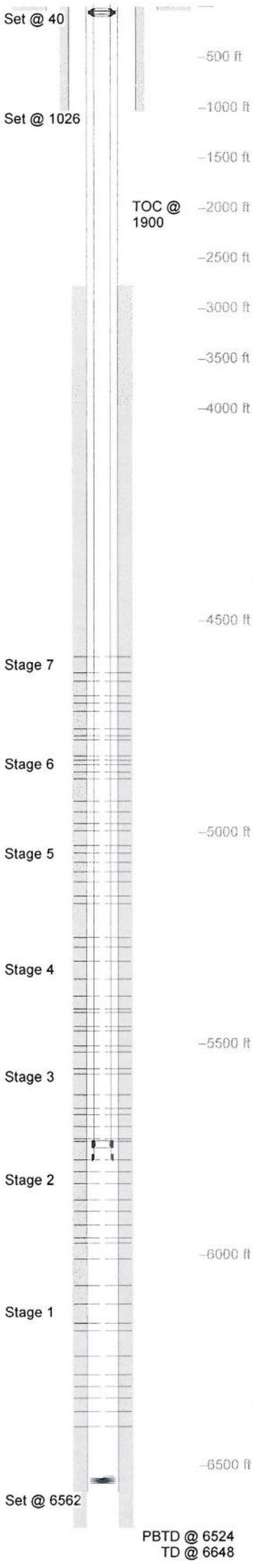
# Downhole Schematic for Cook Martin 20-1D (PB20)

ENCANA

Project : South Piceance | API # : 05045205590000 | Surface Location : NWNE Sec 20 T7S - R95W 6th PM

Area : Parachute | County : | BHL : NWNE-20-7S-95 W 6th PM

As Of : 07/28/2012 | GL : 5646.0 ft | KB to GL : 22.0 ft | KB : 5668.0 ft




## Casing Details

| Section | Hole | Casing | Mass | Set At | Length | Thread | Grade | Description |
|---|---|---|---|---|---|---|---|---|
| Conductor | 26.000 | 16 | 42 | 40 | 60 | | A52A | Joint |
| Surface | 12.250 | | 0 | 1,026 | 1 | LT&C | | Guide Shoe |
| | | 9.625 | 36 | 1,025 | 42 | LT&C | K-55 | Casing |
| | | | 0 | 983 | 1 | LT&C | | Float Shoe |
| | | 9.625 | 36 | 982 | 954 | LT&C | K-55 | Casing |
| | | 9.625 | 36 | 28 | 3 | ST&C | J55 | Casing Pup |
| | | 9.625 | 36 | 25 | 3 | LT&C | J55 | Well Head |
| | | 9.625 | 36 | 22 | 27 | LT&C | J55 | Landig Jnt. |
| Production | 8.750 | | 0 | 6,562 | 1 | Butt | | Guide Shoe |
| | | 4.5 | 11.6 | 6,561 | 27 | Butt | S80 | Csng. |
| | | | 11.6 | 6,533 | 2 | Butt | | Float Collar |
| | | 4.5 | 11.6 | 6,532 | 922 | Butt | S80 | Csng. |
| | | 4.5 | 11.6 | 5,609 | 22 | Butt | S80 | Csng. Marker JT. |
| | | 4.5 | 11.6 | 5,587 | 1,006 | Butt | S80 | Csng. |
| | | 4.5 | 11.6 | 4,581 | 22 | Butt | S80 | Csng. Marker JT. |
| | | 4.5 | 11.6 | 4,559 | 4,527 | Butt | S80 | Csng. |
| | | 4.5 | 11.6 | 32 | 5 | Butt | P-110 | Mandril |
| | | 4.5 | 11.6 | 27 | 23 | Butt | S80 | LD. Joint |

## Cement Details

| Section | Sequence | Top | Density | Blend / Additives |
|---|---|---|---|---|
| Conductor | Fill | 0 | 0.0 | 4 yards redi mix / |
| Surface | Lead | 0 | 12.5 | 12.5 G Lead (75 bbls.) / D907 18800lb; 2%D79+o.2%D46+0.25ppsD29 |
| | Tail | 778 | 15.8 | 15.8 Class G (31bbls.) / 14006lbD907+0.75%S001+0.2%D046+0.2 %ppsD29 |
| Production | Scavenger | 0 | 8.3 | CW100 / |
| | Lead | 2,771 | 12.0 | 12.0 TXI Lead / D049□75.000 lb/sk□WTSK□□34,275.00 lb<br>D079□1.000 %□BWOB□□342.75 lb<br>D013□1.000 %□BWOB□□342.75 lb<br>D046□0.500 %□BWOB□171.38 lb<br>D029□0.250 lb/sk□WTSK□□114.25 lb<br>D112 75 lb |
| | Tail | 4,817 | 13.0 | 13.0 TXI / D049□75.000 lb/sk□WTSK□37,650.00 lb<br>D020□3.000 %□BWOB□1,129.5 lb<br>D112□0.200 %□BWOB□75.3 lb<br>D013□0.600 %□BWOB□225.9 lb<br>D046□0.500 %□BWOB□□188.25 lb<br>D029□0.250 lb/sk□WTSK□125.5 lb□125.25 lb |

## Tubing and Downhole Equipment

| O.D. | Length | Depth | Description |
|---|---|---|---|
| 0.000 | 20.00 | 20.00 | KB - 2.00 |
| 4.063 | 0.84 | 20.84 | 4 1/16" 5K WG hanger |
| 2.594 | 0.67 | 21.51 | 2 3/8" N80 saver sub |
| 2.375 | 5,705.58 | 5,727.09 | 176 jts 2 3/8" J-55 4.7# Eue tbg |
| 3.063 | 0.92 | 5,728.01 | 1.81 F-nipple |
| 2.375 | 31.65 | 5,759.66 | 1 JT 2 3/8" J-55 4.7# Eue tbg |
| 3.125 | 0.91 | 5,760.57 | Top 1/2 POBS |
| 3.750 | 1.23 | 6,524.30 | Bttm 1/2 POBS & 3 3/4" mill |

## Perforations

| Stage | Date | From | To | Shots |
|---|---|---|---|---|
| 1 | 06/18/2012 | 6,406 | 6,407 | 3 |
| | | 6,370 | 6,371 | 3 |
| | | 6,338 | 6,339 | 3 |
| | | 6,310 | 6,311 | 3 |
| | | 6,282 | 6,283 | 3 |
| | | 6,238 | 6,239 | 3 |
| | | 6,178 | 6,179 | 3 |
| | | 6,160 | 6,161 | 3 |
| | | 6,114 | 6,115 | 3 |
| 2 | 06/28/2012 | 6,070 | 6,071 | 3 |
| | | 6,008 | 6,009 | 3 |
| | | 5,970 | 5,971 | 3 |
| | | 5,958 | 5,959 | 3 |
| | | 5,928 | 5,929 | 3 |
| | | 5,896 | 5,897 | 3 |
| | | 5,868 | 5,869 | 3 |
| | | 5,830 | 5,831 | 3 |
| | | 5,802 | 5,803 | 3 |
| 3 | 07/01/2012 | 5,774 | 5,775 | 3 |
| | | 5,730 | 5,731 | 3 |
| | | 5,724 | 5,725 | 3 |
| | | 5,694 | 5,695 | 3 |
| | | 5,666 | 5,667 | 3 |
| | | 5,652 | 5,653 | 3 |
| | | 5,620 | 5,621 | 3 |
| | | 5,570 | 5,571 | 3 |
| | | 5,558 | 5,559 | 3 |
| 4 | 07/03/2012 | 5,518 | 5,519 | 3 |
| | | 5,504 | 5,505 | 3 |
| | | 5,468 | 5,469 | 3 |
| | | 5,458 | 5,459 | 3 |
| | | 5,424 | 5,425 | 3 |
| | | 5,416 | 5,417 | 3 |
| | | 5,386 | 5,387 | 3 |
| | | 5,346 | 5,347 | 3 |
| | | 5,304 | 5,305 | 3 |
| 5 | 07/04/2012 | 5,270 | 5,271 | 3 |
| | | 5,248 | 5,249 | 3 |
| | | 5,168 | 5,169 | 3 |
| | | 5,150 | 5,151 | 3 |
| | | 5,116 | 5,117 | 3 |
| | | 5,092 | 5,093 | 3 |
| | | 5,070 | 5,071 | 3 |
| | | 5,048 | 5,049 | 3 |
| | | 5,030 | 5,031 | 3 |
| 6 | 07/06/2012 | 4,994 | 4,995 | 3 |
| | | 4,978 | 4,979 | 3 |
| | | 4,950 | 4,951 | 3 |
| | | 4,924 | 4,925 | 3 |
| | | 4,872 | 4,873 | 3 |
| | | 4,856 | 4,857 | 3 |
| | | 4,838 | 4,839 | 3 |
| | | 4,828 | 4,829 | 3 |
| | | 4,818 | 4,819 | 3 |
| 7 | 07/07/2012 | 4,780 | 4,781 | 3 |
| | | 4,770 | 4,771 | 3 |
| | | 4,754 | 4,755 | 3 |
| | | 4,712 | 4,713 | 3 |
| | | 4,694 | 4,695 | 3 |
| | | 4,676 | 4,677 | 3 |
| | | 4,642 | 4,643 | 3 |
| | | 4,622 | 4,623 | 3 |
| | | 4,584 | 4,585 | 3 |

## Frac Summary

Stage 1 : 6,114 - 6,407, 15285 bbls of Slickwater Report Date: 12/30/1899
Stage 2 : 5,802 - 6,071, 9571 bbls of Slickwater Report Date: 06/30/2012
Stage 3 : 5,558 - 5,775, 10238 bbls of Slickwater Report Date: 07/02/2012
Stage 4 : 5,304 - 5,519, 8095 bbls of Slickwater Report Date: 07/03/2012
Stage 5 : 5,030 - 5,271, 7714 bbls of Slickwater Report Date: 07/06/2012
Stage 6 : 4,818 - 4,995, 9762 bbls of Slickwater Report Date: 07/07/2012
Stage 7 : 4,584 - 4,781, 8345 bbls of Slickwater Report Date: 07/08/2012

## Comments

SIBHP 0 psi 7/28/2012