WA 6860

added 10-4-11 EJH

STATE HYGIENIC LABORATORY, IOWA CITY, IOWA
WATER LABORATORY DIVISION
MINERAL ANALYSIS

LAB. NO. 8600
MINERAL NO. 4197
Oct. 29 1954

TOWN Lanesboro COUNTY Carroll
OWNER OF SUPPLY Town
COLLECTOR'S NAME K. F. Boyles
DATE COLLECTED 10-19-54 DATE RECEIVED 10-21-54
REPORT TO: NAME State Dept. of Health
ADDRESS Des Moines, Iowa

FIELD DATA

SOURCE: WELL NAME, NUMBER, POINT OF COLLECTION, DEPTH, CONSTRUCTION DATE, ETC., Well #2. Sample collected from discharge line ahead of Iron Removal Tank. 133 ft. Deep. Started drilling July 7, Finished Aug. 10, '54. Temporary Analysis

WELL PUMPED 1/4 HRS. AT 50 GPM. DATE OF PREVIOUS SAMPLE 7-19-54

WAS SAMPLE FREE OF TURBIDITY WHEN COLLECTED Yes

TEMPERATURE °F 52° ALKALINITY (ppm $CaCO_3$) P 0 T 430 pH 7.3

LABORATORY ANALYSIS
(PARTS PER MILLION)

SPECIFIC CONDUCTANCE K AT 25°C 60.6 x 10^{-5} TURBIDITY

INSOLUBLE MATTER 17.0 $Fe_2O_3 + Al_2O_3 + Mn_2O_3 (R_2O_3)$ 7.0

TOTAL SOLIDS 356 SILICA (SiO_2) TOTAL IRON (Fe) 16.0

ALKALINITY (ppm $CaCO_3$) P 34.0 T 351.0 pH 8.1 DATE 10-25-54

POSITIVE IONS		NEGATIVE IONS	
K^+	6.0	NO_3 — asN	None
Na^+	9.2	F^-	0.25
Ca^{++}	99.4	Cl^-	6.0
Mg^{++}	26.1	SO_4^{--}	11.9
Mn^{++}	< 0.005	HCO_3^-	345.3
		CO_3^{--}	40.8

HARDNESS AS $CaCO_3$ 333.5 ppm 19.5 gpg

All determinations made on filtered sample except total Fe and total Mn. Soluble Fe = 0.22, Total Mn = 0.08

ANALYST J. Dougherty

CHIEF CHEMIST

les

Coded 10-4-77824

W-6860

STATE HYGIENIC LABORATORY, DES MOINES BRANCH

The University of Iowa
405 STATE OFFICE & LAB BLDG, E 7th & COURT
DES MOINES, IOWA 50309

LAB NO. 3980

MINERAL ANALYSIS

MINERAL NO. 9294

REPORTED 10 May 1972

TOWN	Lanesboro	COUNTY	Carroll
OWNER OF SUPPLY	Municipal		
COLLECTOR'S NAME	C.F. Launspoch		
DATE COLLECTED	22 February 1972	Date Received	23 February 1972
REPORT TO	Environmental Engineering Service State Department of Health Des Moines, Iowa		

FIELD DATA

SOURCE Well
SAMPLING POINT

WELL DATA
NAME OR NUMBER 2
CONSTRUCTION DATE DEPTH 133'
PUMPED 1/2 HRS AT 50 GPM

WAS SAMPLE FREE OF TURBIDITY WHEN COLLECTED? Not Stated
TEMPERATURE ° C ALKALINITY (mg/l $CaCO_3$)P T pH
IS A POLYPHOSPHATE BEING USED? DATE OF PREVIOUS SAMPLE

LABORATORY ANALYSIS
(MILLIGRAMS PER LITER)

SPECIFIC CONDUCTANCE AT 25° C	640 micromhos			SILICA (SiO_2)	28
TOTAL RESIDUE	385	TOTAL IRON (Fe)	11		
FILTRABLE RESIDUE	385	SOLUBLE IRON (Fe)	11		
ALKALINITY AS $CaCO_3$ P	None	T 358	pH 6.8	DATE	23 February 1972
HARDNESS AS $CaCO_3$	328	mg/l 19.2	gpg		

POSITIVE IONS		NEGATIVE IONS		TRACE METALS	
POTASSIUM (K^+)	5.4	NITRATE (NO_3^-)	0.2	ARSENIC	0.10*
SODIUM (Na^+)	11	FLUORIDE (F^-)	0.35	BARIUM	0.6
CALCIUM (Ca^{++})	86	CHLORIDE (Cl^-)	< 0.5	CADMIUM	< 0.01
MAGNESIUM (Mg^{++})	27	SULFATE (SO_4^{--})	14	CHROMIUM	< 0.01
MANGANESE (Mn^{++})	0.09	BICARBONATE (HCO_3^-)	437	COPPER	< 0.01
		CARBONATE (CO_3^{--})	None	LEAD	< 0.01
				ZINC	< 0.01

No turbidity observation noted upon collection of sample. Turbid and yellow upon receipt in lab.
*Due to Iron interference in first sample, analysis was done on resample taken

ANALYST
Calkins, Morlan, Pierson

R. L. MORRIS, Ph.D.
ASSOCIATE DIRECTOR AND
PRINCIPAL CHEMIST

2155

jo

Coded

STATE HYGIENIC LABORATORY, DES MOINES BRANCH

The University of Iowa
405 STATE OFFICE & LAB BLDG, E 7th & COURT
DES MOINES, IOWA 50309

LAB NO. 3980

MINERAL ANALYSIS

MINERAL NO. 9294

REPORTED 10 May 1972

TOWN Lanesboro COUNTY Carroll
OWNER OF SUPPLY Municipal
COLLECTOR'S NAME C.F. Launspoch
DATE COLLECTED 22 February 1972 Date Received 23 February 1972
REPORT TO Environmental Engineering Service
State Department of Health
Des Moines, Iowa

FIELD DATA

SOURCE Well
SAMPLING POINT

WELL DATA
NAME OR NUMBER 2
CONSTRUCTION DATE DEPTH 133'
PUMPED 1/2 HRS AT 50 GPM

WAS SAMPLE FREE OF TURBIDITY WHEN COLLECTED? Not Stated
TEMPERATURE ° C ALKALINITY (mg/l $CaCO_3$)P T pH
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LABORATORY ANALYSIS
(MILLIGRAMS PER LITER)

SPECIFIC CONDUCTANCE AT 25° C 640 micromhos SILICA (SiO_2) 28
TOTAL RESIDUE 385 TOTAL IRON (Fe) 11
FILTRABLE RESIDUE 385 SOLUBLE IRON (Fe) 11
ALKALINITY AS $CaCO_3$ P None T 358 pH 6.8 DATE 23 February 1972
HARDNESS AS $CaCO_3$ 328 mg/l 19.2 gpg

POSITIVE IONS	Prob 5.4	NEGATIVE IONS		TRACE METALS	
POTASSIUM (K^+)	54	NITRATE (NO_3^-)	0.2	ARSENIC	0.10*
SODIUM (Na^+)	11	FLUORIDE (F^-)	0.35	BARIUM	0.6
CALCIUM (Ca^{++})	86	CHLORIDE (Cl^-)	< 0.5	CADMIUM	< 0.01
MAGNESIUM (Mg^{++})	27	SULFATE (SO_4^-)	14	CHROMIUM	< 0.01
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				ZINC	< 0.01

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ANALYST
Calkins, Morlan, Pierson

R. L. MORRIS, Ph.D.
ASSOCIATE DIRECTOR AND
PRINCIPAL CHEMIST

2155

WATER QUALITY REPORT

STATE HYGIENIC LABORATORY, Des Moines Branch
The University of Iowa
E 7th & Court, Rm 405, Des Moines, Iowa 50309

Town	Lanesboro		
Source	At well		
Specific Location			
Date Collected	18 April 1972		
Date Received	19 April 1972		
Lab Number	5105		
		FIELD DATA	
Collection Time			
pH			
Temperature			
Dissolved Oxygen			
	BACTERIOLOGICAL EXAMINATION		
Fecal Coliform/100 ml			
	CHEMICAL ANALYSIS (as mg/l unless designated otherwise)		
Conductance (micromhos)			
MBAS (as LAS)			
pH (units)			
Alkalinity: P			
T			
NITROGEN: Organic N			
Ammonia N			
Nitrite N			
Nitrate N			
Nitrate as NO_3			
RESIDUE: Total			
Fixed			
Volatile			
Filtrable Residue T			
F			
V			
Nonfiltrable Residue T			
F			
V			
Settleable Matter (ml/l)			
PHOSPHATE: Filtrable P			
Total P			
Dissolved Oxygen			
BOD			
COD			
Grease or Oil			
Turbidity (JTU)			
Total Hardness (as $CaCO_3$)			
Calcium (Ca^{++})			
Magnesium (Mg^{++})			
Chloride (Cl^-)			
Sulfate (SO_4^{--})			
ARSENIC	0.10		

REMARKS:

COLLECTOR C.J. Launspoch, Water Supt.
REPORT TO Lanesboro, Iowa

R. L. Morris, Ph.D.
Associate Director & Principal Chemist

1341

JHG 10 May 1972 jb

There has been a correction made on the attached Mineral Report, Lab. # 3980.

Please discard the previous report sent to you.

Thank you.

Jean Bayes
State Hygienic Lab
E. 7th & Court

Paul —
this is the one
you can't ha Arsenic
error