

Permanent Monitoring Installation Report



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|-----------------------|---------------|--------------------|-------------------|
| Field Ticket # | RGS1905230030 | EOT | 810.6 m MD |
| Client | Santos Ltd | Tubing Size | 2-3/8in 4.7 lb/ft |
| Well Name | Broandah 4 | Casing Size | 7in 23lb/ft |
| Well Location | Roma | SHP | 0 psi |
| Rig | WildDesert 4 | BHP | 983 psi |
| Customer Rep | Rod Mann | SHT | 20 °C |
| Service Eng | Ben Cosgrove | BHT | 45 °C |

| Activity | Date | Time | Activity | Date | Time |
|-----------------|-------------|-------------|-----------------|-------------|-------------|
| Depart Base | 22-May-19 | 19:00 | Job End | 23-May-19 | 1:00 |
| Job Start | 22-May-19 | 21:00 | Return Base | 23-May-19 | 1:30 |

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|-------------|-----------------------------|--------------------|-----------------------------|
| Gauge Use | Pump Control | Surface Card | Not required |
| Gauge Depth | 779.93 m | Telemetry | Analogue |
| Gauge Type | 4-20mA 0-1.5k psi, 105 DegC | Surface Output | 4-20mA |
| Pres Range | 0-1500 psia | Cable Splice Depth | N/A |
| Batch | Mar 19" Rev 2 | Tubing Hanger | 1/4in NPT - 1/4in Swagelok |
| Max Devi | 0.0° | Wellhead Outlet | AnTech Type C S/N 19-004139 |

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|------------------|---------------------|---------------|---------------|
| TEC Cable | 0.25" x 11mm Encap | Encapsulation | Square 11mm |
| Serial Number | 7020095410/20 | Manufacturer | Draka |
| Conductor | 16 AWG Solid Copper | Material | Polypropylene |
| Tube OD | 0.25" | Pres Rating | 15 kpsi |
| Material | 316L SS | Temp Rating | 150 DegC |

| | | | |
|---------------|----------|-------------------|----------------|
| Gauge | Analogue | Pres Sensor | Piezoresistive |
| Serial Number | LC00326 | Calibration Range | 0 -1500 psia |
| Depth | 779.93 m | Temp Sensor | N/A |
| OD | 1" | Temp Range | N/A |
| Vibration | N/A | Vibration Range | N/A |

| | |
|---------------------------|---|
| Gauge Carrier | Cannon Clamp Type with Vibration Sleeve |
| Running OD | 4.600" |
| Serial Number | N/A |
| Cross Coupling Protectors | 2-3/8in - 3-1/2in Wiper Blade Style Stainless Steel |
| Running OD | 4.000" |
| Qty Installed | 81 |
| Bands and Clips Material | 0.25" x 0.75" w-7/8" Buckle 316SS |
| Qty Installed | 164 |

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| Comments: Gauge Carrier installed 2 full joints above PCP. 4-20mA Analogue gauge installed. RIH installing 81 banded CCP. Installed 2 x 1/4in NPT fittings in the hanger and pressure tested. Nipped down and installed Rod lock and AnTech wellhead outlet. | |
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| Sequence of Events | | |
|--------------------|-------|---|
| Date | Time | Description |
| 22-May-19 | | Wildesert Rig Crew to perform Gauge install. |
| | | Pick up Sheave and make up BHA. |
| | | Make up gauge carrier and gauge to completion. |
| | | RIH first 4 joints then increase back tension on spooling unit. |
| | | Installed 81 banded cross coupling protectors. |
| | 19:00 | Depart Base |
| | 19:45 | Arrive at location |
| | 21:00 | Make up hanger. |
| | | Strip encapsulation and pass cable through tubing hanger and tighten TEC seals. |
| | 21:30 | Land hanger and start pressure test to 1500 psi. |
| 23-May-19 | | Rig down floor. |
| | | Nippled down. |
| | 23:00 | Land and nipple up rod-lock. |
| | | Pressure test rod lock to 300/3000 psi. |
| | 0:45 | Install AnTech wellhead outlet. |
| | 1:00 | Final gauge reading 983.2 psia. |
| | | Prepare report. |
| | 1:30 | Depart location for Roma. |
| | 2:30 | Arrive at Roma. |