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Preliminary Description of Ground-water Conditions at Sterling, Alaska

BY

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ABSTRACT

A collection and review of available ground-water data at Sterling, Alaska, has resulted in the creation of extensive well-log and water-quality databases. The databases are used to show that most wells tap glaciofluvial sand and gravel aquifers and that ground-water flows toward the Moose and Kenai Rivers under a water-table gradient ranging from 0.003 to 0.06. Some wells are also tentatively identified as tapping a Tertiary aquifer of sandstones and conglomerates.

Historic water-quality data show elevated concentrations of organic and inorganic constituents at the Sterling Special Waste Site as compared to data obtained from surrounding water wells. Some analyses also exceed state and federal drinking water standards. Elevated concentrations of benzene are noted near several known fuel leaks along the Sterling Highway east of the Moose River. Water wells used in the Sterling area commonly have high concentrations of iron and manganese. A few instances of arsenic, copper, and chloride exceeding maximum contaminant levels in water. wells have been found.

ACKNOWLEDGMENTS

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INTRODUCTION

Sterling, Alaska, is a small rural community located near the confluence of the Moose and Kenai Rivers on the Kenai Peninsula in south-central Alaska (fig. 1). Water supplies in the area are mostly obtained from wells less than 60 m deep, tapping water-table and confined glacio-fluvial aquifers. Citizens in the area have become concerned about the possible effects of ground-water contamination from known fuel leaks or spills in the area or past waste disposal operations. These concerns have prompted an interest in developing a better understanding of existing ground-water conditions in the area. This study is intended to summarize available information about aquifers found in the area, ground-water flow directions, and the quality of ground water.

SOURCES OF INFORMATION

Sources of information for this report consist of drillers logs of local water wells, consultants reports of site investigations (commonly containing monitor well logs, water quality data and related information), and analyses of local well water by DEC and a few public water suppliers. Locations of reported data sites were determined with available site maps, plat maps, legal descriptions of properties, as-built diagrams of properties, and a few engineering surveys of well locations. None of the reported geologic, water-level, or water-quality data described above has been field-verified during this study. The primary intent of this report is to describe trends in existing data and establish a relatively complete historical database for use in subsequent studies. Appendix A contains a listing of all water data sites used in this study.

Ground-water records are available for 391 sites in the 15.9 sq mi area. This represents an average of 29 data sites per sq mi, excluding 2.4 sq mi of the study area contained in the Kenai

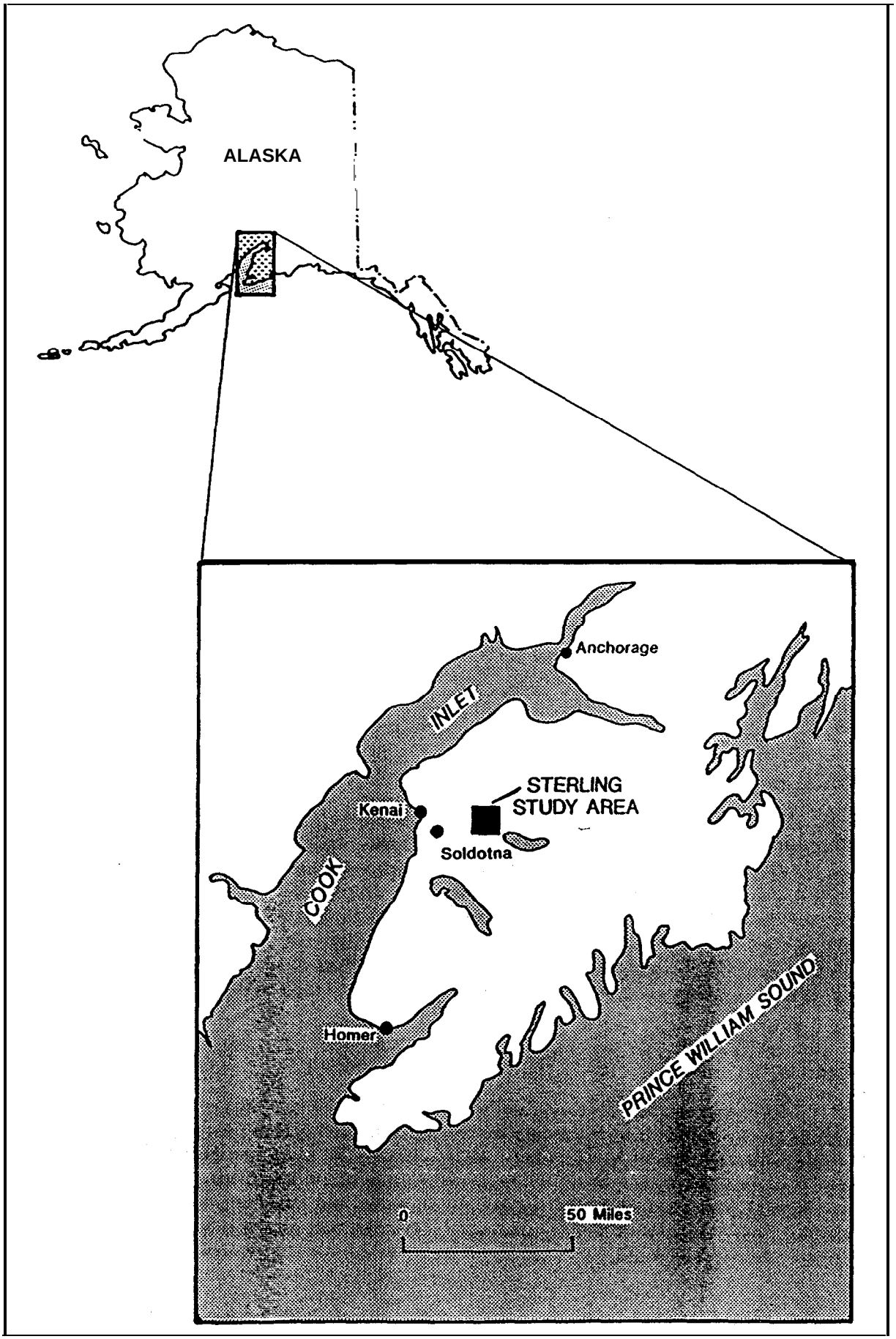

Figure 1. Location of the Sterling study area.

National Moose Range. All data site locations are determined to the nearest second of latitude and longitude and detailed well log data are stored in the Ground Water Site Inventory (GWSI) database of the U.S. Geological Survey.

GEOLOGIC SETTING

Sterling is located on the glaciated lowland plain of the Kenai Peninsula. The area has been subjected to repeated glacial advances from surrounding mountains, including mountains on the west side of Cook Inlet. Past glacial advances have also blocked lower Cook Inlet, causing large lakes to form and inundate the Kenai Peninsula lowland plain (Karlstrom, 1964). Surficial deposits in the Sterling area consist of glacial outwash in relict meltwater channels, terraces, and hummocky ablation deposits; till, mostly in end moraine complexes; lakebed deposits; and modern alluvial deposits. Glacial deposits in some areas are overlain by peat and loess.

Glacial deposits in the Sterling area are underlain by Tertiary sedimentary rocks of the Kenai Group. Two exploratory oil wells in the study area penetrated several thousand feet of Tertiary rocks. The uppermost formation of the Kenai group is the Sterling Formation, consisting of sandstone, interbedded silty claystone, conglomeratic sandstone, and lignitic coal (Calderwood and Fackler, 1972). Although they are not known to crop out anywhere in the study area, several water wells may have penetrated these rocks.

AQUIFERS

Sheet 1 shows the locations of known wells, boreholes and springs in the study area. Most wells tap water-bearing sand and gravel deposits in the glacial drift. These sand and gravel deposits, together with associated silty glacial deposits, are termed the Quaternary aquifer in this report. Saturated sand and gravel deposits occur under both confined and unconfined conditions in the area.

The composition of the Quaternary aquifer varies considerably over short distances in the Sterling area. Water wells tapping the Quaternary aquifer range from 5 to 113 ft deep. Reported yields from these wells range from 1 to 100 gallons per minute.

Some wells in the study area appear to penetrate Tertiary rocks. These rocks are termed the Tertiary aquifer. The Tertiary aquifer consists of sandstones and conglomerates in the Sterling Formation of the Kenai Group. The Tertiary aquifer is confined by silty claystones and coals in the Sterling formation and glacial drift.

GROUND-WATER FLOW SYSTEMS

Sheet 2 shows elevations of water levels in wells calculated using driller's reports and land surface elevations determined from 1:25,000 or 1:63,360 topographic maps. Surveyed well elevations were used for a few sites where they were available. Approximate water table contours were manually drawn based on the plotted water-level elevations and elevations of surface waters. The water-table contours do not perfectly reflect plotted water-level data because some wells tap confined or semi-confined portions of the aquifer and most well locations and elevations are imprecisely known.

Schematic ground-water flow arrows are also shown on sheet 2. These arrows were drawn perpendicular to the approximate water table contours and show the approximate horizontal direction of ground-water flow in the Quaternary aquifer. Existing data indicate that ground water

has a downward component of flow across most of the study area, except near the Kenai and Moose Rivers where flowing wells have been drilled.

The schematic flow arrows show that ground water generally flows toward the Moose and Kenai Rivers and Scout Lake. Ground water also discharges into a wetland and small stream system in the central part of the study area. Two springs (labelled '1 S' on sheet 1) are mapped in this area.

GEOLOGIC CROSS SECTION

Sheet 3 is a geologic cross section through the study area that illustrates typical conditions in the area. The end moraine complex west of the Moose River is considered to have been deposited by glaciers originating on the West side of Cook Inlet, as opposed to the drift shown on the east end of the section that was deposited by ice emanating from the Kenai Mountains to the east (R.D. Reger, Alaska Division of Geological and Geophysical Surveys, written commun., 1991).

Numerous wells along the line of the cross section tap confined or semi-confined portions of the aquifer; sandy and gravelly deposits common at the land surface are too thin in places to serve as significant sources of water. In most cases, individual water-yielding strata are too thin and discontinuous to be correlated between wells. The depths of closely spaced wells are commonly dissimilar as a result of the irregular position of water-yielding strata within the Quaternary and Tertiary aquifers.

GROUND-WATER QUALITY

Database Content

Ground-water quality data are available from 92 wells and one spring in the study area (Sheet 1). All water quality data are contained in a microcomputer database that uses commercially available dBASE IV software from Ashton-Tate Corporation of Torrance, California. A printout or diskette of the data are available upon request from the authors at a nominal cost. The diskette includes a README file on database structure and file content.

All data included in the database are reported values on analytical reports from state, federal, and commercial laboratories. A precursor database was originally provided to the authors by the Alaska Department of Environmental Conservation (ADEC) and was formatted in POWERBASE. We subsequently converted and expanded this database to its current form and content.

Data entries made by ADEC were checked and confirmed with "hard copies" of the analytical reports. The data values for inorganic constituents on eight commercial laboratory analyses were not substantiated because the analytical reports were unlocatable.

Summary statistics on types and numbers of analyses are presented in Table 1. Approximately 75 percent of the inorganic and organic analyses in the database were performed by commercial laboratories, and about 25 percent were performed by the ADEC laboratory at Douglas, Alaska. Five inorganic analyses were performed by the U.S. Geological Survey at Denver, Colorado.

The computerized database is organized according to the laboratories performing the analysis because sampling and analytical documentation differs significantly among different laboratories. For example, the most common type of metal analysis performed by ADEC provides total or total recoverable, rather than dissolved, concentrations. Commercial laboratories, however, often do not differentiate between these three types of analysis. In this report ADEC-analyzed samples list total

Table 1. Types of analyses of water quality in the Sterling study area.

Types of Analyses	Number of analyses	Number of sites
Non-metallic inorganic constituents	227	82
Metallic constituents	210	77
Volatile organic compounds	202	151
Base, neutral, and acid extractable organic compounds	126	65

or total recoverable values, but this can not be assumed to be the case for commercial laboratories. The dBASE water quality database on diskette identifies which laboratory produced specific analytical values.

The accuracy of the values could not be verified for most analyses because a quality assurance plan was not written. Data validity was verified in a few cases when quality assurance reports were available. Quality assurance plans and reports are manually filed as part of the data documentation at the Division of Water office at Eagle River. Cation-anion balances were performed only on a single U.S. Geological Survey analysis. Ion balances could not be performed on other analyses because the laboratories did not do complete cation and anion analyses. The pH data were not examined in this report because field versus laboratory values could not be differentiated on most analytical reports.

Results and Discussion

The water quality data listed in appendices B, C and D present an overview of constituents exceeding maximum contaminant levels, rather than detectable concentrations. In many cases, constituents were detected below the maximum contaminant level, but except for a brief descriptive analysis of nonregulated organic compounds, these data are not further analyzed here.

In many cases, no immediate follow-up sampling of inorganic constituents exceeding maximum contaminant levels was done. For this reason these values are considered questionable and should be used with caution.

Inoraanic Comoounds Appendices B and C show all wells with reported values of inorganic constituents that exceed federal and state drinking water standards. These wells are identified by section and map number to facilitate location of the sites on sheet 1.

Appendix B shows the inorganic constituent concentrations that exceeded the maximum contaminant level (MCL) in the National primary drinking water regulations, 40 CFR Part 141 (National Archives and Records Administration [NARA], 1990). These elements are regulated for health concerns. The highest concentrations of arsenic, chromium and lead *were* found at Sterling Special Waste Site wells. Barium, cadmium, and nitrate exceeded the maximum contaminant level twice, each time at Sterling Special Waste Site wells. Mercury data were slightly above 0.002 milligrams per liter at two wells.

Appendix C shows the inorganic constituent concentrations exceeding the maximum contaminant level in the National secondary drinking water regulations, 40 CFR Part 143 (NARA, 1990). These

regulations control contaminants that primarily affect the aesthetic qualities relating to the public acceptance of drinking water. Iron and manganese concentrations occur throughout the study area at levels above the maximum contaminant level. The highest iron concentration measured was 10.9 milligrams per liter at a residential well in Section 15. Zinc concentrations have been measured above the maximum contaminant level at several Sterling Special Waste Site wells between 1980 and 1987. Chloride concentrations were observed above the maximum contaminant level at two Sterling Special Waste Site wells and one commercial well along the Sterling Highway. Copper concentrations were measured above the maximum contaminant level once at the Sterling Elementary School.

Organic Compounds Appendix D shows the regulated volatile organic compounds exceeding the maximum contaminant levels, 40 CFR Part 141.61 (NARA, 1990). Benzene was the only regulated volatile organic compound that has been found to exceed the maximum contaminant level of 0.005 milligrams per liter for benzene. The highest concentration of benzene found in the study area was 8.6 milligrams per liter from a gas station monitoring well located at a gas station on the Sterling Highway.

Nonregulated organic compounds reported more than once in concentrations below and above the reported detection limit at Sterling Special Waste Site wells were (in order of frequency) ethylbentene, toluene, xylene, phenol, and 1 ,1 ,1 -trichloroethane. Benzoic acid, benzyl alcohol, 4-chloro-3-methyphenol, and chrysene were reported once at Sterling Special Waste Site wells.

Detectable concentrations of nonregulated organic compounds were found at four residential wells. Toluene, phenol, and 2-butanone was reported in a well located at section 15 map no. I-1 9. Toluene was measured twice in a well located at section 1 map no. I-21. Chloroform was reported once in a well located at section 1 map no. I-23; and 1,1,1-trichloroethane was measured once in a well located at section 6 map no. I-9 (Sheet 1). Detectable concentrations of ethylbenzene, toluene, and xylene were reported in gas station monitoring wells along the Sterling Highway.

Summary

The most commonly encountered water quality constituents in the Sterling area exceeding primary or secondary maximum contaminant levels are iron and manganese, which are of concern for aesthetic reasons, such as taste, odor, and staining. Most inorganic constituents exceeding the maximum concentration levels were observed at the Sterling Special Waste Site. Arsenic is the only inorganic constituent found to exceed the maximum contaminant level at residential wells. Copper and chloride are the only inorganic constituents found to exceed the maximum contaminant level at public water supplies.

A disproportionate, greater amount of sampling effort was done in sections 2, 6, 7, 12 and 15, and particularly section 1, which accounts for these sections showing the most inorganic constituents exceeding maximum contaminant levels. Most sections in the study area were not sampled as intensively as the above mentioned sections and we can not assume that the above mentioned sections are the only areas with relatively high levels of iron and manganese.

Benzene concentrations exceeding the maximum contaminant level were measured only in ten monitoring wells located near several fuel leaks along the Sterling Highway east of the Moose River.

CONCLUSIONS

Ground-water at Sterling, Alaska, is obtained mostly from unconfined and confined glacio-fluvial sand and gravel deposits of the Quaternary aquifer. Most wells are less than 60 m deep and their locations are known with sufficient accuracy to permit contouring of an approximate water-table map. The water-table map is used to illustrate that ground water generally flows towards the Moose and Kenai Rivers, with some variability resulting from local aquifer heterogeneity and landform and surface water features. Well data indicates that ground water also has a downward component of flow across most of the study area.

A few wells are tentatively concluded to have penetrated Tertiary rocks and tapped sandstone or conglomerate beds within the Sterling Formation for water supplies. Limited data from these wells precludes detailed description of the characteristics of the Tertiary aquifer.

Existing ground-water quality data indicates that numerous water supply wells contain concentrations of iron and manganese in excess of recommended maximum contaminant levels, Copper, arsenic and chloride have also been detected at elevated levels in a few instances. Monitoring wells at known fuel spill sites along the Sterling highway have shown elevated concentrations of benzene. Monitoring wells at the Sterling Special Waste Site have shown concentrations of arsenic, barium, cadmium, chloride, chromium, lead, mercury, and nitrate that exceed maximum contaminant levels.

REFERENCES CITED

Calderwood, K.W., and Fackler, W.C., 1972, Proposed stratigraphic nomenclature, Kenai Group, Cook Inlet Basin, Alaska: American Association of Petroleum Geologists Bulletin, v. 56, no. 4, p. 739-754.

Karlstom, T.N.V., 1964, Quaternary geology of the Kenai lowland and glacial history of the Cook Inlet region, Alaska: U.S. Geological Survey Professional Paper 443, 69 p.

National Archives and Records Administration, 1990, Code of Federal Regulations, Title 40, Chapter 1 - Environmental Protection Agency (continued) (Parts 100-149): U.S. Government Printing Office, Washington DC, 1990, 969 p.

APPENDIX A

Listing of data sites.

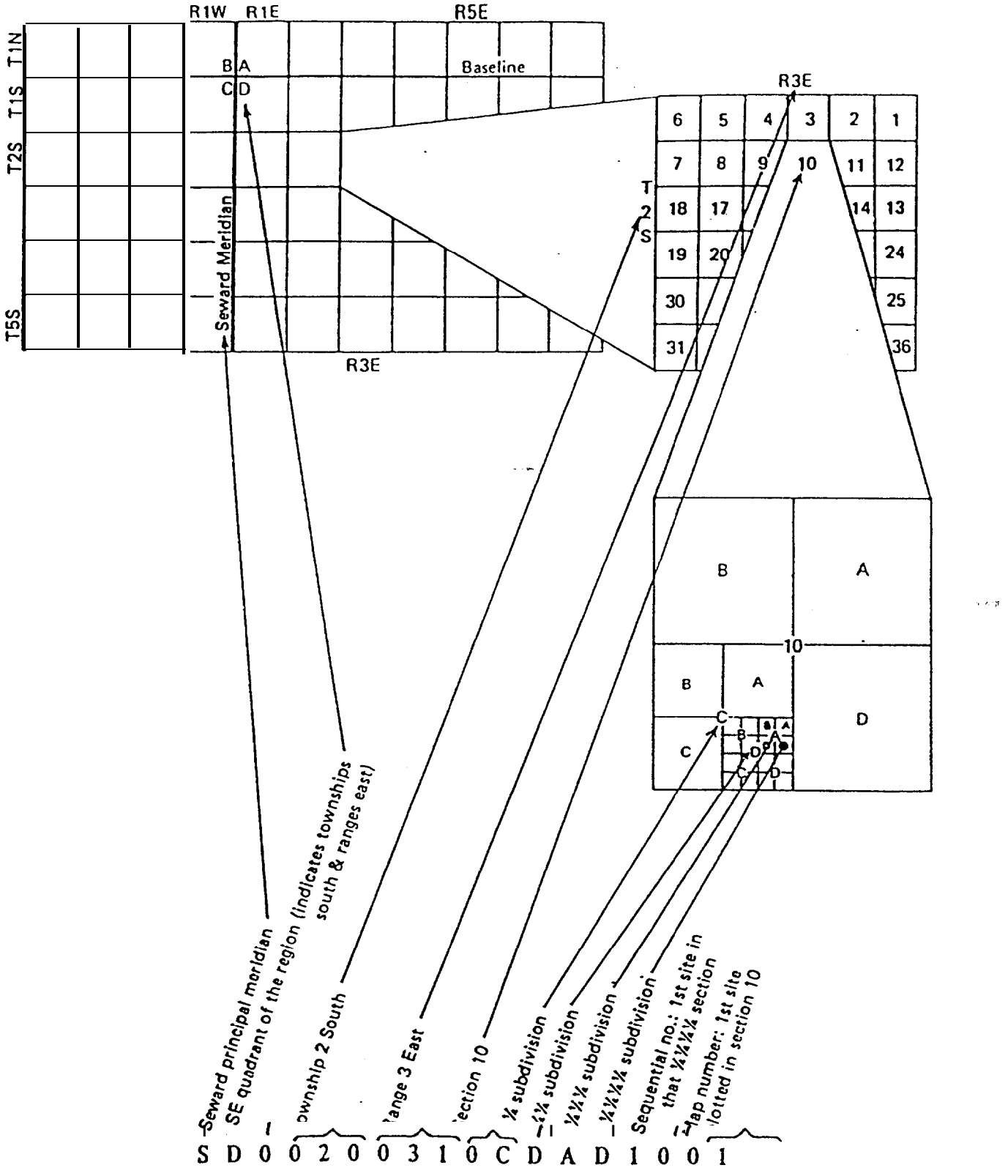

Diagram showing derivation of local number from the official rectangular subdivision of public lands.

LOCAL WELL NUMBER	OWNER	ALTITUDE OF LAND SURFACE (METERS)	DEPTH OF WELL (METERS)	WATER LEVEL (METERS)	DISCHARGE (GPM)	ASSIGNOR OF OTHER IDENTIFIER	OTHER IDENTIFIER
SB00500805ABAD1 002	KUIPER BOB	10.	17.	10.	40.	GOVT LOTS	LO2 NE1/4
	--				--	LAS	005173
SB00500805BBDA1 003	FELLMAN JIM	52.	22.	14.	20.	VEIL OMIST 5	TR01
SB00500805BBDD1 001	MOORE RONALD H	58.	61.	14.	30.	VEIL OMIST 6	TR02
	--				--	LAS	008135
SB00500806ADDA1 001	COLLER AUSTIN E	52.	29.	9.	6.	VEIL OMIST 4	TR01
SB00500806CAAA1 002	BRINDEL JUDY&GEORGE	57.	50.	32.	30.	MOOSE RIVER HTS	L02B01
	--				--	LAS	002129
SB00500806CACC1 012	GORLAC STEVE	62.	--	--	--	SECTION 06 LOTS	UNSUBD LOT
SB00500806CADB1 011	WALTERS F A	58.	46.	17.	20.	MOOSE RIVER HTS	L09B02
SB00500806CCAB1 008	GILBERTSON DAVID K	67.	12.	--	12.	ELSA LOUISE SOB	L01B05
SB00500806CDAA1 003	TIMBES LAURA&JACK	50.	63.	3.	50.	LAS	004173
	--				--	GOVT LOTS	L12
	--				--	SECTION 06 LOTS	L12
SB00500806CDDB1 009	PENDERSEN ELSA&WALTER	48.	40.	3.	--	SECTION 06 LOTS	UNSUBD LOT
SB00500806DAAD1 005	WEST WILLIAM0	58.	20.	20.	--	SWAN VIEW	TR03
SB00500806DACA1 007	STASAK MIKE	48.	14.	4.	30.	SWAN VIEW	TR05
	--				--	LAS	007808
SB00500806DACA2 007	STASAK MIKE	40.	15.	0.	30.	SWAN VIEW	TR05
	--				--	LAS	007808
SB00500806DADC1 006	LINDLE HAL&RICE-WHITFORD	58.	12.	--	--	SWAN VIEW	TR07
	RICE-WHITFORD&HAL LINDLE				--	--	--
SB00500806DBAB1 014	STANDINGER MARVIN	35.	21.	6.	12.	MOOSE RIVER HTS	L01B03
SB00500806DBBB1 004	FLOTRE GAIL&PERRY	se:	38.	19.0	15.	MOOSE RIVER HTS	L01B02
	--				--	LAS	006097
SB00500806DBCA1 013	HIEBERT AUGIE&PAT	49.	16.	0.	10.	MOOSE RIVER HTS	L05B03
SB00500806DBCC1 010	GRANT SUE&PATRICK	50.	17.	2.	25.	MOOSE RIVER HTS	LO7902
SB00500807AACD1 019	SANDERS HOWARD	52.	57.	--	15.	OTTER CREEK SW	L03B03
	S&B CONSTRUCTION				--	--	--
SB00500807AACD2 019	FISKE HANK	52.	27.	9.	12.	OTTER CREEK SW	L04B03
SB00500807AADA1 033	MERKES KENNY	58.	21.95	6.	6.	OTTER CREEK SUB	L08B05
SB00500807AADB1 010	LORENZO ABURTO	58.	52.	--	40.	OTTER CREEK SW	L02B05
	--				--	LAS	008217
SB00500807AADD1 013	SANDERS CONSTRUCTION	58.	54.	0.	50.	OTTER CREEK SW	LO9905
	MARSTERS EVERETT L				--	LAS	003694
SB00500807ADDC1 020	MERKAS DENNIS	55.	16.	7.5	15.	OTTER CREEK SW	L11B02
SB00500807ADDD1 002	BOGARD RICHARD	57.91	14.6	--	--	--	--
SB00500807BADB1 021	POOLER DAVID	52.	11.	--	--	ELSA LOUISE S W	L04B03
SB00500807BBBB1 022	POWELL HAROLD	58.	18.	5.	12.	GATTEN SUB	L18
SB00500807BCAD1 023	BOLZ PHYLLIS J&WILLIAM J	57.	20.	14.	6.	ELSA LOUISE SW	L05B02
SB00500807BCCC1 032	TOLLEFSEN ERIC	52.	15.	9.	1.5.	ELSA LOUISE SW	L08B01
SB00500807BDBB1 036	LEA JANE&GERARD	58.	--	--	--	ELSA LOUISE SW	L01B02
	GILBERTSON JANE				--	--	--
SB00500807BDBC1 024	KRAPP RICHARD	62.	19.	12.	6.	ELSA LOUISE SUB	LO3802
SB00500807BDCB1 025	POWELLHAROLD	56.	18.	--	--	ELSA LOUISE SW	L04B02
SB00500807BDCC1 034	SHOWALTER	58.	--	--	--	ELSA LOUISE SW	LO8802
SB00500807BDCD1 035	GILBERTSON KARROL	55.	--	--	--	PBDERSENS MR 1	LO3
SB00500807BDCD2 035	CHIAPPONE ESTHER	55.	28.	12.	5.	PEDERSENS MR	LO4
SB00500807CAAD1 007	NAPTOWNE BAR	56.39	21.0	--	--	--	--
SB00500807CABA1 026	FISKE THERESA E&HENRY E	52.	13.	--	--	PBDERSENS MR 3	LO1
SB00500807CABD1 005	ADH	48.55	--	--	--	ADH BRDG 672	TH 01
SB00500807CABD2 005	ADH	49.99	16.8	--	--	ADH BRDG 672	TH 02
SB00500807CABD3 005	BLOODWORTH HAROLD&BALD EAGLE BAR	50.	19.	12.73	6.5	SECTION 07 LOTS	LO6
	BALD EAGLE BAR&BLOODWORTH HAROLD				--	SECTION 07 LOTS WELL 1	LO6
SB00500807CACB1 003	MOOSE RIVER RESORT	53.34	30.	--	--	--	--
SB00500807CADB1 014	DNR ISAAC WALTON CMPGD	50.	26.	-3.	SO.	SECTION 07 LOTS	LO6
	ISAAC WALTON CMPGD DNR				--	LAS	002513
	AK DIV OF PARKS & REC				--	--	--
SB00500807CADD1 006	E&E UNION SERVICE	53.34	20.4	10.06	--	--	--
SB00500807CADD2 006	E&E ONION SERVICE	53.34	12.2	3.66	35.00	--	--
SB00500807DAAC1 015	MERKES LEON N	62.	16.	--	--	SECTION 07 LOTS	UNSUBD LOT
SB00500807DABD1 016	MERKES LEON N	62.	16.	--	--	SECTION 07 LOTS	UNSUBD LOT
SB00500807DACC1 017	MERKES LEON N	58.	46.	--	--	SECTION 07 LOTS	UNSUBD LOT
SB00500807DADC1 008	MERKES LEON	59.44	24.7	--	3.00	--	--
SB00500807DBAD1 011	MILLS SEYMOUR	62.	45.	17.	--	GATTEN SOB	L64

LOCAL WELL NUMBER		OWNER	ALTITUDE OF LAND SURFACE (METERS)	DEPTH OF WELL (METERS)	WATER LEVEL (METERS)	DISCHARGE (GPM)	ASSIGNOR OF OTHER IDENTIFIER	OTHER IDENTIFIER
SB00500807DBCB1	038	STERLING CHEVRON	58.	17.	15.	--	SECTION 07 LOTS	UNSUB LOT
		--				--	STERLING CWEV	m - 1
SB00500807DBCC1	027	STERLING CHEVRON CAFE-DONNA SCHWANKE	58.	78.	11.	20.	SCHWANKE SUB	L01A
		SCHWANKE DONNA-STERLING CHEVRON CAFE				--	--	--
SB00500807DBCC2	027	SWANKE ROLDON	58.	19.	12.	35.	SCHWANKE SUB	L01A
		STERLING CHEVRON				--	--	--
SB00500807DBCC3	027	STERLING CHEVRON	55.	17.	14.8	--	SCHWANKE SUB	L01AB02
		--				--	STERLING CHEV	MW-2
SB00500807DBCC4	027	STERLING CHEVRON	55.	17.	15.	--	SCHWANKE SUB	L01AB02
		--				--	STERLING CHEV	MW-3A
SB00500807DBCC5	027	STERLING CHEVRON	55.	16.	14.	--	SCHWANKE SUB	L01AB02
		--				--	STERLING CHEV	VES-1
SB00500807DBCC6	027	STERLING CHEVRON	55.	16.	14.	--	SCHWANKE SUB	L01AB02
		--				--	STERLING CHEV	VES-2
SB00500807DBCC7	027	STERLING CHEVRON	55.	16.	14.	--	SCHWANKE SUB	L01AB02
		--				--	STERLING CHEV	V-Es-3
SB00500807DBCC8	027	STERLING CHEVRON	55.	16.	14.	--	SCHWANKE SUB	L01AB02
		--				--	STERLING CHEV	VES-4
SB00500807DBCD1	037	SCHWANKE RONALD-SEAFOODS OF AK 1	58.	19.	12.	3s.	SCHWANKE SUB	L02B02
		SEAFOODS OF ALASKA 1-RONALD SCHWANKE				--	NOBBY HTS	WELL 01 L01B01
SB00500807DBCD2	037	SCHWANKE RONALD-SEAFOODS OF AK 2	58.	21.	12.	35.	SCHWANKE SUB	L02B02
		SEAFOODS OF ALASKA 2-RONALD SCHWANKE				--	NOBBY HTS	WELL 02 L01B01
SB00500807DBDA1	009	COOK JOHN	60.96	17.7	10.67	5.00	--	--
SB00500807DBDA2	009	COOKS TESORO	62."	11.27	8.7	--	DOSER SW	L02APT02
		--				--	COOKS CORNER	B-15
SB00500807DBDA3	009	COOK JOHN	52.	27.	14.	15.	DOSER SW	L01APT02
SB00500807DBDD1	039	COOK JOHN&CAROL	58.	11.	8.	--	DOSER SUB	L01BPT02
		--				--	COOKS CORNER	cc-e
SB00500807DBDD2	039	CWK JOHN&CAROL	58.	10.5	8.7	--	DOSER SW	L01BPT02
		--				--	COOKS CORNER	cc-9
SB00500807DBDD3	039	CWK JOHN&CAROL	se.	11.	9.	--	DOSER SUB	L01BPT02
		--				--	COOKS WRNER	cc-10
SB00500807DBDD4	039	COOKS TESORO	58.	9.04	6.2	--	DOSER SUB	L01BPT02
		--				--	COOKS WRNER	B-1/SW01
SB00500807DBDD5	039	CWKS TESORO	58.	9.59	7.5	--	DOSER SW	L01BPT02
		--				--	COOKS WRNER	B-2/SW02
SB00500807DBDD6	039	COOKS TESORO	58.	9.14	8.	--	DOSER SW	L01BPT02
		--				--	COOKS CORNER	B-3/SW03
SB00500807DBDD7	039	CWKS TESORO	58.	12.28	11.	--	GOVT LOTS	L11
		--				--	COOKS CORNER	B-4/SW04
SB00500807DBDD8	039	COOKS TESORO	58.	9.22	7.5	--	DOSER SW	L01BPT02
		--				--	COOKS CORNER	B-5/SW05
SB00500807DCAB1	028	MCLANE&ASSOCIATES W C	se.	--	--	--	NOBBY HTS	L01B01NEAR
		--				--	STERLING PJ 83	BORING 02
						--	DRY	UNCONSOL
SB00500807DCAC1	040	COOKS TESORO	se.	13.25	12.	--	NOBBY HTS	L04B01
		--				--	COOKS CORNER	a-12
SB00500807DCAC2	040	CWKS TESORO	58.	13.36	12.0	--	NOBBY HTS	L03B01
		--				--	WOKS CORNER	B-13
SB00500807DCAC3	040	COOKS TESORO	se.	13.29	11.4	--	NOBBY HTS	L05B01
						--	COOKS CORNER	B-14
SB00500807DCAD1	029	MCLANE&ASSOCIATES INC	58.		--	--	NOBBY HTS	L05B01
		--				--	STERLING PJ 83	BORING 01
		--				--	DRY	UNCONSOL
SB00500807DCAD2	029	COOKS TESORO	58.	13.45	12.	--	NOBBY HTS	L07B01
						--	COOKS CORNER	B-11
SB00500807DCBA1	018	MCDOWELL SAM E	52.	24.	--	--	SCHWANKE SUB	L03B02
SB00500807DCBD1	012	BRAZINGTON MARVIN G SR	52.	27.	--	--	DOSER SUB	L11
SB00500807DCDA1	030	ABURTO CARLOS	se.	21.	--	--	DOSER SW	LOS
SB00500807DDAC1	031	NORTHERN LIGHTS SEAFOODS	58.	24.	11.	5.	MCFARLAND S W	L20
		OS POSTAL SERVICE				--	MCFARLAND SUB	WELL 01 L20
SB00500807DDAC2	031	NORTHERN LIGHTS SEAFOODS	58.	30.	8.	30.	MCFARLAND SW	L20
		US POSTAL SERVICE				--	MCFARLAND SW	WELL 02 L20
SB00500807DDBB1	004	AUBRTO CARLOS	60.35	11.0	8.53	15.00	--	--
SB00500807DDBB2	004	HARDENBURGER DEAN	58.	30.	11.	60.	MCFARLAND SUB	TROF

LOCAL WELL NUMBER		OWNER	ALTITUDE OF LAND SURFACE (METERS)	DEPTH OF BELL (METERS)	WATER LEVEL (METERS)	DISCHARGE (GPM)	ASSIGNOR OF OTHER IDENTIFIER	OTHER IDENTIFIER
SB00500807DDBB2	004	MOM&DADS GROCERY	56.	30.	11.	--	MCFARLAND SUB	WELL 02 TROF
SB00500807DDBD1	001	BRINKLEY RALPH	60.35	22.3	8.59	--	--	--
SB00500808CBBB1	001	WALBER OAVE	58.	54.	11.	2.	SCROGGS SUB	TROA
SB00500817BBAD1	009	GRAIKA JOAN	65.	18.	--	--	SECTION 17 LOTS	UNSUBD LOT
SB00500817BBCA1	019	PALMA VINCEHT P	62.	12.	8.	10.	BOLSTRIDCE ADD1	L07B01
		--				--	LAS	006445
SB00500817BBCB1	021	ADEC	62.	9.86	8.	--	BOLSTRIOGE SUB	L14B02
		--				--	BORING NO	B81-90-1
SB00500817BBDA1	011	STERLING BUILDERS & HARDWARE	62.	9.	--	--	JIMBO SOB	L01B01
		HITT HARRY J&BELVA L				--	ADEC SOIL GAS	TB04
SB00500817BBDA2	011	ALASKA STATE	62.	8.	1.	--	ADEC SOIL GAS	TB02
		--				--	JIMBO SUB	L01B01
SB00500817BBDA3	011	ADEC	62.	8.	7.	--	JIMBO SOB	L01B01
		--				--	ADEC SOIL GAS	TB01
SB00500817BBDB1	022	ALASKA STATE	62.	9.	8.	--	TB	NO 3
		--				--	BOLSTRIOGE ADD1	L05B01
SB00500817BBDC1	005	BOLSTRIOGE BASIL S	65.53	16.3	6.53	5.00	BOLSTRIOGE ADD1	L04B01
SB00500817BBDC2	005	BOLSTRIDGE BASIL S	65.53	18.3	5.49	3.50	BOLSTRIDGE AD01	L03801
SB00500817BBDC3	005	MOM&DAD GROCERY	62.	44.	--	--	BOLSTRIDGE SOB	L02AB01
SB00500817BBDD1	028	ADEC	62.	9.05	7.	--	BOLSTRIDGE SUB	L02AB01
						--	BORING NO	B81-90-4
SB00500817BCAA1	026	BOLSTRIDGE BASIL	62.	16.	7.	15.	BOLSTRIDGE SUB3	L01AB01
SB00500817BCAD1	023	BOLSTRIOGE BASIL	62.	16.	7.	15.	BOLSTRIDGE AD01	L01
SB00500817BCBD1	016	FENA JIM	62.	10.	4.	20.	BOLSTRIDGE SUB	L25
SB00500817BDBA1	001	BROWN BING	68.58	45.	--	--	--	--
SB00500817BDBC1	006	EISCHEN JOYCE&NORMAN	65.	60.	12.	20.	GREGORY SW NO4	L12B08
		--				--	LAS	003996
		--				--	UNKKNOWN	UNCONSOL
SB00500817BDBC2	006	AOEC	65.	5.28	4.	--	GREGORY SUB NO4	L11B08
		--				--	BORING NO	B81-90-3
SB00500817BDBD1	003	NAPTOWNE INN	65.53	109.	--	-	--	--
SB00500817BDBD2	003	KING LES&NAPTOWN TRADING POST	62.	6.	4.4	--	GREGORY SW NO4	L11B08
		NAPTOWN TRADING POST&KING LES				--	NAPTOWN POST	N-S
SB00500817BDBD3	003	KING LES&NAPTOWN TRADING POST	62.	6.	4.	--	GREGORY SUB NO4	L11B08
		NAPTOWN TRADING POST&KING LES				--	NAPTOWN POST	N-6
SB00500817BDBD4	003	KING LES&NAPTOWN TRADING POST	62.	6.	4.	--	GREGORY SUB NO4	L11B08
		NAPTOWN TRADING POST&KING LES				--	NAPTOWN POST	N-l
SB00500817BDBD5	003	KING LES&NAPTOWN TRADING POST	62.	6.6	5.0	--	GREGORY SW NO4	L11B08
		NAPTOWN TRADING POST&KING LES				--	NAPTOWN POST	N-8
SB00500817BDBD6	003	KING LES&NAPTOWN TRADING POST	62.	6.6	5.0	--	GREGORY SUB NO4	L11B08
		NAPTOWN TRADING POST&KING LES				--	NAPTOWN POST	N-9
SB00500817BDBD7	003	KING LES&NAPTOWN TRADING POST	62.	6.	4.7	--	GREGORY SW NO4	L11B08
		NAPTOWN TRADING POST&KING LES				--	NAPTOWN POST	N-10
SB00500817BDBD8	003	KING LES&NAPTOWN TRADING POST	62.	6.	4.4	--	GREGORY SUB NO4	L11B08
		NAPTOWN TRADING POST&KING LES				--	NAPTOWN POST	N-11
SB00500817BDCC1	011	WORTHY CONRAD	62.	46.5	31.	--	GREGORY SUB NO5	LO3813
SB00500817BDDC1	020	LEFLER CLIFF	62.	9.	5.	15.	GREGORY SUB NO2	L14B02
SB00500817CABA1	008	FALL FRANK R	51.91	24.7	1.	--	GREGORY SUB	L06B01
SB00500817CBAB1	029	FLOTHE GLEN	62.	26.	6.	2.	EDGAR LAW	L01
		--				--	CONIFNED	UNCONSOL
SB00500817CBCA1	025	MELTON CECIL	48.	17.	11.	20.	EDGAR LAW ADD01	LO1
SB00500817CBDB1	002	CONDE JOSEPH&EMILY	52.	11.	11.	1s.	EDGAR LAW ADD01	LO2
SB00500817CCBA1	014	MORKUNAS AL	so.	11.	3.	so.	BOLSTRIDGE SUB	LO4
SB00500817CCBB1	015	LEWIS LEE K&PAULINE A	52.	9.	2.	2s.	BOLSTRIDGE SUB	LO2
SB00500817CCCA1	001	COLEMAN KEN	60.96	32.	13.72	40.	RIVERWIND II	L06B01
SB00500817CCCB1	012	NATIONAL BANK OF ALASKA	50.	--	--	--	RIVERWIND II	L03B01
SB00500817CCDB1	004	MILLER JOHN	19.25	11.1	15.85	1.00	RIVERWIND II	LO3802
SB00500817DBAD1	013	PROUDFOOT CHESTER L	83.	43.	30.	20.	GREGORY SW NO4	L10B06
		--				--	LAS	012402
SB00500817DBBD1	024	BUTT JACK	62.	28.	-3.	1.	GREGORY SUB	L19B01
		--				30.	--	--
SB00500817DCDD1	021	SIEBERT JOHN&JOSEPHINE	50.	36.	2.0	so.	BINGS LARDING 1	L11B04
		--				--	LAS	009109
SB00500817DDCB1	010	TITUS GARY	67.	53.	12.	24.	BINGS LANDING 1	L21B05
		MAINS BRIAN				--	--	--

LOCAL WELL NUMBER		OWNER	ALTITUDE OF LAND SURFACE (METERS)	DEPTH OF WELL (METERS)	WATER LEVEL (METERS)	DISCHARGE (GPM)	ASSIGNOR OF OTHER IDENTIFIER	OTHER IDENTIFIER
SB00500817DDCC1	018	HODSON HIKE	27.	47.	9.	20.	SINGS LANDING 1	L15B03
SB00500818AAAD1	010	ACKERMAN JOE	65.53	19.2	9.14	10.00	MCFARLAND SUB	L01TR0K
SB00500818AABA1	002	SMITH TERRANCE DAVID	62.	19.	--	--	MCFARLAND SUB	L01TR0O
SB00500818AABB1	003	KNIGHT OTHEL	62.	42.	9.	--	MCFARLAND SUB	L17
SB00500818AABD1	001	MCDERMETT W H	64.01	20.7	--	10.00	--	--
SB00500818AADB1	009	ACKERMAN JOE&TONI M	62.	30.	9.	4.	MCFARLAND SUB	L02TR0K
		--				--	MULTIPLE	UNCONSOL
SB00500818ABDD1	015	BUCHER PETE	so.	60.	3.	18.	APACHE ACRES	TR0D
SB00500818ADAA1	005	SHELDON JAMES P	62.	18.	14.	--	HEATHER ADD	L03801
		--				--	MCFARLAND SW	L01TR0L
		--				--	LAS	008048
SB00500818ADBD1	014	MCKELVEY CHARLES	55.	30.	--	--	GAGE SUE	L04A
		--				--	DRY	UNCONSOL
		--				--	GAGE SW	WELL 1 L04A
SB00500818ADBD2	014	MCKELVEY CHARLES	55.	22.	11.	8.	GAGE SW	L04A
		--				--	GAGE SW	WELL 2 L04A
SB00500818BCBD1	011	GARNETT ED	52.	35.	12.	1s.	TROTTER-GARNETT	L0B2
		VIOLET MUMM				--	--	--
SB00500818CDCC1	012	JOHNSON MIKE	62.	10.	1.	20.	HOLIDAY PARK	L01B01
SB00500818DABD1	006	SHELDON JAMES P	55.	19.	12.	4.	MCFARLAND SUE	L14B01
		--				--	GOERIG ADD	L14
		--				--	LAS	005476
SB00500818DCAB1	007	HEIM MARLENE	58.	53.	0.	30.	HOLIDAY PARK	L16B06
SB00500818DDAD1	004	IOANIN GEORGE A	so.	9.	5.	9.	MCFARLAND SW	L01
SB00500818DDBA1	013	VANDERVEUR NICK L	so.	41.	-3.	1s.	MCFARLAND SW	L0B
		NELSON ROBERT M&SALLY				--	--	--
SB00500818DDCC1	008	IMM LARRY	62.	65.	6.	20.	HOLIDAY PARK	L08B06
SB00500901BAAB1	004	KENAI PENINSULA BOROUGH	103.	6.	--	--	BORING NO	SB01
		STERLING WASTE DISPOSAL				--	WASTE SITE	AK0003
SB00500901BAAB2	004	KENAI PENINSULA BOROUGH	102.82	5.3	4.2	--	BORING NO	MW14&SB02
		STERLING WASTE DISPOSAL				--	BORING HO	SB02&MW14
		--				--	WASTE SITE	AK0003
		--				--	GOVT LOTS	L03
SB00500901BAAB3	004	KENAI PENINSULA BOROUGH	102.77	37.	32.88	--	BORING NO	MW13
		STERLING WASTE DISPOSAL				--	WASTE SITE	AK0003
		--					GOVT LOTS	L03
SB00500901BAAB4	004	STERLING WASTE SITE	102.9	58.	32.88	--	BORING NO	MW19
		--					WASTE SITE	AK0003
		--				--	GOVT LOTS	L03
SB00500901BAAC1	005	KENAI PENINSULA BOROUGH	103.08	38.7	33.38	--	BORING NO	MW10
		STERLING WASTE DISPOSAL					WASTE SITE	AK0003
		--				--	GOVT LOTS	L03
SB00500901BAAD1	006	KENAI PENINSULA BOROUGH	92.	10.1	--	--	BORING HO	TW01
		STERLING WASTE DISPOSAL				--	WASTE SITE	AK0003
SB00500901BAAD2	006	KENAI PENINSULA BOROUGH	91.68	32.	21.9	9.	BORING NO	TW02
		STERLING BASTE DISPOSAL				--	WASTE SITE	AK0003
		--				--	GOVT LOTS	L03
SB00500901BAAD3	006	STERLING HASTE SITE	91.6	26.	21.86	--	BORING NO	MW17
		--				--	WASTE SITE	AK0003
		--				--	GOVT LOTS	L O 3
SB00500901BAAD4	006	STERLING WASTE SITE	91.6	48.	21.81	--	BORING HO	MW16
		--					WASTE SITE	AK0003
						--	GOVT LOTS	L03
SB00500901BAAD5	046	KENAI PENINSULA BOROUGH	94.6	49.6	23.9	9.	BORING NO	TW00
		STERLING HASTE DISPOSAL				--	WASTE SITE	AK0003
		--				--	GOVT LOTS	L03
SB00500901BABB1	025	STERLING HASTE SITE	106.0	62.	35.25	--	BORING NO	MW18
		--					WASTE SITE	AK0003
		--				--	GOVT LOTS	L03
SB00500901BABB2	025	KENAI PENINSULA BOROUGH	105.5	38.	35.5	--	BORING NO	MW12
		STERLING WASTE DISPOSAL				--	WASTE SITE	AK0003
SB00500901BABC1	008	KENAI PENINSULA BOROUGH	103.52	36.7	33.53	--	BORING NO	MW15
		STERLING WASTE DISPOSAL				--	WASTE SITE	AK0003
SB00500901BABD1	009	KENAI PENINSULA BOROUGH	104.4	61.7	30.46	--	BORING NO	TW07
		STERLING WASTE DISPOSAL				--	WASTE SITE	AK0003

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SB00500901BABD1 009	--	104.4	61.7	30.46	--	GOVT LOTS	LO3
SB00500901BABD2 009	KENAI PENINSULA BOROUGH	102.	33.	24.	2s.	SECTION 01 WTS	LO3
SB00500901BACA1 010	KENAI PENINSULA BOROUGH	91.8	11.89	12.	--	BORING NO	TH02
	STERLING WASTE DISPOSAL				--	WASTE SITE	AK0003
	--				--	GOVT LOTS	LO3
SB00500901BACC1 012	KENAI PENINSULA BOROUGH	96.5	27.	23.	--	WASTE SITE	AK0003
	STERLING SPECIAL WASTE SITE				--	GOVT M S	LO3
SB00500901BACC2 012	STERLING WASTE SITE	92.6	26.	22.44	--	BORING NO	MW20
	--				--	WASTE SITE	AK0003
	--				--	GOVT LOTS	LO3
SB00500901BACC3 012	STERLING WASTE SITE	92.4	48.6	22.74	--	BORING ND	MW21
	--				--	WASTE SITE	AK0003
	--				--	GOVT M S	LO3
SB00500901BACD1 011	KENAI PENINSULA BOROUGH	89.86	22.4	20.88	--	BORING NO	MW11
	STERLING WASTE DISPOSAL				--	WASTE SITE	AK0003
SB00500901BACD2 011	STERLING WASTE DISPOSAL	87.	20.	17.	--	STERLING S WS THOS	
	KENAI PENINSULA BOROUGH					--	--
SB00500901BADA1 013	KENAI PENINSULA BOROUGH	85.3	18.0	--	--	BORING NO	TH04
	STERLING SPECIAL WASTE SITE				--	WASTE SITE	AK0003
	--				--	GOVT LOTS	LO3
SB00500901BADA2 013	KENAI PENINSULA BOROUGH	86.07	21.	14.25	--	BORING NO	TWO4
	STERLING WASTE DISPOSAL				--	WASTE SITE	AK0003
	--				--	GOVT LOTS	LO3
SB00500901BADA3 013	KENAI PENINSULA BOROUGH	94.6	11.	9.72	--	BORING NO	TWO3
	STERLING WASTE DISPOSAL				--	WASTE SITE	AK0003
	--				--	GOVT LOTS	LO3
SB00500901BADB1 015	KENAI PENINSULA BOROUGH	91.7	21.7	--	--	BORING ND	TH03
	STERLING WASTE DISPOSAL				--	WASTE SITE	AK0003
	--				--	GOVT M S	LO3
SB00500901BADC1 016	KENAI PENINSDLA BOROUGH	85.72	18.	15.99	--	BORING ND	MW09
	STERLING WASTE DISPOSAL				--	WASTE SITE	AK0003
SB00500901BADC2 016	KENAI PENINSULA BOROUGH	84.4	9.	--	--	BORING ND	TH01
	STERLING WASTE DISPOSAL				--	WASTE SITE	AK0003
	--				--	GOVT WTS	LO3
SB00500901BADC3 016	KENAI PENINSULA BOROUGH	89.20	46.	19.2	--	BORING NO	TWO6
	STERLING SPECIAL WASTE SITE				--	WASTE SITE	AK0003
SB00500901BADC4 016	KENAI PENINSULA BOROUGH	87.6	9.	--	--	BORING ND	TWOS
	STERLING WASTE DISPOSAL				--	WASTE SITE	AK0003
	--				--	GOVT LOTS	LO3
SB00500901BADD1 026	STERLING WASTE SITE	es.9	43.	16.20	--	BORING NO	MW22
	--				--	WASTE SITE	AK0003
	--				--	GOVT LOTS	LO3
SB00500901BADD2 026	KENAI PENINSULA BOROUGH	86.16	26.	16.44		BORING NO	MW08
	STERLING WASTE DISPOSAL				--	WASTE SITE	AK0003
	--				--	GOVT LOTS	LO3
SB00500901BBBA1 024	ARCO ALASKA	123.	113.	--	50.	SECTION 01 LOTS	LO4
	--				--	ARCO ALASKA	MR 1
SB00500901BBCC1 022	JOHNSON	108.	--	--	--	SECTION 01 LOTS	UNSUBD LOT
SB00500901CACC1 001	MURPHEE C C	76.20	12.2	--		--	--
SB00500901CBBD1 014	FRANZMANN CARL	83.	18.97	--	5.	FRANZMANN SUB	L03B01
SB00500901CDBB1 017	MCLANE&ASSOCIATES INC	73.	--	--	--	GRANDVIEW	L01A301
	--				--	STERLING PJ 85	BORING 01
	--				--	DRY	UNCONSOL
SB00500901CDBB2 017	BROW PAMELA&SAMUEL	73.	20.	9.	50.	GRANDVIEW	L01A
SB00500901CDCB1 018	MCLANE&ASSOCIATES INC	73.	--	--	--	GRANDVIEW	L01C301
	--				--	STERLING PJ 85	BORING 02
	--				--	DRY	UNCONSOL
SB00500901CDCC1 019	MCLANE&ASSOCIATES INC	70.		--	--	GRANDVIEW	L01D301
	--				--	STERLING PJ 85	BORING 03
	--				--	DRY	UNCONSOL
SB00500901DCAA1 020	KISHBAUM ED	67.	22.	3.	15.	GRANDVIEW	L08A
SB00500901DCCC1 021	LARROW	67.	--	--	--	GRANDVIEW	LOS
SB00500901DCDC1 002	GELLER GREG	68.58	22.6	6.10	20.00	GRANDVIEW	LO7
SB00500901DCDD1 023	SHUEY	62.	--	--	--	GRANDVIEW	L08B
SB00500902AAAD1 003	POHL LEONARD B	121.92	64.	54.56	15.00	--	

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SB00500902AAAD2 003	HARVEY PAUL	123.	78.	55.	--	SWANSON RIVER 2	TR02B
SB00500902ACDD1 005	JENSEN ROBERT F	108.	61.	55.	10.	SECTION 02 LOTS	UNSUBD LOT
					--	LAS	006809
SB00500902ADAD1 004	JENSEN GARY C	98.	30.	27.	10.	SLATE SUB	TR01
					--	LAS	005924
SB00500902BADC1 010	HANSEN JIM	92.	10.	--	--	JACOBSEN SUB 2	TR02
SB00500902BBAC1 007	YODER BILLY JEAN&WALTER H	98.	37.	--	--	SCHLERETH SUB	TR01
SB00500902CABA1 015	VASILIE DAVID	83.	10s.	12.	4.	WHISPERING MDWS	L15B01
SB00500902CABC1 011	GRANGERS PREST R	93.	17.	--	20.	WHISPERING MDWS	L06B02
SB00500902CADB1 01.9	MCKENZIE CALLEN	75.	20.	10.	25.	WHISPERING MDWS	L13B01
SB00500902CBAC1 016	PISTILLI KAREN	93.	--	--	--	WHISPERING MDWS	L09AB03
SB00500902CBCC1 014	BISHOP JOHN	83.	15.	9.	30.	WHISPERING MDWS	L10B03
SB00500902CCBC1 017	SANDBERG ERIC	77.	1s.	10.	8.	WHISPERING MDWS	L12B03PT02
SB00500902CDAC1 012	SCHANKLE JOHN	77.	14.	11.	10.	WHISPERING MDWS	L02B03
SB00500902CDBB1 002	DAVIS LARRY	99.06	4s.	12.19	30.00	WHISPERING MDWS	L03B01
SB00500902CDBB2 002	WEEKLEY CLAUDIA&CLAUD E	83.	18.	13.	15.	WHISPERING MDWS	L11B01
SB00500902CDBD1 006	HALL JOE	77.	52.	12.	--	WHISPERING MDWS	L04B01
	DENINSON MIKE&DOROTHY				--	--	--
SB00500902DAAA1 008	FRANZMANN LOUISE A	87.	18.	--	--	VALLEY VW SW 2	LOS
SB00500902DADC1 009	SLATE BOB	93.	18.3	15.4	37.5	VALLEY VW SW 2	LO4
	EBNET MARV				--	--	--
SB00500902DBBD1 013	SHAULES DAVID	77.	21.	--	--	DUTCH BASIN	TR0A1
SB00500902DCDD1 001	MCGHEE V E	76.20	18.3	--	.10	--	--
SB00500903CBAA1 002	TED FORSI&ASSOCIATES	87.	--	--	--	BRUCE SUB	L04B02
	FORSI TED&ASSOCIATES				--	STERLING PJ 84	TH 01
					--	DRY	UNCONSOL
SB00500903CBDB1 003	TED FORSI&ASSOCIATES	87.	--	--		BRUCE SW	L02B02
	FORSI TED&ASSOCIATES					STERLING PJ 84	TH 02
					--	DRY	UNCONSOL
SB00500903CCAA1 004	TED FORSICASSOCIATES	92.	--	--	--	BRUCE SUB	L04B01
	FORSL TED&ASSOCIATES					STERLING PJ 84	TH 03
SB00500903CCDA1 005	TED FORSI&ASSOCIATES	92.	--	--		BRUCE SUB	L02B01
	FORSI TED&ASSOCIATES				--	STERLNG PJ 84	TH 04
					--	DRY	UNCONSOL
SB00500903CCDC1 ,906	PENNER DALE	90.	27.	20.	16.	BRUCE SW	L01B02
SB00500903DCCD1 001	OREAGAN LEWIS	91.44	27.4	--		--	--
	TOLBERT JAMES W						--
SB00500910AAAA1 002	BURBACK ROBERT	83.	34.	11.	35.	BURBACK SUB	L01
SB00500910ACBB1 003	TED FORSI&ASSOCIATES	83.	--		--	SHADY NOOK SUB	L07B01
	FORSI TED&ASSOCIATES				--	DRY	UNCONSOL
SB00500910ACBC1 004	TED FORSI&ASSOCIATES	83.	--	--	--	SHADY NOOK SUB	L05B01
	FORSI TED&ASSOCIATES				--	DRY	UNCONSOL
SB00500910ACBD1 005	TED FORSI&ASSOCIATES	83.	--	--	--	SHADY NOOK SUB	L05B02
	FORSI TED&ASSOCIATES				--	DRY	UNCONSOL
SB00500910ACCA1 006	TED FORSI&ASSOCIATES	85.		--		SHADY NOOK SOB	LO3802
	FORSI TED&ASSOCIATES				--	DRY	ONCONSOL
SB00500910ACCC1 007	TED FORSI&ASSOCIATES	83.		--	--	SHADY NOOK SUB	L01B01
	FORSI TED&ASSOCIATES				--	DRY	UNCONSOL
SB00500910ACCD1 008	TED FORSI&ASSOCIATES	87.	--	--		SNAOYNOOK SOB	L01B02
	FORSI TED&ASSOCIATES				--	DRY	ONCONSOL
SB00500910ADBB1 009	BUSTER ALLEN	83.	65.	2.	8.	TOD NELSON SUB	L08B01
SB00500910BAAB1 012	MARKS LORI L&ROBERT M	87.	36.	11.	50.	LEILANI SUB	LO1
SB00500910BBBB1 010	WEAVER EUGENE	83.	29.	14.	30.	SECTION 10 LOTS	UNSUBD LOT
					--	LAS	000819
SB00500910DABA1 001	HOFFMEIER MORRICE	88.39	22.6	--		--	--
SB00500910DACB1 011	AK OIV PKS SCOOT LK	83.	18.	13.16	20.	SECTION 10 LOTS	UNSUBD LOT
						LAS	000401
						RECFACILITY	SCOUT LAKE
						AK DIV PKS	SCOUT LK REC FA
SB00500911AABB1 034	STERLING PENTECOSTAL CHURCH	83.	21.	8.	12.	STERLING HTS	L08B02
SB00500911AABC1 007	NICHOLSON WALTER 0	97.	41.	18.	40.	STERLING NTS	L10B03
					--	LAS	009545
SB00500911AACC1 009	BUNTZ LEN	77.	18.	11.	12.	STERLING HTS	L09B07
SB00500911AACC2 009	BUNTZ DAVE	77.	17.	11.	15.	STERLING HTS	L10B07
SB00500911AACC3 009	BUNTZ LEN-MCLEOD BUILDERS	77.	16.	10.	40.	STERLING HTS	L11B07

LOCAL WELL NUMBER	OWNER	ALTITUDE OF LAND SURFACE (METERS)	DEPTH OF WELL (METERS)	WATER LEVEL (METERS)	DISCHARGE (GPM)	ASSIGNOR OF OTHER IDENTIFIER	OTHER IDENTIFIER
SB00500911AACC3 009	MCLEOD BUILDERS-LEN BUNTZ	77.	16.	10.	--	--	--
SB00500911AACC4 009	MCLEOD BUILDERS, BUNTZ	77.	17.	10.	20.	STERLING HTS 2	L12B07
	BUNTZ, MCLEOD BUILDERS				--	--	--
SB00500911AACD1 033	BUNTY LEN	77.	18.	11.	12.	STERLING HTS	L04B07
SB00500911AADC1 032	LOVE JOHN	77.	16.	10.	12.	STERLING HTS	L07B08
SB00500911ABAA1 012	HOVIS BLANCH&JAMES	83.	44.	20.	3s.	STERLING HTS 2	L04B01
	HIBPSHAM REBECCA&TOM				--	--	--
SB00500911ABAB1 013	SMITH CHARLENE&DENNIS	73.	12.6	--	12.	STERLING HTS 2	L03B01
SB00500911ABDD1 014	ANDERSON ROD	75,.	14.	9.	10.	STERLING HTS 2	L08B01
SB00500911ACBB1 036	VOHS ART	77.	12.	9.	12.	STERLING HTS 3	L03AB01
	KIFFMEYER JEFFRY				--	--	--
SB00500911ACBD1 010	HERSHBERGER DALE&RICE-WHITFORD	17.	16.	10.	--	STERLING HTS 1	L01B01
	RICE-WHITFORD&DALE HERSHBERGER				--	--	--
SB00500911ACCD1 031	MCCALL THELMA F	77.	13.	--	--	STERLING HTS 1	L08B02
SB00500911ADAA1 015	DECHENNE DEBBIE	77.	16.	8.	10.	STERLING HTS 2	L07B02
SB00500911ADDA1 037	POWELL HAROLD&WASH OUT LAUNDRY	77.	25.	12.	30.	STERLING HTS 2	L08B03
	WASH GUT LAUNDRY&POWELL HAROLD				--	--	--
SB00500911ADDD1 011	MCCALL FRED	77.	16.	9.	10.	STERLING HTS 2	L09AB03
SB00500911BAAA1 016	WM J NELSON&ASSOCIATES	73.	--	--	--	WEAVER	L06B01
	NELSON WM JCASSOCIATES				--	DRY	UNCONSOL
	--				--	STERLING PJ 83	BORING 16
SB00500911BAAB1 017	WM J NELSON&ASSOCIATES	73.	--	2.	--	WEAVER PT1	L05BB01NEAR
	NELSON WM J&ASSOCIATES				--	STERLING PJ 83	BORING 17
SB00500911BACA1 018	ROBINSON DEAN	83.	17.	12.	30.	WEAVER	L01B02
SB00500911BADA1 019	NORTHERN TEST LAB	83.	3.	--	--	WEAVER	L03B02NEAR
	--				--	STERLING PJ 81 TH	08
	--				--	DRY	UNCONSOL
SB00500911BADB1 020	HILER HOWARD	83.	14.	9.	8.	WEAVER PT1	L05AB01
SB00500911BADC1 021	NORTHERN TEST LAB	83.	--	--	--	WEAVER	L02B02
	--				--	STERLING PJ 81 TH	09
	--				--	DRY	UNCONSOL
SB00500911BADC2 021	TORO	83.	20.	14.	12.	WEAVER	L02B02
	ELDRIDGE ROYAL				--	--	--
SB00500911BCDC1 002	WEAVERS JACK	63.82	52.	15.24	--	--	--
SB00500911CBAA1 035	ELLISON LINDA M&L D	..-77.	--	--	--	SECTION 11 LOTS	L13
SB00500911CBBA1 008	PETERSON JAMES	83.	20.	13.	25.	PATTERSON NO2	TR03
	RENNEY LOUIS, STERLING BUILDERS				--	--	--
	STERLING BUILDERS, LOUIS RENNEY				--	--	--
SB00500911CBBB1 022	STERLING BUILDERS	83.	20.	13.	20.	PATTERSON NO2	TR01
	OBRIEN NIKKI&DOUG				--	--	--
SB00500911DAAB1 001	STERLING SCHOOL	76.20	21.3	--	20.00	SECTION 11 LOTS	GOVT LOT 2
	KENAI BOROUGH STERLING SCHOOL				--	--	--
SB00500911DAAB2 001	AK DEPT EDUC STERLING	76.20	9.8	8.38	--	--	- -
SB00500911DABB1 006	CHUMLEY LEE	73.15	14.9	11.58	8.00	GOVT TRACTS	L12
SB00500911DABC1 023	STERLING FIRE STATION, KENAI BOROUGH	73.	12.	5.	100.	STRLNG FIRE STA	L02
	KENAI BOROUGH, STERLING FIRE STATION				--	--	--
SB00500911DACB1 024	TADRIAINEN MIKE	73.	--	--	--	BARKER RON SOB	L02B02
	--				--	RON BARKER SOB	L02B02
	--				--	STERLING PJ 78 TP	03
	--				--	DRY	UNCONSOL
SB00500911DACC1 025	BARKER ENTERPRISES	70.	11.	4.	10.	BARKER RON SUB	L04B02
	--				--	RON BARKER SUB	L04B02
SB00500911DACD1 026	TAURIAINEN MIKE	73.	--	--	--	BARKER RON SUB	L06B02
	--				--	RON BARKER SUB	L06B02
	--				--	STERLING PJ 78 TP	02
SB00500911DADC1 027	TADRIAINEN HIKE	73.	--	--	--	BARKER RON SOB	COBB02
	--				--	RON BARKER SOB	LOBB02
	--				--	STERLING PJ 78 TP	01
	--				--	DRY	UNCONSOL
SB00500911DADD1 028	BARKER RAYMOND H	73.	--	--	--	BARKER RON SUB	L09B02
	--				--	RON BARKER SUB	L09B02
SB00500911DBCA1 005	NAT BARK OF AK.	76.20	12.2	8.97	--	--	--
SB00500911DBDB1 003	HANDLEY JOHN	76.20	10.4	--	--	--	--
SB00500911DBDD1 004	CLARK NED	76.20	9.	--	--	--	--
SB00500911DDAC1 029	ANDERSON RITA&MEL	70.	19.	7.	40.	COTTONWD SPRUCE	L07B01

LOCAL NELL NUMBER	OWNER	ALTITUDE OF LAND SURFACE (METERS)	DEPTH OF WELL (METERS)	WATER LEVEL (METERS)	DISCHARGE (GPM)	ASSIGNOR OF OTHER IDENTIFIER	OTHER IDENTIFIER
SB00500911DDAC1 029	BAHNER DONALD	10.	19.	7.	--	--	--
SB00500911DDBA1 030	ROBINETTE ED CONSTRUCTION	73.	18.	18.	12.	COTTONWD SPRUCE	L05B01
SB00500912ABBA1 022	CRAIG ENID	67.	--	--	--	GRANDVIEW	L03
SB00500912ABBB1 0 1 2	BROWN ERIC	67.	24.	7.	10.	GRANDVIEW	L09801
SB00500912ABCB1 007	THORPE WAYNE	62.	19.	--	40.	GRANDVIEW	L11A
SB00500912ABCC1 0 1 3	CHUMLEY HUGH	67.	18.	a.	8.	GRANDVIEW S	L01
SB00500912ABCD1 008	CHUMLEY HUGH	65.	29.	a.	60.	GRANDVIEW 5	L03803
	PALMA VINCENT P				--	LAS	008470
SB00500912ABDC1 014	CHUMLEY HUGH	61.	27.	9.	35.	GRANDVIEW S	LOS
SB00500912ABDC2 014	NATIONAL. BANK OF ALASKA	67.	24.	--	--	GRANDVIEW 3	L11B-2
SB00500912ACAB1 015	MCDOWELL SAM	67.	26.	--	--	GRANDVIEW	L13
	--				--	LAS	008467
SB00500912ACCC1 016	GRIZZELL JIM	67.	16.	6.	35.	GRANDVIEW	L16A
SB00500912ACDC1 017	LISKEY WAYNE	67.	23.	18.	--	GRANDVIEW	L16-C
SB00500912BCCB1 001	LEVANS KEN	76.20	12.8	--	--	--	--
	CARTER JAMES W				--	--	--
SB00500912BCCB2 001	CARTER JAMES W	76.20	15.2	7.92	5.00	--	--
SB00500912CBCB1 009	STERLING BAPTIST CHURCH	73.	12.	a.	12.	MISSION SW	L02
SB00500912CBCD1 018	BROWNING JENNIFER&JAMES	70.	9.	5.	15.	ANOTHER RD SUB	L01
SB00500912CBCD1S	BROWING JAMES&JENNIFER	70.	--	--	--	ANOTHER RO SOB	L01
SB00500912CBDB1S	UNKNOWN	67.	--	--	--	--	--
	BROWNING JAMES				--	--	--
SB00500912DAAD1 002	MOOSE RIVR BAR	68.58	18.3	--	--	--	--
SB00500912DABD1 019	FISKE HENRY H	62.	11.	--	--	GREATLAND EST 2	TR01
	MCDOWELL SAN				--	LAS	009466
SB00500912DADC1 003	WHITE COLLEEN	68.58	9.8	4.51	20.00	GREATLAND EST 2	L09B02
SB00500912DBBC1 023	BOLSTRIDGE BASIL	67.	17.	6.	30.	SUMPTER SUB	L03B02
SB00500912DCAA1 010	FISKE HANK	67.	16.	8.	20	SUMPTER SUB	L20B08
	--				--	LAS	011290
SB00500912DCAD1 020	FISKE HANK	67.	23.	5.	18.	SUMPTER SW	L16B08
SB00500912DDBB1 021	ZOLLMAN KAREN PARRISH	65.	13.	6.	20.	GREATLAND EST 2	L07B02
	PARRISH KAREN ZOLLMAN				--	--	--
SB00500912DDBC1 006	GRIZZELL JIM	73.	14.	6.	20.	GREATLAND EST 2	L06B02
	LEESMAN VERN E				--	LAS	005951
SB00500912DDCC1 005	COLLINS JIM	68.58	20.7	14.63	12.00	GREATLAND EST 2	L02B02
SB00500912DDCD1 004	FISKE HANK	67.06	9.1	4.57	15.00	GREATLAND EST 2	L01B02
SB00500912DDCD2 004	FISKE HANK	67.06	34.	15.85	10.00	GREATLAND EST 2	L01B02
SB00500912DDDD1 011	HECHT PAUL	67.	10.	--	--	GREATLAND EST 2	L01B01
	--				--	LAS	008341
SB00500913AAAB1 008	LEQUIRE MICHAEL	62.	22.	11.	20.	MOOSE RIVBR EST	L07B01
	PJEIFFER SHAUN J				--	--	--
SB00500913AAAC1 020	ENBERG CHRISTINE	58.	28.	12.	10.	MOOSE RIVBR EST	L08B01
	--				10.	--	
SB00500913AABA1 019	GRIZZELL JIM	62.	34.	-3.	60.	MOOSE RIVER EST	L11B01
SB00500913AABC1 010	GRIZZELL JIM	62.	17.	9.	a.	MOOSE RIVER EST	L03302
SB00500913ACAA1 011	PALMER LLOYD L	48.	9.	--	--	MOOSE RIVBR EST	L01B04
SB00500913ACAC1 003	HARRIS LEE	48.	9.	-1.	30.	MOOSE RIVER EST	L20B03
	--				30.	LAS	001403
SB00500913ACAC2 003	DOWLING&RICE ASSOCIATES	48.	--	.51	--	MOOSE RIVER EST	L21B03
	--					STERLING PJ a4 TH 01	
SB00500913ACAD1 004	NELSON DAVE	48.	10.	--	25.	MOOSE RIVBR EST	L17B03
	--				10.	LAS	00113s
SB00500913ACCA1 012	PROFESSIONAL DESIGN ASSOCIATES	48.	--	--	--	MOOSE RIVER EST	L25B03
					--	STERLING PJ 83 BORING	MR3
	--				--	DRY	UNCONSOL
SB00500913ACCA2 012	PROFESSIONS DESIGN ASSOCIATES	48.	--	1.	--	MOOSE RIVER EST	L25B03
	--				--	STERLING PJ a3	BORING MR1
SB00500913ACCA3 012	RICE-WHITFORD&ASSOCIATES	48.	--	.8	--	MOOSE RIVER EST	L25B03
	PFEIFFER PAUL				--	STERLING PJ a6 TH 01	
SB00500913ACCA4 012	PFEIFFER PAUL J	48.	41.	--	15.	MOOSE RIVER EST	L25B03
	--				10.	--	--
SB00500913ADAB1 017	HIEBERT AUGIE&PAT	50.	16.	0.	10.	MOOSE RIVER EST	L05B03
SB00500913BBAA1 013	HAUSEN JAN&PATRICIA	65.	45.3	11.	100.	WRANGLE SUB 2	TR09
SB00500913BBAC1 014	HANSEN SAM	73.	45.3	11.	100.	WRANGLE SUB 3	L03
SB00500913BBBD1 002	JAMES HOVIS	60.50	53.	8.84	--	--	--

LOCAL BELL NUMBER		OWNER	ALTITUDE OF LAND SURFACE (METERS)	DEPTH OF BELL (METERS)	WATER LEVEL (METERS)	DISCHARGE (GPM)	ASSIGNOR OF OTHER IDENTIFIER	OTHER IDENTIFIER
SB00500913BBCB1	018	AULDRIDGE DALE H	61.	16.	9.	8.	AULDRIDGE SUB	L01
SB00500913BBCC1	001	AULDRIDGE T H	68.58	18.0	--	7.00	--	--
SB00500913BCDC1	009	RICKETTS CLIFF	62.	35.	7.	20.	WRANGLE SOB	TR05
SB00500913BDAB1	005	DOWLING-RICE & ASSOCIATES	67.	3.	3.	--	WRANGLE SUB	TROA
		--				--	WRANGLE Q R ADD	L04
		--				--	STERLING PJ 93	TH02
SB00500913BDAC1	006	--	65.	2.3	2.	--	WRANGLE SUB	TROA
		--				--	WRANGLE Q R ADD	L05
		--				--	STERLING PJ 83	TH03
SB00500913BDAD1	007	DOWLING-RICE & ASSOCIATES	67.	3.	--	--	WRANGLE SW	TROA
		--				--	WRANGLE Q R ADD	L09
		--				--	STERLING PJ 83	TH01
		--				--	DRY	UNCONSOL
SB00500913CBBB1	015	DORCAS LEE E	62.	9.	--	--	DORCAS SUB	TR01
SB00500913CBBC1	016	LUNDELL DALE	67.	36.	21.	a.	SECTION 13 LOTS	DNSWD LOT
SB00500914ADAD1	004	RATLIFF WANDA&TERRY	73.	48.	9.	15.	SCOUT RIDGE SUB	L03
SB00500914BACB1	005	WHITE MARK	73.	12.	7.	10.	DAYTON SUB	L04
		--				--	LAS	008775
SB00500914BADC1	001	KIMBALL PHILIP E	67.	9.	4.	20.	DAYTON SUB	L01
		--				--	LAS	004085C
SB00500914BBAA1	006	MCLANE&ASSOCIATES INC	67.	--	1.7	--	CARMICHAEL SUB	TROA
		--				--	STERLING PJ 92	BORING 04
SB00500914BBBB1	007	MCLANE&ASSOCIATES INC	73.	--	--	--	CARMICHAEL SOB	L01B01
		--				--	STERLING PJ 92	BORING 03
		--				--	DRY	UNCONSOL
SB00500914BBCC1	008	MCLANE&ASSOCIATES INC	11.	--	3.	--	CARMICHAEL SUB	TR0B
		--				--	STERLING PJ 82	BORING 01
SB00500914BBDD1	009	MCLANE&ASSOCIATES INC	73.	--	--	--	CARMICHAEL SOB	TR0B
		--				--	STERLING PJ 82	BORING 02
SB00500914BCBB1	010	WHITE DAVID L	75.	17.	--	--	FORSTNER SUB	TROA
SB00500914BDAB1	011	FORSTNER LOUIS G	61.	11.	9.	15.	FORSTNER SUB 2	L01B02
SB00500914BDAC1	012	FORSTNER LOUIS G	67.	35.	35.	--	FORSTNER SW 2	L08B02
SB00500914BDAD1	013	PENINSOLA ENGINEERING	62.	--	2.	--	FORSTNER SW 2	LO3902
		--				--	STERLING PJ 79 TH	03
SB00500914BDBC1	014	PENINSOLA ENGINEERING	73.	--	--	--	FORSTNER SW 2	L08B01
		--				--	STERLING PJ 79 TH	01
		--					DRY	UNCONSOL
SB00500914BDBC2	014	STEGER KEVIN	73.	13.	6.	8.	FORSTNER S W 2	L08B01
SB00500914BDBD1	003	CALIGANHAROLD	70.	14.	--	--	FORSTNER SW 2	L03B01
		SANDERS HOWARD				--	LAS	009259
SB00500914BDCB1	015	RAMISEY ROBIN&CHARLES	77.	26.	7.	7.	FORSTNER SW 2	L07B01
SB00500914BDCB2	015	PENINSULA ENGINEERING	77.	--	--	--	FORSTNER SUB 2	L07B01
		--				--	STERLING PJ 79 TH	02
		--				--	DRY	UNCONSOL
SB00500914BDDA1	016	PENINSULA ENGINEERING	62.	--	2.	--	FORSTNER SW 2	L04B02
		--				--	STERLING PJ 79 TH	04
SB00500914BDDD1	017	PENINSOLA ENGINEERING	62.	--	--	--	FORSTNER SUB 2	L05B02NEAR
		--				--	STERLING PJ 79 TH	07
		--				--	DRY	UNCONSOL
SB00500914CAAB1	029	WEST MIKE&DONNA	61.	18.	--	--	FORSTRER SUB 3	L01B03
SB00500914CAAD1	028	PENINSOLA ENGINEERING	67.	--	3.	--	FORSTNER SW 3	LO3803
		--				--	STERLING PJ 79 TH	06
SB00500914CABB1	002	TYGER CARL	73.	55.	15.	--	FORSTNER SOB 3	L01B04
		--				--	LAS	006323
SB00500914CABB2	002	PENINSOLA ENGINEERING	73.	--	3.	--	FORSTNER SW 2	L01B04
		--				--	STERLING PJ 79 TH	05
SB00500914CABC1	018	PENINSULA ENGINEERLNG	67.	--	--	--	FORSTNER SW 3	L08B04
		--				--	STERLING PJ 19 TH	09
		--				--	DRY	UNCONSOL
SB00500914CABD1	019	PENINSULA ENGINEERING	67.	--	--	--	STERLING PJ 79 TH	09
		--				--	FORSTNER SUB 3	L03B04
		--				--	DRY	UNCONSOL
SB00500914CACB1	020	PENINSULA ENGINEERING	67.	--	--	--	FORSTNER SUB 3	LO7804
		--				--	STERLING PJ 79 TH	10
		--				--	DRY	UNCONSOL

LOCAL WELL NUMBER		OWNER	ALTITUDE OF LAND SURFACE (METERS)	DEPTH OF WELL (METERS)	WATER LEVEL (METERS)	DISCHARGE (GPM)	ASSIGNOR OF OTHER IDENTIFIER	OTHER IDENTIFIER
SB00500914CADC1	021	PENINSULA ENGINEERING	62.	--	2.	--	FORSTNER SW 3	L05B03
		--				--	STERLING PJ 79	TH 11
SB00500914DCBC1	023	FISKE HANK	65.	16.	12.	4.	MTN RIDGE HTS	LO2801
SB00500914DCCA1	024	FISKE HANK	62.	66.	7.	100.	MTN RIDGE HTS	L03B02
SB00500914DDAC1	02s	ALASKA DEC SECTION 14 DUMP SITE	58.	8.45	3.2	--	SECTION 14 LOTS	UNSUBD LOT
		--				--	STERLING PJ 88 BORING	B3
SB00500914DDCA1	026	ALASKA DEC SECTION 14 DUMP SITE	62.	9.3s	7.70	--	SECTION 14 LOTS	UNSUBD LOT
		--				--	STERLING PJ 88 BORING	B1
SB00500914DDDA1	027	ALASKA DEC SECTION 14 DUMP SITE	55.	6.99	1.75	--	SECTION 14 LOTS	UNSUBD LOT
		--				--	STERLING PJ 88 BORING	B4
SB00500914DDDB1	022	ALASKA DEC SECTION 14 DUMP SITE	62.	9.40	4.4	--	SECTION 14 LOTS	UNSUBD LOT
						--	STERLING PJ 88 BORING	B2
SB00500915AABA1	005	LUPTON WILLIAM	76.20	5.2	--	--	--	--
SB00500915AABB1	001	GLEN JIMMY	76.20	19.2	--	--	--	
SB00500915ABBB1	003	YOUNG ROY	76.20	6.1	--	--	--	
SB00500915ABBC1	008	YOUNG RICK&KATHY	73.	20.	12.	10.	MCNUTT R A SUB2	L01B
		HAWKINSON DOUGLAS C				--	LAS	001151C
		--				--	R A MCNUTT SUB2	L01B
SB00500915ACBB1	010	ORTH MARK	83.	35.	15.	15.	VALERIE ACRES 2	LO1
SB00500915ACBC1	011	ORTH LEROY C/O RICE-WHITFORD&ASSOCIAT	83.	2s.	15.	10.	VALERIE ACRES 2	LO2
		RICE-WHITFORD&ASSOCIATES C/O LEROY OR				--	--	
SB00500915ACCB1	012	DOWLING-RICE&ASSOCIATES	83.	--	--	--	VALERIEACRES	TROH
		DESMIDT JOE				--	--	--
SB00500915ACCC1	007	DESMIDT J	63.62	33.	13.72	20.00	VALERIE ACRES	TROH
SB00500915BADA1	013	MERKES LEON N	77.	12.	--	--	MERNAFF SW	L01
SB00500915BBAA1	009	ABURTO LORENZO	80.	19.3	12.	2s.	SCOUT LAKE SUB	L09B01
		--				--	LAS	008218
SB00500915BBAA2	009	STONE KEN	80.	31.0	12.	17.	SCOUT LAKE SUB	L11B01
SB00500915BBAD1	015	GEESLIN JAMES	77.	19.	10.	2s.	SCOUT IAKE SUB	L07B01
SB00500915BBBC1	016	WRIGHT BOB	80.	--	15.	20.	SCOUT LAKE SUB	L01B01
SB00500915BBBD1	017	RATLIFF TERRY	73.	48.	9.	15.	SCOUT LAKE SW	L03B01
SB00500915BBCB1	018	BARR PAUL J	83.	21.	--	--	SCOUT LAKE SUB	L01B02
SB00500915BCBB1	019	SISSON CLIP	73.	26.	14.	20.	NAFF SW	TR01
SB00500915BCCC1	014	VANRYZIN CHRIS	73.	17.	10.	1s.	NAFF SUB	TR04
SB00500915BDAB1	020	MCLANE&ASSOCIATES INC	83.	--	--	--	NAFF SW PT2	L03B01
		--				--	STERLING PJ 84 BORING	04
		--				--	DRY	UNCONSOL
SB00500915BDAD1	021	MCLANE&ASSOCIATES INC	83.	--	--	--	NAFF SUB PT2	L04&05B02
						--	STERLING PJ 84	BORING 01
		--				--	DRY	UNCONSOL
SB00500915BDBD1	022	MCLANE&ASSOCIATES INC	83.	--	--	--	NAFF SW PT2	L07B01
		--				--	STERLING PJ 84	BORING OS
		--				--	DRY	UNCONSOL
SB00500915BDCC1	023	MCLANE&ASSOCIATES INC	83.	--	--	--	NAFF SW PT2	L15B02
						--	STERLING PJ 84	BORING 03
		--				--	DRY	UNCONSOL
SB00500915BDDB1	024	MCLANE&ASSOCIATES WC	83.	--	--	--	NAFF SUB PT2	L09B02
		--				--	STERLING PJ 84	BORING 02
		--				--	DRY	UNCONSOL
SB00500915CBBB1	025	R&M CONSULTANTS	73.	--	--	--	COURSEN SW	TR0A
		--				--	STERLING P.7 77	TH 04
		--				--	DRY	UNCONSOL
SB00500915CBCA1	026	R&M CONSULTANTS	83.	--	--	--	SECTION 15 LOTS	UNSUBD LOT
						--	STERLING PJ 77	TH 03
		--				--	DRY	UNCONSOL
SB00500915CBCC1	027	R&M CONSULTANTS	73.	--	2.	--	SECTION 15 LOTS	UNSUBD LOT
		--				--	STERLING PJ 77	TH 06
SB00500915CBCD1	029	R&M CONSULTANTS	83.	--	--	--	SECTION 15 LOTS	UNSUBD LOT
		--				--	STERLING PJ 77	TH OS
		--				--	DRY	UNCONSOL
SB00500915CBDA1	028	R&M CONSULTANTS	83.	--	5.	--	SECTION 15 LOTS	ONSWD LOT
		--				--	STERLING PJ 77	TH 01
SB00500915CBDC1	030	R&M CONSULTANTS	83.	--	3.8	--	SECTION 15 LOTS	UNSUBD LOT
		--				--	STERLING PJ 77	TH 02
SB00500915CCAA1	038	STREHLOW LEONARD F	83.	46.	24.	50.	SECTION 15 LOTS	UNSUBD LOT

LOCAL WELL NUMBER	OWNER	ALTITUDE OF LAND SURFACE (METERS)	DEPTH OF WELL (METERS)	WATER LEVEL (METERS)	DISCHARGE (GPM)	ASSIGNOR OF OTHER IDENTIFIER	OTHER IDENTIFIER
SB00500915CCAA1 038	--	83.	46.	24.	--	LAS	000614
SB00500915CCCC1 031	MCLANE&ASSOCIATES INC	77.	--	4.	--	WOODFIN SUB	L10
	--				--	STERLING PJ 83	BORING 02
SB00500915CCDC1 032	MCLANE&ASSOCIATES INC	83.	--	--	--	WOODFIN SUB	L13
	--				--	STERLING PJ 83	BORING 01
	--				i -	DRY	UNCONSOL
SB00500915CCDD1 033	FNMA C/O RICE-WHITFORD&ASSOCIATES	80.	33.	21.4	--	WOODFIN SUB	L14
	RICE-WHITFORD ASSOCIATES,FNMA				--	--	--
SB00500915CDAD1 004	GORDON ARTHUR	76.20	4s.	--	--	--	--
SB00500915CDDA1 039	--	--	4s.	27.97	--	--	--
SB00500915CDDB1 002	BRADFORD RALPH	76.20	44.	--	--	--	--
SB00500915DBAC1 037	NORTHLAND MORTGAGE	83.	29.	--	5.	CUSTER SUB	L0A4
SB00500915DBDA1 034	SPURGEON RON	83.	27.	18.	8.	EAGLE SCOUT 2	L02
	CARROLL RHEBA&DELTON				--	--	--
SB00500915DBDB1 035	EVANS JAMES	83.	29.	--	--	EAGLE SCOUT 2	L01
SB00500915DBDC1 036	SPURGEON RON	83.	29.	20.	20.	EAGLE SCOUT 2	L04
	HODDOX BOBBY				--	--	--
SB00500915DBDC2 036	HADDOCK ROBERT S	83.	51.	36.	10.	EAGLE SCOUT 2	L04
	--				--	EAGLE SCOUT 2	WELL 2 L04
SB00500915DCDB1 006	TRINITY CN DRLNG CO	83.82	--	--	--	--	--

Appendix B. Inorganic constituents exceeding the maximum contaminant level (MCL) in the National Primary Drinking Water Regulations'

ARSENIC MCL = 0.05 mg/L				CHROMIUM MCL = 0.05 mg/L			
Section & Map No.[2]		Date	Value (mg/L)	Section & Map No.[2]		Date	Value (mg/L)
6	I-8	05/15/85	0.056	1	1-5*	12/15/85	0.052
1	1-16'	08/30/90	0.11	1	1-16"	08/30/90	120.
1	2-I 2'	09/05/90	0.124	1	2-4'	12/16/85	0.238
1	3-6'	09/05/90	0.138	1	2-12"	09/05/90	1.35
7	3-9	06/20/86	0.065	1	2-25'	12/16/85	0.066
7	3-28	06/19/86	0.073	1	3-6"	09/05/90	1.13

LEAD MCL = 0.05 ma/L			
Section & Map No.[2]		Date	Value (mg/L)
1	1-16'	08/30/90	0.066
1	2-6'	01/15/80	0.88
1	2-12'	09/05/90	0.21
1	3-6'	09/05/90	0.28
1	3-16'	09/26/83	0.074

[1] Regulated for health concerns, Code of Federal Regulations, Title 40, Part 141, 1990.

[2] Map numbers with asterisks refer to wells at the Sterling Special Waste Site, NE% of NW¼ of Section 1, T5N R9W Seward Meridian.

Appendix B. (continued) Inorganic constituents exceeding the maximum contaminant level (MCL) in the National Primary Drinking Water Regulations'

BARIUM MCL = 1.0 mg/L			CADMIUM MCL = 0.01 mg/L		
Section & Map No.[2]	Date	Value (mg/L)	Section & Map No.[2]	Date	Value (mg/L)
1 2-12'	09/05/90	4.0	1 2-6"	01/15/80	0.05
1 3-6.	09/05/90	2.3	1 2-26 *	07/07/87	0.025

MERCURY MCL = 0.002 mg/L			NITRATE MCL = 10 mg/L		
Section & Map No.[2]	Date	Value (mg/L)	Section & Map No.[2]	Date	Value (mg/L)
1 1-I	11/03/83	0.0021	1 I-16'	08/30/90	12
1 3-6'	09/05/90	0.0022	1 3-6'	09/05/90	15

[1] Regulated for health concerns, Code of Federal Regulations, Title 40, Part 141, 1990.

[2] Map numbers with asterisks refer to wells at the Sterling Special Waste Site, NE% of NW¼ of Section 1, T5N R9W Seward Meridian.

Appendix C. Inorganic constituents exceeding the maximum contaminant levels (MCL) in the National Secondary Drinking Water Regulations'

IRON MCL = 0.3 mg/L						MANGANESE MCL = 0.05 mg/L					
Section/ Map No.[2]		Date	Value (mg/L)	Mean value (mg/L)	No. of analyses	Section/ Map No.[2]		Date	Value (mg/L)	Mean value (mg/L)	No. of analyses
1	1-2	-	-	1.5	3	1	1-2	-	-	0.25	3
2	1-3	05/15/85	0.8	-	1	2	1-5	-	-	0.13	4
2	1-5	-	-	0.5	3	6	1-8	-	-	1.1	5
6	1-8	-	-	0.6	5	12	1-8	-	-	0.12	2
6	1-9	-	-	0.5	4	1	1-9*	07/22/82	0.21	-	1
1	1-9*	07/22/82	2.6	-	1	12	1-13	-	-	0.08	2
12	1-13	-	-	1.1	2	2	1-15	-	-	0.10	2
2	1-15	09/20/85	0.34	-	1	2	1-16	-	-	0.20	2
2	1-16	-	-	0.5	2	7	1-17	09/20/85	0.10	-	1
15	1-19	-	-	10.9	4	15	1-19	-	-	0.20	5
1	1-21	-	-	7.9	2	1	1-21	-	-	0.17	2
12	1-22	05/14/85	0.4	-	1	12	1-21	-	-	0.14	2
1	1-22	-	-	1.6	4	12	1-22	-	-	0.14	3
1	1-23	-	-	1.2	3	1	1-23	-	-	0.12	3
7	1-35	09/20/85	0.66	-	1	7	1-34	-	-	0.21	2
1	2-6*	-	-	4.2	26	7	1-35	09/20/85	0.08	-	1
1	2-13*	-	-	4.8	15	7	1-36	05/13/86	0.15	-	1
1	2-17	05/12/80	0.39	-	1	1	2-6*	-	-	0.10	23
1	3-16*	-	-	3.4	21	7	3-9	05/13/86	0.07	-	1
7	3-28	-	-	1.8	3	1	3-16*	-	-	0.19	19
1	5-6*	-	-	1.3	3	7	3-28	-	-	3.3	3
						1	5-6*	-	-	0.52	4

[1] Excluding pH (see text, p. 5). Inorganics regulated for aesthetic concerns, Code of Federal Regulations, Title 40, Part 143, 1990.

[2] Map numbers with asterisks refer to wells at the Sterling Special Waste Site, NE% of NW% of Section 1, T5N R9W Seward Meridian.

Appendix C. (continued) Inorganic constituents exceeding the maximum contaminant levels (MCL) in the National Secondary Drinking Water Regulations'

ZINC MCL = 5.0 mg/L				CHLORIDE MCL = 250 mg/L			
Section & Map No.[2]		Date	Value (mg/L)	Section & Map No.[2]		Date	Value (mg/L)
1	2-6'	01/1 5/80	28	1	I-11'	09/05/90	298
1	2-26'	06/23/87	6.4	1	2-26'	09/05/90	481
1	3-16*2	04/11/83	8.8	7	3-28	10/11/85	600
1	3-16*	09/26/83	8.6				
1	5-6*	12/17/85	11.9				

COPPER MCL = 1.0 mg/L			
Section & Map No.[2]		Date	Value (mg/L)
11	1-1	1 O/l 8/88	4.2

[1] Excluding pH (see text, p. 5). Inorganics regulated for aesthetic concerns, Code of Federal Regulations, Title 40, Part 143, 1990.

[2] Map numbers with asterisks refer to wells at the Sterling Special Waste Site, NE% of NW% of Section 1, T5N R9W Seward Meridian.

Appendix D. Regulated volatile organic compounds exceeding the maximum contaminant level (MCL) in the National Primary Drinking Water Regulations.[1]

BENZENE MCL = 0.005 mg/L					
Section	Map No.	Date	Value or Mean Value (mg/L)	Range	No. of analyses
17	1-17	11/11/88 08/18/89	0.014	0.005- 0.022	2
7	l-27	04/11/89	0.012		1
7	l-38	04/11/89 10/20/89	0.014	0.012- 0.016	2
7	1-39	04/22/89 03/13/90 10/14/90	6.67	3.02- 8.60	3
7	2-39	04/22/89 03/13/90 10/20/90	0.91	0.62- 1.10	3
7	3-27	04/11/89 10/20/89	1.50	1.19- 1.81	2
7	6-39	03/11/90 10/13/90	0.021	1.010- 0.033	2
7	7-27	10/20/90	3.96		1
7	7-39	03/15/90	4.95	4.20- 5.71	2
7	8-27	10/20/89	5.33	.	1

[1] Regulated for health concerns, Code of Federal Regulations, Title 40, Part 141, 1990.