

Alberta Department of Energy

**Innovative Energy
Technologies Program**

BRINTNELL FIELD HORSETAIL POLYMER FLOOD PILOT PROJECT

Canadian Natural Resources Limited

Annual Report

June 29th, 2007



**Innovative Energy Technologies Program
Project Annual Report Requirements**

Summary

Canadian Natural Resources Limited has had another successful year operating the Brintnell polymer flood pilot. This year has provided CNRL with a wealth of data that is currently being analyzed and incorporated into future plans.

The subject project is a pilot designed to evaluate the feasibility, both technical and economic, of polymer flooding in the Wabiskaw zone of the Brintnell Field within the Pelican Lake area. With the continued success throughout the year, the pilot has proven to be both a technical and economic success. A wealth of knowlend has also been gained on the field implementation and operation of the Polymer Flood.

Currently there are two polymer injectors with three offset producers comprising the pilot pad. The two injectors have been on continuous injection since the start of the pilot. Since last report, there has now been flood response seen on all three of the producing wells. The specifics of the results will be discussed throughout this report, but the results have exceeded all initial estimates for incremental production. Recently water cuts on the producers have increased and polymer has been identified in the water being produced. This eventual break through was expected, is only minor, and has not effected the produced oil rates.

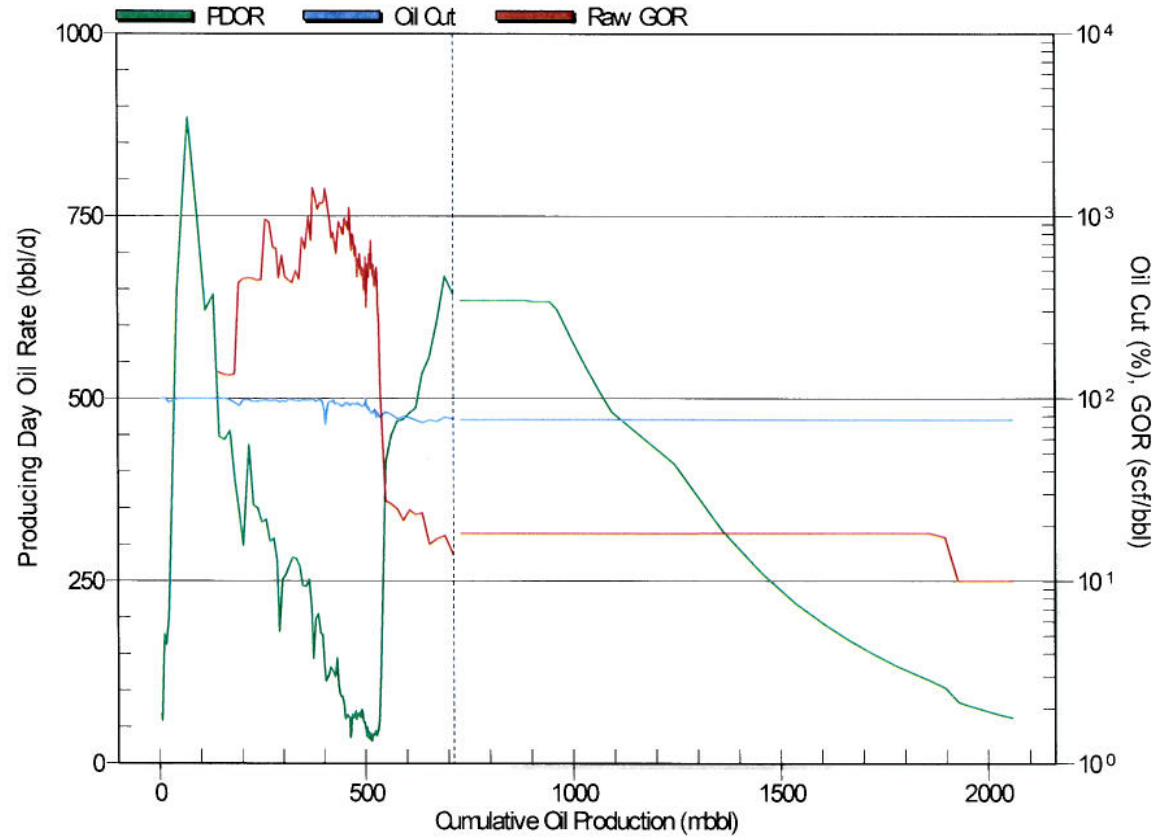
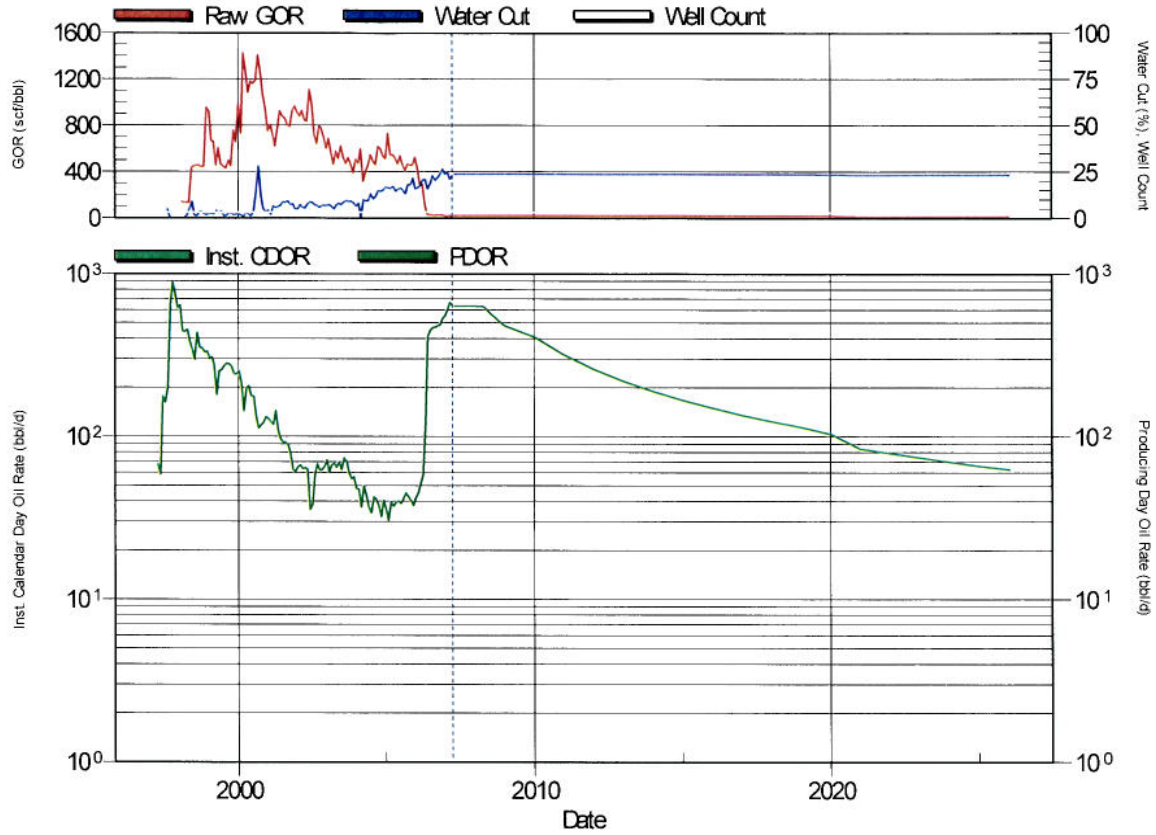
Chronological Report of Activities

Since the commencement of polymer injection in May 2005 several operational changes have been made. The following is a listing of the date, operation, and impetus for each of the actions taken:

Date	Operation	Impetus
Late August 2005	Viscosity of Injected Polymer Reduced. Reduced from ~20cp to ~13cp.	Following original plan polymer concentration (i.e. viscosity) was reduced once a predetermined pressure response at wellhead was observed.
Sept 22 nd 2005	Received increase to Maximum Allowable Wellhead Injection Pressure (MAWIP) to 7650kPa	Applied for approval in anticipation of exceeding existing MAWIP of 3500kPa.
November 24 th 2005	Switched from higher molecular weight polymer to lower molecular weight polymer.	Pressure at injectors was rising faster than anticipated. Hypothesis was that there may be plugging of pore throats due to high molecular weight (and hence molecule size) of polymer. The switch to lower molecular weight polymer (12 Daltons vs. 20 Daltons) was an attempt to ensure skin damage was not a driving factor in developing pressure at the injection wellhead. Decreasing molecular weight necessitated an increased concentration of polymer to maintain viscosity.
April 20 th 2006	Pump Change at 00/15-34-081-22W4M.	Increasing fluid levels at this producer necessitated a larger downhole pump to move the fluid efficiently i.e. Production Response.
June 4 th 2006	Pump Change at 00/14-34-081-22W4M.	Increasing fluid levels at this producer necessitated a larger downhole pump to move the fluid efficiently i.e.
October 11 th 2006	Pump Change at 00/16-34-081-22W4M.	Increasing fluid levels at this producer necessitated a larger downhole pump to move the fluid efficiently i

Updated Incremental Reserves and Production

Given recent production response, reserves and production estimates have been revised upwards compared to the original numbers presented.



With an additional year of production information, and rates that have again exceeded expectations, the recovery has been again increased from an incremental 11% to 17%.

Wabiskaw Reservoir Characterization – Horsetail Polymer Flood Pilot

The Wabiskaw member is the basal unit of the lower Cretaceous Clearwater Formation and is informally subdivided into three sands encountered downhole as the “A” sand, “B” sand, and “C” sand respectively. The three sands of the Wabiskaw represent a prograding shoreface-attached bar complex overlying the fluvial to restricted bay sediments of the McMurray Formation, and capped by the transgressive marine shale of the Clearwater Formation. The three coarsening-upward Wabiskaw sands are separated by shale and range in thickness, saturation, and permeability with the “A” sand being the thickest and most prolific reservoir in the Brintnell area. The “A” sand is a continuous and homogenous northeast-southwest trending body that ranges from 4-7 meters in the CNR Brintnell area with an average thickness of 5 meters.

Internally the “A” sand can be further divided into three locally mappable facies based on sedimentary and electric-log character as shown in the table below:

Geological Properties by Facies

	Facies 1	Facies 2	Facies 3
Thickness	0.1m	2.0 m	2.0 m
Porosity	25	31	27
Kh	878	2900	1500
Kv	*598	*1600	*750
Oil Sat.	41	65	55
Water Sat.	59	35	45

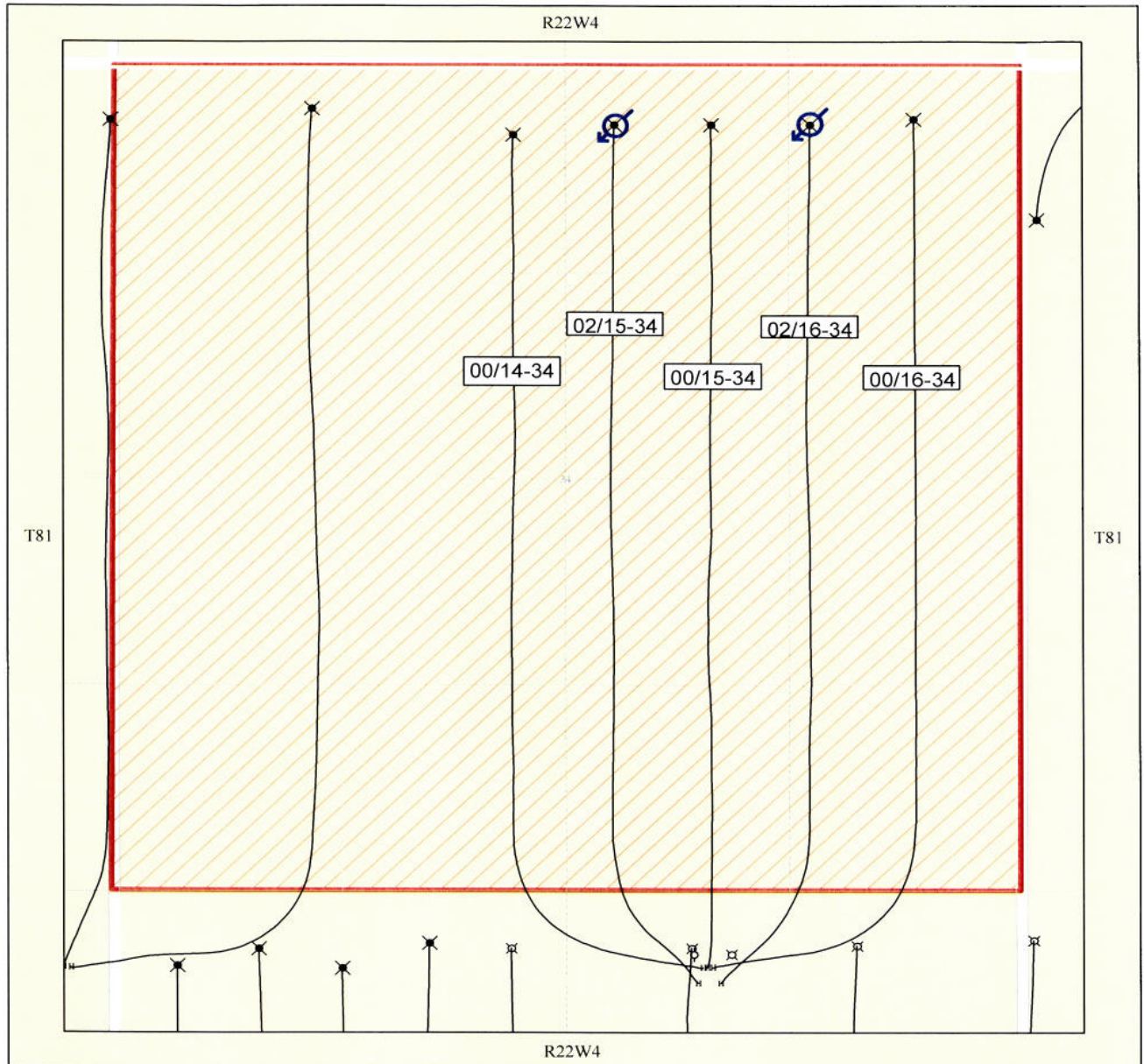
Core: 00/06-11-082-22W4 *Inferred from Kh/Kv ratios in nearby wells.

Facies 1 comprises the uppermost sediments in each well with an average thickness in the application area of 30 cm. Facies 2 is the main reservoir body, harboring the highest oil saturation, porosity, and permeability, with an average thickness of 2.5 meters in the application area. Facies 3 comprises the lower sediments of the Wabiskaw “A” sand at Brintnell with an average thickness of 2 meters and displays slightly lower saturation and permeability due to increased laminated and dispersed mud.

All three facies share a similar composition including a predominance of quartz grains and chert that appear subrounded to subangular and well-sorted. Glauconite is present in the Wabiskaw as well as fines consisting of Illite, Chlorite, Kaolinite, and Smectite. Facies 2 contains the most effectively sorted and coarsest sediment with an upper fine-grained sand. The matrix is unconsolidated sand with disseminated fines decreasing upwards through Facies 3 and Facies 2 before reappearing and decreasing pore space in Facies 1.

Structure in the pool dips slightly to the southwest with no bottom water present in the Brintnell area north of Township 78. Gas is present in small isolated pockets based on electric-log mapping. There are no known gas caps within the proposed injection patterns.

Well Layout



WELL LEGEND	
Bottom Hole Locations:	
◇ Suspended	⊠ Service or Drain
★ Heavy Oil	

PROPRIETARY DATA LEGEND	
Regions:	
▨	CNRL Proprietary Land Solid

Canadian Natural Resources	
HORSETAIL POLYMER PILOT	
Figure 3- Injector Pattern	
<small>Created in AccuMap™ Product of BHS Energy Datum: NAD 27 Vol. 153a, 03, Mar. 2 2005 (03) 776-8646</small>	<small>Author: RZ Date: March 24, 2005 File: Injector plan for AE-MAP Scale: 1:10000</small>



The wells shown above are offset 175m in the East-West direction and are approximately 1375m in lateral length. Patterns are inferred to be centered on each injector with the centre well (00/15-34) contributing 50% of it's production to each injector and the two outside producers allocated 100% to the nearest offset injector.

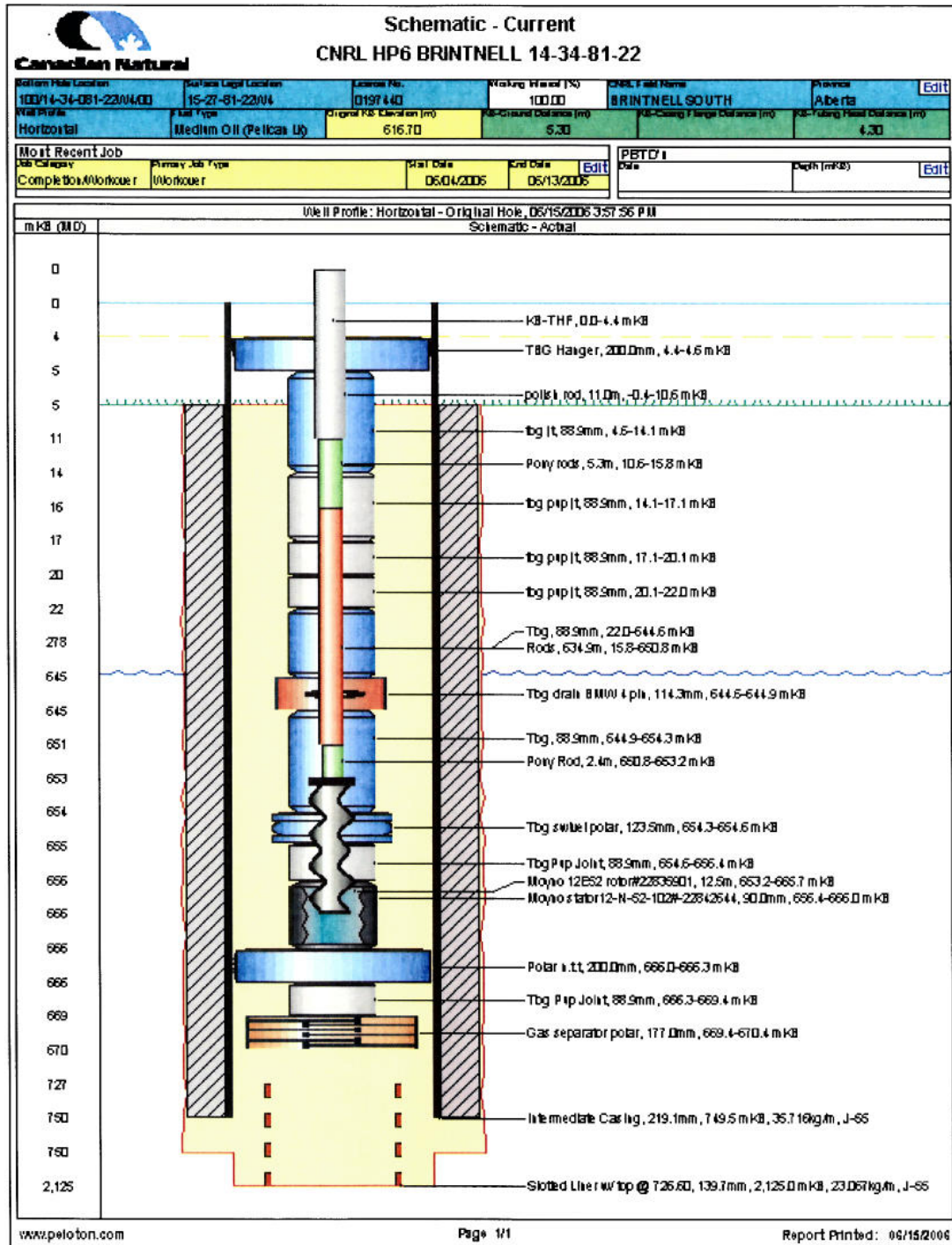
Well List and Details

UWI	Licence #	Well Name	TV Depth	R/R Date	Status
00/16-34-081-22W4/0	197442	CNRES HZ BRINTNELL 16-34-81-22	412.3	03/12/1997	Producer
02/16-34-081-22W4/0	223817	CNRES HZ BRINTNELL 16-34-81-22	409.9	08/03/1999	Poly Injector
00/15-34-081-22W4/0	197441	CNRES HZ BRINTNELL 15-34-81-22	412.2	03/02/1997	Producer
02/15-34-081-22W4/0	223816	CNRES HZ BRINTNELL 15-34-81-22	409.6	08/09/1999	Poly Injector
00/14-34-081-22W4/0	197440	CNRES HZ BRINTNELL 14-34-81-22	411.9	02/22/1997	Producer

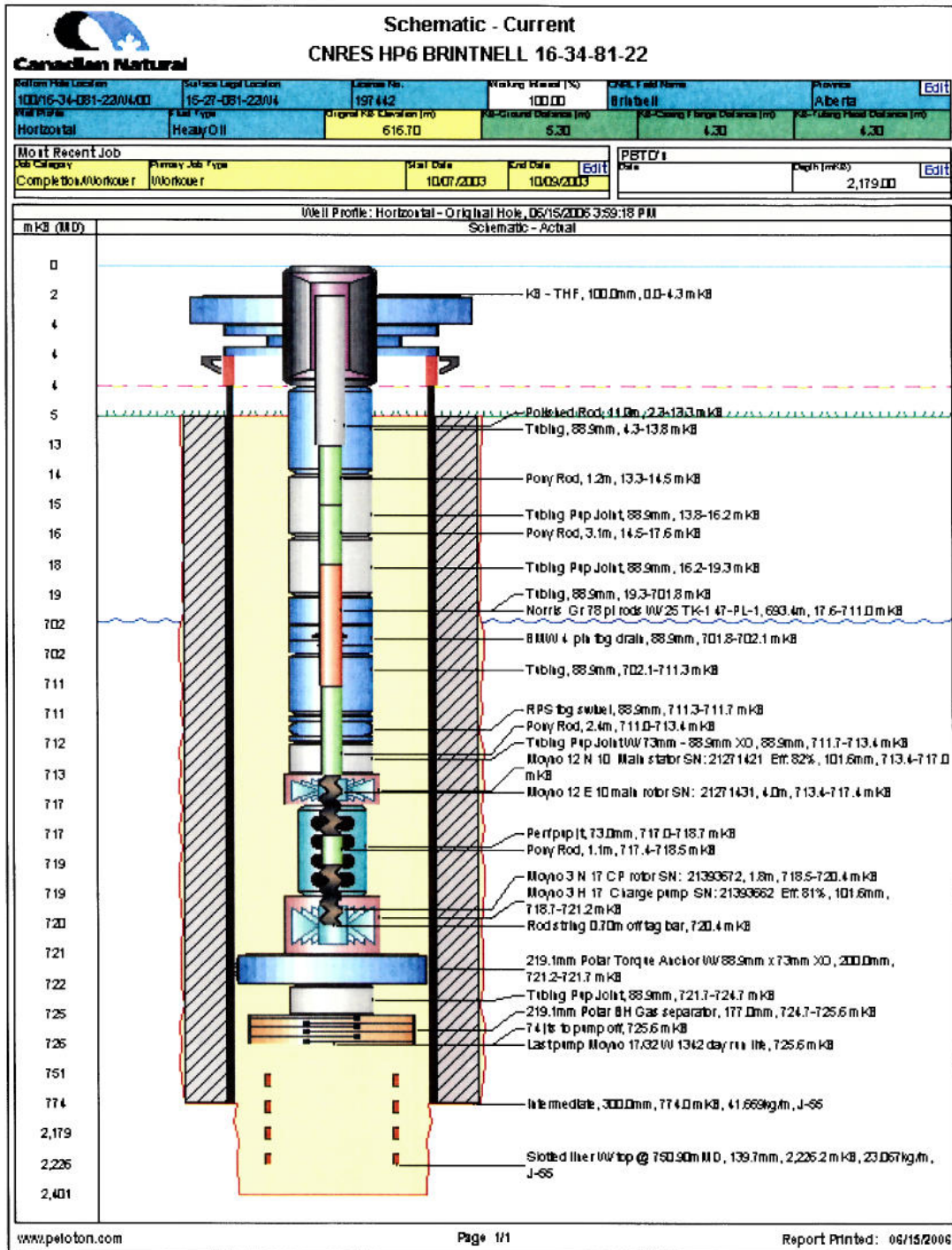
The following pages contain the wellbore schematics for the above wells involved in the polymer pilot.

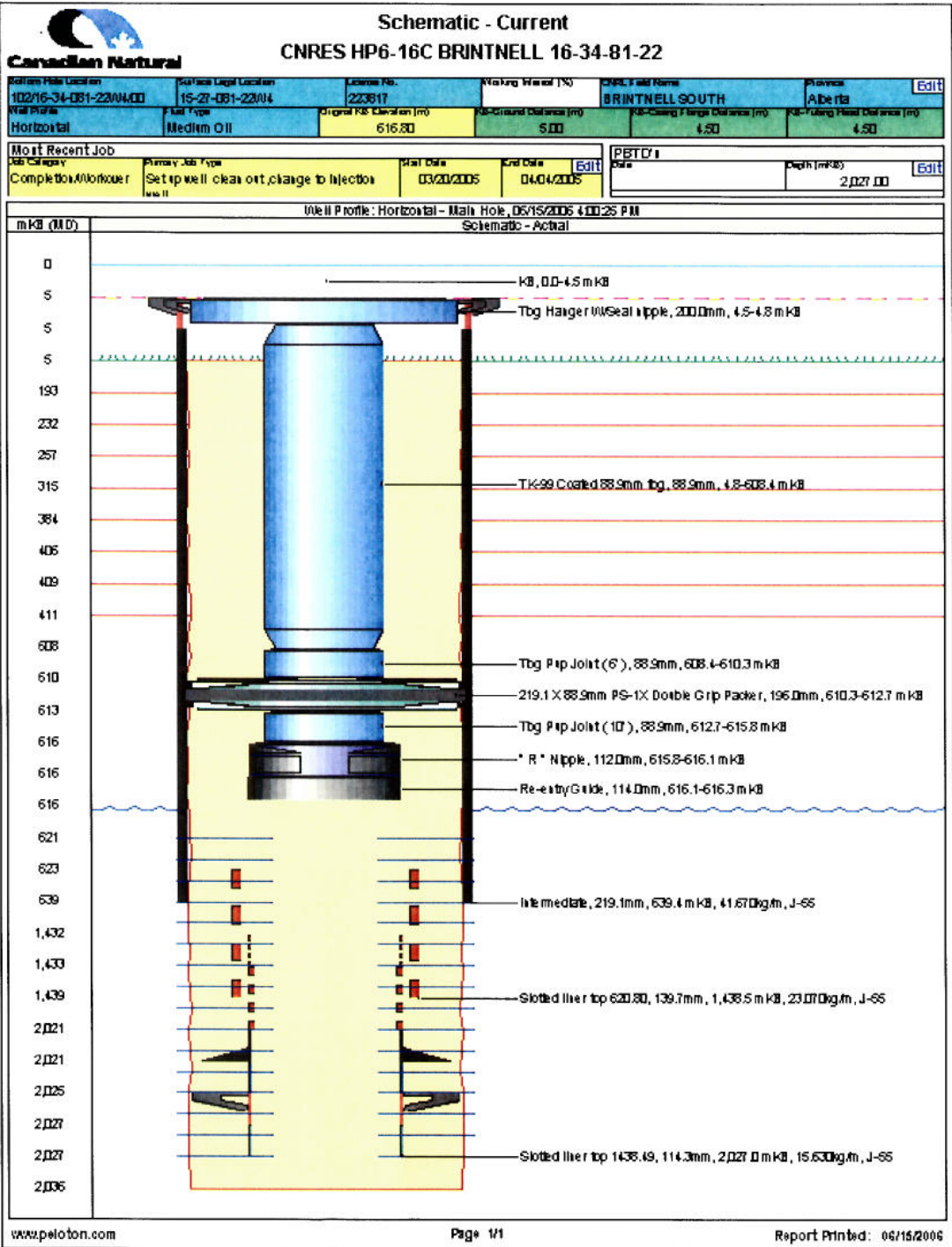
Wellbore Schematics

Producers:



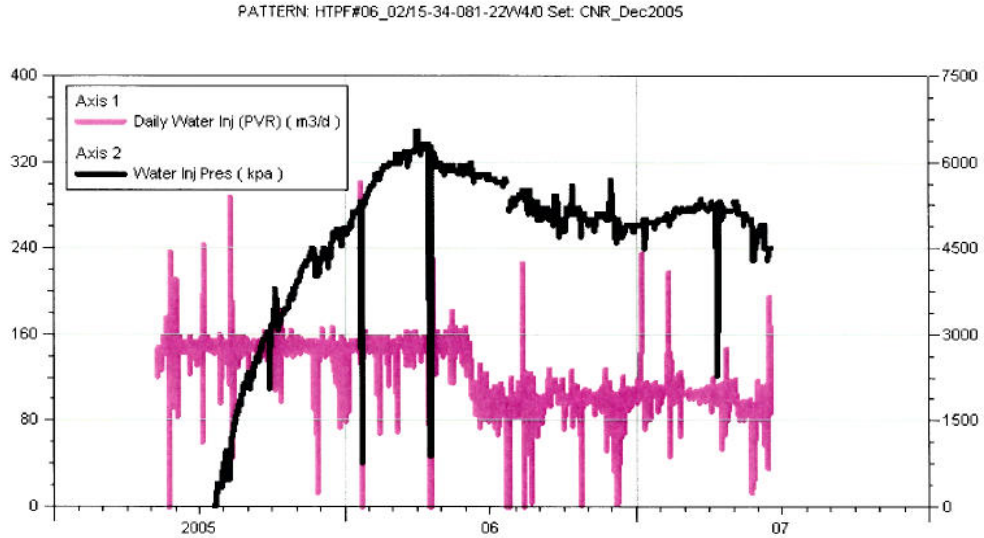
Injectors:



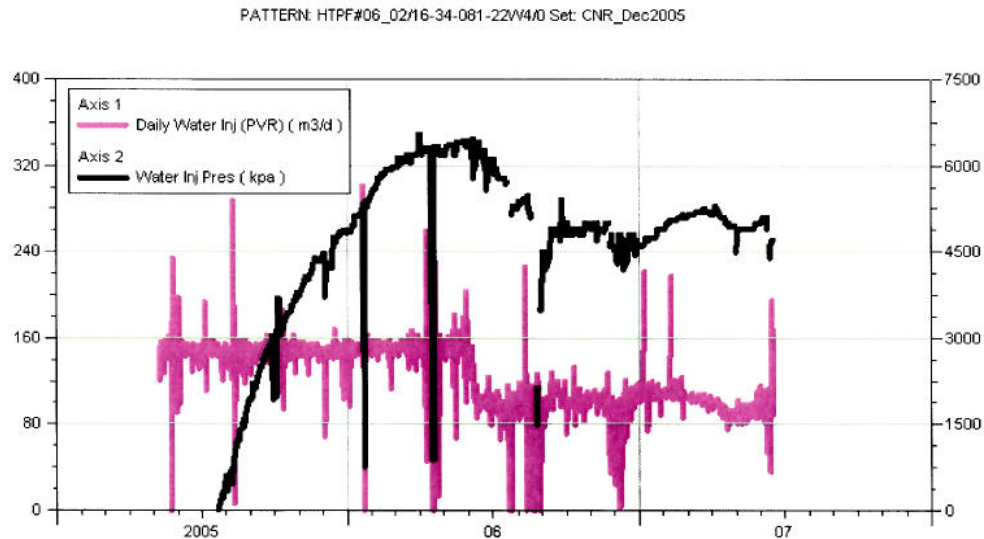


Production / Injection Performance and Data

Below are individual and group plots for the wells included in the polymer pilot. Injection volumes and pressures are plotted against time with production volumes and cuts done on the same scale.

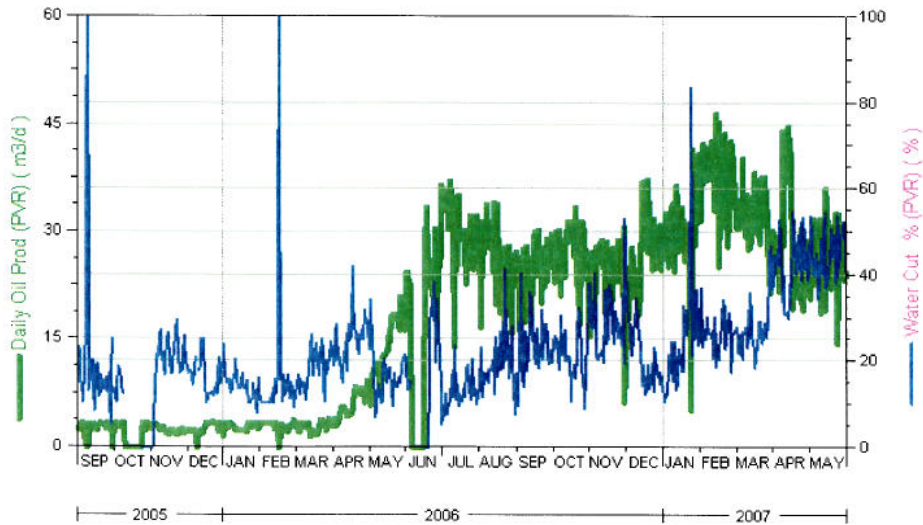


The 15-34 polymer injector has behaved as expected. As the pattern is approaching fill up the pressure has begun to level off. Then recently as injected polymer reaches the producer the injection pressure shows some minor reduction.



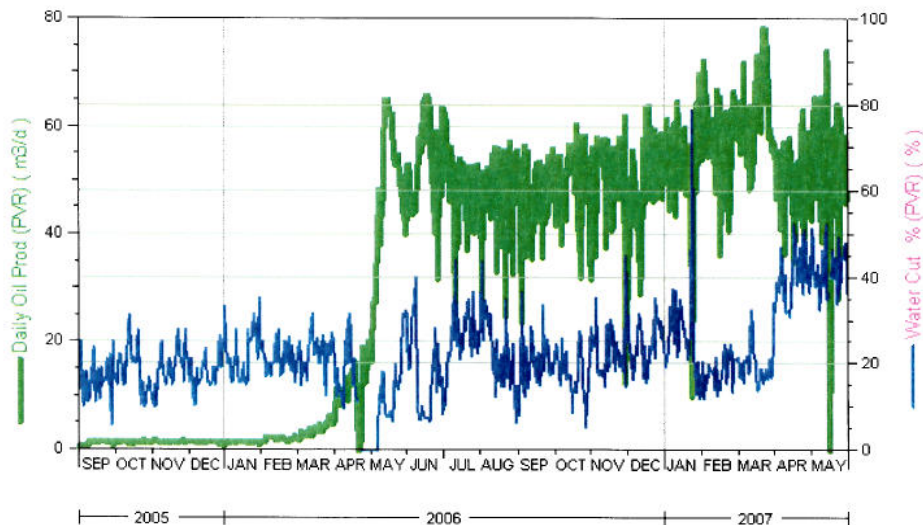
The 16-34 polymer injector has performed much as the 15-35 injector and as the pattern approached fill up the pressure levelled off.

00/14-34-081-22W4/D

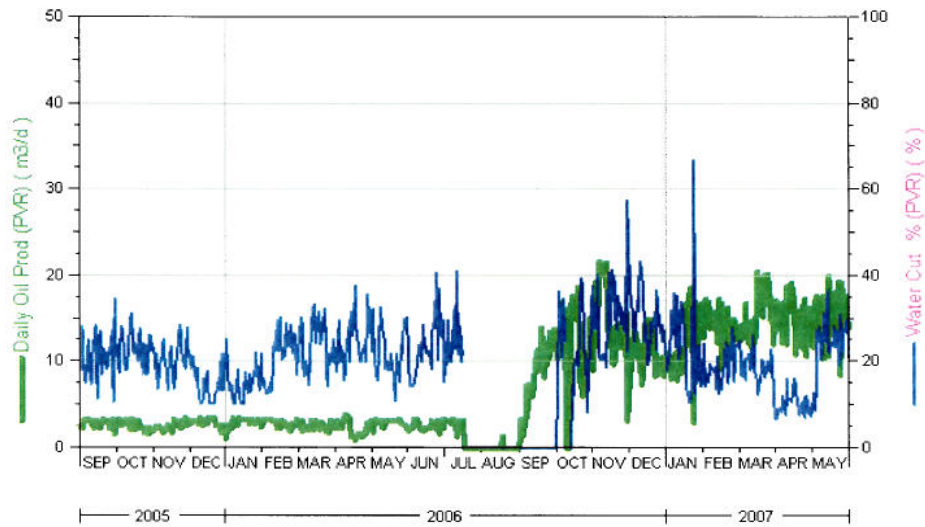


The 14-34 producer which offsets the 15-34 injector on the West has shown significant response since April of last year. As shown on the graph the water cut has been steadily increasing, and there has been polymer recorded in the produced water.

00/15-34-081-22W4/D

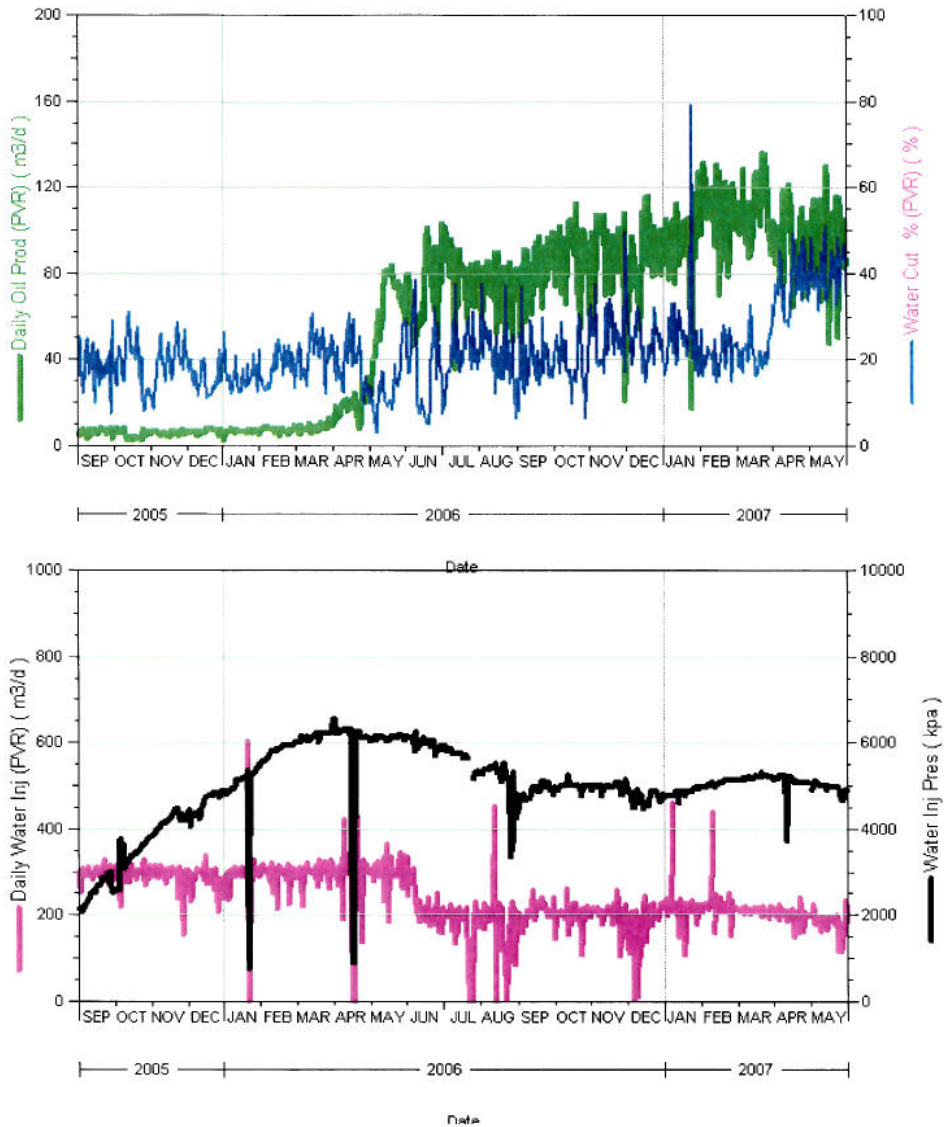


The greatest production response has been observed at the 15-34 producer. Intuitively this makes sense as this producer is in the middle of the two polymer injectors and thus is receiving support from both directions. Again as with 14-34 there has been some minor breakthrough of the polymer as the produced water cuts hav increased.



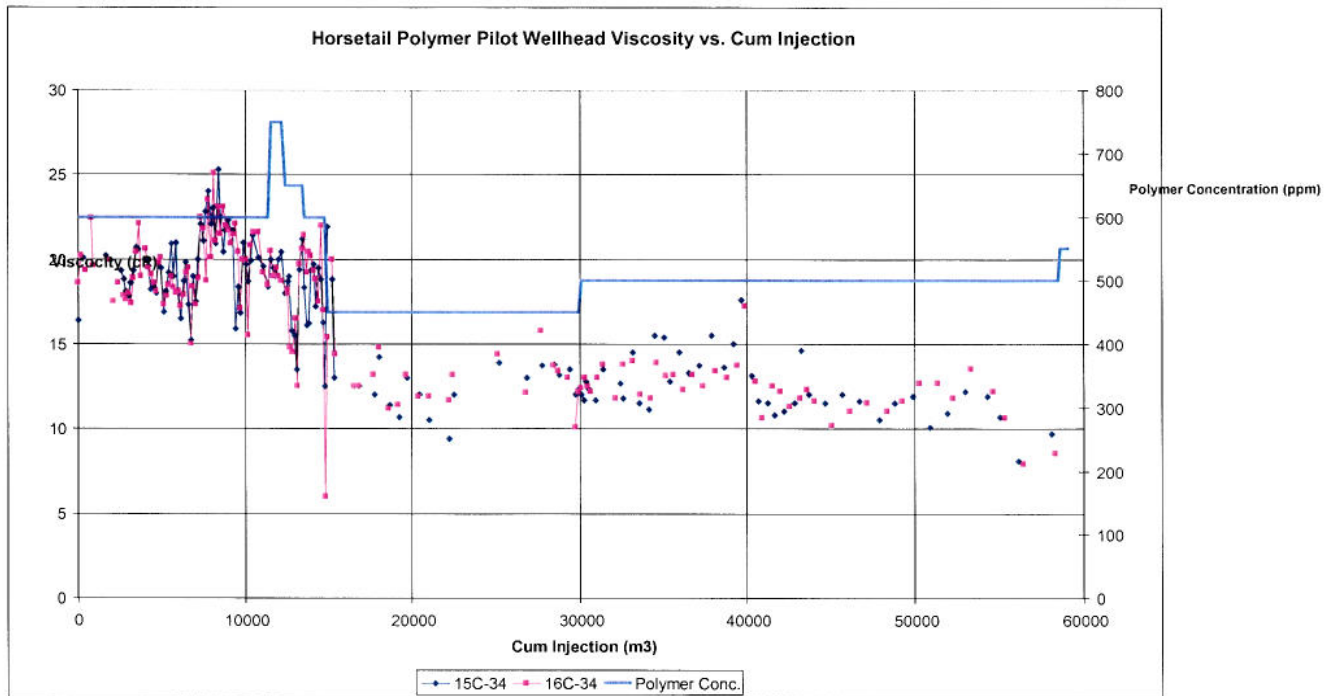
The 16-34 well on the far east end of the pad has now seen response since the last annual report. Although the response has not been as great as seen in the other two producers, the results have been very encouraging.

HTP6 Group Plot



The above plot shows the entire pilot area. As can be seen the production response (oil shown in green) has been substantial throughout the past year. The response to date supports the theory being tested that the polymer will allow for pressure response without catastrophic break though early in the program. Constant learning's are occurring as we monitor the production response at the producers.

Wellhead Fluid Composition



The above graph illustrates the wellhead viscosity of the polymer mixture being injected. The blue line corresponds to the polymer concentration used to achieve the desired level of viscosity. The step change in concentration at the 30000m³ mark is the switch to lower molecular weight polymer, hence a higher concentration of polymer for the same viscosity.

Predicted Vs Actual Performance (Simulation Work)

Early in 2006 IFP produced an updated set of predictive runs to better match the actual pressure profiles of the polymer injectors. Originally the simulations predicted a much more gradual rise in pressure over time. Changes to estimates in rock compressibility and absolute permeability have allowed much better history matching with the data obtained over the past year. Further simulation work is currently being evaluated for it's merits.

Details of the IFP report were included in the 2006 Annual Report.

Pilot economics to date

Updated information is included in Appendix A:

- Sales volumes of natural gas and by-products.
- Revenue.
- Capital costs (include a listing of items with installed cost greater than \$10,000).
- Direct and indirect operating costs by category (e.g. fuel, injectant costs, electricity).
- Crown royalties, applicable freehold royalties, and taxes.
- Cash flow.
- Cumulative project costs and net revenue.
- Explanation of material deviations from budgeted costs.

Facilities

Facilities at the polymer pilot site have not been changed at all since installation and commencement of injection. All plans and process diagrams submitted with the original application should be considered valid.

Environment/Regulatory/Compliance

To demonstrate compliance, CNRL has included all associated approvals received for the polymer pilot in Appendix C. These include:

1. Alberta Energy and Utilities Board Approval #10147B for Enhanced Oil Recovery (Polymer Injection Scheme)
2. Alberta Energy and Utilities Board Approval for Application 1418578 (Request for Increase of Maximum Allowable Wellhead Injection Pressure) at Pilot Polymer Flood Injector Wells
3. Alberta Environment Water Source Well Licence Documentation

CNRL is fully in compliance with all regulatory agencies; all applications necessary for operation have been received.

Safety remains a high priority for CNRL and all personnel operating on site are versed in the emergency procedures associated with field operation and all polymer plant specific issues. The emergency response plan for the field includes the polymer pilot pad and all procedures are reviewed periodically to ensure new operating issues and concerns are addressed.

Future Operating Plan

Milestones

- Completed core flood studies, polymer type selection and initial reservoir simulation. Dec 2004 ✓
- Project startup occurred May 3, 2005. Commissioned injection facility and commenced injection of polymer/water mixture. ✓
- Attaining cumulative liquid voidage replacement ratio of 1.0 and first production response. Estimate June 2006. ✓
- Attaining peak oil production rate of 750 bopd from the pilot project. February 2007 ✓
- Evaluation of switching from polymer to water injection will occur if polymer breakthrough is significant
- Obtaining sufficient production data to extrapolate results to an ultimate recovery with a high degree of confidence. Using the North Horsetail Waterflood project to the North of the polymer pilot as a suitable analogy would suggest that even after 3 years of waterflood we are still experiencing the plateau making it difficult to predict ultimate recoveries. For this reason the timing of this milestone was pushed to the summer of 2008 or beyond.

Deliverables

- Proof of applicability of polymer flooding as secondary recovery mechanism to increase oil recovery and minimize water use in heavy and medium oil reservoirs similar to the Pelican Lake Wabiskaw reservoir. Proof of success will lead to greatly increased use of polymer flooding, producing oil reserves which would otherwise remain unrecovered.
- Accurate estimates of ultimate recovery factors attainable using polymer flooding in reservoirs of this type.
- Polymer design strategy and optimized operating practices.
- Documentation and resolution of technical problems which may arise during polymer flooding.

Part of the cost optimization strategy will be in determining the timing for the switch from polymer injection to water injection. This will greatly reduce the cost per barrel injected while maintaining the pressure in the reservoir and aiding recovery of the oil resource.

Salvage Update

At such time as abandonment's become necessary all government requirements will be observed in the process.

Interpretations and Conclusions

The subject polymer pilot has shown tremendous results over the past 12 months. All three of the producers have shown response to the polymer injection. This response has been greater than expected at more than 10 times the previous depleted primary oil production. This production response has been constant over the last twelve months with very little if any decline in production noted

As of the last two months CNRL has seen some very minor breakthrough of the polymer to the producers with 200ppm of polymer reordered in the produced water. This breakthrough is minor and the water cut is only up from an initial 20% to a current 40%. With the increased water cut there have been some increased fluid levels in the producers, which have yet to be optimized. If optimized there may be an additional increase in the oil production as predicted by previous modeling of polymer breakthrough.

The challenges that exist with respect to the pilot centre on being the trial run for the polymer injection. Without analogous patterns that have polymer injection there is no basis for comparison. Every effort is being made to make changes to one variable at a time so that there is an easy to establish cause-and-effect trend with the data. Test frequency and data accuracy has been paramount to the success of the pilot and continues to be a high priority as the project moves forward. This pilot will serve as the baseline for future expansion and CNRL maintains it's commitment to the integrity of the data being collected on this pilot.

Technical and economic viability are constantly being assessed. With the last twelve months of production the pilot is approaching both a technical and economic success. As more production data is collected the ultimate recovery estimate from the pilot becomes more accurate

CNRL has proceeded with the expansion of polymer flooding in other areas of the Brintnell Field with the results to date from the pilot. As continued learning's occur from the pilot these are applied to the other expanded polymer flood areas. The pilot continues to be an important learning tool to CNRL. The pilot has the longest, most accurate data on the implementation operation and response from polymer injection.

APPENDIX A

Brintnell Field Horsetail Ploymer Flood Pilot Project
Canadian Natural Resources Limited
Monthly Summary Report by Object and Subsidiary
Project 12831011, 12831145, 12831012, 12831146, 12831013
Activity Period 05/01/06 - 05/31/07

Description	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07 Total
Units													
OIL													
5015.105 - Oil	-1,979.70	-2,152.40	-2,270.30	-2,362.50	-2,283.90	-2,350.50	-2,567.70	-2,750.40	-3,030.80	-2,852.20	-3,230.80	-2,920.80	-2,460.50
5015.110 - Clean Oil Trucking													-33,212.50
5025.110 - Field Condensate Trucking													
Total - OIL	-1,979.70	-2,152.40	-2,270.30	-2,362.50	-2,283.90	-2,350.50	-2,567.70	-2,750.40	-3,030.80	-2,852.20	-3,230.80	-2,920.80	-2,460.50
GAS													
5020.105 - Natural Gas	-0.8	-2.3	-5.6	-3.5	-3.5	-0.3	-4.7	-3.1	-2.3	-3.6	-0.8	-0.8	-2.5
Total - GAS	-0.8	-2.3	-5.6	-3.5	-3.5	-0.3	-4.7	-3.1	-2.3	-3.6	-0.8	-0.8	-2.5
NGL													
5030.405 - Pentane Revenue	-0.2	-0.3	-0.4	-0.1	-0.3	-0.1	-0.1	-0.1	-0.2	-0.1	-0.2	-0.2	-0.2
Total - NGL	-0.2	-0.3	-0.4	-0.1	-0.3	-0.1	-0.1	-0.1	-0.2	-0.1	-0.2	-0.2	-0.2
Prices													
OIL													
5015.105 - Oil	374.15	329.65	371.04	354.62	246.99	217.48	237.55	280.23	237.68	296.01	310.23	272.51	281.31
GAS													
5020.105 - Natural Gas	232.35	196.46	199.7	220.32		172.07	230.98	278.63	278.19	283.83	295.45		258.88
NGL													
5030.405 - Pentane Revenue	478.8	502	528.92	523.1	465.23	424.3	415.5	446.3	418.15	428.2	444		463.15
Revenue													
5015.105 - Oil	-740,707.43	-709,547.24	-842,380.02	-837,797.83	-564,107.36	-511,176.00	-609,948.07	-770,743.26	-720,370.86	-844,272.87	-1,002,291.21	-795,955.35	-692,169.69
5015.110 - Clean Oil Trucking						11,287.98				266.88			11,554.86
5020.105 - Natural Gas	-185.88	-451.86	-1,118.31	-771.13		-51.82	-1,085.59	-863.75	-639.84	-1,021.80	-236.36		-647.19
5025.110 - Field Condensate Trucking	816.39	1,092.67	899.7	1,960.36	841.97	1,339.16	1,750.03	1,519.45	1,486.87	1,342.37	1,123.33	657.31	14,829.61
5030.405 - Pentane Revenue	-95.76	-150.6	-211.57	-52.31	-139.57	-42.43	-41.55	-44.63	-63.63	-42.82	-88.8		-1,086.30
Total - Revenue	-740,172.68	-709,057.03	-842,810.20	-836,660.91	-563,404.96	-498,642.91	-609,325.18	-770,132.19	-719,607.46	-843,728.24	-1,001,493.04	-795,298.04	-692,909.51
Royalties													
5310.105 - Oil Crown Royalty	7,407.08	7,095.47	8,423.80	8,377.98	5,641.07	5,111.76	6,099.48	7,707.43	7,203.70	8,442.74	10,022.91	7,959.56	6,921.70
5320.105 - Gas Crown Royalty	52.05	131.04	317.32	223.18		14.23	340.75	238.9	161.04	269.35	61.72		1,809.58
5370.105 - Pentane Crown Royalty	32.5	49.24	51	33.38	26.32	25.04	12.66	14.68	12.81	26.92	14.13		298.68
Total - Royalties	7,491.63	7,275.75	8,792.12	8,634.54	5,667.39	5,151.03	6,452.89	7,961.01	7,377.55	8,739.01	10,098.76	7,959.56	6,921.70
Operating Expenses													
5415.105 - Salaries Operations	103.07	156.43	150.78	99.99	99.09	88.79	971.92	1,947.84	2,882.42	1,258.92	1,394.48	1,287.23	1,236.29
5415.110 - Benefits Operations	20.4	23.28	15.68	14.28	14.52	13.86	160.54	263.54	421.71	361.86	331.17	277.93	234.08
5415.115 - Contract Operations	101.06	100.39	99.58	422.39	297	883.97	1,500.93	1,597.19	2,166.99	1,611.72	1,871.91	1,821.87	2,017.96
5415.120 - Engineering, Superv., Consulting					25	43.75							68.75
5415.135 - Camp Costs	32.52	26.2	32.73	31.1	30	88.4	454.93	338.62	248.01	346.44	385.34	359.66	380.93
5416.115 - Contract Admin	0.92	1.29	0.67	1.2	0.8	8.3	9.25	15.13	3.74	11.04	10.97	12.57	9.76
5416.125 - Travel / Training Costs	0.69	0.83		1.26	1.56	52.96	14.25				2.54	3.15	42.75
5416.130 - Safety Related Costs	5.16	11.45	2.58	3.79	11.63	11.18	242.84	5.12	73.21	10.5	25.62	55.9	130.89
5416.135 - Vehicle Costs	18.14	84.11	15.9	43.29	50.5	177.64	826.81	828.04	668.93	600.71	608.88	384.96	593.88
5416.140 - Helicopter				6.25	0.46	4.76	8.84	5.66	4.62	2.31	2.32		27.26
5416.145 - Field Supplies Costs	5.14	30.06	16.67	15.59	28.72	118.93	53.04	56.26	102.27	87.49	101.43	94.68	103.01
5416.150 - Office Costs	3.33	3.38	4.47	3.82	2.35	10.68	46.2	40	29.4	29.43	28.68	2.35	1.81
5420.105 - Chemicals	0.34	4.15			125.51	540.95	15.41	107.73	59.87	-2.23	381.95		132.04
5422.105 - Instrumentation / Electrical	440.42	575.26	573.93	1,411.02	1,669.98	1,677.07	146.86	1,464.90	137.5	642.65	245.4	900.6	21.38
5422.115 - Meter Proving										7.13	12.65		19.78
5425.105 - Parts & Supplies	325.76	39.38	54.62	443.85	597.21	475.3	1,611.31	699.04	3,860.42	601.01	376.32	154.69	40.21
5425.110 - Lubricants	27.45		25.72	3.9		194.72	131.39	145.9	162.15	381.95	157.4		281.73
5430.105 - Repairs & Maintenance	192.3	386.02	1,025.06	174.29	186.61	2,638.59	1,331.08	392.74	1,168.86	769.76	1,898.87	4,132.13	517.79
5430.110 - Pipeline Patrol												4.76	4.76
5430.125 - Corrosion Cont./Cathodic Prot.		18.96			0.24		4.02	154.17		137.76	8.42		6.76
													330.33

Brintnell Field Horsetail Polymer Flood Pilot Project
Canadian Natural Resources Limited
Monthly Summary Report by Object and Subsidiary
Project 12831011, 12831145, 12831012, 12831146, 12831013
Activity Period 05/01/06 - 05/31/07

Description	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07 Total	576.88
5435.105 - Wireline	4,877.26	1,425.00	93,497.18	232,395.47	11.86	1,071.00	42.59	109.45	13.01	333.51	1,228.84	12.33	32.68	333,265.91
5435.125 - Service/Swab Rig			1,030.00	927	13.26	1,559.12	435.87	109.45	1,051.48	306.13	3,161.85	1,591.74	2,240.28	3,631.82
5435.130 - Steamer/Chem Wash/Vacuum Truck	12.61	1.65	11.25	54.56	4.36	92.89	22.45	14.62	14.25	16.84	30.05	18.59	22.05	10,549.25
5440.105 - Communication	2.65	1.22	1.58	1.22	4.36	92.89	22.45	14.62	14.25	16.84	30.05	18.59	22.05	242.57
5440.110 - Utilities	6,190.09	5,518.74	4,387.21	4,684.31	5,148.94	8,754.80	7,245.42	6,756.33	7,611.94	6,513.36	6,995.97	6,173.83	2,020.63	78,001.37
5445.105 - Fuel	32.04	28.59	39.39	45.64	239.71	296.83	401.94	296.72	280.22	242.28	17.06	338.15		2,258.57
5450.105 - Equipment Rental	1.89	0.89	0.9	9.74	54.63	1.49	17.38	33.41	307.14	14.36	32.18	10.94	27.2	512.15
5455.105 - Trucking - Emulsion	85.99	124.82	98.65	39.66	114.68	121.59	446.18	9,095.79	7,375.13	87.33	29,831.73	4,403.79		51,825.34
5455.110 - Trucking - Produced Water	198.75	2,941.80	516.29	358.27	542.02	257.29	664.2	206.9	159.29	24.69	277.6	3,028.84		9,175.94
5455.115 - Trucking - Other Fluids	2.06	7.33			0.6					12.69	12.91			35.59
5455.120 - Trucking - Tangibles / Freight	6.74	4.44	9.96	165.41	24.64	84.56	81.6	15.52	32.78	35.55	45.85	28.33	30.07	565.45
5460.105 - Surface/Lease Rental - Crown									775.31					775.31
5460.205 - Contra Rental Expense									-428.31					-428.31
5460.210 - Rental Redistribution	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.61	35.7	35.7	35.7	35.7	35.7	464.01
5465.105 - Lease & Road Maintenance	151.42	199.7	182.25	119.37	423.95	1,293.30	1,411.80	604.68	937.83	1,752.20	1,550.67	3,061.38	2,779.53	14,468.08
5478.105 - Sand Cleanout/Tank Cleaning			127.39	5.98					3,390.84		1,068.32			4,592.53
5478.110 - Trucking - Slop	23.05	10.29	14.27	6.6	0.76			25.38			26.84			107.19
5478.120 - Slop Processing / Disposal	6,421.56	5,049.23	8,953.70	7,843.06	10,201.42	6,808.39	11,646.92	12,809.29	12,055.02	14,758.22	15,485.09	16,950.88	14,790.93	143,773.71
5480.105 - Property Tax				39,888.06										39,888.06
5490.110 - Chart Reading	68.6	28.81	31.61	26.41	44.71	31.41	32.61	29.06	18.71	25.51	0.11			337.55
5490.120 - Gas Analysis	2.4			1.74										2.4
5490.121 - Oil Analysis								0.22						1.74
5490.140 - Miscellaneous Expense				4.53	8.58			1.52						0.22
5491.105 - Regulatory	0.51	0.7	589.99						328.58		3.12		472.5	551.33
5491.110 - AEUB/B.C. - Admin Fees													472.81	2,377.12
5494.105 - Pollution Control & Monitoring													4.77	4.77
5494.110 - Waste Management													51.05	2,235.74
5494.115 - Environmental/Damage Claims														61.6
5498.905 - Overhead														73.32
Total - Operating Expenses	19,402.86	16,855.51	111,550.54	289,317.89	20,063.53	27,575.93	30,076.89	38,165.41	47,605.93	31,480.15	66,191.39	45,760.42	29,186.73	775,233.18
Operating Income	-713,278.19	-684,925.77	-722,467.54	-538,708.48	-537,674.04	-465,915.95	-572,795.40	-724,005.77	-664,623.98	-803,509.08	-923,202.89	-741,578.06	-656,801.08	-8,749,486.23
Lifting Cost (per BOE)	-1.56	-1.24	-7.79	-19.43	-1.4	-1.86	-1.86	-2.2	-2.49	-1.75	-3.35	-2.49	-1.88	-3.71
Net Income (per BOE)	57.23	50.51	50.44	36.18	37.41	31.49	35.39	41.79	34.82	44.71	45.4	40.35	42.38	41.83
Royalties as a % of Revenue	-1.01	-1.02	-1.04	-1.03	-1	-1.03	-1.05	-1.03	-1.02	-1.03	-1	-1	-0.99	-1.02
Volume Per Day														
OIL	-63.86	-71.75	-73.24	-76.21	-76.13	-75.82	-85.59	-88.72	-97.77	-101.86	-104.22	-97.36	-79.37	-83.87
GAS	-0.03	-0.08	-0.18	-0.11	-0.01	-0.01	-0.16	-0.1	-0.07	-0.13	-0.03	-0.08	-0.08	-0.07
NGL	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01