Natural Resources and Environment
AGRICULTURE • RESOURCES • CONSERVATION • LAND MANAGEMENT

WELL SUMMARY

PELICAN POINT-1
(W374)

1 Folio No	2 Referred to	3 Date	4 Clearing Officer's Initials	1 Folio No.	2 Referred to	3 Date	4 Clearing Officer's Initials

FILE COVER INSTRUCTIONS FOR ACTION OFFICERS

(1) FOLIO NUMBERS: Each subject paper attached to a file is to be given a consecutive number by the attaching officer. Papers must not be removed from or attached to a file without approval.

(2) REFERRAL TO OTHER OFFICERS: When an Officer completes action on the file and further action is required by some other Officer, please initial Column (4) and on the next vacant line, enter the relevant folio number in Column (1), indicate to whom the file is to be forwarded in Column (2) and record the date in Column (3).

(3) BRING UP MARKINGS: When action on a file is required at a later date, the officer will initial Column (4) and, on the next vacant line, enter the relevant folio number in Column (1), then write "B/U" followed by the action officer's name in Column (2) and the date the file is required in Column (3).

(4) PUTAWAY MARKINGS: When ALL action on a file is completed the officer concerned will initial Column (4) and, on the next vacant line, write "P/A" in column (2).

REGISTRY MUST BE NOTIFIED OF ANY FILE MOVEMENTS BETWEEN OFFICERS

LOCATION

PELICAN POINT-1 (W374)

Well Summary Report

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PE904087

This is an enclosure indicator page.
The enclosure PE904087 is enclosed within the container PE904086 at this location in this document.

The enclosure PE904087 has the following characteristics:

ITEM_BARCODE	= PE904087
CONTAINER_BARCODE	= PE906242
NAME	= well card
BASIN	= GIPPSLAND
PERMIT	=
TYPE	= WELL
SUBTYPE	= WELL_CARD
DESCRIPTION	= well card Pelican Point 1
REMARKS	=
DATE_CREATED	= 1/08/29
DATE_RECEIVED	=
W_NO	= W374
WELL_NAME	= Pelican Point-1
CONTRACTOR	= Valve oil Wells Ltd
CLIENT_OP_CO	= Valve oil Wells Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

LITHOLOGY & STRATIGRAPHY

W374 7-1-1933. V.A.L.V.E. BORE. PELICAN POINT-1

Summary of strata passed through in latter part of V.A.L.V.E. Bore, Pelican Point, Gippsland, with particular reference to limestone. Taken from daily log of V.A.L.V.E. Bore, to be seen at office of that Company.

2000/2015	15'	Sandy marl (dark brown).
2015/2035	20'	Grey sandy marl with hard bands limestone.
2035/2045	10'	Grey sandy marl.
2045/2048	3'	Grey sandy marl with small hard bands limestone.
2048/2061	13'	Marl.
2061/2067	6'	Marl and small bands limestone.
2067/2084	17'	Marl and hard limestone.
2084/2094	10'	Sticky marl with small bands of limestone.
2094/2099	5'	Sticky marl.
2099/2100	1'	Sandy marl.
2100/2104	4'	Sticky marl.
2104/2106	2'	Loose sand and fossils.
2106/2111	5'	Extra sticky marl.
2111/2125	14'	Extra sticky marl with hard bands limestone.
2125/2157	32'	Sticky marl.
Lower Miocene — 2157/2192	35'	Clayey marl and small hard bands of limestone.
2192/2200	8'	Grey shale.
2200/2203	3'	Coarse sand.
2203/2208	5'	Sand limestone and marl.
2208/2215	7'	Limestone and marl.
2215/2221	6'	Limestone, sand shale and marl.
upper oligocene? — 2221/2232'6"	11'6"	Limestone and shale
2232'6"/2234	1'6"	Hard limestone.
2234/2236	2'	Limestone & shale.
2236/2237	1'	Hard limestone.
2237/2240	3'	Clayey marl.
2240/2246	6'	Limestone and shale.
2246/2249	3'	Marl (clayey)
2249/2257	8'	Marl with small hard bands of limestone
2257/2260	3'	Sticky marl.
2260/2263	3'	Limestone.
2263/2265	2'	Sticky marl.
2265/2267	2'	Very hard limestone.
2267/2268	1'	Marl.
2268/2271	3'	Hard limestone.
2271/2275	4'	Sticky, clayey marl.
2275/2276	1'	Soft limestone.
2276/2281'6"	5'6"	Hard Limestone.
2281'6"/2282'6"	1'	Marl.
2282'6"/2287	4'6"	Hard limestone.
2287/2288	1'	Marl.
2288/2292	4'	Hard limestone.
2292/2293	1'	Sticky marl.
2293/2294	1'	Hard limestone.
2294/2295	1'	Sticky marl.
2295/2296	1'	Hard limestone.
2296/2297'6"	1'6"	Sticky marl.
2297'6"/2298	6"	Bluish clay.
2298/2299'3"	1'3"	Very hard limestone.
2299'3"/2299'9"	6"	Sticky marl.
2299'9"/2301'3"	1'6"	Grey shale.
2301'3"/2302'9"	1'6"	Extra hard limestone.
2302'9"/2306	3'3"	Hard limestone.
2306/2307	1'	Marl.
2307/2309	2'	Hard limestone.
2309/2311	2'	Grey shale, fossils and small shells.

LAKE VICTORIA OIL WELLS, BORE, PELICAN POINT. W374

Surface	
49'	Loose running sand.
72'	Sand and gravel.
72 to 85'	Black sticky clay.
85 to 94'	Grey sticky clay.
94 to 105'	Stiff yellow clay.
105 to 164'	Bands of clay, sand gravel, gravel.
164 to 172'	Grey and white shale.
172 to 234'	Drift sand.
234 to 320'	Drift sand with lignite, slight traces limestone.
320 to 361'	Drift sand with a few shells, Hard band of blue limestone
361 to 409'	Sand, shelly, with hard bands of sand.
409 to 414'	Brown clay with thin lignite bands.
414 to 521'	Drift sand (freenish)
521 to 525'	Green marl with hard bands.
525 to 563'	Grey marl with broken shells.
563 to 815'	Soft grey limestone (will not stand up).

Bore Sample Analysis

(5)

PELICAN POINT

Bore

Geology	Bore	Oil only	Gas only	Oil & Gas	Petrol Evident	Notes
PLIOCENES						
Sand, gravel						
Gravel						
Limestone (hard) band	364			364		
Clay				to		
Lime				394		
and						
Shells	563					
MIOCENES entered here	720					
" Upper begin						
Lime						
				874		
				952		
	995					
				1105		
" Middle begin			1220			
Marl			1232			
			to			
Pebbles			1290			
			1427			
			to			
			1475			
" Lower begin	1508					
Shells			1553			
		1658				
				1671		
				1685		
		1691				
		to				
		1715				
and		1732				
				1767		
				1776		
			1786			
			1798		1798	Strong Odour
		1817			1812	Very " "
				1843		
				1853	1858	See Gov. Analyist Report 632 A Report (29.4.32)
			1865			
Fossils			1872			
				1882		
				to	1920	Strong Odour
					1962	" "
				2075		Government Reports See Below
				2079		
				to	2084	" "
				2143		
				2145		
				2152		
				2157		
				2165	2165	" "
			2173			
			to			
OLIGOCENES entered	2227		2229			
	2232		2236			
			to			
			2242			
			2268			
			2270			
Marl			2278			
			2280			
and			2282			
			2292			
			2303			
			to			
			2305			
Limestone.			2311			

Government Reports

Gov^t Analysts Report 632^A "Distinct petroliferous odour"
"aqueous portion carried minute dark brown oily granules"
"resembles a waxy oil or grease"
Mr W H. Binney, Head Driller — "Oil coming up had distinct petroliferous odour"

PELICAN POINT 1, GIPPSLAND

BASIC INFORMATION

Company: Valve Oil Wells Ltd. (Lake Victoria Oil Wells)
Date Drilled : Sept. 1929
Location: Parish of Boole Poole, $38^{0}00'46"S$, $147^{0}37'03"E$.
Elevation: 10 ft. a.s.l.
Total Depth: 2311 ft.
Present Sample Availability: Nil
Source of Log: Chapman unpublished reports 24,39,43, and 46 (open file). Regrettably there is no other information available.

LOG INTERPRETATION

Based on the limited number of samples retrieved:

325 ft.: Shelly, calcareous or limonitic quartzose sand, angular to subrounded, partially micaceous: fossils include mollusca and bryozoa, as well as forams (e.g. miliolids and Ammonia beccarii)

361 ft.: Cream-colored calcareous quartzose sand, subangular, with some glauconite; shell fragments, bryozoa and forams occur

392 ft.: Shelly, calcareous quartzose sand, angular to subangular; contains mollusca, bryozoa and forams

- - - - -

2060 ft.: Grey fossiliferous marl with decomposed bryozoa, siliceous sponge spicules, and forams and ostracods

2190 ft.: As above

2195 ft.: Pale grey bryozoal, shelly marl

2197 ft.: Hardened, greenish grey bryozoal marl, bedded

2200 ft.: Grey bryozoal marl with common forams, also ostracods and sponge spicules; this lithology accompanied by hard concretionary limestone nodules containing pyrite and siderite with associated fossils

2227 ft.: Pale grey compact marl with sponge spicules and common forams (inc. miliolids)

2230 ft.: Grey marl with some pyrite; forams are present (inc. Elphidium)

STRATIGRAPHIC SUBDIVISION

Such a subdivision is of little significance since it is based on only ten samples from a 2311 ft. section. Representative units are believed to be:

325-392 ft.: Jemmys Point Formation
2060-2230 ft.: basal Gippsland Limestone, with the sample at 2230 ft. being very close to the top of the Lakes Entrance Formation

This interpretation is based to some extent on Chapman's fossil lists.

Barry Hocking

7th November 1969

J.B. HOCKING,
Geologist,
Sedimentary Basin Studies Section

HYDROCARBON SHOWS AND ANALYSIS

E. SEASPRAY GROUP

In such records as are available from offshore wells there is no mention of hydrocarbon shows above the Latrobe.

In the onshore area the main Seaspray Group hydrocarbon occurrence is the Lakes Entrance oil pool which is in the lower part of the Lakes Entrance Formation. Oil shows have been recorded in the same arenaceous member of the Lakes Entrance Formation in some of the outlying wells of the Lakes Entrance area such as Colquhoun Wells 1 and 4 and Gippsland Oil Co. Wells 1 and 3. Southwards from the Lakes Entrance area, hydrocarbon occurrences are mainly confined to minor instrumental gas shows in the Gippsland Limestone.

Duck Bay-1: A few gas shows were recorded in Gippsland Limestone beds, which on the basis of samples and electric log evidence appeared to be porous and water-bearing.

Pelican Point-1: This well was drilled in 1969 by Valve Oil Wells to a depth of 2309 feet at the base of the Gippsland Limestone. Gas shows were recorded in the ranges 1448-1475 feet, 1770-1826 feet, 1842-1875 feet, 2336-2883 feet and 2290-2291 feet. Oil shows were recorded in the ranges 1665-1730 feet, 1791 feet, 1826-1869 feet, 2080-2085 feet and 2168-2185 feet. No hydrocarbon occurrences are on record for the Government well Romawi-1 which had penetrated the Gippsland Limestone six miles to the north-west in the previous year.

Southwest Bairnsdale-1 is in a rather different category in that no indications of hydrocarbons were observed during the drilling of the well and it was assumed that none were present. However, in the geological report which constituted part of the 1968 review of prospects, Wooldridge (1968, pp.19,20) wrote:

> "The sonic log response between 1135 feet and 1170 feet in Arco south-west Bairnsdale No.1 would appear to be reading gas. Inspection of the samples showed the interval to be loose gravelly sand. The gas-detector gave no indication of gas while the section was being drilled.
>
> Schlumberger give an opinion that the zone could be hydrocarbon-bearing. (See Appendix I). The zone in question stands apart from underlying sands on sonic-resistivity plot because of the slow sonic readings throughout it."

VALVE OIL COMPANY - PELICAN POINT.

REPORT BY GUY R. ANDREW.

The drill at Pelican Point operated by the Valve Company having reached a point which disclosed certain conditions of great importance to shareholders, I propose to set out briefly the actual position as disclosed by boring operations in the Company's well.

To facilitate the subject I append a sketch plan which with the accompanying plan will enable the shareholders to follow my remarks with greater ease.

The present depth is 1900 feet. The fresh water or deltaic conditions were passed through, and the first limestone was encountered at 361 feet. This limestone constitutes the most important marker horizon in this field. Since entering the marine series soft limestone and fossiliferous marls have persisted. At about 1800 feet indications of both oil and gas were again met with. The oil at this level is colourless and shows evidence of infiltration through more or less porous strata. Consistently with depth after passing the 1800 ft. mark the character of both the oil and gas showed signs of alteration, and also increasing considerably in volume. At the present depth, viz. 1900 feet, the oil is reddish brown, and is present in sufficient quantities to be plainly visible along the whole length of the ditch when bailing operations are in progress. Also the petroliferous odour of the gas is very pronounced, and is apparent some distance from the bore.

Naturally these indications are of signal importance, and the question next arises as to the possibility of oil being found in payable quantities in this particular area at a lower level.

A study of the accompanying plan discloses the fact that the limestone or marker horizon, which was first struck in the Valve bore at 361 feet, was not intersected by the Goon-Nure bore (which is operating to the north), until the 820 ft. level was reached. A second band of characteristic limestone, which was struck in the Valve bore at 642 feet, was not encountered in the Goon Nure bore until the 1190 feet level. This means that there is a difference in altitude between the two bores of about 500 feet.

At first glance such an acute dip in the strata led me to consider the possibility of a faulted zone, with the downthrow to the north. Such a consideration however was promptly negatived by the showings of gas and oil in the well at Pelican Point, where as they have not been encountered at the corresponding depth in THE bore to the north. In view of such evidence I am firmly convinced that a folded structure, or antidline, does exist in the area in which we are at present drilling.

After carefully co-relating the logs of the various bores in the Longford section, which lies about 30 miles to the westward I am of the opinion that this fold is asymetrical. The southerly leg is but gently flexured, having a dip of only about 10 feet to the mile. The northerly leg is very acutely inclined, dipping sharply towards the synclinal basin in which it would appear that the bore to the north is operating. Hence the difference in the stratigraphical horizon.

Experience gained on various fields throughout the world teaches us that oil (which always rises to the highest point, owing to its specific gravity in relationship to water) is in nearly all instances found in the gently inclined structure, as the area of collection is much greater on that side. Consequently I feel confident, judging by the indications of both oil and gas which we have already encountered and which are

increasing in volume with depth, that the oil measures, which we seek, lie but a short distance below us.

Reports from the field state that the water has been successfully shut off, so that I do not anticipate, any delay in drilling operations, and I do not consider that I am unduly optimistic when I say that the shareholders may at any moment expect to hear that we have reached our objective when the marine series have been passed through, the underlying sands have been penetrated.

GUY R. ANDREW.

Consulting Geologist.

Melbourne,
9th May, 1932.

Geological Survey Laboratory,
Department of Mines,
MELBOURNE.
29/4/1932.

COPY W374

Report No. 632[A] PELICAN POINT-1

Sample	----	Sludge
From	----	Valve Oil Wells bore
Locality	----	Pelican Point, Gippsland Lakes
Sender	----	J. Macmeikan, 414 Collins St., Melbourne.

Sample consisted of a four-gallon tin of finely divided bore sediment in the form of slurry. When freshly opened the contents of the tin possessed a characteristic petroliferous odour strongly resembling kerosene (this may have come from the container).

The mineral portion of the sample was a ferruginous and calcareous material mixed with siliceous matter, all being in a fine state of division. When allowed to stand for some time the sludge showed numerous oil films.

The aqueous portion of the sample, when allowed to settle out, carried minute dark brown oily granules of some substance that appeared to resemble a waxy oil or grease. These brownish grains are distinct from oil globules as they are solid bodies and not liquid. Portion of the mixed sludge was treated with a volatile solvent, with the following result:-

Solvent solution, after treatment, was coloured yellowish-brown and possessed a slight dark green fluoresence, indicating that some action had taken place between sample and solvent. The extract obtained by evaporation of the solvent consisted of a dark brown greasy or waxy mass, equivalent to approximately 0.2% of sample. This waxy oil extract is almost odourless. It consists of a very heavy grade of mineral oil which, at ordinary atmospheric temperature, is semi-solid.

Owing to the container not being airtight, any gas that was originally present had been lost by diffusion.

J.C.WATSON.

29/4/1932.

Hard limestone . . . . . 2308 – 2309

Grey shale, w/ fossils & small shells . . . . . 2309 – 2311

Well suspended. Jan 1933 till Dec. 1933.

PELICAL POINT 1

Water . at 1798.
≈ 2000.

Oil + Gas Shows.

Slight oil + gas show – 878'

952 – 995, 1080 – 1084 } slight gas show.

1105 Sli. gas show w/ oil films.

1220 – 1290, 1427 – 1457 } Slight gas show.

1457 – 1475 Good gas show

1560 – 1569 Slight gas show.

1650 – 1655 Oil films

1665 – 1671, 1676 – 1685 } Sli. gas show w/ oil films.

1695 – 1705, 1721 – 1732 } Good show oil films.

1755 – 1767 Sli. gas show w/ oil films

1767 Good show oil.

1768 Sli. gas show w/ oil films.

1778 Sli gas show.

1791 – 1798, 1798 – 1812 } Good show gas – petrolif odour w/ oil films.

1832 Sli. show gas.

1840, 1849, 1858 – 1900, 1900 – 1921 } Good gas show w/ oil films.

1921 – 1977, 1977 – 2008 } Strong gas show w/ oil globules.

2008 – 2048, 2055 – 2067 } Sli gas show w/ oil films

2067 – 2075. Good gas show w/ oil globules.

2075 – 2140. Sli. gas show – petrolif odour.

2140 – 2145, 2152 – 2165 } Good show gas w/ oil films

2165 – 2229. – Strong gas show – inflammable, petrolif. odour

2232 – 2246, 2267 – 2270, 2274 – 2282 } Sli gas show.

2301 – 2306 Good gas show – inflammable

2306 – 2309. Slight gas show.

MISCELLANEOUS

PELICAN POINT.

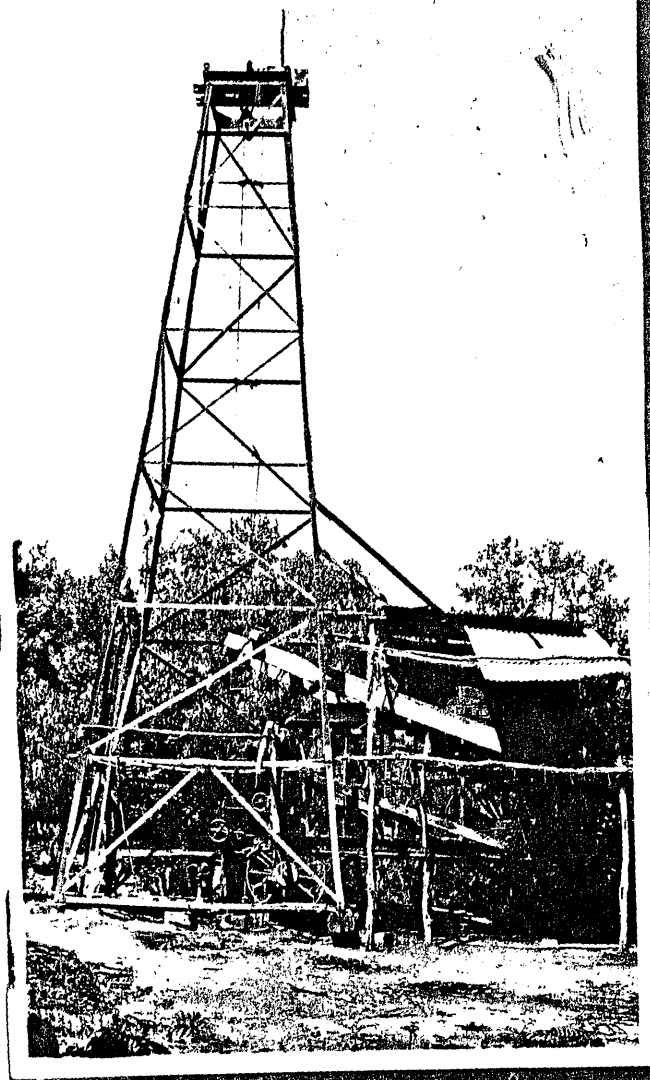
ex W.B. 1947.

18th Oct 1929 Lake Victoria Oil Wells Boring * D. 300'.

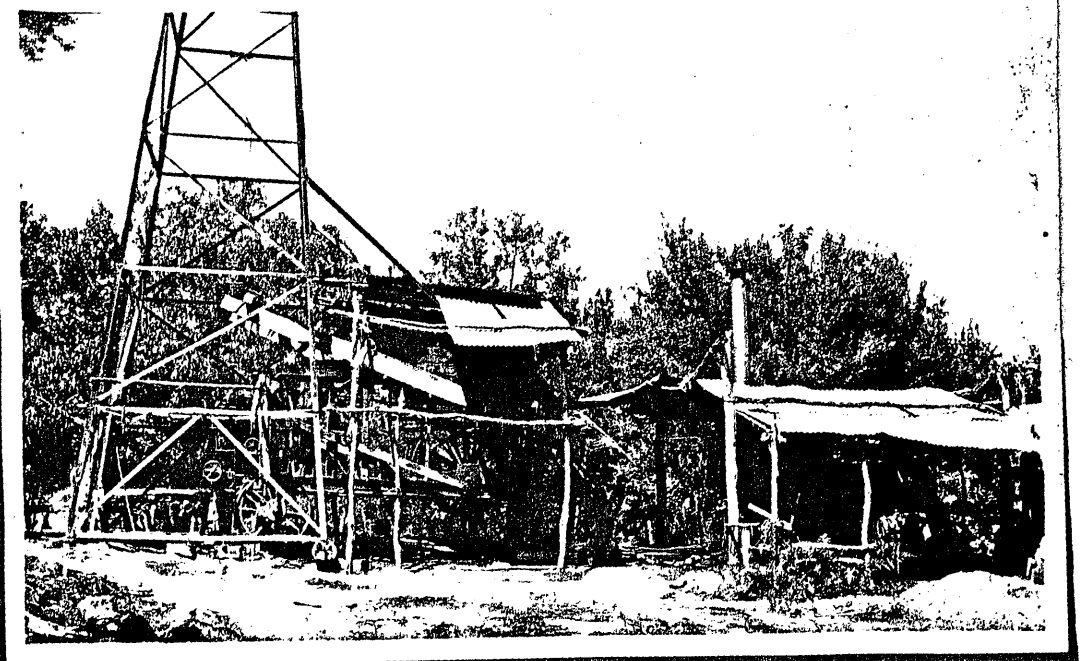
Letter 24/5/32. Value Oil Wells NL Formed by 1 Pelican Pt.

Report 9/5/32 Value Oil Company. Drilling.

Pelican Point



The Derrick



The Bore

1929

2

VICTORIA.—DEPARTMENT OF MINES.

Oil

BORING OPERATIONS.

The following is the Record of Work done on Victoria Drill No. 7 while in my charge for week ending 12/10/1929.

Telegraphic Address Payne & M...

Postal Address " "

RECEIVED 16 OCT. 1929

R. Renkin
Signature of Foreman.

Parish of Bool Boole Bore No. 1

POSITION: From Pelican Point corner allot. section go

Position being located Mr "Atkinson" then

STAFF.

Position.	Name.	Shift Hours.	Days worked.
Foreman	R Renkin	till	
Shift-foreman		till	
Shift-foreman		till	
Assistant		till	
Assistant		till	
Assistant		till	

TOOLS USED.

	From. feet.	To. feet.		From. feet.	To. feet.
Auger			Calyx		
Drive pump			Shot		
Star bit			Diamonds		

FUEL.

On hand at end of previous week	
Received during week	
Total	
On hand	
Used	

WATER.

Struck at .... feet.

Flow .... gallons per hour.

Quality ....

Standing at when bore completed .... feet.

TUBES.

	8″	7″	6″	5″	4″	3″
	feet.	feet.	feet.	feet.	feet.	feet.
In hole			263			
Not in use			37			
Total			300			

Diameter of bore hole .... inches.

Reduced to .... inches diameter at .... feet.

Dip at strata ....

Remarks on strata that are worth recording, also explanations of any delays, repairs, loss of material, &c. :—

FEET BORED.

Shift.		From. feet.	To. feet.	For Shift. feet.	METER. At end of Shift.
Monday	Day	234	238	4	
	Afternoon				
Tuesday	Day	238	246	8	
	Afternoon				
Wednesday	Day	246	256	10	
	Afternoon				
Thursday	Day	256	262	6	
	Afternoon				
Friday	Day	262	280	18	
	Afternoon				
Saturday	Day				
	Afternoon				
TOTAL FOR WEEK					

STRATA PASSED THROUGH.

Material.	From. ft. in.	To. ft. in.	Thickness. ft. in.	Core Obtained. ft. in.
Drift to	263′ 0			
Sand with fragments of Shells				
263′ to 280′				
Casing very tight to				
drive				