

APT ANALYSIS

SITE: Crow's Nest South
Section 5 Township 47 S Range 32 E

REPORT: Hydrogeologic Study for Crow's Nest South
April 1988
Murray - Millboro

GEOLOGIC DATA: pg. 4, _____

DEPTH (LSD)	LITHOLOGY
<u>0-8</u>	<u>sand</u>
<u>8-10</u>	<u>clayey sand</u>
<u>10-23</u>	<u>shell, sand, debris</u>
<u>23-32</u>	<u>sand shell</u>
<u>32-38</u>	<u>sandy clay</u>
<u>38-105</u>	<u>sandy limestone</u>

Static Water Level at the site is approximately _____ ft. msl.
Base of the aquifer at the site is estimated at _____ ft. msl.

WELL DESCRIPTIONS:

Well	Diam. (in)	Total Depth	Cased Depth	Screen/ Open	Plane Coords.		
					r	X	Y
<u>TPW</u>	<u>12</u>	<u>105</u>	<u>65</u>	<u>S</u>	<u>-</u>		
<u>OBS1</u>	<u>4</u>	<u>105</u>	<u>↓</u>	<u>S</u>	<u>108'</u>		
<u>OBS2</u>	<u>4</u>	<u>90</u>	<u>↓</u>	<u>O</u>	<u>620'</u>		
<u>OBS3</u>	<u>12</u>	<u>105</u>	<u>↓</u>	<u>S</u>	<u>1215'</u>		

INFLUENCING FACTORS:

interference from off site wells 102 hours into test
10 wells pumping 6,500 gpm approx 8,000 ft away caused about 1 ft
of interference and test

APT: pg. 10

23

Started: 3/14/88
Duration: 72 h
Discharge: 2350 gpm
Recovery: 3 h V_s

Comments:

- 1) _____
- 2) _____
- 3) _____
- 4) _____

CONSULTANT'S ANALYSIS: pg. 13

Method: Copper, Jacob-Handcock, Recovery

gpd/ft³

Well	Transmissivity (GPD/FT)	S	Sy	K' / b'
<u>OB51</u>	<u>769,000 - 940,000</u>	<u>1.2 - 1.16 x 10⁻⁴</u>	<u>-</u>	<u>2.6 x 10⁻²</u>
<u>OB52</u>	<u>673,000 - 850,000</u>	<u>1.6 - 2.0 x 10⁻⁴</u>	<u>-</u>	<u>7 x 10⁻²</u>
<u>OB53</u>	<u>1,036,000 - 1,266,000</u>	<u>1.6 - 1.7 x 10⁻⁴</u>	<u>-</u>	<u>7 x 10⁻³</u>
<u>TPW</u>	<u>954,000</u>	<u>-</u>	<u>-</u>	<u>-</u>

Comments:

Method: GWAP

Well	Transmissivity (GPD/FT)	S	Sy	K' / b'
<u>OB51</u>	<u>708,206</u>	<u>1.479 x 10⁻⁴</u>	<u>-</u>	<u>-</u>
<u>OB52</u>	<u>741,597</u>	<u>1.738 x 10⁻⁴</u>	<u>-</u>	<u>-</u>
<u>OB53</u>	<u>1,071,734</u>	<u>1.898 x 10⁻⁴</u>	<u>-</u>	<u>-</u>

Comments:

Method: WHIP

Well	Transmissivity (GPD/FT)	S	Sy	K' / b'
<u>OB51</u>	<u>860,948</u>	<u>1.21 x 10⁻⁴</u>	<u>-</u>	<u>2.6 x 10⁻³</u>
<u>OB52</u>	<u>1,119,756</u>	<u>1.267 x 10⁻⁴</u>	<u>-</u>	<u>1.78 x 10⁻⁴</u>
<u>OB53</u>	<u>1,067,396</u>	<u>2.146 x 10⁻⁴</u>	<u>-</u>	<u>-</u>
<u>all</u>	<u>444,900 - 545,068</u>	<u>3.0 - 3.67 x 10⁻⁴</u>	<u>-</u>	<u>4.5 x 10⁻³ - 9.35 x 10⁻²</u>

Comments:

REANALYSIS:

Method: _____
Results: _____

Well	Transmissivity (GPD/FT)	S	Sy	K'/b'
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Comments:

Method: _____
Results: _____

Well	Transmissivity (GPD/FT)	S	Sy	K'/b'
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Comments:

RECOMMENDED VALUES:

Transmissivity (GPD/FT)	Storage	Sy	Leakance
750,000	1.6×10^{-4}	/	1×10^{-3} grad/ft ²

REFERENCES:

ag K = 1253 ft/d
LZ K' = 4×10^{-3}

Aa T -20
B -100
Th 80

CZ T +10
B -20
Th 30

MAPS

location X 451350
Y 759950