

5. APPENDICES

- Reports of technical studies on velocity surveys, logs, samples, cores and sidewall cores (including petrophysical analysis, paleontology, reservoir characteristics, fluid saturation, relative permeability, capillary pressure, fluid analysis and geochemical analysis)
- II. One copy of the well completion data include
 - a. Raw field data and processed data for all Wireline logs in MWD, LWD logs in LIS, DLIS, LAS or ASCII format
 - b. Field log and processed log display for all Wireline, MWD, LWD logs in PDS, META, PDF or TIF format
 - c. Mudlog data (in ASCII of LAS format) and display (in TIF or PDF format)
 - d. Raw data, processed data, checkshot and time/depth analysis in DLIS, SEG-Y or ASCII format
 - e. Velocity survey display in TIF, JGEG, PDS or PDF format
 - f. Photography of core and sidewall core in both natural and UV light in JPEG,
 PNG or TIF format
 - g. A composite well log including, where appropriate, wireline logs, sampling and testing details, interpreted formation tops and lithology of intervals penetrated in TIF, JPEG or PDF format
 - h. interpretative log analysis in LIS, DLIS, ASCII, LAS or XLS format
 - i. Petrophysical, geochemical and other sample analysis
- III. A well index sheet
- IV. Report of revised structure maps and appropriate interpreted seismic sections illustrating the post-drill structural and stratigraphic interpretation of the well

^{**} Data listed above was submitted as part of EP171_RPT_01 Armour Annual Activity & Expenditure EP171_signed



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Drill Cuttings - Sample Description

0-12.5 m: No sample caught.

12.5-30 m: DOLOMITE: moderate weathered, light grey to brown, minor light grey chert, calcareous in part, iron-ferruginous oxidized in part, no fluorescence, no visible porosity, oxidized cubic pyrite grains.

30-50 m: DOLOMITE: weak weathered, buff, light grey to grey, calcareous in part, iron-ferruginous oxidized in part, no fluorescence, no visible porosity, cubic pyrite.

50-60 m: DOLOMITE: light grey to grey, no fluorescence, no visible porosity, cubic pyrite.

60-70 m: DOLOMITE: light grey to grey, massive, no fluorescence, no visible porosity, cubic pyrite. DOLOMITIC GRAINSTONE: medium grained, dark brown, dolomite grained, carbonaceous matrix, pyrite throughout matrix, no fluorescence, no visible porosity.

70-80 m: DOLOMITIC GRAINSTONE: medium rounded grained, dark brown, dolomite grained, carbonaceous matrix, pyrite throughout matrix, no fluorescence, no visible porosity.

80-90 m: DOLOMITIC GRAINSTONE: medium rounded grained, dark brown, dolomite grained, carbonaceous matrix, pyrite throughout matrix, no fluorescence, no visible porosity. DOLOMITE: light brown to brown, very fine grained, small filled fracture, no fluorescence, no visible porosity.

90-100 m: DOLOMITE: light brown to brown, very fine grained, small filled fracture, no fluorescence, no visible porosity. DOLOMITE: light grey to light green, fine grained, cubic pyrite, no fluorescence, no visible porosity.

100-110 m: DOLOMITIC GRAINSTONE: fine angular grained, dark brown, dolomite grained, halite grained, carbonaceous matrix, pyrite throughout matrix, no fluorescence, no visible porosity. DOLOMITE: light brown to brown, very fine grained, small filled fracture, no fluorescence, no visible porosity.

110-120 m: DOLOMITE: light brown to dark brown, fine grained, small filled fracture, no fluorescence, no visible porosity.

120-130 m: DOLOMITIC GRAINSTONE: fine angular grained, dark brown, dolomite grained, carbonaceous sugary matrix, pyrite throughout matrix, no fluorescence, minor porosity. DOLOMITE: light brown to grey, very fine grained, small filled fracture, **no** fluorescence, no visible porosity.

130-150 m: DOLOMITIC GRAINSTONE: fine angular grained, dark brown, dolomite grained, carbonaceous matrix, no fluorescence, no visible porosity. DOLOMITE: light brown to grey, very fine grained, no fluorescence, no visible porosity. SILTSTONE: dark red brown, fine grained, no fluorescence, no visible porosity.

150-170 m: DOLOMITE: light grey to light green, very fine grained, cubic pyrite, no fluorescence, no visible porosity.

170-200 m: DOLOMITE: light grey to light green, light brown, very fine no grained, carbonaceous in part, small calcite filled fracture, pyrite in part, no fluorescence, no visible porosity.



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200-220 m: DOLOMITE: light grey to dark grey, light brown to dark brown, blocky, microcrystalline, carbonaceous in part, small calcite filled fracture, cross-laminated in part, pyrite in part, no fluorescence, no visible porosity.

220-240 m: DOLOMITE: light grey to medium grey, blocky, microcrystalline, carbonaceous in part, no fluorescence, no visible porosity. DOLOMITIC PACKSTONE: medium grey to green grey, blocky, calcareous, no fluorescence, no visible porosity.

240-280 m: DOLOMITIC PACKSTONE: medium grey to green grey, blocky, calcareous vein, oolitic, calcareous fragment in part, no fluorescence, no visible porosity. DOLOMITE: light grey to dark grey, light brown to dark brown, blocky, microcrystalline, carbonaceous in part, small calcite filled fracture, cross-laminated in part, pyrite in part, no fluorescence, no visible porosity.

280-290 m: DOLOMITIC PACKSTONE: medium grey to green grey, blocky, calcareous vein, calcareous fragment in part, pyrite in part, no fluorescence, no visible porosity. DOLOMITE: light brown to dark grey, light brown to dark brown, blocky, microcrystalline, bedded, carbonaceous in part, small calcite filled fracture, cross-laminated in part, cubic pyrite in part, no fluorescence, no visible porosity. SILTSTONE: dark red brown, fine grained, bedded, no fluorescence, no visible porosity.

290-320 m: DOLOMITIC PACKSTONE: medium grey to green grey, blocky, calcareous vein, calcareous fragment in part, pyrite in part, no fluorescence, no visible porosity. DOLOMITE: light cream to light brown, blocky, microcrystalline, bedded, carbonaceous in part, small calcite filled fracture, no fluorescence, no visible porosity. SANDSTONE: grey, rounded medium grained, carbonate cement, no fluorescence, no visible porosity.

320-350 m: DOLOMITIC PACKSTONE: light grey to medium grey, blocky, calcareous vein, calcareous fragment in part, pyrite in part, no fluorescence, no visible porosity, DOLOMITE: light cream to medium brown, blocky, microcrystalline, bedded, carbonaceous in part, small calcite filled fracture, no fluorescence, no visible porosity.

350-360 m: DOLOMITE: light grey to grey, blocky, cryptocrystalline, minor calcium, abundant yellow mineral fluorescence, with SILTSTONE: dark grey to black, carbonaceous, minor 5%, no visible porosity.

360-363 m: ARGILLACEOUS DOLOMITE: light brown to cream, blocky, cryptocrystalline, minor calcite vein, abundant yellow mineral fluorescence, no oil visible porosity, with SILTSTONE: dark grey to black, carbonaceous, dolomitic, no visible porosity.

375-387 m: SILTSTONE: brown, dolomitic, trace calcite fragment, no mineral fluorescence, no visible porosity.

387-402 m: DOLOMITE: grey to light grey, cryptocrystalline to microcrystalline, blocky, argillaceous in part, abundant mineral fluorescence, no visible porosity.

402-405 m: DOLOMITE: light grey to cream, cryptocrystalline, blocky, argillaceous in part, trace calcite fragment, abundant mineral fluorescence, no visible porosity, with minor dark grey carbonaceous SLTST.



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408-426m: DOLOMITE: light grey to cream, cryptocrystalline, blocky, argillaceous in part, trace calcite fragment, trace galena 417-420 m, abundant mineral fluorescence, no visible porosity.

426-435m: DOLOMITE: light grey to cream, cryptocrystalline, blocky, argillaceous in part, trace calcite fragment, abundant mineral fluorescence, no visible porosity, with SILTSTONE: grey to green grey, dolomitic, carbonaceous in part, trace galena, local grading to fine grained dolomitic sandstone, no fluorescence, no visible porosity.

435-447 m: SILTSTONE: grey to green grey, red brown in part, dollomitic, trace ironferruginous stain, trace calcite fragment, local grading to fine grained dolomitic sandstone, no fluorescence, no visible porosity, with DOLOMITE: light grey to cream, cryptocrystalline, blocky, argillaceous in part, trace calcite fragment, abundant mineral fluorescence, no visible porosity.

447-453 m: ARGILLACEOUS DOLOMITE: grey to green grey, cryptocrystalline, blocky, silty in part, trace calcite fragment, trace galena, minor mineral fluorescence, no visible porosity.



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453-456 m: ARGILLACEOUS DOLOMITE: grey to green grey, cryptocrystalline, blocky, silty in part, trace calcite fragment, trace galena, minor mineral fluorescence, no visible porosity, with SILTSTONE: dark brown, dolomitic, carbonaceous in part, argillaceous, no fluorescence, no visible porosity.

462-474 m: ARGILLACEOUS DOLOMITE: light grey to cream, cryptocrystalline, blocky, silty in part, trace calcite fragment, trace galena, minor mineral fluorescence, no visible porosity, with DOLOMITIC MUDSTONE: brown, blocky, carbonaceous in part, silty in part, no fluorescence, no visible porosity

474-495 m: ARGILLACEOUS DOLOMITE: grey to cream, green in part, cryptocrystalline, hard, blocky, silty in part, trace calcite fragment, minor mineral fluorescence, no visible porosity.

495-498 m: ARGILLACEOUS DOLOMITE: grey to cream, green in part, cryptocrystalline, hard, blocky, silty in part, trace calcite fragment, minor mineral fluorescence, no visible porosity with DOLOLIMTC MUDSTONE: dark grey to black, blocky, carbonaceous, silty in part, minor calcite vein, no fluorescence, no visible porosity.

498-516 m: ARGILLACEOUS DOLOMITE: grey green to brown, cryptocrystalline to microcrystalline, hard, blocky, silty in part, trace calcite fragment, minor mineral fluorescence, no visible porosity.

516-522 m: ARGILLACEOUS DOLOMITE: grey green to brown, cryptocrystalline to microcrystalline, hard, blocky, silty in part, trace calcite fragment, minor mineral fluorescence, no visible porosity DOLOMITE: light grey to cream, cryptocrystalline, blocky, argillaceous in part, trace calcite fragment, abundant mineral fluorescence, no visible porosity CHERT: red-brown, translucent in part.

522-552 m: DOLOMITE: light grey to cream, cryptocrystalline, blocky, argillaceous in part, trace calcite fragment, abundant mineral fluorescence, no visible porosity, with minor DOLOMITIC MUDSTONE: dark grey to black, microcrystalline, trace galena, calcareous in part.

552-594 m: ARGILLACEOUS DOLOMITE: grey green to brown, cryptocrystalline to microcrystalline, hard, blocky, silty in part, trace calcite fragment, minor mineral fluorescence, no visible porosity DOLOMITE: light grey to cream, cryptocrystalline, blocky, argillaceous in part, trace calcite fragment, abundant mineral fluorescence, no visible porosity.

594-630 m: SILTSTONE: light brown to red brown in part, dolomitic, trace iron-ferruginous stain, trace calcite fragment, no fluorescence, no visible porosity, with ARGILLACEOUS DOLOMITE: light grey to cream, cryptocrystalline, blocky, argillaceous in part, trace calcite fragment, abundant mineral fluorescence, no visible porosity.

630-648 m: ARGILLACEOUS DOLOMITE: grey green to brown, cryptocrystalline to microcrystalline, hard, blocky, silty in part, trace calcite fragment, minor mineral fluorescence, no visible porosity DOLOMITE: light grey to cream, cryptocrystalline, blocky, argillaceous in part, trace calcite fragment, abundant mineral fluorescence, no visible porosity.



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648-672 m: SILTSTONE: light brown to red brown in part, dolomitic, trace iron-ferruginous stain, trace calcite fragment, no fluorescence, no visible porosity, with minor ARGILLACEOUS DOLOMITE: light grey to cream, cryptocrystalline, blocky, argillaceous in part, trace calcite fragment, abundant mineral fluorescence, no visible porosity.

672-690 m: SILTSTONE: light brown to red brown in part, dolomitic, trace iron-ferruginous stain, trace calcite fragment, no fluorescence, no visible porosity.

690-702 m: SILTSTONE: light brown to red brown in part, hard, blocky, dolomitic, trace ironferruginous stain, trace calcite fragment, no fluorescence, no visible porosity with SANDSTONE: green grey, hard, blocky, dolomitic, very fine to fine grained, no fluorescence, no visible porosity.

702-717 m: SILTSTONE: green grey, red brown in part, hard, blocky, dolomitic, trace ironferruginous stain, trace calcite fragment, no fluorescence, no visible porosity, local graded to SANDSTONE: green grey, hard, blocky, dolomitic, very fine to fine grained, no fluorescence, no visible porosity.

717-744 m: SILTSTONE: red brown, hard, blocky, dolomitic, trace calcite fragment, no fluorescence, no visible porosity.

744-750 m: SILTSTONE: green grey, hard, blocky, dolomitic, trace iron-ferruginous stain, trace calcite fragment, no fluorescence, no visible porosity, local graded to SANDSTONE: round brown, hard, blocky, dolomitic, very fine to fine grained, no fluorescence, no visible porosity.

750-753m: SANDSTONE: light grey, very hard, amorphous, fine to medium grained, siliceous cement, oolitic, trace pyrite, no visible porosity, no fluorescence, with SILTSTONE: brown to cream, hard, blocky, no fluorescence, no visible porosity.

753-816 m: SILTSTONE: brown, hard, blocky, dolomitic, sandy in part, fluorescence, no visible porosity.

816-828 m: ARGILLACEOUS DOLOMITE: grey, cryptocrystalline, blocky, hard, silty in part, trace calcite fragment, no fluorescence, no visible porosity, minor banded pyrite.

828-840 m: ARGILLACEOUS DOLOMITE: white to light grey, microcrystalline, angular, very hard, silty in part, calcareous fragments, green to white to translucent quartz fragments, no fluorescence, no visible porosity.

840-843 m: ARGILLACEOUS DOLOMITE: white to light grey, microcrystalline, angular, very hard, silty in part, calcareous fragments, green to white to translucent quartz fragments, no fluorescence, no visible porosity, possible minor stromatolitic laminations.

843-855 m: ARGILLACEOUS DOLOMITE: white to light grey, microcrystalline, angular, very hard, silty in part, calcareous fragments, green to white to translucent quartz fragments, no fluorescence, no visible porosity.

855-864 m: DOLIMITIC GRAINSTONE: light grey to grey and light brown to brown, hard, blocky, microcrystalline, no fluorescence no visible porosity, fine bedding laminated with CHERT: green to white to translucent quartz fragments, hard with minor pyrite and galena.



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864-879 m: SILTSTONE: brown, hard, blocky, weak dolomitic cement, sandy in part, trace pyrite, trace calcareous fragments, no fluorescence, no visible porosity, minor green to white to translucent quartz fragments.

879-882 m: SILTSTONE: brown to grey with minor pink grains possible tuffaceous in part, hard, blocky, weak dolomitic cement, sandy in part, trace pyrite, trace calcareous fragments, no fluorescence, no visible porosity, minor green to white to translucent quartz fragments.

891-894m: ARGILLACEOUSILLACEOUS DOLOMITE: light to dark grey, hard, blocky, microcrystalline, no fluorescence no visible porosity, with DOLOMITE: white to light grey, hard, blocky, cryptocrystalline, no fluorescence no visible porosity, minor disseminated pyrite, with minor SILTSTONE: brown decreasing.

894-900 m: ARGILLACEOUSILLACEOUS DOLOMITE: light to dark grey, hard, blocky, microcrystalline, no fluorescence no visible porosity, with DOLOMITE: white to light grey, hard, blocky, cryptocrystalline, no fluorescence no visible porosity, minor disseminated pyrite, with minor SILTSTONE: brown decreasing.

900-912 m: ARGILLACEOUS DOLOMITE: light to dark grey, hard, blocky, microcrystalline, no fluorescence no visible porosity, with DOLOMITE: white to light grey, hard, blocky, cryptocrystalline, no fluorescence no visible porosity, minor disseminated pyrite.

912-927 m: DOLOMITE: white to light grey, hard, blocky, cryptocrystalline, no fluorescence no visible porosity, minor disseminated pyrite, with minor ARGILLACEOUS DOLOMITE: light to dark grey, hard, blocky, microcrystalline, no fluorescence no visible porosity.

927-945 m: DOLI MUDSTONE: black, microcrystalline, hard, blocky, calcareous, silty in part, disseminated pyrite and galena, moderate yellow residual fluorescence, no visible porosity DOLOMITE: white to light grey, hard, blocky, cryptocrystalline, no fluorescence no visible porosity, minor disseminated pyrite.

945-978 m: DOLOMITE: white to light grey, hard, blocky, cryptocrystalline, no fluorescence, no visible porosity, trace disseminated pyrite.

978-990 m: DOLOMITE: white to light grey, hard, blocky, cryptocrystalline, trace disseminated pyrite and galena, trace calcite fag, no fluorescence, no visible porosity.

990-993 m: DOLI MUDSTONE: dark grey to black, microcrystalline, hard, blocky, calcareous, silty in part, trace disseminated pyrite, no fluorescence, no visible porosity. DOLOMITE: white to light grey, hard, blocky, cryptocrystalline, no fluorescence no visible porosity, minor disseminated pyrite.

993-1035 m: DOLOMITE: white to light grey, hard, blocky, cryptocrystalline, local graded to grey argillaceous dolomite, silty in part, no fluorescence no visible porosity.

1035-1044 m: DOLOMITE: grey to light grey, hard, blocky, cryptocrystalline, local graded to grey argillaceous dolomite, silty in part, no fluorescence no visible porosity with ARGILLACEOUS DOLOMITE: grey to dark grey, hard, blocky, microcrystalline, no visible.

1044-1046.35 m: DOLOMITE: grey to light grey, hard, blocky, cryptocrystalline, local graded to grey argillaceous dolomite, silty in part, no fluorescence no visible porosity with



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ARGILLACEOUS DOLOMITE: grey to dark grey, hard, blocky, microcrystalline, no visible fluorescence, weak acetone rim cut, no visible porosity.

1046.35-1065 m: DOLOMITE: grey to light grey to cream, hard, blocky, cryptocrystalline to microcrystalline, local graded to green grey argillaceous dolomite, silty in part, trace calcite fragment, no fluorescence no visible porosity.

1065-1098 m: ARGILACEOUS DOLOMITE: grey to green grey, hard, blocky, cryptocrystalline to microcrystalline, lithic fragment in part, abundant calcite fragment, minor mineral fluorescence, no visible porosity with minor DOLIMITIC MUDSTONE: dark grey, hard, angular, silty, trace pyrite and galena no fluorescence, no visible porosity.

1098-1110 m: ARGILLACEOUS DOLOMITE: grey to light grey, hard, blocky, cryptocrystalline to microcrystalline, lithic fragment in part, trace calcite fragment, trace pyrite, minor mineral fluorescence, no visible porosity.

1110-1142.77 m: ARGILLACEOUS DOLOMITE: grey to green grey, hard, blocky, cryptocrystalline to microcrystalline, silty in part, trace calcite fragment, no fluorescence, no visible porosity with minor DOLIMITIC MUDSTONE: dark grey, hard, angular, silty, trace pyrite and galena no fluorescence, no visible porosity.