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Comments

Annular volume calculated for 8.7" casing
Enough Pig ?
Thank you very much for the survey!!
API # 49-123-21753-0000

Company: Antelope Oil and Gas, LLC
Well: Mathews 1-H
Field: Mathews
Location: Lat: 48° 0' 0.000 N, Long: 103° 0' 0.000 W
Rig: Cyclone 2
Survey Date: 10/16/2015
Job Number: 2015-10-16-01
Survey Corrected To: Grid
Vertical Section Azimuth: 0.000°
Magnetic Declination: 8.500°
Grid Convergence: 0.000°
Total Correction: 8.500°
Survey Type: Definitive Survey
Survey Error Model: ISCWSA Rev 0
Survey Program: MWD
Tie-In Survey: 0.00 ft
Vertical Section Origin: 0.00 ft, 0.00 ft
Measured Depth Range: 0.00 ft to 10,000.00 ft
Calculation Method: Minimum Curvature
Start Date: 10/16/2015
End Date: 10/16/2015
Last Survey Date: 10/16/2015
Number of Surveys: 1
Planned Survey: No
Planned Offset to Target: 0.00 ft
Magnetic Field Strength: 56,500.0 nT
Magnetic Dip Angle: 73.000°
Declination Date: 10/16/2015
Magnetic Model: IGRF2015
Local Coordinates Referenced To: Well Head
Vertical Section Referenced To: Well Head

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | True Vertical Depth (ft) | Vertical Section (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude | Dogleg Severity (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | Tool Face (°) | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 48° 0' 0.000 N | 103° 0' 0.000 W | | | | | |
| 10,000.00 | 0.00 | 0.00 | 10,000.00 | 0.00 | 0.00 | 0.00 | 48° 0' 0.000 N | 103° 0' 0.000 W | 0.00 | 0.00 | 0.00 | 0.00 | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 48° 0' 0.000 N | 103° 0' 0.000 W | | | | | |
| 10,000.00 | 0.00 | 0.00 | 10,000.00 | 0.00 | 0.00 | 0.00 | 48° 0' 0.000 N | 103° 0' 0.000 W | 0.00 | 0.00 | 0.00 | 0.00 | |

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| 10,000.00 | 0.00 | 0.00 | 10,000.00 | 0.00 | 0.00 | 0.00 | 48° 0' 0.000 N | 103° 0' 0.000 W | 0.00 | 0.00 | 0.00 | 0.00 | |