

RTA-6M

1/24/84

Mid Hawthorn pilot well - 250-300

• NE corner of Sears Rd & SR 29

150' N. of USGS monitoring wells

• Begin drilling 0930 -

0-10' Interbedded gray-blgray clay,
w-tan micrite, w/some br
med grain, well cemented S.S.

10-20'

* hit hd. LS.
hard drilling

10-20'

AS above. Grading into
more w-tan-br LS. Very
sandy; toward bottom more
shelly & fossiliferous LS.

20-30'

Back into more gray-blgray
clay - predominately.

30-40

Same but w/ more shell
& calcite; evidence of some
arenaceous clay.

LEVEL

40-50	Same as 20-30' - all clay	110-120	Same, but w/ some wh- black qtz pebbles, also well rd. wh shell rock becoming more evident at bottom
50-60	Same, but clay became more compact (harder)	120-130	f-m gr S.S., well cemented, semi rd., w/ pebble size well rounded qtz *very fast drilling tan-wh w/ some shell from above
60-70	Same, but became more green & more arenaceous (v.f. gr sand) - Due to the speed of drilling	130-140	Same, but w/ more argi cement (gr-grey) - becoming more unconsolidated
70-80	same w/ definite v.f grain sand (used desander) *turn on desander	140-150	(Beginning to drill harder - bedrock - <u>Set casing here</u>) wh arg. ss - v hard & well- cemented w/ calcite; good pore spaces - becoming more arenaceous, w/ alot of very well rd. qtz pebbles Note: almost becoming like an arenaceous LS. Not well sorted
80-90	Same		
90-100	(Drilling speed increased considerably) Same w/ considerably more v.f gr sand - lighter green color - (evidence of qtz?)		
100-110	Same		

Definitely producing area

150-160 wh-tan ds. w/ a lot of shell & test material - a lot of perm - v hard, some s.s. (probably from above)

160-170 same; becoming a bit more arg - wh-tan
*Stop drilling - for 2nd well
165'

170-180 (Drilling slowed down considerably) gr-grey clay w/ still some t.s. intermixed
evidence of phosphate
NOTE: Found old artesian well ~ 30 yds E of drill site on Fred Barfield Farms property.

180-190 same but w/ more phosphate
*some fossil evidence

190-200 same but more arena (sand)

200-210 same Missed sample

* Large Bivalvia

missed samples
210-220 same as above

220-230 same but sand becoming more evidence

230-240 definitely becoming sandier
(further drilling) SS - wh-br - w/ some phosphate - vf - med gr - unconsolidated arg, possibly calc cement - fairly well sorted

240-250 same but grading into more s.s. - med lg gr - fairly sorted - semi well rounded - poorly cemented -

250-260 same, but more rounded & less sorted f - md gr - sub angular - sub rded - some shell

260-270 (Faster drilling) becoming sandier - same as above w/ more lg pebbles - well rounded

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270-280 (drilling slowed down)
same as above - poorly
sorted; sub red - red,
became more arg - br & dk
grey clay

280-290 Same - gr - grey clay

290-300 (Drilling getting harder -
from 290-295) - possible L.S.
Same - becoming more
phosphatic - same SHIT!

Finished drilling @ 1300
Tripped out @ 1330

Begin logging @ 1400

Surveys: G-C

Finished @ 1515

Measured flow out 1" orifice - 64"
on Artesian well - got 1L sample.

Well finished to 380'
Complete set of logs run

Filled hole up to 165' w/ cement
Drilled rest of hole to 10"
Installed 140' of 6" casing

Developed well —

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10-20'
* hit hdl LS.
hrdrilling

10-20' AS above. Grading into
more w-tan-br LS. Very
sandy; toward bottom more
shelly & fossiliferic LS.

20-30' Back into more grey-blgray
clay - predominately.

30-40' Same but w/ more shell
& calcite; evidence of some
arenaceous clay.

LEVEL

40-50 same as 20-30' - all clay

50-60 same, but clay became more compact (harder)

60-70 same, but became more green & more arenaceous (v. f. gr sand) - Due to the speed of drilling

70-80 same w/ definite v. f. grain sand (used desander)
*turn off desander

80-90 same

90-100 (Drilling speed increased considerably)
same w/ considerably more v. f. gr sand - lighter green color - (evidence of Qtz?)

100-110 Same.



110-120 Same, but w/ some wh- & black Qtz pebbles, also well rd. wh shell rock becoming more evident at bottom

120-130 f-m gr SS., well cemented, semi rd., w/ pebble size well rounded Qtz tan-wh w/ some shell from above
*very fast drilling

130-140 same, but w/ more arg cement (gr-grey) - becoming more unconsolidated

140-150 (Beginning to drill harder - bedrock - Set casing here)

Definitely producing area

wh arg ss - v hard & well cemented w/ calcite; good pore spaces - becoming more calcareous, w/ alot of very well rd. Qtz pebbles
Note: almost becoming like an arenaceous LS.
Not well sorted

150-160

wh-tan d.s. w/ a lot of shell & test material - a lot of perm - v hard, some s.s. (probably from above)

160-170

same; becoming a bit more arg - wh-tan

*Stop drilling - for 2nd well

165'

170-180

(Drilling slowed down considerably) gr-grey clay w/ still some d.s. intermixed

evidence of phosphate

NOTES: Found old artesian well 30 yds E of drill site on Fred Garfield Farms property.

180-190

same but w/ more phosphate *some fossil evidence

190-200

same, but more arena (sand)

200-210

same Missed sample

* Large Bivalvia

210-220

missed samples

same as above

220-230

same, but sand becoming more evidence

230-240

definitely becoming sandier SS - wh-br - w/ some phosphate - vf - med gr - unconsolidated - arg, possibly calc cement - fairly well sorted

(faster drilling)

240-250

same but grading into more s.s. - med lg gr - fairly sorting semi well rounded - fairly cemented -

250-260

same, but more rounded & less sorted f - md gr - sub angular - sub rded - some shell

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(Faster drilling) becoming sandier - same as above w/ more lg pebbles - well rounded

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from 290-295) - possible LS.
Same - becoming more
phosphatic - some SHIT!

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on Artesian well - got 16 sample.

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