


<div><div></div><div><div>Peyto Ansell 102/15-29-52-19W5</div><div>Last Revision: 27-Mar-17</div></div></div>																																																																																																																																																			
Basic Well Information				Configuration		Geological Information				Bits and BHA		Operational Notes		Casing and Cement		Mud																																																																																																																																			
<div>Well Name: Peyto Ansell 102/15-29-52-19W5</div> <div>Unique ID: 102/15-29-52-19W5</div> <div>A/E # &amp; Amount: D17-0005 for \$1993908</div> <div>Surface Loc.: 03-29-52-19W5</div> <div>Well Status: DEV (CB - Cardium Fm)</div> <div>Licence No: 482622</div> <div>Surface Coords: 43.21m North of South Boundary of Section 29</div> <div>582.38m East of West Boundary of Section 29</div> <div>BH Coords: 304.60m North of South Boundary of Section 29</div> <div>728.44m East of West Boundary of Section 29</div> <div>Target Summary: N/Am radius @ Wilrich (2818 mTVD)</div>				<div><div>BOP Stack</div><div>279mm, 34500 kPa</div><div>Casing Bowl</div><div>279mm x 244.5mm x 34.5MPa</div></div>		<div>Surveyed GLE: 1000.6m</div> <div>Estimated KBE: 1006.2m</div> <div>Objective: Obtain production from Wilrich Formation</div> <div>EPZ = 0 km (B-140, sweet gas well) No H<sub>2</sub>S Anticipated</div> <table><thead><tr><th>Formation</th><th>Depth (TVD)</th><th>Pressure (kPa)</th><th>EMW (kg/m<sup>3</sup>)</th></tr></thead><tbody><tr><td colspan="4">Entire Interval Above Top Belly River</td></tr><tr><td>Belly River</td><td>1483</td><td>14,000</td><td>962</td></tr><tr><td>Lea Park (Wapiabi)</td><td>1762</td><td></td><td></td></tr><tr><td>Lea Park Marker</td><td>1810</td><td></td><td></td></tr><tr><td>Colorado</td><td>1927</td><td></td><td></td></tr><tr><td>Badheart</td><td>2046</td><td></td><td></td></tr><tr><td>Muskiki</td><td>2065</td><td></td><td></td></tr><tr><td>Cardium Zone</td><td>2141</td><td></td><td></td></tr><tr><td>Cardium Sand</td><td>2163</td><td>23,000</td><td>1084</td></tr><tr><td>Blackstone</td><td>2185</td><td></td><td></td></tr><tr><td>Cardium Zone Repeat</td><td>2223</td><td></td><td></td></tr><tr><td>Cardium Sand Repeat</td><td>2240</td><td>23,000</td><td>1047</td></tr><tr><td>Blackstone Repeat</td><td>2261</td><td></td><td></td></tr><tr><td>Second White Specks</td><td>2343</td><td>29,500</td><td>1283</td></tr><tr><td>Doe Creek</td><td>2513</td><td></td><td></td></tr><tr><td>Dunvegan</td><td>2552</td><td></td><td></td></tr><tr><td>Shaftesbury</td><td>2566</td><td></td><td></td></tr><tr><td>Base Fish Scales</td><td>2625</td><td></td><td></td></tr><tr><td>Viking</td><td>2656</td><td>32,000</td><td>1228</td></tr><tr><td>Joli Fou</td><td>2675</td><td></td><td></td></tr><tr><td>Notikewin</td><td>2678</td><td>27,000</td><td>1028</td></tr><tr><td>Falher</td><td>2696</td><td>33,000</td><td>1248</td></tr><tr><td>Mann Coal Mrk #3</td><td>2737</td><td></td><td></td></tr><tr><td>Mann Coal Mrk #2.5</td><td>2772</td><td></td><td></td></tr><tr><td>L. 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Target (Toe)</td><td>2792</td><td>39,500</td><td>1442</td></tr></tbody></table> <div><div>*All formations pressures have been reviewed &amp; all formations with no pressure / mud density listed can be controlled with previously listed mud density</div><div>Landing 1mTVD below Wilrich Coal</div></div>				Formation	Depth (TVD)	Pressure (kPa)	EMW (kg/m <sup>3</sup> )	Entire Interval Above Top Belly River				Belly River	1483	14,000	962	Lea Park (Wapiabi)	1762			Lea Park Marker	1810			Colorado	1927			Badheart	2046			Muskiki	2065			Cardium Zone	2141			Cardium Sand	2163	23,000	1084	Blackstone	2185			Cardium Zone Repeat	2223			Cardium Sand Repeat	2240	23,000	1047	Blackstone Repeat	2261			Second White Specks	2343	29,500	1283	Doe Creek	2513			Dunvegan	2552			Shaftesbury	2566			Base Fish Scales	2625			Viking	2656	32,000	1228	Joli Fou	2675			Notikewin	2678	27,000	1028	Falher	2696	33,000	1248	Mann Coal Mrk #3	2737			Mann Coal Mrk #2.5	2772			L. 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Target (Toe)	2792	39,500	1442	<div>Surface Hole</div> <div>311mm</div> <div>605m</div> <div>KOP: 250mMD</div> <div>2.5 deg/30m</div> <div>EOB: 310mMD</div> <div>5 degrees</div> <div>KOP#2: 2440mMD</div> <div>4 deg/30m</div> <div>Intermediate Hole</div> <div>222mm</div> <div>2940mMD</div> <div>2812mTVD</div> <div>77.77 degrees</div> <div>Deflection Point #1: 2940mMD</div> <div>6 deg/30m</div> <div>Deflection Point #2: 3001mMD</div> <div>3.5 deg/30m</div>		<div>Surface Hole</div> <div>• 311mm U519S PDC Bit</div> <div>• 203mm 7/8 4.0stg motor 1.83deg</div> <div>• 203mm MWD</div> <div>• 2 x 203mm NMDC's</div> <div>• 2 x 114mm HWDP</div> <div>• 165mm Jars</div> <div>• 40 x 114mm HWDP</div> <div>• 101mm DP as required</div> <div>Intermediate Hole</div> <div>BHA #1: Drillout to ICP</div> <div>• 222mm Z616 PDC Bit</div> <div>• 165mm 7/8 5.0 stg motor 1.83deg</div> <div>• 165mm Float Sub</div> <div>• 165mm MWD</div> <div>• 3 x 165mm NMDC's</div> <div>• 2 x 114mm HWDP</div> <div>• X/O</div> <div>• 165mm Jars</div> <div>• 38 x 114mm HWDP</div> <div>• X/O</div> <div>• 101mm DP as required</div> <div>• Pick up DF513R PDC at KOP</div> <div>Motor set at 2.12* ABH slick</div> <div>Main Hole</div> <div>BHA #1: ICP Drillout to TD</div> <div>• 159mm TBD PDC bit to TD</div> <div>• 121mm 7/8 6.4 stage HR motor @ 1.83deg FBH</div> <div>• 101mm Float Sub</div> <div>• 121mm MWD with Gamma</div> <div>• 3 x 121mm Flex NMDC's</div> <div>• 2 x 101mm DP</div> <div>• 121mm Jars</div> <div>• 156 x 101mm DP</div> <div>• 48 x 101mm HWDP</div> <div>• 101mm DP as required</div> <div>• Set up 101mm HWDP as req'd to TD Hz leg in one run. Keep HWDP above 45deg Inc.</div>		<div>Surface Hole</div> <div>• Offset wells have not encountered any losses or gravel</div> <div>• If severe LC occurs or unable to stabilize gravel call Cgy before ordering cmt plugs</div> <div>Intermediate Hole</div> <div>• Slow parameters in the Cardium Sst.: 30RPM • WOB - 12K DaN • 1.80m3/min</div> <div>• Offsets have had losses with densities of 1330kg/m3 &amp; higher. Try to to maintain density at 1310kg/m3 or less</div> <div>• Top set ICP in the Wilrich shale break below the Wilrich coal and above the sand</div> <div>Directional Plan</div> <div>Surface Hole</div> <div>KOP: 250mMD</div> <div>BUR: 2.5 deg/30m</div> <div>EOB: 310mMD</div> <div>Hold Angle: 5 degrees</div> <div>Intermediate Hole</div> <div>KOP2: 2440mMD</div> <div>BUR2: 4 deg/30m</div> <div>EOB#2: 2673 mMD</div> <div>Hold Angle#: 31.05 degrees</div> <div>KOP3: 2673mMD</div> <div>BUR3: 5.25 deg/30m</div> <div>ICP: 77.77 degrees</div> <div>Main Hole</div> <div>HZ WP1: 2940mMD</div> <div>Turn Rate #1 6 deg/30m</div> <div>HZ WP2: 3001mMD</div> <div>Turn Rate #2 3.5 deg/30m</div> <div>See Compass Directional Plan #24571 D2</div>		<div>Surface Casing</div> <div>244.5mm, 53.57kg/m, J-55 LT&amp;C</div> <div>Surface Centralizers:</div> <div>• 1.5 m above float shoe: 1 per joint (fixed)</div> <div>• 1.5 m above float collar: 1 per joint (fixed)</div> <div>• 1 centralizer/3 jts to surface</div> <div>Surface Cement</div> <div>See complete Sanjel program</div> <div>Preflush: 2m<sup>3</sup> Water (1000kg/m<sup>3</sup>)</div> <div>Preflush: 3m<sup>3</sup> Scavenger (1250kg/m<sup>3</sup>)</div> <div>Blend: SURFACEmix PRO</div> <div>Density: 1700 kg/m<sup>3</sup> (605m to Surf.)</div> <div>Minimum 50 to 75% Open Hole Excess</div> <div>Intermediate Casing</div> <div>177.8mm, 38.7 &amp; 34.2 kg/m ERW-80 LT&amp;C</div> <div>Intermediate Hole Centralizers:</div> <div>• 1 mid jnt above float collar &amp; shoe (floating)</div> <div>• 1 Stand off band per joint in build section</div> <div>• 1 Stand-off band every 50m KOP to Surf.</div> <div>Intermediate Hole Float Equipment:</div> <div>• Run conventional float equipment</div> <div>Intermediate Cement</div> <div>See complete Sanjel program</div> <div>Preflush: 2.5m<sup>3</sup> Base Oil (1250kg/m<sup>3</sup>)</div> <div>5.0m<sup>3</sup> Spacer (1300kg/m<sup>3</sup>)</div> <div>Lead Blend: LITEmix 1325</div> <div>Lead Density: 1325kg/m<sup>3</sup> (2.041m to Surf.)</div> <div>Tail Blend: iPrime</div> <div>Tail Density: 1550kg/m<sup>3</sup> (ICP to 2.041m)</div> <div>• Pump 30% excess over gauge for Lead &amp; Tail</div> <div>• If losses occur pump 50% lead excess</div> <div>Production Hole Centralization:</div> <div>• 1 OPTimizer below each frac port &amp; packer. At least every 3rd jnt in the Hz (floating)</div>		<div>Surface Hole</div> <div>System: Gel Chem</div> <div>Density: &lt; 1150kg/m<sup>3</sup></div> <div>Viscosity: 40 to 120 s/l</div> <div>pH: 8.0 to 9.0</div> <div>Calcium: 80 to 100 mg/l</div> <div>Spud with 80 vis mud</div> <div>Intermediate Hole</div> <div>Interval: Drillout SC to ICP</div> <div>System: ~90/10 Invert</div> <div>Density: ~1100 - 1315kg/m<sup>3</sup></div> <div>CaCl2: 25 to 30%</div> <div>HPHT: ~15cc/30min to KOP</div> <div>&lt;5cc/30 min for Coals</div> <div>Lime: 20 to 25 kg/m<sup>3</sup></div> <div>ES: 1500+ volts</div> <div>YP: 3 to 4 Pa's to KOP</div> <div>4 to 6 Pa's to ICP</div> <div>Viscosity: 45 to 65 s/L</div> <div>LGS: &lt;8%</div> <div>• Utilize Controlseal / Gilsonite / CalCarb 0 &amp; 325 in a 1/4 : 1/4 : 1:1 ratio for seepage losses</div> <div>Hztl / Main Hole</div> <div>Interval: Drillout ICP to TD</div> <div>System: ~ 90/10 Invert</div> <div>Density: ~1450kg/m<sup>3</sup></div> <div>Viscosity: 55 to 65 s/L</div> <div>CaCl2: 25 to 30%</div> <div>Lime: 20 to 25 kg/m<sup>3</sup></div> <div>ES: 1500+ volts</div> <div>LGS: &lt;8%</div> <div>HPHT: ~8 cc/30 min</div> <div>YP: 3 to 5 Pa's</div>	
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<div>ERCB: Drayton Valley 780.542.5182 800.222.6514</div> <div>Drilling Manager Lee Curran Office 403.451.4110 Cell 403.861.7212</div> <div>Drilling Engineer Dave Hauck Office 403.451.4107 Cell 403.554.4528</div> <div>Drilling Sup't Jeff Russell Office 587.390.6116 Cell 587.222.3779</div> <div>Drilling Sup't Jamie Andolsek Office 403.261.5051 Cell 403.852.1049</div> <div>Construction (Field) Stewart Lawton Office N/A Cell 780.674.1730</div> <div>Staff Geologist Chris Coolican Office 403.451.4120 Cell 403.700.2275</div> <div>VP Operations, COO Scott Robinson Office 403.290.1371 Cell 403.815.2242</div> <div>See Drilling Program for Additional Contact Info.</div>																																																																																																																																																			
Services & Pertinent Telephone Numbers																																																																																																																																																			
<div><div>Service</div><div>Company</div><div>Contact</div><div>Phone #</div></div> <div><div>Drilling Rig:</div><div>Trinidad 434</div><div>Andrew Moore</div><div>780.228.2045</div></div> <div><div>Fluids:</div><div>Secure Energy</div><div>Dominic Dube</div><div>780.499.5668</div></div> <div><div>Cement:</div><div>Sanjel</div><div>Edson</div><div>780.723.3472</div></div> <div><div>Surface Casing:</div><div>Alberta Tubulars</div><div>Withers Dispatch</div><div>800.260.9171</div></div> <div><div>Intermediate Casing:</div><div>Alberta Tubulars</div><div>Withers Dispatch</div><div>800.260.9171</div></div> <div><div>CHL Logging:</div><div></div><div>None</div><div></div></div> <div><div>Directional:</div><div>Compass</div><div>Omar Marsa</div><div>403.861.8041</div></div> <div><div>Casing Bowl:</div><div>Streamflo</div><div>Edson Dispatch</div><div>780.712.5505</div></div> <div><div>Centrifuge:</div><div>Apex</div><div>Whitecourt Dispatch</div><div>780.778.4702</div></div> <div><div>MSF Liner Equip:</div><div>Baker Hughes</div><div>Brandon Hallborg</div><div>780.612.3150</div></div> <div><div>Cuttings Hauling:</div><div>Cornerstone</div><div>Carrot Ck Dispatch</div><div>780.728.9111</div></div> <div><div>Sawdust:</div><div>Mojo</div><div>Ian Kallay</div><div>403.700.7827</div></div> <div><div>Production Casing:</div><div>Continental Alloys</div><div>VDM Dispatch</div><div>780.467.9897</div></div> <div><div>Drilling Supervisor:</div><div>Peyto Exploration</div><div>Mark Ogilvie</div><div>403.304.5816</div></div> <div><div>Drilling Supervisor:</div><div>Peyto Exploration</div><div>Kelly Blanchard</div><div>780.667.6424</div></div> <div><div>Drilling Supervisor:</div><div>Peyto Exploration</div><div>Rig Phone</div><div>780.229.0450</div></div>																																																																																																																																																			
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<div>•Pressure test all BOPE to 34.5mPa high at SCP, annular preventer reduced 17.5mPa (Surface Casing test low to 1.4mPa &amp; high to 14.0mPa)</div> <div>•Drilling rig will set uncemented 114.3mm Multi-Stage Frac Liner &amp; tie-back</div> <div>Actual Spud to TD: 0 days</div> <div>Actual Spud to RR: 0 days</div> <div>Final Field Estimate: \$</div>																																																																																																																																																			
				<div>Hztl / Main Hole</div> <div>159mm</div> <div>Approx TD = 2792mTVD</div> <div>Approx TD = 4139mMD</div> <div>Approx Hztl Leg 1199m</div>																																																																																																																																															