ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1989 NONPOINT SOURCE WATER QUALITY ASSESSMENT

*** WATERBODY ***

Name of Waterbody: Rabbit Creek

Location or Lat/Long: 61° 04' 25" 149° 50' 15"

Waterbody Type:
- [X] River/Stream
- [ ] Lake
- [ ] Fresh Wetland
- [ ] Tidal Wetland
- [ ] Estuary
- [ ] Coastal Shoreline
- [ ] Groundwater

Waterbody Size:
- 12 Miles
- ____ Acres/Hectares
- ____ Acres/Hectares
- ____ Acres/Hectares
- ____ Square Miles
- ____ Square Miles

ADEC USE ONLY
304l: N L M S
WQL: 0 - N
1 - PS
2 - NPS
3 - WQS
4 - Con/Ent
ID#: ____

Segment of Waterbody Addressed:
From: ____
To: ____
Other Description: ____
Size of Segment: ____

USGS Hydrologic Unit #: AK 190 - 20401 - 007

*** ASSESSMENT ***

Describe Source of Pollution and Documentation Provided: Urban Development - monitored for bacteria and metals

Type of Documentation (Attached If Possible):
- [X] Water quality data
- [ ] Documented oil spill
- [ ] Enforcement action
- [ ] Photos with documentation
- [ ] Photos without documentation
- [X] Written report
- [ ] Field notes
- [ ] Overflight
- [ ] Observation
- [ ] Other

Assessment type:
- [X] Monitored
- [ ] Evaluated

Violation of Water Quality Standards:
- [ ] **Past** Violation Documented
- [X] **Current** Violation Documented
- [ ] **Current** Violation Suspected
- [ ] **Future** Violation Projected

Waterbody Status:
- [ ] Impaired - Past
- [X] Impaired - Current
- [ ] Suspected
- [ ] Unimpaired

Comments: 3 sites sampled for fecal coliform bacteria.

Author of This Assessment: C. Kent **Affiliation:** ADEC **Date:** 89 08 (YY/MM)

*** USE STATUS ***

Meets Clean Water Act Goals:

[X] Fishable
[ ] Not Fishable
[ ] Fishable Not Attainable

[X] Swimmable
[ ] Not Swimmable
[ ] Swimmable Not Attainable

Impaired Uses:

FRESHWATER
[X] Drinking
[ ] Agriculture
[ ] Aquaculture
[ ] Industry
[X] Recreation, Contact
[ ] Recreation, Secondary
[ ] Fish, Shellfish, Wildlife

MARINE
[ ] Aquaculture
[ ] Seafood Processing
[ ] Industry
[ ] Recreation, Contact
[ ] Recreation, Secondary
[ ] Fish, Shellfish, Wildlife
[ ] Harvest of Fish, Shellfish

Support of Designated Uses:

[ ] One or More Uses Not Supported (Impaired)
[X] One or More Uses Partially Supported (Partially Impaired)
[ ] One or More Uses Suspected to Be Affected (Suspected)
[ ] One or More Uses Projected to Become Affected (Projected)
[ ] All Uses Fully Supported, sources present (Unimpaired)
[ ] All Uses Fully Supported, no sources present (Unimpaired)

Trophic Status:

[ ] Oligatrophic
[ ] Mesatrophic
[ ] Eutrophic
[ ] Hypereutrophic
[ ] Dystrophic
[X] Unknown

Trophic Trend

[ ] Improving
[ ] Stable
[ ] Deteriorating

*** TOXICS ***

Monitored for Toxics: [ ] Yes [X] No

Type of Toxics Monitoring:

[ ] 1 Organics in water column
[ ] 2 Organics in sediments
[ ] 3 Organics in fish tissue
[ ] 4 Organics in discharges
[ ] 5 Pesticides in water column
[ ] 6 Pesticides in sediments
[ ] 7 Pesticides in fish tissue
[ ] 8 Pesticides in discharges
[ ] 9 Metals in water column
[ ] 10 Metals in sediments
[ ] 11 Metals in fish tissue
[ ] 12 Metals in discharges
[ ] 13 Other inorganics in water column
[ ] 99 Other inorganics in sediments
[ ] 99 Other inorganics in fish tissue
[ ] 14 Other inorganics in discharges
[ ] 15 Toxicity testing of water column
[ ] 16 Toxicity testing of sediments
[ ] 17 Toxicity testing of discharges

Fish and Shellfish Contamination:

[X] 0 None detected
[ ] 1 Contaminated fish
[ ] 2 Fishing advisory
[ ] 3 Fishing ban
[ ] 4 Fish abnormalities
[ ] 5 Shellfish restrictions due to pathogens
[ ] 6 Fish kill

*** NONATTAINMENT CAUSES ***

Pollutants: (H = High, M = Medium, S = Slight)

__ 0 Cause Unknown
__ 1 Unknown toxicity
__ 2 Pesticides — Type _____
__ 3 Priority organics — Type _____
__ 4 Nonpriority organics — Type _____
__ 5 Metals — Type _____
__ 6 Ammonia
__ 7 Chlorine
__ 8 Other inorganics
__ 9 Nutrients
__ 10 pH
M 11 Siltation
__ 12 Organic enrichment
__ 13 Salinity/TDS/Chlorides
__ 14 Thermal modifications
__ 15 Flow alteration
__ 16 Habitat alteration
M 17 Pathogens
__ 18 Radiation
__ 19 Oil and Grease
__ 20 Taste and Odor
S 21 Suspended solids
__ 22 Noxious aquatic plants
__ 23 Filling and draining

Sources of Pollutants: (H = High, M = Medium, S = Slight)

Point Sources
__ 1 Industrial
__ 2 Municipal
__ 3 Municipal pretreatment
__ 4 Combined sewers
__ 5 Storm sewers
__ 6 Other dischargers

Nonpoint Sources
M 9 Unspecified

Agriculture
__ 11 Non-irrigated crop production
__ 12 Irrrigated crop production
__ 13 Specialty crop production
__ 14 Pasture land
__ 15 Range land
__ 16 Feedlots
__ 17 Aquaculture
S 18 Animal holding areas
__ 19 Manure lagoons

Silviculture
__ 21 Harvest, restoration
__ 22 Forest management
__ 23 Road construction/maintenance

Construction
S 31 Highway/road/bridge
S 32 Land development

Urban Runoff
S 41 Storm sewers
__ 42 Combined sewers
S 43 Surface runoff

Source Unknown
__ 90 Source Unknown

Resource extraction/exploration
__ 51 Surface mining
__ 52 Subsurface mining
__ 53 Placer mining
__ 54 Dredge mining
__ 55 Petroleum activities
__ 56 Mill tailings
__ 57 Mine tailings

Land Disposal (Permitted Activities)
__ 61 Sludge
__ 62 Wastewater
__ 63 Landfills
__ 64 Industrial land treatment
H 65 Onsite wastewater systems
__ 66 Hazardous waste
__ 67 Septage disposal

Hydrologic Modification
__ 71 Channelization
__ 72 Dredging
__ 73 Dam construction
S 74 Flow regulation/modification
__ 75 Bridge construction
S 76 Removal of riparian vegetation
S 77 Streambank modification
__ 78 Draining/filling of wetlands

Other
__ 81 Atmospheric deposition
__ 82 Waste storage/storage tank leaks
__ 83 Highway maintenance and runoff
__ 84 Spills
__ 85 In-place contaminants
__ 86 Natural
__ 87 Recreational activities
__ 88 Upstream impoundment
__ 89 Salt storage sites
H 99 Septic tank seepage

*** COMMENTS ***

DESCRIBE POLLUTANTS AND POLLUTANT SOURCES. THE BASIS FOR THE DETERMINATION THAT A WATERBODY IS IMPAIRED MUST BE EXPLAINED IN THIS SECTION. DESCRIBE THE NATURE OF THE VIOLATION OF WATER QUALITY STANDARDS, INCLUDING DATA OR OTHER DOCUMENTATION IN RELATION TO STANDARDS. ALSO DESCRIBE WHETHER THE VIOLATION IS CONSIDERED PAST OR CURRENT, AND OTHER RELEVANT INFORMATION.

Placed on 1989 304(l) Longlist based on PGGS info (D.S. 6-5-89)
Monitored by municipality for Bacteria, metals (Pb)
- Violations of water quality occured for Bacteria, metals occured during monitoring period.

- Rabbit Cr. monitored & cited in:
MOA Water Quality Monitoring Program, Annual Report, 1989.
Fecal coliform counts in violation of AWQS.

Point Sources:

NPDES Permit Number: _____
NPDES Permit Name: _____
Causes Nonattainment: [ ] Yes [ ] No
Pollutant: _____

NPDES Permit Number: _____
NPDES Permit Name: _____
Causes Nonattainment: [ ] Yes [ ] No
Pollutant: _____

Nonpoint Sources:

Nonpoint Source Name: _____
Nonpoint Source Type: _____
Nonpoint Source Description: _____

Nonpoint Source Name: _____
Nonpoint Source Type: _____
Nonpoint Source Description: _____

WB File 98

A	DATE	TIME	FECAL	PH	H2OT	COND	DISSO2	COMMENTS
2	09/06/94	1130	36	6.790	4.7	50	11.2	
2	09/01/94	1040	10	7.740	10.2	50	9.9	
2	08/19/94	1105	33	7.560	10.6	49	10.7	
2	08/12/94	1120	14	7.680	8.8	50	13.5	
2	08/05/94	1100	12	7.970	9.7	49	10.3	
2	08/01/94	1110	484	7.880	8.6	48	10.5	
2	07/26/94	1130	58	7.930	7.9	45	10.6	
2	07/21/94	1115	2	7.910	8.0	42	10.7	
2	07/14/94	1125	10	7.870	8.0	42	11.0	
2	07/07/94	1135	7	7.880	6.3	41	10.9	
2	06/30/94	1115	3	7.880	6.3	41	10.4	
2	06/23/94	1145	1	5.180	6.4	31	11.4	
2	06/15/94	1310	3	5.530	7.5	37	10.3	
2	06/08/94	1000	0	7.530	5.6	38	11.7	
2	05/18/94	1210	0	7.040	7.8	60	0.0	
2	04/26/94	1015	6	7.320	3.4	75	0.0	
2	03/22/94	1030	65	8.070	3.6	60	0.0	
2	02/18/94	1050	5	7.610	0.6	40	10.5	
2	01/19/94	1110	0	7.580	1.1	45	10.3	
2	01/07/94	1145	2	7.820	0.1	45	13.5	
2	12/30/93	1120	22	7.950	0.3	40	13.9	
2	12/23/93	1055	5	8.120	0.8	40	13.6	
2	12/16/93	1110	14	8.110	1.1	35	13.5	
2	12/08/93	1140	5	8.100	0.5	35	13.8	
2	12/03/93	1130	6	7.970	0.1	40	14.2	
2	11/23/93	1200	57	7.950	0.1	35	15.0	
2	11/17/93	1105	114	8.150	0.1	40	13.7	
2	10/20/93	1600	0	7.980	0.9	30	13.7	
2	09/28/93	1240	4	8.040	4.7	35	11.6	
2	09/21/93	1140	8	8.310	5.3	30	11.9	
2	09/16/93	1120	200	8.350	7.7	30	10.6	HIGH - STORM
2	09/09/93	1125	8	8.070	8.0	40	10.4	
2	09/02/93	1330	10	7.980	9.1	40	9.8	
2	08/26/93	1440	7	8.000	14.4	50	10.1	
2	08/19/93	1300	8	8.440	11.9	50	10.3	
2	08/10/93	1355	9	8.110	14.5	50	9.6	
2	08/03/93	1320	7	8.040	10.7	50	10.2	
2	07/26/93	1245	22	7.690	9.4	50	10.5	
2	07/22/93	1040	6	8.100	10.0	40	10.1	
2	07/14/93	1145	16	6.940	10.0	20	10.3	
2	07/09/93	1235	4	7.570	10.7	40	10.0	
2	06/30/93	1610	0	0.000	9.0	40	10.0	
2	06/22/93	1230	5	7.610	9.1	35	10.6	
2	06/18/93	1315	0	8.410	7.4	35	10.3	
2	06/07/93	1310	4	8.240	5.8	30	10.3	
2	06/02/93	1205	4	7.820	9.4	30	10.9	
2	05/27/93	1110	3	7.640	5.5	35	10.1	
2	05/19/93	1110	12	7.800	8.1	55	11.3	
2	05/14/93	1040	2	8.080	6.5	50	11.3	
2	05/10/93	1055	0	7.950	2.2	50	11.8	
2	05/04/93	1105	0	7.460	4.3	60	11.5	
2	04/29/93	1325	2	7.100	2.4	55	13.0	
2	11/06/92	1030	2	7.790	6.8	40	11.2	

H3.49

A	DATE	TIME	FECAL	PH	H2OT	COND	DISSO2	COMMENTS
2	10/28/92	1120	2	7.120	1.7	40	11.8	
2	10/23/92	1015	3	7.690	2.1	40	12.0	
2	10/20/92	1120	4	7.400	1.1	40	12.4	
2	10/14/92	1020	3	6.950	0.7	0	11.2	
2	10/09/92	1050	3	7.650	2.1	50	11.4	
2	09/29/92	1025	8	7.840	0.7	7	14.5	ICE.
2	09/23/92	1045	7	8.430	0.8	5	14.3	
2	09/17/92	1050	8	7.480	3.0	30	12.8	
2	09/11/92	1132	0	8.230	3.0	30	0.0	
2	09/03/92	1140	0	7.650	6.0	30	11.4	
2	08/26/92	1050	59	7.520	5.6	40	11.1	
2	08/20/92	1155	1	7.830	6.0	50	11.4	
2	08/14/92	1030	15	8.070	6.0	40	11.6	
2	08/07/92	1040	2	8.160	7.4	50	11.6	
2	08/04/92	1040	165	7.350	9.0	45	10.9	
2	07/27/92	1041	16	7.280	8.4	45	10.9	
2	07/22/92	1030	2	7.970	8.0	40	11.2	
2	07/14/92	1109	4	7.660	9.2	40	10.5	
2	07/08/92	1136	3	8.160	8.4	40	11.0	
2	07/02/92	1115	2	7.890	10.0	50	11.7	
2	06/26/92	1015	1	7.910	8.0	40	11.3	
2	06/18/92	1030	2	7.440	5.5	30	11.8	
2	06/12/92	1100	0	7.520	8.5	35	10.9	
2	06/08/92	1136	0	6.830	7.4	30	10.2	
2	06/02/92	1030	3	7.800	5.4	40	11.1	
2	05/26/92	1115	4	7.890	5.5	50	10.3	
2	05/19/92	1100	0	7.910	4.1	65	10.6	
2	05/14/92	1035	3	7.630	3.2	65	11.3	
2	05/08/92	1145	0	7.720	4.0	80	11.4	
2	05/04/92	1115	32	7.540	1.4	60	12.9	
2	04/28/92	1200	14	6.800	7.0	70	12.0	
2	04/21/92	1125	1	7.350	3.5	60	0.0	
2	04/13/92	1045	17	8.290	0.9	55	10.3	broke ice
2	04/08/92	1040	31	7.850	2.5	60	12.1	
2	04/01/92	1033	600	8.030	4.9	50	11.0	
2	03/26/92	951	300	7.950	1.8	50	11.3	
2	03/19/92	1010	396	7.060	3.0	50	11.5	
2	03/13/92	1410	233	7.540	4.0	50	11.6	
2	03/09/92	1455	792	7.360	4.0	50	12.3	
2	03/03/92	1015	0	7.850	0.4	50	12.3	
2	02/25/92	1000	0	8.040	1.8	50	11.1	
2	02/19/92	1010	0	7.990	0.5	38	0.0	
2	02/13/92	1115	0	7.270	0.6	45	12.0	
2	02/07/92	1115	0	7.370	2.0	45	12.1	
2	02/03/92	1230	1	7.910	0.7	45	12.0	
2	01/30/92	1130	0	7.560	0.5	54	11.9	
2	01/23/92	1140	0	7.660	1.5	56	11.0	
2	01/20/92	1200	2	0.000	2.0	50	12.1	
2	01/16/92	1400	18	0.000	2.0	50	11.2	
2	01/07/92	1230	0	0.000	3.0	45	11.4	
2	01/02/92	1340	2	6.800	1.0	40	11.7	
2	12/23/91	1310	3	7.400	1.0	40	11.8	
2	12/18/91	1405	1	5.000	1.0	45	11.7	

12.39

21.34

117.00

A	DATE	TIME	FECAL	PH	H2OT	COND	DISSO2	COMMENTS
2	12/12/91	1145	0	7.200	2.5	45	12.1	
2	12/05/91	1210	10	8.200	3.0	50	11.6	
2	11/25/91	1200	2	7.550	0.8	40	12.9	
2	11/19/91	1215	2	7.700	0.3	40	13.3	
2	11/13/91	1200	4	7.100	0.6	40	11.8	ice in creek
2	11/07/91	1230	17	7.560	1.3	0	2.1	conductivity
2	11/06/91	1130	35	7.830	3.7	35	12.0	
2	10/30/91	1110	59	0.000	2.5	42	0.0	
2	10/25/91	1145	17	7.820	0.3	30	0.0	
2	10/17/91	1330	1	7.490	1.2	30	0.0	
2	10/11/91	1545	2	4.300	1.5	30	0.0	
2	10/04/91	1432	4	7.130	4.5	30	0.0	
2	10/01/91	1600	20	6.800	8.0	42	0.0	
2	09/25/91	1050	31	6.800	6.0	32	0.0	
2	09/18/91	1320	15	6.800	6.2	30	0.0	
2	09/12/91	1500	0	7.100	8.0	30	0.0	
2	09/03/91	1220	4	7.780	7.0	47	0.0	
2	08/27/91	1540	0	7.100	9.0	45	11.5	
2	08/14/91	1120	10	7.940	9.0	50	10.9	
2	08/08/91	1350	3	8.470	11.0	50	10.5	clover in bl
2	08/01/91	1125	3	7.410	5.6	40	10.0	
2	07/29/91	1140	22	6.440	7.0	49	11.9	
2	07/24/91	1045	2	7.710	7.8	41	10.4	
2	07/16/91	1110	4	7.720	6.1	32	12.2	
2	07/11/91	1125	12	0.000	6.0	45	11.8	
2	07/02/91	1440	7	7.480	6.0	38	12.6	
2	06/27/91	1500	2	7.740	10.1	40	10.9	
2	06/19/91	1430	2	7.880	7.8	45	11.7	
2	06/11/91	1335	1	7.110	6.2	40	12.5	
2	06/07/91	1200	1	8.990	3.9	45	12.7	
2	06/03/91	1055	1	7.230	3.5	45	12.6	PH?
2	05/29/91	1235	1	5.830	4.6	48	12.3	
2	05/20/91	1050	10	8.090	6.1	55	12.2	
2	05/14/91	1440	1	6.920	4.0	55	12.7	
2	05/07/91	1400	2	6.230	6.2	60	11.7	
2	05/03/91	1515	11	7.610	4.4	60	11.7	
2	04/30/91	1015	5	7.720	3.0	60	12.2	
2	04/25/91	1425	9	7.960	4.6	60	12.6	DUCKS
2	04/16/91	1150	5	6.250	1.1	50	13.4	
2	04/11/91	1420	1	7.880	3.9	55	11.8	
2	04/02/91	1455	1	6.310	2.9	50	11.9	
2	03/28/91	1350	1	7.550	3.2	50	12.6	
2	03/26/91	1520	3	7.310	2.4	50	12.4	
2	03/21/91	1440	4	7.420	2.1	50	12.2	
2	03/13/91	1325	42	7.650	1.9	55	12.9	
2	11/14/90	1235	2	7.110	0.5	35	13.6	
2	11/09/90	1350	5	7.700	0.0	50	13.5	
2	11/06/90	1230	2	7.960	0.2	40	14.4	
2	10/31/90	1310	2	0.000	0.0	40	14.4	
2	10/25/90	1420	5	7.800	2.0	40	13.4	
2	10/18/90	1340	7	8.110	0.2	60	14.0	
2	10/10/90	1335	8	6.560	3.3	40	12.9	
2	10/03/90	1235	3	7.880	1.8	41	13.7	PH METER WAC

7.37

'A	DATE	TIME	FECAL	PH	H2OT	COND	DISSO2	COMMENTS
:2	09/27/90	1145	2	6.350	4.1	45	12.5	
:2	09/24/90	1240	2	7.030	4.8	35	8.5	
:2	09/17/90	1310	3	7.590	6.1	40	12.0	
:2	09/12/90	1340	5	6.430	7.8	40	11.7	
:2	09/05/90	1415	10	6.190	7.1	50	11.8	
:2	08/27/90	1055	12	6.600	8.0	30	11.3	
:2	08/22/90	1035	7	6.080	6.8	25	11.0	
:2	08/14/90	1045	0	6.200	8.1	30	11.8	
:2	08/09/90	1140	3	6.410	6.6	25	12.1	
:2	08/01/90	1215	7	6.990	7.6	25	12.0	
:2	07/24/90	1500	5	6.830	8.6	30	11.4	
:2	07/20/90	1315	27	6.510	8.7	25	11.5	
:2	07/16/90	1255	19.60 5360	6.320	8.2	20	11.4	
:2	07/11/90	1415	2	0.000	8.6	20	0.0	
:2	07/06/90	1240	2	0.000	8.0	35	0.0	
:2	06/28/90	1215	6	6.630	7.0	17	12.3	
:2	06/21/90	1130	0	0.000	5.5	15	12.6	
:2	06/14/90	1445	0	0.000	6.2	5	12.0	
:2	06/07/90	1545	0	0.000	8.1	10	11.5	
:2	05/30/90	1515	0	0.000	6.3	40	11.9	
:2	05/24/90	1520	0	4.060	5.8	22	11.9	
:2	05/18/90	1235	0	7.640	3.2	12	13.3	
:2	05/08/90	1250	2	7.360	3.3	60	13.2	
:2	05/03/90	1520	0	7.740	3.0	33	13.2	
:2	04/27/90	1505	0	6.550	3.4	61	12.8	
:2	04/24/90	1050	2	6.900	1.7	40	13.3	
:2	04/19/90	1320	4	0.000	1.9	62	13.4	
:2	04/12/90	1150	0	7.020	1.5	58	13.1	
:2	04/04/90	1110	6	6.920	1.6	30	13.7	
:2	03/30/90	1510	7	7.040	2.4	30	14.1	
:2	03/23/90	1105	10	0.000	0.2	42	13.8	
:2	03/19/90	1510	0	0.000	0.2	0	14.6	
:2	03/14/90	1430	4	0.000	0.9	0	13.6	
:2	03/09/90	1040	4	7.380	0.9	45	13.3	
:2	03/01/90	1410	0	7.700	0.2	40	14.0	
:2	02/23/90	1550	0	7.390	0.5	35	13.4	
:2	02/21/90	1510	3	7.670	0.6	40	13.9	
:2	02/16/90	1440	1	7.470	0.6	50	13.3	
:2	02/07/90	1520	0	7.360	0.1	25	14.1	Frozen-6"
:2	01/30/90	1510	0	0.000	0.0	45	14.2	
:2	01/25/90	1300	27	7.250	0.3	45	14.3	
:2	01/18/90	1200	7	7.840	1.2	48	13.8	
:2	01/10/90	1430	1	7.970	0.3	22	14.5	center lead
:2	01/05/90	1350	2	7.820	0.3	45	14.3	open leads
:2	12/27/89	1615	2	7.420	0.1	40	14.4	open h2o;sho
:2	12/21/89	1600	6	7.710	1.2	50	13.9	
:2	12/15/89	1620	0	6.320	1.8	50	13.3	
:2	12/12/89	1415	13	6.890	1.2	50	14.0	eroded ice c
:2	12/07/89	1510	4	7.400	1.6	50	13.6	
:2	11/29/89	1540	0	7.640	1.3	42	13.5	DECOMPOSING
:2	11/21/89	1520	1	7.820	1.0	40	13.9	OPEN INTERMI
:2	11/14/89	1640	9	7.020	0.2	40	13.9	SUSPENDED IC
:2	11/06/89	1630	320	6.540	0.5	35	13.8	

'A	DATE	TIME	FECAL	PH	H2OT	COND	DISSO2	COMMENTS
:2	11/03/89	1550	18	7.060	2.9	40	12.9	
:2	10/30/89	1530	10	7.650	1.8	40	13.7	
:2	10/26/89	1600	2	7.610	0.8	35	13.8	
:2	10/19/89	1550	2	7.460	1.3	0	12.9	
:2	10/10/89	1510	2	7.210	2.2	35	12.6	
:2	10/05/89	1510	10	7.760	4.7	35	12.2	LEAKED OUT
:2	09/29/89	1440	2	7.790	5.2	38	12.2	
:2	09/22/89	1530	10	6.690	5.6	50	12.1	
:2	09/18/89	1500	7	7.490	6.0	50	11.9	
:2	09/13/89	1450	17	7.510	6.6	40	11.9	
:2	09/08/89	1530	4	7.570	8.8	40	11.6	
:2	08/31/89	1530	7	6.990	7.6	35	11.6	
:2	08/29/89	1540	28	7.250	7.9	30	11.5	
:2	08/24/89	1610	8	7.550	7.8	45	11.6	
:2	08/16/89	1600	13	7.460	9.0	45	11.1	
:2	08/08/89	1545	15	0.000	9.6	40	11.0	
:2	08/01/89	1510	8	0.000	8.8	40	11.0	
:2	07/26/89	1630	5	7.330	8.9	40	11.0	
:2	07/25/89	1230	11	7.440	8.2	40	11.1	
:2	07/12/89	1330	3	7.390	9.4	40	10.7	
:2	07/07/89	1620	2	7.280	10.7	40	10.9	
:2	07/03/89	1320	3	7.680	9.1	35	11.2	
:2	06/28/89	1110	3	7.740	6.7	30	11.8	
:2	06/21/89	1610	3	6.930	6.7	25	11.7	
:2	06/15/89	1515	2	7.310	5.2	25	12.1	
:2	06/09/89	1505	8	7.740	4.8	35	12.3	
:2	05/31/89	1200	2	7.420	3.7	30	12.6	
:2	05/24/89	1530	2	7.330	6.4	70	12.2	
:2	05/19/89	1430	2	7.740	5.5	50	12.4	
:2	05/12/89	1535	2	7.690	4.5	50	12.9	
:2	05/05/89	1135	1	7.650	2.2	45	13.6	
:2	04/27/89	1125	3	7.390	2.3	50	13.0	
:2	04/14/89	1555	1	7.350	1.9	50	0.0	
:2	04/12/89	1400	1	7.390	2.0	48	13.6	
:2	04/04/89	1230	1	7.420	1.1	40	13.2	
:2	03/30/89	1340	1	7.450	0.8	40	13.5	
:2	03/22/89	1450	1	7.600	1.4	40	13.8	
:2	03/15/89	1415	1	7.600	0.7	40	13.3	
:2	03/08/89	1235	1	7.680	0.7	40	13.7	
:2	02/28/89	1110	1	7.400	0.8	40	13.7	
:2	02/21/89	1155	1	7.770	1.0	40	13.4	
:2	02/16/89	1100	1	7.270	1.2	40	13.8	
:2	02/09/89	1355	1	7.560	1.0	40	13.7	
:2	01/31/89	1135	1	7.600	0.8	35	12.0	
:2	01/13/89	1315	1	0.000	0.6	35	14.8	
:2	12/15/88	1035	10	7.020	1.0	35	13.4	
:2	12/01/88	1115	1	7.420	0.4	32	13.3	
:2	11/23/88	1045	2	7.270	0.4	30	14.4	
:2	11/15/88	1455	2	7.230	1.5	35	13.3	
:2	11/10/88	1455	2	7.410	1.8	32	13.0	
:2	11/01/88	1530	2	7.280	0.8	30	13.1	
:2	10/27/88	1520	1	0.000	2.1	35	13.0	
:2	10/21/88	1550	1	0.000	0.0	0	0.0	

'A	DATE	TIME	FECAL	PH	H2OT	COND	DISSO2	COMMENTS
:2	10/11/88	1530	1	7.410	2.8	32	12.8	
:2	10/05/88	1600	1	0.000	0.0	0	0.0	
:2	09/30/88	1535	118	7.740	3.6	35	12.1	
:2	09/20/88	1415	6	0.000	0.0	0	0.0	
:2	09/15/88	1525	1	7.590	5.6	40	11.9	
:2	09/06/88	1550	2	7.670	6.3	38	11.4	
:2	09/02/88	1525	2	0.000	6.7	41	11.5	
:2	08/26/88	1500	1	6.650	7.6	35	11.1	
:2	08/23/88	1125	2	7.120	5.7	32	12.0	
:2	08/18/88	1555	54	7.560	6.7	32	11.8	
:2	08/08/88	1605	1	7.080	7.6	35	11.6	
:2	08/01/88	1645	6	0.000	6.5	27	12.0	
:2	07/27/88	1535	2	7.050	7.8	28	11.5	
:2	07/21/88	1650	1	7.160	5.8	25	12.3	
:2	07/12/88	1545	1	7.750	5.7	28	12.3	
:2	07/06/88	1545	4	0.000	6.3	35	12.1	
:2	06/29/88	1510	10	8.000	6.0	25	12.4	
:2	06/24/88	1535	1	7.920	5.4	25	12.0	
:2	06/20/88	1525	1	7.470	5.0	22	0.0	
:2	06/16/88	1525	2	7.400	4.5	22	13.0	
:2	06/09/88	1545	1	0.000	6.1	30	11.9	
:2	06/06/88	1600	4	0.000	3.0	20	13.8	
:2	06/01/88	1610	1	0.000	4.5	0	13.0	
:2	05/27/88	1610	8	7.330	4.5	36	12.0	
:1	12/20/94	1400	92	7.850	0.9	52	16.0	
:1	09/30/94	1550	21	0.000	3.1	60	14.0	
:1	09/26/94	1040	27	7.840	5.8	49	20.8	
:1	09/20/94	1030	42	6.850	6.0	52	22.0	
:1	09/06/94	1050	15	6.770	5.2	59	10.5	
:1	09/01/94	1020	26	7.900	11.2	60	10.7	
:1	08/19/94	1025	37	7.540	10.7	51	10.8	
:1	08/12/94	1030	16	7.760	10.5	51	12.6	
:1	08/05/94	1025	16	7.880	10.2	51	9.8	
:1	08/01/94	1035	10	7.980	11.0	56	10.3	
:1	07/26/94	1055	35	7.940	9.1	52	10.6	
:1	07/21/94	1040	23	7.840	8.9	52	10.3	
:1	07/14/94	1045	19	7.840	8.8	49	10.7	
:1	07/07/94	1055	10	8.000	7.1	49	10.6	
:1	06/30/94	1040	5	7.850	7.4	38	10.2	
:1	06/23/94	1115	9	5.810	6.6	38	10.7	
:1	06/15/94	1155	1	6.690	8.6	40	10.2	
:1	06/08/94	930	1	7.750	6.3	43	11.1	
:1	05/18/94	1145	2	7.200	5.9	60	0.0	
:1	04/26/94	1010	8	7.940	2.9	80	0.0	
:1	03/22/94	1015	0	7.840	3.0	60	0.0	
:1	02/18/94	1025	10	7.810	0.4	65	10.4	
:1	01/19/94	1045	1	7.840	1.5	60	10.4	
:1	01/07/94	1100	0	7.900	0.1	55	14.0	
:1	12/30/93	1040	27	7.930	0.1	50	14.6	
:1	12/23/93	1010	65	8.170	1.0	50	13.9	
:1	12/16/93	1025	7	8.160	0.5	45	13.5	
:1	12/08/93	1100	2	7.980	0.0	50	14.5	
:1	12/03/93	1025	3	8.030	0.1	45	14.5	

24.75

15.02

A	DATE	TIME	FECAL	PH	H2OT	COND	DISSO2	COMMENTS
1	11/23/93	1100	35	8.210	0.1	45	15.1	
1	11/17/93	1025	69	8.240	0.0	50	14.1	
1	10/20/93	1530	11	8.090	1.0	42	14.0	
1	09/28/93	1210	0	8.070	5.4	50	11.3	
1	09/21/93	1125	21	8.410	5.4	40	11.8	
1	09/16/93	1155	2300	7.930	10.3	45	10.4	HIGH - STORM
1	09/09/93	1055	15	8.220	9.1	45	10.6	
1	09/02/93	1305	16	8.120	9.6	50	10.2	
1	08/26/93	1410	4	8.080	14.7	60	9.9	
1	08/19/93	1235	37	8.270	11.8	60	10.4	
1	08/10/93	1335	107	8.330	12.5	60	9.5	
1	08/03/93	1245	31	8.240	11.4	55	10.1	
1	07/26/93	1220	3	8.110	13.4	60	10.2	
1	07/22/93	1015	7	8.300	9.9	50	10.3	
1	07/14/93	1120	9	6.970	12.6	50	10.4	
1	07/09/93	1210	3	7.240	25.0	50	9.8	
1	06/30/93	1545	2	0.000	10.0	50	10.6	
1	06/22/93	1200	5	7.460	10.0	40	10.7	
1	06/18/93	1245	10	8.290	8.1	50	11.0	
1	06/07/93	1235	600	8.400	6.1	35	9.3	
1	06/02/93	1135	9	7.540	8.5	40	11.1	
1	05/27/93	1035	6	7.250	5.4	40	11.2	
1	05/19/93	1040	16	7.740	6.5	55	11.3	
1	05/14/93	1005	16	7.750	5.5	65	12.1	
1	05/10/93	1020	61	7.720	4.6	70	12.7	
1	05/04/93	1051	17	7.320	4.2	80	11.9	
1	04/29/93	1100	17	7.500	2.4	75	13.5	
1	04/23/93	1000	900	6.800	1.9	80	12.7	
1	04/19/93	1130	23	6.760	4.0	92	12.8	
1	04/15/93	1000	74	7.190	3.1	95	11.4	
1	04/06/93	1035	42	7.810	2.4	80	12.2	
1	03/31/93	950	0	6.970	0.5	60	12.0	
1	03/22/93	1015	134	6.910	1.8	70	12.3	
1	03/16/93	945	8	6.810	0.8	60	11.6	
1	03/11/93	1035	22	0.000	0.0	80	11.2	
1	03/04/93	910	0	6.110	2.5	60	13.6	
1	02/26/93	1010	7	6.690	2.1	60	0.5	
1	02/22/93	1245	0	7.170	1.6	60	11.4	
1	02/18/93	1055	6	7.970	0.8	60	12.8	
1	02/09/93	1210	0	7.590	0.7	65	12.4	
1	02/02/93	1130	0	6.700	0.7	55	12.4	
1	01/29/93	1010	0	6.580	0.7	60	12.9	
1	01/25/93	1145	0	7.570	1.0	60	12.8	
1	01/19/93	1200	0	6.180	1.5	50	14.3	
1	01/13/93	1109	1	8.010	1.5	50	13.4	
1	01/08/93	1147	3	7.140	1.1	60	12.6	
1	12/29/92	1150	0	8.240	0.8	50	12.4	
1	12/21/92	1135	1	7.730	2.1	75	10.7	
1	12/14/92	1056	3	6.790	2.3	60	13.1	
1	12/10/92	1120	2	8.040	0.6	55	13.8	
1	11/30/92	1130	9	7.240	0.7	60	0.0	
1	11/24/92	1132	24	7.570	1.8	60	0.0	
1	11/17/92	1005	7	6.400	0.0	50	13.0	

25.87

64.24

'A	DATE	TIME	FECAL	PH	H2OT	COND	DISSO2	COMMENTS
:1	11/10/92	1030	10	6.480	1.0	55	13.7	
:1	11/06/92	1005	0	7.250	2.1	45	12.4	
:1	10/28/92	1100	4	7.210	1.3	45	12.9	
:1	10/23/92	1000	4	7.590	1.0	40	12.3	
:1	10/20/92	1047	25	7.230	0.6	45	13.6	
:1	10/14/92	1005	36	7.100	0.9	0	11.8	
:1	10/09/92	1040	76	7.350	1.9	60	12.5	
:1	09/29/92	1000	11	7.960	0.4	32	13.9	ICE.
:1	09/23/92	1020	4	8.350	0.5	40	14.6	
:1	09/17/92	1025	14	7.370	3.1	40	13.2	
:1	09/11/92	1056	6	7.550	2.0	35	0.0	
:1	09/03/92	1105	0	7.470	6.7	35	11.6	
:1	08/26/92	1025	78	7.080	7.0	50	11.4	
:1	08/20/92	1130	35	7.390	7.4	60	11.2	
:1	08/14/92	1010	14	7.470	7.0	50	11.5	
:1	08/07/92	1015	39	7.640	8.9	60	11.1	
:1	08/04/92	1011	77	7.300	9.7	60	10.9	BROKE THERME
:1	07/27/92	1012	4	7.220	9.2	50	11.1	
:1	07/22/92	958	6	7.880	9.2	50	11.1	
:1	07/14/92	1035	17	7.860	9.4	50	10.9	
:1	07/08/92	1103	9	7.940	8.4	45	11.0	
:1	07/02/92	1040	14	7.860	11.0	45	11.6	CONSTRUCTION
:1	06/26/92	945	240	7.290	8.0	48	11.7	
:1	06/18/92	1000	15	7.340	5.6	40	11.7	Construction
:1	06/12/92	1012	28	7.300	6.8	40	12.3	
:1	06/08/92	1056	15	7.620	6.4	40	11.0	
:1	06/02/92	1005	3	7.710	7.6	50	12.4	High flow.
:1	05/26/92	1045	10	7.810	6.2	60	10.6	
:1	05/19/92	1020	9	7.940	6.1	80	11.3	
:1	05/14/92	1013	5	7.140	3.9	80	11.9	
:1	05/08/92	1120	0	7.120	4.0	90	12.0	
:1	05/04/92	1053	28	7.160	0.4	80	13.5	
:1	04/28/92	1200	14	6.630	6.0	90	12.7	
:1	04/21/92	1110	89	7.370	2.0	85	0.0	
:1	04/13/92	1030	35	7.920	0.9	85	12.6	
:1	04/08/92	1028	8	7.780	1.0	70	12.5	
:1	04/01/92	1023	16	8.080	3.3	65	11.9	
:1	03/26/92	936	104	7.720	1.9	66	11.3	
:1	03/19/92	956	50	7.600	4.0	80	11.9	
:1	03/13/92	1400	0	7.640	7.0	70	11.2	
:1	03/03/92	957	1	7.440	0.3	60	12.4	
:1	02/25/92	944	0	7.890	1.5	50	11.5	
:1	02/19/92	950	1	8.050	0.4	40	0.0	
:1	02/13/92	1100	0	7.240	0.9	50	13.3	
:1	02/07/92	1100	0	7.420	2.0	55	12.9	
:1	02/03/92	1213	0	7.780	1.5	55	11.8	
:1	01/29/92	1200	1	7.770	1.0	71	11.2	
:1	01/23/92	1125	3	7.730	2.0	70	11.7	
:1	01/20/92	1150	144	0.000	1.0	70	11.9	
:1	01/16/92	1140	12	0.000	2.0	60	12.0	
:1	01/07/92	1200	7	0.000	3.0	55	12.0	
:1	01/02/92	1315	2	6.800	1.0	50	11.8	
:1	12/23/91	1250	33	7.400	1.0	55	12.1	

16.14

40.92

21.45

TA	DATE	TIME	FECAL	PH	H2OT	COND	DISSO2	COMMENTS
21	12/18/91	1355	72	6.500	1.0	60	12.2	
21	12/12/91	1121	2	7.600	2.0	60	12.6	
21	12/04/91	1540	1	7.100	1.0	50	0.0	
21	11/25/91	1145	5	7.520	0.4	50	14.0	
21	11/19/91	1200	25	7.780	0.3	70	13.7	
21	11/13/91	1125	49.79 60	7.320	0.4	55	12.4	ice in creek
21	11/07/91	1200	600	7.590	1.2	35	2.1	
21	11/06/91	1100	68	7.840	3.0	40	12.1	
21	10/30/91	1010	8	6.800	2.8	55	0.0	
21	10/25/91	1100	25	7.470	0.3	0	0.0	
21	10/16/91	1555	5	6.800	4.0	45	0.0	
21	10/11/91	1515	6	5.160	2.1	30	0.0	
21	10/04/91	1505	19	7.360	5.4	40	0.0	
21	10/01/91	1530	4	6.800	7.5	95	0.0	
21	09/24/91	1600	18	6.800	8.0	40	0.0	
21	09/18/91	1250	13	6.800	7.2	40	0.0	
21	09/12/91	1430	21	7.100	9.0	50	0.0	
21	09/03/91	1140	15	7.700	8.0	50	0.0	
21	08/26/91	1030	15	6.800	18.0	60	8.9	
21	08/14/91	1040	17	7.710	10.0	60	10.6	
21	08/08/91	1320	3	8.420	12.0	60	10.4	recalibrate
21	08/01/91	1040	6	7.880	6.6	50	12.0	
21	07/29/91	1050	20	7.300	8.0	52	11.8	
21	07/24/91	1020	7	7.840	9.1	50	11.5	
21	07/16/91	1015	19.25 33	7.940	7.2	45	11.8	
21	07/11/91	1045	143	0.000	7.5	60	11.6	
21	07/02/91	1510	4	7.410	7.6	48	11.6	
21	06/27/91	1420	400	7.270	9.0	45	10.6	
21	06/19/91	1345	4	7.400	7.3	45	11.5	
21	06/11/91	1305	15	7.500	6.1	48	10.8	
21	06/07/91	1135	4	6.370	5.1	50	12.5	
21	06/03/91	1020	60	7.320	5.1	55	12.4	
21	05/29/91	1200	8	6.750	9.2	55	12.0	
21	05/20/91	1030	1	7.860	5.1	65	11.6	
21	05/14/91	1410	1	7.100	5.2	70	12.2	2 DOGS PLAYI
21	05/07/91	1325	3	6.360	5.6	80	11.7	
21	05/03/91	1450	32	7.770	6.1	78	11.9	
21	04/30/91	950	11	7.760	2.1	70	12.4	
21	04/25/91	1350	9	7.850	4.8	78	12.4	HORSE DROPPI
21	04/16/91	1130	16.47 170	6.240	2.8	75	13.4	
21	04/10/91	1505	72	7.510	5.0	78	11.8	MUD SLIDES
21	04/02/91	1445	1	8.050	3.4	60	13.1	
21	03/28/91	1340	16	7.640	2.9	65	12.6	
21	03/26/91	1505	1	6.920	1.8	65	11.8	
21	03/21/91	1415	1	6.630	1.8	60	12.7	
21	03/13/91	1310	105	7.240	2.0	65	13.0	
21	03/07/91	1400	49	7.680	4.7	70	11.6	DO DONE IN L
21	02/27/91	1455	2	7.050	2.2	70	12.0	
21	02/20/91	1545	1	7.740	2.8	60	12.0	
21	02/19/91	1415	2	7.800	1.8	62	13.0	
21	02/14/91	1520	1	8.260	3.0	60	13.4	
21	02/05/91	1030	1	7.290	0.3	65	13.2	
21	01/28/91	1200	1	7.100	3.0	60	13.6	

TA	DATE	TIME	FECAL	PH	H2OT	COND	DISSO2	COMMENTS
21	01/24/91	945	3	7.390	1.7	62	13.2	
21	01/15/91	1445	1	6.850	0.5	52	13.3	
21	01/08/91	950	1	7.530	0.4	62	15.2	
21	01/03/91	1010	1	7.370	1.2	53	13.8	
21	12/26/90	1305	1	6.310	0.6	50	12.6	
21	12/21/90	1050	2	7.030	2.0	50	12.5	
21	12/18/90	950	2	6.600	0.5	48	12.7	
21	12/12/90	1330	2	7.370	1.6	50	14.0	
21	12/05/90	1410	3	4.850	0.9	70	14.2	TOOK SAMPLE
21	11/29/90	0	2	6.900	0.3	51	14.0	CRUSTY ICE,S
21	11/14/90	1310	5	7.090	0.5	40	14.1	VERY WINDY,
21	11/09/90	1325	5	7.820	0.0	60	13.0	
21	11/06/90	1200	10	7.920	0.1	45	14.5	
21	10/31/90	1235	2	0.000	0.2	40	14.1	LOTS OF HORS
21	10/25/90	1350	10	7.670	1.7	48	13.3	LOTS OF HORS
21	10/18/90	1315	23	8.020	0.2	80	14.4	
21	10/10/90	0	17	6.900	4.0	50	12.6	
21	10/03/90	1205	5	7.470	1.2	50	13.8	
21	09/27/90	1110	8	6.380	4.8	50	12.2	
21	09/24/90	1215	46	7.080	5.4	50	12.1	
21	09/17/90	1245	17	7.540	6.5	50	11.5	
21	09/12/90	1310	22	6.550	8.5	50	11.1	
21	09/05/90	1350	25	6.780	8.6	70	11.4	
21	08/27/90	1030	35	6.770	9.7	45	11.0	
21	08/22/90	1010	58	7.000	8.5	45	12.2	
21	08/14/90	1010	10	6.260	9.6	45	12.1	
21	08/09/90	1110	18	6.440	8.1	40	12.4	
21	08/01/90	1145	2	5.510	8.7	40	12.2	
21	07/24/90	1420	3	6.350	10.3	40	10.8	
21	07/20/90	1235	37	6.230	10.0	35	11.2	
21	07/16/90	1225	2	6.570	9.6	30	10.9	
21	07/11/90	1340	40	6.160	10.8	30	0.0	
21	07/06/90	1210	22	0.000	8.7	50	0.0	
21	06/28/90	1130	10	6.270	7.7	27	12.1	
21	06/21/90	1100	5	0.000	7.0	20	12.0	
21	06/14/90	1415	20	0.000	7.1	11	12.2	
21	06/07/90	1510	0	0.000	9.2	20	11.2	
21	05/30/90	1445	0	0.000	7.6	50	11.5	
21	05/24/90	1450	0	4.790	6.8	30	11.8	
21	05/18/90	1140	0	8.100	4.1	20	12.9	
21	05/08/90	1230	5	7.660	4.3	65	13.0	
21	05/03/90	1500	0	7.870	4.3	52	13.0	
21	04/27/90	1420	2	5.740	3.9	80	12.2	
21	04/24/90	1020	2	6.650	1.8	58	13.2	
21	04/19/90	1250	8	0.000	2.0	80	13.5	
21	04/12/90	1120	42	7.690	1.2	83	13.2	
21	04/04/90	1050	8	7.260	1.5	60	14.1	
21	03/30/90	1450	86	7.100	1.9	55	13.7	
21	03/23/90	1035	0	0.000	0.2	58	14.2	
21	03/19/90	1450	0	0.000	0.2	0	15.2	
21	03/14/90	1400	5	0.000	0.4	70	14.0	
21	03/09/90	1000	1	7.350	0.8	55	14.6	
21	03/01/90	1320	0	7.560	0.3	60	14.1	

20.29

14.89

A	DATE	TIME	FECAL	PH	H2OT	COND	DISSO2	COMMENTS
1	02/23/90	1520	0	7.600	0.2	50	14.4	
1	02/21/90	1440	3	7.930	0.4	52	14.2	
1	02/16/90	1400	0	7.650	0.2	55	14.4	
1	02/07/90	1440	1	7.700	0.2	37	14.6	Frozen-8"
1	01/30/90	1440	12	0.000	0.0	60	13.9	
1	01/25/90	1200	1	7.050	0.2	35	14.3	ph meter che
1	01/18/90	1120	4	7.630	1.0	55	14.0	
1	01/10/90	1350	0	8.180	0.3	30	14.1	Center lead
1	01/05/90	1310	2	7.750	0.2	50	14.4	open leads
1	12/27/89	1540	1	7.600	0.1	58	14.2	open h20;sho
1	12/21/89	1520	3	7.890	0.3	60	14.6	
1	12/15/89	1600	15	6.080	1.7	60	13.4	
1	12/12/89	1435	108	7.610	1.1	68	14.0	eroded ice c
1	12/07/89	1430	3	7.420	1.4	50	13.5	
1	11/29/89	1500	1	7.900	0.8	48	14.1	SUSPENDED IC
1	11/21/89	1450	1	7.590	0.6	48	14.2	INTERMITTANT
1	11/14/89	1605	5	7.450	0.2	45	14.1	LEADS
1	11/06/89	1600	380	6.740	0.6	48	14.0	
1	11/03/89	1520	76	7.240	3.1	60	13.0	
1	10/30/89	1455	3	7.450	2.0	50	13.7	
1	10/26/89	1530	8	7.400	0.9	50	14.0	
1	10/19/89	1520	24	7.740	2.7	0	12.7	
1	10/10/89	1440	8	7.430	1.9	45	13.6	
1	10/05/89	1440	3	7.630	5.2	45	12.3	
1	09/29/89	1410	4	7.560	5.9	48	12.1	PH METER CHE
1	09/22/89	1500	8	6.980	6.6	55	12.1	
1	09/18/89	1440	33	7.620	7.1	60	11.5	
1	09/13/89	1510	135	7.500	7.5	50	11.7	
1	09/08/89	1510	0	7.770	9.3	55	11.3	
1	08/31/89	1500	46	7.160	8.1	50	11.5	
1	08/29/89	1500	72	7.550	8.7	45	11.5	
1	08/24/89	1540	80	7.470	9.3	55	11.0	
1	08/16/89	1530	7	7.180	10.2	50	10.7	ph meter ok-
1	08/08/89	1510	3	0.000	10.7	50	10.7	
1	08/01/89	1435	373	0.000	9.8	51	10.9	
1	07/26/89	1550	15	7.560	10.4	50	10.5	ph meter rec
1	07/25/89	1150	40	7.450	8.6	50	11.3	
1	07/12/89	1300	5	7.510	10.6	50	10.6	
1	07/07/89	1600	2	7.600	11.6	50	10.7	
1	07/03/89	1250	5	7.700	9.6	40	11.6	
1	06/28/89	1035	2	7.760	7.4	40	11.5	
1	06/21/89	1540	3	7.540	6.9	35	11.6	
1	06/15/89	1440	7	7.620	5.9	30	12.1	
1	06/09/89	1430	8	7.850	6.5	45	12.0	
1	05/31/89	1130	163	7.170	4.5	40	11.9	
1	05/24/89	1630	2	7.300	5.9	60	12.2	
1	05/19/89	1335	7	7.720	6.2	72	11.7	
1	05/12/89	1505	2	7.770	5.1	60	12.2	
1	05/05/89	1100	3	7.750	2.7	55	13.4	
1	04/27/89	1045	4	7.530	2.8	65	13.5	
1	04/14/89	1530	2	7.460	1.9	60	0.0	
1	04/12/89	1315	8	7.440	1.6	60	13.2	
1	04/04/89	1155	2	7.510	1.0	52	13.6	

35.72

A	DATE	TIME	FECAL	PH	H2OT	COND	DISSO2	COMMENTS
1	03/30/89	1300	44	7.600	1.1	50	14.1	
1	03/22/89	1420	1	7.740	1.0	50	14.0	
1	03/15/89	1305	1	7.620	0.9	50	13.6	
1	03/08/89	1155	1	7.590	0.7	45	13.9	
1	02/28/89	1030	1	6.920	0.9	50	13.8	
1	02/21/89	1125	1	7.830	0.9	45	13.9	
1	02/16/89	1010	1	7.070	0.9	45	14.3	
1	02/09/89	1310	1	7.500	0.7	50	14.2	
1	01/31/89	1045	1	7.670	0.7	40	12.7	
1	01/24/89	1110	1	7.620	0.6	40	14.0	
1	01/19/89	1210	1	7.510	0.5	40	13.1	
1	01/13/89	1200	1	7.650	0.5	45	15.0	
1	01/10/89	1405	2	7.710	0.8	40	13.9	
1	01/05/89	1235	1	7.780	0.5	40	14.1	
1	12/28/88	1525	1	0.000	0.5	42	14.0	
1	12/20/88	1300	10	7.570	1.2	40	0.0	
1	12/15/88	935	6	7.370	0.8	40	13.6	
1	12/07/88	955	4	7.580	0.5	40	13.8	
1	12/01/88	955	4	7.590	0.5	40	13.4	
1	11/23/88	955	2	7.430	0.5	40	14.0	
1	11/15/88	1415	4	7.330	0.8	35	13.9	
1	11/10/88	1415	1	7.780	0.8	40	13.8	
1	11/01/88	1445	8	7.470	0.6	38	13.7	
1	10/27/88	1440	1	0.000	1.7	40	13.5	
1	10/21/88	1515	2	0.000	0.0	0	0.0	
1	10/11/88	1445	2	7.700	2.4	40	13.3	
1	10/05/88	1535	24	0.000	0.0	0	0.0	
1	09/30/88	1615	1	7.350	3.6	30	12.3	
1	09/20/88	1345	4	0.000	0.0	0	0.0	
1	09/15/88	1440	2	7.830	6.0	40	12.1	
1	09/06/88	1500	1	7.910	7.0	38	11.7	
1	09/02/88	1445	2	0.000	7.3	40	11.6	
1	08/26/88	1415	34	6.820	9.2	48	11.0	
1	08/23/88	1035	12	7.750	7.0	40	11.8	
1	08/18/88	1505	12	7.700	8.1	40	11.3	
1	08/08/88	1520	4	7.760	10.0	40	11.8	
1	08/01/88	1620	20	7.330	8.3	35	12.1	
1	07/27/88	1445	6	7.350	8.7	32	11.3	
1	07/21/88	1550	16	7.410	7.3	30	11.5	
1	07/12/88	1500	4	0.000	7.0	30	11.7	
1	07/06/88	1500	8	7.500	7.9	31	11.5	
1	06/29/88	1425	1	7.710	7.1	32	12.1	
1	06/24/88	1450	1	8.400	6.2	30	11.9	
1	06/20/88	1435	4	7.550	5.9	30	12.2	
1	06/16/88	1440	6	7.600	6.2	30	12.1	
1	06/09/88	1445	12	7.500	7.3	32	11.7	
1	06/06/88	1510	10	0.000	4.2	25	12.9	
1	06/01/88	1525	4	0.000	6.0	42	12.4	
1	05/27/88	1500	2	7.440	6.1	45	11.1	
1	05/23/88	1150	0	7.470	4.9	52	12.3	
1	05/19/88	1155	0	0.000	4.0	55	12.6	
1	05/09/88	1145	0	0.000	4.5	70	12.6	
1	05/04/88	1135	0	8.200	2.6	50	0.0	

13.14