Natural Resources and Environment

AGRICULTURE • RESOURCES • CONSERVATION • LAND MANAGEMENT

# ATTACHMENT TO WCR
# WELL SUMMARY INFO.
# ANGLESEA-1
# W345

OTWAY BASIN

| 1 Folio No | 2 Referred to | 3 Date | 4 Clearing Officer's Initials |
|---|---|---|---|
| 1922 | [redacted] | | |

| 1 Folio No | 2 Referred to | 3 Date | Clea Offi Init |
|---|---|---|---|
| | ONSHORE | | |

South Australian Oil Wells Co. N.L.

WELL SUMMARY ANGLESEA-1
(W345)

CONTENTS:

APPENDIX:

APPENDIX 1:

PE903072

This is an enclosure indicator page.
The enclosure PE903072 is enclosed within the container PE905677 at this location in this document.

The enclosure PE903072 has the following characteristics:

| | |
|---|---|
| ITEM_BARCODE | = PE903072 |
| CONTAINER_BARCODE | = PE905677 |
| NAME | = Well Card |
| BASIN | = Otway |
| PERMIT | = |
| TYPE | = WELL |
| SUBTYPE | = REPORT |
| DESCRIPTION | = Well Card (enclosure from Well Summary Information Folder—attachment to WCR) for Anglesea-1 |
| REMARKS | = |
| DATE_CREATED | = 31/07/22 |
| DATE_RECEIVED | = |
| W_NO | = W345 |
| WELL_NAME | = Anglesea-1 |
| CONTRACTOR | = Sth. Australia Oil Wells Co. N.L |
| CLIENT_OP_CO | = Sth. Australia Oil Wells Co. N.L |

(Inserted by DNRE - Vic Govt Mines Dept)

W345

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WELL ANGLESEA No.1 TYPE BASIN

Tenement Holder Sth.Aust. Oil Wells Co.N.L.

Operator

Tenement

Map Used Pt. Angahook. Sect. 13, near Anglesea River. Anglesea 1/Mile Mk.

Latitude 38° 24' 15" S

Longitude 144° 11' 20" E.

Elevation approx 5' Total Depth 462' Status Dry & Abandoned.

Spud June 1922 Completed Abandoned July 1922

Casing

## STRATIGRAPHY

Ex. Mt. Barrabool, W. 1947. p.131-132

| | |
|---|---|
| Clay yellow | 0' - 39' |
| Mudstone, black, carbonaceous, pyritic | 39' - 186' |
| Clay sandy | 186' - 274' |
| Brown coal | 274' - 282' |
| Sand with fragments of charcoal | 282' - 294' |
| Clay, brown, with lignite | 294' - 301' |
| Brown coal | 301' - 312' |
| Clay | 312' - 317' |
| Sand, grey, medium | 317' - 319' |
| Clay, brown | 319' - 324' |
| Sand, fine with a little clay | 324' - 354' |
| Gravel | 354' - 355' |
| Clay brown | 355' - 390' |
| Sand fine | 390' - 393' |
| Clay brown | 393' - 399' |
| Sandy clay with lignite fragments | 399' - 412' |
| Gravel coarse | 412' - 413' |
| Clay Sandy | 413' - 416' |
| Sand with fossil resin & Lignite | 416' - 417' |
| Sandstone, black, hard | 417' - 418' |
| Brown coal | 418' - 429' |
| Clay, sdy, pale brown | 429' - 446' |
| Clay, white, with seams of lignite | 446' - 455' |
| Sand, coarse, rounded, silica | 455' - 462' |

## FORMATION TESTS

## LOG SUMMARY AND INTERPRETATION

~~Last Reading~~ ~~First Reading~~

~~ELECTRIC LOG.~~

~~MICRO LOG.~~

~~CONTINUOUS DIAMETER.~~

~~330'~~ ~~4800'~~
~~330'~~ ~~6000'~~
~~4800'~~ ~~6000'~~
~~6750'~~ ~~6000'~~
~~6602'~~ ~~786'~~

.A. Oil Wells. oN.L.
ANGLESEA No. 1

## CORES

| No. | Interval | Rec. | No. | Interval | Rec. | No. | Interval | Rec. | No. | Interval | Rec. |
|---|---|---|---|---|---|---|---|---|---|---|---|
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**CHEMICAL ANALYSES** (Oil, water, gas.)

Oil Show when Bailing.

**GENERAL** (Conclusion, structure, plugging, etc.)

APPENDIX 2:

Anvgahook 8308

WELL NAME: Anglesea 1 BASIN

STATUS: RIG CONSEC. No.

DATE: Commenced Completed 1947 TOTAL DEPTH 140.9

ELEVATION (GL) 1.52 LOCATION AMG sheet 38 24 15 144 11 20

PARISH No A Anvgahook. N E

ENGINEERING DATA (casing plugs, completion details) S. A. OIL WELLS.

GEOPHYSICAL LOGS Logged by BHT

| CORES: Conventional | | | | Side Wall Cores | | | |
|---|---|---|---|---|---|---|---|
| From (m) | Thick | Recov | % | Depth (m) | Recov | Depth | Recov. |

PALAEONTOLOGY: Foraminifera Det. by

Palynology Det. by

GROUNDWATER DATA: (T.D.S., screened intervals, S.L., Drawdown, Yield)

| STRATIGRAPHY: Formation | | Depth(m) | FROM | TO | Comments |
|---|---|---|---|---|---|
| | Newer Basalt | CXNV | | | |
| | Whalers Bluff Fm | CQWB | | | |
| | Moorabool Viaduct Sds. | CXMO | | | |
| Heytesbury Group (CMH) | PortCambell Lst Fm | CMPC | | | |
| | Gellibrand Marl | CMGM | | | |
| | Clifton Fm. | COCL | | | |
| Nirranda Group (CON) | Narrawaturk Marl | CONM | | | |
| | Mepunga Fm | CEME | | | |
| Wangerrrip Group (CPW) | Dilwyn Fm (Easter View) | CPDI | | | |
| | Older Volcanics | CEEV | | | |
| | Pember Mudstone | CPPM | | | |
| | Pebble Point Fm. | CPPP | | | |
| Sherbrook Group (MCS) | Paaratte Fm | MCPA | | | |
| | Timboon Sd (Skull Ck) | MCTS | | | |
| | Nullawaare Fm | MCNG | | | |
| | Belfast Mudstone | MCBM | | | |
| | Flaxmans Fm | MCFL | | | |
| | Waarre Snds Fm | MCWR | | | |
| Otway Group (MC02) | Eummeralla Fm | MCEU | | | |
| | Pretty Hill Sds (GELTWOOD BEACH) | MCPH | | | |
| | Palaeozoic Mudstones | PSMV | | | |

OTHER DATA: (Velocity survey, seismic line, gas/oil show, tests)

DATA SOURCE, REFERENCES, COMMENTS

BRAGG GROUNDWATER 1947 PP 131-132

APPENDIX 3:

S.A. O.W. Anglesea
No 1, 2.

No. 8 Bore, Moutajup, Allotment 3B of Section C, Jennawarra Parish. Owner, O. B. Mibus.

Packed up some plant @ ready for removal to Anglesea, Victoria. 25/1/22

Covering work done to 14th June, 1922:

No. 8 bore -

Log:
0' - 16' .. clay, alluvial
16' - 22' .. Clay and decomposed basalt.
22' - 201' .. Basalt, very hard in parts
201' - 223' .. Clay, sandy, yellow.
223' - 231' .. Sand and gravel
231' - 262' .. Sandstone, calcareous concretions, tertiary shells.
262' - 270' .. Conglomerate sand and gravel
270' - 272' .. Clay, yellowish
272' - 277' .. Clay, changing to shale or slate, yellow with blue inclusions, probably Ordovician in age.

Remarks: Water at 12', 38', 60', and on through the basalt. Oil films at 248'. Pulled all casing. Left in 25' of 6⅜" casing high at top for a water well.

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SOUTH AUSTRALIAN OIL WELLS

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Anglesea Bore:

Bore No. 1, Section 13, Parish Angahook, County Polwarth, near Anglesea River.

Log:
0' - 39' .. Clay, yellow
39' - 186' .. Mudstone, black, carbonaceous, pyritic
186' - 274' .. Clay, sandy
274' - 282' .. Brown coal
282' - 294' .. Sand with fragments of charcoal
294' - 301' .. Clay, brown with lignite
301' - 312' .. Brown coal
312' - 317' .. Clay
317' - 319' .. Sand, grey, medium
319' - 324' .. Clay, brown

324' - 354' .. Sand, fine with a little clay

354' - 355' .. Gravel

355' - 390' .. Clay, brown

390' - 393' .. Sand, fine

393' - 399' .. Clay, brown

399' - 412' .. Sandy clay with lignite fragments

412' - 413' .. Gravel, coarse

413' - 416' .. Clay, very sandy

416' - 417' .. Sand with fossil resin and lignite

417' - 418' .. Sandstone ?, black and hard

418' - 429' .. Brown coal

429' - 446' .. Clay, pale brown, sandy

446' - 455' .. Clay, white with seams of lignite

455' - 462' .. Sand, coarse, silica, rounded

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Report to 31st July, 1922:

At Moutajup cleared up the camp and moved casing, tools, etc., to Anglesea. Abandoned this district.

At Anglesea, Bore No. 1 cemented off for the third time and now allowing cement to set.

No. 2 Bore, located 46 chains west of No. 1, and 250' higher. Started 24/7/22.

Log: 0' - 18' .. Clay, yellow

18' - 19' .. Conglomerate, hard, red

19' - 40' .. Clay, sandy, yellow

40' - 105' .. Clay, sandy, brown

105' - 158' .. Mudstone, black carbonaceous with frequent shows of gas.

Remark: 8" Casing to 120'.

Bore No. 1 bore - tested for water. Shut off but found that the cement had not acted. Oil showed again when bailing. Temporarily abandoned this bore and removed casing.

No. 2 Log, Continued:

158' - 300' .. Black mudstone

300' - 366' .. Clay, sandy, lighter colour

366' - 439' .. Clay, brown. Beds of fossil shells.

439' - 446' .. Clay, more sandy, brown

446' - 472'. Clay, dark brown, sticky; more fossils.

Remark: Water at 215 feet, very little, contains Fe, Mg, Al, Na @@@ as chlorides and sulphates.

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On the 31st October, 1922, Company obtained a heavy @@@ plant of the Star type from the Goldfields Diamond Drilling Company, capable of going to 3,000 feet, an oregon derrick 42' high has been erected over No. 2 bore Anglesea and the plant installed. Cleaning out operations are now in progress, much clay having entered the hole $6\frac{3}{8}$" casing has been lowered to the bottom and will be continued to below the deep water sand, where it will be cemented.

Nov. 30th. Cleaned out hole to bottom & drilled to 553 ft in brown clay. oil films (crude) showed well from 540 ft onwards.

Report to 31/12/22:

No 2 Anglesea ran up above to 472

Log - 553' - 560' .. Clay, brown, sticky

560' - 568' .. Sand and clay

568' - 580' .. Clay, dark brown, oily films

580' - 582' .. Coal, brown, impure

582' - 604' .. Clay, brown with oily films

604' - 612' .. Clay, brown @@@@ more sandy, lighter color

612' - 636' .. Sand, fine packed hard, very little water

NOTE: No. 2 bore was deepened to 636'. Two trials to cut off water and sand were made. In each case another sand was discovered on going deeper, and the casing had to be loosened and lowered. $6\frac{3}{8}$" casing inserted to 584' shutting off top water. see p134

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Lane Lease, Section 10, Angahook Parish.

Two hand bores were sunk on this lease during the month of December, 1922, the results being used in the construction of a structure contour map. Further work is in progress. These bores are only shallow ones, the deepest being 106 feet, and were being sunk to the black mudstone to determine the contour of the surface.

Month ending November ~~3rd~~ 30th, 1922:

No. 2 Bore, Noble Lease, Anglesea, Victoria - Cleaned out the hole to bottom. Have drilled to 553 feet, brown clay, fossiliferous.

Remark: Trouble arose with casing, so a pump was installed and @@@@ mud forced around the casing to prevent the walls from caving. Oil films (crude) showed well from 540 feet onwards. Gas bubbled through water in hole at times. Very little water making.

31st January, 1923:

No. 2 Bore, Noble Lease - see p133.

Log, Contd.

636' - 641' .. Sand, fine, grey, hard, absorbs water

641' - 648' .. Clay, hard, brown

648' - 722' .. Clay, brown, sandy with pyritic lumps. Dark oil films

722' - 726' .. Clay, dark, fissile clay

726' - 730' .. Sand, coarse, with @@@@ streaks

730' - 736' .. Clay, dark grey with sand streaks and lignite lumps

736' - 741' .. Clay or brown coal, probably the latter

741' - 742' .. Clay, whitish and @@@@@ talcose with seams of lignite.

Remarks: We put in 5" casing and worked it to 320 feet, when it "froze". In trying to loosen same by means of hydraulic jacks, we tore it apart at 300 feet. We then fished out the broken piece with a tap and screwed it together again. After pumping in water under heavy pressure, we broke through obstruction behind the casing and freed the latter. We have now withdrawn 5" pipe and intend to try to loosen the $6\frac{3}{8}$" and carry it down to 740' into the clay in order to shut off the upper waters.

NOTE: Five hand bores on adjoining leases were sunk to determine the structure of the black clay or mudstone underlying the surface deposits. No more will be sunk at present. All are shallow. No further particulars were given.

28th January, 1923: During month loosened $6\frac{3}{8}$" casing after a lot of trouble. The hole was then reamed out and the casing carried down to 638', where it became fast. In spite of the fact that we could get a good return @@@ of the circulating water, we could not loosen

jacks

the pipe even with hydraulic ~~taps~~. We then put in clay, mixed it to a mud, and forced the same behind the casing with a pump until the casing 'stalled.' More mud was drilled into the formations below the $6\frac{3}{8}$" casing and 5" pipe was put in. This was carried to 720', using thick mud to keep the walls of the hole up. The hole was cleaned out to 724', the previous bottom. Drilling is proceeding using the circulating system when necessary.

Report for week ending 31st May, 1923:

During May no work was done at Anglesea, but the crew returned there on the 31st and recommended. The idea is to loosen the $6\frac{3}{8}$" casing frozen at 638 feet, carry it to the sandstone at 753', and shut off the water; Then put back the 5" casing @@@@ in order to go deeper." Testing out some sand which showed oil on boring operations.

(see p151)

S.A.O.W. Anglesea

To follow Anglesea Bore: (N°32) (p135)

Casing 8", 46', shut off top water, salty.

Casing 6", 276', shut off water.

Casing 5", 408@', cemented off water. Water sands 24', salt.

At 186' and onwards, salt.

282', 319', 354', 390', each with better supplies.

462' almost fresh water rising to near the surface.

@@@@@@@@@

O I K: Films show at 312'. 324', 365', 390', 399' but the best showing is from 400' to 417'. The 416' sand is probably oil bearing if it can be isolated from the water. It is important.

G A S: No concentration. Plentiful bubbles in water from 74' to 354'. Never enough to sample. This bore has twice been cemented. Work will begin again on 2nd June. 1923

APPENDIX 4:

APPENDIX 5:

APPENDIX 6:

LITH 2308

SA Oil Wells Co. N.L., Anglesea No. 1 (Bangwanath, W. 1947, p. 131-132)
Ph. Angahook, Sec. 13, n. Anglesea River
Lat. 38°24'15" Long. 144°11'20" Sfc level ca 5'

| | | | |
|---|---|---|---|
| | 0 | 39 | clay, yellow |
| DB — | 39 | | mudstone, black, carbonaceous, pyritic |
| EV ? — | 186 | | clay, sandy |
| | 274 | | brown coal 8' |
| | 282 | | sd, w. charcoal fragments |
| | 294 | — | clay, brown, w. lignite |
| | 301 | .. | brown coal 9' |
| | 312 | | clay |
| | 317 | | sd, grey, medium |
| | 319 | | clay, brown |
| | 324 | | sd, fine, w. a little clay |
| | 354 | | gravel |
| | 355 | | clay, brown |
| | 390 | | sd, fine |
| | 393 | | clay, brown |
| | 399 | | sandy clay w. lignite fragments |
| | 412 | | gravel, coarse |
| | 413 | | clay, sandy |
| | 416 | | sd, w. fossil resin & lignite |
| | 417 | | ss, black, hard |
| | 418 | | brown coal 11' |
| | 429 | | clay, sandy, pale brown |
| | 446 | | clay, white, w. lignite seam, |
| | 455 | | sd, coarse, rounded, silica |
| | 462 | | |