

WARZYN

ENGINEERING INC

Consulting Engineers • Civil • Structural • Geotechnical • Materials Testing • Soil Borings • Surveying

1409 EMIL STREET, P.O. BOX 9538, MADISON, WIS. 53715 • TEL. (608) 257-4848

January 30, 1980
C 7606W

Mr. Carl Pedretti, Chairman
Town of Onalaska
Town Hall
Route 2
Onalaska, Wisconsin 54650

Re: Groundwater Monitoring
Onalaska Sanitary Landfill

Dear Mr. Pedretti:

Please find attached the groundwater monitoring results for the fourth quarter of 1979. Sampling was conducted on December 5, 1979. All monitoring wells except for B2 were sampled. Samples were also obtained from the Miller home and garden wells.

We were unable to obtain a sample from monitoring well B2 due to a kink in the well casing which was apparently the result of landfilling. We recommend that the well be repaired by excavating and replacing the damaged section(s) such that samples can be obtained.

Groundwater elevations have increased over a foot in all wells from the previous sampling (September 19, 1979), but groundwater still appears to flow in a generally southerly direction toward the Miller property and the Black River.

As in past quarters, the monitoring wells downgradient from and within the fill area show the elevation of some parameters above background concentrations found in monitoring wells B1 and B5. These include specific conductance, COD, chloride & hardness. All monitoring wells are generally within the range of concentrations detected in previous sampling periods for all parameters.

The Miller home well had a large increase in dissolved iron and a slight increase in pH from the previous sampling period. All other parameters are at levels comparable to the previous sampling. The dissolved iron concentration in the Miller home well is above secondary drinking water standards. Extreme fluctuations in dissolved iron have also been observed in background monitoring wells B1 and B5.

RECEIVED
JAN 31 1980
DNR La Crosse Area

If you have any questions concerning this report, please feel free to contact us.

Very truly yours,

WARZYN ENGINEERING INC.



Robert J. Karnauskas
Hydrogeologist

RJK/pag

Enclosures: Groundwater Contour Map, December 5, 1979
Analytical Laboratory Results

cc: Mr. Chuck Geochele
Department of Natural Resources
Madison, WI w/enc.

Mr. Jim Boettcher
Department of Natural Resources
Lacrosse, WI w/enc.

Mr. Jeff Miller
Department of Natural Resources
Eau Claire, WI w/enc.

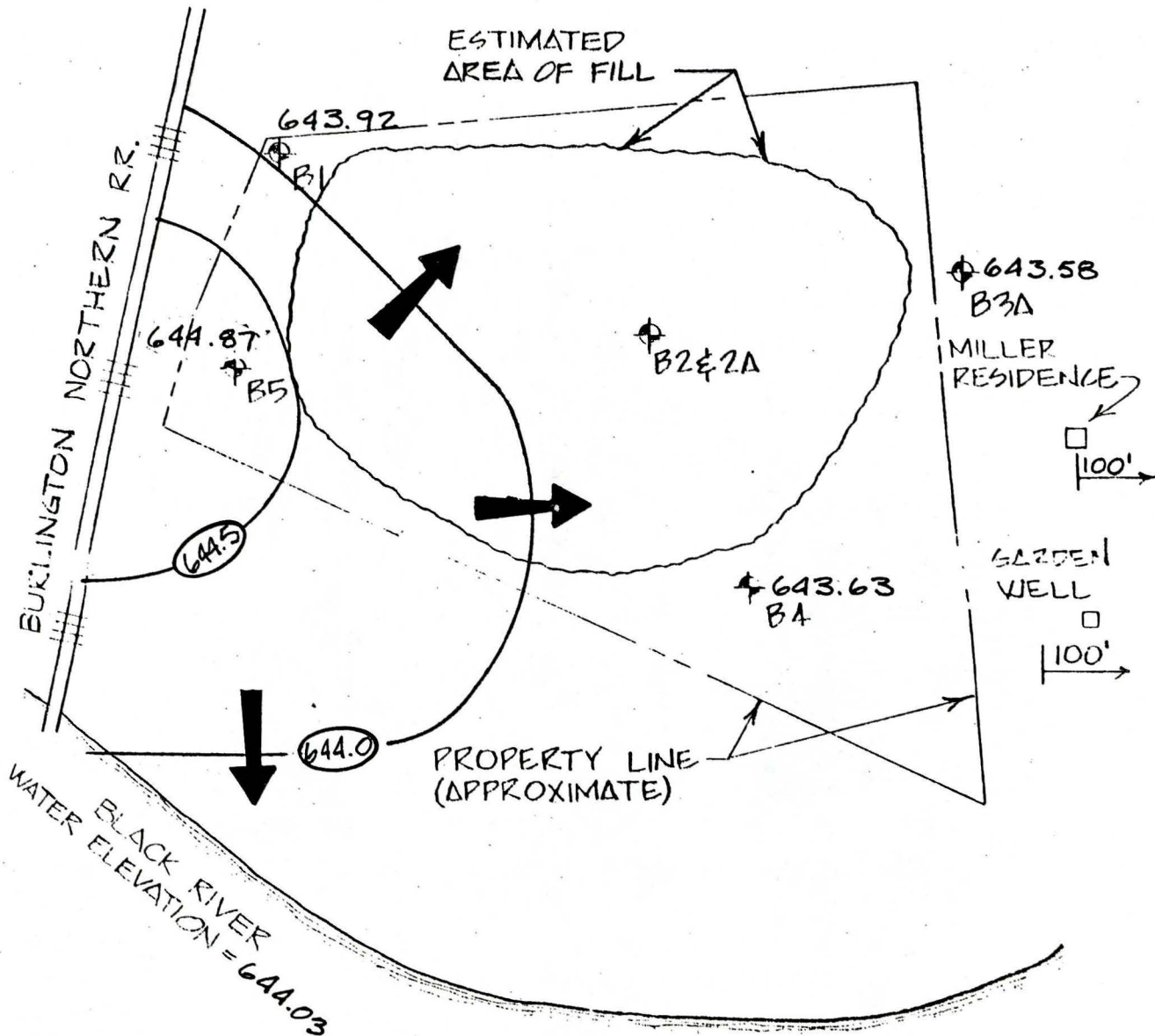
Mr. Gene Mitchell
Department of Natural Resources
Madison, WI w/enc.

WARZYN**ENGINEERING INC****ANALYTICAL LABORATORY RESULTS**Project Onalaska Sanitary LandfillLocation Onalaska, WisconsinDate Received: 12/5/79Project No: C 7606WSheet 1 of 1Ckd PC App'd BKDate Issued: 1-30-80

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Sample No.	Groundwater Elevation	pH Units	Conductivity umhos/cm	Chemical Oxygen Demand	Chloride	Total Hardness	Dissolved Iron	Nitrate Nitrogen	Sulfate
B1	643.92'	7.00	265	<10	<5	160	.10	<.10	<5
B2A	638.56'	7.25	1245	48	54	344	.10	<.10	<5
B3A	643.58'	7.40	710	15	34	376	.05	<.10	<5
B4	643.63'	7.05	455	109	10	208	.25	<.10	10
B5	644.87	7.00	440	22	10	200	<.05	<.10	<5
Miller House	-	7.90	995	15	110	456	2.30	<.10	5
Miller Garden	-	8.20	305	<10	5	140	.35	<.10	6

All parameters are mg/l unless otherwise stated.



LEGEND

- GROUNDWATER CONTOUR
- DIRECTION OF HORIZONTAL GROUNDWATER FLOW
- GROUNDWATER MONITORING WELL, NUMBER & ELEVATION



SCALE: 1" = 200'

	GROUNDWATER CONTOUR MAP 12/05/79 DATA		
	TOWN OF ONALASKA SANITARY LANDFILL ONALASKA, WISCONSIN		
DWN TDH	CHK'D CGK	APP'D <i>James A. Pin</i>	DATE 1/30/80
			C71606-A20