

CODECO CONSULTING (2000) INC.

DAILY DRILLING REPORT

410, 311 - 6th Avenue S.W.
Calgary, Alberta T2P 3H2
Phone: (403)237-7808
Fax: (403)265-1760

Well Name: Devlan et al Thunder River N-73 67°30'131°15'

Date: 06-Mar-01 Day: 11

Depth: 825 mKB Progress: 67 m Drlg.: 17.25 hrs. Drill Rate: 3.88 m/hr Rig: Akita #14

Operation: Drilling 200mm hole.

Bit No.	Size	Type	Serial Number	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
2	200	EDT09XC	164838	435	793	358	80.00	10/11	80	3 x 11.1	3-2-I
3	200	EDT17XC	163953	793		32	6.00	12	100/85	3 x 11.1	IN
				Pump No. 1		Pump No. 2		Desander		Desilter	
Model				F-500				Underflow Density		1280	
Liner/Stroke				152 x 191				Overflow Density		1050	
SPM				120				Flow Rate, l/min		5	
Volume				1.25				Operating Hours		24.00	

Pump Pressure: 6,400 kPa Ann. Vel.: DC: 108 m/min DP 54 m/min Jet Vel.: m/sec kW:

Drilling Assembly: Bit, shock sub, 12 - 159mm DCs, X-over, 101mm DP

SURVEYS			MUD		ADDITIVES (SACKS)			
Depth (mKB)	Inclination (deg)	Direction (deg)	Weight	1050	Gel	40		
			Viscosity	43	Lignite	1		
			pH	9.5	Aquapac	1		
			Water Loss	8.0	Sawdust	50		
			P.V.	13.0				
			Y.P.	6.0				
			Gels	2/4				
			Filter Cake	1.3				
			Solids	0.03			Day Cost	1,724
			Oil				Well Cost	9,613

Core No. Size/Type: In: mKB Out: mKB Meters Rec.: %
DST No.: Formation: Interval: to PF: ISI: VO: FSI:

RIG TIME

1. Drill	17.25	7. Clean to Bottom	13. Cement	19. Rig Up
2. Rig Service	0.75	8. Core	14. WOC	20. Mix LCM
3. Trip	4.25	9. DST	15. Nipple Up	21.
4. Survey		10. Log	16. Pressure Test	22.
5. Circ./Cond.		11. Handle Tools	17. Repair	23.
6. Ream		12. Run Casing	18. Slip/Cut	24.

REMARKS

0800 - 0815: Rig service. 0815 - 1730: Drilled from 758 - 793m KB. ROP dropped to 2.3 mph and held steady. 1730 - 1745: Rig service. 1745 - 2200: Hoist out for bit change. Evaluate bit wear, pick up new bit and run in hole. 2200 - 2400: Drill ahead. Drilling break at 816.5 - 817.0 mKB, lost 0.5m3. Rate 0.3m3 every 10 minutes (pump off). 0000 - 0015: Rig service. 0015 - 0415: Drill ahead. Drill 1m to 818m, fractured, high torque. 0415 - 0600: Mix and pump LCM pill. Flow check, holding. Observe for 15 minutes, good.

0600 - 0800: Drill ahead. Building volume and properties. Holding good. No more losses to report.

NOTE: Lost 0.5m3 on penetration and 1.0m3 while working. Total losses = 1.5m3.

Well Cost: 45,465 Cum. Cost: 808,933 AFE No.: AFE Amount
Weather: Light Snow -21C Supervisor: Erwin Alyea Mobile: 403-997-2529 Taken By: Michael Woolfer



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Well Name: Devlan et al Thunder River N-73 67°30'131°15'

Date: 04-Mar-01 Day: 9

Depth: 672 mKB Progress: 94 m Drlg.: 23.00 hrs. Drill Rate: 4.09 m/hr Rig: Akita #14

Operation: Drilling 200mm hole.

Bit No.	Size	Type	Serial Number	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
2	200	ED09XG	164838	435		237	47.50	10/11	80	3 x 11.1	IN
		Pump No. 1	Pump No. 2			Desander	Desilter			Centrifuge	
Model		F-500		Underflow Density						1280	
Liner/Stroke		152 x 191		Overflow Density						1050	
SPM		120		Flow Rate, l/min						5	
Volume		1.25		Operating Hours						24.00	

Pump Pressure: 7,300 kPa Ann. Vel.: DC: 108 m/min DP 54 m/min Jet Vel.: m/sec kW:

Drilling Assembly: Bit, bit sub, 12 - 159mm DCs, X-over, 101mm drill pipe to surface.

SURVEYS			MUD		ADDITIVES (SACKS)		
Depth (mKB)	Inclination (deg)	Direction (deg)	Weight	1060	Gel	17	
598	1.25		Viscosity	44	Aquapac	1	
			pH	9.0	Lignite	1	
			Water Loss	7.6	Caustic	1	
			P.V.	14.0	Sawdust	6	
			Y.P.	6.5			
			Gels	3/6			
			Filter Cake	1.3			
			Solids	0.04			Day Cost 855
			Oil				Well Cost 7,775

Core No. Size/Type: In: mKB Out: mKB Meters Rec.: %
 DST No.: Formation: Interval: to PF: ISI: VO: FSI:

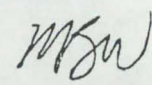
RIG TIME

1. Drill	23.00	7. Clean to Bottom		13. Cement		19. Rig Up	
2. Rig Service	0.75	8. Core		14. WOC		20.	
3. Trip		9. DST		15. Nipple Up		21.	
4. Survey	0.25	10. Log		16. Pressure Test		22.	
5. Circ./Cond.		11. Handle Tools		17. Repair		23.	
6. Ream		12. Run Casing		18. Slip/Cut		24.	

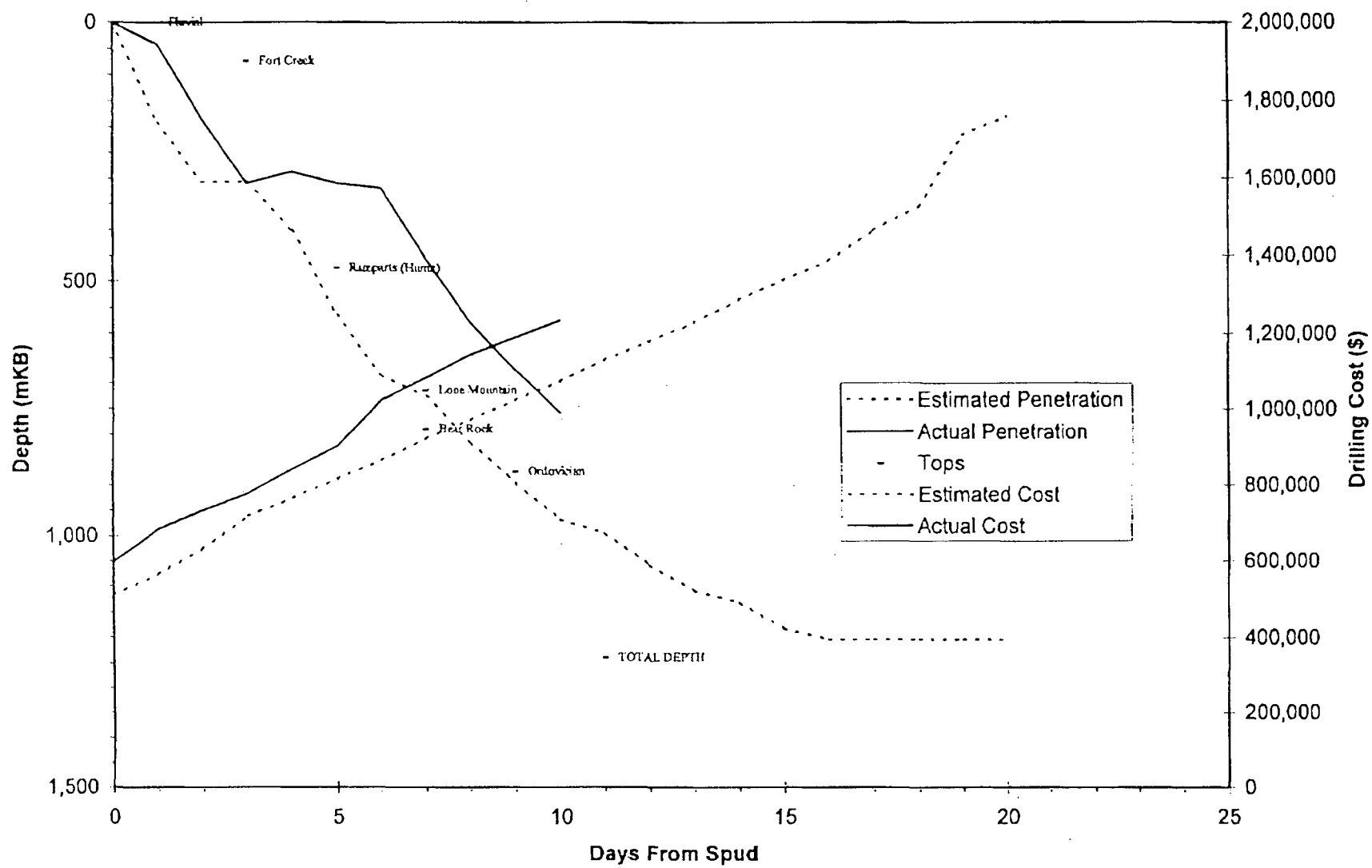
REMARKS

0800 - 0815: Rig service. 0815 - 1230: Drill ahead. 1230 - 1245: Survey. 1245 - 1600: Drill ahead. 1600 - 1615: Rig service.
 1615 - 2400: Drill ahead. 0000 - 0015: Rig service. 0015 - 0800: Drill ahead.

Well Cost: 44,596 Cum. Cost: 719,613 AFE No.: AFE Amount
 Weather: Overcast -18 Supervisor: Erwin Alyea Mobile: 403-997-2529 Taken By: Michael Woolfer



Devlan et al Thunder River N-73 Drilling and Cost Curves



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Well Name: Devlan et al Thunder River N-73 67°30'131°15'Date: 02-Mar-01 Day: 7Depth: 456 mKB Progress: 137 m Drlg.: 18.75 hrs. Drill Rate: 7.31 m/hr Rig: Akita #14Operation: Drilling 200mm hole.

Bit No.	Size	Type	Serial Number	In	Out	Meters	Hours	Weight	RPM	Nozzles	Condition
1	200	L-127	158872	310	435	125	19.25	10/11	160	3 x 11.1	4-1-I
2	200	EDT09XG	164838	425		31	1.50	8/10	80	3 x 11.1	IN
		Pump No. 1		Pump No. 2				Desander		Desilter	
Model		F-500				Underflow Density				1230	
Liner/Stroke		152 x 191				Overflow Density				1030	
SPM		120				Flow Rate, l/min				3	
Volume		1.25				Operating Hours				16.00	

Pump Pressure: 5,000 kPa Ann. Vel.: DC: 108 m/min DP 54 m/min Jet Vel.: m/sec kW: Drilling Assembly: Bit, bit sub, 12 - 159mm DCs, X-over, 101mm drill pipe to surface.

SURVEYS			MUD		ADDITIVES (SACKS)		
Depth (mKB)	Inclination (deg)	Direction (deg)	Weight	1090	Gel	33	
346	0.50		Viscosity	45	Aquapac	2	
			pH	9.5	Lignite	3	
			Water Loss	7.5	Bicarb	3	
			P.V.		Sawdust	5	
			Y.P.		Soda Ash	3	
			Gels		Caustic	2	
			Filter Cake				
			Solids				Day Cost 1,674
			Oil				Well Cost 6,296

Core No. Size/Type: In: mKB Out: mKB Meters Rec.: %
 DST No.: Formation: Interval: to PF: ISI: VO: FSI:

RIG TIME

1. Drill	18.75	7. Clean to Bottom		13. Cement		19. Rig Up	
2. Rig Service	0.50	8. Core		14. WOC		20. Held BOP Drill	0.25
3. Trip	2.75	9. DST		15. Nipple Up		21.	
4. Survey	0.25	10. Log		16. Pressure Test		22.	
5. Circ./Cond.	0.25	11. Handle Tools		17. Repair	1.25	23.	
6. Ream		12. Run Casing		18. Slip/Cut		24.	

REMARKS

0800 - 0915: Finish wiring shaker motor. 0915 - 1230: Drill ahead. 1230 - 1245: Survey. 1245 - 1300: Held BOP Drill. 1300 - 1600: Drill ahead. 1600 - 1615: Rig service. 1615 - 0315: Drill ahead to 435m KB. 0315 - 0330: Circulate up sample. 0330 - 0345: Rig service. 0345 - 0630: Hoist bit #1, hole in good shape. Run in with bit #2, no hole troubles. 0630 - 0800: Pattern in new bit and drill ahead.

GL = 120.10m, KB = 124.20m, CF = 120.10m

Well Cost: 63,783 Cum. Cost: 615,716 AFE No.: AFE Amount
 Weather: Overcast -21C Supervisor: Erwin Alyea Mobile: 403-997-2529 Taken By: Michael Woofst