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October 3, 2006

Mr. D.G. Davies
McCarthy Tetrault LLP
Suite 3300, 421 - 7th Avenue S.W.
Calgary, Alberta T2P 4K9

Dear Mr. Davies:

Re: EnCana Information Request - Sep 19, 2006
Applications 1394112 and 1409180
Cold Lake Oil Sands Area - Clearwater Deposit

Attached are Imperial Oil's responses to your information request dated September 19, 2006.

Yours truly,

ORIGINAL COPY SIGNED

Susan C. Stark, Manager
In-Situ Development Planning

SCS/ry

Attachments

cc: EL Lui TJ Boone
 SR Maxwell MD Taylor
 E. Smith (AEUB)

* an Alberta limited partnership

EnCana Information Request (September 19, 2006)

1. Item 1 of the submission gives volumetric gas in place estimates for four gas pools.

a) Please provide the details of these estimates including how net pay, porosity and water saturation were determined for individual wells and the pools.

The reservoir parameters are based on log analysis (Sg, porosity) and analogue values (Bg) used in the area of interest. Sg calculated from gas effect on each neutron and density logs were screened for invasion effects and a gas cap of sufficient thickness (~2m). Volumes were determined from isopach maps of the pools.

Gas Pool	Sg	Porosity	Pore Volume 1e6 m3	1/Bg sm3/m3	Volumetric OGIP 1e6 sm3
A	0.75	0.34	19.9	32.5	165
B	0.62	0.34	10.7	32.5	73
C	0.62	0.34	1.8	32.5	13
E	0.75	0.34	29.7	32.5	246

b) Please provide a central type well location for each pool and provide an estimate of the approximate thickness and reservoir properties of the bitumen under each pool that Imperial believes is in communication with the gas pools.

The following is the requested list of type wells for the four gas pools.

- Pool A: 100/16-24-65-4w4
- Pool B: 100/01-09-65-4w4
- Pool C: 100/16-01-65-4w4
- Pool E: 100/15-32-65-4w4

The following OBIP and average gross pay thickness data is specific to the resource located directly beneath the mapped gas pools.

Pool	Area 1e6 m2	OBIP 1e6 m3	Bitumen Gross Pay m	So %	Porosity
A	9.8	81.0	39	67%	0.32
B	5.5	48.4	43	64%	0.32
C	1.1	11.0	48	66%	0.32
E	13.2	129.9	50	61%	0.32

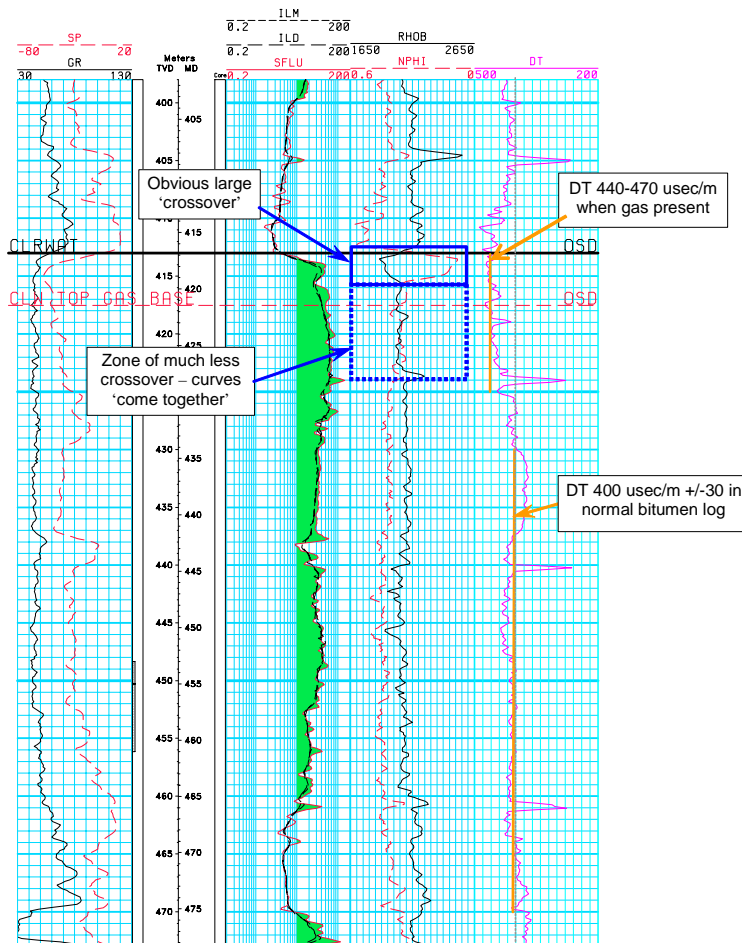
Notes: OBIP and Gross Pay are based on a 6 wt% cut-off

c) Does Imperial have any pressure measurements in the bitumen zones under the gas pools?

Imperial has not collected pressure data from the bitumen column associated with these gas pools.

Imperial has observed a column of "foamy oil" (5 to 10-m in thickness) at some delineation wells drilled under the M&P gas pool several years after gas production activities has commenced. This demonstrates that the pressure in the bitumen column has been reduced as a result of the gas pool production activities. One example is shown below. This well was drilled in 1988, seven years after the start of M&P gas production.

UWI: 108122606504W400
Name: M03-13 # : 08/12-26
ELEV: KB 616.1 METERS
TD: 488.3 METERS TVD



d) **Why was the E Pool returned to production? Was it because Imperial determined that this would not adversely affect bitumen recovery or because there are no commercial bitumen reserves in pressure communication with the E pool? Please explain your answer.**

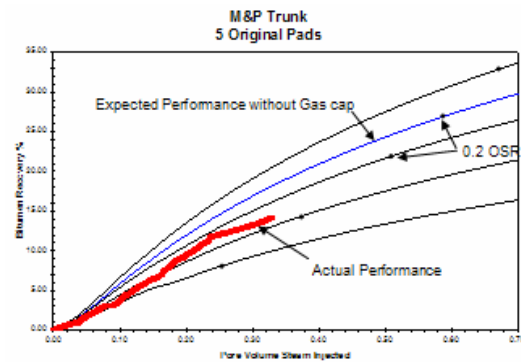
In November 1997 Imperial initiated a waterflood in the E gas pool as a precursor to CSS development. Water injection occurred at two of the previous gas wells (100063206504W400 and 100153206504W400) and gas production was restarted at the remaining gas well (100040506604W400). The objective of the flood was to reduce the compressibility of the fluids in the gas cap by replacing the remaining gas with water. Due to the lower than expected injectivity (faster than expected skin build-up), water injection was halted in December 1998.

In light of the demonstrated 25% recovery reduction for CSS in the presence of an areally extensive gas pool, Imperial continues to assess alternate recovery techniques to more effectively recover this resource.

2. **In Item 3, Imperial supplies a figure titled "M&P Trunk 5 Original Pads". In that figure two curves are labeled.**

a) **Please provide a description of the remaining 4 curves.**

The plot in question is reproduced here. The five curves (four black and one blue) shown in the plot are some of the empirical models Imperial uses to forecast CSS performance at Cold Lake. The key factors that dictate which curve a pad will follow are the thickness and bitumen content of the resource targeted for development with CSS. The better the quality of the resource, the higher will be the performance curve.



Given the above average thickness and bitumen content of the resource targeted for development with CSS at these five M&P pads (located under the A gas pool), the expected performance should have followed the identified curve. Instead, the performance of these five pads has been significantly below expectation.

3. In Item 4 Imperial states "No material changes in cumulative OSR performance were noted between the two groups of wells. This result is reasonable given that the fraction of the solution gas removed from the associated bitumen column as a result of the Clearwater gas production is expected to be small."

a) Why would Imperial expect that only a small amount of solution gas would be removed from areas with no overlying gas, particularly in light of its comments in item 2?

The following Table summarizes the gas pool areas, bitumen pay, OBIPs and associated solution gas for the resource directly under the gas pools.

The exsolved solution gas shown in this Table represents the difference between the cum gas produced from the gas pools and the volume of gas that should have been produced based on the volumetric OGIP and shut-in pressure data.

For the two largest gas pools (A and E), a maximum of 10 - 12% of the solution gas would need to be produced to support the excess gas production observed. Extending the region of influence by only 500-m beyond the zero edge of the gas pool reduces the solution gas removal to 7 - 8%.

Pool	Area	Bitumen Gross Pay m	OBIP Under Gas Pool 1e6 m3	Solution Gas 1e6 m3	Solution Gas Exsolved		If Area is Gas Pool + 500-m %
	1e6 m2				1e6 m3	%	
A	9.8	39	81.0	673	76	11%	7%
B	5.5	43	48.4	402	55	14%	7%
C	1.1	48	11.0	91	28	31%	9%
E	13.2	50	129.9	1078	134	12%	8%

Notes: OBIP and Gross Pay are based on a 6wt% cut-off

Solution Gas dissolved in bitumen under the gas pool is based on 8.3 m3/m3 bitumen.

Solution Gas Exsolved = Cum Gas Produced - Theoretical Produced GIP

Gas Pool + 500-m: assumes no change in pay thickness, gas pool and gas pool + 500-m areas represented as circles to simplify math

These data show that for the production operations under taken at these gas pools, the fraction of the solution gas removed from the associated bitumen column has been small. If gas production activities had continued, the fraction of solution gas removed would have also increased.

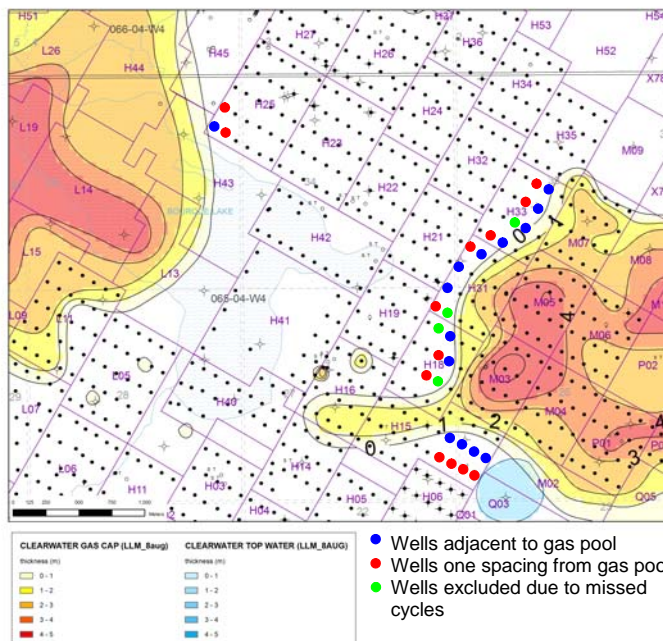
- b) In this instance it would appear that the field data indicates that depressuring a gas cap has no measurable impact on bitumen recovery in areas offsetting the gas cap. Does Imperial have any field data that would contradict this conclusion?

For the gas pools identified, the fraction of the solution gas removed from the bitumen column has been small and thus the expected impact this gas removal would have on CSS performance is also small. For example, if removal of 100% of the solution gas were to cause a 20% reduction in CSS recovery, a 10% reduction in solution gas would cause a 2% reduction. Using the cumulative OSR as a representative for recovery, a 2% reduction in a 0.32 OSR would be 0.0064. This level of change in OSR can not be reliably measured the field.

Imperial's technical opinion is that currently there is no definitive field data to prove - or disprove - the impact depressuring a gas pool will have on the ultimate recovery achievable with CSS in areas offsetting a gas pool.

On an intuitive level, given that solution gas drive is a key recovery mechanism for CSS, any removal of the dissolved solution gas will result in a reduction in recovery. It should be expected that as the fraction of the solution gas removed from the bitumen increases, the negative impact it will have on CSS recovery will also increase. This belief is reinforced by the published simulation study included as part of our original submission.

- c) Please provide a list of wells included in this review split by:
- CSS wells located adjacent to - but outside of - the zero edge.
 - CSS wells located one additional well spacing from the gas pools.



Pad	Group	Common Name	UWI	Cum Steam m3	Cum Bitumen m3	Cum Water m3	Cum OSR	Cum WSR
H15	Adjacent to Gas Pool	H15-12	109082706504W400	51,981	19,277	35,637	0.37	0.69
	Adjacent to Gas Pool	H15-13	112052606504W400	54,219	24,823	43,440	0.46	0.80
	Adjacent to Gas Pool	H15-14	103042606504W400	51,735	19,567	35,356	0.38	0.68
	Adjacent to Gas Pool	H15-15	104042606504W400	52,079	18,519	35,993	0.36	0.69
	Adjacent to Gas Pool						0.39	0.72
	One Spacing Away	H15-22	108012706504W400	52,115	15,951	40,652	0.31	0.78
	One Spacing Away	H15-23	109012706504W400	53,902	17,276	46,907	0.32	0.87
	One Spacing Away	H15-24	105042606504W400	53,290	16,647	44,925	0.31	0.84
	One Spacing Away	H15-25	106042606504W400	54,096	13,863	43,626	0.26	0.81
One Spacing Away						0.30	0.83	
H18	Adjacent to Gas Pool	H18-03	107162706504W400	96,360	27,161	66,597	0.28	0.69
	Adjacent to Gas Pool	H18-09	107092706504W400	99,695	35,010	61,805	0.35	0.62
	Adjacent to Gas Pool						0.32	0.65
	One Spacing Away	H18-08	106092706504W400	77,367	29,948	75,217	0.39	0.97
	One Spacing Away	H18-13	100092706504W400	95,659	35,274	71,479	0.37	0.75
One Spacing Away						0.38	0.85	
H25	Adjacent to Gas Pool	H25-25	104163306504W400	87,796	26,904	48,456	0.31	0.55
	Adjacent to Gas Pool						0.31	0.55
	One Spacing Away	H25-19	102163306504W400	90,652	29,002	67,426	0.32	0.74
	One Spacing Away	H25-26	100093306504W400	92,040	31,705	68,656	0.34	0.75
One Spacing Away						0.33	0.74	
H31	Adjacent to Gas Pool	H31-02	102043506504W400	95,962	34,171	68,216	0.36	0.71
	Adjacent to Gas Pool	H31-06	105043506504W400	97,557	35,275	76,460	0.36	0.78
	Adjacent to Gas Pool	H31-11	111162706504W400	96,499	32,684	72,928	0.34	0.76
	Adjacent to Gas Pool						0.35	0.75
	One Spacing Away	H31-01	100043506504W400	95,510	33,434	67,539	0.35	0.71
	One Spacing Away	H31-16	108162706504W400	99,248	37,870	81,558	0.38	0.82
One Spacing Away						0.37	0.77	
H33	Adjacent to Gas Pool	H33-04	102063506504W400	88,345	18,708	51,779	0.21	0.59
	Adjacent to Gas Pool	H33-09	106063506504W400	96,502	19,707	51,271	0.20	0.53
	Adjacent to Gas Pool	H33-14	109063506504W400	97,234	24,558	47,829	0.25	0.49
	Adjacent to Gas Pool	H33-18	111043506504W400	96,986	27,705	53,988	0.29	0.56
	Adjacent to Gas Pool						0.24	0.54
	One Spacing Away	H33-03	100063506504W400	80,441	17,532	45,421	0.22	0.56
	One Spacing Away	H33-08	105063506504W400	95,864	25,458	67,185	0.27	0.70
	One Spacing Away	H33-17	110043506504W400	98,896	29,438	60,004	0.30	0.61
One Spacing Away						0.26	0.63	
Overall	Adjacent to Gas Pool						0.31	0.64
	One Spacing Away						0.32	0.75