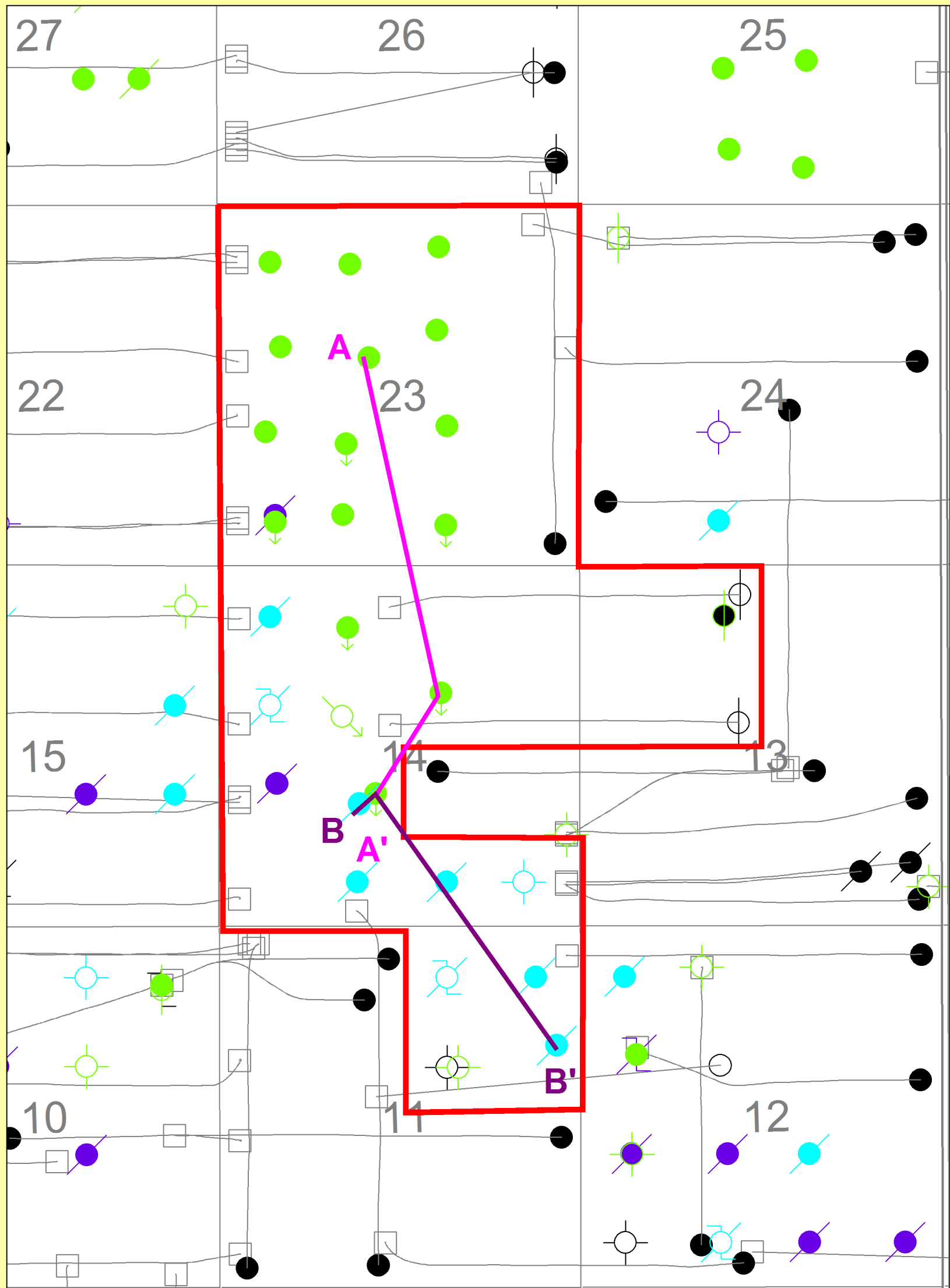


R28

R27W1

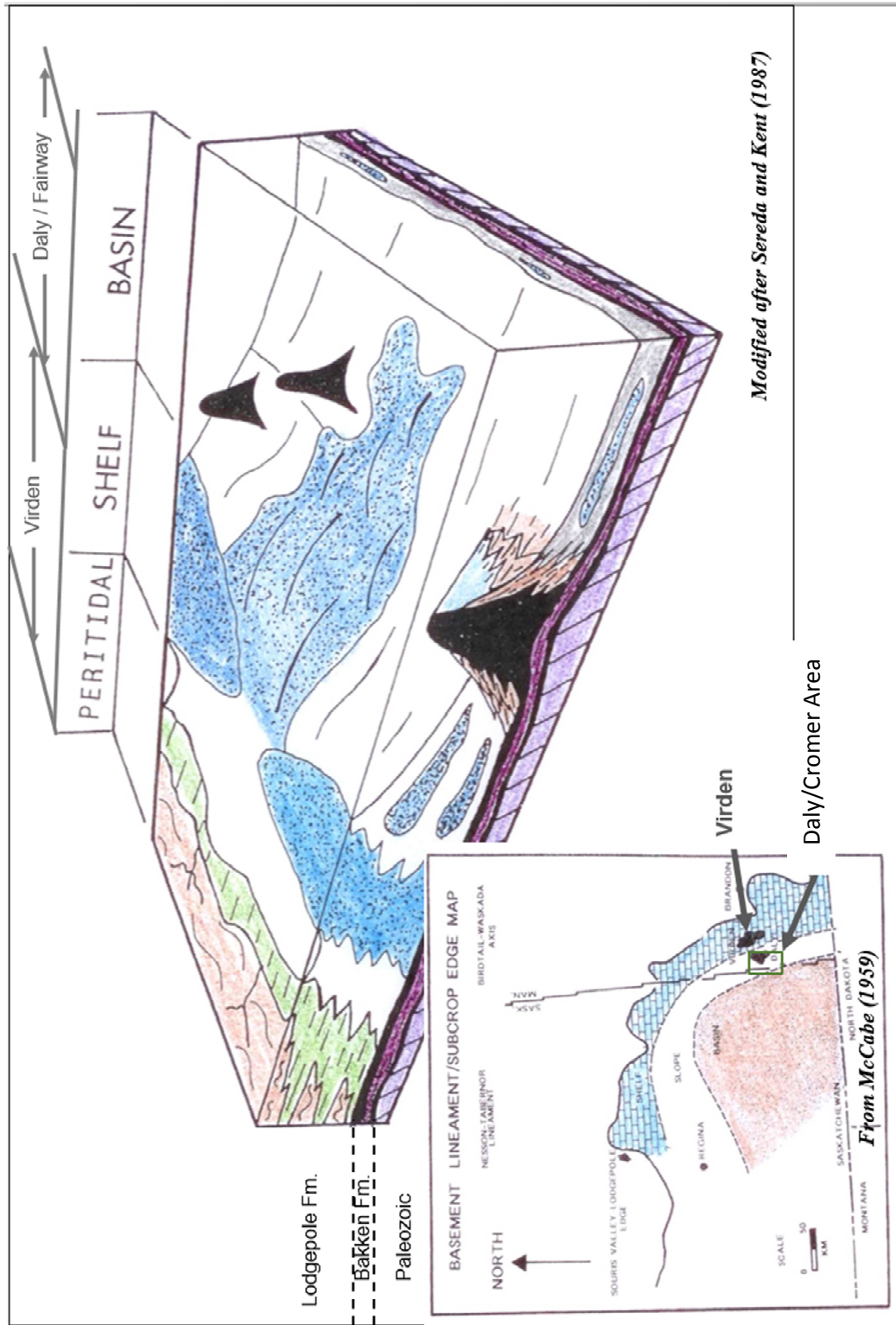


R28

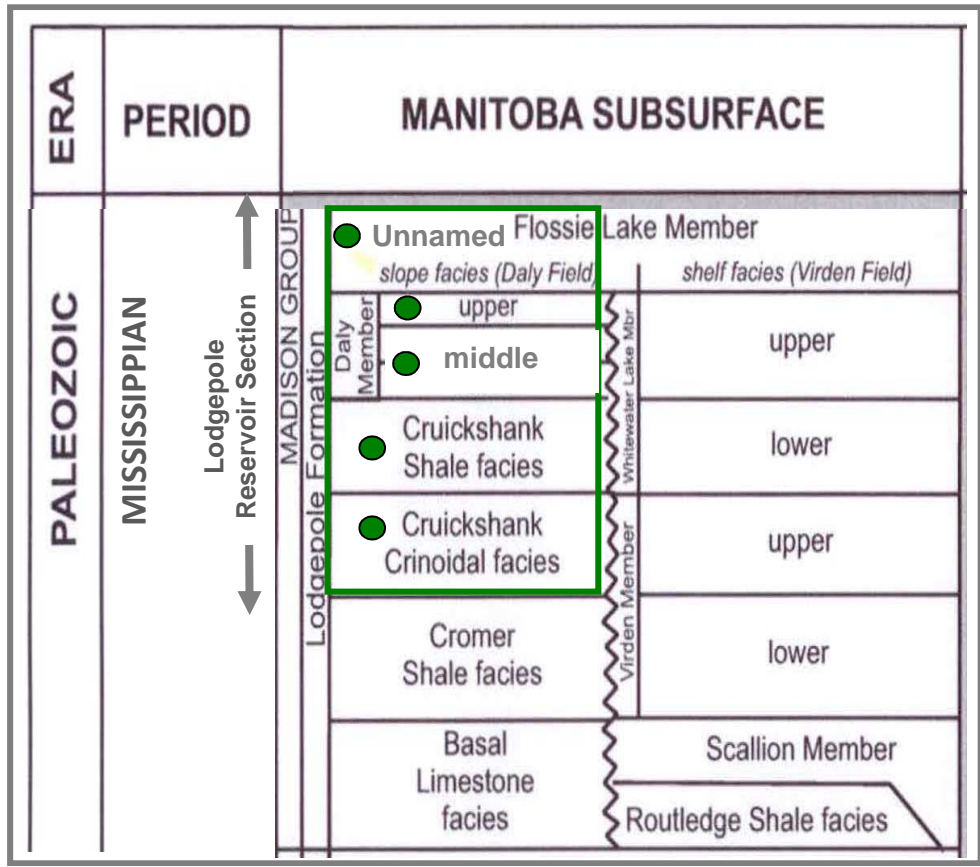
R27W1

| Legend | |
|--------|-----------------------------|
| Grid | |
| — | DLS - Township |
| — | DLS - Section |
| Wells | |
| | 20 OldLogs ViewedCore |
| | 101 PetrophysicalLog Interp |
| | RR prior 19750101 |
| | Project Wells |

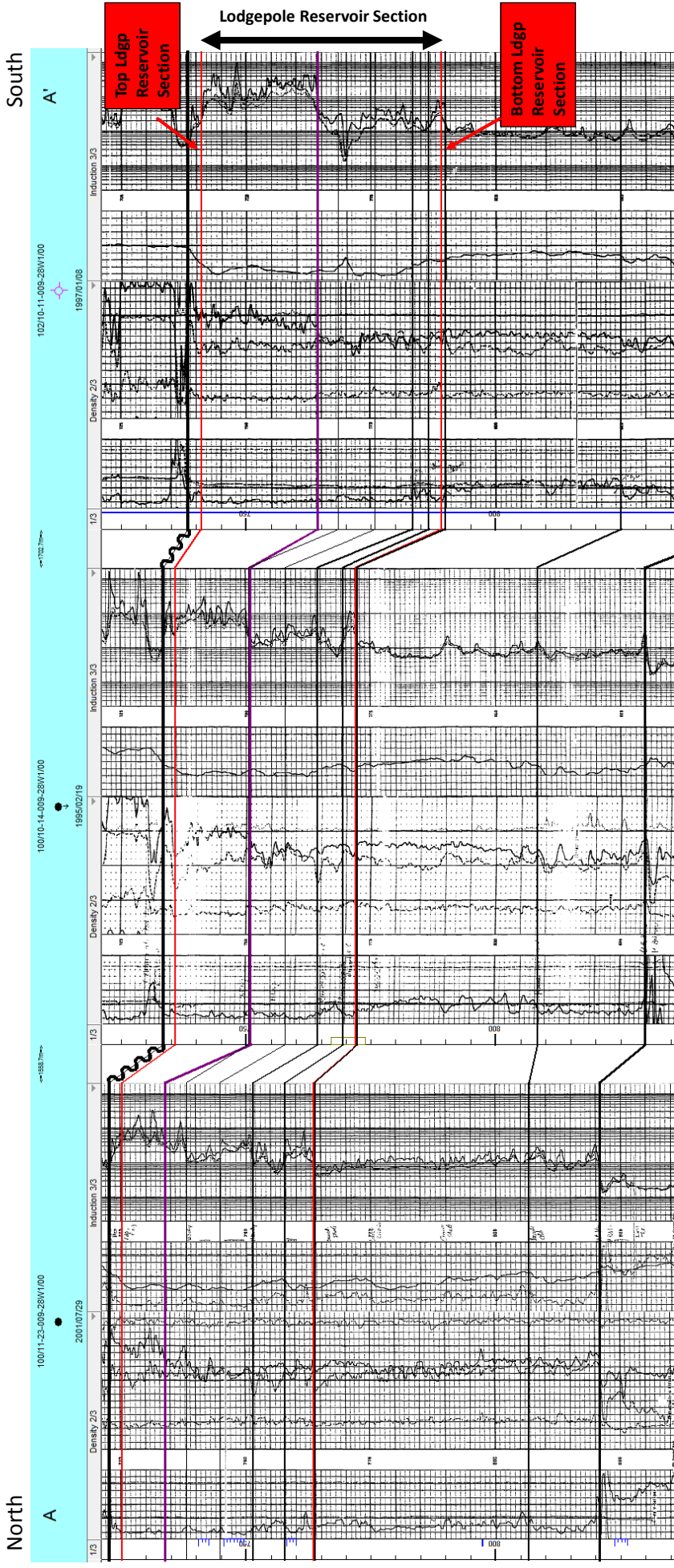
| | | |
|--------------------------------------|-----------------|----------------------|
| Tundra Oil and Gas Ltd | | |
| Proposed Cromer Unit No 2 | | |
| Base Map | | |
| Licensed to : Tundra Oil and Gas Ltd | | |
| www.geologic.com | By : K McNeil | Date : 2015/05/12 |
| | Scale = 1:20000 | Project : Daly North |



Appendix 2: Regional geological setting, Lodgepole Formation.



Appendix 3: Mississippian Lodgepole stratigraphic column, Cromer/Daly and Virden area, Williston basin. Oil bearing reservoir at the proposed Cromer Unit can occur in the Unnamed down to the base of the Cruickshank Crinoidal. This is referred in this report as the “**Lodgepole Reservoir Section**” Modified after Nicolas and Barchyn, TGI II (2008).



North

South

- 1a. Unnamed Dolostone
- 1b. Unnamed Limestone
- 2. Upper Daly
- 3. Middle Daly
- 4. Crck Sh
- 5. Crck Cr
- 6. Cromer Shale
- 7. Basal Limestone

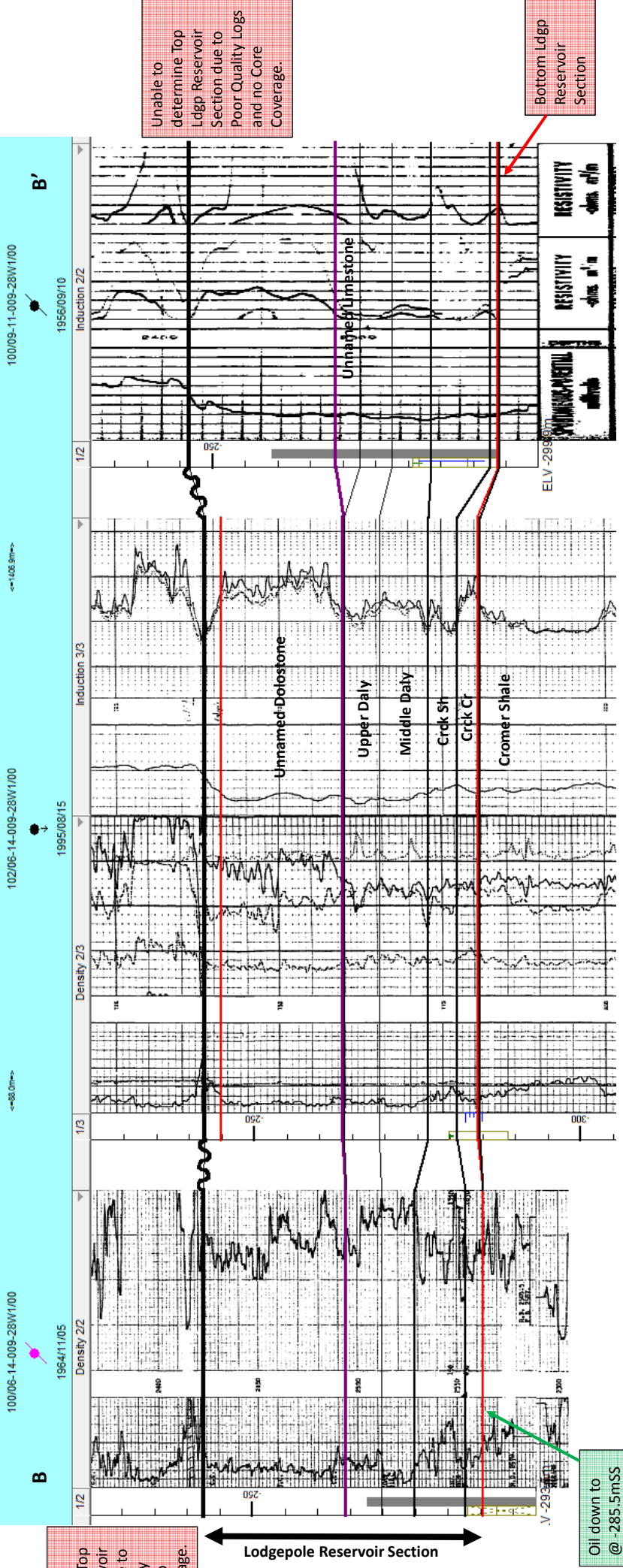
Appendix 4A: Structural cross-section A-A', Cromer proposed Unit 2. Refer to Appendix 1 for the cross-section index map. Cross Section A-A' illustrates the following:

1. Lodgepole Stratigraphy comprised of seven members, with the five top members being productive.
2. The structural changes from North to South

Appendix 4A
Proposed Cromer Unit No 2
 A-A' Structural Cross Section

Northwest

Southwest

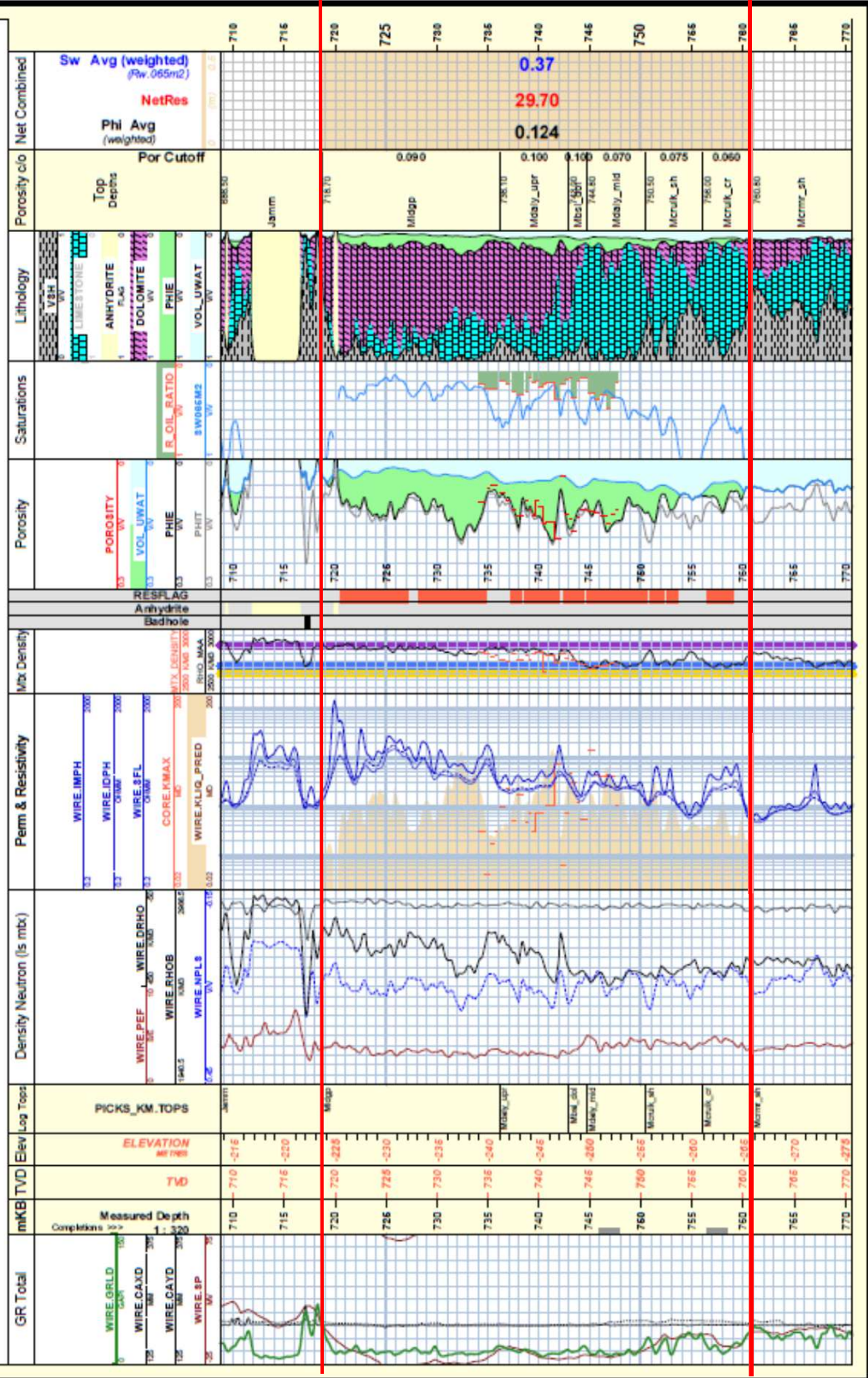


Appendix 4B: Structural cross-section A-A', Cromer proposed Unit 2. Refer to Appendix 1 for the cross-section index map. B-B' illustrates the following:

1. Cores at 100/06-14-009-28W1 indicate "oil down to" -285.5mSS (Appendix 20). The gamma ray log response is similar at 1006-14-009-28W1 in the Cruickshank Crinoidal, suggesting oil is observed down to the base of the Lodgepole Reservoir Section.
2. Poor data quality when logs are older than 1975. Core descriptions are used to define reservoir top and bottom of the Lodgepole Formation. Top and bottom reservoir cannot be determined if there is no core data and/or if the log quality is too poor (ie 100/6-14-009-28W1 and 100/09-11-009-28W1). These wells where phi-h cannot be determined are shown in Appendix 1.

Appendix 4B
Proposed Cromer Unit No 2
 B-B' Structural Cross Section

Log Date: 04-DEC-2002 KB Elev.: 495.10 m TD: 854.50 msh Mud Wt: 1075.00 Kg/m3 Rmt: 0.30 ohmm @ 16 deg Plot: 12-May-2015



Top Reservoir
(Ldgp Reservoir Section)

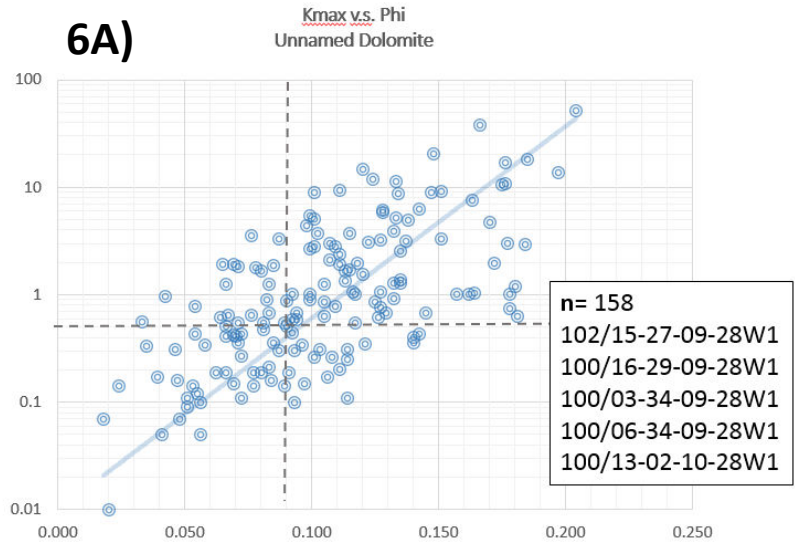
Net Reservoir:
29.7m @ 12.4% porosity
(Sw = 42%)

Sw and Porosity values are weighted
average

Bottom Reservoir
(Ldgp Reservoir Section)

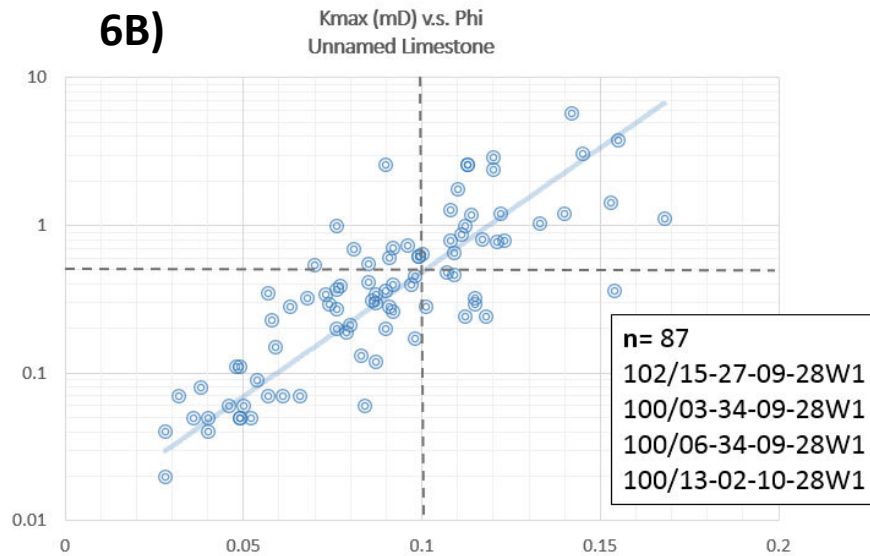
Appendix 5
Proposed Cromer Unit No 2
Example of Petrophysical
Evaluation

6A)



Unnamed Dolomite: 9% porosity cut-off

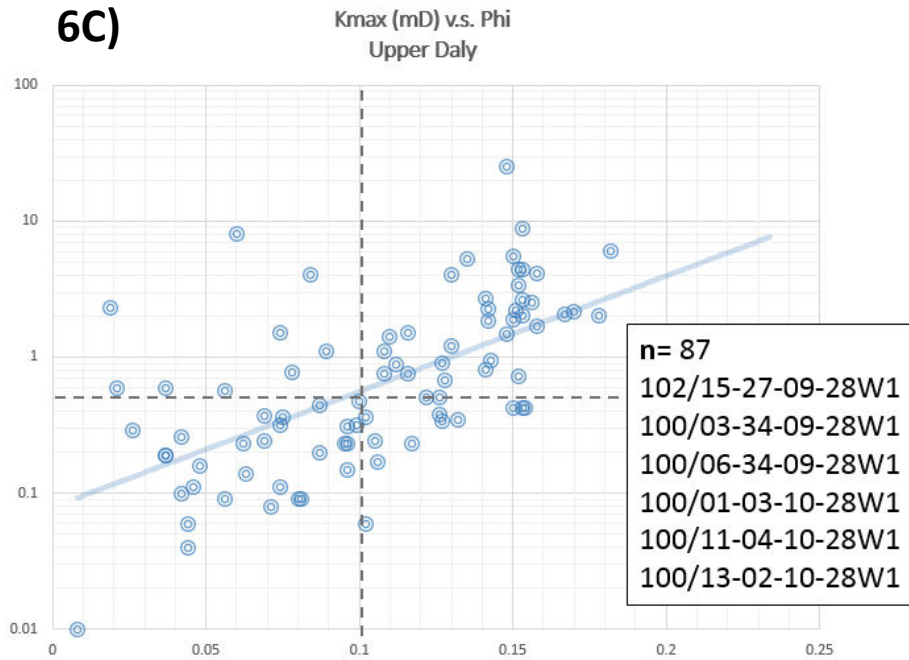
6B)



Unnamed Limestone: 10% porosity cut-off

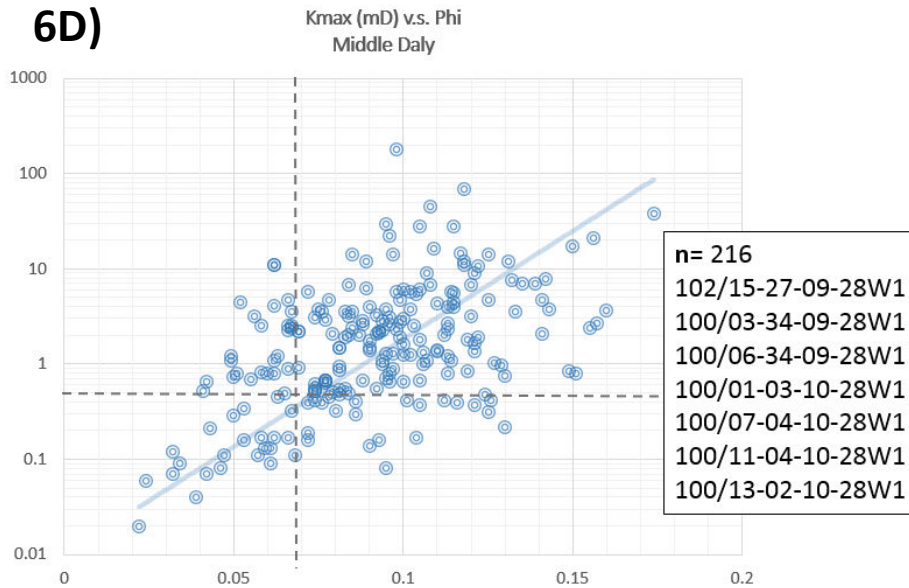
Appendices 6A and 6B: Porosity – permeability cross-plots for the Unnamed Dolomite and Unnamed Limestone. Number of samples included in each graph is indicated by **n**. Well locations used for this assessment shown for each plot.

6C)



Upper Daly: 10% porosity cut-off

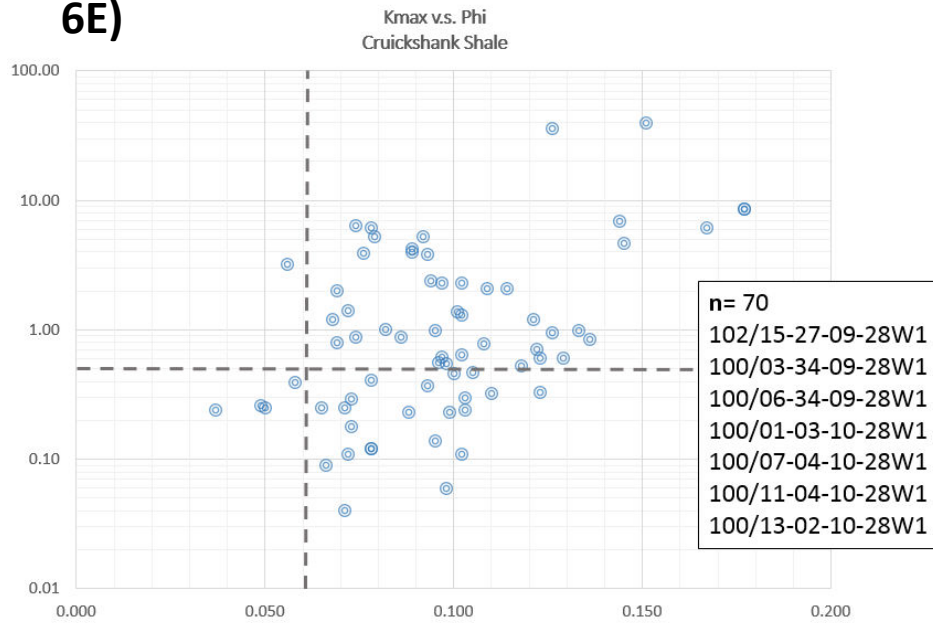
6D)



Middle Daly: 7% porosity cut-off

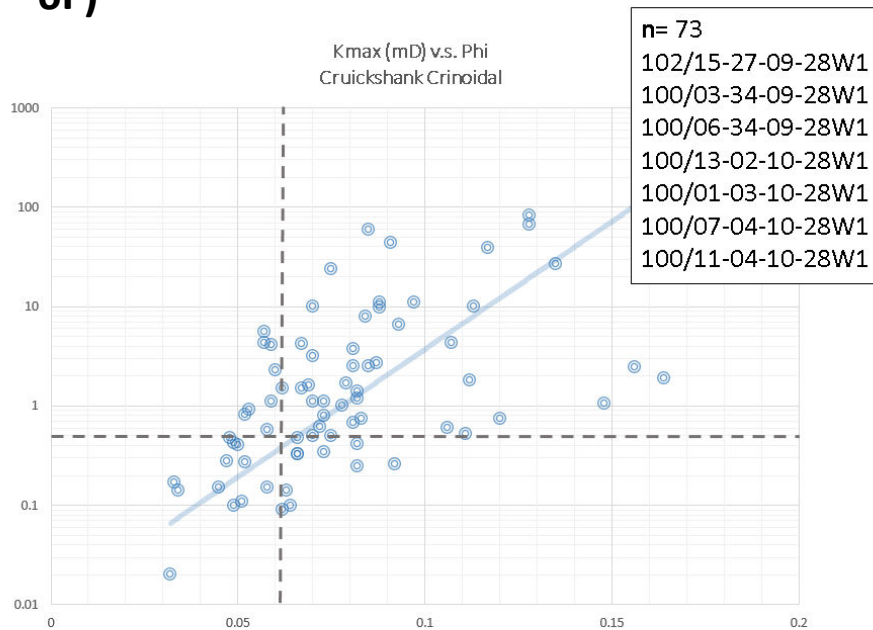
Appendices 6C and 6D: Porosity – permeability cross-plots for the Upper Daly and Middle Daly. Number of samples included in each graph is indicated by **n**. Well locations used for this assessment shown on each plot.

6E)



Cruickshank shale: Data too scattered to do a regression. A 7.5% porosity cut-off is assumed based on qualitative observations made in cores and visual calibration with logs.

6F)



Cruickshank Crinoidal: 6% porosity cut-off

Appendices 6E and 6F: Porosity – permeability cross-plots for the Cruickshank shale and Cruickshank Crinoidal. Number of samples included in each graph is indicated by **n**. Well locations used for this assessment shown on each plot.

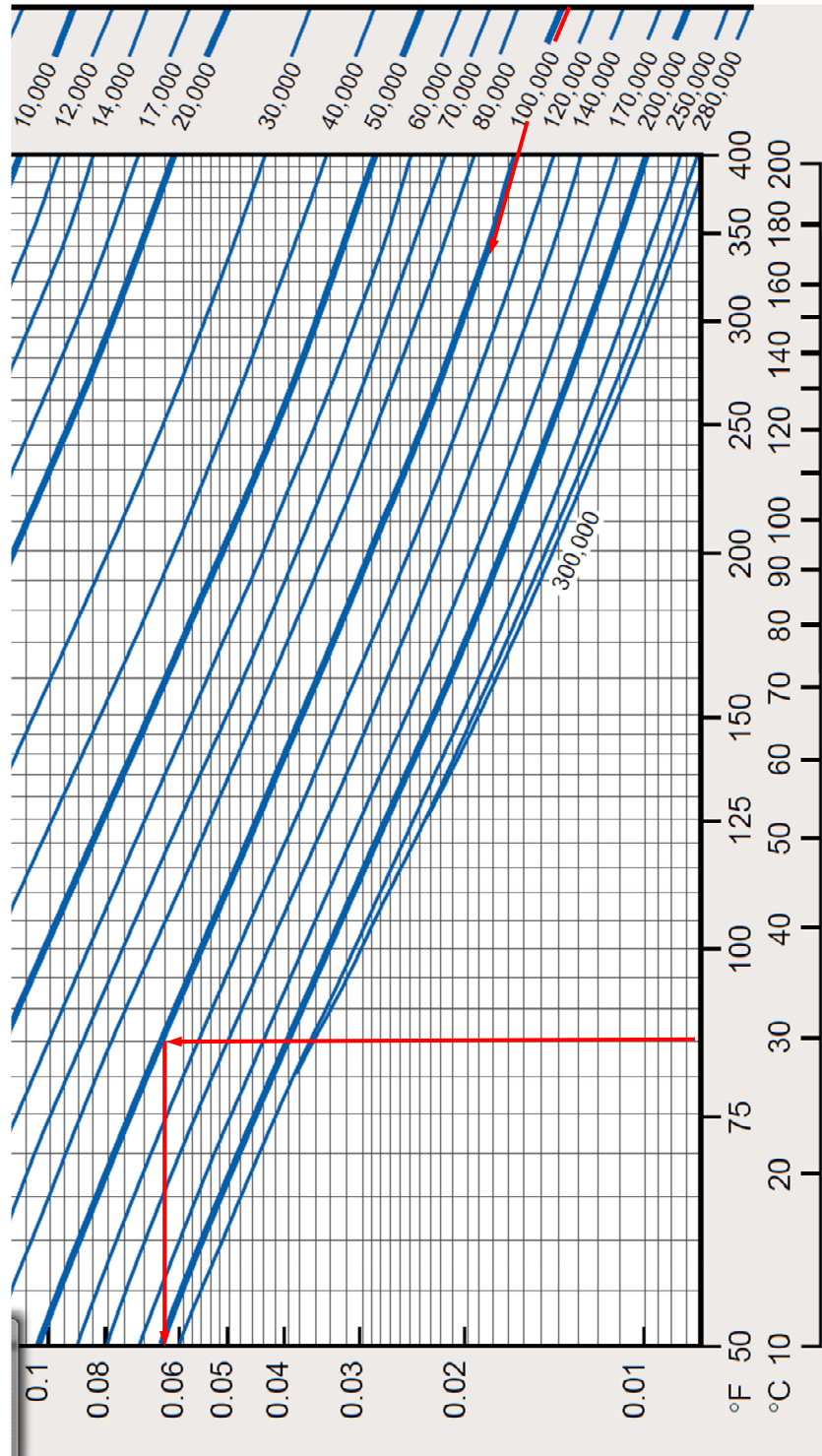
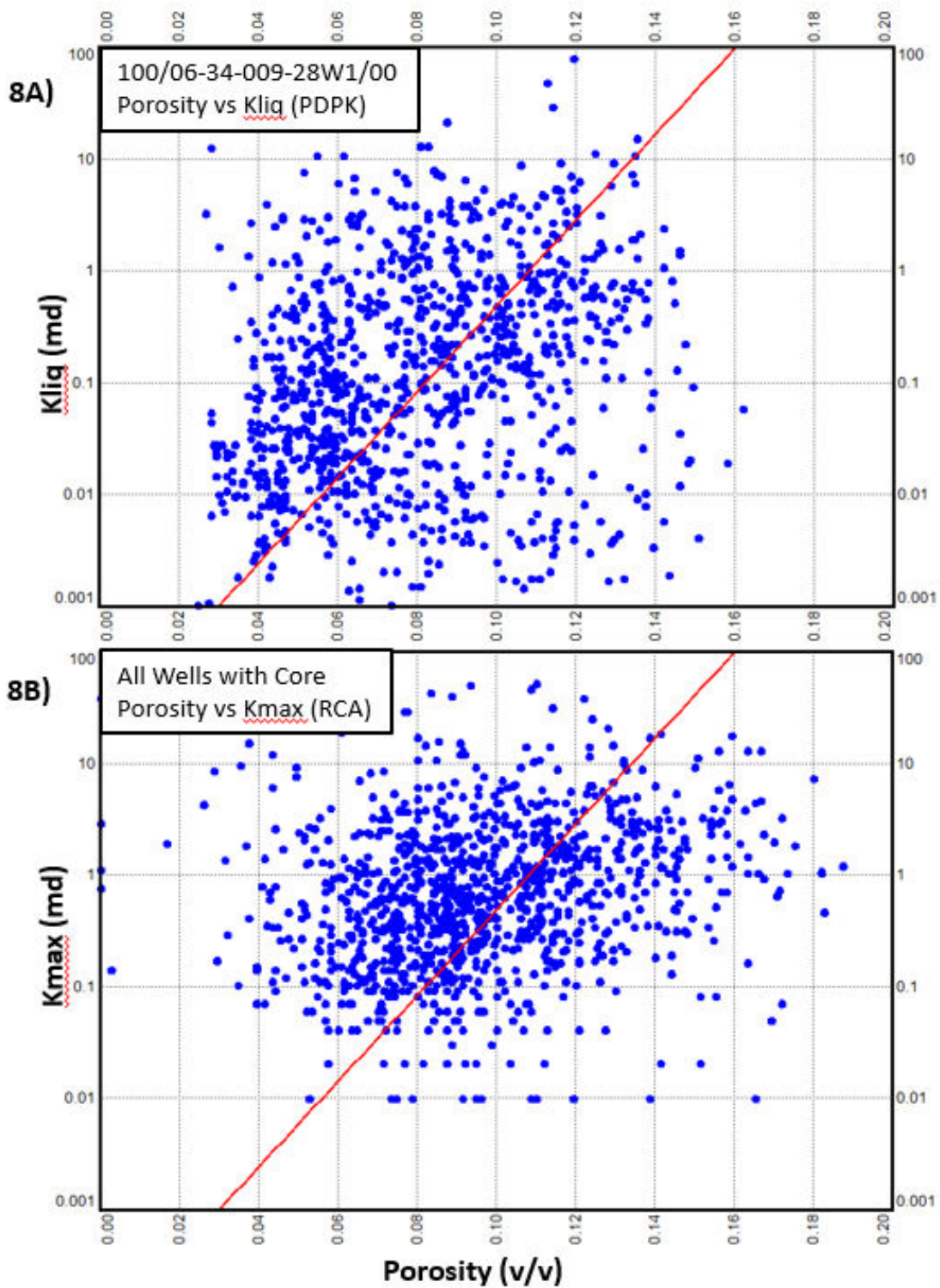
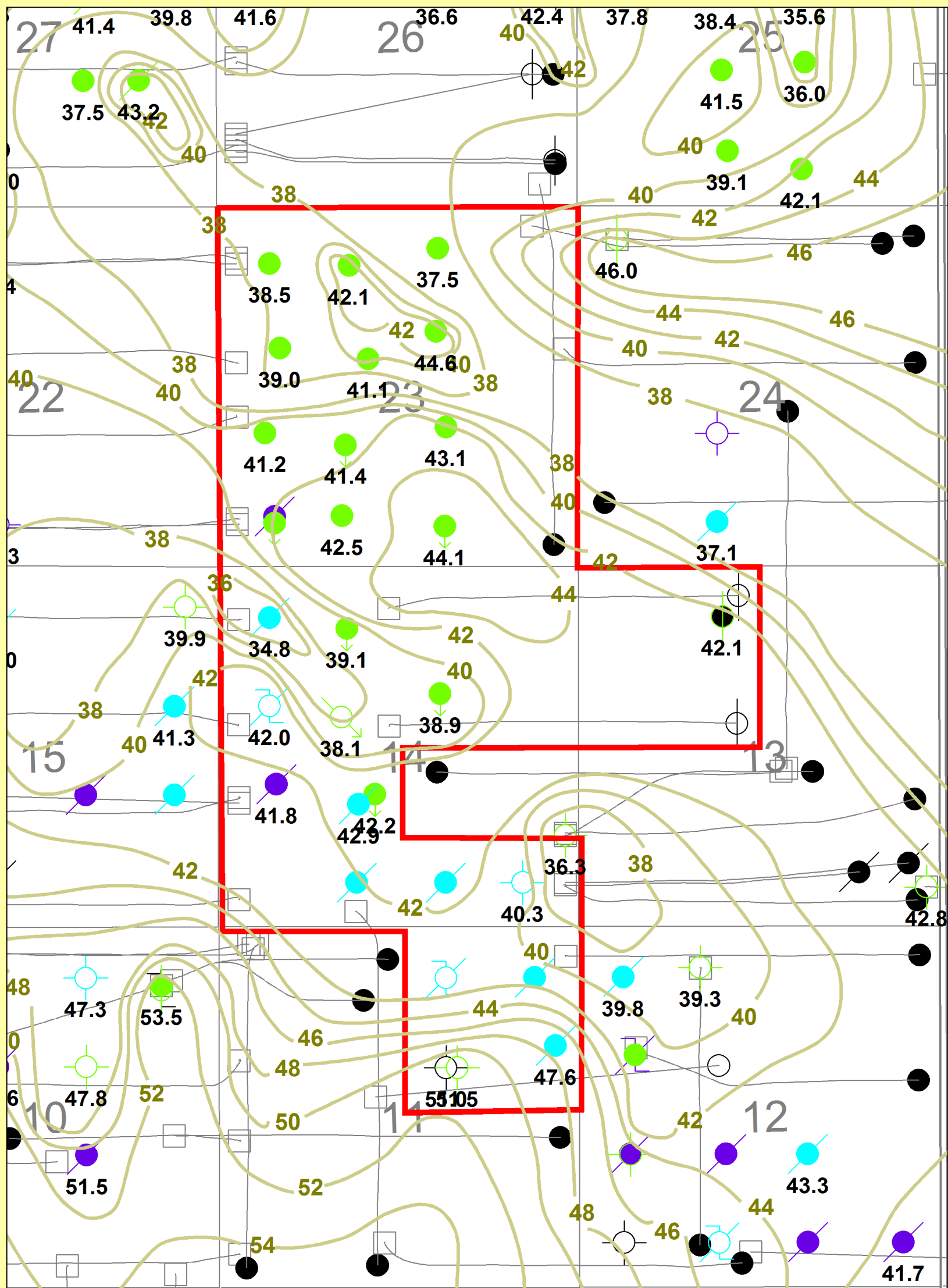


Figure 7: Salinity – Temperature – Water Resistivity (Rw) relationship used for Rw conversion. At a temperature= 30C and a salinity= 101,000 ppm, Rw= 0.065 (Lodgepole Formation, Cromer area).



Appendix 8A) 6-34 well crossplot of Porosity vs Profile Permeameter with regression established (red line),

Appendix 8B) Same regression as in 8a, but with all cored wells.



Legend

Grid

- DLS - Township
- DLS - Section


Wells

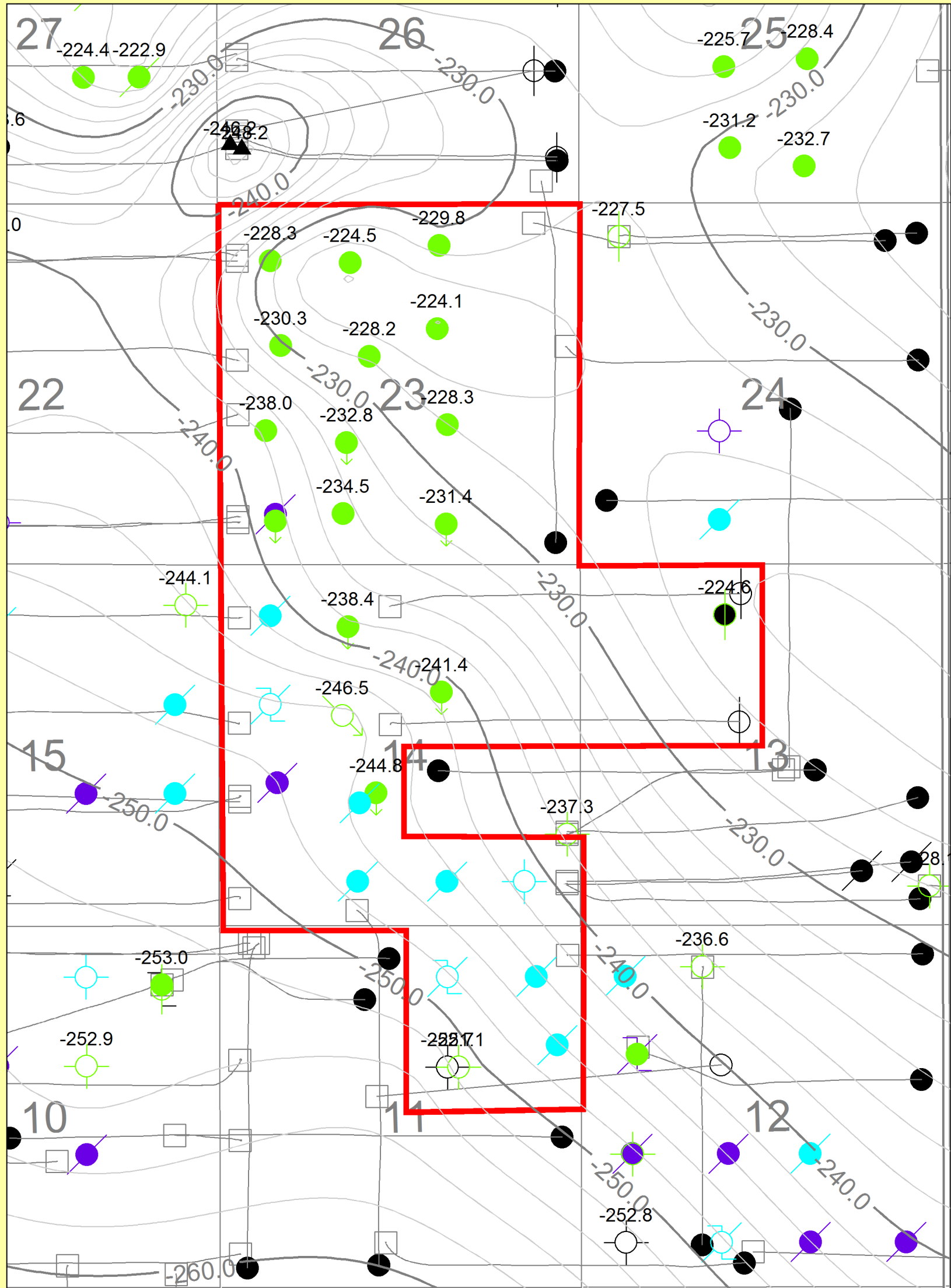
- 20 OldLogs ViewedCore
- 101 PetrophysicalLog Interp
- RR prior 19750101
- Project Wells

Tundra Oil and Gas Ltd

Proposed Cromer Unit No 2 Lodgepole to Cromer Isopach Map (2m contour interval)

Licensed to : Tundra Oil and Gas Ltd

| | | |
|--|-----------------|----------------------|
|  | By : K McNeil | Date : 2015/05/12 |
| | Scale = 1:20000 | Project : Daly North |



T9

T9

Legend

Grid

- DLS - Township
- DLS - Section


Wells

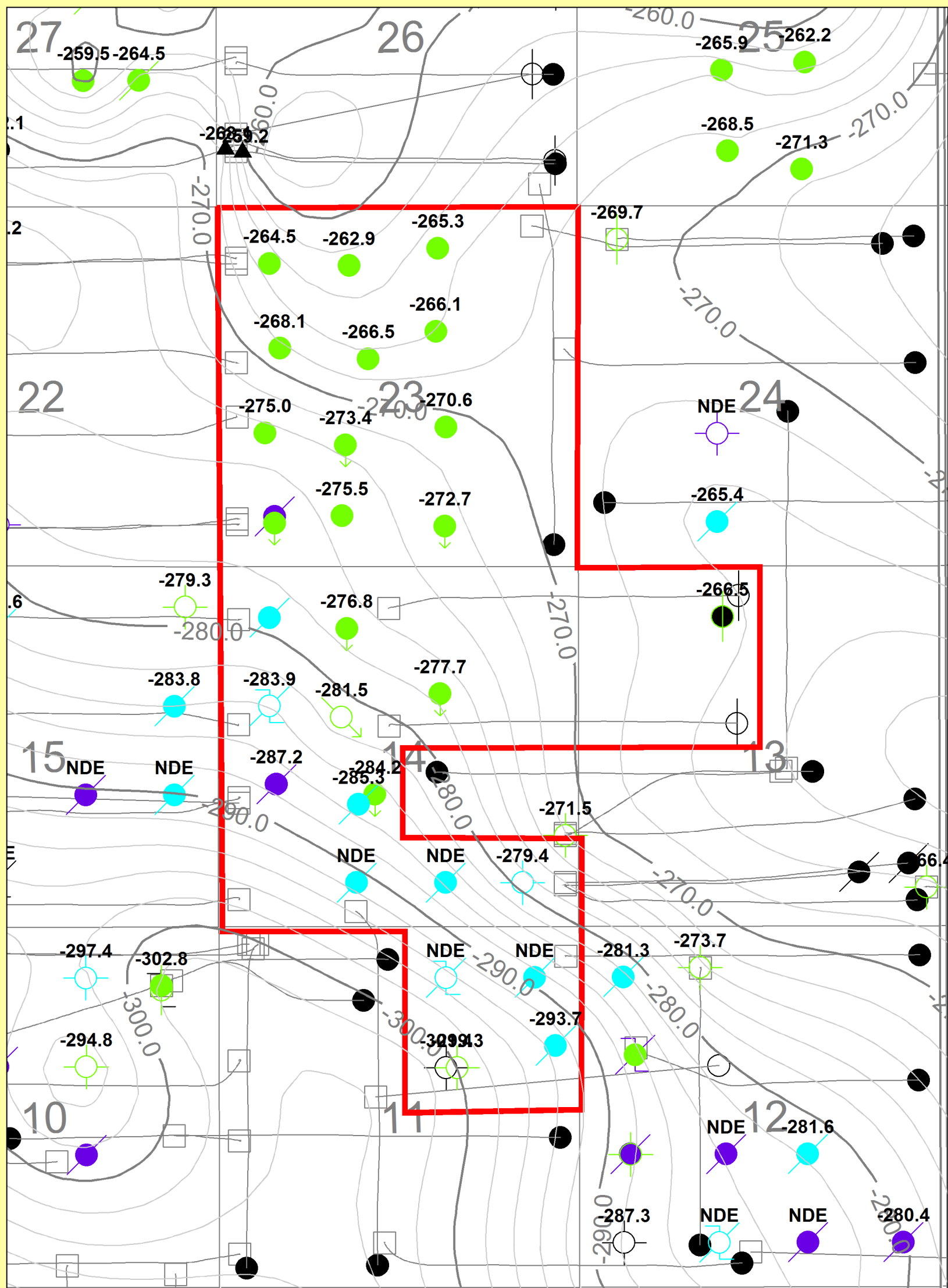
- ⊕ Project Wells
- 101 PetrophysicalLog Interp
- ⊕ 20 OldLogs ViewedCore
- ⊕ RR prior 19750101

Tundra Oil and Gas Ltd


Proposed Cromer Unit No 2
 Top Ldgp Reservoir Subsea Structure Map
 (2m contour interval)

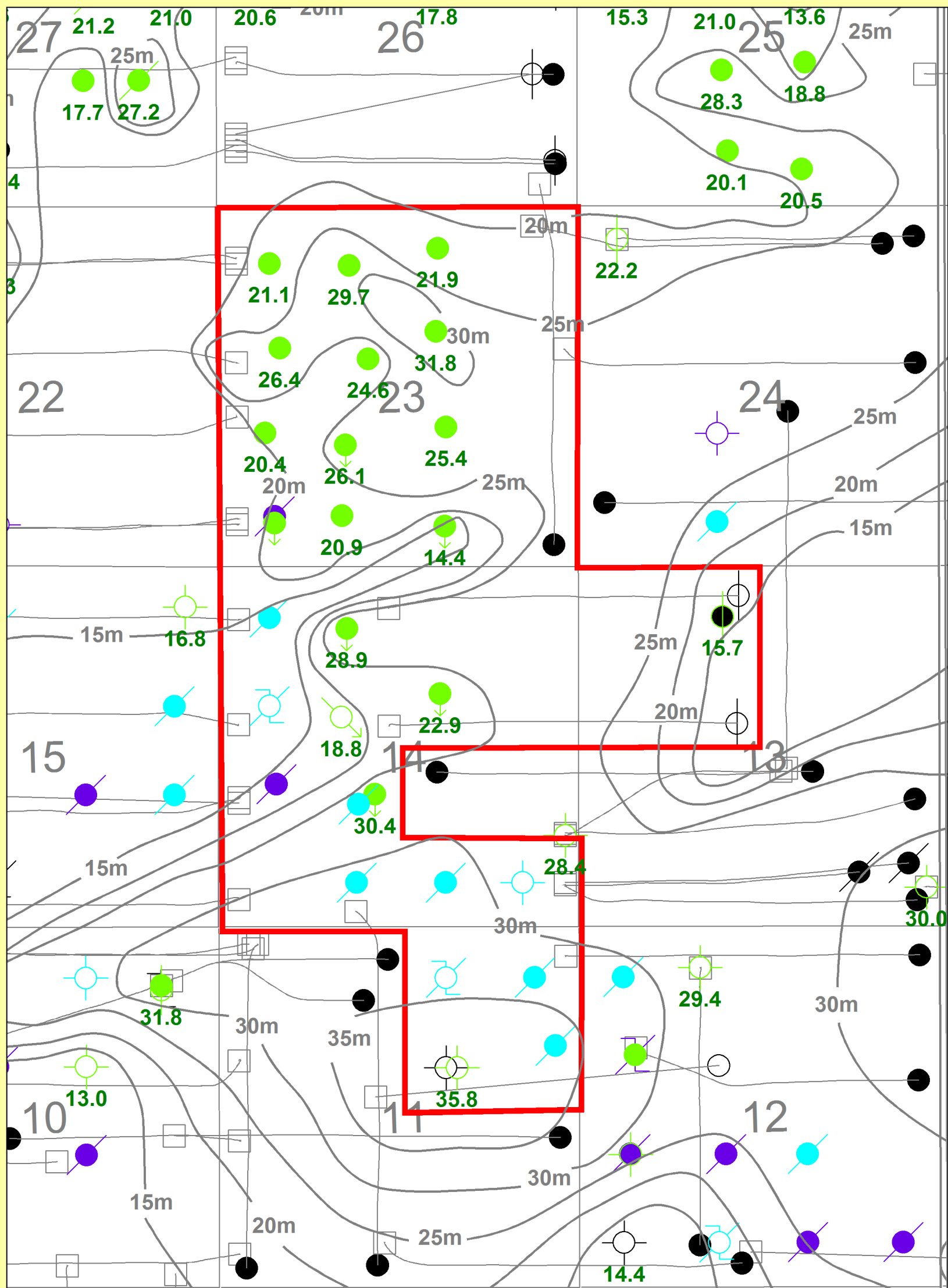
Licensed to : Tundra Oil and Gas Ltd

| | | |
|---|-----------------|----------------------|
|  | By : K McNeil | Date : 2015/05/11 |
| | Scale = 1:20000 | Project : Daly North |



| Legend | |
|--------|-----------------------------|
| Grid | |
| — | DLS - Township |
| — | DLS - Section |
| Wells | |
| ⊕ | Project Wells |
| ● | 101 PetrophysicalLog Interp |
| ● | 20 OldLogs ViewedCore |
| ⊕ | RR prior 19750101 |

| | | |
|---|-----------------|----------------------|
| Tundra Oil and Gas Ltd | | |
| Proposed Cromer Unit No 2 | | |
| Bottom Ldgp Reservoir Subsea Structure Map | | |
| (2m contour interval) | | |
| Licensed to : Tundra Oil and Gas Ltd | | |
|  | By : K McNeil | Date : 2015/05/11 |
| | Scale = 1:20000 | Project : Daly North |

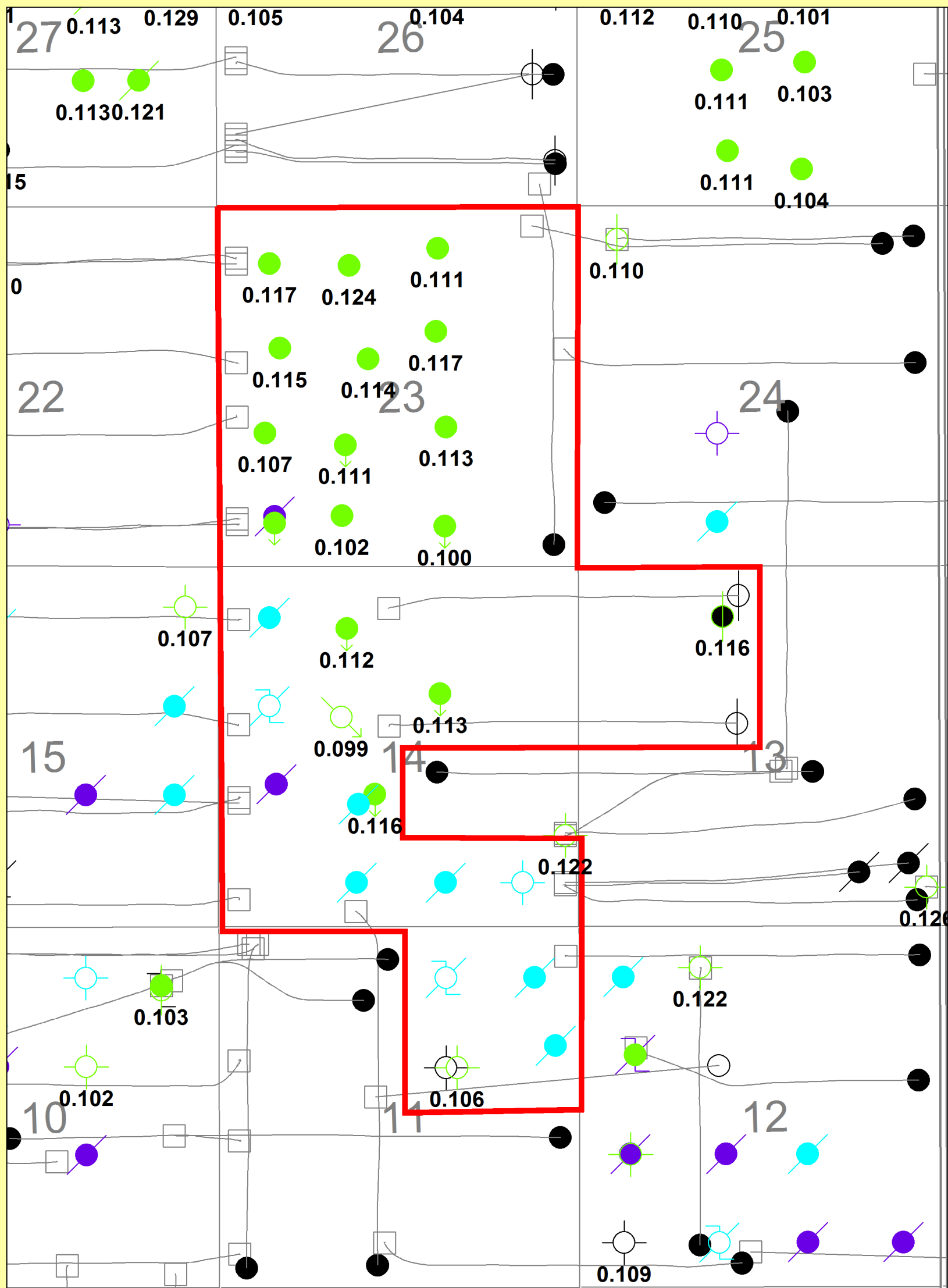


T9


T9

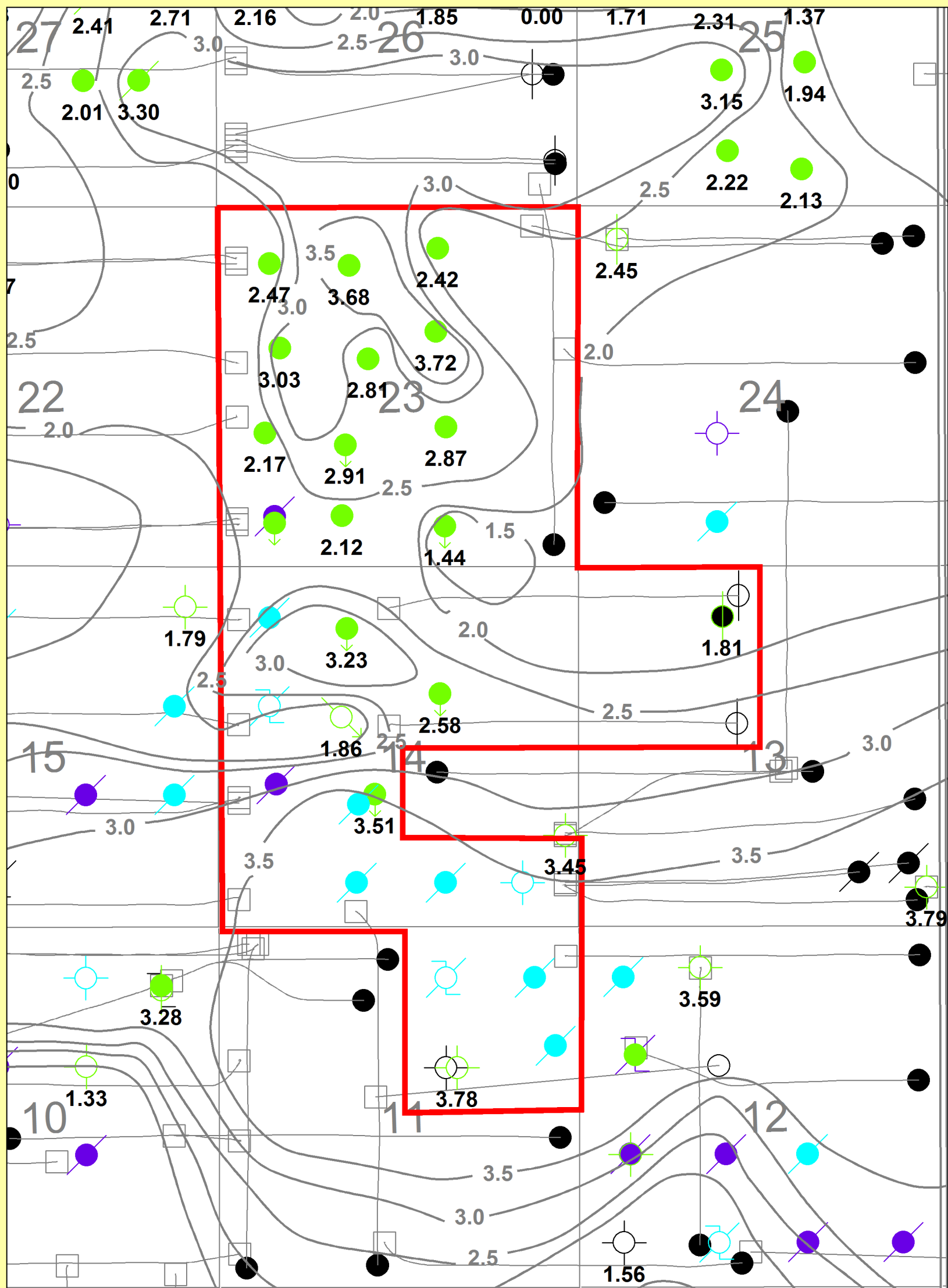
| Legend | |
|--------|-----------------------------|
| Grid | |
| — | DLS - Township |
| — | DLS - Section |
| Wells | |
| | 20 OldLogs ViewedCore |
| | 101 PetrophysicalLog Interp |
| | RR prior 19750101 |
| | Project Wells |

| | | |
|--|-----------------|----------------------|
| Tundra Oil and Gas Ltd | | |
| Proposed Cromer Unit No 2 | | |
| Net Lodgepole Reservoir Isopach Map | | |
| (5m contour interval) | | |
| Licensed to : Tundra Oil and Gas Ltd | | |
| www.geologic.com | By : K McNeil | Date : 2015/05/12 |
| | Scale = 1:20000 | Project : Daly North |



| Legend | |
|--------|-----------------------------|
| Grid | |
| — | DLS - Township |
| — | DLS - Section |
| Wells | |
| ⊙ | Project Wells |
| ● | 101 PetrophysicalLog Interp |
| ⊙ | 20 OldLogs ViewedCore |
| ⊙ | RR prior 19750101 |

| | | |
|--|-----------------|----------------------|
| Tundra Oil and Gas Ltd | | |
| Proposed Cromer Unit No 2 | | |
| Weighted Average Porosity | | |
| Lodgepole Reservoir Section | | |
| Licensed to : Tundra Oil and Gas Ltd | | |
|  www.geologic.com | By : K McNeil | Date : 2015/05/11 |
| | Scale = 1:20000 | Project : Daly North |




Legend

Grid

- DLS - Township
- DLS - Section

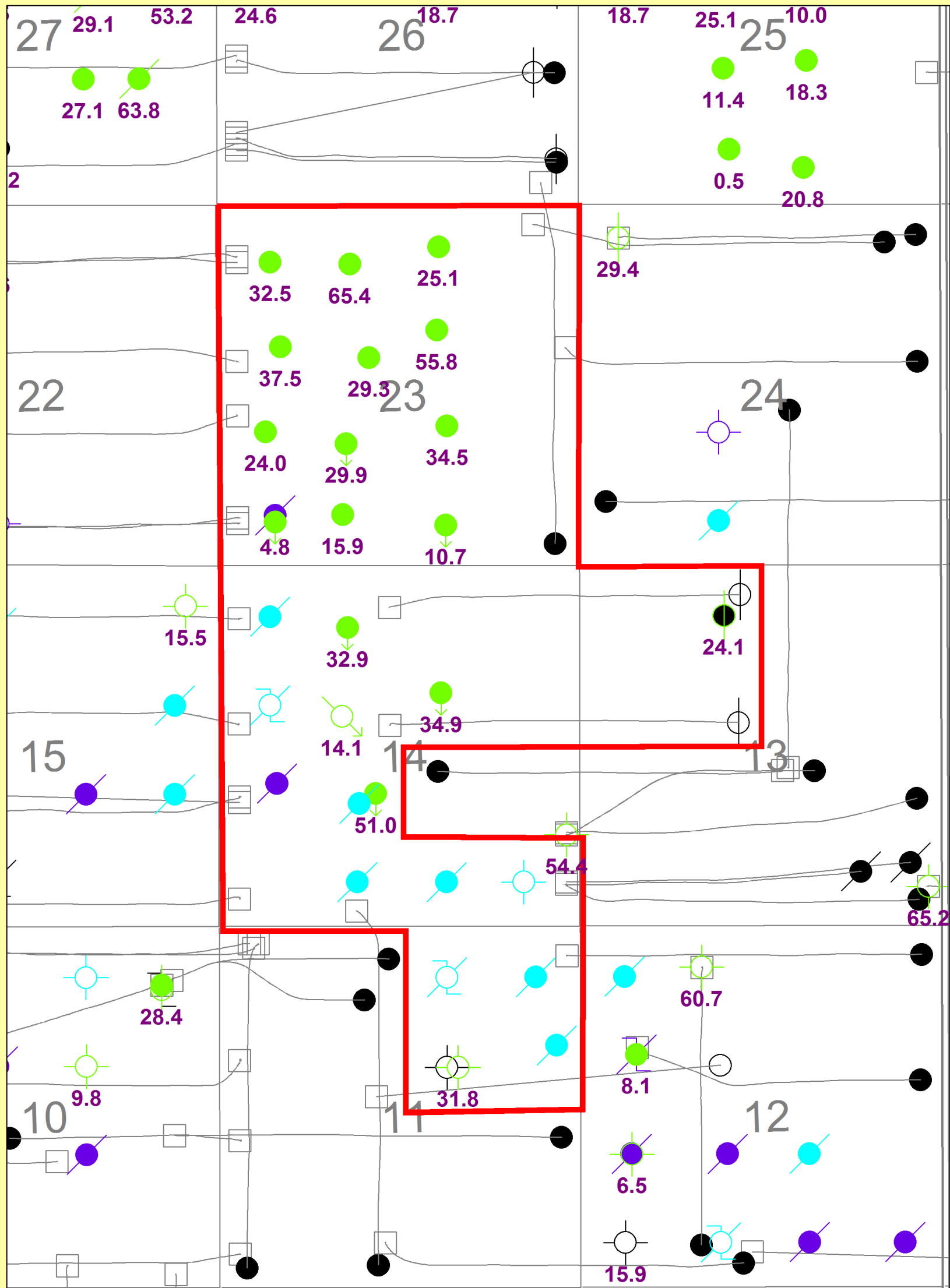
Wells

- ⊕ Project Wells
- ⊕ 101 PetrophysicalLog Interp
- ⊕ 20 OldLogs ViewedCore
- ⊕ RR prior 19750101

| | | |
|--|-----------------|----------------------|
| Tundra Oil and Gas Ltd | | |
| Proposed Cromer Unit No 2 | | |
| Phi-h Lodgepole Reservoir Section | | |
| (0.5m contour interval) | | |
| Licensed to : Tundra Oil and Gas Ltd | | |
|  www.geologic.com | By : K McNeil | Date : 2015/05/11 |
| | Scale = 1:20000 | Project : Daly North |

R28

R27W1



T9

T9

R28

R27W1

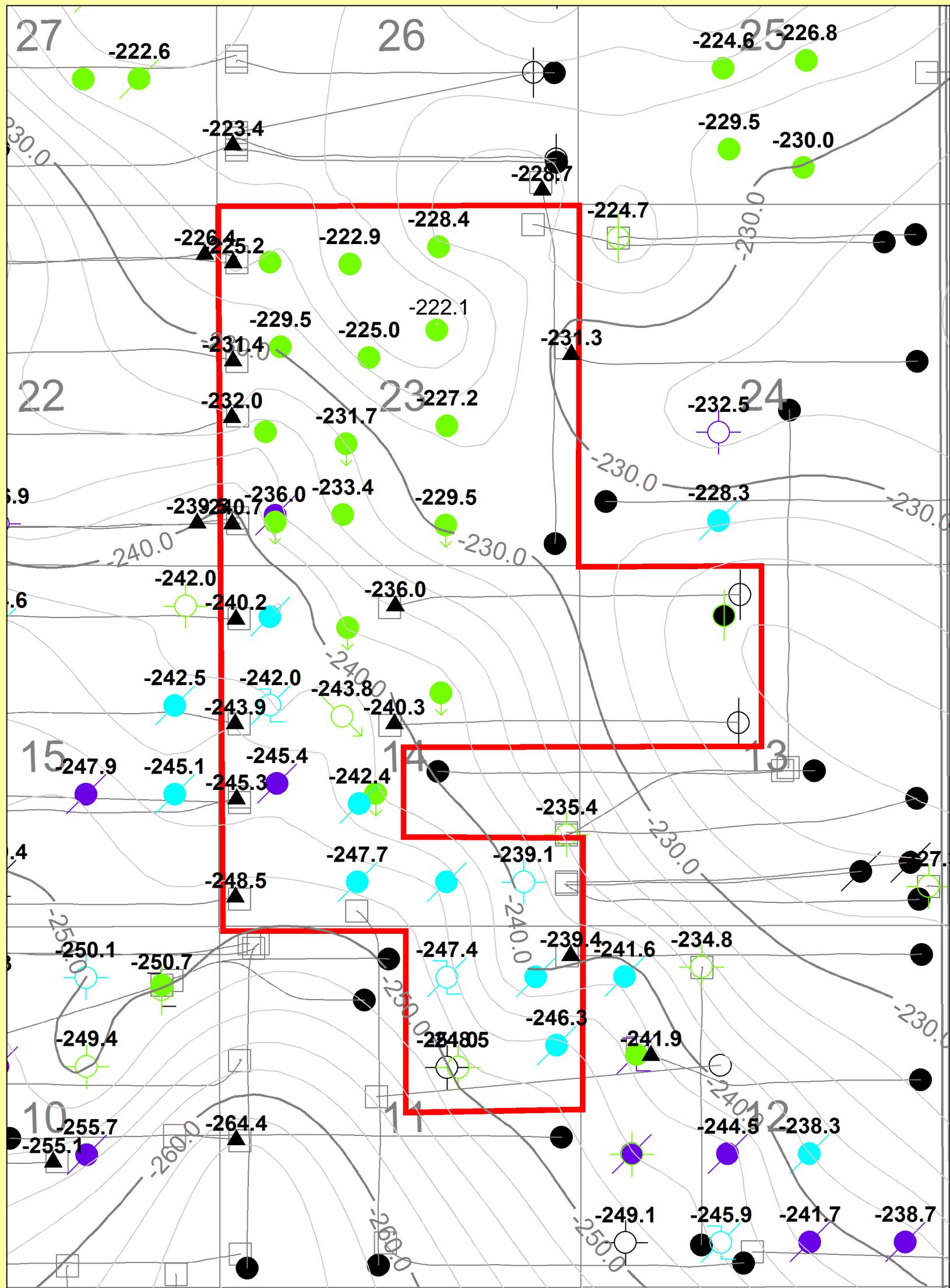
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|--------|-----------------------------|
| Grid | |
| — | DLS - Township |
| — | DLS - Section |
| Wells | |
| | 20 OldLogs ViewedCore |
| | 101 PetrophysicalLog Interp |
| | RR prior 19750101 |
| | Project Wells |

Tundra Oil and Gas Ltd

Proposed Cromer Unit No 2 Kh (geom) Lodgepole Reservoir Section

Licensed to : Tundra Oil and Gas Ltd

| | | |
|--|-----------------|----------------------|
| | By : K McNeil | Date : 2015/05/12 |
| | Scale = 1:20000 | Project : Daly North |



T9

T9

Legend

Grid

- DLS - Township
- DLS - Section

Wells

- Project Wells
- 101 PetrophysicalLog Interp
- 20 OldLogs ViewedCore
- RR prior 19750101

Tundra Oil and Gas Ltd

Proposed Cromer Unit No 2
Top Ldgp FM Subsea Structure Map
(2m contour interval)

Licensed to : Tundra Oil and Gas Ltd

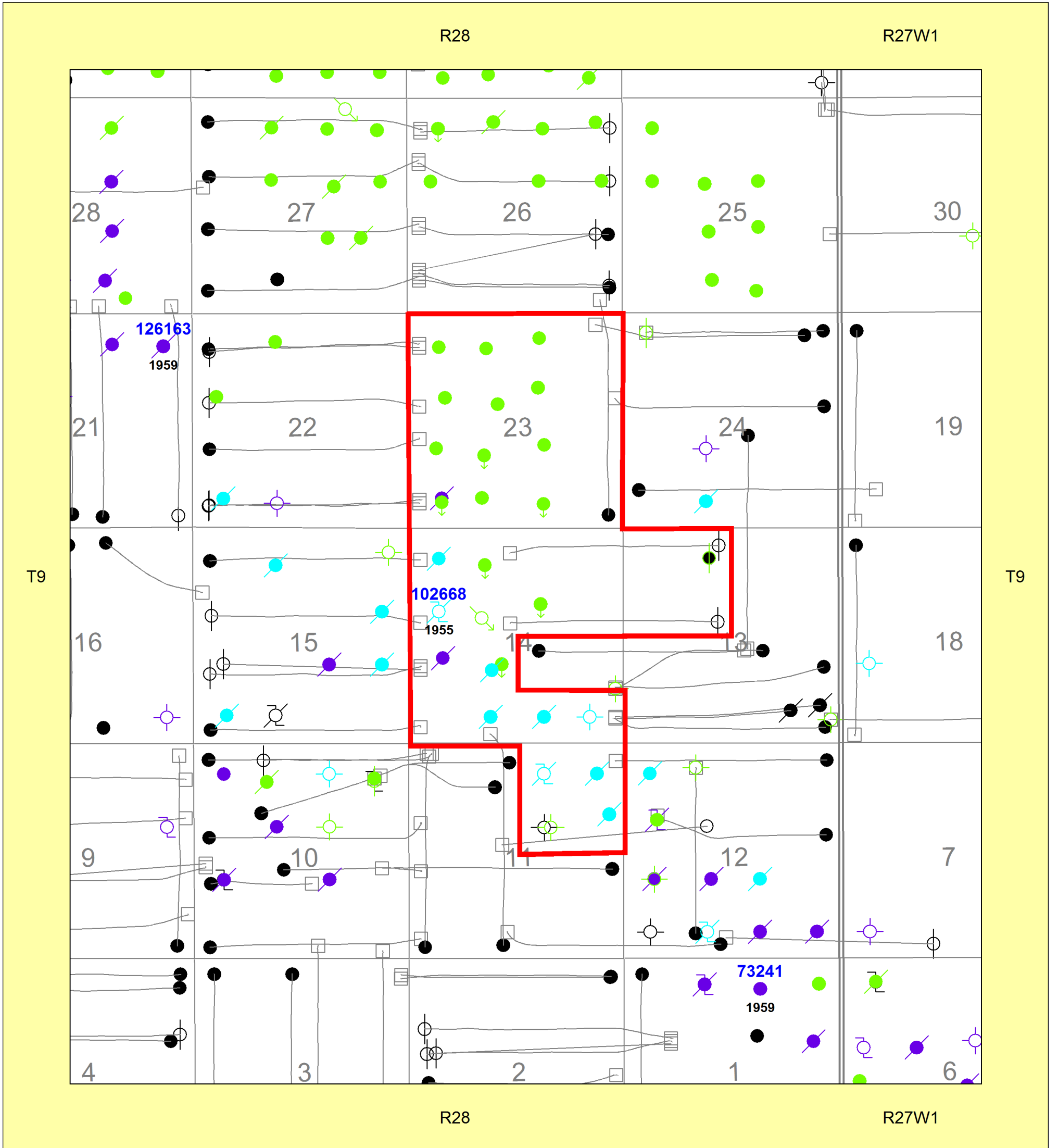


By : K McNeil


Date : 2015/05/11

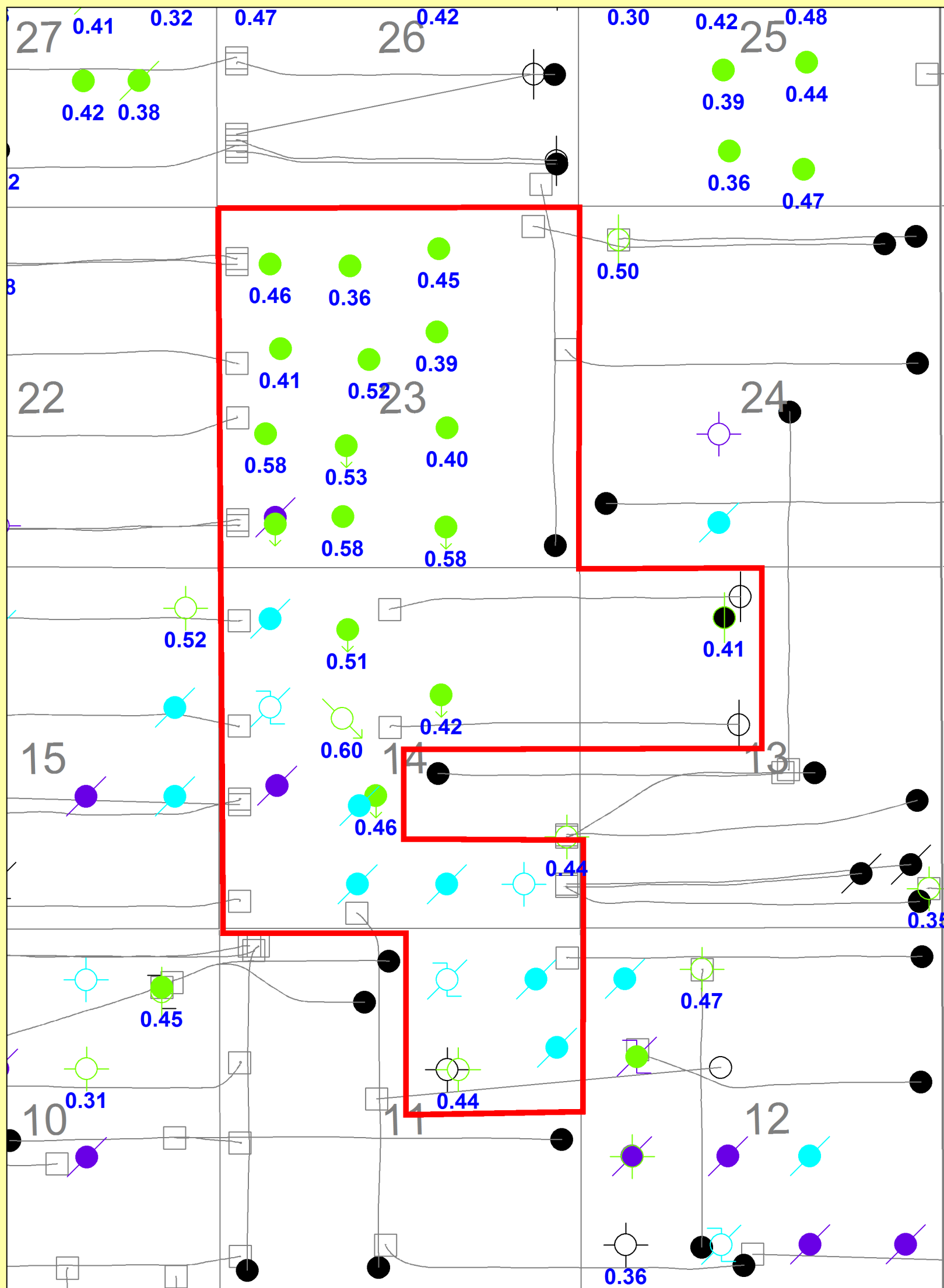
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Project : Daly North



| Legend | |
|--------|-----------------------------|
| Grid | |
| — | DLS - Township |
| — | DLS - Section |
| Wells | |
| ● | Project Wells |
| ● | 101 PetrophysicalLog Interp |
| ● | 20 OldLogs ViewedCore |
| ● | RR prior 19750101 |

| | | |
|---|-----------------|----------------------|
| Tundra Oil and Gas Ltd | | |
| Proposed Cromer Unit No 2 | | |
| Lodgepole FM Salinity Map (ppm) | | |
| Licensed to : Tundra Oil and Gas Ltd | | |
|  www.geologic.com | By : K McNeil | Date : 2015/05/11 |
| | Scale = 1:30000 | Project : Daly North |



Legend

Grid

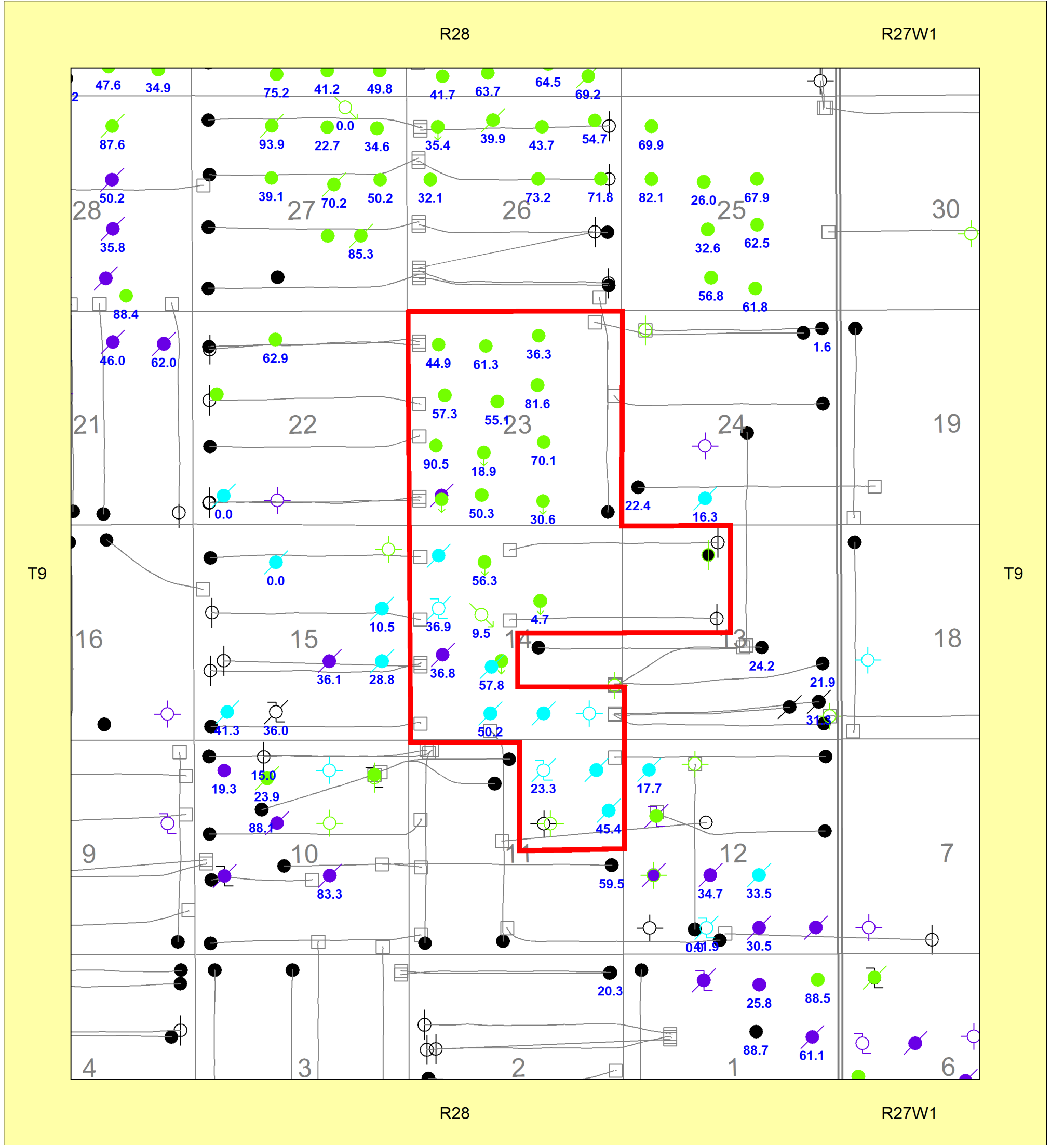
- DLS - Township
- DLS - Section

Wells

- ⊕ Project Wells
- ⊕ 101 PetrophysicalLog Interp
- ⊕ 20 OldLogs ViewedCore
- ⊕ RR prior 19750101

Average Sw within Proposed Cromer Unit No. 2 is 49%

| | | |
|--|-----------------|----------------------|
| <h2 style="margin: 0;">Tundra Oil and Gas Ltd</h2> | | |
| <h1 style="margin: 0;">Proposed Cromer Unit No 2</h1> <h2 style="margin: 0;">Sw - Lodgepole Reservoir Section</h2> | | |
| Licensed to : Tundra Oil and Gas Ltd | | |
| | By : K McNeil | Date : 2015/05/11 |
| www.geologic.com | Scale = 1:20000 | Project : Daly North |



- Legend**
- Grid**
- DLS - Township
 - DLS - Section
- Wells**
- Project Wells
 - 101 PetrophysicalLog Interp
 - 20 OldLogs ViewedCore
 - RR prior 19750101


Tundra Oil and Gas Ltd

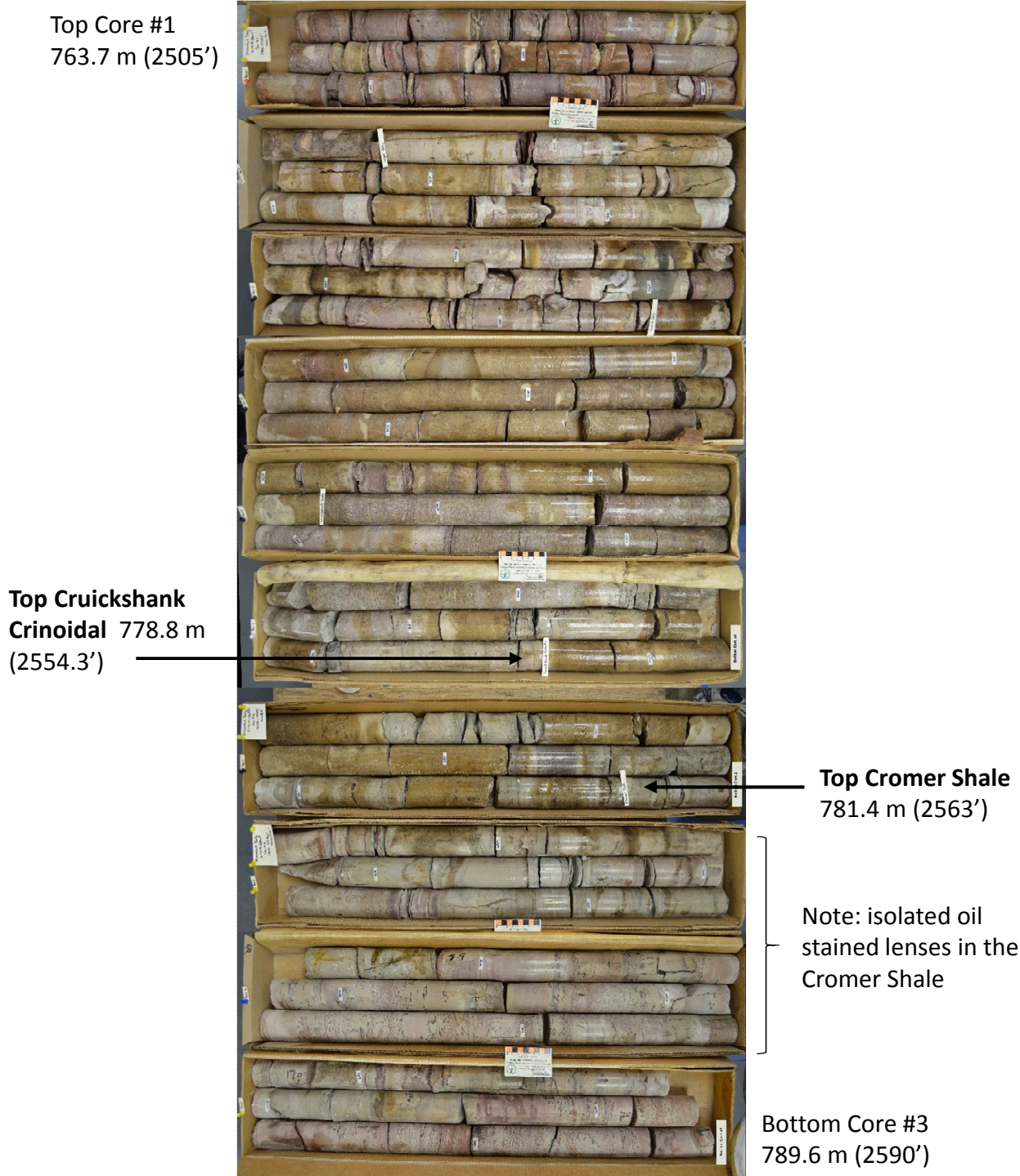
Proposed Cromer Unit No 2

Avg WCT (%) in F12 mo Production

Lodgepole FM

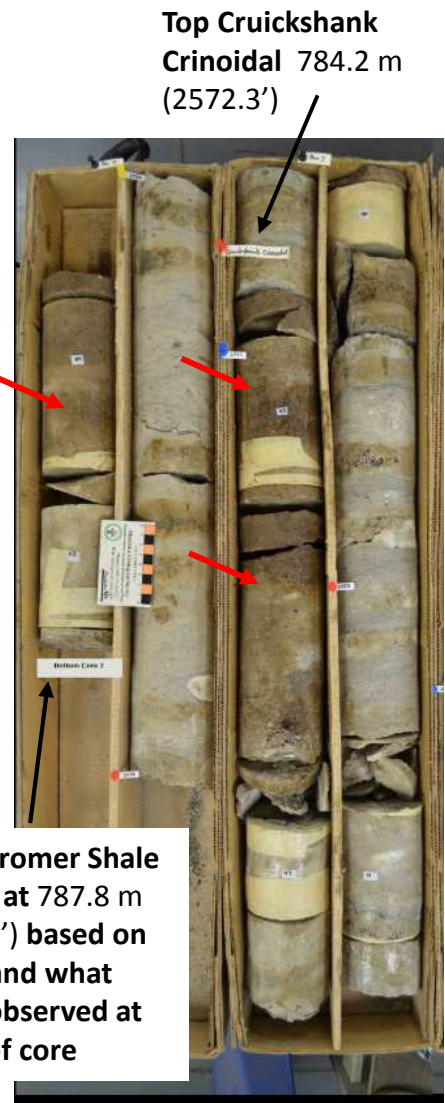
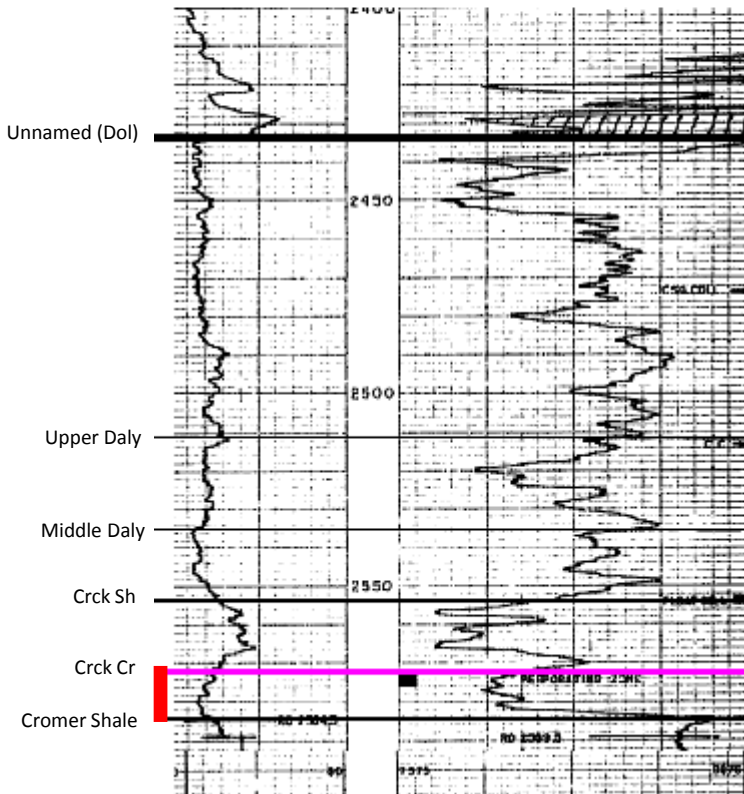
Licensed to : Tundra Oil and Gas Ltd

| | | |
|--|-----------------|----------------------|
|  <small>www.geologic.com</small> | By : K McNeil | Date : 2015/05/11 |
| | Scale = 1:30000 | Project : Daly North |



Appendix 20: Core photograph composite; 100/06-14-009-28W1, 763.7 – 789.6 m (rig released in 1964). Note that excellent to moderate oil stain is observed down to the base of the Lodgepole Reservoir, which corresponds to the base of the Cruickshank Crinoidal (top of Cromer Shale, the bottom seal). This indicates “oil down to” -285.5 mSS. Note the presence of isolated, oil stained lenses in the Cromer Shale which extend down to -289.2 mSS.

100/04-15-009-28W1/00
 +1607 1978/06/21
 2593.0 Mcrmr_sh
 AO ABD Producer
 RUNDLE DALY
 Density 2/2



Bottom Core #2
 780.5m (2585')

Appendix 21: Core photograph ; 100/04-15-009-28W1, 770 – 777 m, interval photographed is highlighted in red on logs (rig released in 1978). 100/04-15-009-28W1 is the structurally lower than any well found within the proposed Cromer Unit. Note the excellent to moderate oil stain in unwashed samples – refer to red arrows. This is observed down to the base of the Lodgepole Reservoir, which corresponds to the base of the Cruickshank Crinoidal (top of Cromer Shale, the bottom seal). This indicates “oil down to” -298.0m at this location.

Appendix 22

References

- Klassen H.J., 1996, An overview of the regional geology and petroleum potential, Lodgepole Formation, southwestern Manitoba; Manitoba Energy and Mines, Petroleum Branch; Petroleum Open file POF 15-96, 42 pages.
- McCabe, Hugh R., 1963, Mississippian Oil Fields of Southwestern Manitoba, Publication 60-5, Province of Manitoba, Dept. of Mines and Natural Resources, p. 6-12.
- Nicolas M.P.B., 2008, Williston Basin Project (Targeted Geoscience Initiative II): Results of the biostratigraphic sampling program, southwestern Manitoba (NTS 62F, 62G4, 62K3), *in:* Geoscientific Paper 2008–1. 28 pages.
- Nicolas M.P.B. and Barchyn D., 2008, Williston Basin Project (Targeted Geoscience Initiative II): Summary report on Paleozoic stratigraphy, mapping and hydrocarbon assessment, southwestern Manitoba, *in:* Geoscientific Paper 2008–2. 21 pages.
- Young H. R. and Rosenthal L.R.P., 1991, Stratigraphic framework of the Mississippian Lodgepole Formation in the Virden and Daly oilfields of southwestern Manitoba; *in:* Sixth International Williston Basin Symposium, p. 113 - 122