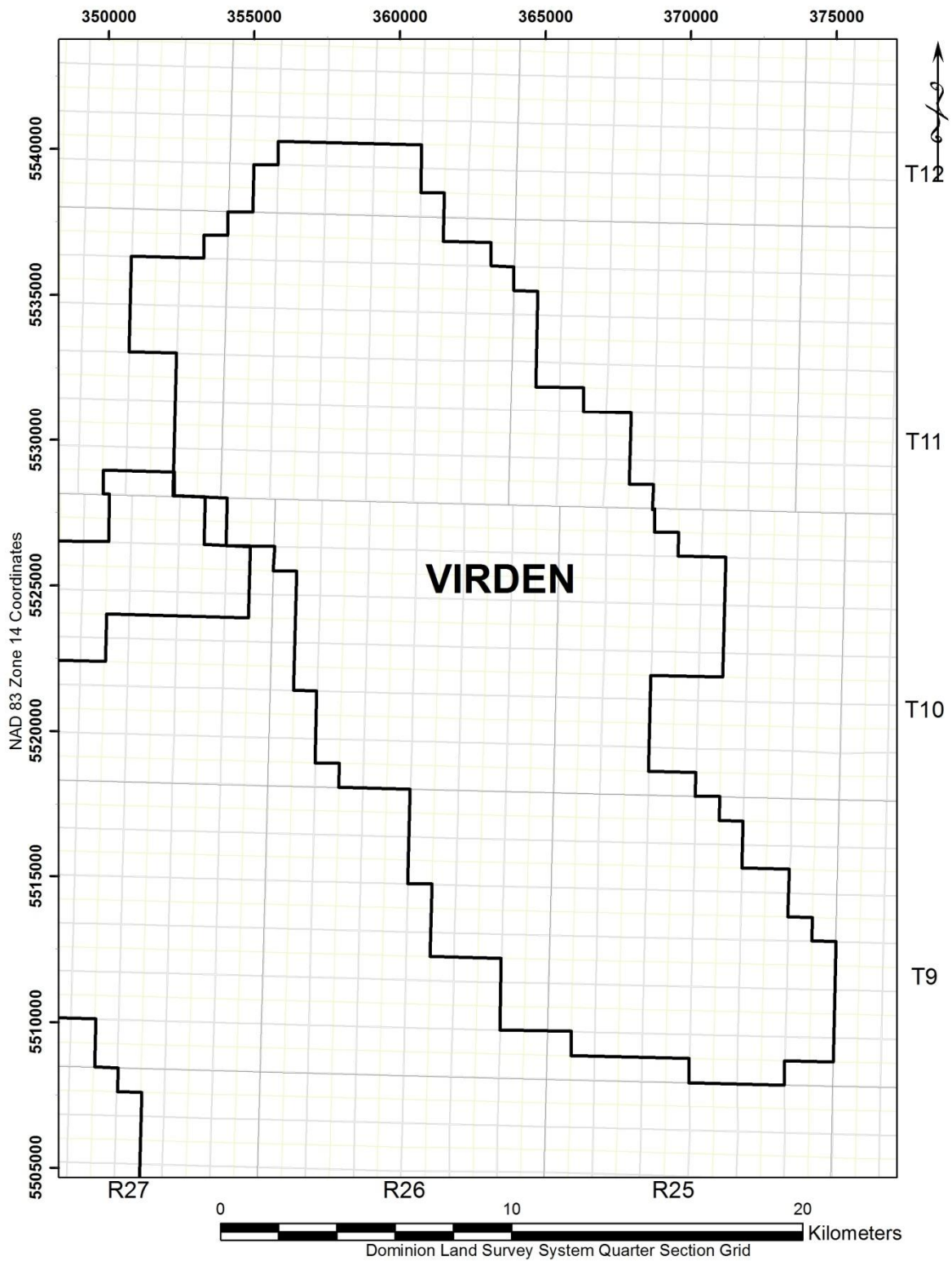


Figure 6 - Virden Field (05)

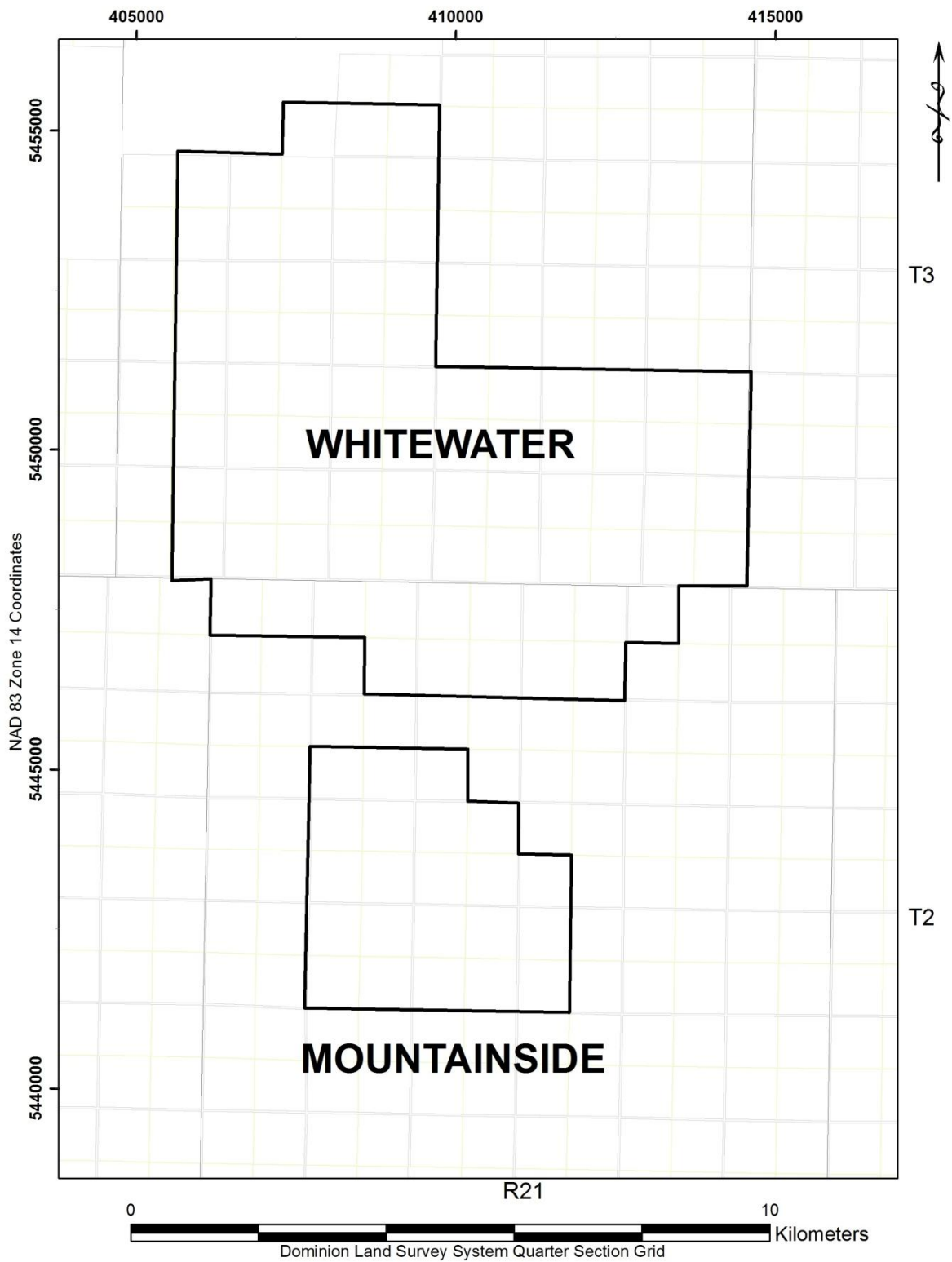


Figure 7 - Whitewater (06) & Mountainside Fields (14)

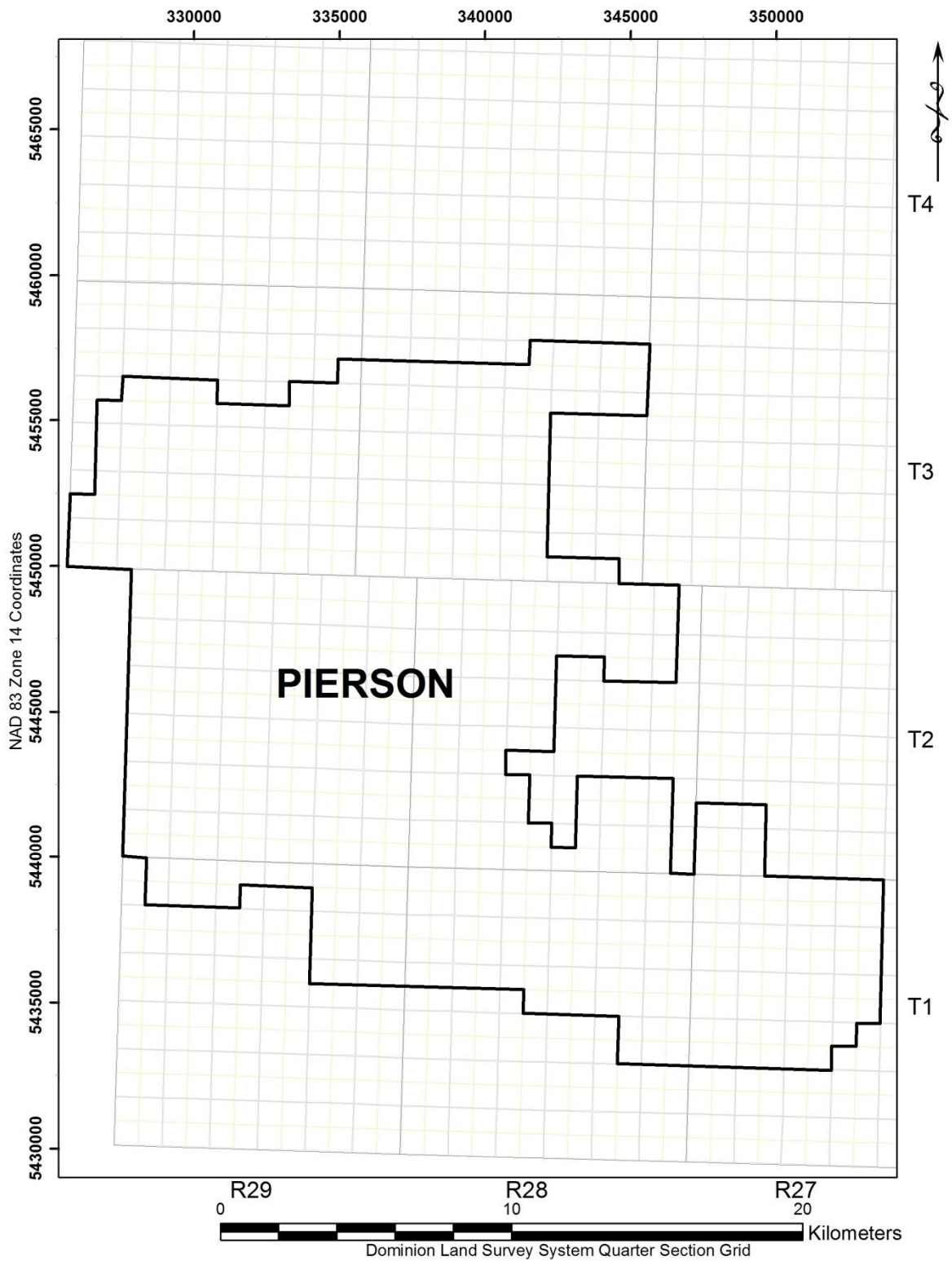


Figure 8 - Pierson Field (07)

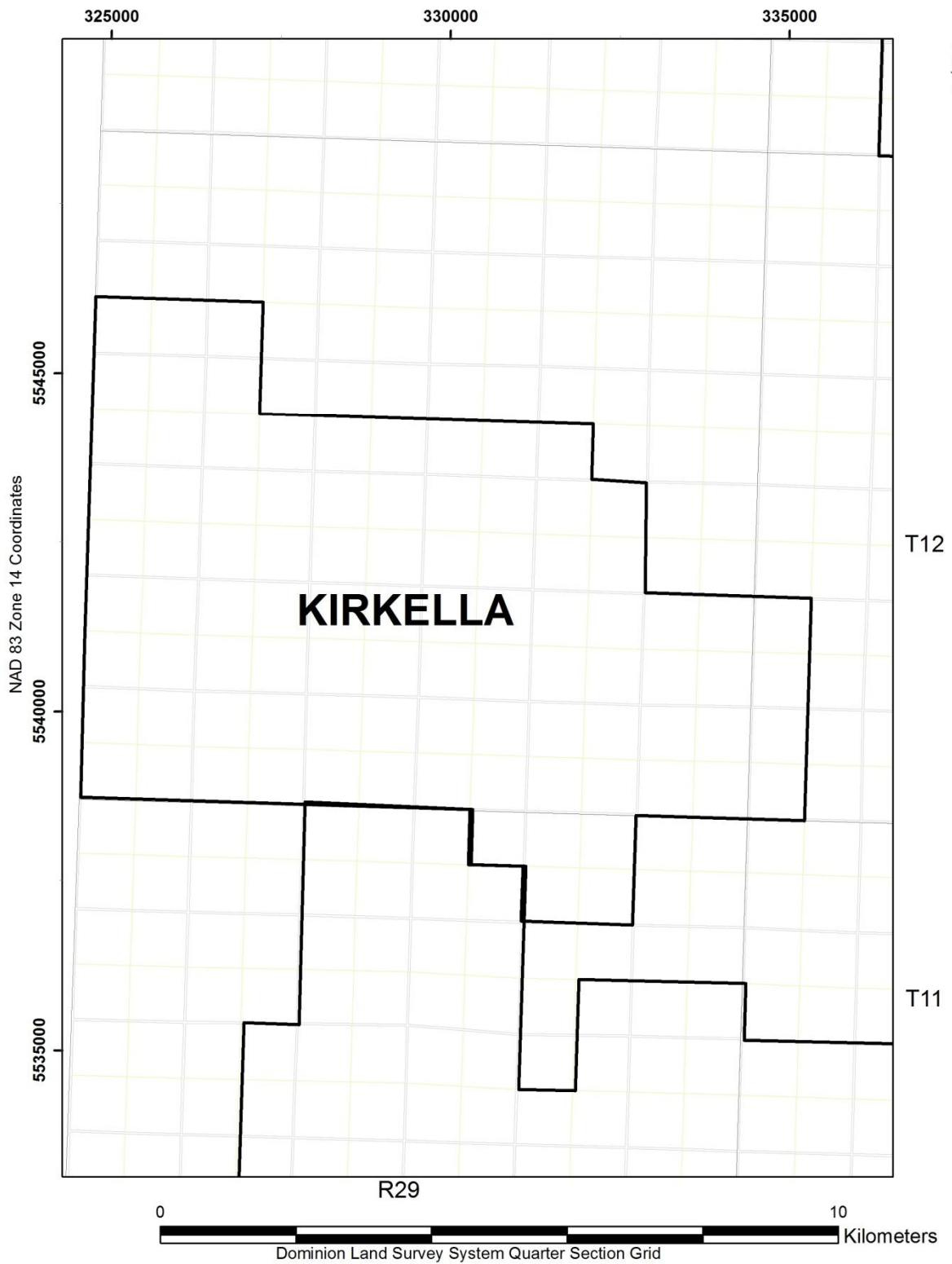


Figure 9 - Kirkella Field (09)

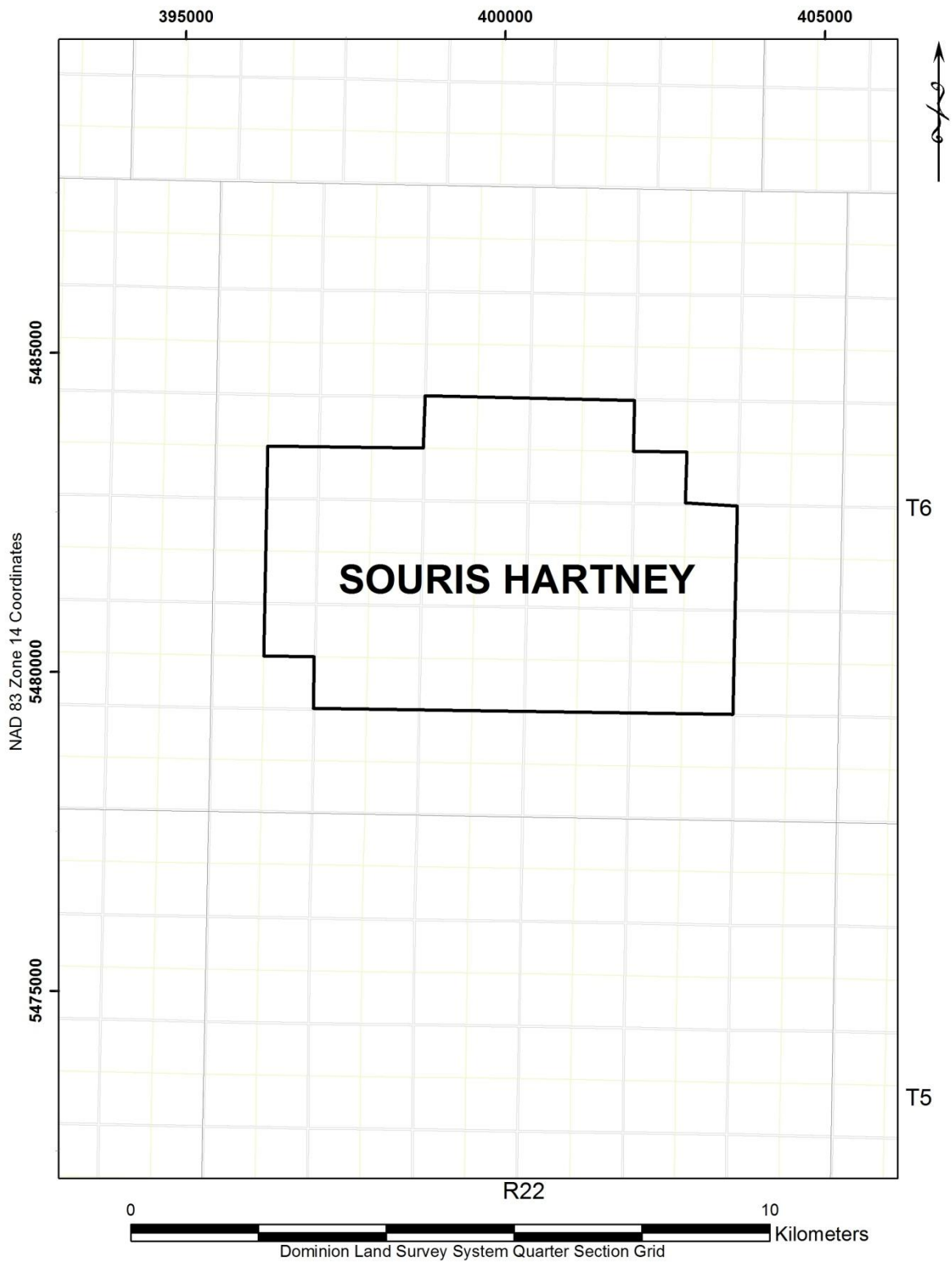


Figure 10 - Souris Hartney Field (10)

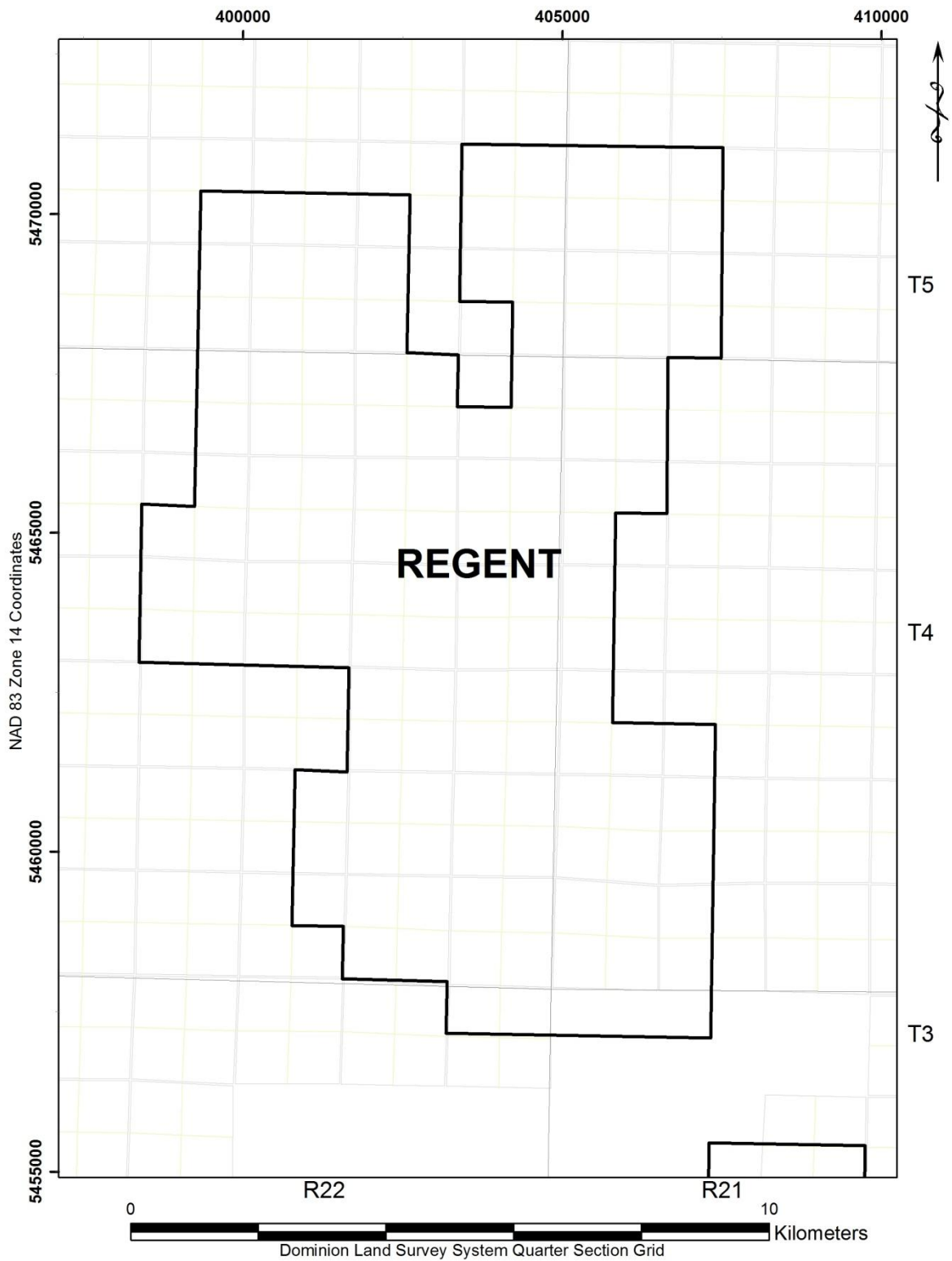


Figure 11 - Regent Field (13)

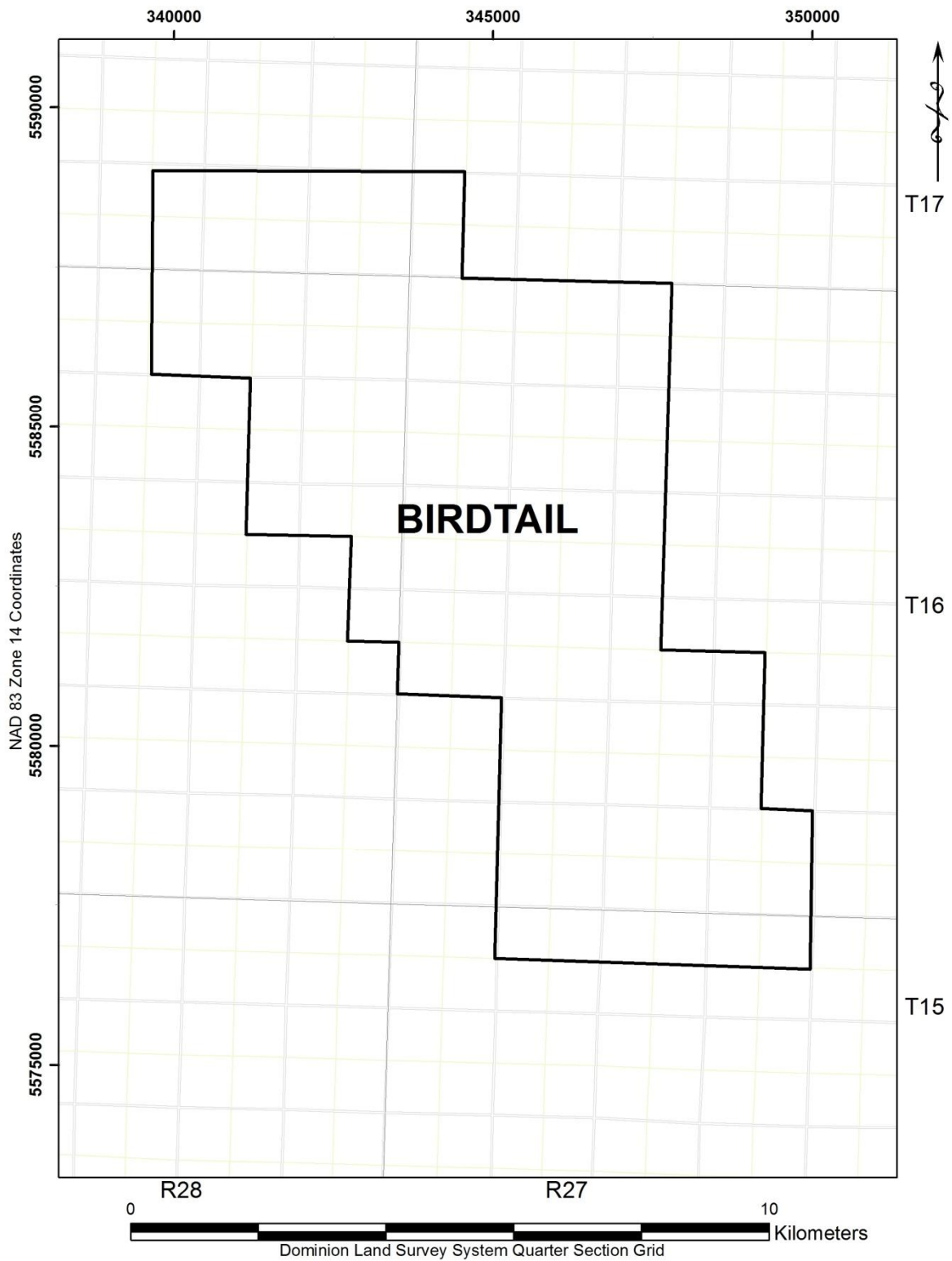


Figure 12 – Birdtail Field (15)

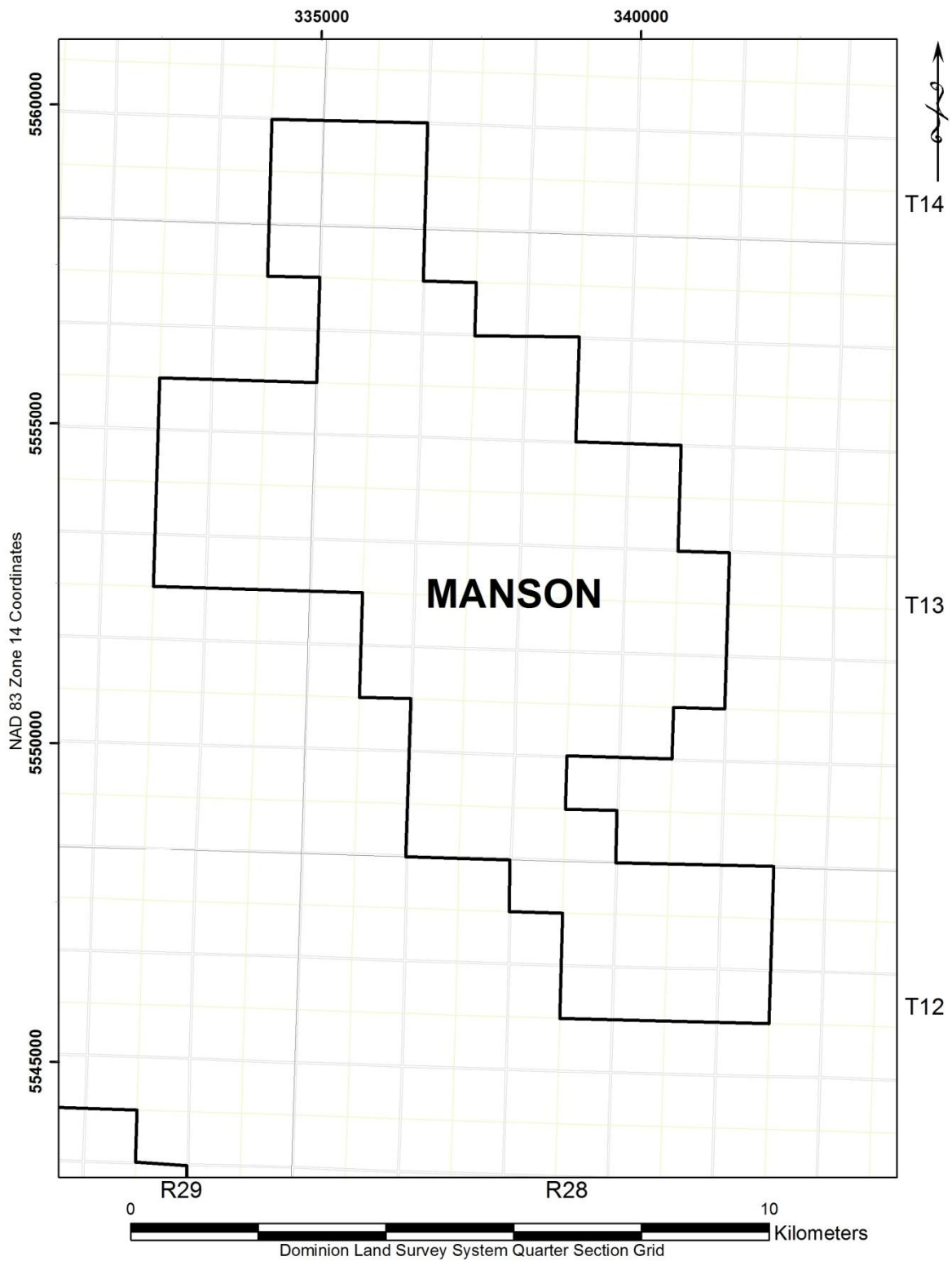


Figure 13 - Manson Field (17)

MANITOBA'S DESIGNATED POOLS

Effective **January 1, 2012** 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 listed on pages 30 to 71.

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	INTERVAL (meters KB)
DALY SINCLAIR FIELD				
Lodgepole A	01 59A	30	100/14-04-010-28W1/00	725.4-821.4
Lodgepole B	01 59B	30	100/13-14-009-28W1/00	736.4-832.7
Lodgepole C	01 59C	30	100/03-33-008-27W1/00	736.7-837.0
Lodgepole D	01 59D	30	100/07-26-009-29W1/00	783.3-883.3
Lodgepole E	01 59E	30	100/13-21-010-28W1/00	718.5-802.2
Lodgepole I	01 59I	30	100/05-07-010-29W1/00	822.0-865.0
Lodgepole K	01 59K	30	100/08-30-010-29W1/00	788.0-877.5
Lodgepole P	01 59P	30	100/03-27-010-29W1/00	769.0-853.2
Lodgepole S	01 59S	30	100/15-12-009-29W1/00	816-819
Lodgepole T	01 59T	30	100/08-17-010-29W1/00	808.0-813.0
Lodgepole V	01 59V	30	100/04-07-009-28W1/00	798-804
Lodgepole W	01 59W	30	100/10-18-007-29W1/00	927.5-932.5
Lodgepole X	01 59X	30	100/02-21-007-28W1/00	
Lodgepole Y	01 59Y	30	100/03-03-009-29W1/00	822.5-825.5
Lodgepole Z	01 59Z	30	100/16-35-008-29W1/00	812.0-880.0
Lodgepole AA	01 59AA	30	100/06-15-008-28W1/00	778.0-888.0
Lodgepole BB	01 59BB	30	100/15-17-008-28W1/00	793.0-903.0
Lodgepole CC	01 59CC	30	100/12-05-009-29W1/00	839.0-951.0
Lodgepole DD	01 59DD	30	100/06-33-008-28W1/00	769.0-872.0
Lodgepole EE	01 59EE	30	100/15-05-008-28W1/00	826.5-832.5
Lodgepole FF	01 59FF	30	100/12-11-011-29W1/00	730.5-733.5; 748.5-751
Lodgepole GG	01 59GG	30	100/06-16-011-29W1/00	744-783.3
Lodgepole HH	01 59HH	30	100/05-10-011-29W1/00	826.6-827.7
Lodgepole II	01 59II	30	100/11-27-011-29W1/00	836.5-838; 839-840
Lodgepole JJ	01 59JJ	30	102/12-34-011-29W1/00	730-748.2
Bakken G	01 60G	31	100/13-06-009-27W1/00	828.0-832.0
Bakken I	01 60I	31	100/02-23-009-28W1/02	829.8-834.7
Bakken J	01 60J	31	100/07-18-010-27W1/02	780.3-784.6
Bakken L	01 60L	31	100/16-10-010-28W1/02	809.5-813.0
Bakken P	01 60P	31	100/12-28-009-28W1/02	842.7-845.7
Bakken Q	01 60Q	31	100/03-27-009-28W1/02	746.0-748.0
Bakken Z	01 60Z	31	100/08-07-010-28W1/02	833.0-836.0
Bakken BB	01 60BB	31	100/04-08-010-29W1/02	887.4-890.5
Bakken-Three Forks A	01 62A	31	100/01-22-010-29W1/00	859.5-866.0
Bakken-Three Forks B	01 62B	31	100/04-21-009-29W1/02	917.0-927.0
Bakken-Three Forks N	01 62N	31	103/04-24-010-28W1/02	814.0-917.0
Bakken-Three Forks Q	01 62Q	31	100/08-30-009-27W1/00	834.0-873.0
Bakken-Three Forks R	01 62R	31	100/16-31-009-27W1/02	832.5-834.5
Bakken-Three Forks S	01 62S	31	100/10-18-007-29W1/00	1061.5-1063

POOL	CODE	PLAT (Page #)	REFERENCE WELL	
			UWI	INTERVAL (meters KB)
Bakken-Three Forks T	01 62T	31	100/11-07-007-29W1/00	1066-1072.4
Bakken-Three Forks V	01 62V	31	100/12-07-009-29W1/00	963-966
Bakken-Three Forks X	01 62X	31	100/03-34-006-29W1/00	1029-1041
Bakken-Three Forks Y	01 62Y	31	100/01-06-011-28W1/00	851.14-856.05
Bakken-Three Forks Z	01 62Z	31	100/07-16-011-29W1/00	753-757.5; 842-846
Bakken-Three Forks AA	01 62AA	31	100/16-21-011-29W1/00	842-843
Bakken-Three Forks BB	01 62BB	31	100/08-17-011-28W1/00	849-851
Bakken-Three Forks CC	01 62CC	31	100/12-24-011-29W1/00	837-840; 842-846
Bakken-Three Forks DD	01 62DD	31	100/12-34-010-27W1/00	
Bakken-Three Forks EE	01 62EE	31	100/05-01-011-29W1/00	853.47-857.01
Bakken-Three Forks FF	01 62FF	31	100/08-03-011-28W1/00	845.04-855.63
Bakken-Three Forks GG	01 62GG	31	102/02-30-006-29W1/00	1096.18-1106.81
Bakken-Three Forks HH	01 62HH	31	102/01-26-010-27W1/00	770.22-782.03
Three Forks A	01 65A	32	100/01-14-008-29W1/00	967.0-969.0
Three Forks B	01 65B	32	100/09-30-007-28W1/00	969.0-971.0
TILSTON FIELD				
Mission Canyon 1 A	02 44A	33	100/06-31-005-29W1/00	940.0-969.0
Mission Canyon 1 C	02 44C	33	100/02-08-006-29W1/00	925.0-940.0
Mission Canyon 1 D	02 44D	33	100/11-15-006-29W1/00	907.0-910.5
WASKADA FIELD				
Favel A	03 10A	34	100/01-03-002-25W1/02	479.5-841.0
Favel B	03 10B	34	100/03-27-001-25W1/02	478.0-479.5
Favel C	03 10C	34	100/10-17-001-24W1/00	481.5-484.5
Lower Amaranth A	03 29A	35	100/11-30-001-25W1/03	884.5-920.5
Lower Amaranth I	03 29I	35	100/03-01-001-25W1/00	873.7-910.0
Lower Amaranth J	03 29J	35	100/01-03-001-25W1/00	885.0-920.5
Lower Amaranth K	03 29K	35	100/03-24-001-25W1/02	866.0-898.0
Lower Amaranth O	03 29O	35	100/13-10-002-24W1/00	869.5-879.5
Mission Canyon 3b A	03 42A	36	100/11-30-001-25W1/03	920.5-929.6
Mission Canyon 3b B	03 42B	36	100/13-27-001-26W1/00	920.0-936.5
Mission Canyon 3b C	03 42C	36	100/05-07-001-25W1/00	931.5-941.0
Mission Canyon 3b E	03 42E	36	100/04-08-001-25W1/00	936.0-948.0
Mission Canyon 3b F	03 42F	36	100/11-22-001-26W1/02	929.5-948.0
Mission Canyon 3b G	03 42G	36	100/11-05-002-26W1/00	929.0-955.5
Mission Canyon 3a A	03 43A	37	100/01-25-001-26W1/00	928.0-950.0
Mission Canyon 3a B	03 43B	37	100/12-23-001-25W1/00	904.6-912.6
Mission Canyon 3a C	03 43C	37	100/12-26-001-26W1/00	924.0-940.0

POOL	CODE	PLAT (Page #)	REFERENCE WELL	
			UWI	INTERVAL (meters KB)
Mission Canyon 3a D	03 43D	37	100/10-30-001-25W1/00	921.0-931.0
Mission Canyon 3a E	03 43E	37	100/02-12-001-26W1/02	930.0-944.0
Mission Canyon 3a F	03 43F	37	100/15-05-001-25W1/00	931.0-941.0
Mission Canyon 3a G	03 43G	37	100/12-31-001-25W1/00	912.5-929.0
Mission Canyon 3a H	03 43H	37	100/06-18-002-25W1/00	899.0-907.0
Mission Canyon 3a I	03 43I	37	100/07-35-001-26W1/00	917.0-935.0
Mission Canyon 3a K	03 43K	37	100/06-19-001-25W1/00	924.0-934.0
Mission Canyon 3a L	03 43L	37	100/08-32-001-25W1/00	909.5-917.0
Mission Canyon 3a M	03 43M	37	100/10-10-001-25W1/00	915.0-925.0
Mission Canyon 3a N	03 43N	37	100/02-20-001-25W1/00	919.5-930.0
Mission Canyon 3a O	03 43O	37	100/10-04-001-25W1/00	931.5-933
Mission Canyon 1 A	03 44A	38	100/01-30-001-25W1/00	917.4-947.9
Mission Canyon 1 B	03 44B	38	100/09-13-001-26W1/00	920.5-967.4
Mission Canyon 1 C	03 44C	38	100/02-22-001-25W1/00	908.3-943.0
Mission Canyon 1 D	03 44D	38	100/04-09-002-25W1/00	986.0-912.0
Mission Canyon 1 E	03 44E	38	100/06-33-001-25W1/00	905.5-942.0
Mission Canyon 1 F	03 44F	38	100/02-27-001-25W1/00	902.5-930.0
Mission Canyon 1 G	03 44G	38	100/04-05-001-24W1/00	910.0-937.0
Mission Canyon 1 H	03 44H	38	100/03-24-001-25W1/00	898.0-910.0
Mission Canyon 1 I	03 44I	38	100/02-14-002-25W1/00	882.0-915.0
Mission Canyon 1 I	03 44J	38	100/04-24-002-26W1/00	898.0-900.0
Mission Canyon 1 K	03 44K	38	100/02-33-001-24W1/00	871.7-900.0
Mission Canyon 1 L	03 44L	38	100/04-12-001-24W1/00	941.5-946.0
Mission Canyon 1 M	03 44M	38	100/09-25-001-24W1/00	939.5-941.5
Mission Canyon 1 N	03 44N	38	100/06-07-001-24W1/00	897.5-898.5
Mission Canyon 1 O	03 44O	38	100/13-09-002-24W1/00	865.0-873.0
Mission Canyon 1 P	03 44P	38	100/15-10-002-24W1/00	888.8-893.8
Mission Canyon 1Q	03 44Q	38	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				
Lodgepole A	05 59A	40	102/06-27-011-26W1/00	563.9-667.0
Lodgepole B	05 59B	40	100/06-28-010-26W1/00	623.0-726.0
Lodgepole C	05 59C	40	100/10-21-009-25W1/00	595.0-648.0
Lodgepole D	05 59D	40	100/07-11-009-25W1/00	598.9-655.3
Lodgepole E	05 59E	40	100/07-26-009-26W1/00	634.0-732.1
Lodgepole G	05 59G	40	100/10-01-011-27W1/00	647.0-710.0

POOL	CODE	PLAT (Page #)	REFERENCE WELL	
			UWI	INTERVAL (meters KB)
WHITEWATER FIELD				
Lower Amaranth A	06 29A	41	100/04-21-003-21W1/02	745.0-757.7
Lodgepole WL A	06 52A	42	100/16-17-003-21W1/00	759.6-786.1
Lodgepole WL B	06 52B	42	100/16-02-003-21W1/00	790.5-812.5
Lodgepole Virden A	06 53A	43	100/05-12-003-21W1/00	787.0-804.5
PIERSON FIELD				
Lower Amaranth A	07 29A	44	100/04-26-003-28W1/00	915.7-949.5
Lower Amaranth B	07 29B	44	100/12-30-002-28W1/02	955.0-992.0
Lower Amaranth E	07 29E	44	100/04-01-002-29W1/00	1016.0-1025.0
Lower Amaranth L	07 29L	44	100/02-26-001-29W1/00	1000.0-1038.0
Lower Amaranth P	07 29P	44	100/03-24-001-28W1/00	972-982
Lower Amaranth Q	07 29Q	44	100/11-21-001-27W1/00	945-963
Lower Amaranth R	07 29R	44	100/02-11-002-28W1/00	959-963.67
Lower Amaranth S	07 29S	44	100/02-31-002-29W1/00	
Lower Amaranth T	07 29T	44	100/15-32-001-29W1/02	
Lower Amaranth – Mission Canyon 3b A	07 35A	45	100/14-17-002-29W1/02	1023.5-1028.5; 1036.5-1038.8
Lower Amaranth – Mission Canyon 3b B	07 35B	45	100/01-35-002-28W1/00	959.0-963.0; 950.5-956.5
Lower Amaranth – Mission Canyon 3b C	07 35C	45	100/11-34-002-28W1/00	974-975; 955-961
Lower Amaranth – Mission Canyon 3b D	07 35D	45	100/15-20-002-28W1/02	975.0-979.0; 988.5-990
Mission Canyon 3 B	07 41B	46	100/14-05-002-28W1/02	1007.5-1030.0
Mission Canyon 3 C	07 41C	46	100/12-06-003-29W1/00	1165.0-1605.0 md
Mission Canyon 3 D	07 41D	46	100/07-21-001-27W1/00	
Mission Canyon 3b B	07 42B	47	100/08-07-003-28W1/00	981.5-990.6
Mission Canyon 3b C	07 42C	47	100/06-17-003-29W1/00	1002.0-1016.0
Mission Canyon 3b D	07 42D	47	100/13-32-002-29W1/00	1021.1-1033.3
Mission Canyon 3b E	07 42E	47	100/11-30-002-28W1/00	990.0-1002.0
Mission Canyon 3b F	07 42F	47	100/14-20-002-28W1/02	987.5-1003.4
Mission Canyon 3b J	07 42J	47	100/13-33-001-28W1/00	1002.0-1026.0
Mission Canyon 3b K	07 42K	47	100/05-30-001-28W1/00	1025.0-1043.5
Mission Canyon 3b L	07 42L	47	100/06-23-002-29W1/00	1012-1020
Mission Canyon 3b M	07 42M	47	100/08-06-002-27W1/00	967.7-969.7
Mission Canyon 3b N	07 42N	47	100/04-34-002-28W1/00	974.5-975.8
Mission Canyon 3b O	07 42O	47	100/09-26-002-28W1/00	963-965

POOL	CODE	PLAT (Page #)	REFERENCE WELL	
			UWI	INTERVAL (meters KB)
Mission Canyon 3b P	07 42P	47	102.06-15-002-29W1.00	1029.49-1032.35
Mission Canyon 3a A	07 43A	48	100/08-16-003-29W1/00	999.7-1018.0
Mission Canyon 3a B	07 43B	48	100/09-18-003-28W1/00	976.9-990.6
Mission Canyon 3a C	07 43C	48	100/04-12-003-29W1/00	995.0-1015.0
Mission Canyon 3a E	07 43E	48	100/06-10-003-28W1/00	970.3-985.0
Mission Canyon 3a F	07 43F	48	100/14-05-003-29W1/03	1085.0-1385.0 md
Mission Canyon 3a G	07 43G	48	100/06-36-002-29W1/02	1002.8-1003.85
Mission Canyon 1 A	07 44A	49	100/04-25-003-28W1/00	948.0-980.0
KIRKELLA FIELD				
Lodgepole Dolomite A	09 51A	50	100/14-08-012-29W1/00	725.0-742.0
Lodgepole Dolomite B	09 51B	50	100/04-19-012-29W1/00	729.0-744.0
Lodgepole Daly A	09 54A	51	100/14-10-012-29W1/00	722.4-734.3
Lodgepole Daly B	09 54B	51	100/05-17-012-29W1/00	746.0-755.0
Lodgepole Daly C	09 54C	51	100/04-18-012-29W1/00	745.5-757.0
Lodgepole Daly D	09 54D	51	100/14-01-012-29W1/00	714.0-740.0
Lodgepole Daly E	09 54E	51	100/16-06-012-29W1/00	746.0-758.0
Lodgepole Crinoidal A	09 55A	52	100/10-03-012-29W1/00	758.0-761.5
Lodgepole Crinoidal B	09 55B	52	100/11-15-012-29W1/00	716.0-720.0 md
Lodgepole Crinoidal C	09 55C	52	100/15-10-012-29W1/00	715.0-729.0
Lodgepole A	09 59A	53	100/16-16-12-29W1/03	741.5-742.5; 752.5-753.5
Bakken-Three Forks A	09 62A	54	100/12-15-012-29W1/02	786.5-791.5
Bakken-Three Forks B	09 62B	54	100/16-03-012-29W1/02	809.0-811.0
Bakken-Three Forks C	09 62C	54	100/14-35-011-29W1/00	817-818.5
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	56	100/16-02004-22W1/00	761.5-780.0
Lodgepole WL B	13 52B	56	100/15-21-004-22W1/00	758.6-777.8
Lodgepole Virden A	13 53A	57	100/06-07-004-21W1/00	766.9-781.8
Lodgepole Virden B	13 53B	57	100/14-13-004-22W1/00	759.0-780.0

POOL	CODE	PLAT (Page #)	REFERENCE WELL	
			UWI	INTERVAL (meters KB)
Lodgepole Virden D	13 53D	57	100/12-31-004-21W1/00	733.0-738.4
Lodgepole Virden E	13 53E	57	100/02-07-005-21W1/00	713.5-715
MOUNTAINSIDE FIELD				
Lodgepole WL A	14 52A	42	103/11-16-002-21W1/00	1078.0-1451.4
BIRDTAIL FIELD				
Bakken A	15 60A	58	100/05-04-016-27W1/00	518.5-524.5
Bakken B	15 60B	58	100/09-09-016-27W1/00	518.5-527.5
Bakken E	15 60E	58	103/09-08-016-27W1/00	520.0-525.0
Bakken-Three Forks A	15 62A	58	100/09-30-016-27W1/00	535.5-538
Bakken-Three Forks B	15 62B	58	100/01-01-017-28W1/00	534.5-536.5
Bakken-Three Forks C	15 62C	58	100/14-35-016-28W1/00	499.5-502
MANSON FIELD				
Bakken-Three Forks A	17 62A	59	100/01-34-012-28W1/00	700.41-707.44
Bakken-Three Forks B	17 62B	59	100/14-09-013-28W1/00	672-674
Bakken-Three Forks C	17 62C	59	100/15-30-013-28W1/00	657.5-661.5; 662.3-664.5
Bakken-Three Forks D	17 62D	59	100/09-05-013-28W1/00	691-694
Bakken-Three Forks E	17 62E	59	100/02-29-013-28W1/00	654.3-658.5; 660.9-663
Bakken-Three Forks F	17 62F	59	100/01-34-012-28W1/00	700.41-707.44
OTHER AREAS				
Melita A	99 19A	60	100/14-15-016-29W1/00	432.3-446.0
Melita B	99 19B	60	100/06-17-016-29W1/00	438-441
Lower Amaranth-Lodgepole	99 40A	61	100/03-33-008-24W1/00	570.0-584.0
Mission Canyon 1 A	99 44A	62	100/08-31-002-23W1/00	812.0-843.0
Mission Canyon 1 D	99 44D	63	100/16-02-003-26W1/00	879.0-922.0
Mission Canyon 1 E	99 44E	64	100/16-06-006-28W1/00	905.0-908.0
Mission Canyon 1 G	99 44G	64	100/02-16-006-26W1/00	855.0-1229.0 md
Mission Canyon 1 H	99 44H	64	100/03-13-006-27W1/00	786.5-790.0
Mission Canyon 1 J	99 44J	64	100/11-36-005-29W1/00	923.0-927.5
Mission Canyon 1 K	99 44K	64	100/09-02-007-27W1/00	777.0-779.5
Mission Canyon 1 L	99 44L	64	100/06-03-007-27W1/00	789.7-794.0
Mission Canyon 1 M	99 44M	62	100/05-35-002-24W1/00	842.0-845.0
Mission Canyon 1 O	99 44O	62	100/14-36-001-23W1/00	944-948
Mission Canyon 1 R	99 44R	64	100/12-21-005-28W1/00	905-908; 899-902

POOL	CODE	PLAT (Page #)	REFERENCE WELL	
			UWI	INTERVAL (meters KB)
Lodgepole WL C	99 52C	65	100/13-19-004-22W1/00	762.0-775.7
Lodgepole Virden C	99 53C	66	100/05-32-002-23W1/00	827.0-828.5
Lodgepole A	99 59A	67	100/15-16-011-27W1/00	646.2-734.0
Lodgepole I	99 59I	68	100/11-35-002-24W1/00	960.0-1955 md, 1063-1308 md
Lodgepole J	99 59J	68	100/10-18-005-22W1/00	757.0-759; 764.0-765.5
Bakken-Three Forks L	99 62L	69	100/05-08-004-29W1/00	1209.5-1214.5
Bakken-Three Forks M	99 62M	69	100/10-08-006-28W1/00	1064.0-1066.0
Bakken-Three Forks U	99 62U	70	100/01-11-010-27W1/00	779.7-789.4
Bakken-Three Forks DD	99 62DD	71	100/15-32-017-28W1/00	511-513

Appendix B Manitoba Pool Codes p. 74.

**MANITOBA'S DESIGNATED POOLS
(POOL PLATS)**

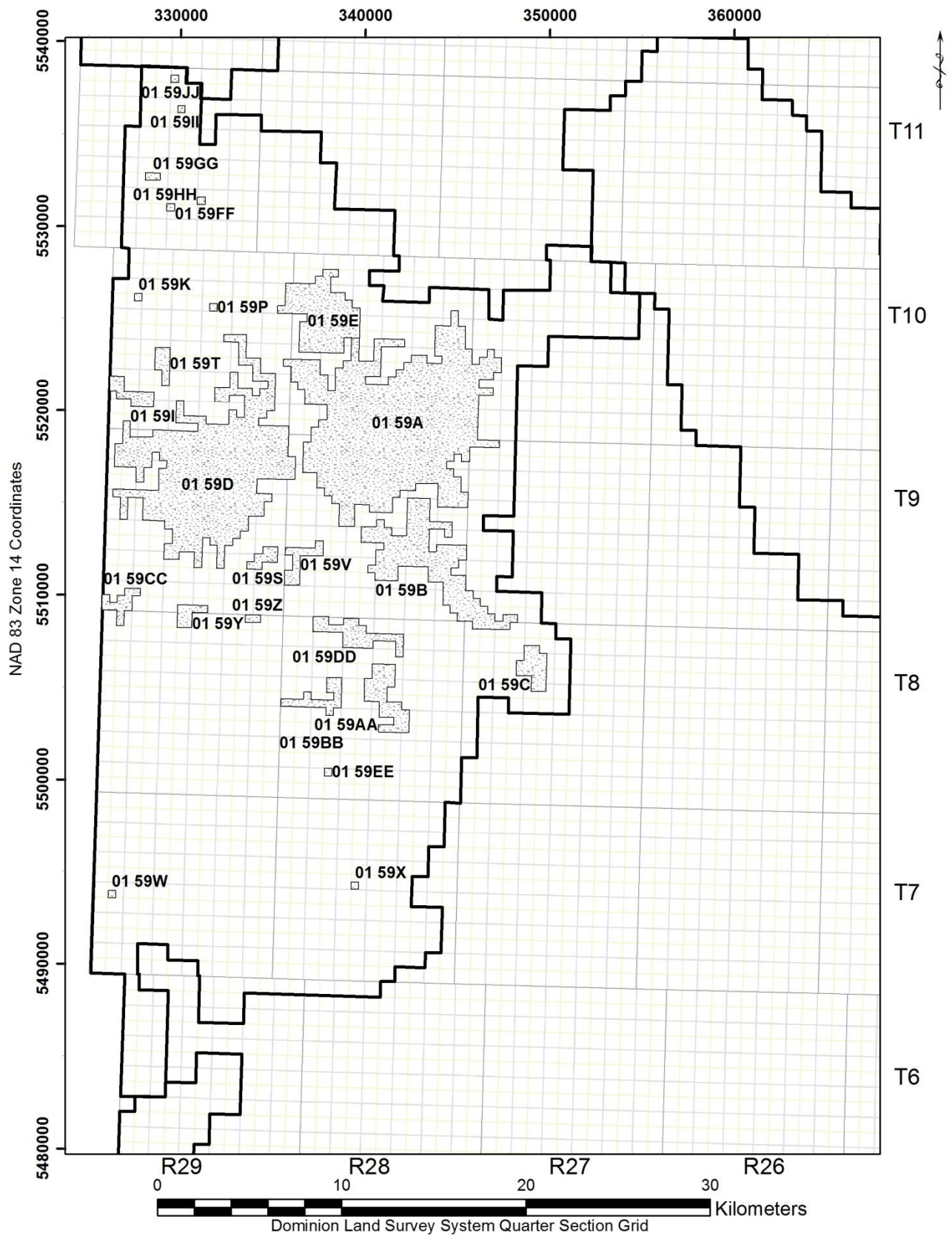
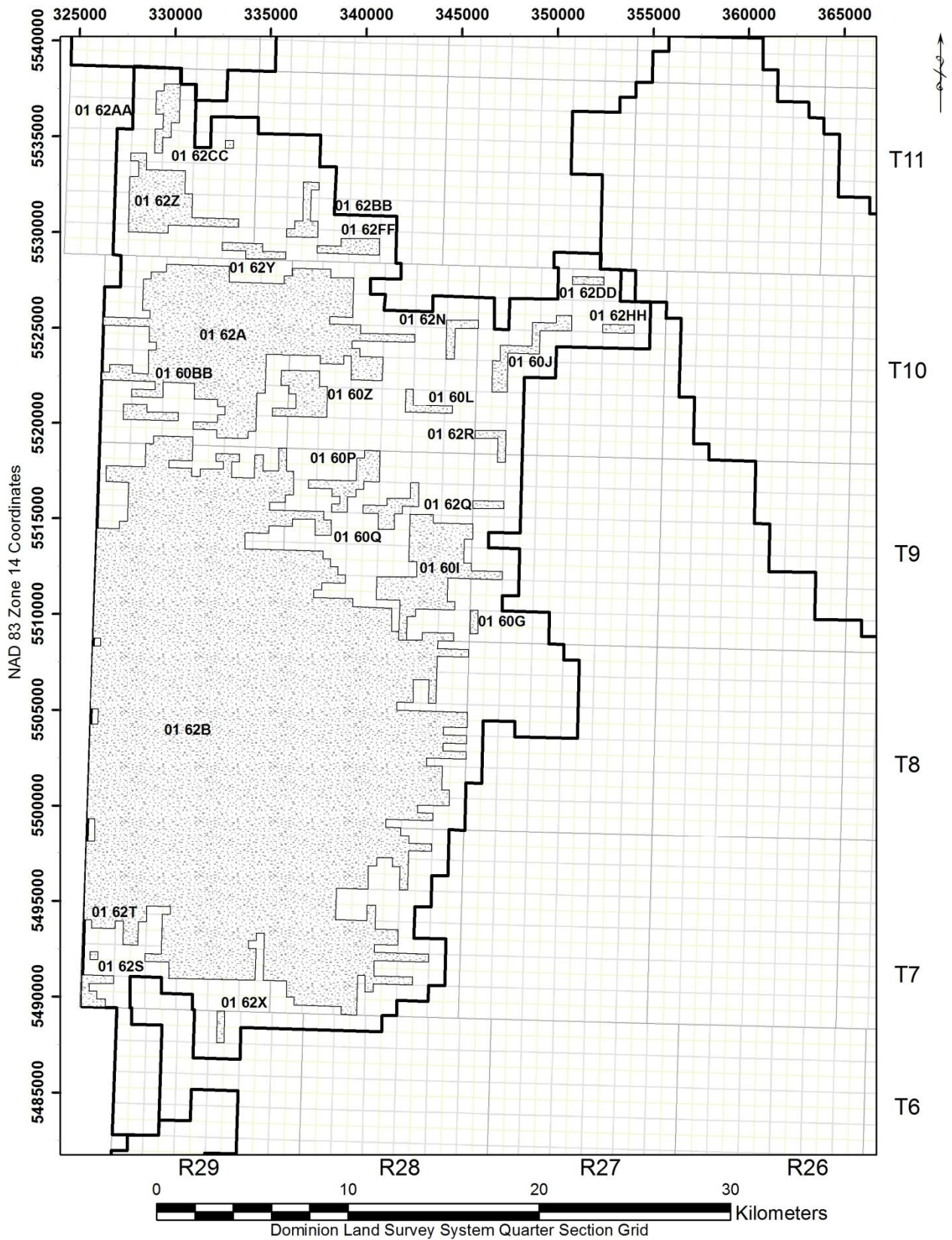


FIGURE 14 - DALY SINCLAIR LODGEPOLE POOLS (01 59A - 01 59II)



**FIGURE 15 - DALY SINCLAIR BAKKEN & BAKKEN-THREE FORKS POOLS
(01 60A - 01 60BB & 01 62A – 01 62CC)**

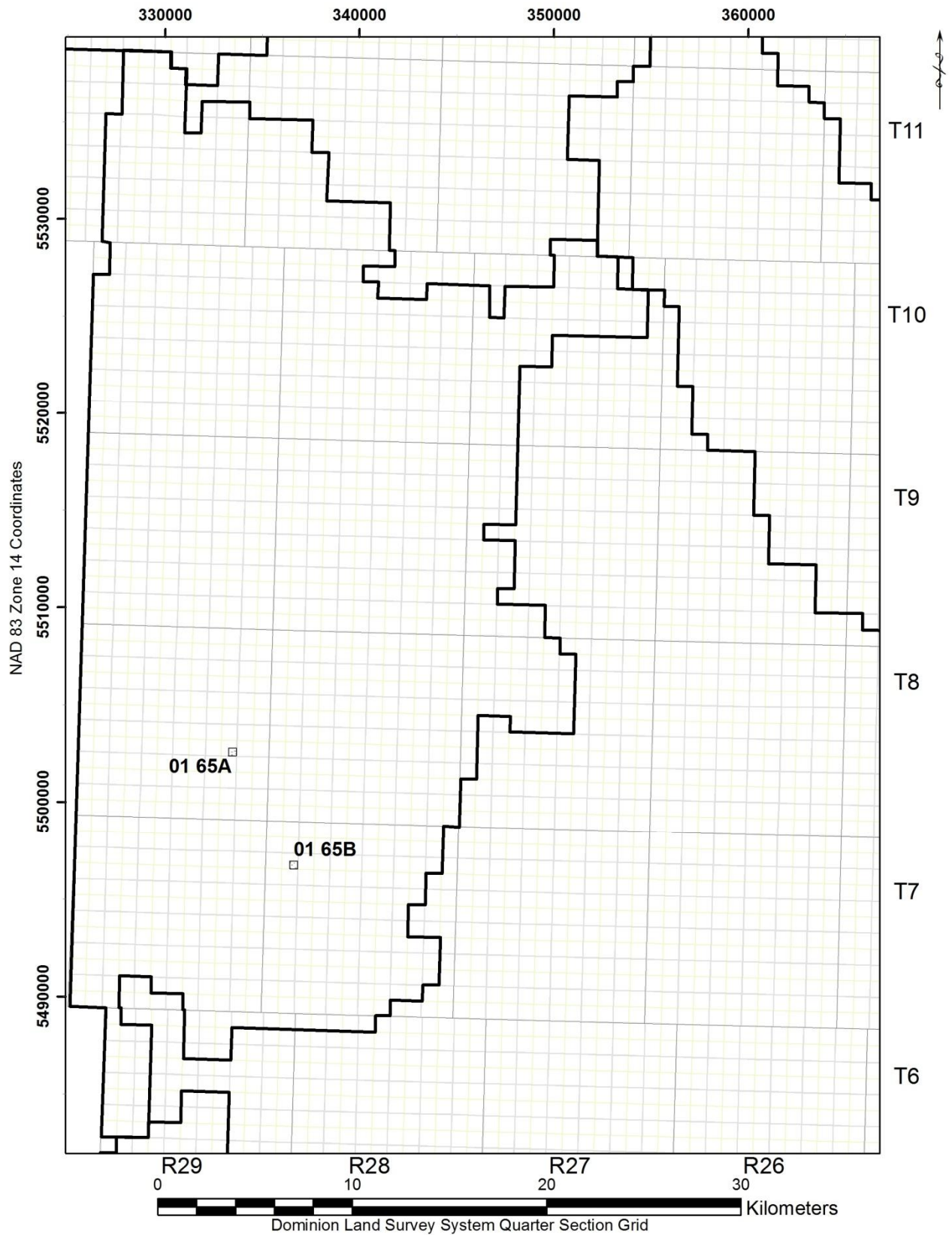


FIGURE 16 - DALY SINCLAIR THREE FORKS POOLS (01 65A & 01 65B)

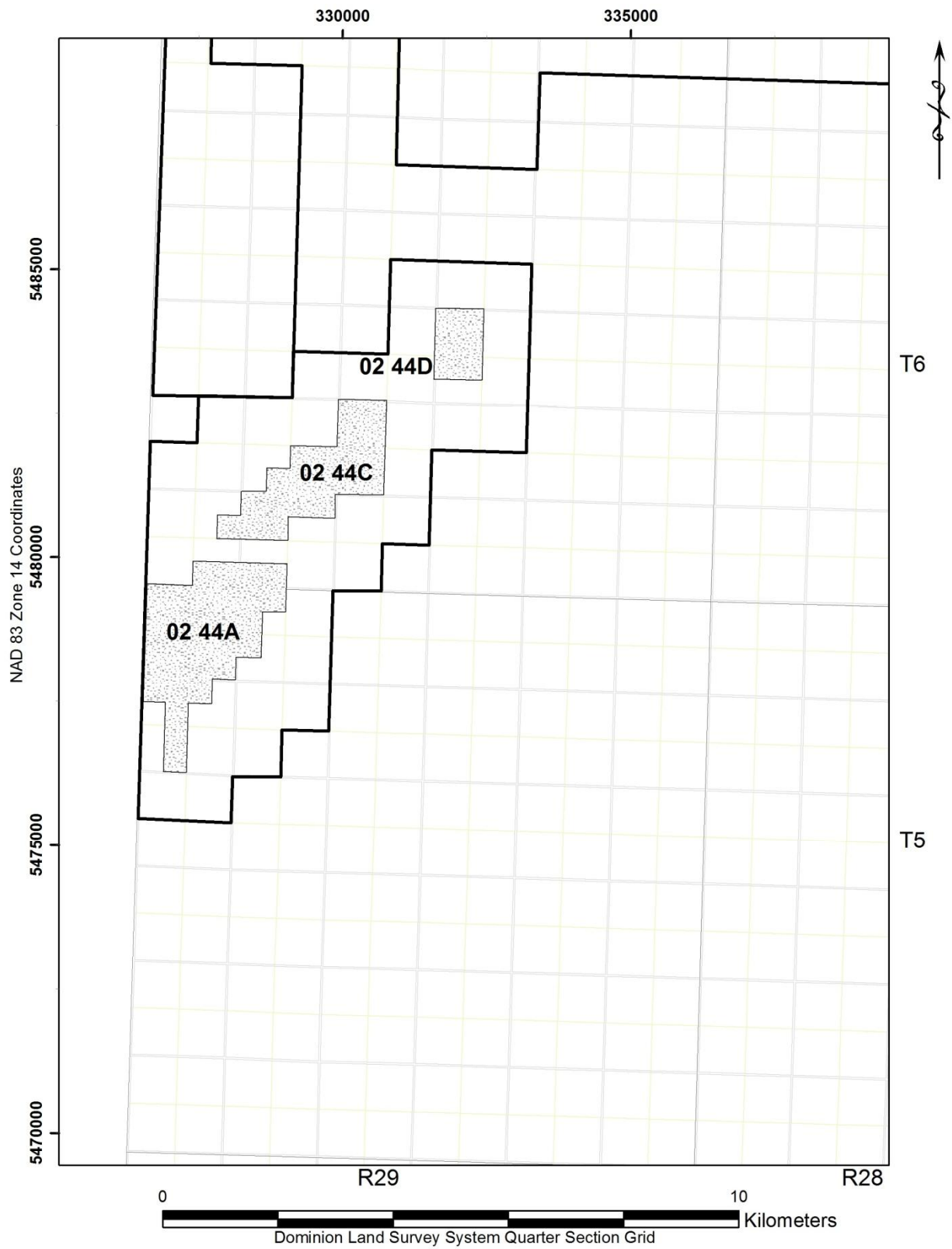


FIGURE 17 - TILSTON MISSION CANYON 1 POOLS (02 44A - 02 44D)

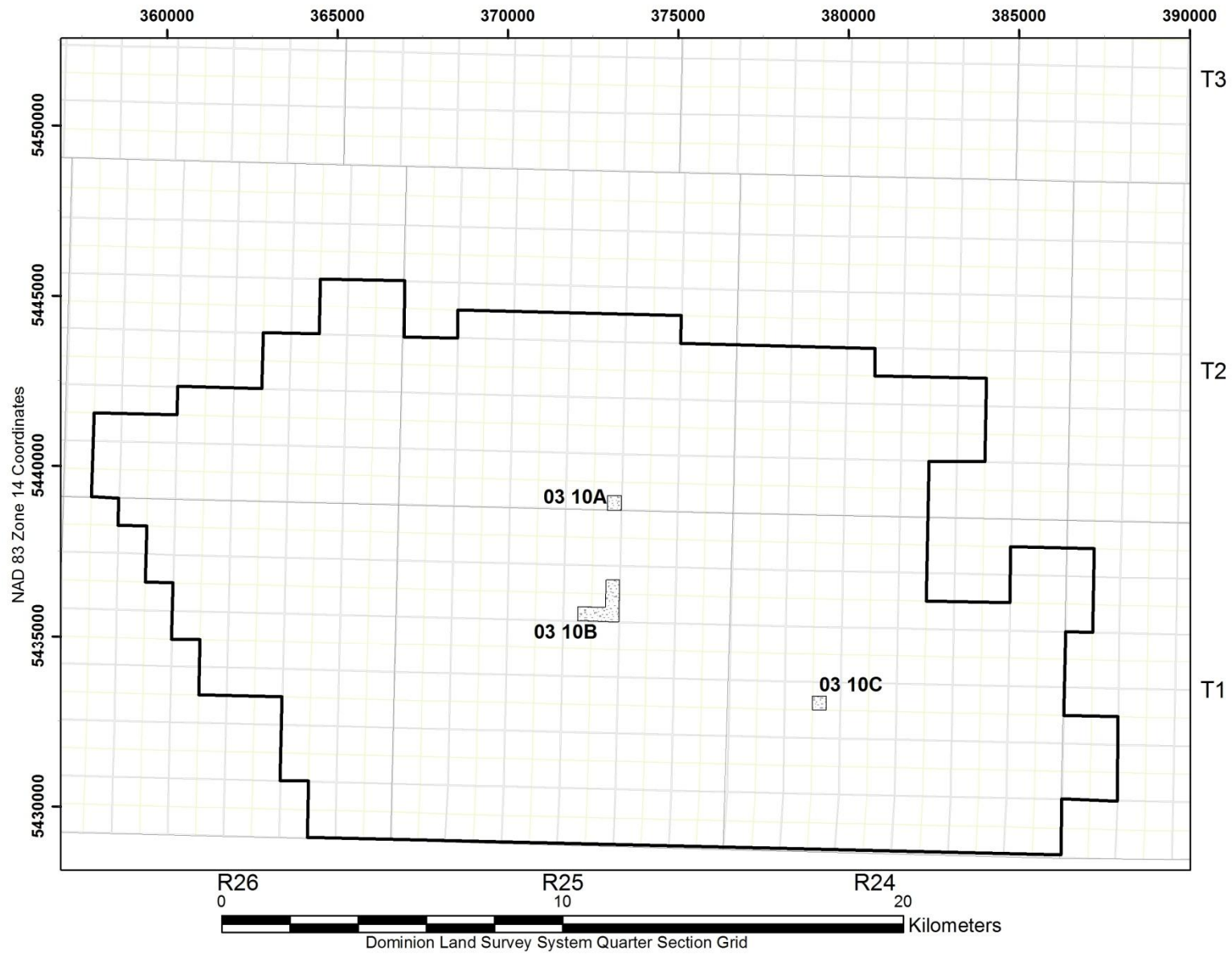


FIGURE 18 - WASKADA FAVEL POOLS (03 10A – 03 10C)

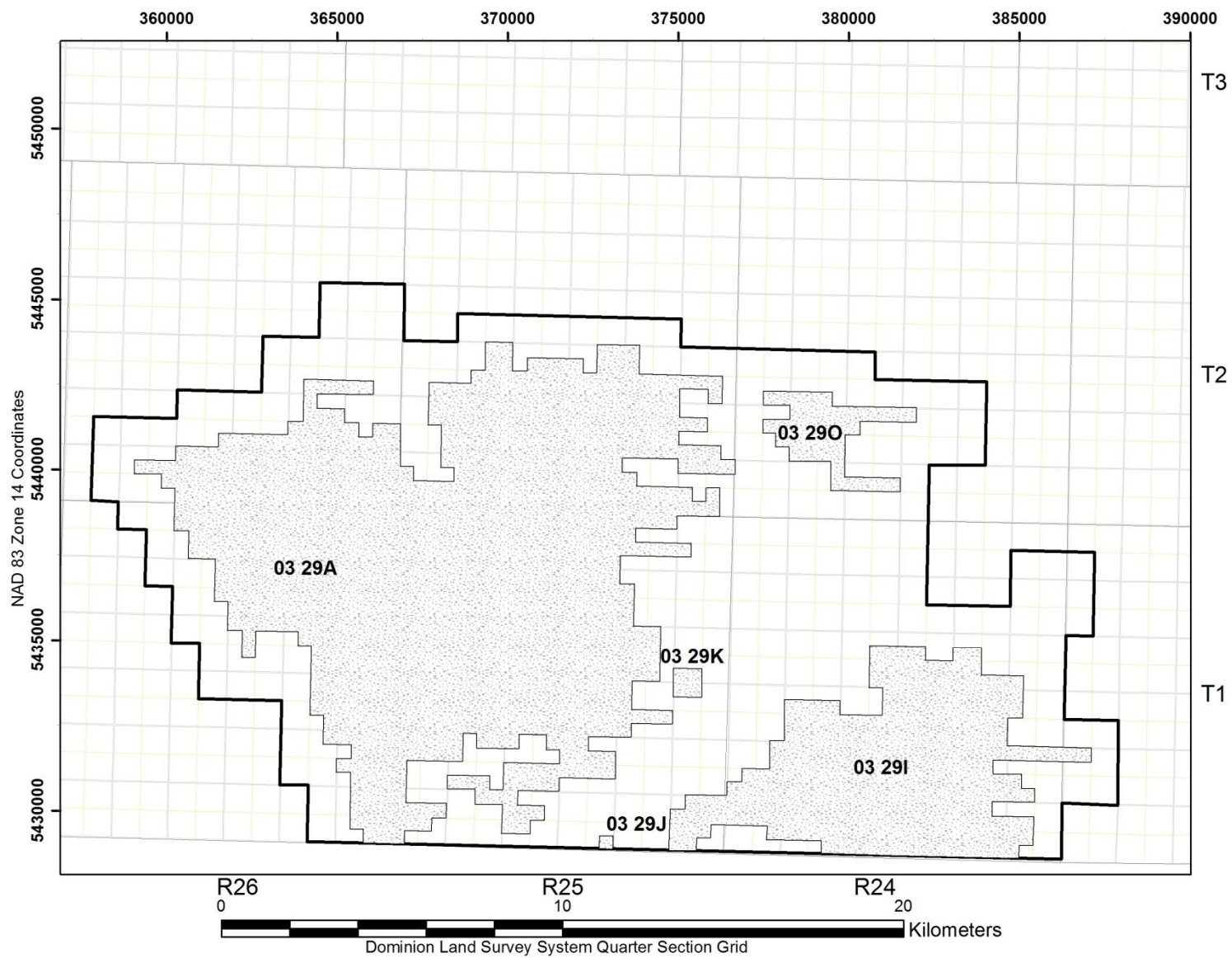


FIGURE 19 - WASKADA LOWER AMARANTH POOLS (03 29A – 03 29O)

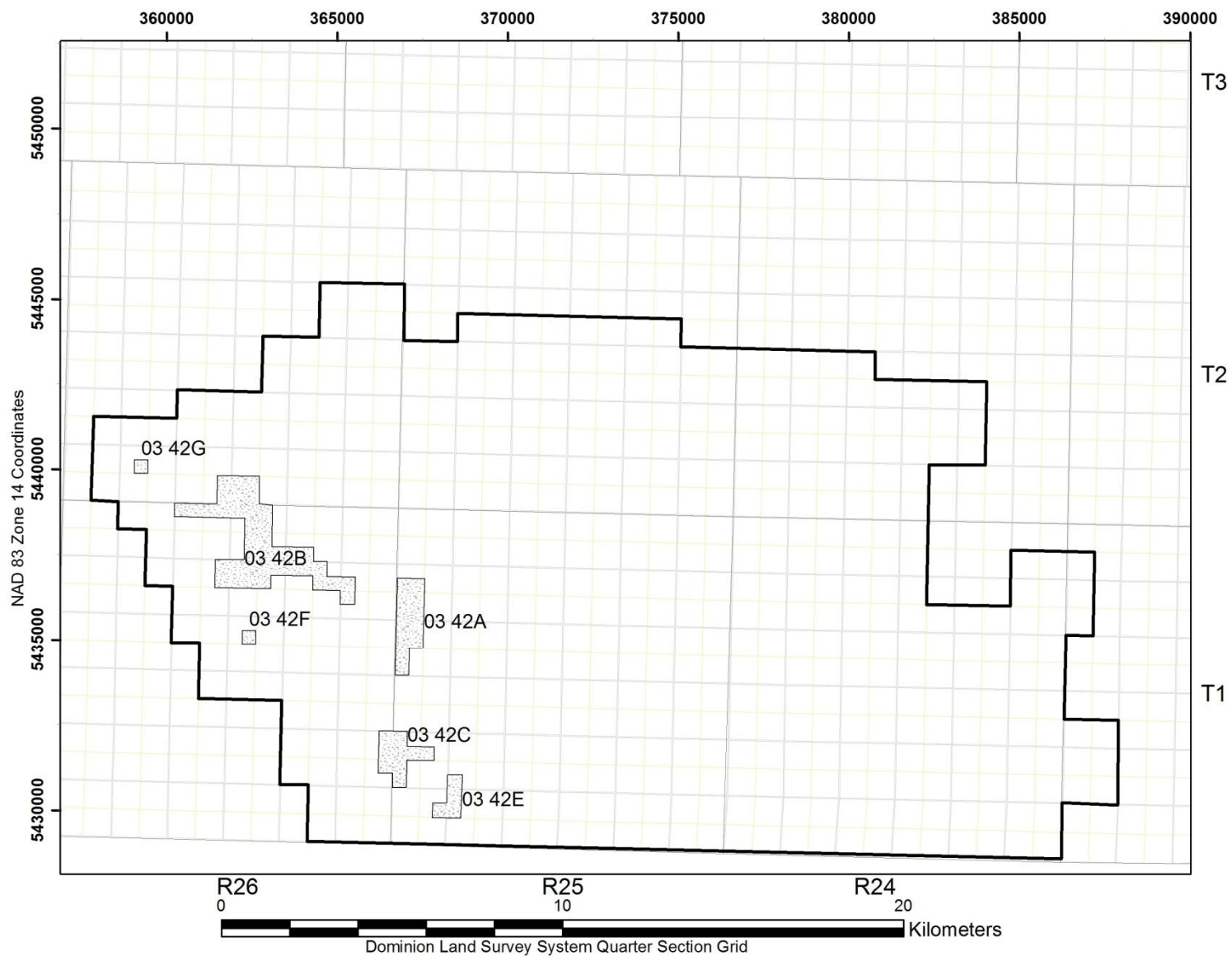


FIGURE 20 - WASKADA MISSION CANYON 3B POOLS (03 42A - 03 42G)

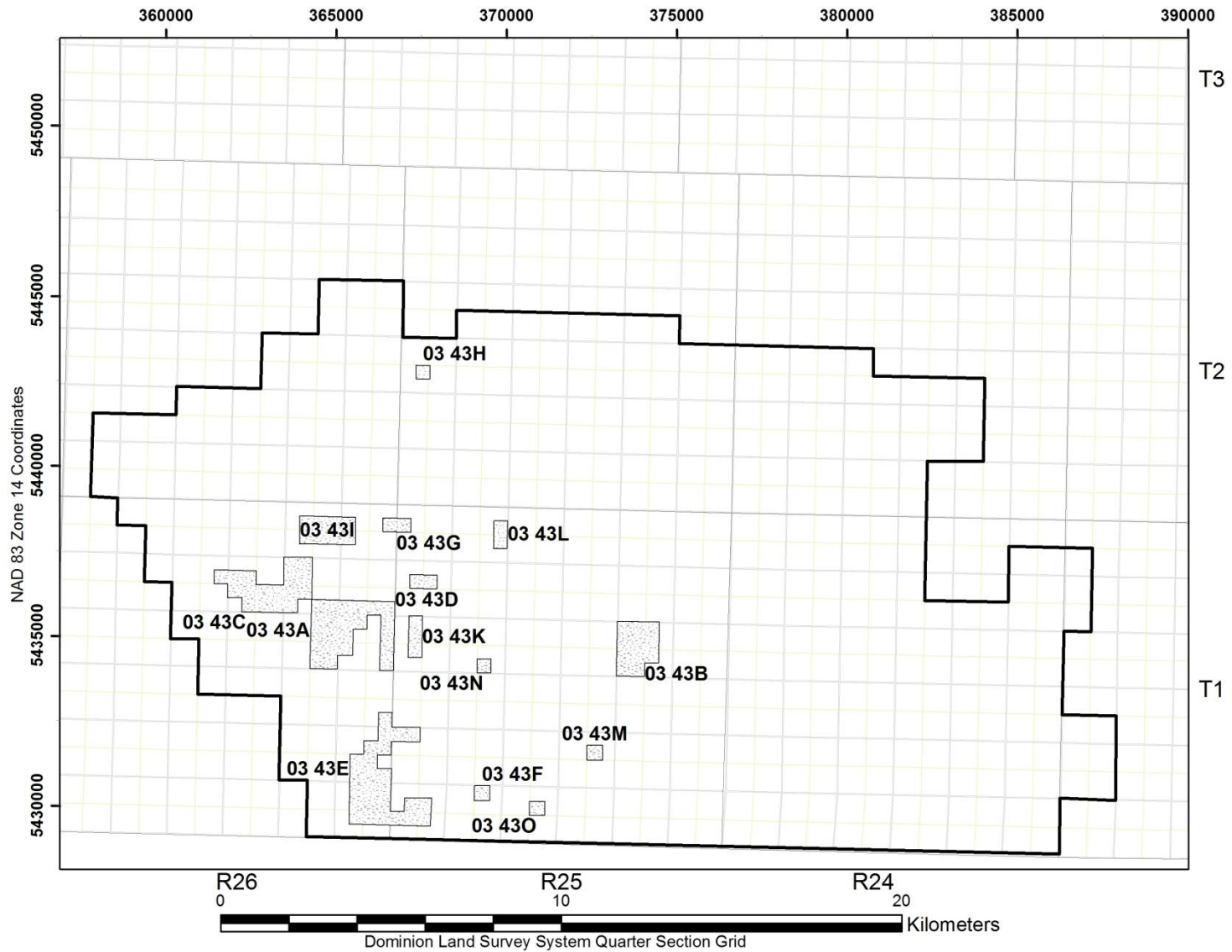


FIGURE 21 - WASKADA MISSION CANYON 3A POOLS (03 43A - 03 43M)

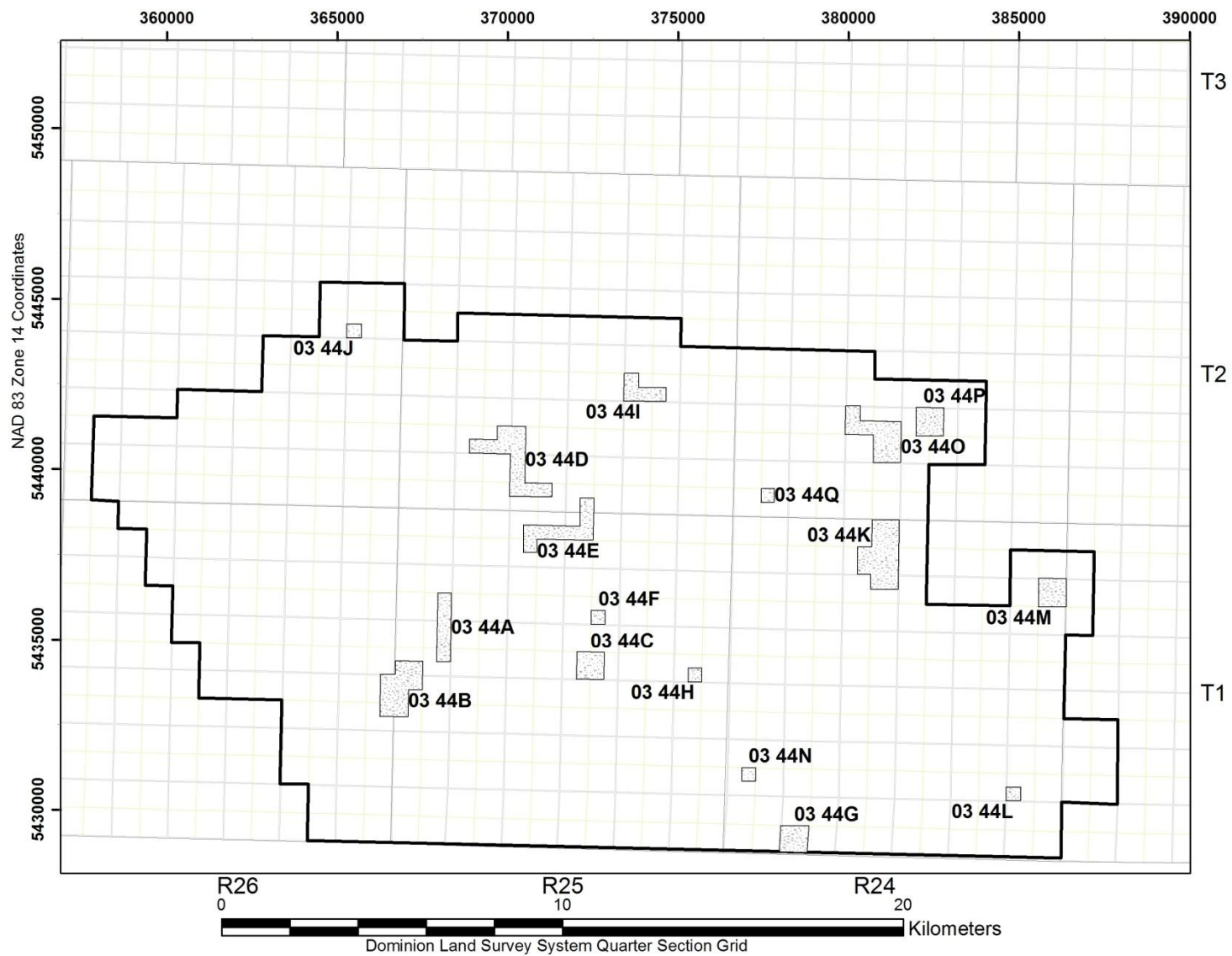


FIGURE 22 - WASKADA MISSION CANYON 1 POOLS (03 44A – 03 44Q)

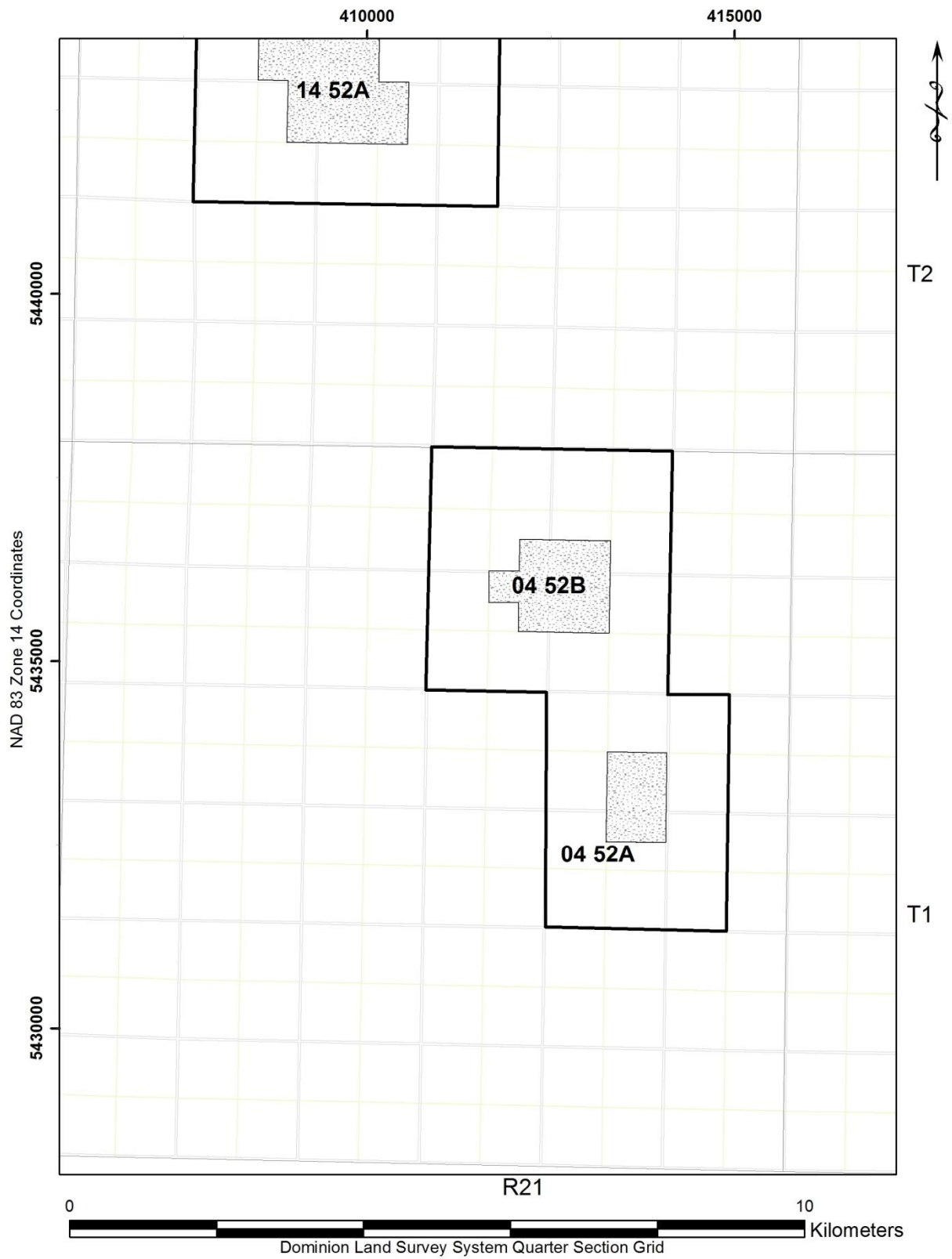


FIGURE 23 - LULU LAKE LODGEPOLE WHITEWATER LAKE POOLS (04 52A – 04 52B)

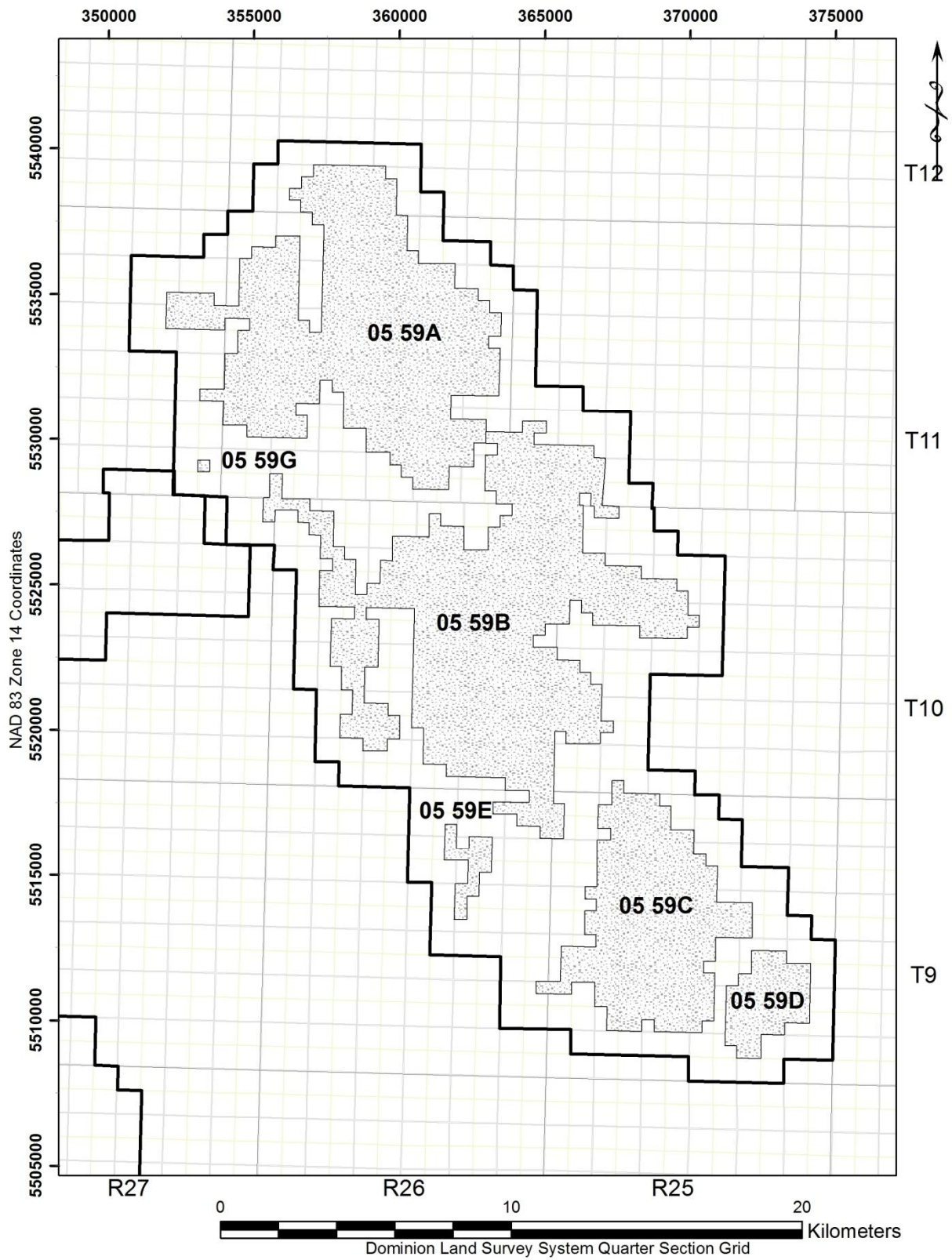


FIGURE 24 - VIRDEN LODGEPOLE POOLS (05 59A – 05 59G)

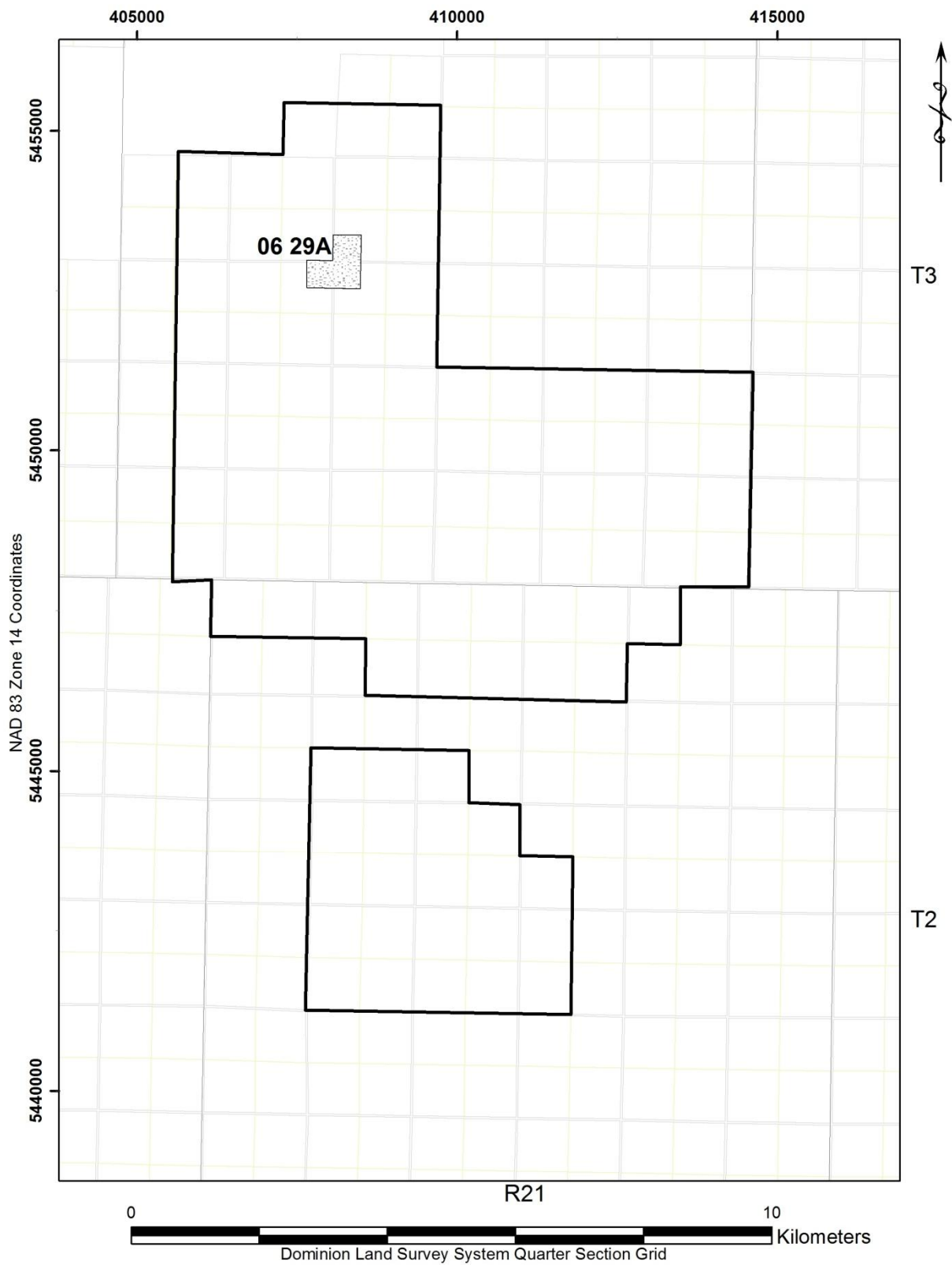


FIGURE 25 - WHITEWATER LOWER AMARANTH A POOL (06 29A)

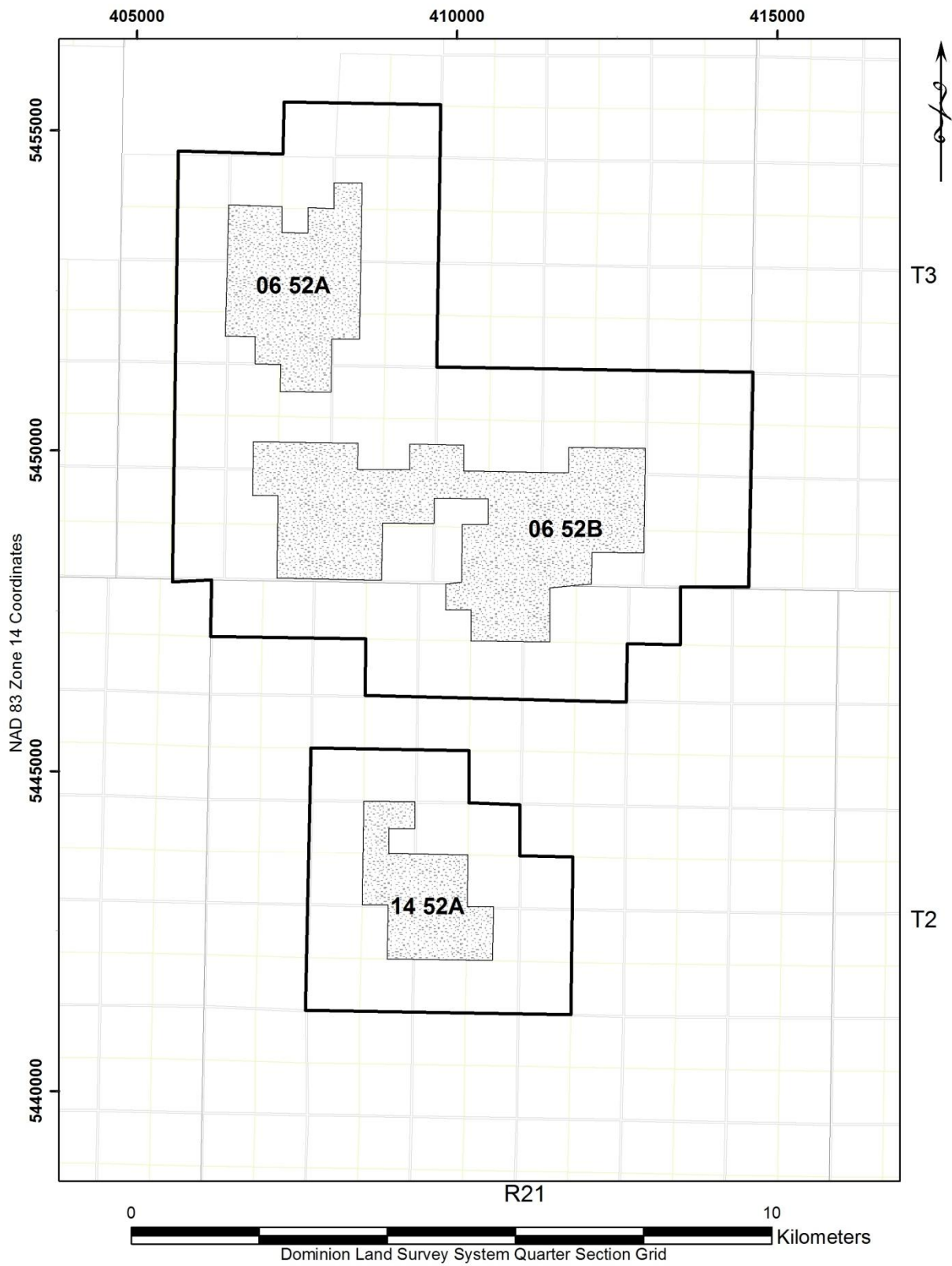


FIGURE 26 - WHITEWATER & MOUNTAINSIDE LODGEPOLE WHITEWATER LAKE POOLS (06 52A - 06 52C & 14 52A)

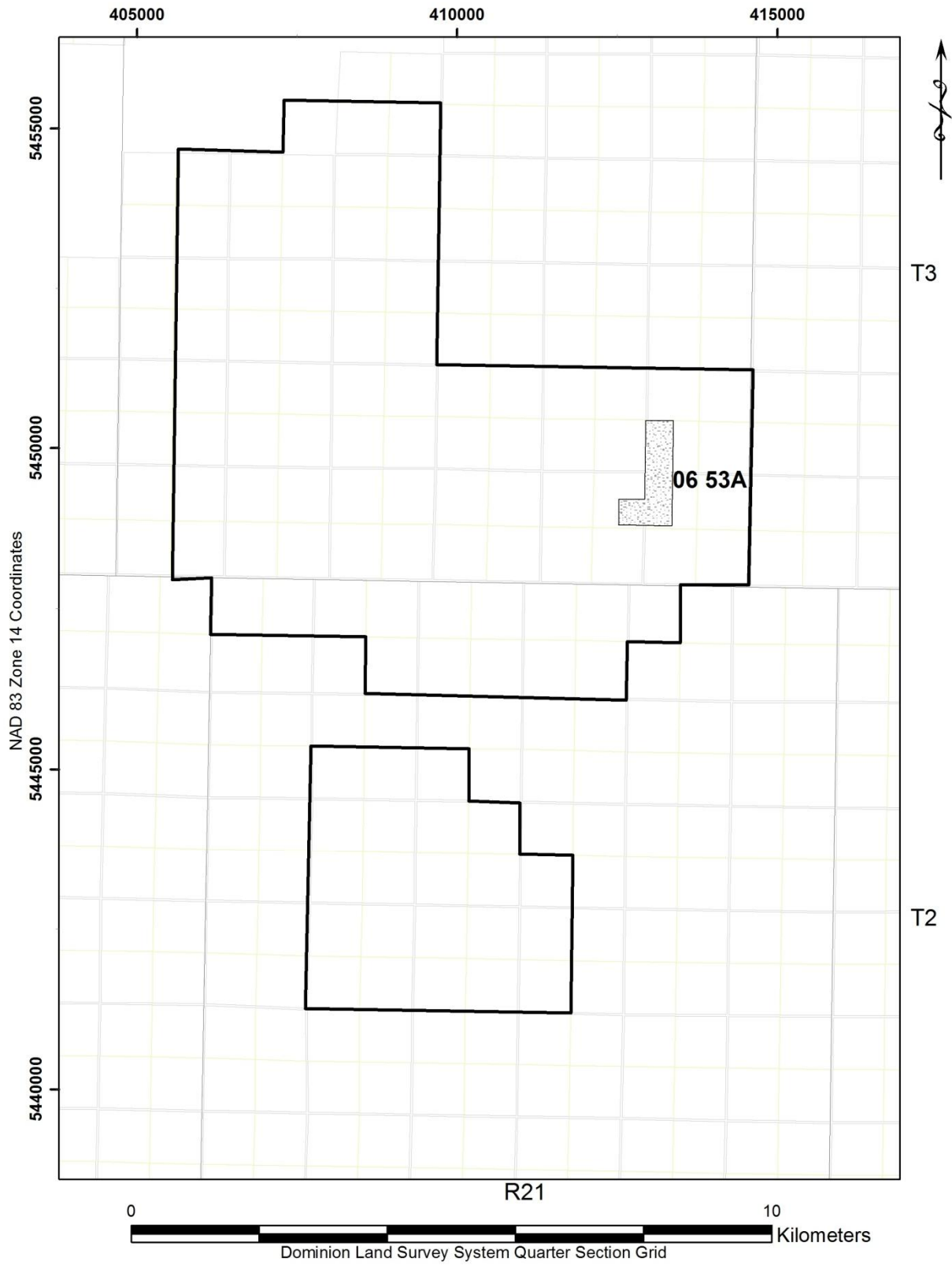


FIGURE 27 - WHITEWATER LODGEPOLE VIRDEN POOL (06 53A)

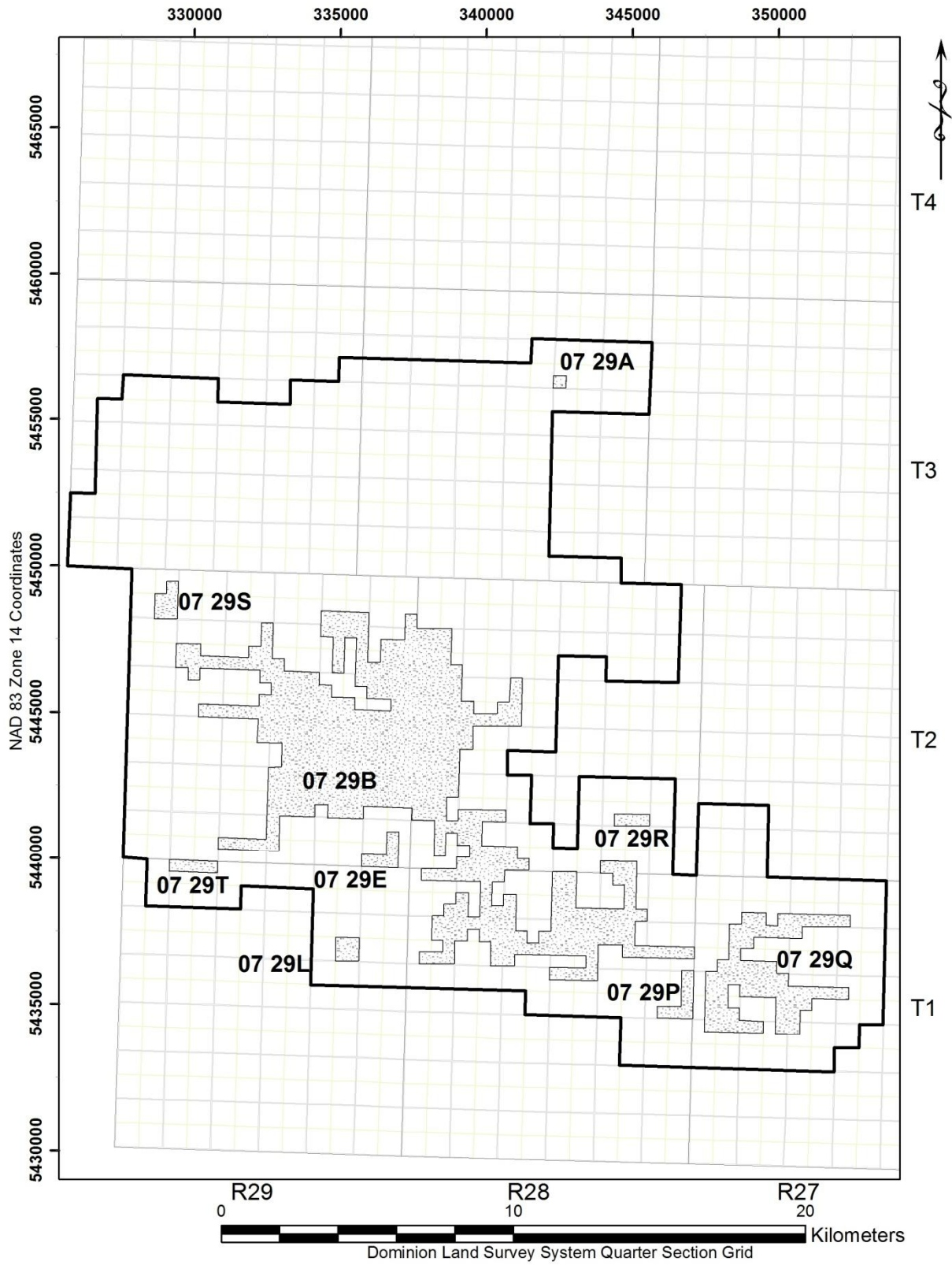
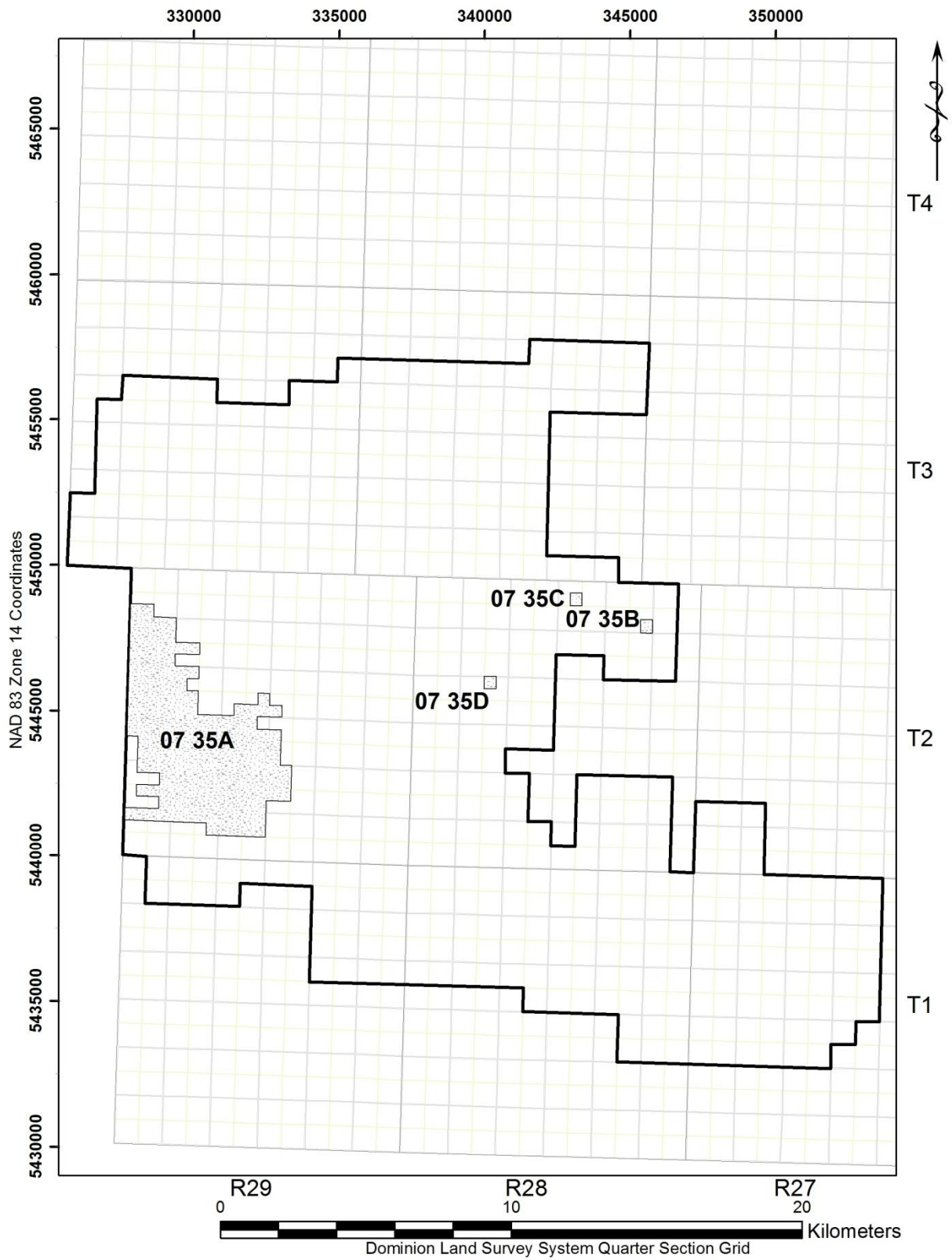


FIGURE 28 - PIERSON LOWER AMARANTH POOLS (07 29A – 07 29Q)



**FIGURE 29 - PIERSON LOWER AMARANTH – MISSION CANYON 3B POOLS
(07 35A – 07 35D)**

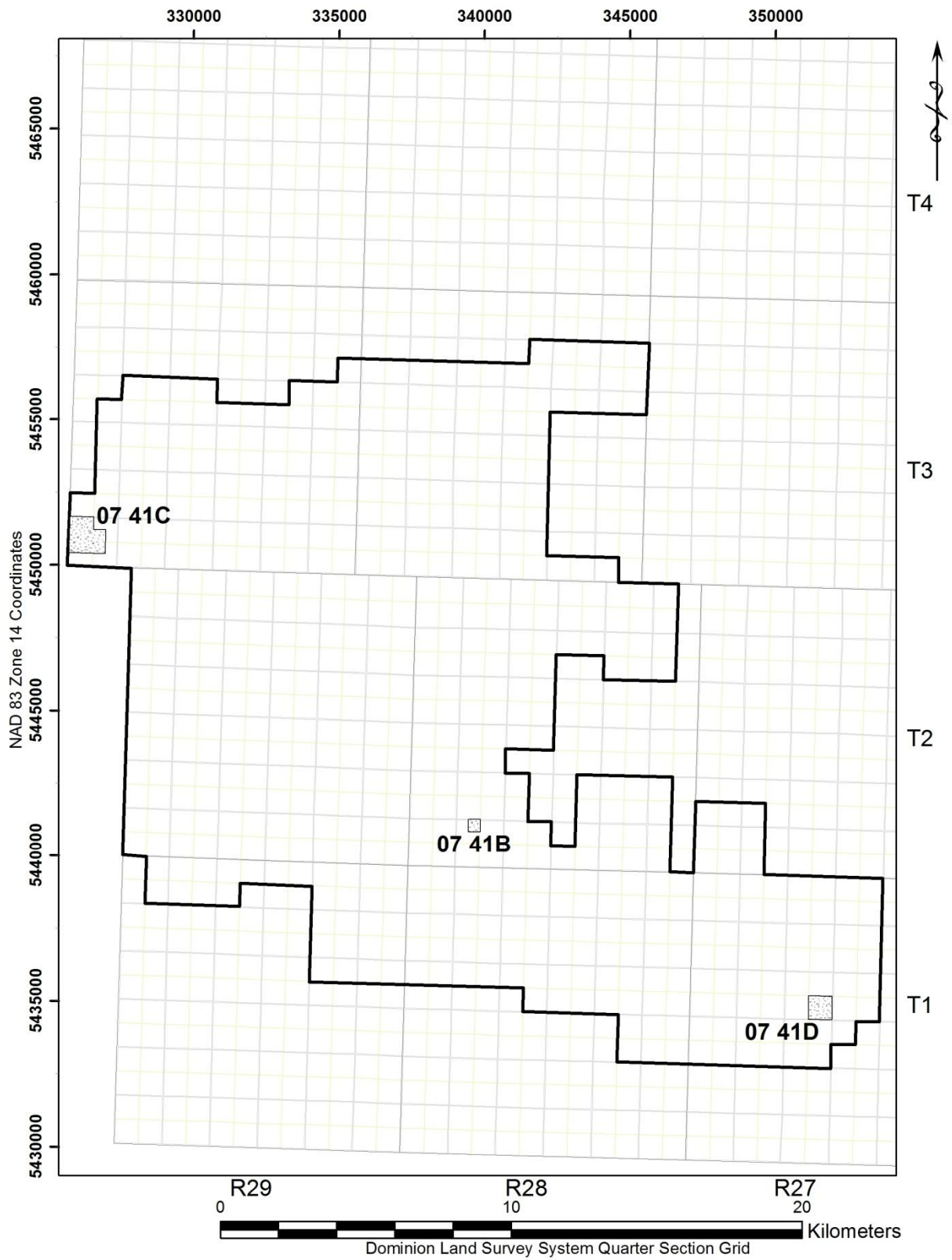


FIGURE 30 - PIERSON MISSION CANYON 3 POOLS (07 41B & 07 41D)

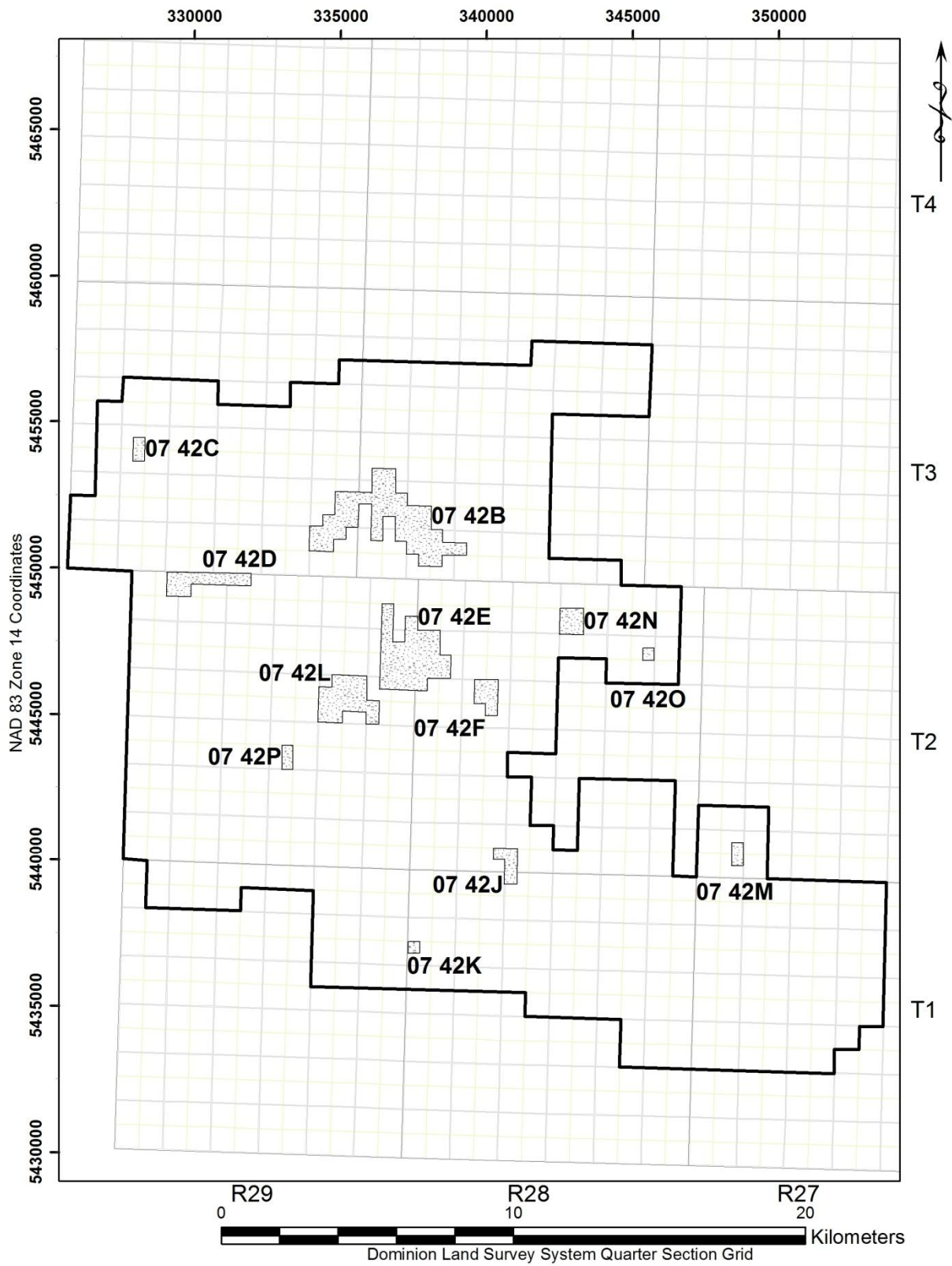


FIGURE 31 - PIERSON MISSION CANYON 3b POOLS (07 42B – 07 42M)

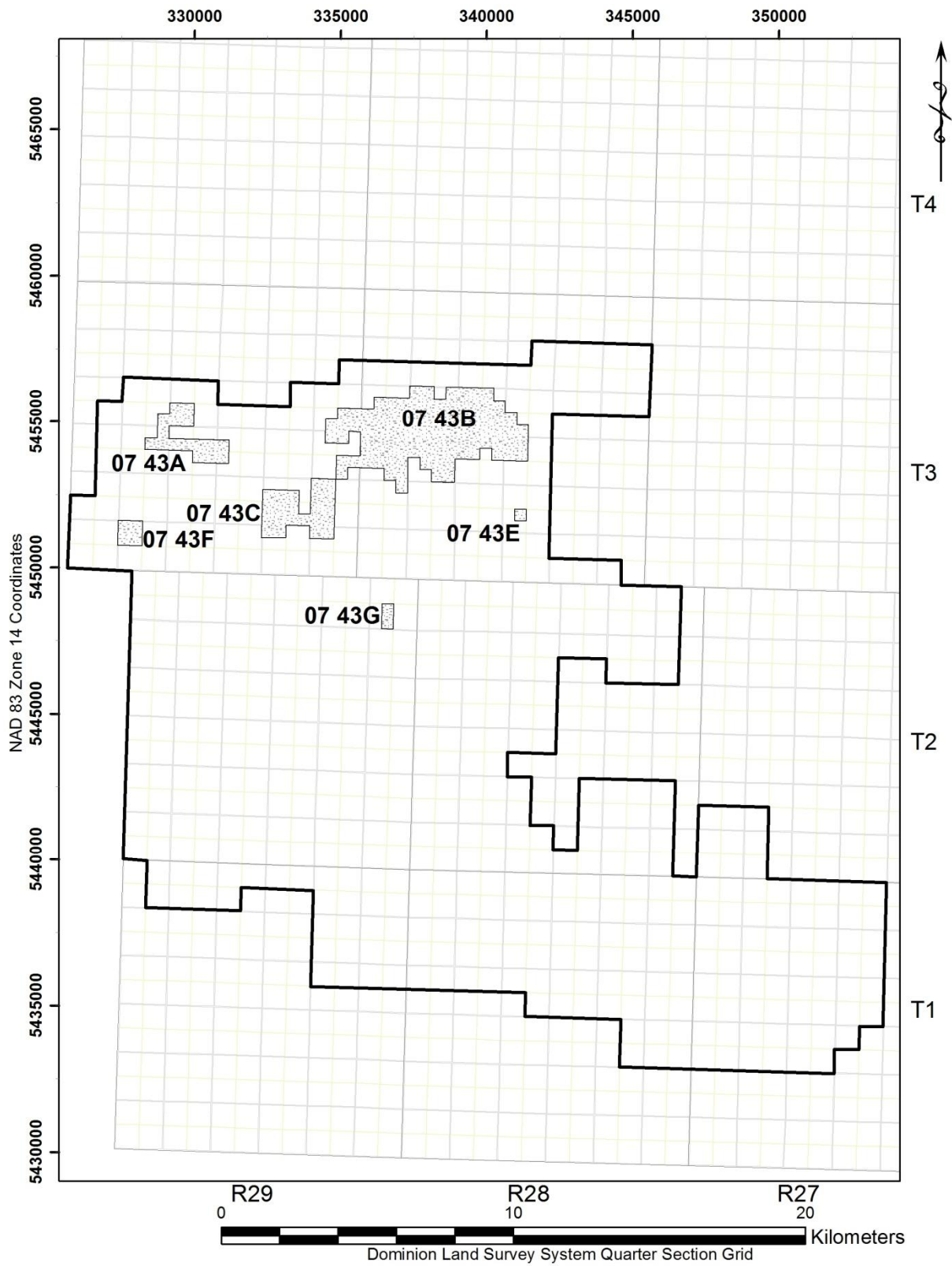


FIGURE 32 - PIERSON MISSION CANYON 3a POOLS (07 43A – 07 43F)

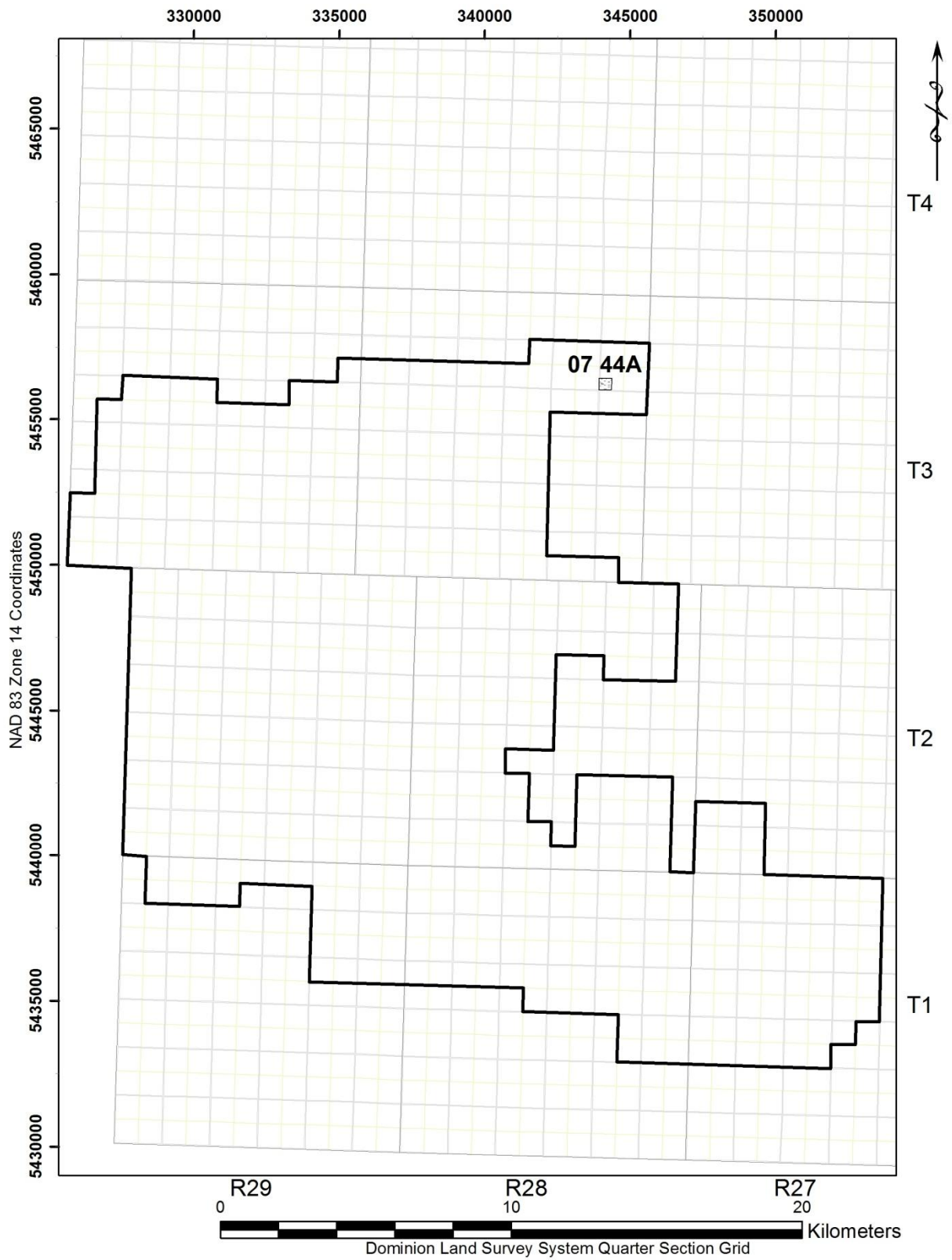


FIGURE 33 - PIERSON MISSION CANYON 1A POOL (07 44A)

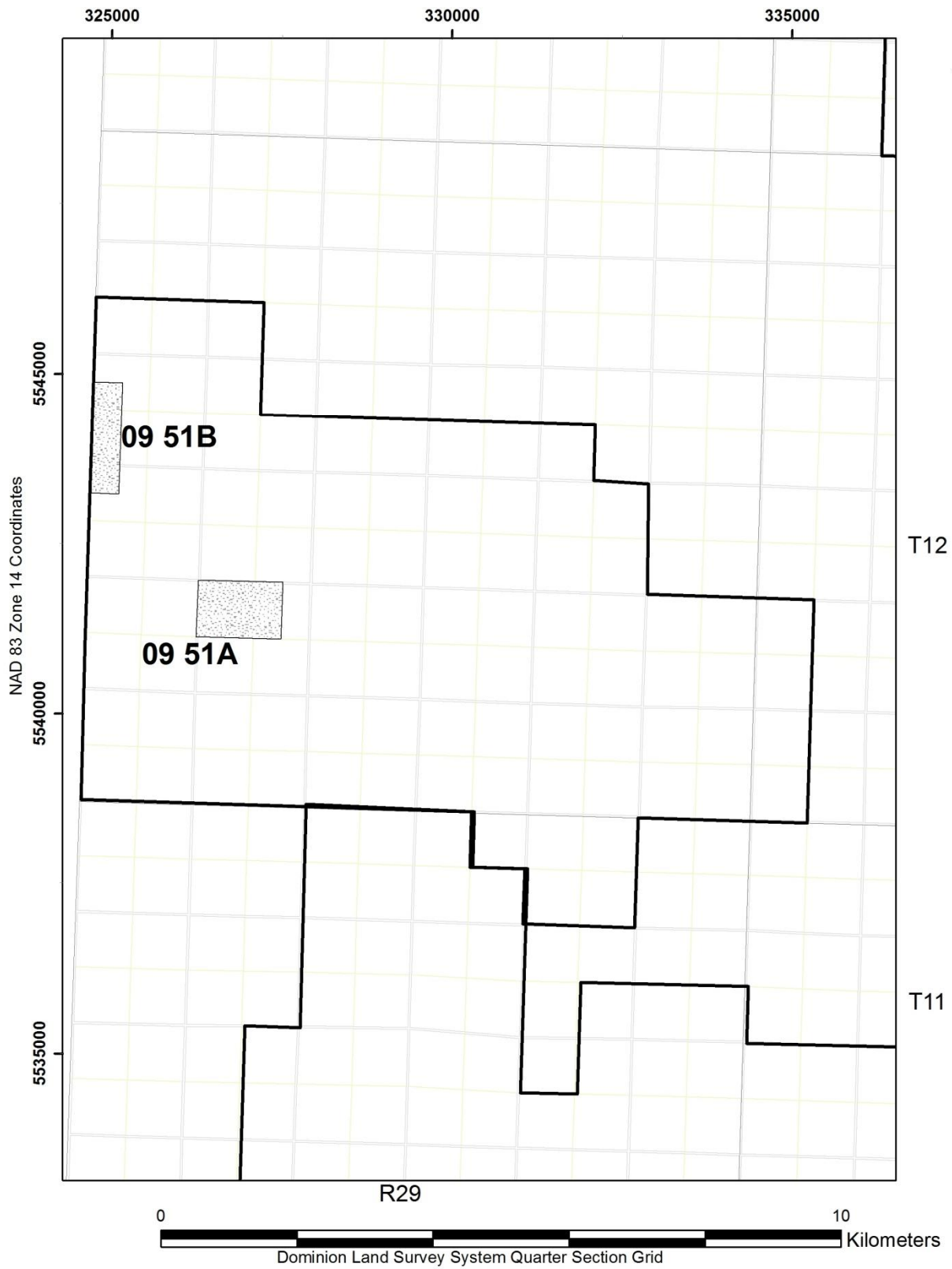


FIGURE 34 - KIRKELLA LODGEPOLE DOLOMITE POOLS (09 51A – 09 51B)

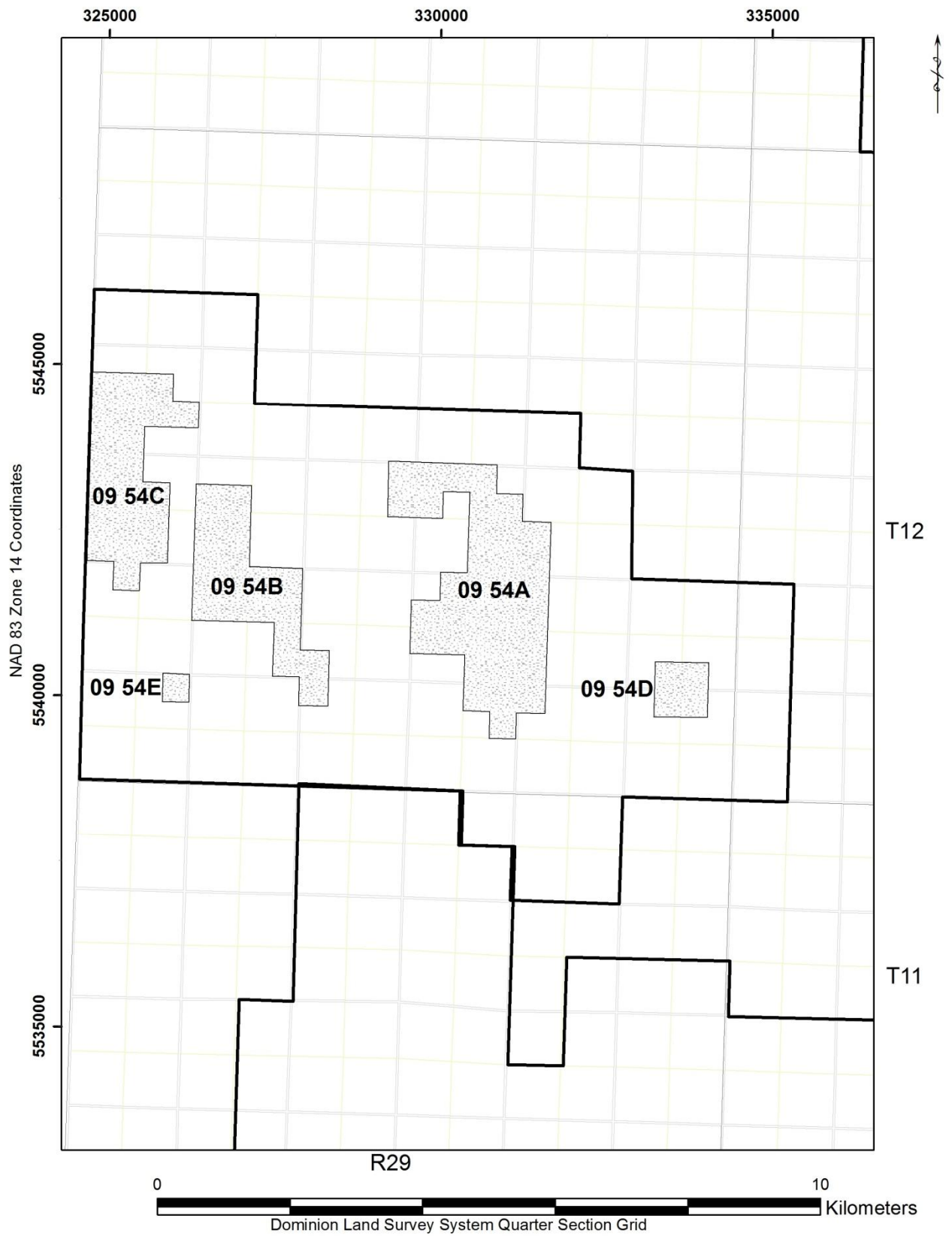


FIGURE 35 - KIRKELLA LODGEPOLE DALY POOLS (09 54A – 09 54E)

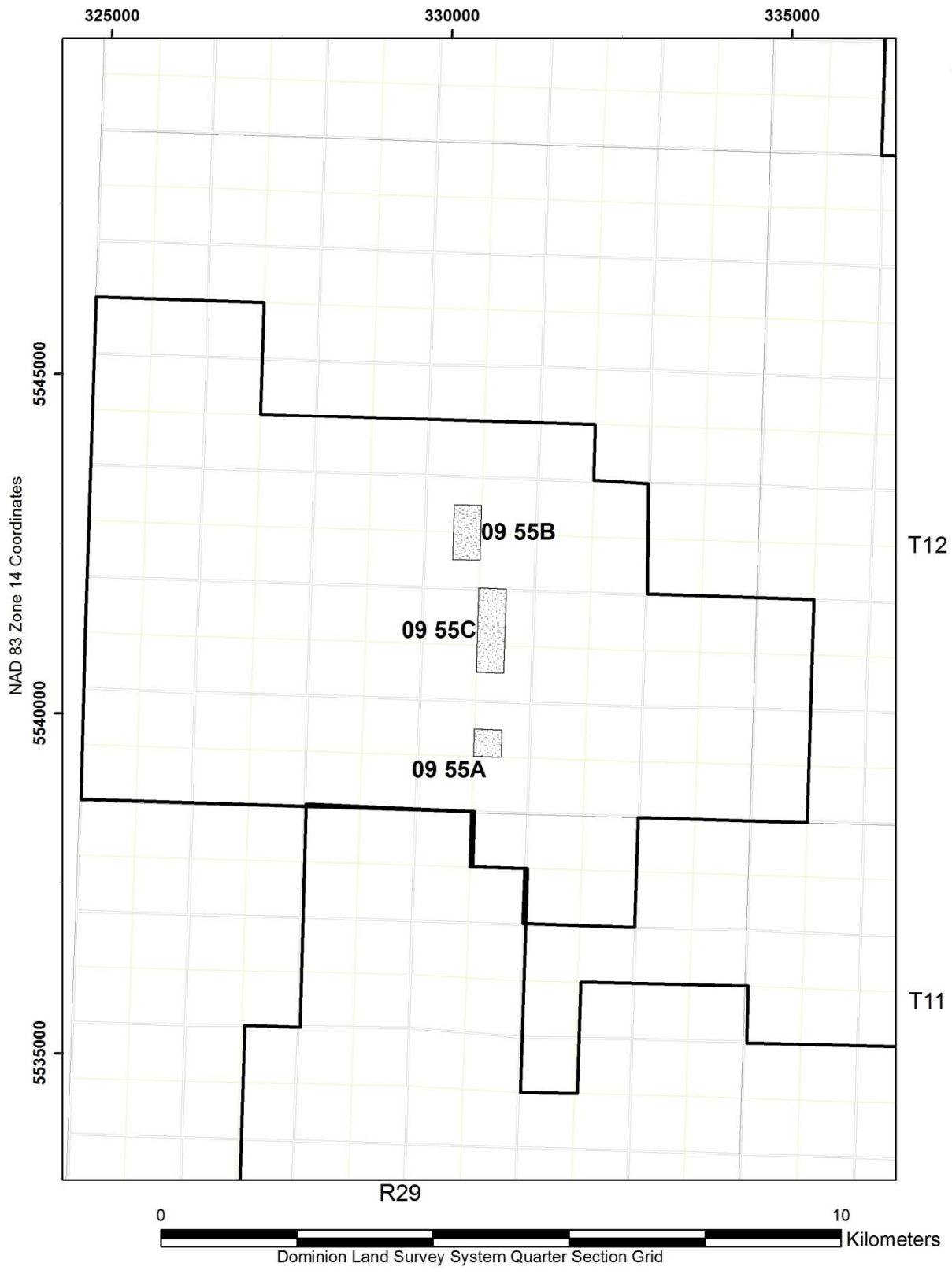


FIGURE 36 - KIRKELLA LODGEPOLE CRINOIDAL POOLS (09 55A – 09 55C)

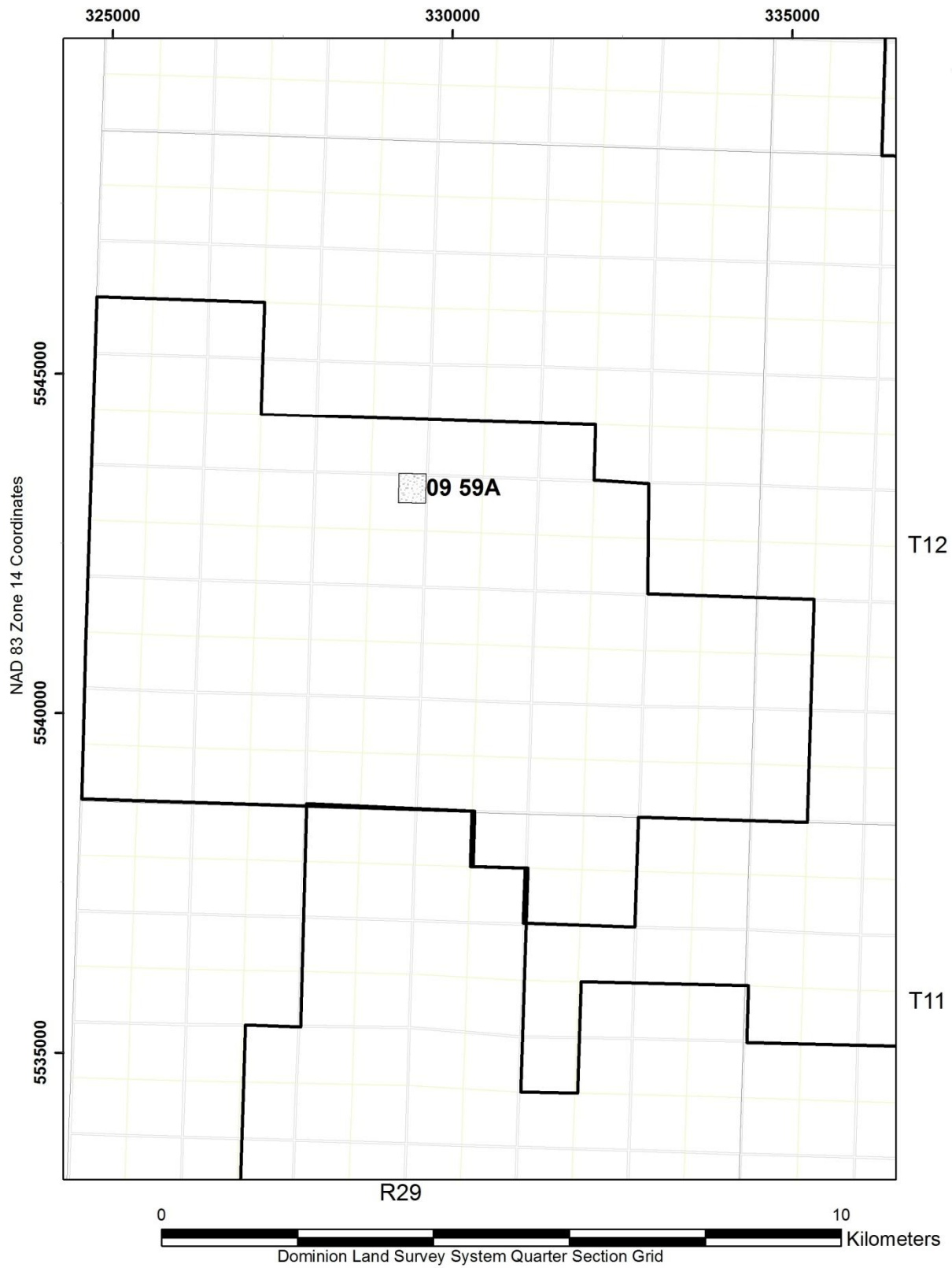


FIGURE 37 - KIRKELLA LODGEPOLE POOLS (09 59A)

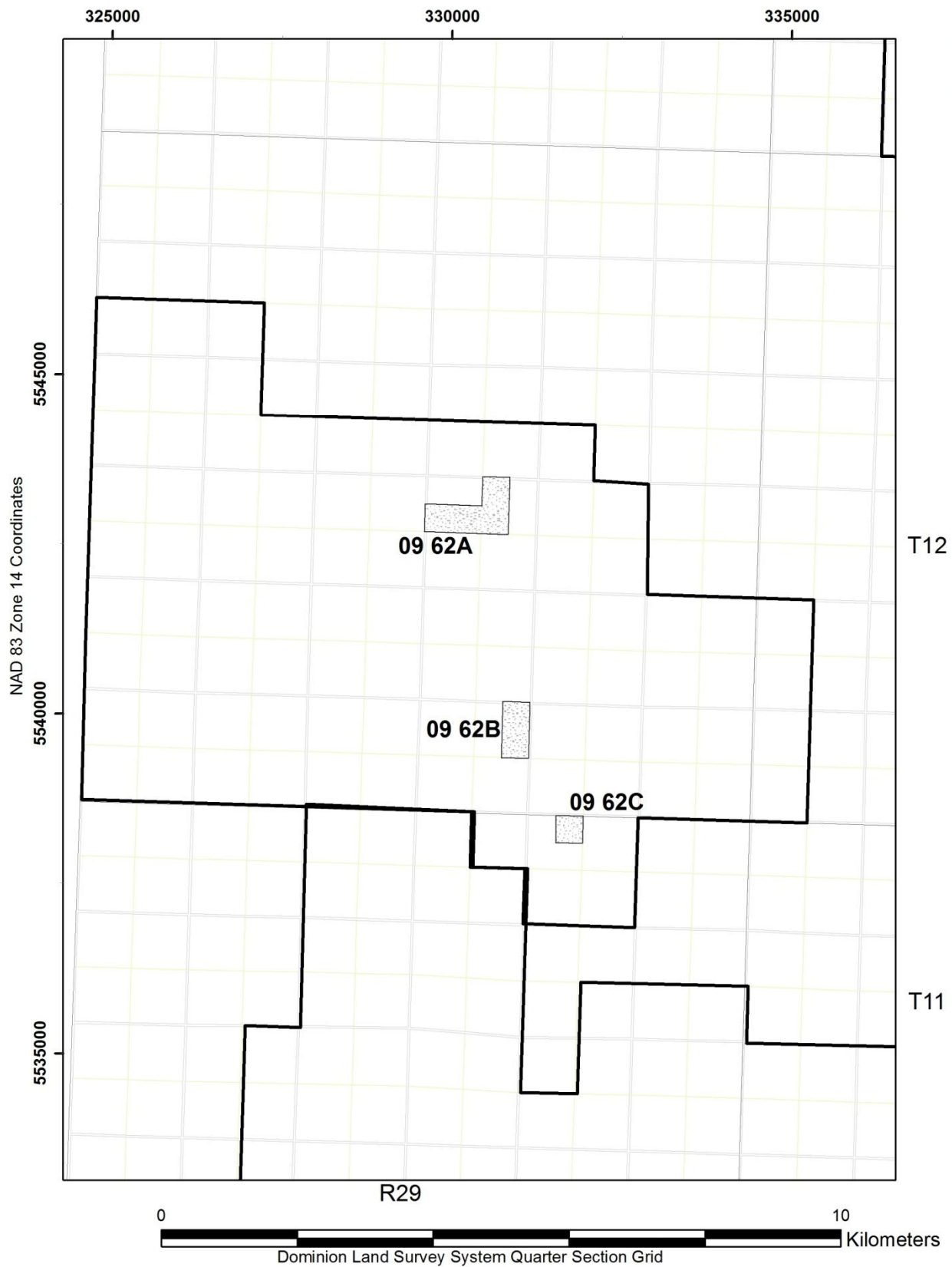


FIGURE 38 - KIRKELLA BAKKEN – THREE FORKS POOLS (09 62A - 09 62C)

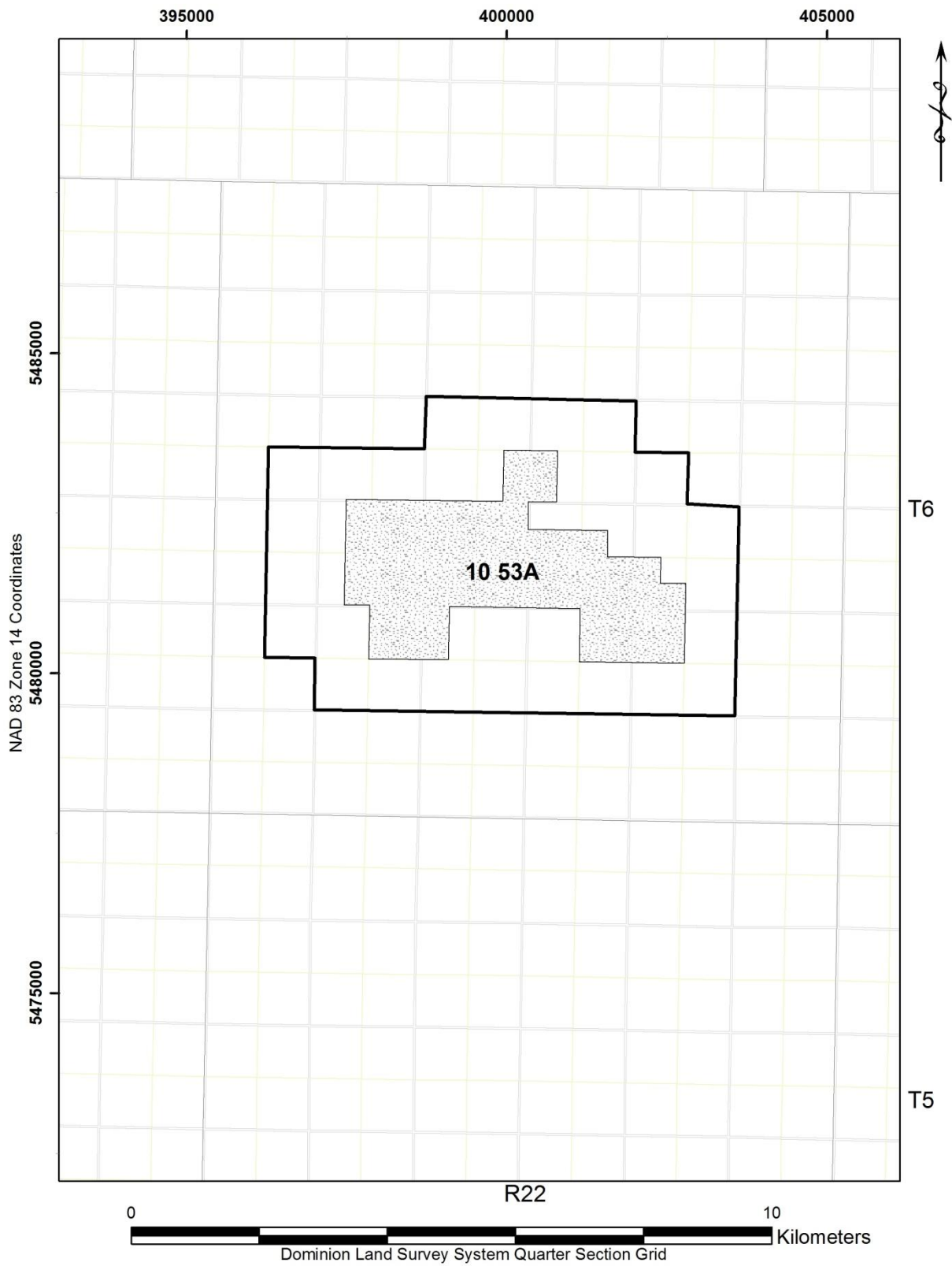


FIGURE 39 - SOURIS HARTNEY LODGEPOLE VIRDEN A POOL (10 53A)

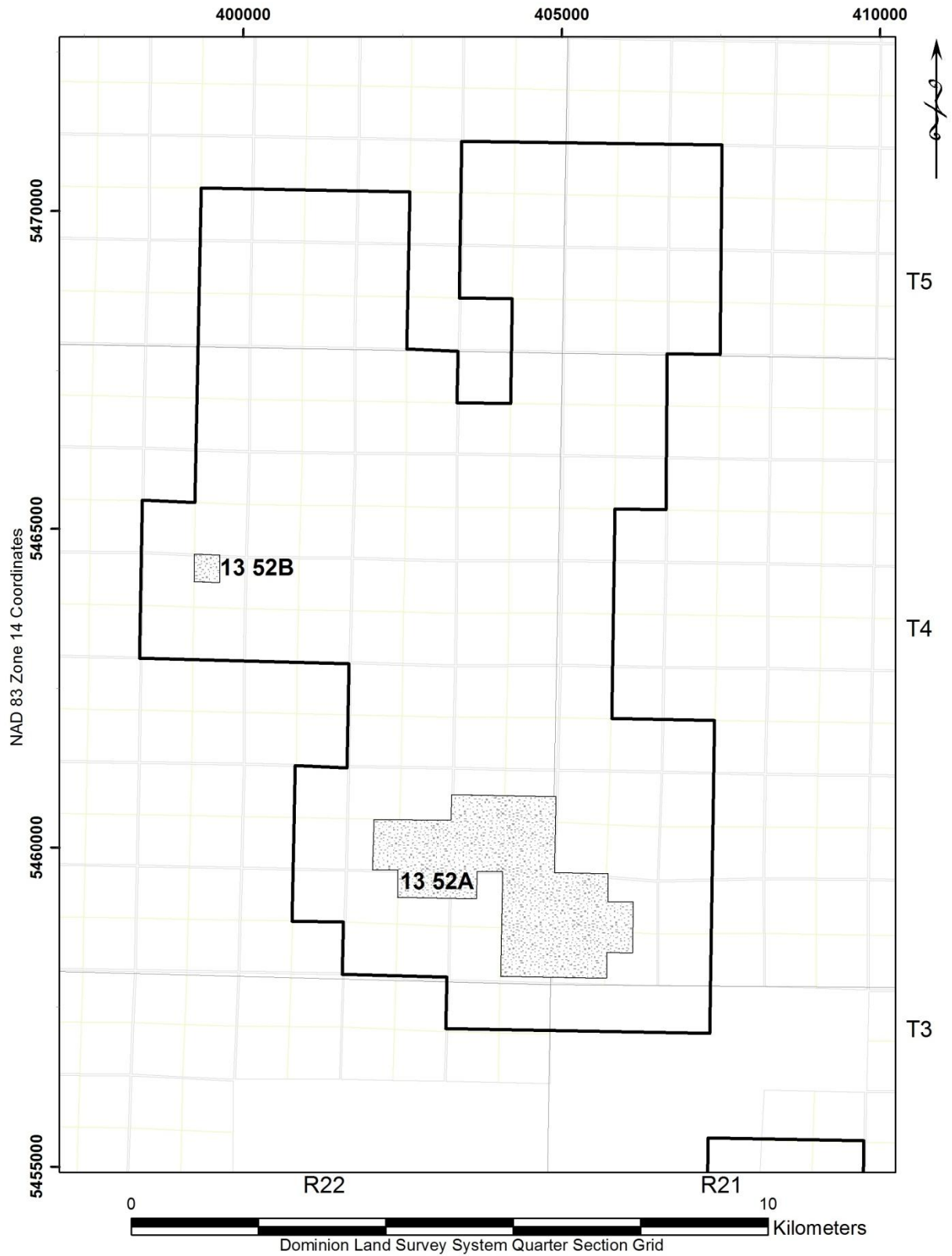


FIGURE 40 - REGENT LODGEPOLE WHITEWATER LAKE POOLS (13 52A-13 52B)

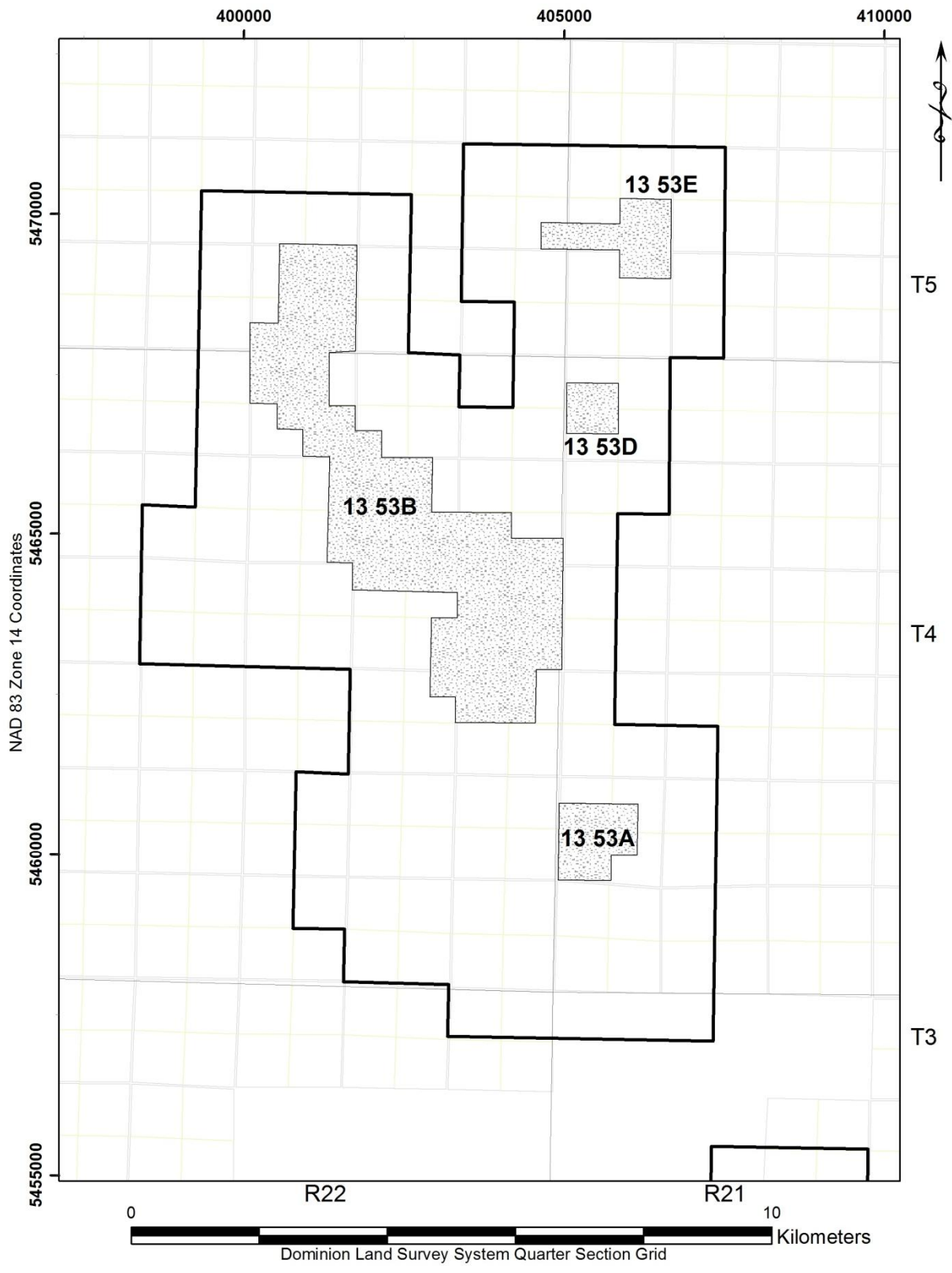
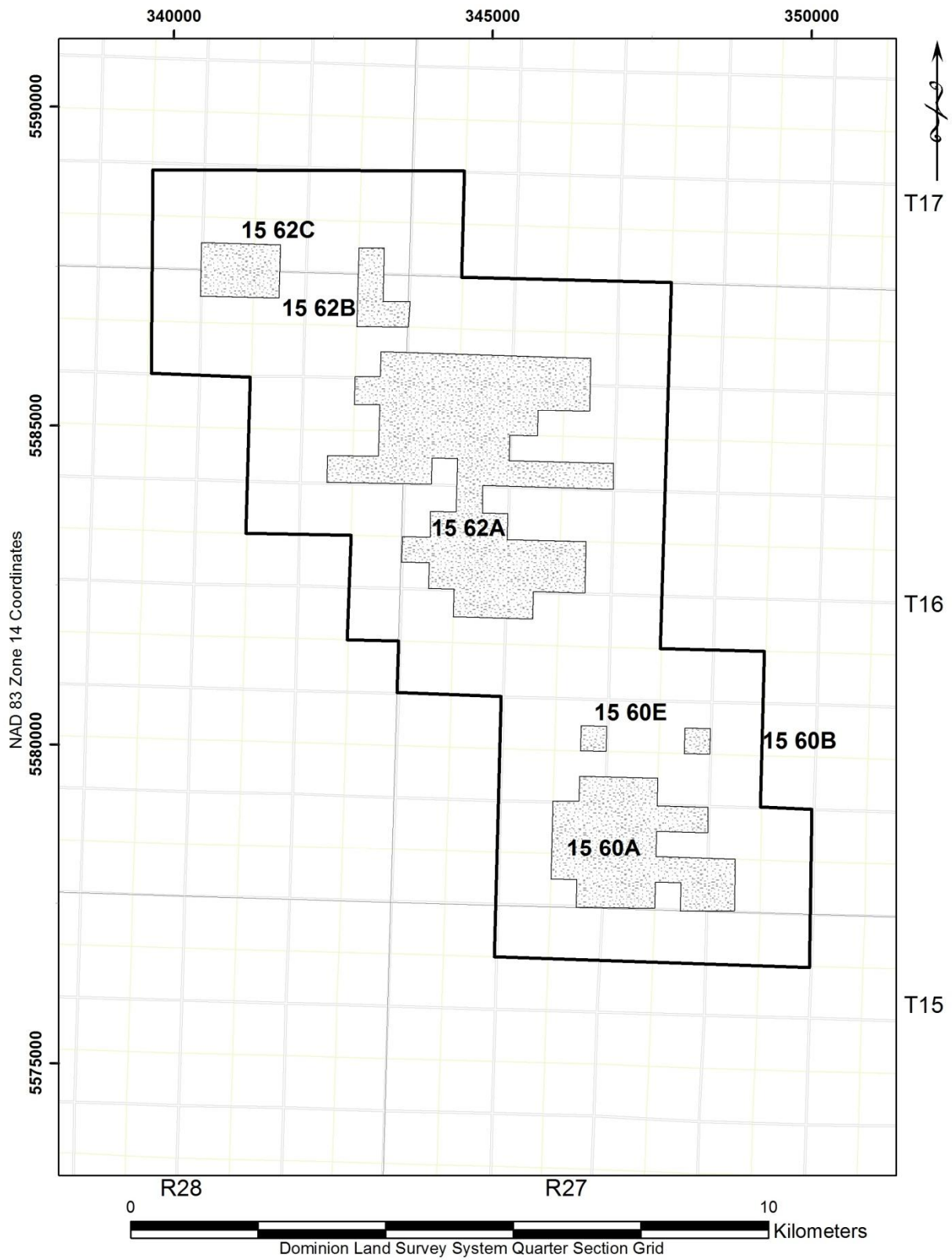


FIGURE 41 - REGENT LODGEPOLE VIRDEN POOLS (13 53A - 13 53E)



**FIGURE 42 - BIRDTAIL BAKKEN & BAKKEN-THREE FORKS POOLS
(15 60A – 15 60E & 15 62A - 15 62B)**

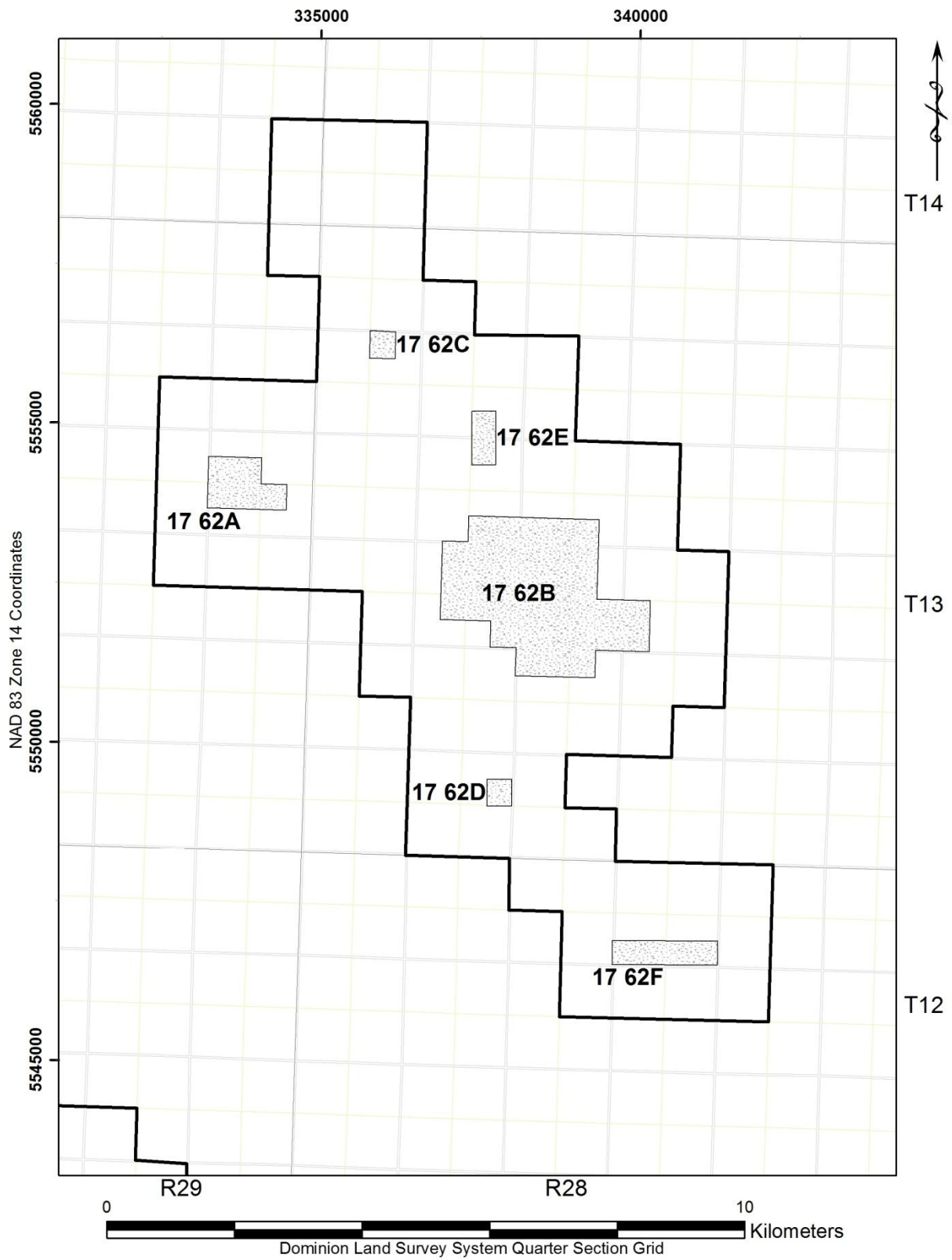


Figure 43 - Manson Bakken-Three Forks Pools (17 62A - 17 62F)

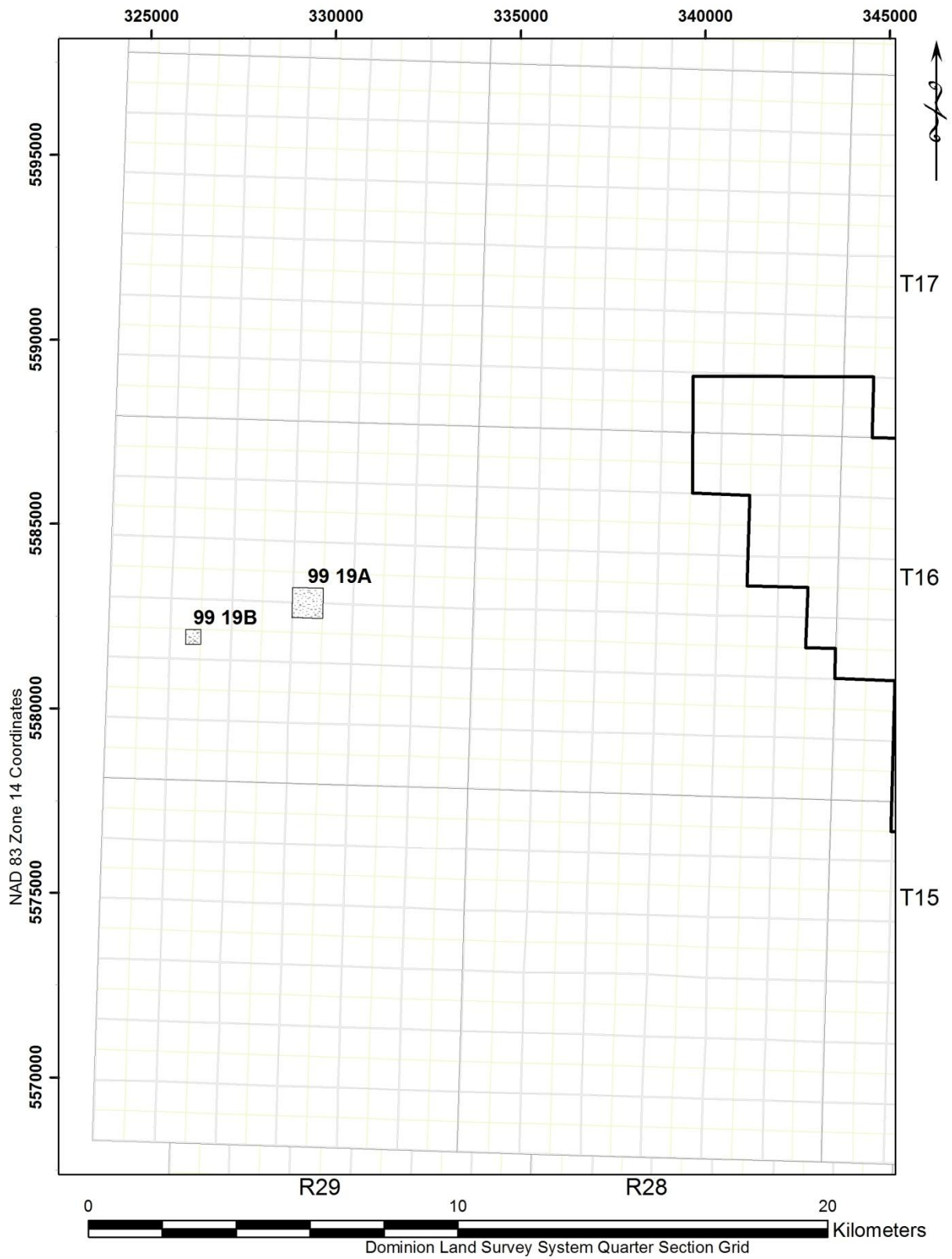


FIGURE 44 - OTHER AREAS MELITA A POOL (99 19A & 99 19B)

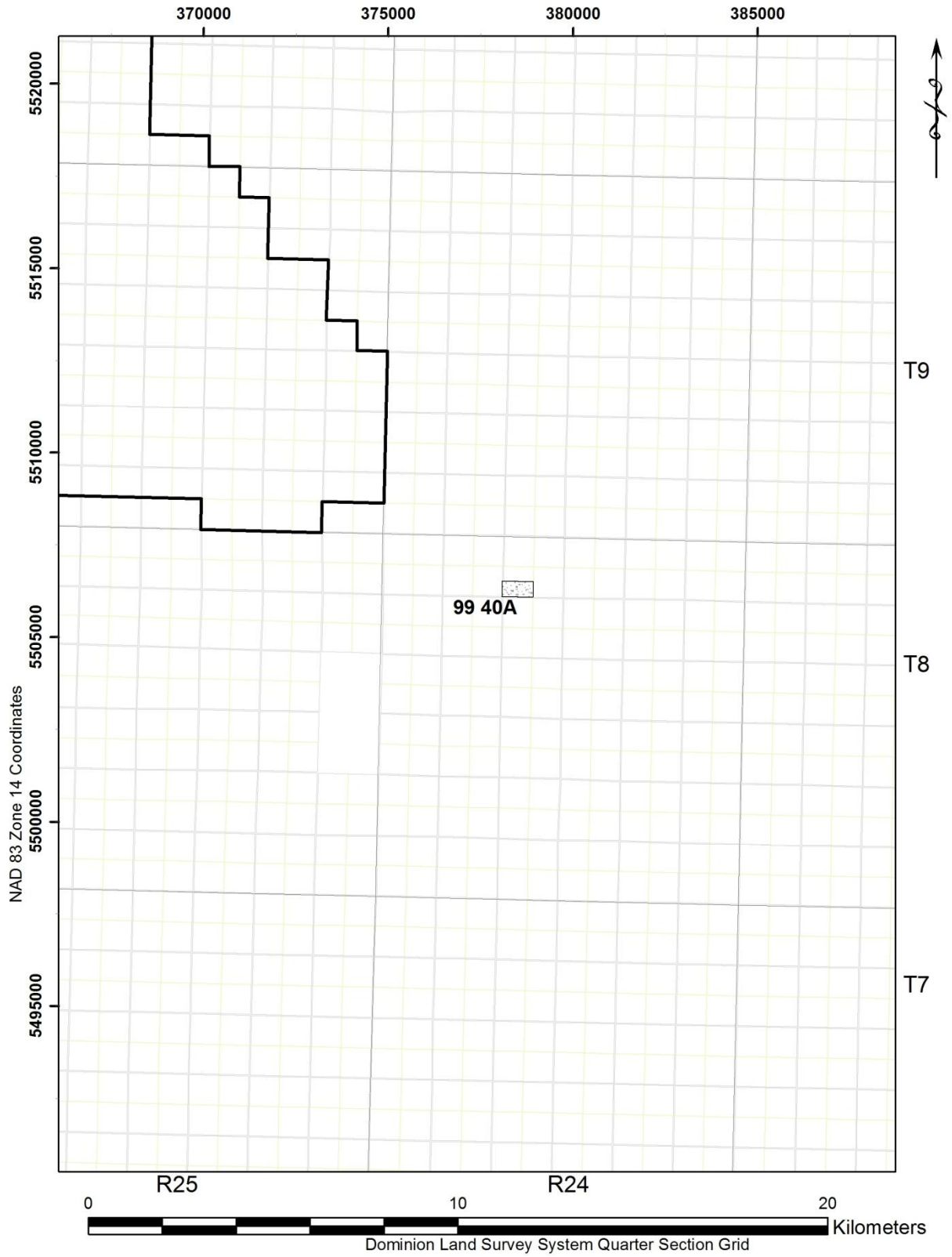


FIGURE 45 - OTHER AREAS LOWER AMARANTH – LODGEPOLE A POOL (99 40A)

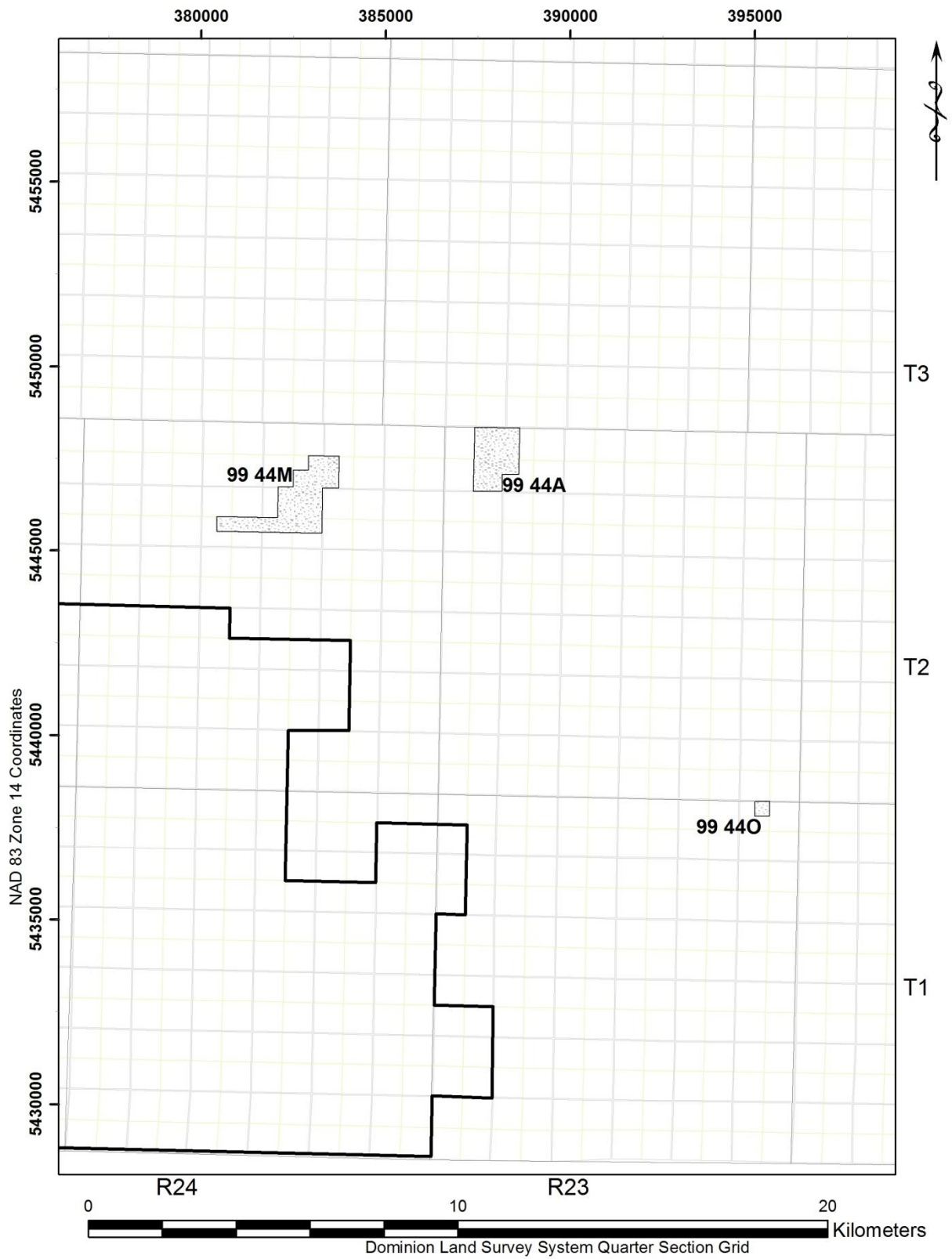


FIGURE 46 - OTHER AREAS MISSION CANYON 1 POOLS (99 44A, 99 44M & 99 44O)

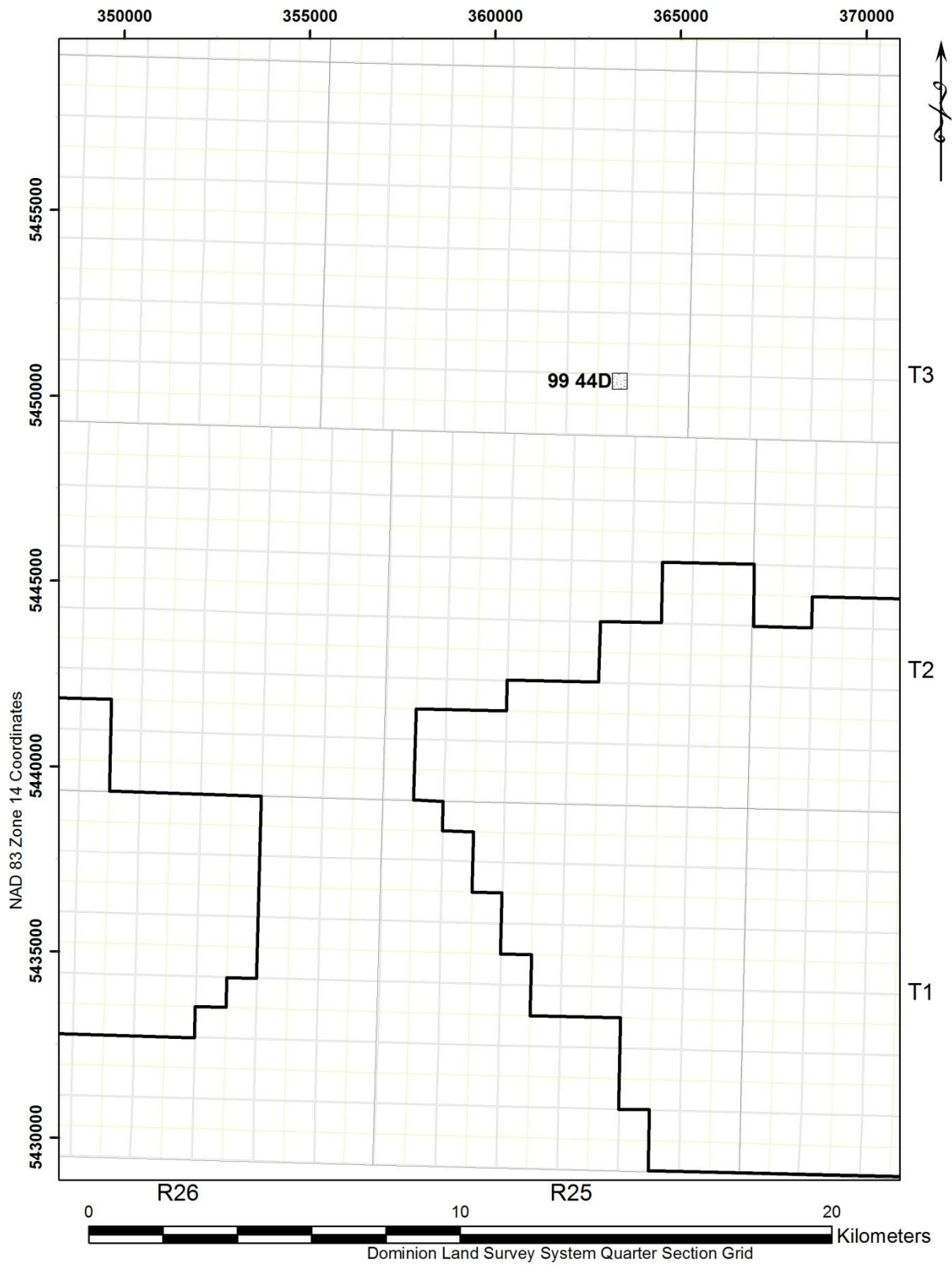


FIGURE 47 - OTHER AREAS MISSION CANYON 1 POOLS (99 44D)

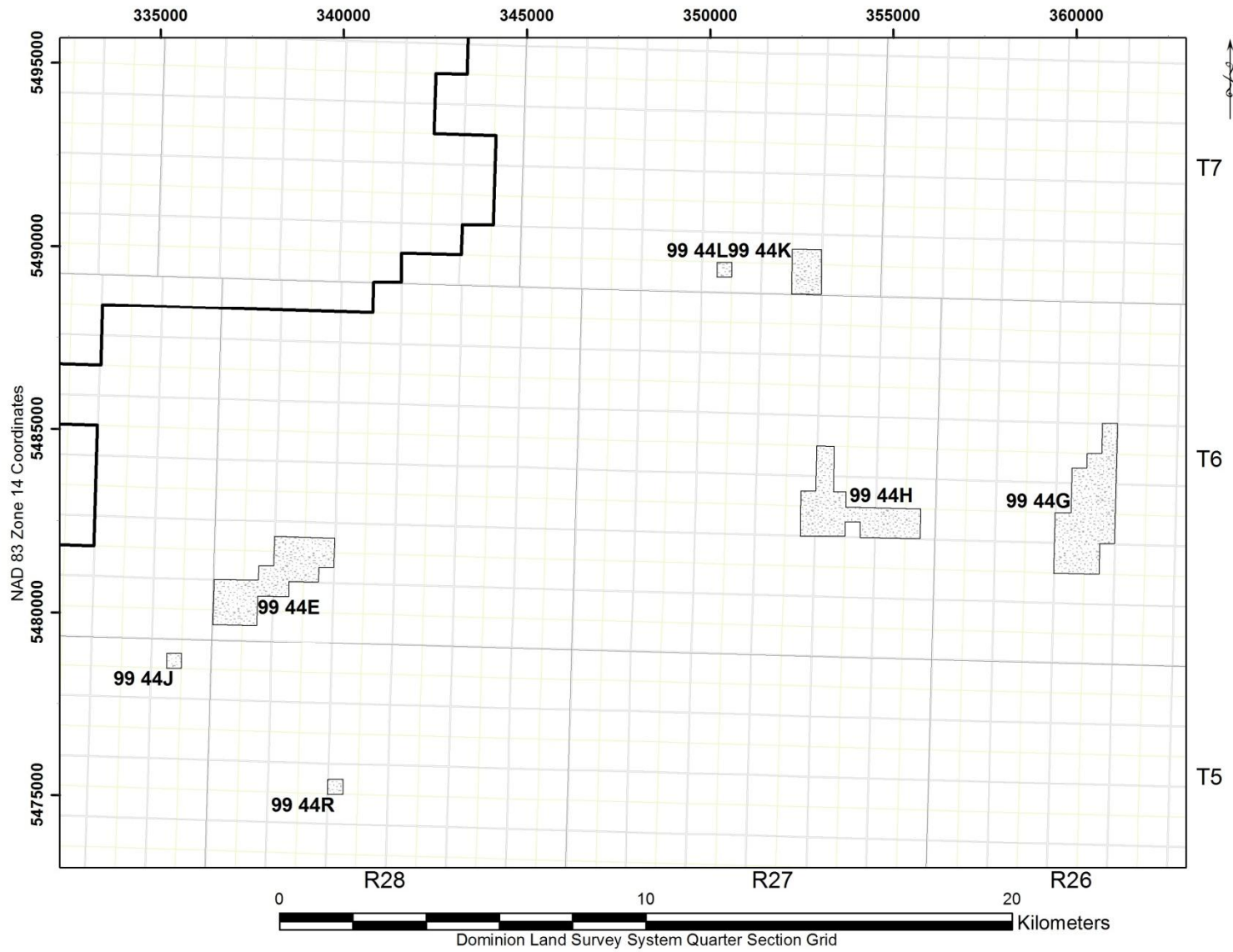


FIGURE 48 - OTHER AREAS MISSION CANYON 1 POOLS (99 44E, 99 44G, 99 44H, 99 44 J, 99 44K & 99 44L)

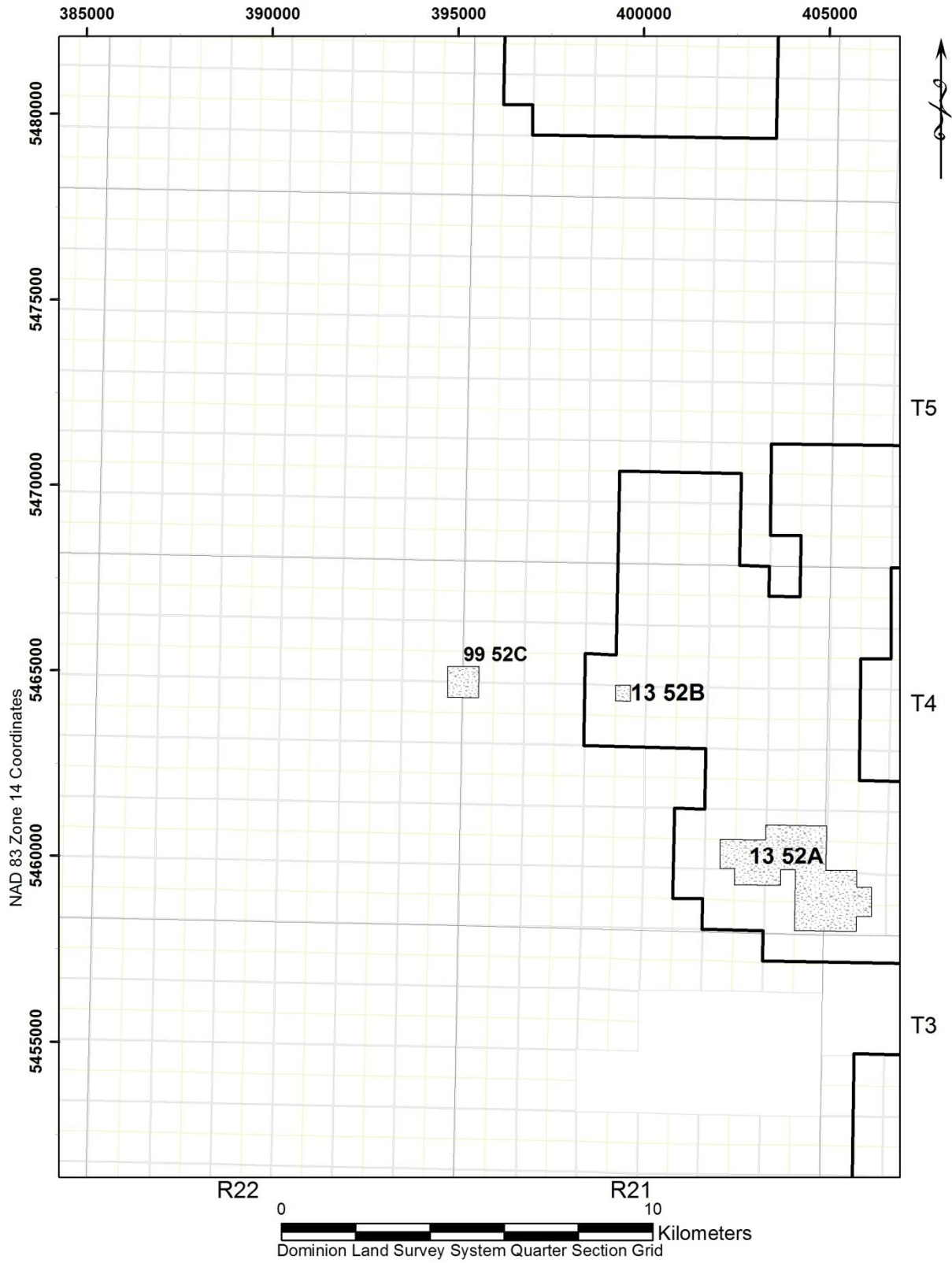


FIGURE 49 - OTHER AREAS LODGEPOLE WHITEWATER LAKE C POOL (99 52C)

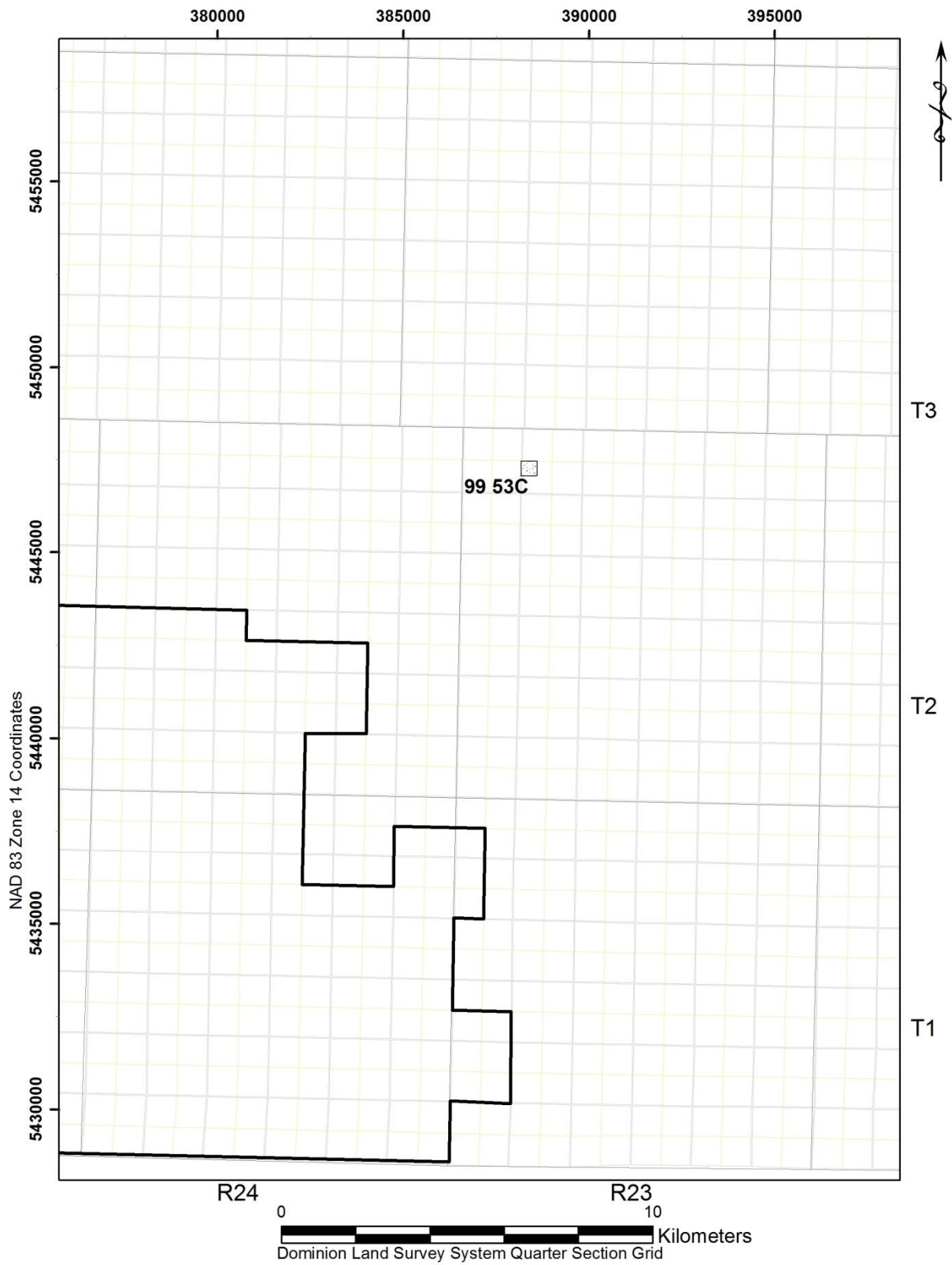


FIGURE 50 - OTHER AREAS LODGEPOLE VIRDEN C POOL (99 53C)

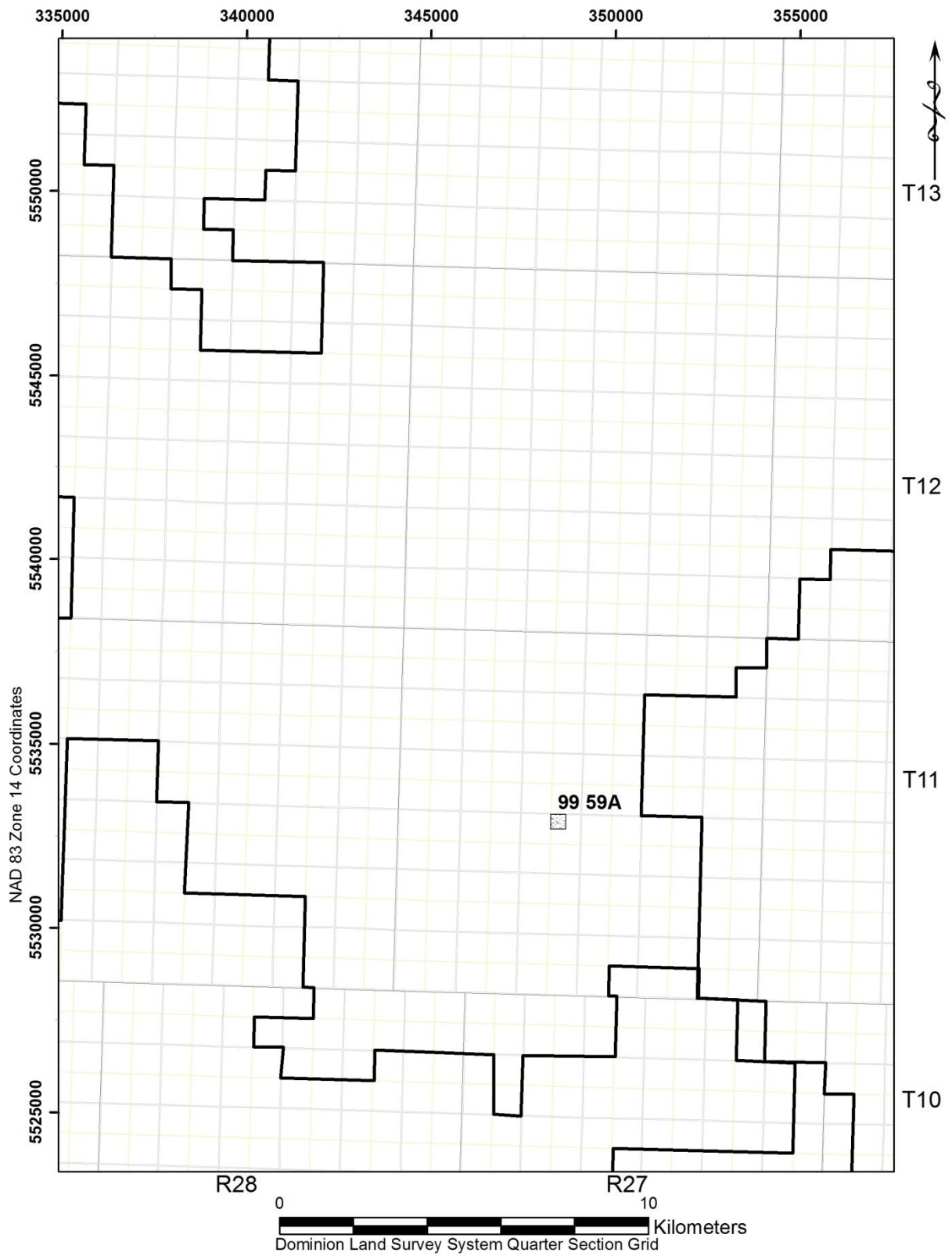


FIGURE 51 - OTHER AREAS LODGEPOLE A POOL (99 59A)

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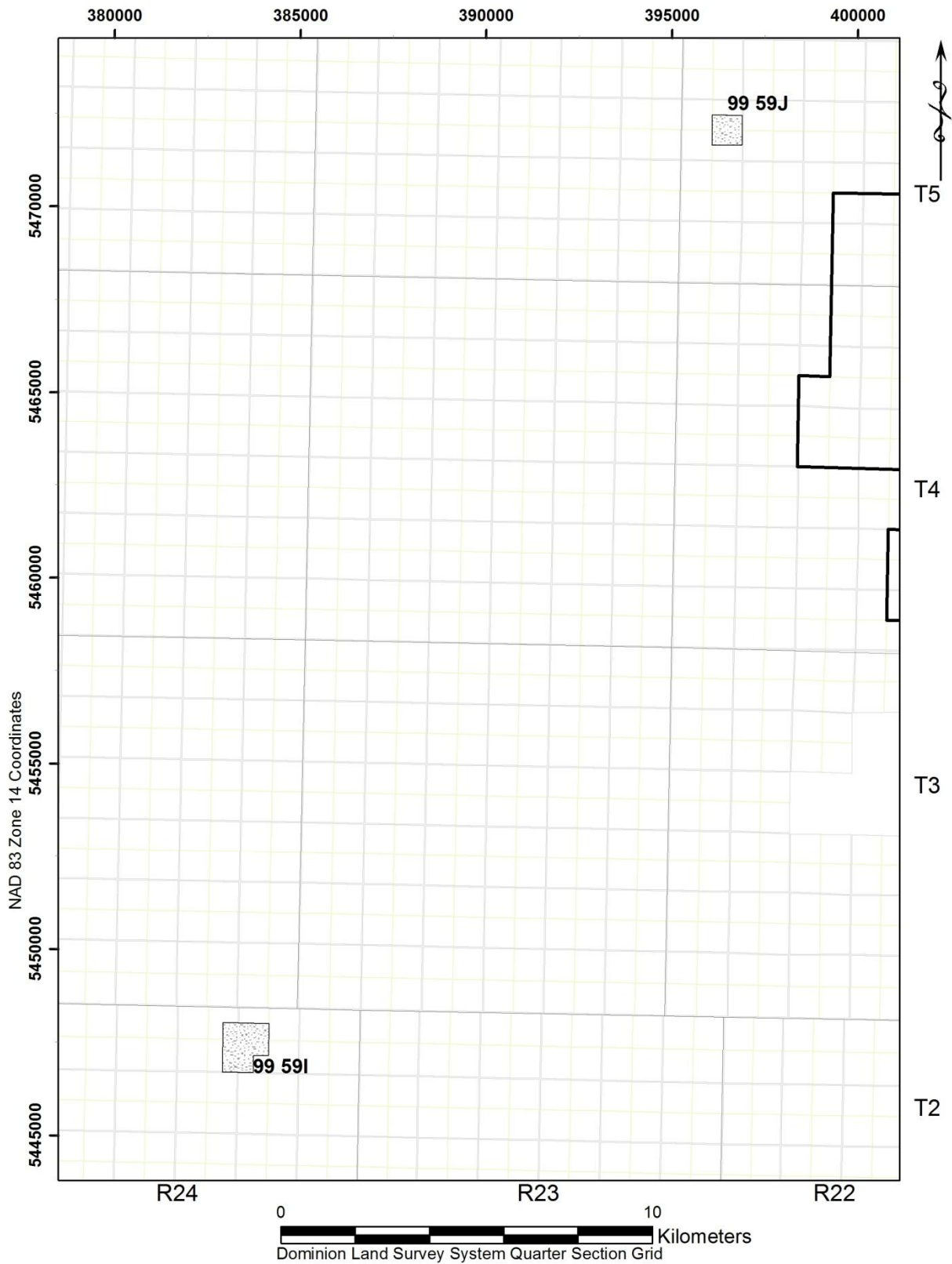
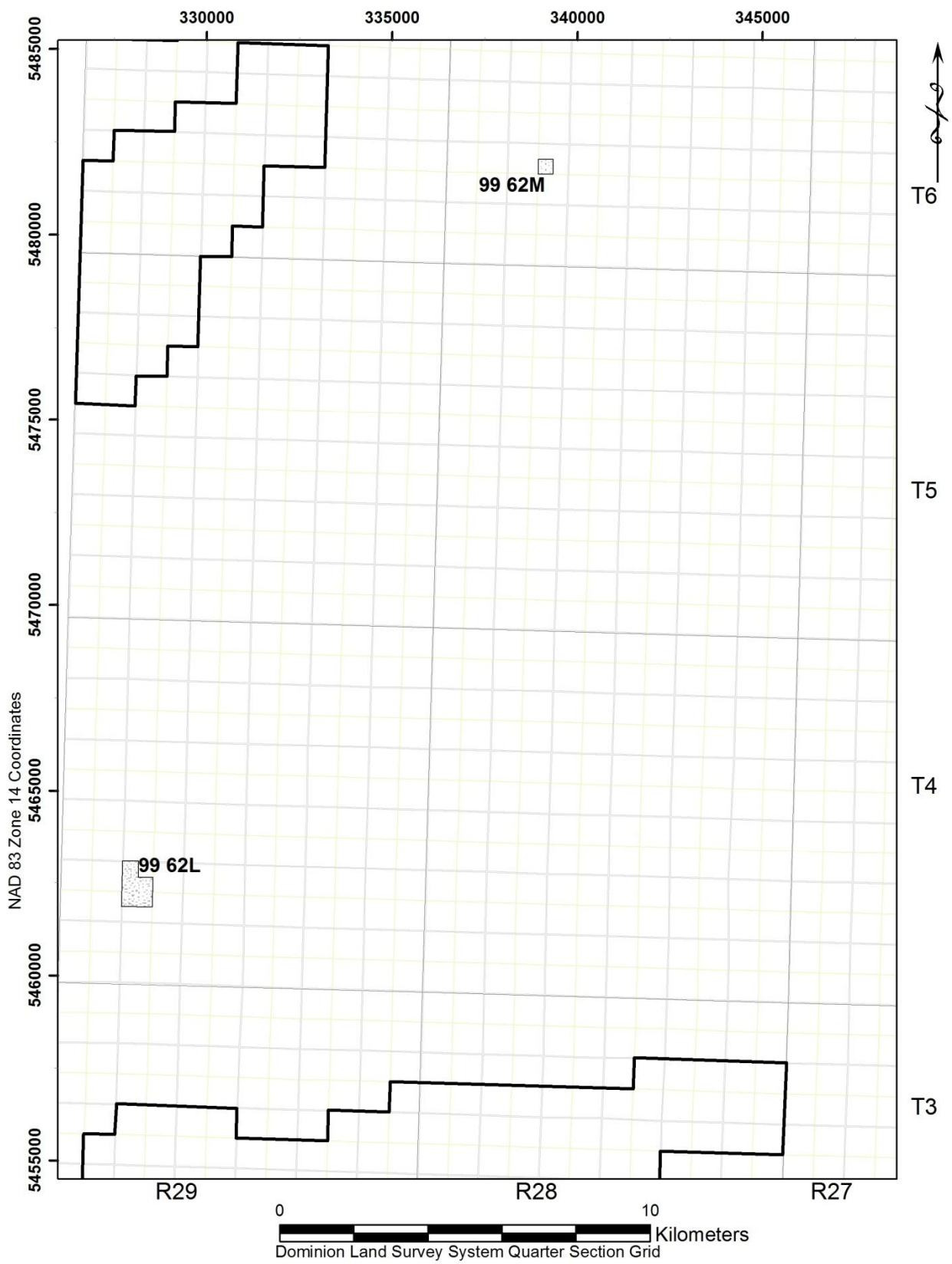


FIGURE 52 - OTHER AREAS LODGEPOLE I & J POOLS (99 59 I & 99 59J)



**FIGURE 53 - OTHER AREAS BAKKEN-THREE FORKS L & M POOLS
(99 62 L & 99 62M)**

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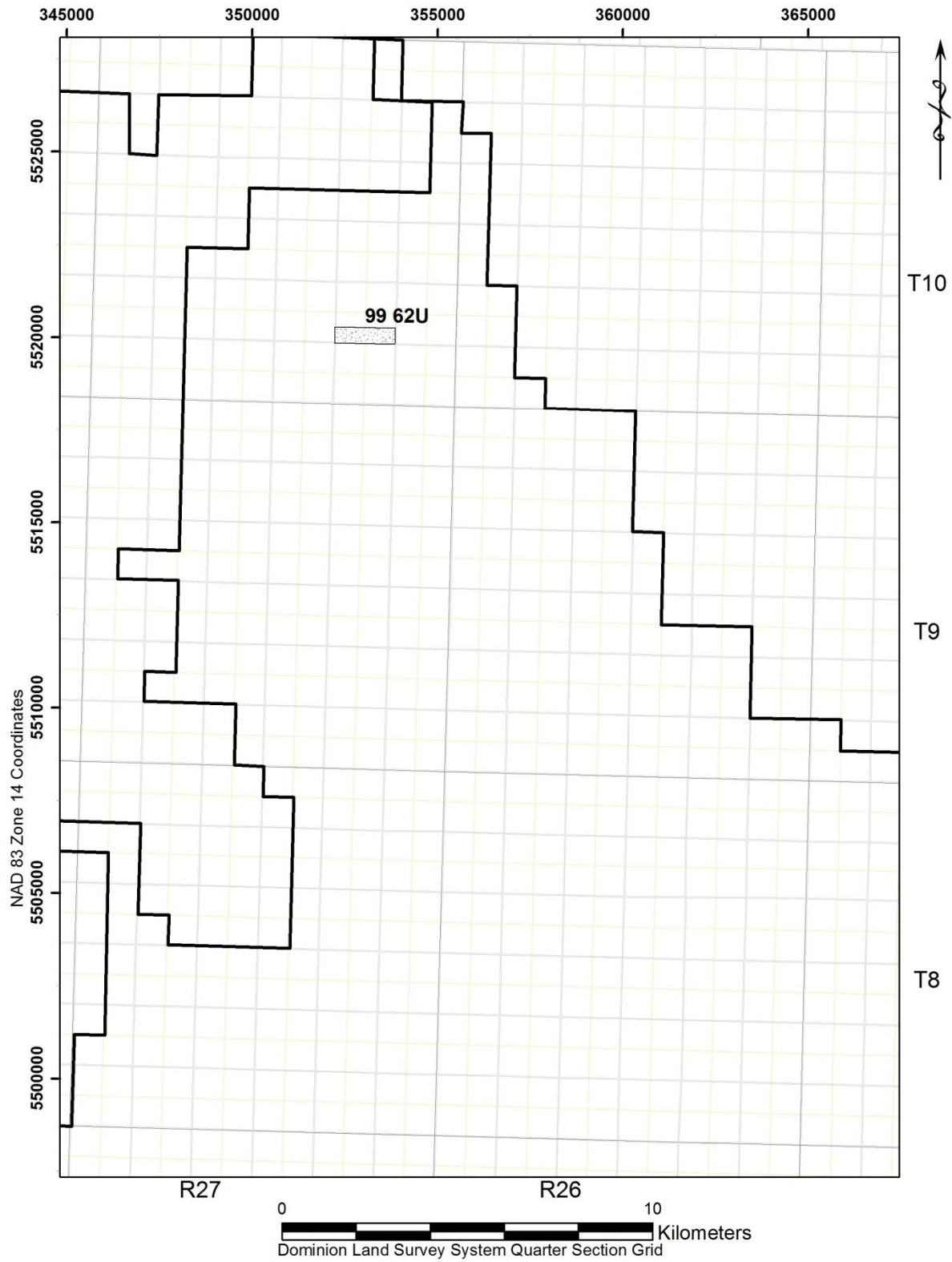


FIGURE 54 - OTHER AREAS BAKKEN-THREE FORKS U POOL (99 62U)

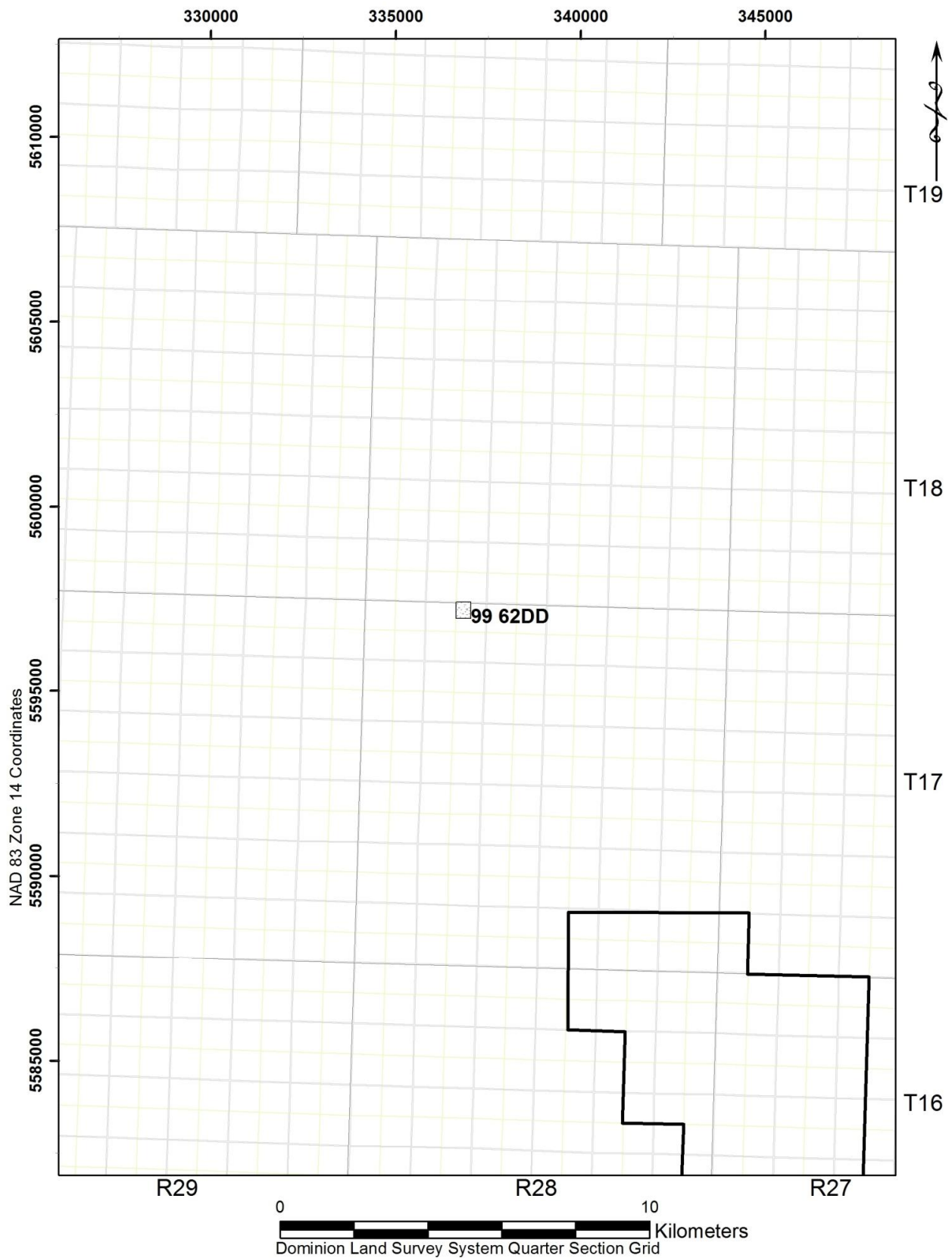


Figure 55 - Other Areas Bakken-Three Forks DD Pool (99 62DD)

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 55:

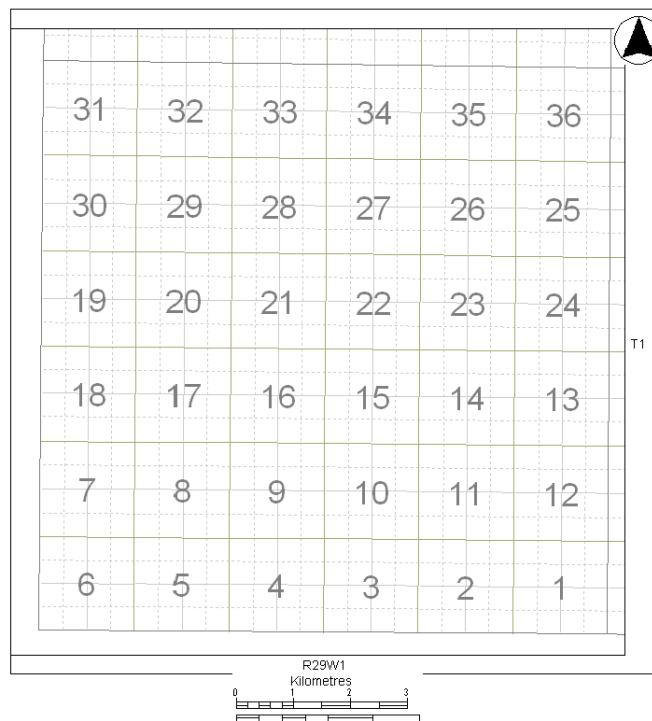


Figure 56
Sections in a Township.

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 56. Each section can also be split into $\frac{1}{4}$ sections as shown in Figure 57, 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 it 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.

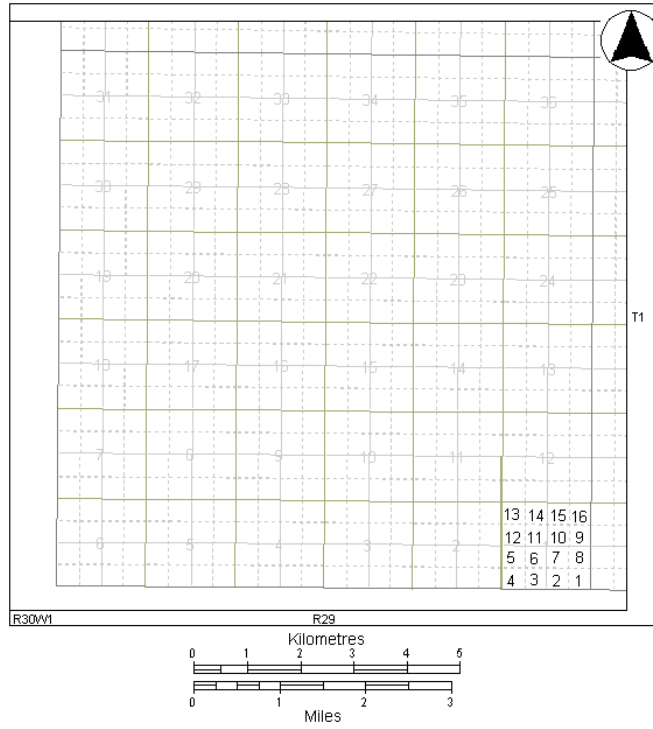


Figure 57
Legal subdivisions in a section.

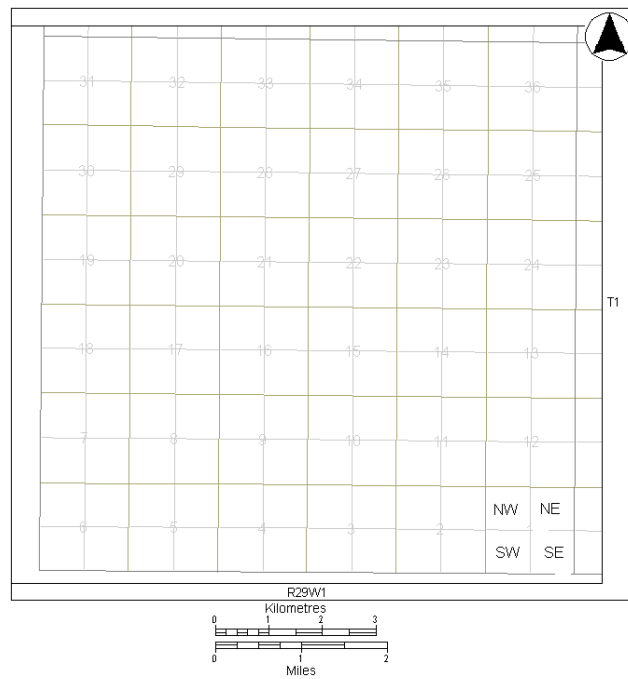


Figure 58
Quarter Section illustration.

APPENDIX B

Manitoba Pool Codes

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

January 1, 2012