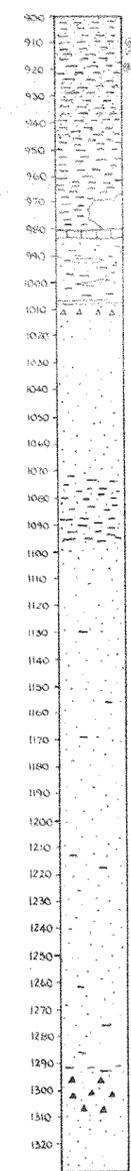


SANTOS LTD - Oodnadatta N°1 Bore continued

Information: 900' - 1032' Core
1032' - 1300' Rockdrilling
1300' - 1322' Core

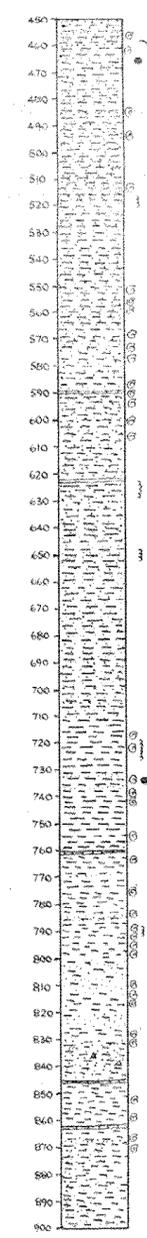


Dark grey, dense Mudstone with interbedded silty and sandy bands. Pyritic in places, intraformational brecciation. Rare fossils from 909' - 914'.
Interbedded dark grey, dense Mudstone and silty, sandy, micaceous bands. Very rare microfossils, but probable microfossils 916' - 917'. Dip of up to 15° between 927' - 932'. Several bands of calcareous Mudstone. Oil slicks at 932' - 933, tested unsuccessfully. Slight greenish fluorescence and interbedded Mudstone and silty bands, pyritic in places. Crystalline Pyrite at 950'.
Banded Mudstone, rather Shaly, with silty bands, pyritic in places. No Microfossils. Rods 'fell through' very poor core-recovery of earthy, clayey material. Very faint oil slicks at 967, non-fluorescent. Sandy parts of core, show dips of up to 15°. At 981' to 984' hard limestone.
Very poor core-recovery. Interbedded thin limestone bands and shale chips, abundant sand in drilling mud. A hard band of limestone at 1007'.
Sandstone, grain size from silty to medium grained. Some bands of silty, micaceous Mudstone. No fossils. A band of hard, slightly calcareous quartzite at about 1010' showing slickensiding. Cross-bedding and slumping in places.
Sand, medium, fine and coarse grained, very poorly sorted. Grains are loose, unconsolidated.
Sandy, silty Mudstone.
Sand, loose, unconsolidated, poorly sorted. Gritty in places. Rare Mudstone bands.
Sand, loose, unconsolidated, poorly sorted. Gritty in places. Rare Mudstone bands.
Sand, loose, poorly sorted. Gritty in places. Rare Mudstone bands.
Very slow drilling in extremely hard formation below 1293'. Sample at 1300' is a cherty material.
Between 1318' and 1322' a fine-grained, almost silty sandstone.

Artesian Sand

SANTOS LTD - Oodnadatta N°1 Bore continued

Information: 450' - 900' Core

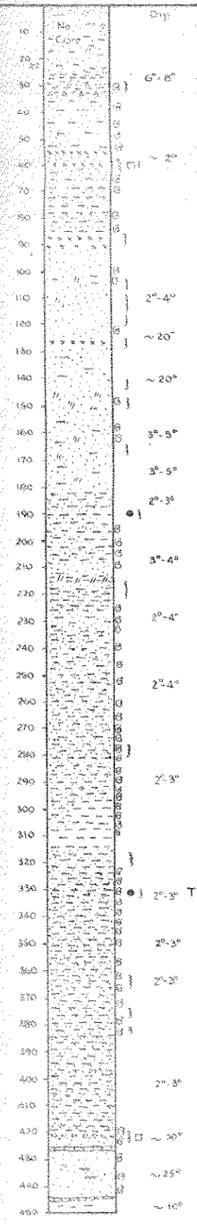


Sandy mudstone, dark grey, dense, rich in pyrite. Oil slicks at 466' showing a distinct greenish-yellowish fluorescence.
Dark grey dense silty mudstone, very uniform and homogeneous formation. Fossils rare and small.
Dark grey dense silty mudstone, very uniform formation. Fossils very rare.
A band of light grey pipe-clay between 535' 8" and 535' 10". Dark grey, dense, silty mudstone, slumping structures common. No fossils.
Dark grey, dense, silty mudstone, slumped, with pyrite and worm tracks. Some small, broken fossils below 581'. At 562' some sandy lenses showing slumping and cross-bedding.
Between 565' and 570' near vertical fracturing and/or jointing. Fossils from 567 to 579. Increase in sand 575' - 579. Slumping and minor cross-bedding common.
At 591' a thin very fine-grained sandstone overlies a 4" band of limestone. Fossils only at certain levels, such as 586, 588, 594. Pyrite is common.
Below 595' interbedded silty and dense dark grey Mudstone. Slump structures and intraformational brecciation are common. Some cross-bedding in the more sandy patches. Fossils are rather rare 598, 600, 605, 608, 627. Pyrite and worm tracks common.
At 623' a 2' wide Limestone band occurs. Above Limestone some slickensiding and dips up to 45° due to cross-bedding.
Below 625' the sandy proportion of the rock increases, crossbedding is very common. Some slickensiding at about 80° to the bedding planes.
Interbedded Mudstone and silty Mudstone, below 635'. Slumping, cross-bedding and intraformational brecciation common. Rich in pyrite, occasional fossils.
Mudstone with interbedded Siltstone, slump-structures, cross-bedding common. No microfossils.
Very rich in pyrite, very little sand in core. No microfossils.
Mudstone with thin bands of siltstone. Slumping common with resulting high dips. Intraformational brecciation below 709'. One steep (70°) gypsum-vein at 709' - 6". No microfossils. Above 717' 3".
Mudstone, dense, dark grey, silty bands. Slumping and intraformational brecciation common, therefore dips and other, unreliable. Some fossils below 717'.
Mudstone, dense, dark grey, brecciated, slumped, crossbedded. At 732' 6" - 732' 11" and 737' - 737' 5". Mudstone with rather coarse grained Sandstone interbedded. Faint oil slicks at 735' with greenish-yellowish fluorescence (similar to previous show). Slumping and intraformational brecciation common. Some fossils. Slickensiding and steep gypsiferous veins. At 760' 6" a 1 1/2" wide slump-bed of interbedded shale, Sandstone and Limestone occurs. Dips variable 10° - 50°. Fossils are Mytilus. Mudstone, dark grey, dense, slightly silty, some low angle slumping and brecciation; Fossils only in some zones. A band of sandstone at 769' 5" - 770' 6".
Mudstone, dark grey, dense silty, generally fossiliferous. Some slumping especially in the more sandy portions, also cross-bedding.
Sand increases below 804', with an almost pure sandstone at 810' (rich in glauconite). At 817' fossils are being deformed and squashed in a zone of slickensiding.
Mudstone, dark grey, dense, generally slightly fossiliferous, occurs interbedded with more sandy and silty bands. Cross bedding and slumping are quite common. Between 832' - 840' quite plain brecciation.
A narrow 2" limestone band at 846' 7". Dense, dark grey, generally unfossiliferous Mudstone; brecciation common.
Dense, near black pyritic Mudstone, with sandy and silty streaks. Fossils generally rare. Foraminifera are suspected. At 861' 8", 1 1/2" of dense, crystalline Limestone. Below that interbedded limestone, shale. Frequent slickensiding, probably a tectonic breccia, steep fractures.
Dense, dark grey, pyritic Mudstone, no microfossils. Low dips, rare silty bands.

SANTOS LTD - OODNADATTA N°1 BORE

Elevation: 421 above mean S.L.
Rig: Falling 1500
Diameter of hole: 0' - 205'
205' - 1300' - 4 1/4"
1300' - 1322' - 4 1/4"
Casing: 205' of 6" W.B.
Scale: Scale 1" = 50'
Location: Approximately 10 miles NW of Oodnadatta, along old track to Tomardere.
Total Depth: 1332'
Drilling Started: 17.5.57
Drilling Stopped: 19.8.57
Information: 0 - 22' Rockbit; 22' - 450' Core.

- LEGEND: Sandstone, Shale, Gypsum, Breccia, Siltstone, Volcanite, Mudstone, Conglomerate, Chert, Quartzite, Fossil, Water, Oil, Gas, Core broken, Zone tested.



Sandy grit and clay and gypsum.
White sandy clay and gypsum.
Interbedded shale and minor sandstone-bands, slumping common. Several thin gypsum bands. Emersion breccia. Pyrite common.
Siltstone, ferruginous in upper part, micaceous otherwise. Gypsum veins, some slickensiding. INDO-CERAMUS - shell fragments through out. Volcanic, buffaceous rock? Dark, ferruginous, platy sandstone.
Micaceous mudstone, with some silty streaks. Fossils: Indoceramus, Aucellina, Belemnite, Echinoderm.
Very fine grained, dark sandstone, showing cross-bedding and slumping. High angle gypsum veins common. Some clayey bands. Volcanic bands near 90'.
Very fine-grained sandstone, clayey in parts. Showing slumping. Numerous steep gypsum veins.
Fine sandy siltstone, micaceous, interbedded with dense micaceous mudstone; steep gypsum bands; slumping and cross bedding common.
Interbedded sandy siltstone and dense mudstone, gypsiferous bands. Slumping mainly in more clayey beds.
Silty mudstone, micaceous, some coaly material, dense mudstone in bands of 3"-4", showing slumping. Good oil slicks at 190', very volatile. Core around 190' seems to contain more coarse-grained material than normally.
Silty mudstone with abundant pyritic patches.
Zone very rich in gypsiferous veins and bands.
Highly fossiliferous, micaceous, pyritic siltstone or silty mudstone. Slumping common.
Dense, dark micaceous mudstone with occasional more sandy bands.
Very fossiliferous, shells now often preserved in their original calcareous material.
Dense, dark blue grey mudstone, highly fossiliferous; Pelecypods, Belemnites and wormtracks.
Dense, dark grey mudstone, nonfossiliferous, but rich in pyrite.
Dense, slightly sandy mudstone, fossils present but rare.
Dense, slightly silty mudstone, fossiliferous; strong oil slicks between 330' - 332' showing a greenish-yellowish fluorescence.
Dense, dark grey, fossiliferous mudstone with occasional pockets and patches of pyritic matter near 361' - 365' where core is much broken. Fossils are very hard to extract from core, as rock is very brittle when dry.
Dense, dark grey, fossiliferous, slightly sandy mudstone, very rare fossils around 376', vertical fractures from 374' to 378'.
Dense, dark grey mudstone, very rare fossils, rare worm-tracks. Some sandy patches, some pyrite below 410'.
At 421' a band of interbedded shale and medium to fine grained sandstone (calcareous occurs (?) Below that a very thin conglomerate of well rounded pebbles (up to 2" dia). Sandstone, dark grey, medium to fine grained, high dip due to crossbedding? At 425' 9" - 426' 9" light grey, very dense fossiliferous limestone. Sandstone, similar to above, poorly cemented fossiliferous with occasional streaks of mudstone below 433', pyrite present. Limestone band at 444' 5" - 444' 8". Interbedded mudstone and sandstone, sand becoming rare towards the bottom. Fossils rather rare.

Remarks: The water cuts at about 60' and 422' could only be observed in the waterlogged cores. The mud did not show any appreciable changes. The oil slicks at 190' and 330' could not be tested by Johnson Tester as at that stage not enough weight was available to set the packers. Analyses of sample 190' however showed genuine crude with paraffin base.
Note: Samples of oil slicks and fossiliferous parts of core forwarded to Adelaide for further examination.
Detailed examination of Sandstone 420' - 452' showed quartz, feldspar, iron coated glauconite and Fe heavy minerals. (Examination carried out by R. Crasso B.Sc.)