

June 3, 2003

Ministry of Energy and Mines

**OIL AND GAS DEVELOPMENT STRATEGY FOR THE HEARTLANDS
DEEP ROYALTY PROGRAM**

Qualification Criteria:

A well-depth deduction amount may be deducted from a reporting entity's royalty payable if the reporting entity consists of nothing more than an interest in a single well and is not a horizontal well and:

- (i) the well has a well depth of at least 2500 metres.
- (ii) the well has a spud date after June 30, 2003 and before July 1, 2008.

Where the following terms are defined:

"well event" means all completions in a zone for a well with a primary product of natural gas.

"well depth" means:

- (a) for a vertical well, the distance between the wellbore's intersection with the top of the deepest productive zone of the well to the point on the surface that is equal to the elevation of the kelly bushing of that well directly above that intersection point.
- (b) for a horizontal well, the sum of the lengths of all of the wellbores that constitute the well event in the deepest productive zone of the well.

"horizontal well" means a well that meets the following criteria:

- (a) a wellbore in the well is drilled at an angle of at least 80 degrees from vertical, and for the purposes of this paragraph the wellbore is deemed to be a line connecting the wellbore's initial point of penetration into a productive zone to the wellbore's end point in that productive zone.
- (b) the length of the wellbore referred to in paragraph (a) is at least 100 metres, measured from the wellbore's initial point of penetration into the productive zone referred to in paragraph (a) to the wellbore's end point in that productive zone.

"reporting entity" means a producer that has an interest in one or more well events or tracts may designate one of those interests as a reporting entity or may group 2 or more of those interests into a grouping, and each such designation or grouping, if approved by the administrator, constitutes a reporting entity.

"vertical well" means any well that is not a horizontal well.

Royalty Calculation:

The well depth deduction amount is determined by the following formula:

$$(CV + AD) \times PS$$

Where, for each well for which the calculation is to be made, “CV” means the Cumulative Value shown opposite the table depth in the portion of the following table that applies to the well,

“AD” means the amount determined by multiplying the Incremental Value amount shown opposite the table depth in the following table by the difference between the well depth and the table depth, “PS” means the reporting entity’s proportionate interest in the well, and “table depth” means the greatest depth, shown in the Depth column of that portion of the following table that applies to the well, that is equal to or less than the well depth.

**Table 1: Deep Royalty Holiday Credits
West Special Sour**

Depth (m)	Cumulative Value \$000	Incremental Value \$/Metre
2500	0	4,200
3000	2,100	600
3500	2,400	700
4000	2,750	800
4500	3,150	900
5000	3,600	1,000
5500	4,100	

East Special Sour

Depth (m)	Cumulative Value \$000	Incremental Value \$/Metre
2500	0	1,500
3000	750	650
3500	1,075	750
4000	1,450	850
4500	1,875	1,000
5000	2,375	1,100
5500	2,925	

West Non-Special Sour

Depth (m)	Cumulative Value \$000	Incremental Value \$/Metre
2500	0	3,800
3000	1,900	550
3500	2,175	600
4000	2,475	700
4500	2,825	800
5000	3,225	900
5500	3,675	

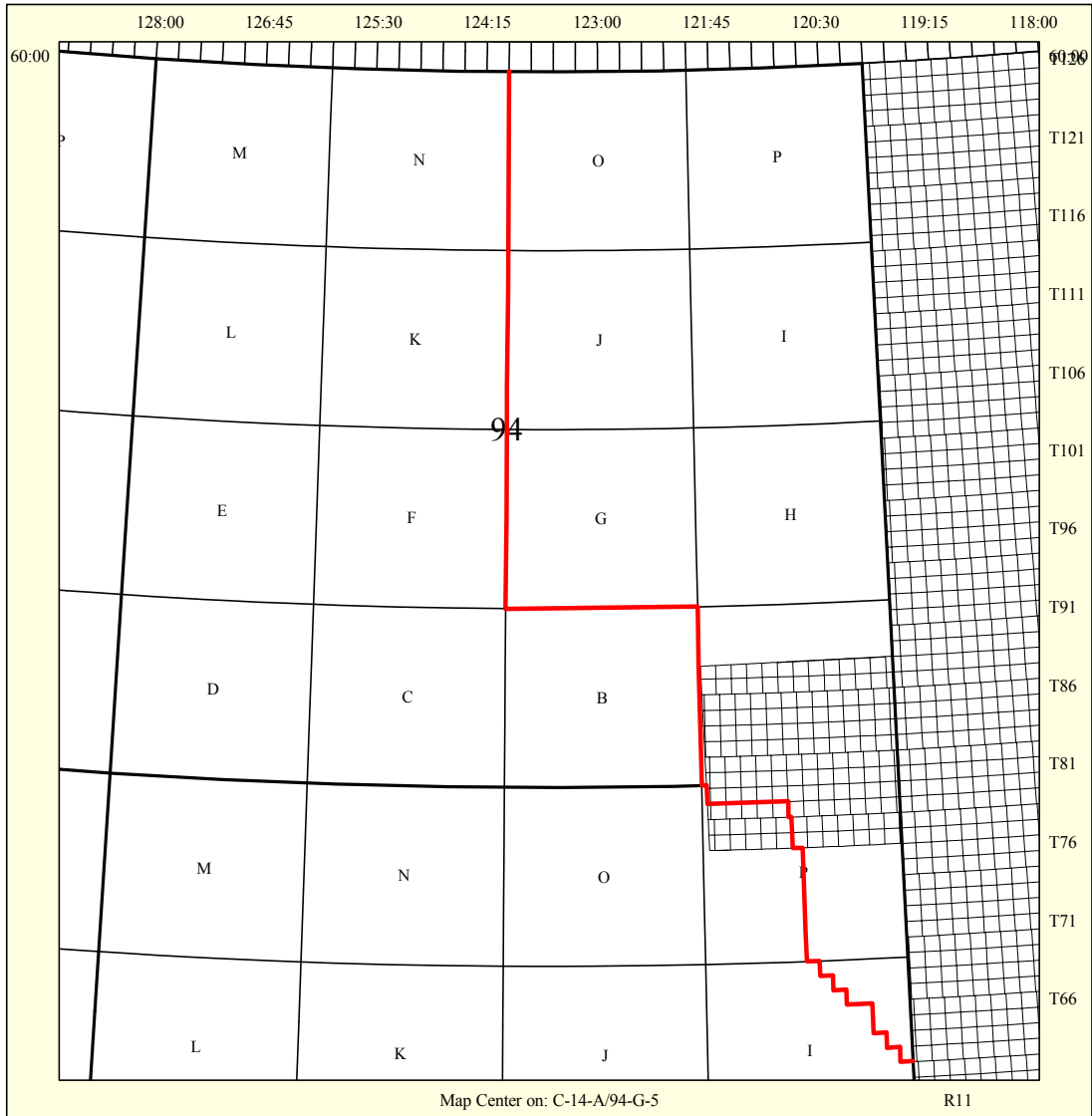
East Non-Special Sour

Depth (m)	Cumulative Value \$000	Incremental Value \$/Metre
2500	0	1,400
3000	700	600
3500	1,000	700
4000	1,350	800
4500	1,750	900
5000	2,200	1000
5500	2,700	

Example: Company A has a 75% interest in a 3346m deep Special Sour well found in the East area.

$$CV = (750,000 + 346 * 650) \times 0.75 = \$731,175 \text{ Royalty Credit}$$

Figure 1: Map of East and West Deep Royalty Areas

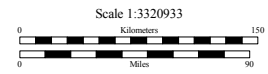


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Map Software by
HIS Energy

Author: Mark Hayes
Date: May 26, 2003
File: Deep Royalty Map.MAP
Scale: 1:3320933

Vol. 13 No. 04, Apr 3 2003
4803 770-9446



For the purposes of determining which portion of the table applies to a well:

- (a) the portions of the table applicable to “East” apply to a well that is located in any of the following areas, which areas are, in the case of areas referred to in subparagraphs (i) to (xvi), described in accordance with the petroleum and natural gas grid established under the Petroleum and Natural Gas Grid Regulation, B.C. Reg. 321/93, and, in the case of the areas referred to in subparagraphs (xvi) to (xxi), described in accordance with the Dominion Land Survey System:
 - (i) that portion of Group 095-A-01 to Group 095-A-04 (inclusive) that is located within British Columbia.
 - (ii) that portion of Group 095-B-01 to Group 095-B-04 (inclusive) that is located within British Columbia.
 - (iii) Group 094-O-01 to Group 094-O-16 (inclusive).
 - (iv) Group 094-P-01 to Group 094-P-16 (inclusive).
 - (v) Group 094-I-01 to Group 094-I-16 (inclusive).
 - (vi) Group 094-J-01 to Group 094-J-16 (inclusive).
 - (vii) Group 094-G-01 to Group 094-G-16 (inclusive).
 - (viii) Group 094-H-01 to Group 094-H-16 (inclusive).
 - (ix) that portion of Group 094-A-01 to Group 094-A-16 (inclusive) that is located outside the Peace River Block.
 - (x) that portion of Group 093-P-09 that is located outside the Peace River Block.
 - (xi) that portion of Group 093-P-10 that is located outside the Peace River Block.
 - (xii) Groups 093-P-01, 093-P-02, 093-P-07 and 093-P-08.
 - (xiii) Group 093-I-16.
 - (xiv) Blocks A and G to K of Group 093-I-15.
 - (xv) Blocks A, B and F to K of Group 093-I-09.
 - (xvi) Block I of Group 093-I-08.
 - (xvii) the portion of the Peace River Block within Township 076 east of Range 20 W6M that is within British Columbia.
 - (xviii) the portion of the Peace River Block within Township 077 east of Range 20 W6M that is within British Columbia.
 - (xix) the portion of the Peace River Block within Township 078 east of Range 20 W6M that is within British Columbia.
 - (xx) the portion of the Peace River Block within Township 079 east of Range 20 W6M that is within British Columbia.
 - (xxi) the portion of the Peace River Block within Township 080 to Township 088 and Range 13 to Range 26 W6M that is within British Columbia.

(b) the portions of the table applicable to “West” apply to a well in British Columbia to which paragraph (a) does not apply.

(c) the portions of the table applicable to “Special Sour” apply to a well:

- (i) from which the maximum potential H₂S release rate is 0.01 m³/s or greater and less than 0.1 m³/s if that well is located within 500 metres of the corporate boundaries of an urban centre.
- (ii) from which the maximum potential H₂S release rate is 0.1 m³/s or greater and less than 0.3 m³/s if that well is located within 1.5 kilometres of the corporate boundaries of an urban centre.
- (iii) from which the maximum potential H₂S release rate is 0.3 m³/s or greater and less than 2.0 m³/s if that well is located within 5 kilometres of the corporate boundaries of an urban centre, or
- (iv) from which the maximum potential H₂S release rate is 2.0 m³/s or greater.

(d) the portions of the table applicable to “Non-Special Sour” apply to any well in British Columbia to which paragraph (c) does not apply.

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