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SINCLAIR BAKKEN-THREE FORKS DEVELOPMENT OVERVIEW

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INTRODUCTION

The Sinclair Field was designated January 1, 2005. The field covers 28 sections in Townships 7 and 8, Ranges 28 and 29 (Figure 1). Prior to 2002, 15 wells were drilled with the total well depth to the Lodgepole. The discovery of well 3-6-7-29 WPM in 2004 is credited with beginning the excitement and success of Sinclair.

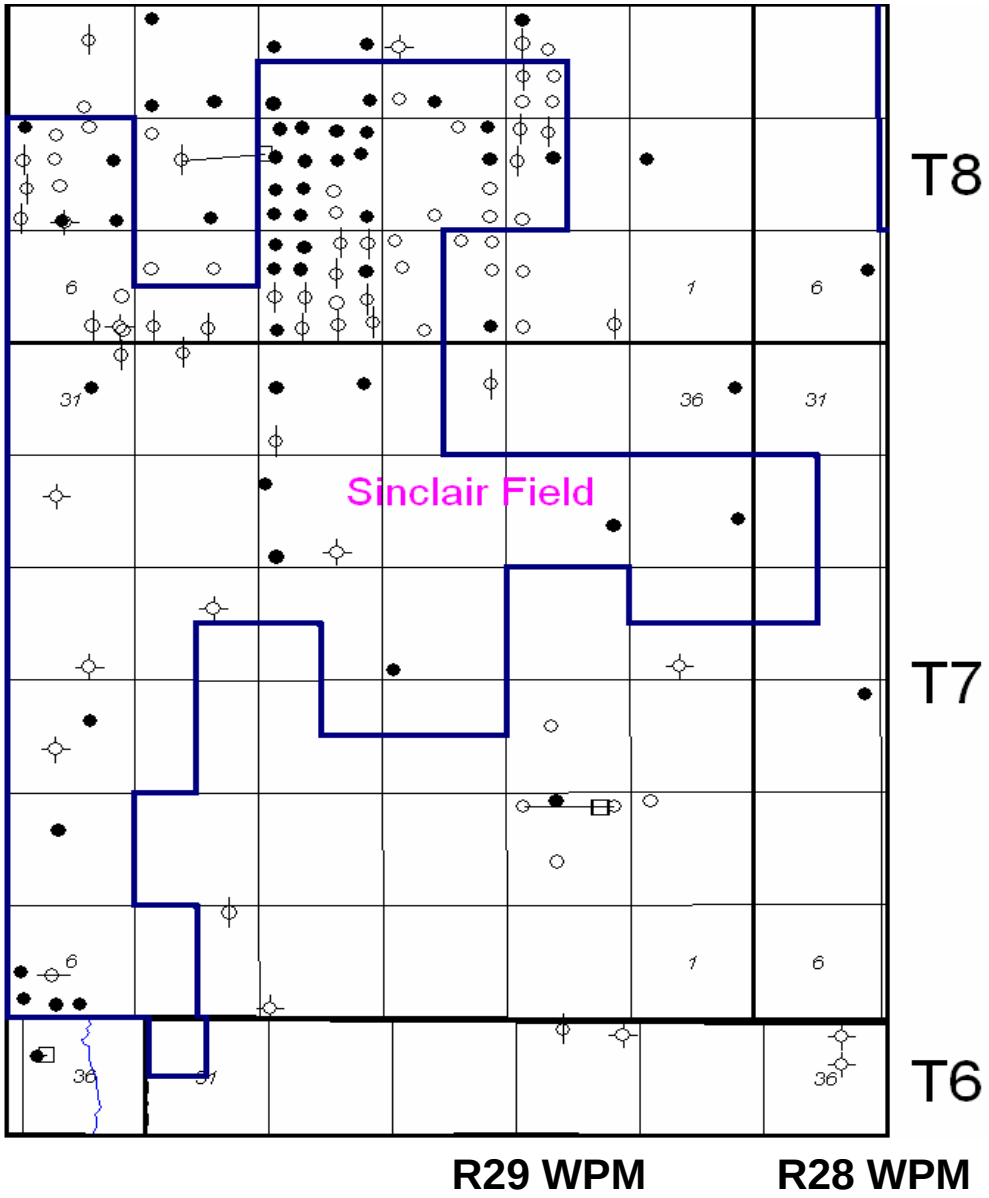

Figure 1 – Sinclair Field (as of January 1st, 2005).

To date, over 200 wells have been licensed in the Sinclair Field. As of September, 2005 a total of 62 wells (confidential and non-confidential) have been drilled by Tundra Oil and Gas, Rideau Petroleums, Kiwi Resources, and Grand Banks Energy. There have been 5 commingled Bakken-Three Forks pools designated in the Sinclair field (Figure 2).

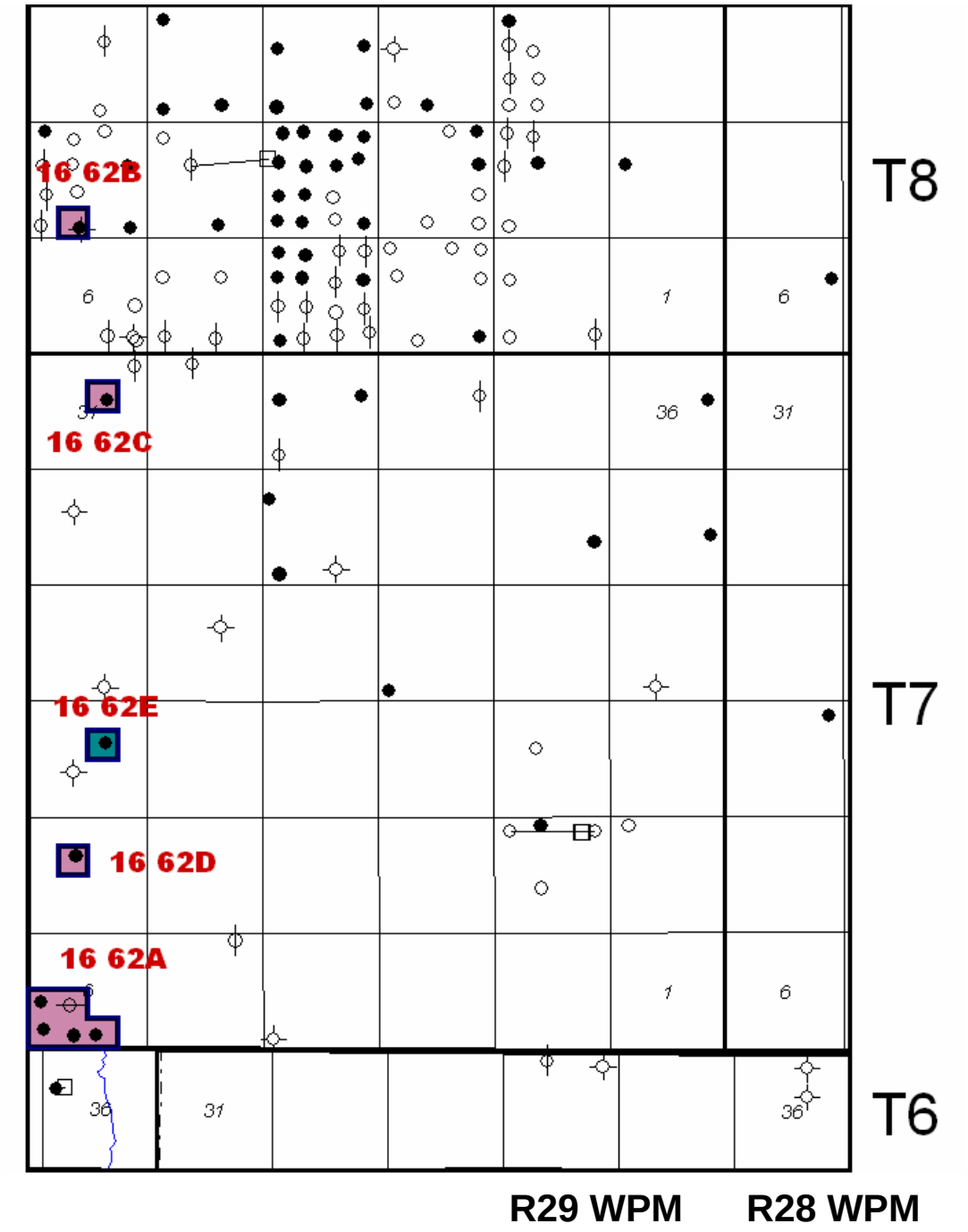

Figure 2 – Sinclair Pools Designations (as of January 1st, 2005).

The average costs for drilling and completing a vertical Sinclair Bakken well is approximately $500,000 and takes on average 4.5 days to drill. The average well depth is 1045 metres. At peak drilling periods, the Sinclair field has seen as many as 6 drilling rigs working.

Cumulative oil production from the 24 non-confidential wells in the Sinclair field as of July, 2005 was 27,550 m^3.

GEOLOGY

General Stratigraphy

The Bakken Formation is a thin unit that crosses the Devonian-Mississippian boundary, and is located in the Three Forks Group (Table 1). It is divided into three clastic members; in ascending order these are the Lower, Middle and Upper Member. Together, the members straddle the Devonian-Mississippian boundary. Each successively younger member overlaps the older member with greater areal extent. The Lower Member is not present in the Sinclair area. The Upper Member has a distinct well log trace that can be seen in Figure 3.

Era	Period	Group	Formation	Member/Facies
Paleozoic	Mississippian	Madison	Charles	
			Lodgepole (Upper)	Flossie Lake
				Whitewater Lake
			Lodgepole (Lower)	Upper Daly
				Lower Daly
				Cruickshank Shale
				Cruickshank Crinoidal
				Cromer Shale
				Basal Limestone
		Bakken		Upper Bakken
				Middle Bakken
				Lower Bakken
	Devonian	Qu'Appelle	Three Forks	
		Saskatchewan	Birdbear	

Table 1 – Partial Manitoba Stratigraphic Column

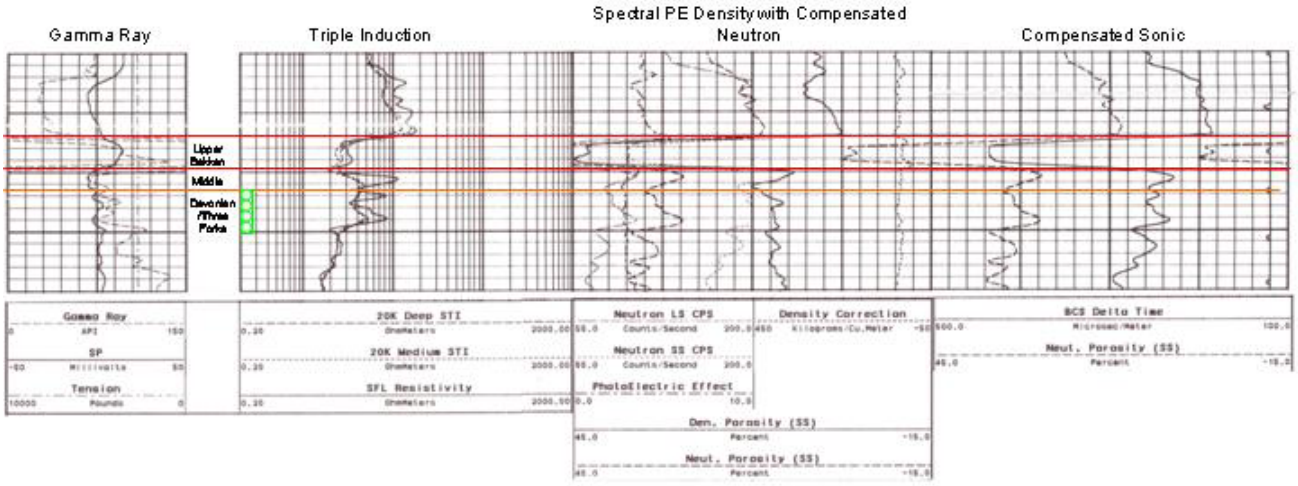

Figure 3 – Type Log for the Bakken and Three Forks Formations, Sinclair Field. Red lines indicate the top and bottom of the Bakken Formation. The green circles represent the reservoir unit, but also show the producing cycle of the Three Forks Formation. The logs are gamma ray, triple induction, spectral PE density with compensated neutron and compensated sonic, respectively. This is a scanned image from a well located at 9-9-8-29 WPM (Licence No. 5285).

Underlying the Bakken Formation is the Qu'appelle Group containing the Three Forks Formation, which primarily is dolomite. For reference, the Lodgepole Formation of the Madison Group overlies the Bakken Formation.

Three Forks Formation

The lithology of the Three Forks Formation is variable across the Williston basin (Figures 4, 5). It can be a green to grey, blocky, silty shale or a green and brown mottled to massive dolomitic shale (Lefever *et al*, 1991). Deeper in the formation, there can be continuous or partial oxidization. In other instances interbedded siltstone and shale have been reported.

Figure 4 – Three Forks Formation. This core photo was taken at a drilled depth of 1033 m, near the top of the perforated/producing interval in the well located at 10-31-7-29 WPM. The well is perforated from 1033 - 1037 m.

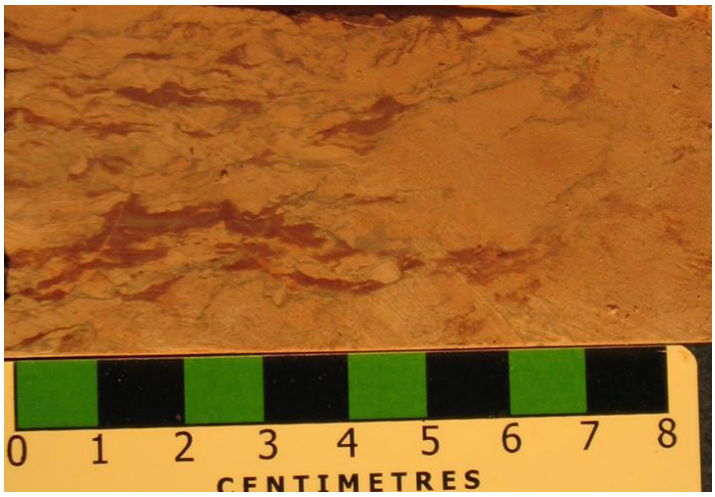

Figure 5 – Three Forks Formation Oxidation. The red colouring indicates the partial oxidation seen just below the perforated interval. The Three Forks Formation becomes completely oxidized in places deeper in this well. Photo taken at a drilled depth of 1038.5 m in core of a well located at 10-31-7-29 WPM.

Throughout the Sinclair area the Middle Bakken overlies the Three Forks Formation unconformably (Figure 6) due to the erosion of the Lower Bakken. The Middle Bakken and Three Forks are not always easily distinguished due to multiple similarities in lithology. Both of the Middle Bakken and the top of the Three Forks produce together as one flow unit.

The log trace of the Three Forks is represented by a series of 3 cycles. Each is recognized by an increasing API count with depth. Only the cycle located at the very top of the Three Forks, or just beneath the Middle Bakken is oil producing (Figure 3 – green circles).

Figure 6 – Three Forks Formation Top. A sharp contact between the Three Forks and Middle Bakken. A rare occurrence. Photo taken at a drilled depth of 1082.7 m from core of a well located at 4-6-7-29 WPM.

Middle Bakken Member

This is the oil producing member of the Bakken and the other half of the flow unit. Overall, the lithology is argillaceous and dolomitic. Contorted bedding and/or crossbedding as well as massive bedding are present (Figures 7, 8). Thickness of the Member in the Sinclair area ranges between less than 1 m and 6 m. Porosity is predominantly intergranular (Martiniuk, 1988), being the most obvious in the coarser grained laminae.

In Manitoba there are four lithofacies recognized according to Fox and Martiniuk (1994). These are in ascending order: (1) fine-grained sandstone that varies between massive, slightly wavy bedding and thinly laminated; (2) interbedded very fine to fine-grained silty sandstone and silty shale; (3) very fine-grained argillaceous sandstone/siltstone with discontinuous lenses or wavy bedding interbedded with silty shale; and (4) massive and sometimes burrowed shaly siltstone to silty shale. For a more detailed lithology see Lefever *et al.* (1991) or Fox and Martiniuk (1994). Lithofacies 1 is the primary reservoir and 2 is the secondary reservoir.

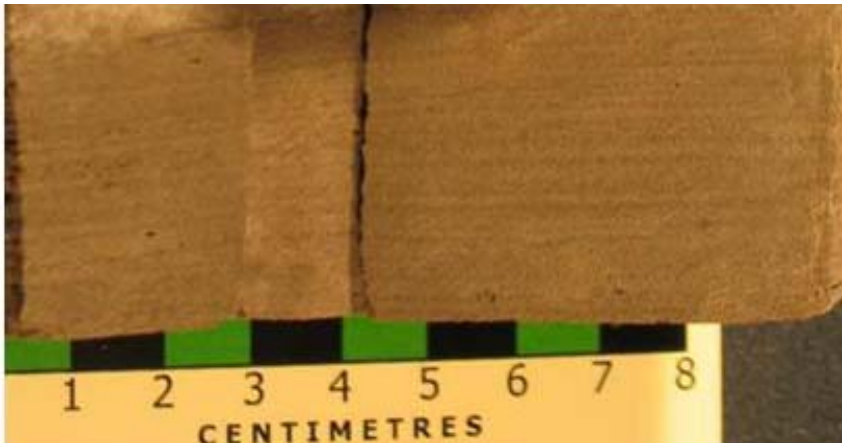

Figure 7 – Middle Bakken Member Bedding. Lithofacies 2. This core photo was taken at 1030.6 m of drilled depth. Taken of 10-31-7-29 WPM.

Figure 8 – Middle Bakken Member Crossbedding. Lithofacies 1. This core photo was taken at a drilled depth of 1080.6 m. Taken of 10-31-7-29 WPM.

Upper Bakken Member

The Upper Member of the Bakken Formation is a black, massive and shale (Figure 9). It is noncalcareous and can appear fissile or finely banded. The average thickness of the Upper Bakken in the Sinclair area is approximately 2 m. Contact with the underlying Middle member is sharp.

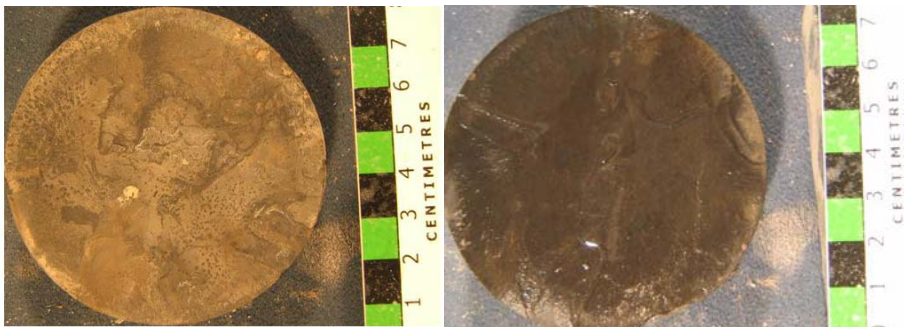

Figure 9 – Upper Bakken Member. Two core photos from a well at 10-31-7-29 WPM at 1028.5 m of drilled depth. The left is dry, the right is wet.

Structure

The Bakken Formation across most of Manitoba mimics the regional tilt of the Williston Basin sediments with an average dip of 9.6 m/km (Figures 10, 11, 12). Structure of the Three Forks Formation, Middle Bakken Member and Upper Bakken Member is orientated northwest to southeast and is fairly uniform. The formation tops are shallower in the northeast and deepen towards the southwest.

Local variations in thickness correlate between both of the Bakken Members and the Three Forks. This may be attributed to salt dissolution of the underlying Prairie Evaporite and subsequent caving/collapse of the overlying strata (Figure 13, 14). This may have occurred in stages while the Bakken and Three Forks was being deposited (LeFever *et al.*, 1991). A Three Forks isopach map is not included due to lack of well control.

Oil production is best when the Middle member is thin and/or the when the Three Forks is a larger contributor to the overall flow unit. This means that when the Middle Bakken contributes more to the flow unit in thickness, the production is not as high as when it is less thinner. From the isopach maps, this usually occurs when the Upper Bakken is thick.

RESERVOIR ROCK AND FLUID PROPERTIES

To date, there are only seven non-confidential wells with drill stem test data. Individual DST information is available in Appendix C. The range of reservoir pressures of the Sinclair field – Bakken formation ranges from 8261 kPa to 10609 kPa.

The average reservoir temperature from DST data is 28.5 °C. The average core porosity is 14.7% (Bakken) and 16.5% (Three Forks) and the average core permeability is 1.8 mD (Bakken) and 4.3 mD (Three Forks). Original oil in place estimates for each of the 5 pools in the Sinclair field are available in Appendix D. The OOIP estimates for the 5 pools range from 54,141 m^3/LSD to 119,514 m^3/LSD. The OOIP estimate is based on a typical well in each of the 5 pools.
The porosity-permeability cross-plot of core data from the 12 non-confidential cores is shown in Figure 10. The cross-plot indicates that a permeability cut-off of 1 mD corresponds to a porosity cut-off of 12.6 %.

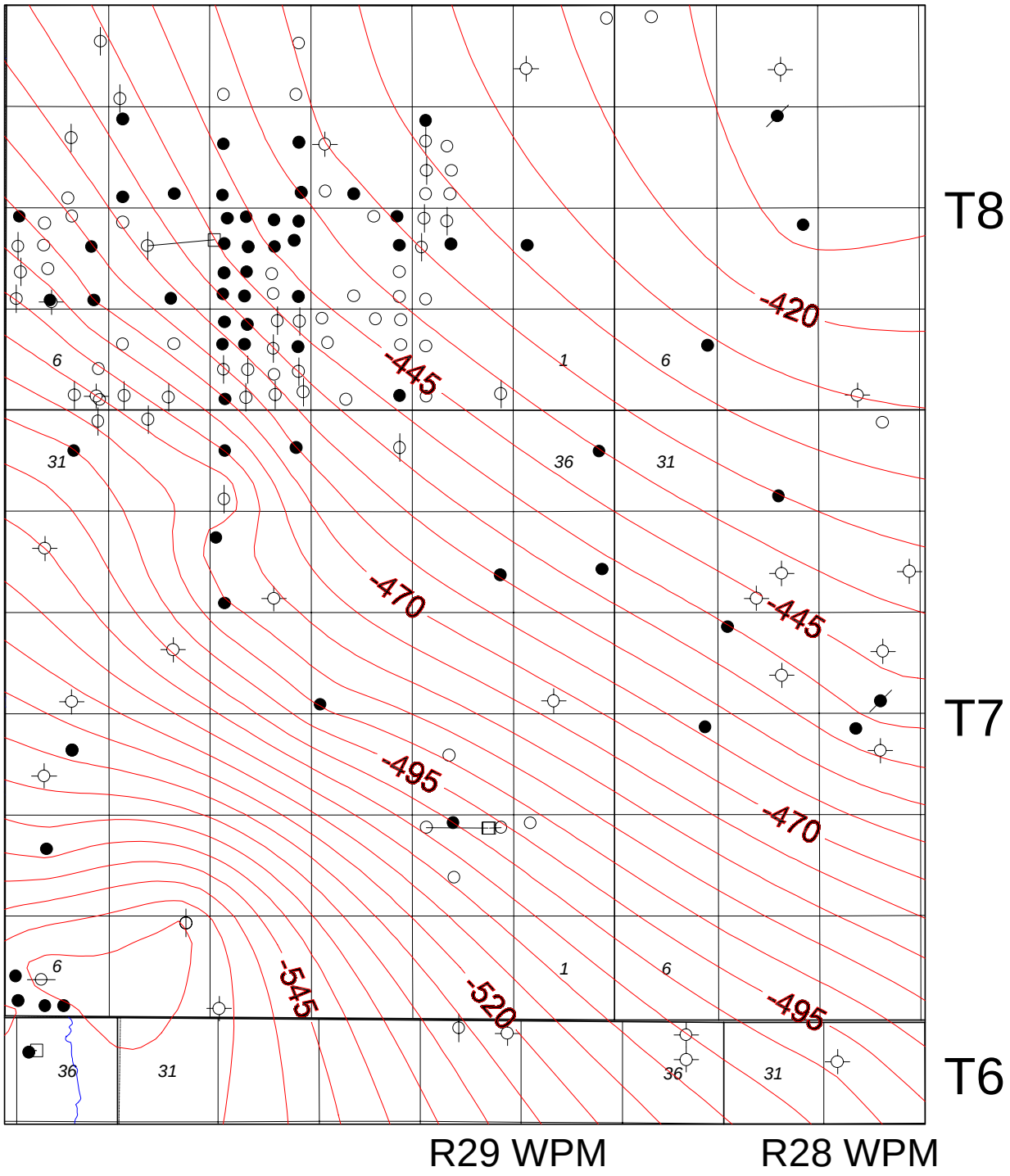

Figure 10 – Devonian Erosional Surface/Three Forks Structure Map. Geoscout created map showing subsea elevations with an interval of 5 m. Map based on available off-confidential data.

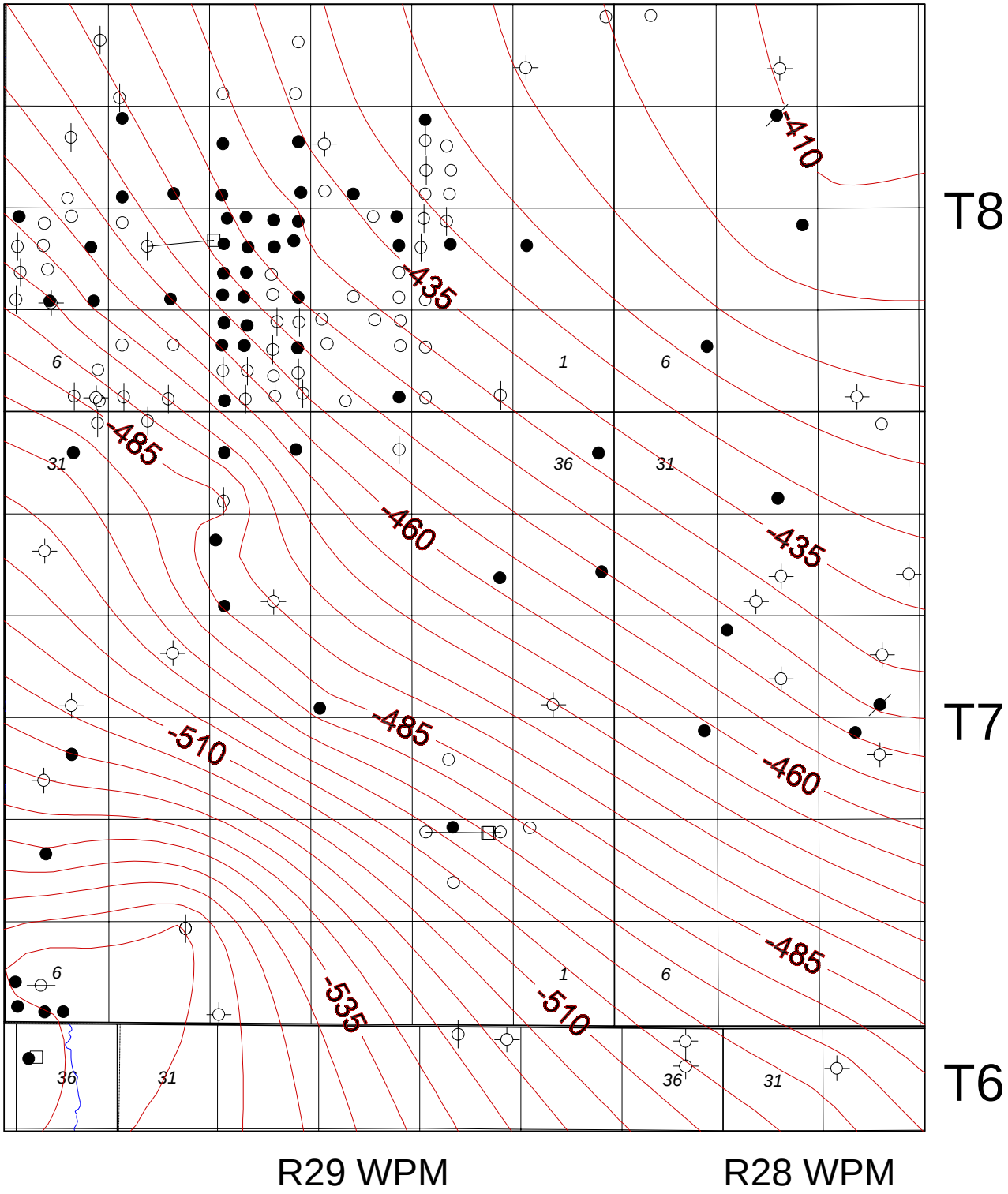

Figure 11 – Middle Bakken Member Structure Map. Geoscout created map showing subsea elevations with an interval of 5 m. Map based on available off-confidential data.

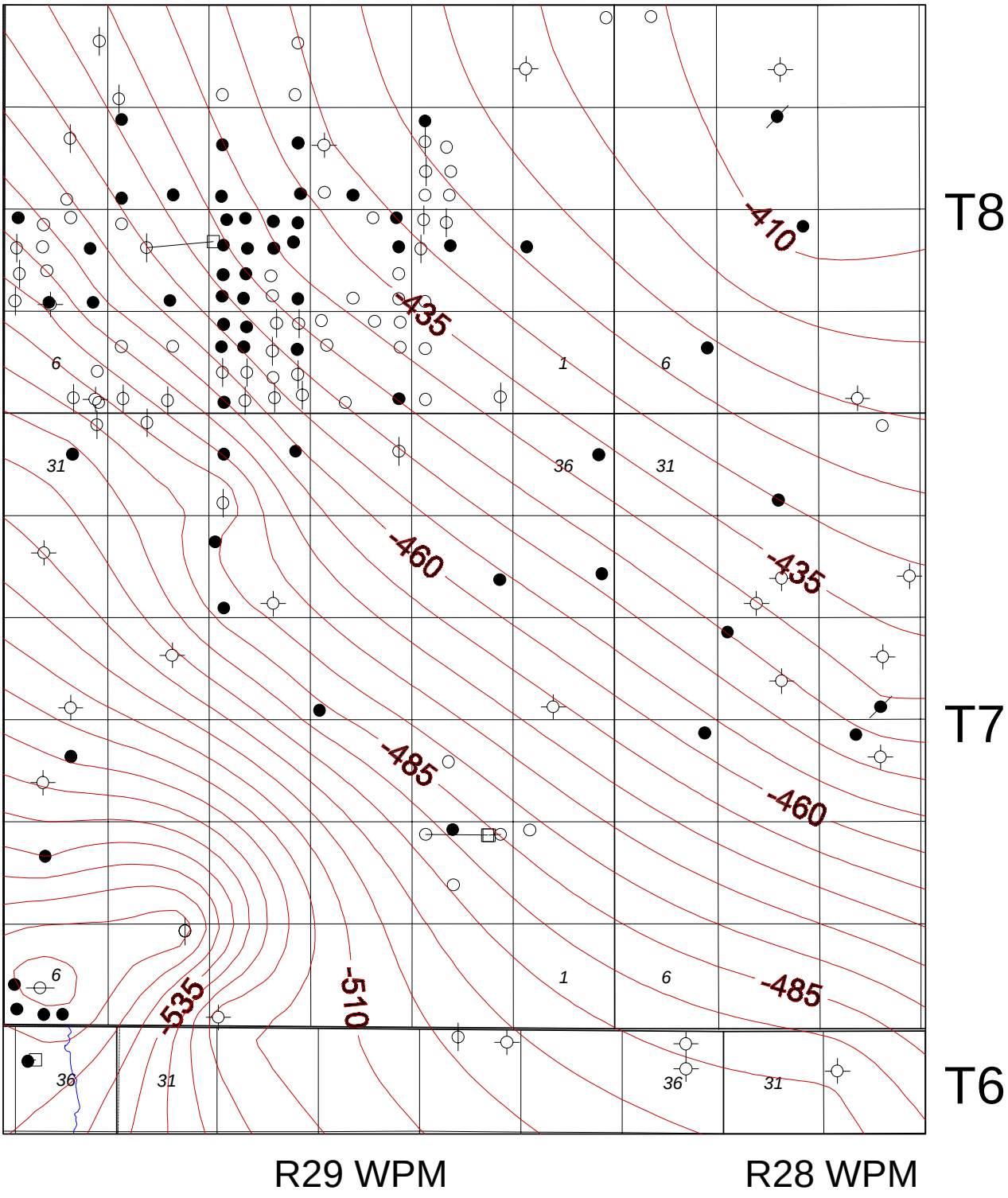

Figure 12 – Upper Bakken Structure Map. Geoscout created map showing subsea elevations with an interval of 5 m. Map based on available off-confidential data.

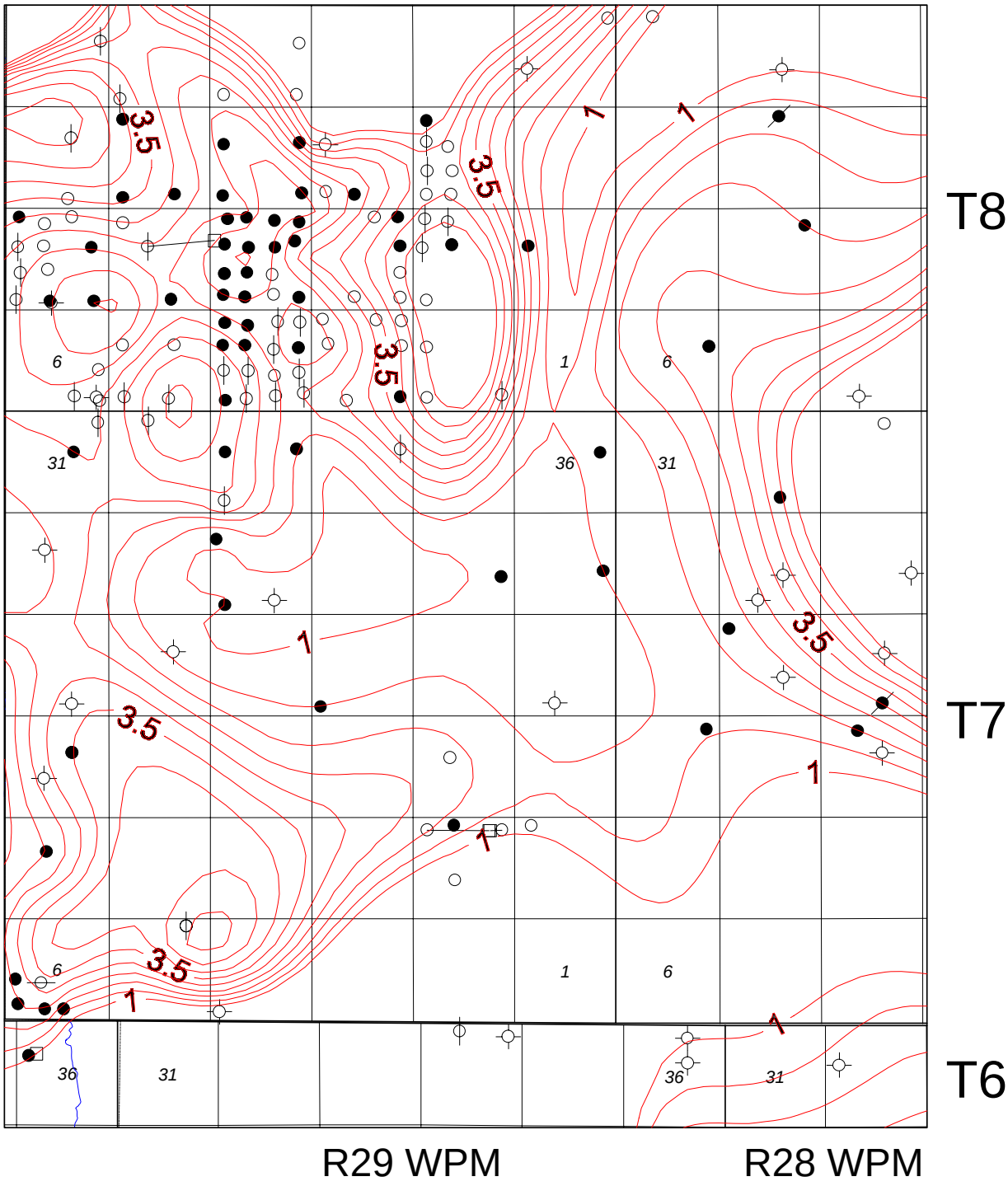

Figure 13 – Middle Bakken Isopach Map. Geoscout created map showing subsea elevations with an interval of 0.5 m. Map based on available off-confidential data.

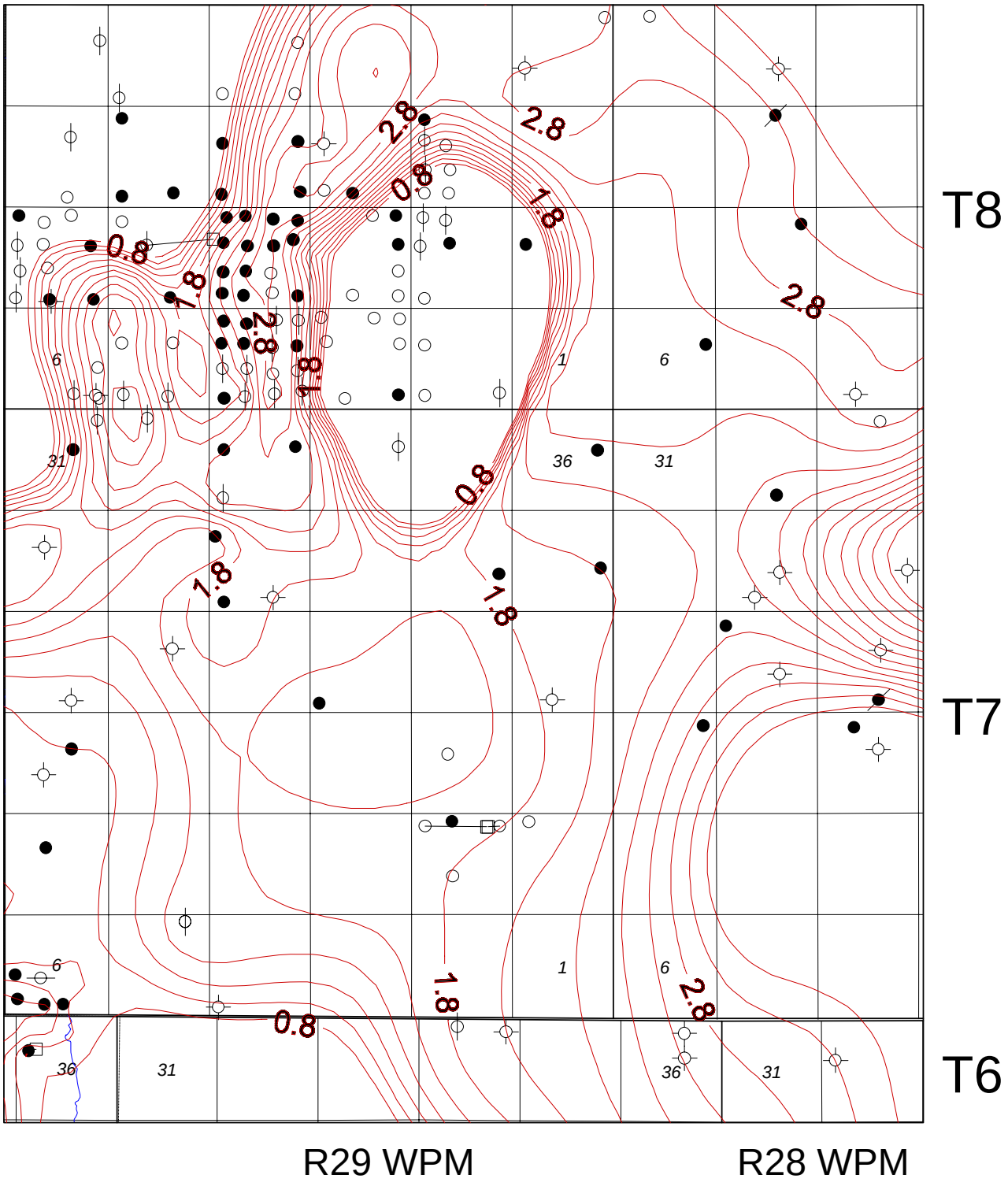

Figure 14 – Upper Bakken Isopach Map. Geoscout created map showing subsea elevations with an interval of 0.2 m. Map based on available off-confidential data. The contour interval is different from the Middle Bakken Member isopach map due to the much smaller data range.

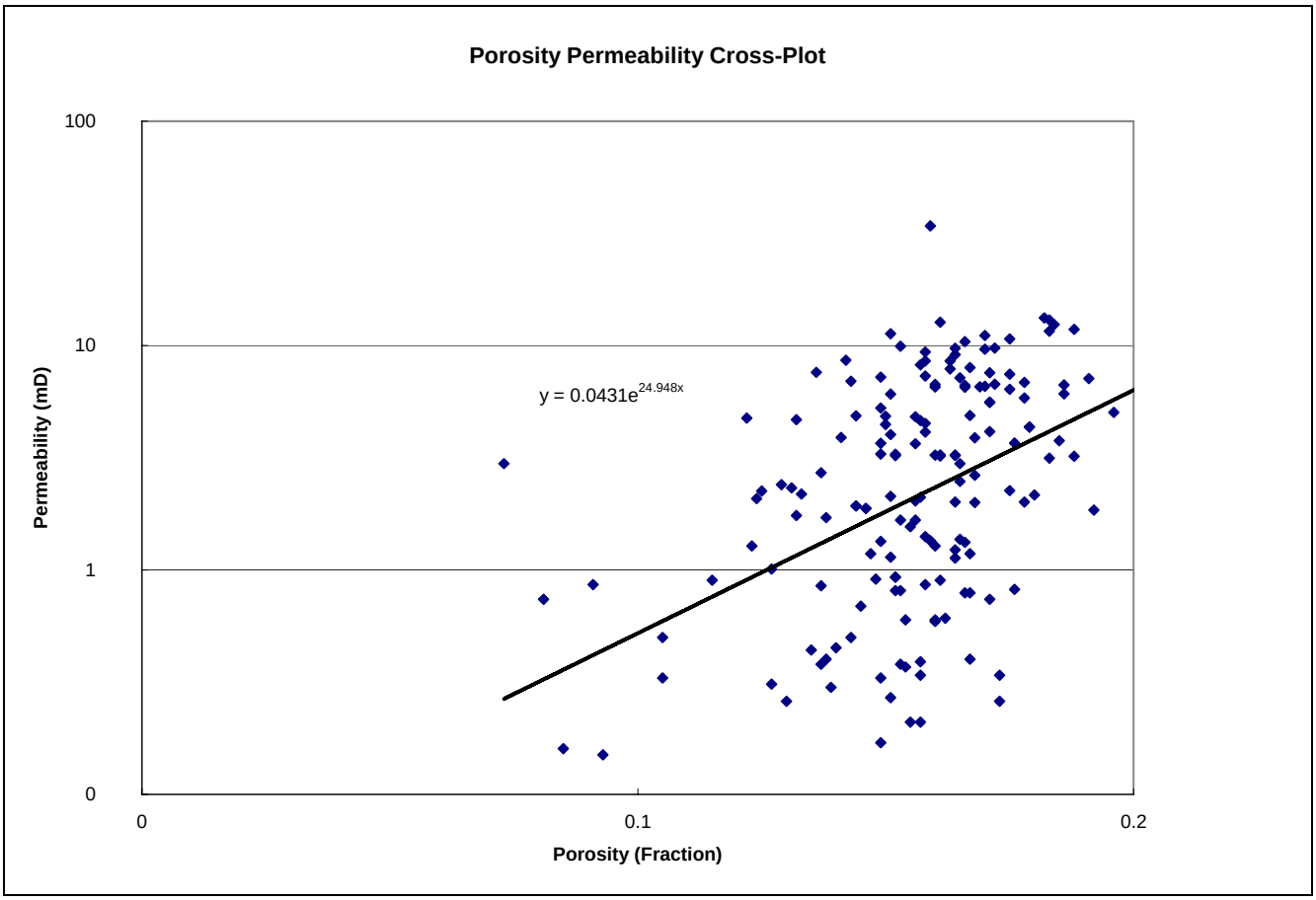

Figure 15 – Sinclair Field Porosity – Permeability Cross-Plot

An average water analysis for the Sinclair field can be seen in Table 2 below.

pH	7.2
H_2S	Positive
Specific Gravity	1.1132
Total Dissolved Solids	173202.1
Bicarbonate (HCO_3)	112.4 mg/L
Chloride (Cl)	100068.2 mg/L
Sulfate (SO4)	6022.3 mg/L
Calcium (Ca)	2261.8 mg/L
Magnesium (Mg)	549.7 mg/L
Sodium (calculated)	64187.2 mg/L
Iron (Fe)	0.6

Table 2 – Sinclair Field Average Water Analysis

A typical oil analysis for the Sinclair field can be seen in Table 3 below.

Specific Gravity @15 deg C	API gravity @15 deg C	Sulfur content % by weight
0.8248	40.07	0.207

Table 3 – Sinclair Field Average Oil Analysis

PRODUCTION HISTORY

As of July, 2005 total non-confidential oil production for the Sinclair field was approximately 3200 m^3/month (Figure 16, see also Figure 18). Current average non-confidential well production is over 3m3/day. Normalized oil production can be seen in Figure 17. The average water cut is 41% and the oil produced is light sweet crude.

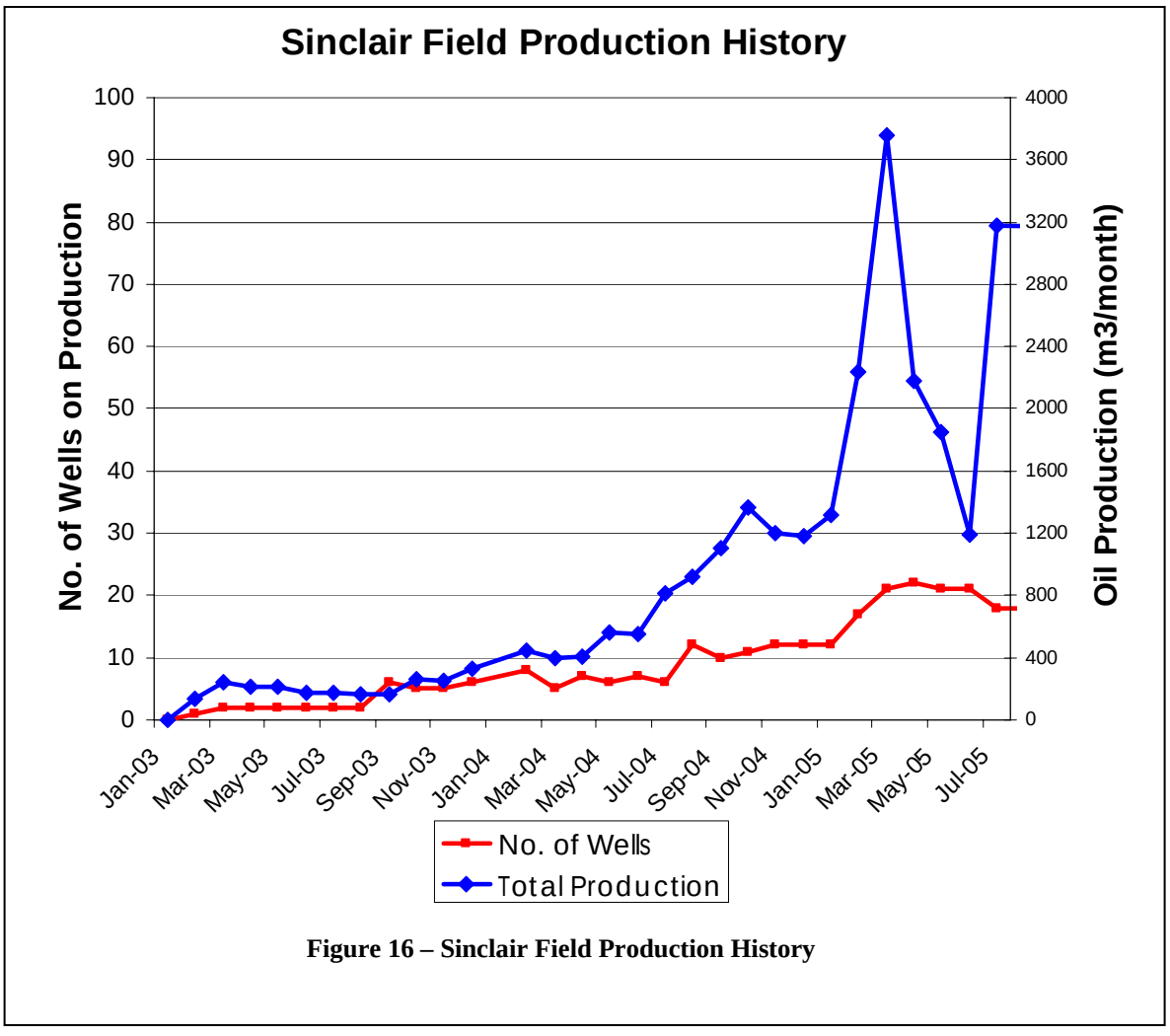

Figure 16 – Sinclair Field Production History

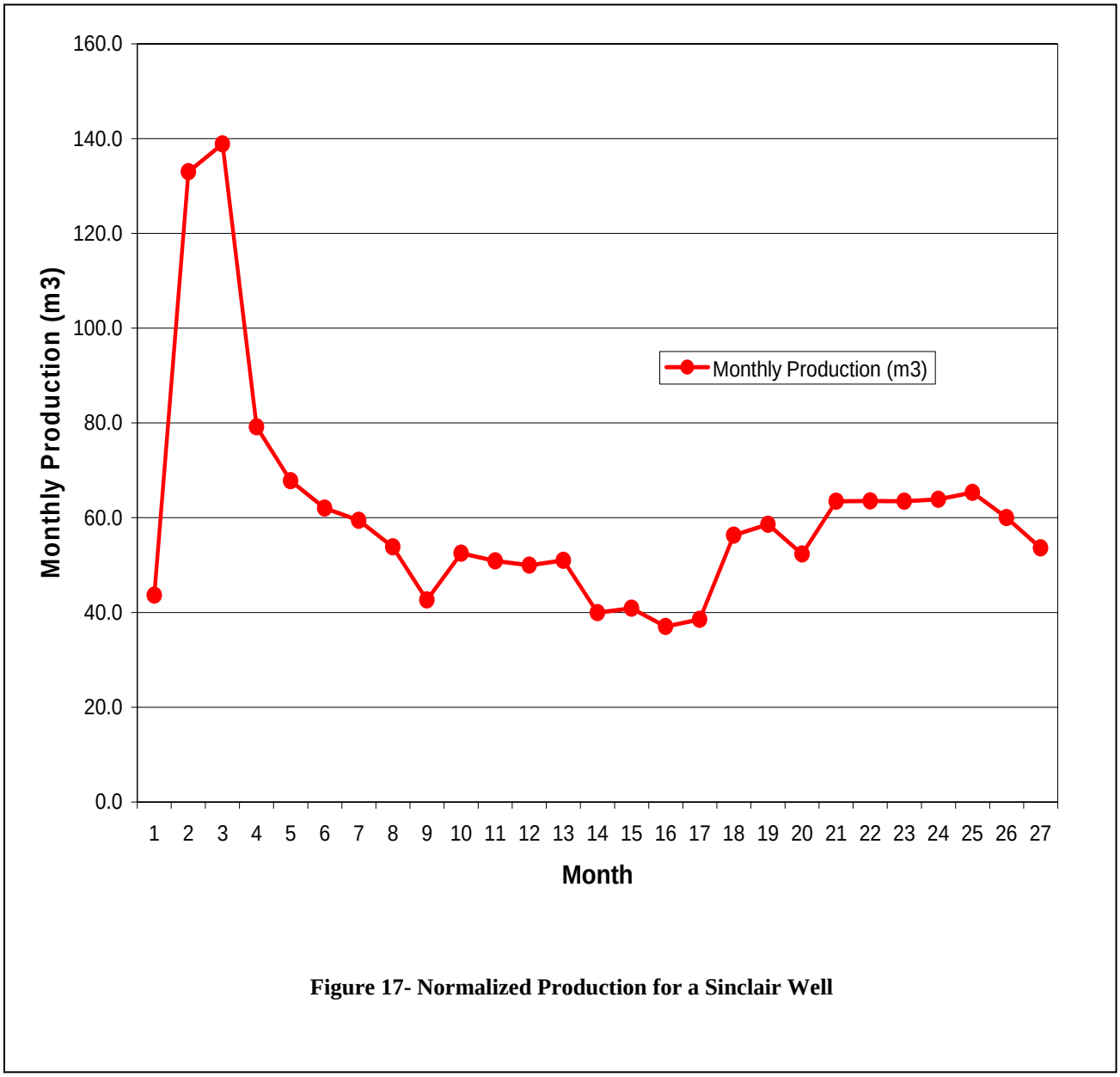

Figure 17- Normalized Production for a Sinclair Well

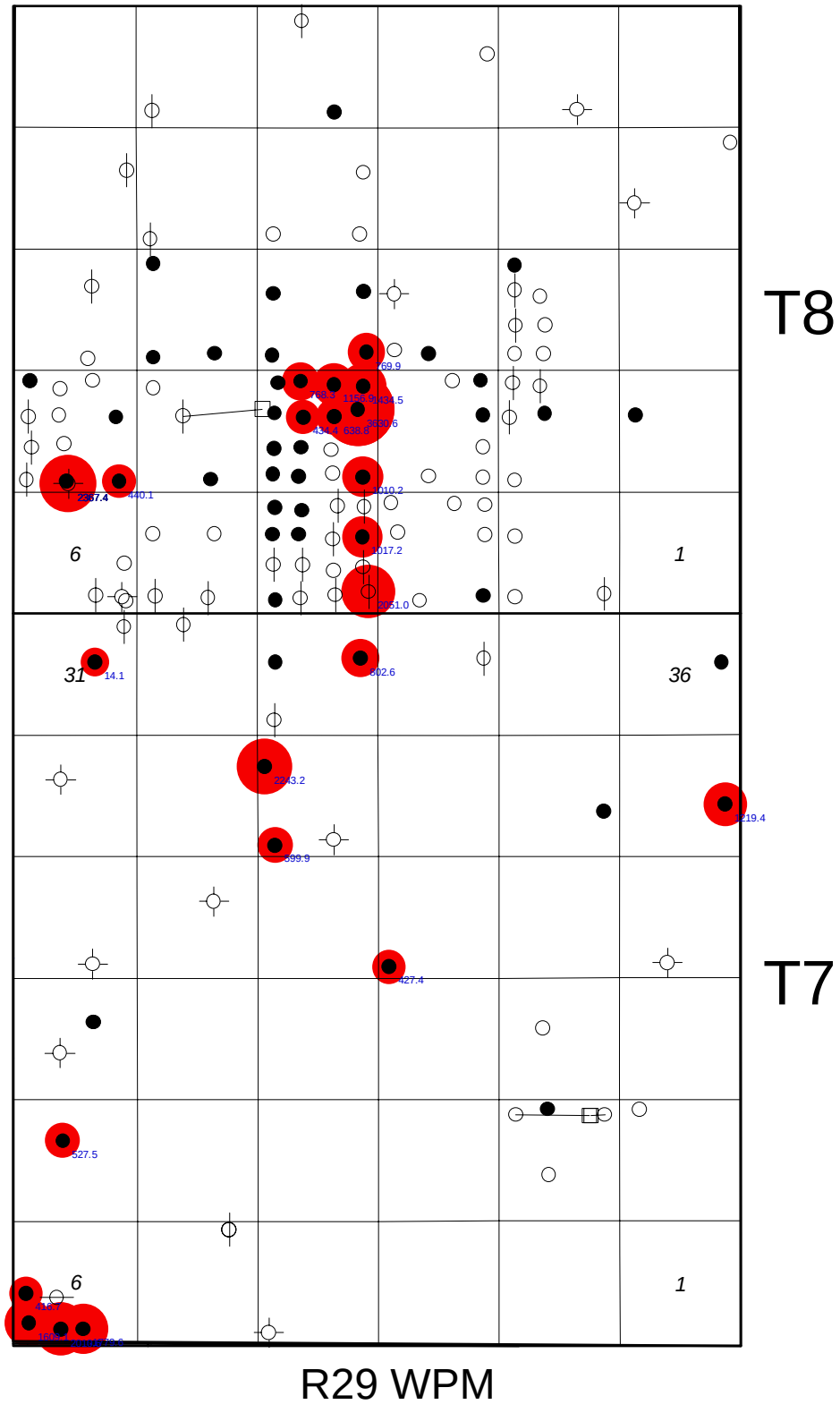

Figure 18 – Sinclair Production Bubble Plot. Includes wells that are off confidential as of July 2005. Posted values are production in m^3.

REFERENCE

LeFever, J.A., Martiniuk, C.D., Dancsok, E.F.R. and Mahnic, P.A., 1991. Petroleum Potential of the Middle Member, Bakken Formation, Williston Basin *in* Williston Basin Sixth International Symposium, Regina 1991; Special Publication Number 11 ed. Christopher, J.E. and Haidl, F.

Fox, J.N., and Martiniuk, C.D., 1994. Reservoir Characteristics and Petroleum Potential of the Bakken Formation, Southwestern Manitoba. Journal of Canadian Petroleum Technology. Vol 33, No. 8, pgs 19-27.

Martiniuk, C.D., 1988. Regional Geology and Petroleum Potential of the Bakken Formation, Southwestern Manitoba. Manitoba Energy and Mines, Petroleum Branch. Petroleum Open File Report POF 8-88. Winnipeg, Manitoba.

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APPENDICES

Appendix A: Sinclair Field Core Data

Well Location (WPM)	Cored Interval (m)	Ave Core Porosity (%)	Ave Core Permeability (mD)	Net Pay Thickness (m)	Gross Pay Thickness (m)
2-21-7-28	825.39 - 858.93	Bakken - 14.1	Bakken - 1.23	0.61	0.61
16-8-8-28	914.0 - 932.0	Bakken - 15.7 Three Forks - 20.7	Bakken - 2.09 Three Forks - 1.51	3.11	4.90
16-5-7-29	1077.21 - 1089.21	Not Available		5.30	8.50
4-6-7-29	1080.0 - 1098.0	Bakken - 13.7 Three Forks - 16.2	Bakken - 0.85 Three Forks - 4.86	2.09	4.99
11-7-7-29	1062.0 - 1080.05	U. Bakken - 14.8 M. Bakken - 15.9	U. Bakken - 1.50 M. Bakken - 4.63	3.71	5.05
4-22-7-29	1004.0 - 1022.0	Bakken - 15.2 Three Forks - 15.8	Bakken - 0.81 Three Forks - 0.86	2.53	4.28
8-25-7-29	953.0 - 968.0	Three Forks - 14.6	Three Forks - 2.25	4.83	5.27
4-28-7-29	1002.0 - 1020.0	Bakken - 13.7 Three Forks - 16.0	Bakken - 2.86 Three Forks - 2.03	4.75	5.11
12-28-7-29	1002.0 - 1020.0	Bakken - 16.0 Three Forks - 18.0	Bakken - 2.54 Three Forks - 6.10	3.65	4.13
10-31-7-29	1028.4 - 1047.0	Bakken - 15.3 Three Forks - 16.1	Bakken - 1.67 Three Forks - 5.59	6.53	10.88
9-33-7-29	989.0 - 1007.0	Bakken - 10.5 Three Forks - 15.2	Bakken - 0.42 Three Forks - 13.3	3.71	6.66
1-4-8-29	980.5 - 998.5	Bakken - 14.9 Three Forks - 16.4	Bakken - 0.17 Three Forks - 3.23	5.05	12.49
9-4-8-29	975.0 - 990.0	Not Available		4.70	6.20
1-9-8-29	970.0 - 983.0	Not Available		4.60	7.64
9-9-8-29	969.0 - 980.0	Bakken - 16.5 Three Forks - 17.1	Bakken - 2.48 Three Forks - 3.61	5.79	6.92
1-16-8-29	967.5 - 980.0	Not Available		4.60	6.60

Gross Pay Thickness:
Zone of core permeabilites where the majority of samples are over 1.0 mD.
Net Pay Thickness: Gross Pay Thickness minus tight zones

Appendix B: Sinclair Field Well Data

Well Location (WPM)	Licence #	KB Elevation (m)	Perforated Interval (m)	Formation Subsea Top (m)		
				U. Bakken	M. Bakken	Three Forks
2-21-7-28	91	493.20	838.5 - 839.4	-440.71	-443.76	-446.8
10-21-7-28	144	496.20		-437.4	-439.23	-444.11
16-8-8-28	5292	503.58		-407.92	-410.92	-413.42
4-4-7-29	5140	522.04		-515.46	Shallow	
16-5-7-29	4655	521.30	924.0 - 926.0 1082.0 - 1086.0	-555	-556.50	-561.5
2-6-7-29	5239	523.01	1081.0 - 1086.0	-554.5	-556.00	-559.5
3-6-7-29	5143	523.39	1081.0 - 1084.0 1086.0 - 1087.0	-552.65	-554.15	-556.61
4-6-7-29	5240	527.90	1082.0 - 1089.5	-550.65	-552.15	-554.65
5-6-7-29	5252	529.46	1114.8 - 1116.8	-556.04	-557.04	-559.54
6-6-7-29	5253	524.21	1094.0 - 1096.0	-558.9	-559.90	-563.29
11-7-7-29	5195	529.25	1066.0 - 1072.4	-534.75	-535.75	-537.75
10-18-7-29	5201	537.62	1061.5 - 1063.0 1064.75 - 1066.75	-518.88	-520.38	-523.38
4-22-7-29	5271	522.54	1014.0 - 1016.0	-485.96	-487.46	-488.96
8-25-7-29	5309	504.76	957.0 - 959.0	-448.24	-450.24	-451.74
4-28-7-29	5303	518.65	1007.0 - 1009.0	-482.35	-484.35	-485.35
12-28-7-29	5254	524.74	1006.5 - 1010.5	-478.76	-480.76	-481.76
11-30-7-29	1903	540.40		-499.9	-502.00	-505.1
10-31-7-29	5197	536.44	1033.0 - 1037.0	-491.56	-493.06	-495.56
4-33-7-29	5433	525.22		-484.75	-487.25	-490.25
9-33-7-29	5364	526.92	991.0 - 994.0	-460.58	-463.08	-464.58
1-4-8-29	5302	527.01	984.0 - 986.0	-452.99	-454.99	-456.99
2-4-8-29	5387	528.65	988.5 - 991.5	-456.35	-459.35	-461.35
3-4-8-29	5408	529.81	995.0 - 998.0	-461.69	-463.69	-466.69
9-4-8-29	5373	526.90	978.0 - 981.0	-448.1	-450.60	-451.6
1-7-8-29	5405	532.69	1002.5 - 1005.5	-466.31	-468.81	-469.81
3-7-8-29	4666	536.40	1014.0 - 1020.0	-473.6	-475.60	-477.1
1-9-8-29	5374	526.81	972.5 - 975.5	-442.19	-444.60	-446.19
9-9-8-29	5285	529.35	973.0 - 975.0	-438.15	-440.15	-443.15
10-9-8-29	5370	528.86	973.0 - 976.0	-440.14	-443.14	-444.64
11-9-8-29	5384	531.89	978.0 - 980.0	-442.61	-445.11	-446.11
14-9-8-29	5385	531.47	976.0 - 978.0	-441.03	-443.53	-445.53
15-9-8-29	5371	530.10	974.25 - 977.25	-439.14	-442.14	-443.14
16-9-8-29	5372	529.92	970.5 - 974.5	-438.08	-441.08	-442.08
12-15-8-29	504	525.20		-430.65	-433.40	-434.9
1-16-8-29	5375	530.64	970.0 - 973.0	-465.36	-438.36	-439.86
5-24-8-29	2088	518.16		-416.66	-419.40	-422.76

Appendix C: Sinclair Drill Stem Test and Oil & Gas Shows

License #	UWI/Location	Formation or Member	DST # and Interval (m)	Oil Show	Gas Show	DST Recovery/show Comments	VO $1^{st}/2^{nd}$ (min)	FP $1^{st}/2^{nd}$ (kPa)	SI $1^{st}/2^{nd}$ (min)	SIP $1^{st}/2^{nd}$ (kPa)	DST Bottom-Hole Temperature °C
5143	3-6-7-29 WPM	Bakken	DST # 1 1075.0-1090.0	x		REC. 48 m GfrOCM	0/59	/2280	59/122	10609/	33
5201	10-18-7-29 WPM	Lodgepole	DST # 1 925.0 - 935.0	x		REC. 90 m GOCM	10/60	489/8351	60/120	8444/8444	30.8
5271	4-22-7-29 WPM	Lodgepole	DST # 1 902.0 - 907.0			REC. 40 m WCM	0/57	51/440	57/117	7950/7952	31
5405	1-7-8-29 WPM	Bakken	DST # 1 1001.5 - 1007	x		REC. 76 m OCM	10/60	549/946	60/120	9637/9430	29
5285	9-9-8-29 WPM	Lodgepole	DST # 1 862.5 - 875			REC. 10 m drM	15/65	212/239	53/113	6179/4075	28
5370	10-9-8-29 WPM	Bakken	DST # 1 970 - 978	x		REC. 56 m frOCM	10/60	570/966	60/120	8466/8261	n/a

Notes:
G-Gassy
fr-Frothy
OCM-Oil Cut Mud
WCM-Water Cut Mud
dr-Drilling

Appendix D: Average OOIP (m3) for Bakken - Three Forks Pools

Pools	Area (ha)	Average Pay (m)	Porosity	Sw	FVF	OOIP(m3)/LSD
Bakken-Three-Forks Pool (16 62B)	16.2	10.8	0.1164	0.395	0.97	119,514
Bakken-Three-Forks Pool (16 62C)	16.2	6.53	0.1598	0.395	0.97	99,205
Bakken-Three-Forks Pool (16 62E)	16.2	7.5	0.122	0.395	0.97	86,989
Bakken-Three-Forks Pool (16 62D)	16.2	3.71	0.1535	0.395	0.97	54,141
Bakken-Three-Forks Pool (16 62A)	16.2	6.7	0.122	0.395	0.97	77,710

Appendix E: Sinclair Field Oil Production Data

Licence	Well Name	Location	On-Prod Date	Pool Code	2003 Total	2004 Total	2005 Total (to end of July)	Total
5143	Tundra Sinclair Prov.	03-06-07-29	18-Jan-04	62A	901.1	785.3	324.2	2010.6
5239	Tundra Sinclair Prov.	02-06-07-29	18-Jan-04	62A	56	1216.6	507	1779.6
5240	Tundra Sinclair Prov.	04-06-07-29	18-Jan-04	62A	70.5	1111.1	427.5	1609.1
5144	Tundra Sinclair	03-07-08-29	26-Jan-04	62B	926.7	942.6	498.1	2367.4
5252	Tundra Sinclair Prov.	05-06-07-29	8-Apr-04	62A	0	264.5	152.2	416.7
5195	Tundra Sinclair	11-07-07-29	13-Jul-04	62D	197.1	233.8	96.6	527.5
5197	Tundra Sinclair	10-31-07-29	18-Jul-04	62C	12	2.1	0	14.1
5201	Tundra Sinclair Prov. COM	10-18-07-29	22-Jul-04	62E	48.5	6.2	0	54.7
5201	Tundra Sinclair Prov. COM	10-18-07-29	22-Jul-04	59A	109.5	8.2	0	117.7
5405	Tundra Sinclair	01-07-08-29	16-Mar-05	62B	0	0	440.1	440.1
5254	Tundra Sinclair	12-28-07-29	17-Mar-05	62F	0	1339.9	903.3	2243.2
5303	Tundra Sinclair Prov.	04-28-07-29	17-Mar-05	62F	0	126.8	473.1	599.9
5271	Tundra Sinclair	04-22-07-29	13-Jun-05	62G	0	247.8	179.6	427.4
5285	Tundra Sinclair	09-09-08-29	22-Jun-05	62H	0	1870.2	1760.4	3630.6
5370	Tundra Sinclair	10-09-08-29	22-Jun-05	62H	0	0	638.8	638.8
5371	Tundra Sinclair	15-09-08-29	22-Jun-05	62H	0	0	1156.9	1156.9
5372	Tundra Sinclair	16-09-08-29	22-Jun-05	62H	0	0	1434.5	1434.5
5374	Tundra Sinclair	01-09-08-29	22-Jun-05	62B	0	0	1010.2	1010.2
5375	Tundra Sinclair	01-16-08-29	22-Jun-05	62H	0	0	769.9	769.9
5384	Tundra Sinclair	11-09-08-29	22-Jun-05	62H	0	0	434.4	434.4
5385	Tundra Sinclair	14-09-08-29	22-Jun-05	62H	0	0	768.3	768.3
5302	Tundra Sinclair Prov.	01-04-08-29	18-Jul-05	62I	0	818.4	1232.6	2051
5364	Tundra Sinclair	09-33-07-29	18-Jul-05	62H	0	0	802.6	802.6
5373	Tundra Sinclair Prov.	09-04-08-29	18-Jul-05	62H	0	0	1017.2	1017.2
5309	Tundra Sinclair	08-25-07-29	3-Aug-05	62H	0	529.1	690.3	1219.4

Appendix F:Bakken-Three Forks Formation Initial Production Table, Sinclair Field

			On Production	Initial Prod	Oil Production (m3)			Water Production (m3)			Water Cut	Days on Production (m)		
Licence #	Well Name	UWI/Location	Date	(m3)	Month 1	Month 2	Month 3	Month 1	Month 2	Month 3	%	Month 1	Month 2	Month 3
5143	Tundra Sinclair Prov.	03-06-07-29	27-Mar-03	14.70	0.1	57.8	114.7	2.2	37.9	84.1	42	1	18	30
5239	Tundra Sinclair Prov.	02-06-07-29	4-Dec-03		56	174.8	124.2	87.8	147.9	108.1	49	17	31	29
5240	Tundra Sinclair Prov.	04-06-07-29	22-Nov-03		1.2	69.3	145.8	12.8	63.2	99.1	45	1	17	30
5144	Tundra Sinclair	03-07-08-29	10-Feb-03		78.7	126.4	89.1	92.3	89	64.9	46	19	31	30
5252	Tundra Sinclair Prov.	05-06-07-29	29-Mar-04		3.5	0	36.3	18	30.4	146.4	83	2	3	22
5195	Tundra Sinclair	11-07-07-29	8-Aug-03	8.50	42.9	39.8	38.4	149.2	178.7	184	81	20	28	31
5197	Tundra Sinclair	10-31-07-29	8-Aug-03	5.64	8.3	3.7	0	151.7	73.3	0	95	21	25	0
5201	Tundra Sinclair Prov. COM	10-18-07-29	24-Aug-03		17.7	34.2	24.2	18.3	30.7	31.3	51	7	27	31
5201	Tundra Sinclair Prov. COM	10-18-07-29	24-Aug-03	11.66	8.5	14.7	10.4	109.5	184.5	187.6	93	7	27	31
5405	Tundra Sinclair	01-07-08-29	2-Mar-05		181.6	0	0	56.7	0	0	24	12	0	0
5254	Tundra Sinclair	12-28-07-29	26-Mar-04		2.4	64.3	171.9	1.3	14.9	57.6	24	1	15	24
5303	Tundra Sinclair Prov.	04-28-07-29	3-Aug-04	7.99	2	34.8	32.1	8	43	32.7	55	1	14	18
5271	Tundra Sinclair	04-22-07-29	12-Jul-04	12.24	47.3	51.2	36.7	111.7	153.4	113.7	74	16	26	21
5285	Tundra Sinclair	09-09-08-29	20-Jan-05	16.63	185	358.8	353.8	76.4	49.9	31.2	15	19	31	30
5370	Tundra Sinclair	10-09-08-29	28-Jan-05	33.48	17	193.3	264.8	10.6	55.8	40.5	18	1	25	27
5371	Tundra Sinclair	15-09-08-29	17-Jan-05	36.77	4.5	225.1	266.9	0	56.2	48.4	17	1	27	27
5372	Tundra Sinclair	16-09-08-29	10-Feb-05	37.74	7	197.8	320.9	2.5	45.1	52.3	16	1	26	26
5374	Tundra Sinclair	01-09-08-29	7-Feb-05	52.81	43.5	331.7	0	13.4	57.1	0	16	4	27	0
5375	Tundra Sinclair	01-16-08-29	21-Feb-05	36.68	52.5	287.1	0	24.1	58.5	0	20	6	27	0
5384	Tundra Sinclair	11-09-08-29	28-Jan-05	23.02	31.9	195.4	0	26.7	52.6	0	26	5	26	0
5385	Tundra Sinclair	14-09-08-29	26-Jul-04	22.77	5	120.1	173.4	3.2	41.5	44.4	23	1	24	27
5302	Tundra Sinclair Prov.	01-04-08-29	21-Jul-04	24.18	5.3	0	112.9	4.2	0	38.9	27	1	0	14
5364	Tundra Sinclair	09-33-07-29	15-Jan-05	37.80	6.2	131.1	230	6.3	50.6	79.2	27	1	15	27
5373	Tundra Sinclair Prov.	09-04-08-29	10-Feb-05	52.79	65.9	296.6	0	23.3	83.9	0	23	5	27	0