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PRESENTATION OF DATA FROM THE GAMBELL, ALASKA WELL PROJECT

by

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in cooperation with
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Department of Environmental Conservation,
Village Safe Water Program,
City of Gambell, and
Jim Munter. Bristol Environmental Services

September 1994

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PRESENTATION OF DATA FROM THE GAMBELL WATER PROJECT. TWO WELLS NEAR SEVUOKUK MOUNTAIN, ST LAWRENCE ISLAND, NEAR GAMBELL, ALASKA

August 1994

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PRESENTATION OF DATA FROM THE GAMBELL, ALASKA WELL PROJECT

By

Roy R. Ireland

ABSTRACT

Planned improvements to the City of Gambell infrastructure included construction of a piped water system and a sewer system, and also an expansion of the water supply if the water resources were available. The main restriction on the expansion of the water supply was ensuring that the aquifer was not degraded by either saltwater intrusion into the body of the aquifer or by advancement of permafrost on the margins of the aquifer. Instances of increased salinity had been noted in the past, but careful placement of new production wells might allow future expansion without any degradation. This report comprises the data gathering stage of the project, with interpretation.

INTRODUCTION

This project was initiated by Chuck Eggener Consulting Engineers and the Department of Environmental Conservation (DEC), Village Safe Water Program who contracted with the Alaska Hydrologic Survey (AHS) of the Alaska Department of Natural Resources, Division of Mining and Water Management, to determine the limits of a small aquifer on St Lawrence Island near the village of Gambell (fig. 1) in order to expand the water supply to the city.

The aquifer was already being utilized but it was uncertain as to whether further development could take place without damaging the aquifer, because increased salinity levels had been observed during prior usage. The location of any future wells could be a significant factor in utilizing the resource without further degradation. Earlier surficial mapping and test drilling had defined the contours and limits of the aquifer along the front of a steep bluff and leading directly across a gravel bar to the ocean (fig. 2). Both the lateral and lower limits of the aquifer were defined by the test drilling and were found to be controlled by permafrost within the otherwise permeable beach gravels of the bar on which the city is located. Flow within the aquifer was determined to be predominantly to the north, into the ocean.

Two new monitoring wells were installed to allow recording of aquifer response to continued high volume pumping at the existing production well. The location of these wells was chosen so as to reveal as much information as possible, based on information gained from the mapping of the aquifer (fig. 2).

This report deals primarily with the results of observations at the test wells and includes a review of the observations taken from the pumping well at the pumphouse. No extensive hydrologic interpretation of the data is made; however, interpretations of the graphs and tables are made to facilitate understanding of the data. Some cautions are also expressed due to the severity of the environment and the anomalies indicated by the data.

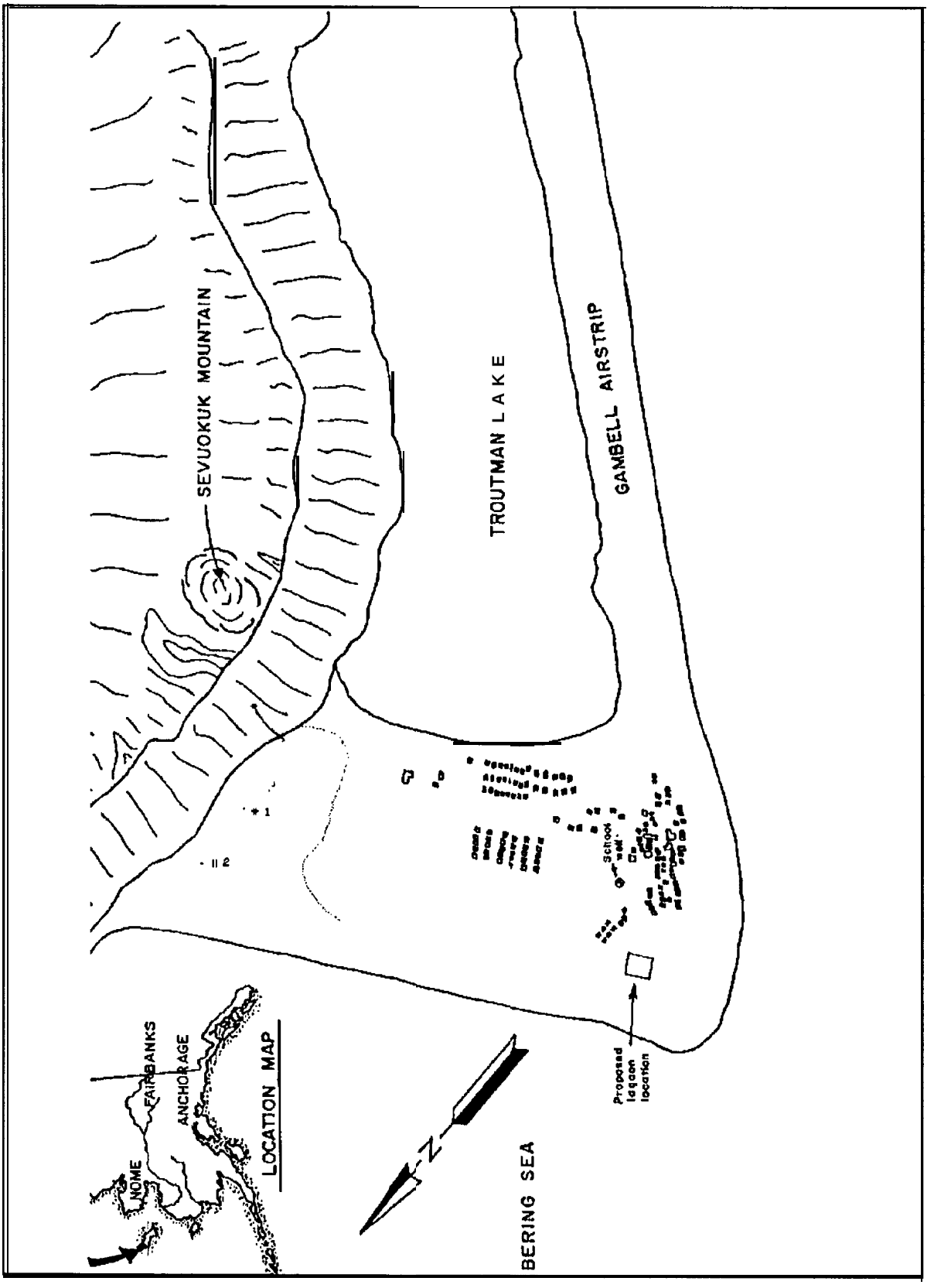
SEVUOKUK MOUNTAIN
TROUTMAN LAKE
GAMBELL AIRSTRIP
BERING SEA
LOCATION MAP
NOME
FAIRBANKS
ANCHORAGE
Proposed lagoon location
School
N

Figure 1

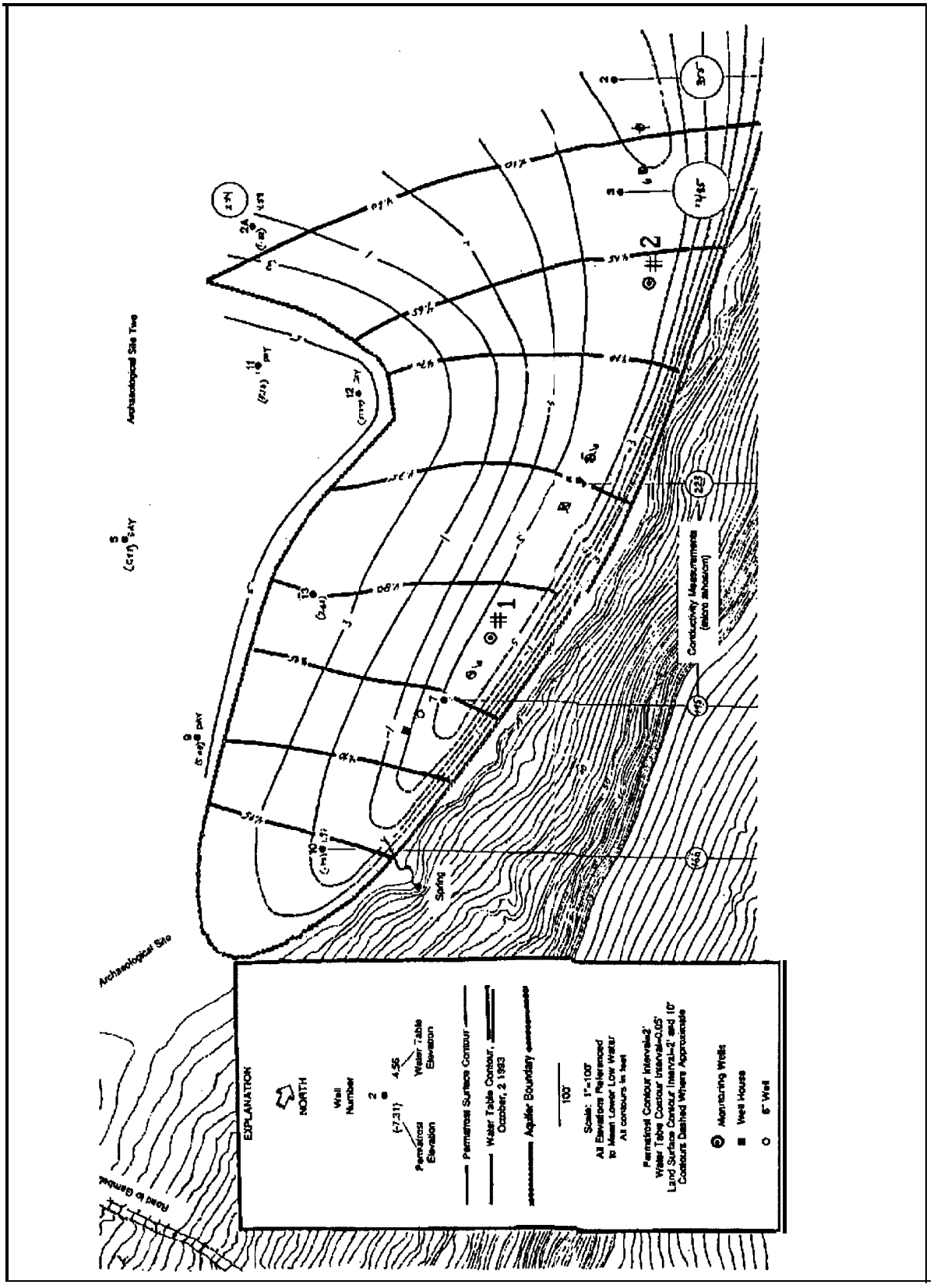
EXPLANATION
NORTH
Well Number
Permafrost Elevation
Water Table Elevation
Permafrost Surface Contour
Water Table Contour, October, 2 1983
Aquifer Boundary
100'
Scale: 1"=100'
All Elevations Referenced to Mean Lower Low Water
All contours in feet
Permafrost Contour Interval=2'
Water Table Contour Interval=0.05'
Land Surface Contour Interval=2' and 10'
Contours Dashed Where Approximate
Monitoring Wells
Well House
6" Well
Archaeological Site Two
Archaeological Site
Spring
Conductivity Measurements (micro siemens/cm)
#1
#2
Road to Gambell

Figure 2

GEOLOGIC SETTING

The City of Gambell (fig. 1) is located near the tip of a gravel spit on the northwest of St. Lawrence Island in the northern Bering Sea. To the south of the community, Troutman Lake is separated from the Bering Sea by a narrow gravel bar to the west and a much broader gravel bar (up to 4000 ft) to the north, on which the community is located. The lake, with a level of about 2 ft above mean low low water (MLLW), is isolated from the aquifer in this northern portion of the spit by permafrost (discontinuous in the area at depths from 7- 10 ft, RZA, Inc, 1985) in the northern banks of the lake and the gravel bar beyond, over a distance of about 900 ft. Some drainage into the aquifer (Figure 2), under study in this report, may take place (Waller, 1959). Sevuokuk Mountain, rising to an elevation of 614 ft above MLLW forms the eastern boundary of both the aquifer and the lake.

Two larger springs, that flowed from the steep bluffs of Sevuokuk Mountain and disappear into the gravel about 1100 ft and 1600 ft respectively from the northern edge of the lake, formed a major source of water to the aquifer. The aquifer also received water from runoff from the mountain and bluffs via a series of minor springs and seeps, and from surface infiltration from an annual precipitation of about 16 inches (Phil Johnson Engineering, 1972). No subsurface entry of fresh water, other than possible flow from Troutman Lake, has been found. If any flow from the lake occurred, it was minimal since the aquifer was fresh while the lake was often brackish. Water in the aquifer flowed to the north and drained into the Bering Sea, about 3200 ft from the spring. Aufeis that formed on the springs during the extended “winter” (late December through early June in terms of aquifer response) indicated some continued flow into the aquifer, at least during the early months.

Gravel beds on the bar were found to be highly permeable. They are comprised of varying amounts of sands and assorted beach gravels with minor amounts of silts and clays. Ice-bound permafrost pervaded the area of the aquifer lessening towards the Bering Sea (Munter, 1994). Storm surges and blown spray contribute saline materials to the aquifer, as would any inflow from Troutman Lake which is generally brackish due to the same storm surges. Any reduction in head in the aquifer would allow saline water to enter into the aquifer from the sea to the north.

INSTRUMENTATION

Chuck Eggener Consulting Engineers installed two monitoring wells (fig. 2, Gambell #1 and Gambell #2) at sites deemed to be critical to the study. Gambell #2 (fig 5) was 800 ft from the pumphouse and Gambell #1 (fig 6) was 200 ft from the pumphouse. The pumphouse is about 700 ft from the upper spring and about 300 ft from the lower spring. It is about 900 ft from the southern edge of the aquifer, which is inferred to extend somewhat to the south of the upper spring, the exact distance being undetermined because of archeological digs in the area. Instrument shelters were provided by Chuck Eggener Consulting Engineers (fig. 3). They consisted of modified 55 gal drums set over the above ground portions of the test wells. Some radiant heating and cooling affects were anticipated because of the drums. Instrumentation was subsequently installed in the wells by AHS personnel (fig. 4).

Instrumentation Northwest 5 psi pressure transducers were selected to measure the level of the water within the well column. Pressure transducers sense the depth of water above the transducer and can be used to determine the depth to water in a well. The 5 psi model has a range of 10 ft, which is greater than any fluctuations expected in any of the wells at the site. The stainless steel transducer assembly was suspended by its data cable within a few inches from the bottom of the well. The depth to water from the top of casing (TOC) and the depth of water over the transducer (DOS) were recorded and the cable was marked and measured as a check on the location of the transducer.

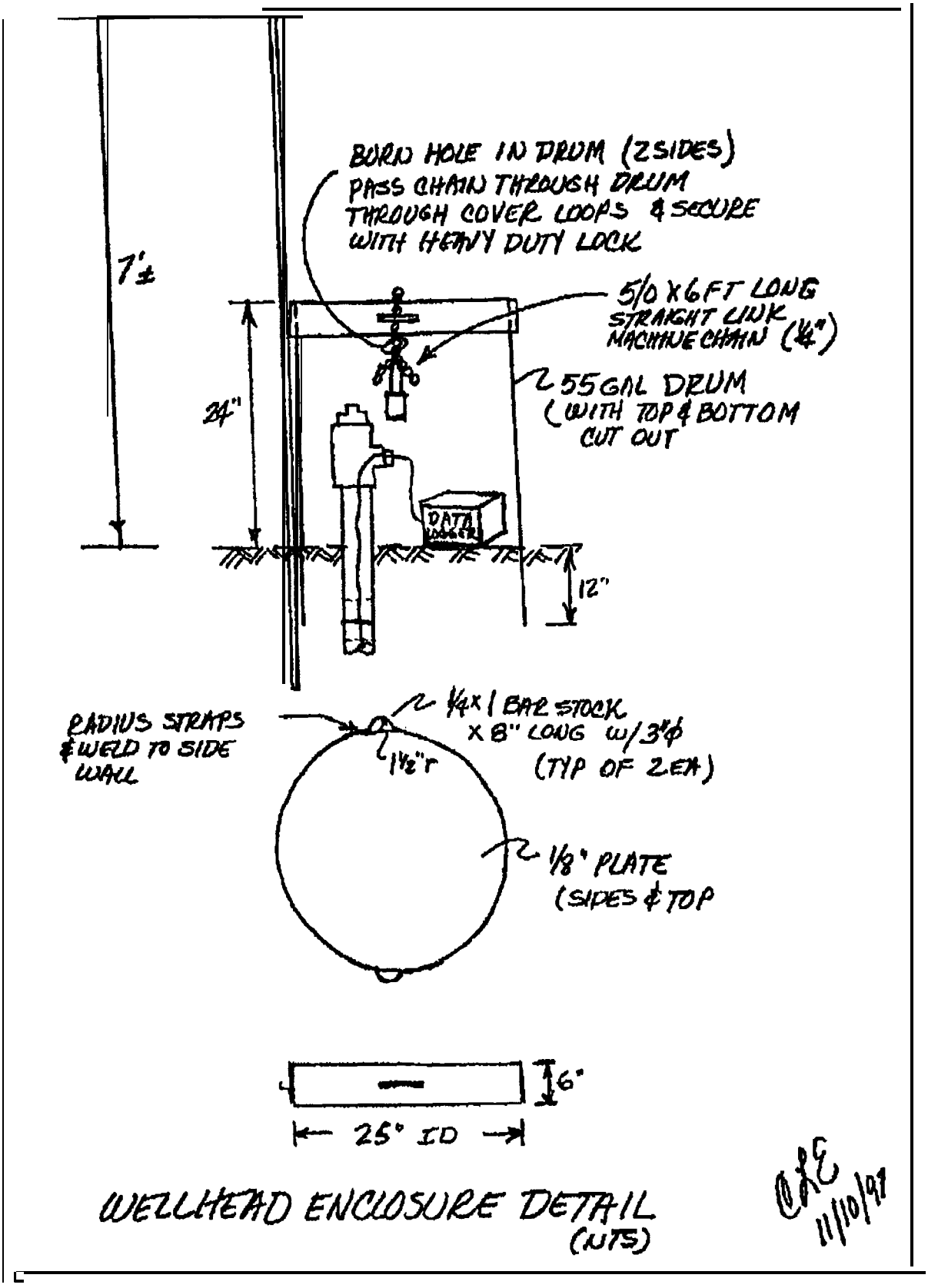
BURN HOLE IN DRUM (2 SIDES)
PASS CHAIN THROUGH DRUM
THROUGH COVER LOOPS & SECURE
WITH HEAVY DUTY LOCK
7'±
5/0 X 6 FT LONG
STRAIGHT LINK
MACHINE CHAIN (¼")
55 GAL DRUM
(WITH TOP & BOTTOM
CUT OUT
34"
DATA
12"
¼ x 1 BAR STOCK
X 8" LONG w/ 3" ϕ
(TYP OF 2 EA)
RADIUS STRAPS
& WELD TO SIDE
WALL
1½" r
⅛" PLATE
(SIDES & TOP
6"
25" ID
WELLHEAD ENCLOSURE DETAIL
(NTS)
11/10/97

Figure 3

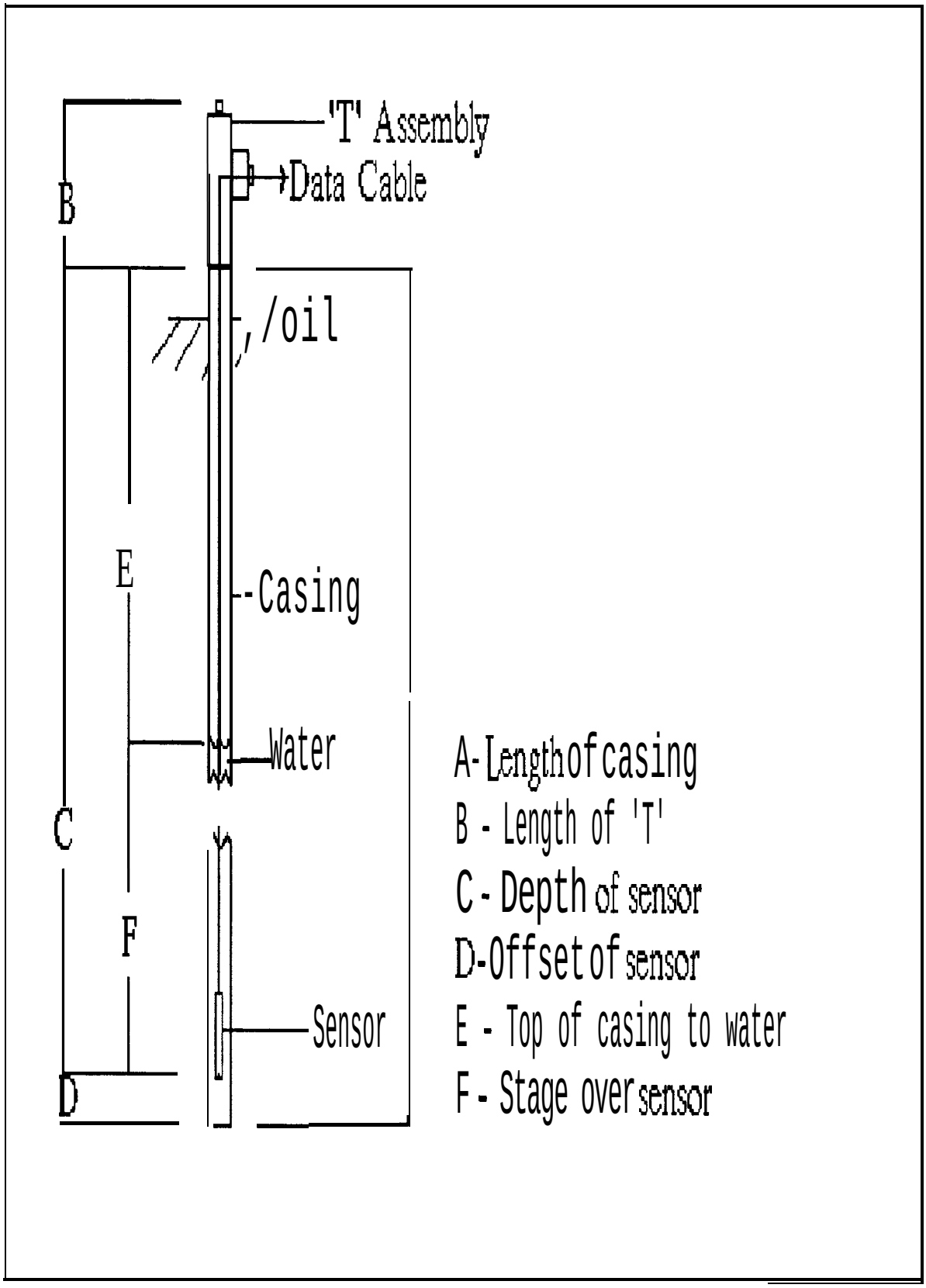
'T' Assembly
Data Cable
B
oil
E
Casing
Water
C
F
Sensor
D
A- Length of casing
B - Length of 'T'
C - Depth of sensor
D- Offset of sensor
E - Top of casing to water
F - Stage over sensor

Figure 4

STATE OF ALASKA
DEPARTMENT OF **NATURAL RESOURCES**
DIVISION OF WATER
WATER **WELL** RECORD

LOCATION OF WELL NORTHEAST OF GAMBELL, GAMBELL 2

BOROUGH	SUBDIVISION	LOT	BLOCK	SECTION QTRS	SECTION	TOWNSHIP ☐N ☐S	RANGE ☐E ☐W	MERIDIAN

LOCATION/SKETCH:

WELL OWNER: USW

DEPTHS **MEASURED FROM:** ☒ casing top ☐ ground surface

BOREHOLE DATA:

Material Type and Color	Depth From	Depth To
0.5" - 2.0" GRAVEL (CLEAN BEACH GRAVEL)	0.0	13.6

WELL DEPTH:
Depth of hole: _____ ft
Depth of casing: 13.6 ft

DATE OF COMPLETION 1 5 94

DEPTH TO **STATIC WATER LEVEL:**
6.5 ft below ☒ top of casing ☐ ground surface
Date: 1 6 94

METHOD OF **DRILLING:** ☐ air rotary ☐ cable tool
☒ other DRIVEN W/SAND POINT

USE OF **WELL:** ☐ domestic ☐ irrigation ☒ monitor
☐ public supply ☐ other _____

CASING STICK-UP: _____ ft. Diam: ____ in. to ____ ft
Casing type: _____ in. to ____ ft

WELL INTAKE **OPENING TYPE:** ☐ open end ☒ screened
☐ perforated ☐ open ☐

Depths of openings; to 10.6 TO 6 ft

SCREEN TYPE _____ Diam: _____ in.
Slot/Mesh Size: _____ Length: _____ ft

GRAVEL PACK **TYPE:** NATURAL
Volume used: _____ Depth to top: _____

GROUT TYPE: NONE Volume: _____
Depth: from _____ ft to _____ ft

DEVELOPMENT METHOD: AGGRESSIVE SWAB 4
Duration: 2 MIN

PUMPING LEVEL AND YIELD:
a f t ft e r _____ hrs pumping _____ gpm

PUMP INTAKE DEPTH: _____ ft Horsepower:
WELL DISINFECTED **UPON COMPLETION?** ☐ YES ☐ NO

CONTRACTOR **INFORMATION:**
DNR/DSW
Registered Business Name
Signature of Authorized Respresentative
6/10/94
Date

REMARKS:

PLEASE MAIL WHITE COPY OF LOG TO:
DNR/DIVISION OF WATER
PO BOX 772116
EAGLE RIVER AK 99977.2116

Figure 5

STATE OF **ALASKA**
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER
WATER WELL **RECORD**

)CATION OF WELL NORTHEAST OF GAMBELL, GAMBELL I

BOROUGH	SUBDIVISION	LOT	BLOCK	SECTION QTRS	SECTION	TOWNSHIP ☐N ☐S	RANGE ☐E ☐W	MERIDIAN

LOCATION/SKETCH: WELL HOUSE ■ 6" WELL
→N ○← 175' →⊗
#?

WELL OWNER: VSW

DEPTHS MEASURED FROM: ☒ casing top ☐ ground surface

BOREHOLE DATA:

Material Type and Color	Depth From	Depth To
0.5" - 2.0" GRAVEL, (CLEAN BEACH GRAVELS)	0.0	14.5
PERMAFROST (?)	14.5	

WELL DEPTH:
Depth of hole: ______ ft
Depth of casing: 14.5 ft

DATE OF COMPLETION 1 / 5 / 94

DEPTH TO STATIC WATER **LEVEL:**
☐ 10.7 ft below ☒ top of casing surface
Date: 1 / 5 / 94

METHOD OF DRILLING: ☐ air rotary ☐ cable tool
☒ other DRIVEN W/ SAND POINT

USE OF WELL: ☐ domestic ☐ irrigation ☒ monitor
☐ public supply ☐ other ______

CASING STICK-UP: ______ ft. Diam: ____ in. to ____ ft
Casing type: ______ ____ in. to ____ ft

WELL INTAKE OPENING TYPE: ☐ open end ☒ screened
☐ perforated ☐ open hole
Depths of openings: 11.5 to 14.5 ft

SCREEN TYPE: ______ Diam: ______ in.
Slot/Mesh Size: ______ Length: ______ ft

GRAVEL PACK TYPE: NATURAL
Volume used: ______ Depth to top: ______

GROUT TYPE: NONE Volume: ______
Depth: from ______ ft to ______ ft

DEVELOPMENT METHOD: PERISTALTIC HAND PUMP
Duration: 1-2 MIN

PUMPING LEVEL AND YIELD:
______ ft after ______ hrs pumping ______ gpm

PUMP INTAKE DEPTH: ______ ft Horsepower: ______
WELL DISINFECTED UPON COMPLETION? ☐ YES ☐ NO

CONTRACTOR **INFORMATION:**

DNR / DOW
Registered Business Name

Stan Carrick 1/10/94
Signature of Authorized Respresentative Date

REMARKS:

PLEASE MAIL WHITE COPY OF LOG TO:
DNR/DIVISION OF WATER
PO BOX 772116
EAGLE RIVER AK 99577-2116

Figure 6

Great Lakes Instruments 3625e2t electrodeless probes were selected to monitor the conductivity of the water contained within each well. Monitoring the relation of conductivity to temperature would allow for recallibration, if required. The conductivity probe was set to read specific conductance, loosely referred to as "conductivity" both here and in the instrumentation literature, when exposed to temperatures of 15 °C. A correction factor of 1.13 was included to correct to (0 ± .3) °C. Because the probe was an electrodeless device, temperature dependant metal/solution interface problems were avoided. A correction factor obtained from regression analysis with laboratory samples was also applied to the conductivity data to correct for initial probe conditions, standard procedure for conductivity studies. Post calibration verified results and correlated with precalibration tests.

Dryden Instrumentation temperature probes were selected to monitor both air and water temperature. In each case, a temperature probe and a conductivity probe were attached as close to the pressure transducer as possible. This allowed monitoring of water conditions at the bottom of the well and, by inference, water that flowed through the aquifer. Air temperature was monitored to provide environmental data for the location of each of the test wells. This monitoring was to show if the wells were similarly influenced by weather conditions in the local environment. The temperature probes are stable and regulated, and so required no recalibration.

Omnidata 900 data loggers were chosen to monitor and record water conditions in the wells. These instruments allowed timed scanning of the probes and transducers, timed switching of external power supplies to the transducers, and extended data recording capabilities. Multiple inputs and power supply regulation were both handled by the logger.

DATA COLLECTION

The data loggers were set to scan the probes and transducers, and to record the data observed, at three hour intervals. The data storage modules had excess capacity, but were serviced as frequently as possible to allow early detection of potential data recording problems. During each of the field trips to Gambell by DEC personnel, the data storage modules on the recorders were retrieved and replaced with a fresh modules. The retrieved modules were returned to the AHS to be digitally read and prepared for reuse. This process required some computer manipulation of the raw data to get it into suitable formats; however, the values in the data were not modified. The regression correction for conductivity was only applied after post calibration had taken place.

Four days from the end of the data recording stage of the project, the sensor in the monitoring well Gambell #2 froze and started giving invalid data (later edited out from the dataset). The aberrant data was an indication of damage to the pressure transducer. This sensor was not removed in the final field trip because it was frozen to the bottom of the well. Electronic failure prevented data from being recovered during the final two months from the other observation well, Gambell #1 . This was the only data loss for either recorder during the period of observation.

The probes and transducer from Gambell #1 were recovered and underwent recalibration. Both the pressure transducer and the two temperature probes returned correct readings during the calibration procedure while the conductivity probe showed a small offset, with the magnitude of change being insignificant relative to the numbers being observed in the field. This drift was corrected by linear interpolation, but had no overall significance (app. A, Table 1) in terms of shape or placement of the curve. The conductivity data showed that conductivity varied independently of the temperature at the probe, an indication that the temperature compensation within the conductivity probe functioned correctly.

The cables were measured and did not show any evidence of stretching during the monitoring period. This was as expected due to the low mass of the combined probes and transducer, and the inherent strength of the combined cables. No correction in stage data was required. The well

casings and static water levels in the wells had been carefully measured at installation and again at the cessation of data gathering. An error of less than .01 ft between the two measurements was determined (app. A, Table 2), which was insignificant relative to the range in stage observed (-0.8 ft through 5.2 ft). All stage data was then back-calculated to absolute stage (water surface elevation) relative to MLLW.

Since the probes and transducer were not recovered from the Gambell #2 well, the same manipulation of the data as with Gambell #1 well data took place. This was justified by the equipment having been identical in both instances, and the respective environments also having been very similar. Perusal of the graphs and data also indicated that using the same conversions was a valid technique.

Pumping data from the pumphouse was provided for the first three months of the monitoring period and for the 14 months before, by the City of Gambell (app. B, a listing of manually entered data from the production wells as supplied to the Division of Water, by Chuck Eggener Consulting Engineers). The irregular nature of this data required some interpolation for the numerous missing observations - often data was read on alternate days and sometimes only partial data was recorded. These are indicated in app. B. Steady trends that continued over time facilitated this interpolation.

Both pumphouse data and observation well data (app. C & D, accumulated data from each monitoring well in two column format) were converted to standard units of measurement and were concatenated into larger databases as the data was retrieved. Conductivity data also were corrected using linear regression. The three datasets were subsequently were combined and the daily averages for all data were calculated. This provided a smaller, comprehensive dataset for more rapid perusal and use of the data (app. E). Comparison of results with the original databases showed only very minor changes between the average data and the recorded data. This indicated that the smaller dataset (app. E) was valid, and could be used to generate interpretative graphs (app. F). In the graphs, data from the production well were smoothed using a 24 observation moving average, due to the erratic nature of the observations. This allowed trends to be discerned from the data by eliminating any short term variability which might have depended as much on the observer as on the parameter being observed.

SUMMARY

Aquifer water temperature dropped to below 0.0 °C, with freezing at the perimeter. There was evidence, in the freezing of the pressure transducer, that the permafrost underlaying the aquifer had risen towards the surface, and had possibly reduced the size of the aquifer as overall temperature dropped. This freezing occurred in early August, and could not have been affected by heat loss to the well which was exposed to warm surface temperatures. Water elevation and temperature were somewhat inversely related, but the response time for temperature was retarded by the thermal inertia of the aquifer. Pumping during periods of low water elevation would reduce the thermal reservoir within the aquifer. Gambell #1 had a higher year round water temperature than Gambell #2 because it was further from the source of recharge water with higher temperatures and had a longer period of time to dissipate heat to the environment.

Water surface elevation rose and dropped rapidly above the 1 ft above MLLW, but more slowly below this level, and eventually reached levels near 1 ft below MLLW (-0.85 ft). Water surface elevation in the aquifer, even at the most remote site, dropped below MLLW, and created a gradient conducive to infiltration of saltwater. Storm surges and other high tide events could enlarge any intrusion because of higher saltwater elevations. Evidence of high tidal events (app F, Graph 9) were observed at Gambell #2, in the paired minor peaks on the conductivity graph occurring during the periods March 3 -17, 1994 and May 27 - June 7, 1994. These peaks were more distinct at Gambell #2 than at Gambell #1 , and were not observed at the production well. Water elevation was only dependant on rates of pumping during the seasonal lows, which occurred during the

period from late December through early June. The large periodic differences in water surface elevations, which repeat annually, allowed two seasons to be determined: a recharge season when the water surface elevation was high; and a non-recharge "winter" season when the water surface elevation was low. The aquifer responded rapidly to the influx of fresh water during the recharge season (app F, Graph 14), and showed rapid rises early in the recharge season and subsequent falls in water elevation as the season ended, without much relation to rates of pumping. During the period of non-recharge, the aquifer showed an ability to maintain itself, only slowly falling to below MLLW, especially when stressed by high rates of pumping. This stability may have been due to the steady back pressure of the saltwater from the ocean. There was an indication of a steady state water elevation of about 3 inches (+ 0.25 ft) above MLLW during seasonal lows. The production well was most affected by pumping and Gambell #2 the least.

Aquifer conductivity rose and dropped sharply, and showed an anomalous recovery. Conductivity appeared to be cyclic, with lows occurring at the times of high water surface elevation within the aquifer, and to have similar magnitude at corresponding times between cycles (app f. Graph 1). Water elevation and conductivity were inversely related, but were not proportional to each other, due to storage within the aquifer. Conductivity appeared to be unrelated to temperature at the levels of conductivity observed. Gambell #2 was most affected by increasing conductivity and the production well the least. Two anomalies occurred; firstly, Gambell #1 had a higher conductivity than Gambell #2 for the period May 7 - 23, 1994, and second, when conductivity briefly rose as water surface elevation rose at Gambell #2 during the period May 9 - 29, 1994, a reversal of the regular inverse relationship was seen both here and at the other wells.

CONCLUSIONS

High rates of extraction of water from the production well affected the conductivity of the water at the sites of the monitoring wells (and hence the aquifer in general), especially during periods of low water elevation in the aquifer. Continued high rates of extraction could degrade the aquifer by allowing incursion of strongly saline water into the body of the aquifer and also by expansion of the permafrost boundaries thereby reducing the size of the aquifer. The thermal stability of the aquifer was uncertain due to the short monitoring period, but the volume of water removed during periods of low water elevation could reduce the available reservoir of thermal energy. The volume of fresh recharge water may not have been sufficient to rapidly or completely flush the aquifer of saltwater once a certain level of salinity has been achieved, nor may it have had sufficient heat content to replace the heat lost to pumping and to the latent heat of freezing if ice had to be melted to restore the size of the aquifer. While this level had apparently not been reached, the anomalous drop in conductivity at Gambell #2 indicated that this level may not have been far removed. The freezing of the transducer and probes to the bottom of the well in early August implied a negative impact on the aquifer, and indicated a delayed restoration of the thermal environment. It would be prudent to limit pumping to less than 16 gpm (23,000 gallons per day) during period of low water elevation from late December to late May. It appeared that rates of 21 gpm (30,000 gallons per day) might be sustainable during periods of high surface water elevation, but insufficient data exists to confirm this.

ACKNOWLEDGEMENTS

Chuck Eggener Consulting Engineers - Chuck Eggener and others.
DEC, Village Safe Water Program - Steve Eng.
Bristol Environmental - James Munter.
Alaska Hydrologic Survey.

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Appendix A - Reconciliation Tables

Conductivity standardization

Standards	Precal. readings	Postcal. readings	Normalized data (mean)	Standardized data (formula #1)
1415.0	**1229.8**	**1240.0**	**1234.9**	**1407.2**
750.0	**665.7**	**680.2**	**673.0**	**767.5**
362.0	**322.9**	**302.0**	**312.5**	**357.1**
147.0	**131.7**	**115.5**	**123.6**	**142.2**

Formula : (std data) = 1.138301342(normal data) + 1.48387108
(y = 1.138301342 x + 1.48387108)

Interpretation: A precalibration value of 1229.8 and a post calibration value of 1240.0 average out to a value of 1234.9 (normalized). When standardized using the formula, it becomes **1407.2**

Procedure: To Normalize data between pre and post calibrations, simply average the pre and post calibration readings to get a new reading that correlates to the standard. Then, to standardize data to **"in lab"** standards (from normalized field data), apply the above formula.

Regression Output:

Constant	1.48387108
Std Err of Y Est	14.3956356
R Squared	0.99955424
No. of Observations	**4**
Degrees of Freedom	**2**
X Coefficient(s)	1.138301342
Std Err of Coef.	0.016997617

Gambell Wells

Depth of sensor reconciliation: observed data versus field measurements

		Gambell #1	Gambell #2
Top of casing (TOC) to water	01/06/94	10.7 ft	6.5 ft
Stage (DP900)	01/06/94	3.6 ft	6.8 ft
TOC to Sensor (sum of above)		14.3 ft	13.3 ft
Length of 'T' assembly		1.42 ft	1.42 ft
Top of 'T' to sensor		15.72 ft	14.72 ft

Verification measurements	08/11/94		
Length of cable, top of casing to sensor		14.21 ft	(frozen)ft
Length of cable, top of 'T' to sensor		15.63 ft	(frozen)ft
Maximum error, less than		0.09 ft	(frozen)ft

Calculation of Absolute Stage (Water Surface Elevation), Relative to MLLW

Total well depth, casing	14.5 ft	13.6 ft
Length of 'T'	1.42 ft	1.42 ft
Total well depth, Top of 'T'	15.92 ft	15.02 ft

Total well depth	15.92 ft	15.02 ft
Depth to sensor	-15.72 ft	-14.72 ft
Offset of sensor from bottom	0.2 ft	0.3 ft

Elevation of top of 'T'	13.16 ft	8.83 ft
Total depth from top of 'T'	-15.92 ft	-15.02 ft
Offset of sensor from bottom	0.2 ft	0.3 ft
Elevation of sensor	-2.56 ft	-5.89 ft
Elevation of water relative to MLLW (formula)	(stage ▪ 2.56) ft	(stage ▪ 5.89) ft

Table 2

Appendix B

Gambell Pumphouse Well Data

Date	Well	Static Feet	Static Inches	Conduc tivity	Temp °F	Static Level	Water Elevation	Meter Reading	GPM	Gals/Day
Note: Elevation of well house is 14.41 ft relative to MLLW										
20-Oct-92	1	10	0.75	150	36.00	10.06	4.35	160531	14.41	20752.00
21-Oct-92	1	9	10.5	160	38.00	9.88	4.54	181283	14.46	20823.00
22-Oct-92	1	9	7.25	170	38.00	9.60	4.81	202106	14.47	20833.00
23-Oct-92	1	9		170	38.00	9.50	4.91	222939	14.39	20721.00
24-Oct-92	1	9	6.7;	170	38.00	9.56	4.85	243660	14.90	21458.00
25-Oct-92	1	9	5.25	170	38.00	9.44	4.97	265118	14.40	20738.38
02-Nov-92	1	10	0.75	170	38.00	10.06	4.35	431025	14.53	20920.00
03-Nov-92	1	10	2.0625	190	39.00	10.17	4.24	451945	14.58	20989.00
04-Nov-92	1	10	3	190	39.00	10.25	4.16	472934	14.17	20410.00
05-Nov-92	1	10	4.0625	190	37.00	10.34	4.07	493344	14.16	20390.00
06-Nov-92	1	10	4.1875	200	39.00	10.35	4.06	513734	14.21	20466.00
07-Nov-92	1	10	3.865	210	38.00	10.32	4.09	534200	13.34	19203.00
08-Nov-92	1	10	4	210	38.00	10.33	4.08	553403	14.21	20463.13
16-Nov-92	1	10	8.75	200	38.00	10.73	3.68	717108	14.30	20597.00
17-Nov-92	1	10	10	200	38.00	10.83	3.58	737705	14.25	20522.00
18-Nov-92	1	10	10.75	180	38.00	10.90	3.51	758227	14.07	20254.00
19-Nov-92	1	10	11.5	180	38.00	10.96	3.45	778481	14.08	20271.00
20-Nov-92	1	10	11.75	200	38.00	10.98	3.43	798752	12.70	18288.00
21-Nov-92	1	10	11.25	190	38.00	10.94	3.47	817040	15.35	22109.00
22-Nov-92	1	10	10	200	38.00	10.83	3.58	839149	15.36	22122.00
23-Nov-92	1	10	2.5	200	38.00	10.21	4.20	861271	14.28	20560.00
24-Nov-92	1	9	4	220	36.00	9.33	5.08	881831	14.60	21018.00
25-Nov-92	1	9	2	200	36.00	9.17	5.24	902849	14.41	20749.00
27-Nov-92	1	9	7	240	35.00	9.58	4.83	944347	13.80	19878.00
30-Nov-92	1	10	2		37.00	10.17	4.24	1003981	14.14	20357.00
01-Dec-92	1	10	4.5		36.00	10.38	4.04	1024338	13.89	19999.00
02-Dec-92	1	IO	6.75		37.00	10.56	3.85	1044337	14.08	20270.00
03-Dec-92	1	IO	8.75		37.00	10.73	3.68	1064607	14.07	20265.00
04-Dec-92	1	10	10.75		40.00	10.90	3.51	1084872	13.92	20039.00
05-Dec-92	1	11	0.75		39.00	11.06	3.35	1104911	13.83	19913.00
06-Dec-92	1	11	3		37.00	11.25	3.16	1124824	13.60	19581.00
07-Dec-92	1	11	4.75	210	39.00	11.40	3.01	1144405	13.54	19503.00
08-Dec-92	1	11	5.75	200	38.00	11.48	2.93	1163908	13.62	19611.00
09-Dec-92	1	11	7.5	200	38.00	11.63	2.79	1183519	13.69	19710.00
10-Dec-92	1	11		210	38.00	11.75	2.66	1203229	13.71	19739.00
II-Dee-92	1	11	10.7;	200	37.00	11.90	2.51	1222968	12.63	18186.50
13-Dec-92	1	12	1.25	210	37.00	12.10	2.31	1259341	6.58	9474.00
14-Dec-92	1	12		160	36.00	12.17	2.24	1268815	3.06	4402.00
15-Dec-92	3	12	2.:	160	38.00	12.21	2.20	1273217	13.20	NA
16-Dec-92	3	12	3.5	170	38.00	12.29	2.12	estimated	13.20	0.00
17-Dec-92	3	12	5	200	37.00	12.42	1.99	estimated	13.20	O.DD
18-Dec-92	3	12	5.75	200	38.00	12.48	1.93	estimated	13.20	0.00
19-Dec-92	3	12	7.5	200	38.00	12.63	1.79	estimated	13.20	0.00
20-Dec-92	3	12	8	200	38.00	12.67	1.74	estimated	13.20	0.00
21-Dec-92	3	12	8	190	37.00	12.67	1.74	estimated	13.20	0.00
22-Dec-92	3	12	8.5	200	37.00	12.71	1.70	estimated	13.20	0.00
27-Dec-92	3	13	0	200	38.00	13.00	1.41	estimated	13.20	0.00
28-Dec-92	3	13	0	210	38.00	13.00	1.41	estimated	13.20	0.00
Ol-Jan-93	3	13	4	200	36.00	13.33	1.08	estimated	13.20	0.00
07-Jan-93	3	13	1	210	37.00	13.08	1.33	estimated	13.20	0.00
08-Jan-93	3	13		220	38.00	13.13	1.29	estimated	13.20	0.00
09-Jan-93	3	13	1::	220	37.00	13.13	1.29	estimated	13.20	0.00
IO-Jan-93	3	13	1	220	37.00	13.08	1.33	estimated	13.20	0.00
II-Jan-93	3	13	1	230	37.00	13.08	1.33	estimated	13.20	0.00
12-Jan-93	3	13	1	220	37.00	13.08	1.33	estimated	13.20	0.00
16-Jan-93	3	13	2	230	35.00	13.17	1.24	estimated	13.20	0.00
17-Jan-93	3	13	3	230	35.00	13.25	1.16	estimated	13.20	0.00
18-Jan-93	3	13	3	230	35.00	13.25	1.16	estimated	13.20	0.00
19-Jan-93	3	13	3	230	34.00	13.25	1.16	estimated	13.20	0.00
20-Jan-93	3	13	3	220	37.00	13.25	1.16	estimated	13.20	0.00
25-Jan-93	3,4	13	8	304	36.00	13.67	0.74	estimated	13.20	0.00
26-Jan-93	3,4	13	8	308	35.00	13.67	0.74	estimated	13.20	0.00
27-Jan-93	3,4	13	7	200	34.00	13.58	0.83	estimated	13.20	0.00

This is the manually gathered data submitted by the City of Gambell, the raw data used to compile app. E.

Appendix B

Gambell Pumphouse Well Data

Date	Well	Static Feet	Static Inches	Conduc tivity	Temp °F	Static Level	Water Elevation	Meter Reading	GPM	Gals/Day
28-Jan-93	3,4	13	8	216	37.00	13.67	0.74	estimated	13.20	0.00
29-Jan-93	3,4	13	8		38.00	13.67	0.74	estimated	13.20	0.00
Dl-Feb-93	3,4	13	11	193 194	37.00	13.92	0.49	estimated	13.20	0.00
02-Feb-93	3,4	13	11	199	38.00	13.92	0.49	estimated	13.20	0.00
03-Feb-93	3,4	13	10.5	277	38.00	13.88	0.54	estimated	13.20	NA
04-Feb-93	3,4	13	11		38.00	13.92	0.49	1273780	14.88	21428.00
05-Feb-93	3,4	13	11	214 198	37.00	13.92	0.49	1295208	20.88	30074.00
06-Feb-93	3,4	13	0	198	36.00	13.00	1.41	1325282	13.86	19963.00
07-Feb-93	3,4	13	0	204	34.00	13.00	1.41	1345245	20.10	28938.00
08-Feb-93	3,4	14	1	207	37.00	14.08	0.33	1374183	14.98	21578.00
09-Feb-93	3,4	13	0	204	37.00	13.00	1.41	1395761	17.21	24780.00
IO-Feb-93	3,4	14	1	214	37.00	14.08	0.33	1420541	17.06	24560.00
II-Feb-93	3,4	14	1	304	37.00	14.08	0.33	1445101	17.03	24523.00
12-Feb-93	3,4	14	1	315	37.00	14.08	0.33	1469624	20.13	28989.00
13-Feb-93	3,4	14	1		37.00	14.08	0.33	1498613	18.49	26626.00
14-Feb-93	3,4	14	1	324 325	37.00	14.08	0.33	1525239	13.97	20119.00
15-Feb-93	3,4	14	1	332	36.00	14.08	0.33	1545358	17.35	24991.00
16-Feb-93	3,4	14	1	330	37.00	14.08	0.33	1570349	16.88	24313.00
17-Feb-93	3.4	14	1	320	36.00	14.08	0.33	1594662	16.82	24215.00
18-Feb-93	3,4	14	1	331 337	37.00	14.08	0.33	1618877	17.18	24741.00
19-Feb-93	3.4	14			36.00	14.08	0.33	1643618	17.27	24873.00
20-Feb-93	3,4	14	1	338	36.00	14.08	0.33	1668491	17.22	24801.00
21-Feb-93	3,4	14	1	335	36.00	14.08	0.33	1693292	17.27	24875.00
22-Feb-93	3,4	14	1	339	36.00	14.08	0.33	1718167	16.63	23950.00
23-Feb-93	3,4	14	1	340	36.00	14.08	0.33	1742117	18.71	26945.00
24-Feb-93	3.4	14	1	351	36.00	14.08	0.33	1769062	17.56	25289.00
25-Feb-93	3,4	14	2	352	36.00	14.17	0.24	1794351	17.45	25126.00
26-Feb-93	3,4	14	2	352	36.00	14.17	0.24	1819477	19.75	28445.00
27-Feb-93	3,4	14	1	345	36.00	14.08	0.33	1847922	15.33	22082.00
28-Feb-93	3,4	14	2	365	36.00	14.17	0.24	1870004	18.01	25933.00
Ol-Mar-93	3,4	14	3	388	36.00	14.25	0.16	1895937	16.21	23345.00
02-Mar-93	3,4	14	3	348	37.00	14.25	0.16	1919282	17.25	24839.00
03-Mar-93	3,4	14	3	367	38.00	14.25	0.16	1944121	17.15	24689.00
04-Mar-93	3,4	14	4	332	37.00	14.33	0.08	1968810	16.89	24315.00
05-Mar-93	3,4	14	4	334	36.00	14.33	0.08	1993125	17.01	24496.00
06-Mar-93	3,4	14	3	325	36.00	14.25	0.16	2017621	17.15	24693.00
07-Mar-93	3,4,5	14	3	400	36.00	14.25	0.16	2042314	18.56	26731.00
08-Mar-93	3,4,5	NA	NA	380	37.00	NA	NA	2069045	17.75	25563.00
09-Mar-93	3,4,5	NA	NA	420	36.00	WA	NA	2094608	17.85	25700.00
IO-Mar-93	3,4,5	14	4	356	37.00	14.33	0.08	2120308	18.24	26269.00
II-Mar-93	3,4,5	NA	NA	391	36.00	NA	NA	2146577	18.69	26912.00
12-Mar-93	3,4,5	14	4	365	37.00	14.33	0.08	2173489	18.49	26629.00
13-Mar-93	3,4,5	NA	NA	375	37.00	NA	NA	2200118	16.56	23845.00
14-Mar-93	3,4,5	NA	NA	380	36.00	NA	NA	2223963	19.63	28262.00
15-Mar-93	3,4,5	14	8	393	36.00	14.67	-0.26	2252225	18.50	26646.00
16-Mar-93	3,4,5	NA	NA	372	36.00	NA	NA	2278871	18.22	26241.00
17-Mar-93	3.4.5	14	9	367	36.00	14.75	-0.34	2305112	18.28	26330.00
la-Mar-93	3,4,5	NA	NA	364	36.00	NA	NA	2331442	18.41	26512.00
19-Mar-93	3,4,5	14	9	364	36.00	14.75	-0.34	2357954	18.23	26257.00
20-Mar-93	3,4,5	NA	HA	356	36.00	NA	NA	2384211	18.49	26620.00
21-Mar-93	3,4,5	NA	NA	321	36.00	NA	NA	2410831	16.07	23135.00
22-Mar-93	3,4,5	14	9	356	37.00	14.75	-0.34	2433966	22.82	32867.00
23-Mar-93	3,4,5	NA	NA	372	37.00	NA	NA	2466833	15.91	22911.00
24-Mar-93	3,4,5	14	11	388	37.00	14.92	-0.51	2489744	20.64	29722.00
25-Mar-93	3,4,5	NA	NA	446	37.00	NA	NA	2519466	16.89	24317.50
27-Mar-93	3,4,5	14	11	388	37.00	14.92	-0.51	2568101	16.89	24315.00
29-Mar-93	3,4,5	14	11	355	37.00	14.92	-0.51	2616731	17.81	25650.00
30-Mar-93	3.4.5	NA	NA	374	37.00	NA	NA	2642381	17.52	25230.00
31-Mar-93	3,4,5	14	11	411	37.00	14.92	-0.51	2667611	19.44	27992.00
01-Apr-93	3,4,5	NA	NA	302	37.00	NA	NA	2695603	19.90	28649.00
02-Apr-93	3,4,5	14	11	354	36.00	14.92	-0.51	2724252	15.32	22064.00
03-Apr-93	3,4,5	NA	NA	434	36.00	NA	NA	2746316	17.35	24979.00
04-Apr-93	3,4,5	NA	NA	463	36.00	NA	NA	2771295	18.60	26790.00
05-Apr-93	3,4,5	14	9	426	36.00	14.75	-0.34	2798085	18.57	26740.00
06-Apr-93	3,4,5	NA	NA	416	36.00	NA	NA	2824825	19.56	28160.00
07-Apr-93	3,4,5	14	9	421	36.00	14.75	-0.34	2852985	17.00	24482.00

Appendix B

Gambell Pumphouse Well Data

Date	Well	Static Feet	Static Inches	Conductivity	Temp °F	Static Level	Water Elevation	Meter Reading	GPM	Gals/Day
08-Apr-93	3,4,5	NA	NA	408	36.00	NA	NA	2877467	18.37	26458.00
09-Apr-93	3,4,5	14	IO	420	36.00	14.83	-0.42	2903925	18.88	27187.00
10-Apr-93	3,4,5	NA	NA	440	36.00	NA	NA	2931112	18.19	26191.00
II-Apr-93	3,4,5	NA	NA	474	36.00	NA		2957303	17.73	25535.00
12-Apr-93	3.4.5	14	11	483	36.00	14.92	- 0 %	2982838	17.55	25267.00
13-Apr-93	3,4,5	NA	NA	456	36.00	NA	NA	3008105	18.21	26217.00
14-Apr-93	3,4,5	14	9	435	37.00	14.75	-0.34	3034322	17.99	25903.00
15-Apr-93	3,4,5	NA	NA	445	37.00	NA	NA	3060225	18.03	25970.00
16-Apr-93	3,4,5	15	1	400	38.00	15.08	-0.67	3086195	16.87	24292.67
28-Apr-93	3,4	NA	NA	527	35.00	NA	NA	3377707	16.36	23564.00
29-Apr-93	3.4	NA	NA	493	35.00	NA	NA	3401271	19.89	28644.00
30-Apr-93	3,4	NA	NA	524	35.00	NA	NA	3429915	15.71	22626.08
24-May-93	4	NA	NA	292	36.00	NA	NA	3972941	14.25	20520.00
25-May-93	4	NA	NA	296	36.00	NA	NA	3993461	13.78	19837.00
28-May-93	4	NA	NA	283	37.00	NA	NA	4052972	13.84	19936.75
01-Jun-93	4	NA	NA		38.00	NA	NA	4132719	16.35	23551.00
03-Jun-93	4	NA	NA		36.00	NA	NA	4179821	16.37	23576.00
05-Jun-93	4	NA	NA		36.00	NA	NA	4226973	9.34	13454.00
07-Jun-93	4	NA	NA		36.00	NA	NA	4253881	14.66	21106.00
09-Jun-93	4	8	8		36.00	8.67	5.74	4296093	13.40	19295.00
II-Jun-93	4	8	10		36.00	8.83	5.58	4334683	14.15	20381.14
18-Jun-93	4	8	9	137	36.00	8.75	5.66	4477351	14.48	20856.67
21-Jun-93	4	NA	NA	136	36.00	NA	NA	4539921	14.50	20874.00
22-Jun-93	3,4	NA	NA	132	36.00	NA	NA	4560795	15.84	22814.50
24-Jun-93	3.4	7	9	137	36.00	7.75	6.66	4606424	15.24	21951.00
25-Jun-93	3,4	8	11			8.92	5.49	4628375	14.86	21402.33
28-Jun-93	3,4	8	0	140	37.00	8.00	6.41	4692582	16.78	24158.00
29-Jun-93	3,4		1	140	37.00	9.08	5.33	4716740	15.54	22384.00
02-Jul-93	3.4	8	0	143	37.00	9.00	5.41	4783892	12.63	18191.67
05-Jul-93	3,4	NA	NA	148	37.00	NA	NA	4838467	18.29	26339.00
07-Jul-93	3.4	NA	NA	151	37.00	NA	NA	4891145	18.26	26300.00
08-Jul-93	3,4	9	6	151	37.00	9.50	4.91	4917445	14.59	21015.00
09-Jul-93	3,4	9	7	144	37.00	9.58	4.83	4938460	15.53	22369.00
12-Jul-93	3,4	9	9	150	37.00	9.75	4.66	5005567	15.93	22937.00
14-Jul-93	3,4	9	IO	151	37.00	9.83	4.58	5051441	14.23	20489.00
16-Jul-93	3,4	9	IO	150	37.00	9.83	4.58	5092419	14.66	21106.67
19-Jul-93	3,4	10	0	158	37.00	10.00	4.41	5155739	14.88	21425.50
21-Jul-93	3,4	10	0	162	37.00	10.00	4.41	5198590	14.71	21189.00
23-Jul-93	3,4	IO	3.5	182	39.00	10.29	4.12	5240968	14.50	20884.67
26-Jul-93	3,4	10	5.5	169	38.00	10.46	3.95	5303622	15.35	22107.50
28-Jul-93	3,4	IO	7.5	216	36.00	10.63	3.79	5347837	14.44	20787.50
30-Jut-93	3,4	IO	8.5	202	36.00	10.71	3.70	5389412	15.72	22642.67
02-Aug-93	3,4	IO	10.5	182	36.00	10.88	3.54	5457340	15.13	21788.50
04-Aug-93	3,4	IO	8.5	183	36.00	10.71	3.70	5500917	15.33	22082.00
06-Aug-93	3,4	11	0	182	36.00	11.00	3.41	5545081	16.22	23353.00
09-Aug-93	3,4	11	1	186	36.00	11.08	3.33	5615140	15.16	21827.00
11-Aug-93	3,4	11	2	179	36.00	11.17	3.24	5658794	15.61	22476.50
13-Aug-93	3,4	11	3	230	36.00	11.25	3.16	5703747	15.90	22894.00
16-Aug-93	3,4	11	1.5	186	37.00	11.13	3.29	5772429	15.79	22741.00
18-Aug-93	3.4	11	0.5	194	37.00	11.04	3.37	5817911	15.33	22070.50
20-Aug-93	3,4	IO	4.5	186	37.00	10.38	4.04	5862052	16.13	23231.33
23-Aug-93	3.4	9	10	189	38.00	9.83	4.58	5931746	14.42	20770.50
25-Aug-93	3,4	10	0.5	177	38.00	10.04	4.37	5973287	15.19	21871.00
27-Aug-93	3,4	10	1.5	179		10.13	4.29	6017029	5.76	8295.67
30-Aug-93	3,4	NA	NA	185		NA	NA	6041916	7.89	
31-Aug-93	3,4	NA	NA			NA	NA	19908	9.81	14133.::
08-Sep-93	3,4	10	3.5	102 105	40.00	10.29	4.12	132974	14.09	20289.50
IO-Sep-93	3.4	10	6	195	40.00	10.50	3.91	173553	16.26	23413.00
13-Sep-93	3,4	10	10	193	36.00	10.83	3.58	243792	12.62	18170.50
15-Sep-93	3.4	IO	6.5	189	36.00	10.54	3.87	280133	15.27	21992.50
17-Sep-93	3,4	11	0	191	38.00	11.00	3.41	324118	15.65	22529.33
20-Sep-93	3,4	10	8.5	186	39.00	10.71	3.70	391706	15.88	22864.00
22-Sep-93	3,4	10	5.5	192	40.00	10.46	3.95	437434	15.01	21620.50
24-Sep-93	3,4	10	4	190	40.00	10.33	4.08	480675	15.37	22134.33
27-Sep-93	3,4	10	7.5	189	38.00	10.63	3.79	547078	15.26	21981.50
29-Sep-93	3,4	10	7.5	188	38.00	10.63	3.79	591041	14.02	20192.50

Appendix B

Gambell Pumphouse Well Data

Date	Well	Static Feet	Static Inches	Conductivity	Temp °F	Static Level	Water Elevation	Meter Reading	GPM	Gals/Day
01-Oct-93	3,4	9	10	205	38.00	9.83	4.58	631426	14.25	20524.20
06-Oct-93	3,4	9	9	189	36.00	9.75	4.66	734047	13.66	19675.50
08-Oct-93	3,4	9	10	186	36.00	9.83	4.58	773398	14.63	21071.00
II-act-93	3,4	9	11.5	188	36.00	9.96	4.45	836611	14.83	21353.50
13-Oct-93	3,4	9	11	197	36.00	9.92	4.49	879318	14.61	21039.50
15-Oct-93	3,4	9	10.5	201	38.00	9.88	4.54	921397	18.93	27262.00
18-Oct-93	3,4	10	1.5	195	42.00	10.13	4.29	1003183	6.57	9462.50
20-Oct-93	3,4	10		207	39.00	10.17	4.24	1022108	11.34	16332.00
22-Oct-93	3,4	10	1.:	200	39.00	10.13	4.29	1054772	13.49	19428.40
01-Nov-93	3,4	10	5	198	39.00	10.42	3.99	1249056	11.64	16768.00
03-Nov-93	3,4	10	4.5	195	41.00	10.38	4.04	1282592	13.46	19385.00
05-Nov-93	3,4	10		198	40.00	10.17	4.24	1321362	12.33	17750.00
08-Nov-93	3,4	10	0.:	193	39.00	10.04	4.37	1374612	10.69	15400.50
10-Nov-93	3,4	9	7.5	192	39.00	9.63	4.79	1405413	11.10	15982.00
12-Nov-93	3,4	8	6.5	198	39.00	8.54	5.87	1437377	13.12	18886.00
15-Nov-93	3,4	7	10	215	39.00	7.83	6.58	1494035	11.49	16539.00
17-Nov-93	3,4	8	5.5	212	39.00	8.46	5.95	1527113	12.75	18359.50
19-Nov-93	3,4	9	2	211	39.00	9.17	5.24	1563832	11.43	16456.60
24-Nov-93	3,4	10	0	214	38.00	10.00	4.41	1646115	13.37	19254.00
26-Nov-93	3,4	10	0.5	221	39.00	10.04	4.37	1684623	12.77	18386.67
29-Nov-93	3,4	10	5.5	215	39.00	10.46	3.95	1739783	12.90	18575.50
Ol-Dee-93	3,4	10	6.5	225	39.00	10.54	3.87	1776934	13.64	19638.50
03-Dec-93	3,4	11	2	227	37.00	11.17	3.24	1816211	12.22	17598.00
06-Dec-93	3,4	11	0	230	36.00	11.00	3.41	1869005	13.80	19878.50
08-Dec-93	3,4	11	2.5	233	39.00	11.21	3.20	1908762	12.33	17760.50
IO-Dee-93	3,4	11	6.5	247	39.00	11.54	2.87	1944283	12.37	17806.67
13-Dec-93	3,4	12	0	249	37.00	12.00	2.41	1997703	13.30	19145.00
15-Dec-93	3,4	12	1	250	37.00	12.08	2.33	2035993	13.55	19519.00
17-Dec-93	3,4	12	0	249	37.00	12.00	2.41	2075031	13.32	19175.00
20-Dec-93	3,4	12	5	243	36.00	12.42	1.99	2132556	15.34	22096.00
22-Dec-93	3,4	12	4	245	36.00	12.33	2.08	2176748	16.73	24092.85
18-Jan-94	3,4	14	1.5	261	39.00	14.13	0.29	2827255	10.64	15316.00
20-Jan-94	3,4	14	2	271	39.00	14.17	0.24	2857887	20.47	29470.50
22-Jan-94	3,4	14	1	271	39.00	14.08	0.33	2916828	31.15	44850.00
24-Jan-94	3,4	14	0	285	39.00	14.00	0.41	3006528	3.02	4348.00
26-Jan-94	3,4	13	11.5	288	39.00	13.96	0.45	3015224	39.22	56474.50
28-Jan-94	3,4	13	10.5	288	39.00	13.88	0.54	3128173	19.63	28274.00
31-Jan-94	3,4	14	6	294	39.00	14.50	-0.09	3212995	20.01	28809.00
02-Feb-94	3,4	14	6	295	39.00	14.50	-0.09	3270613	21.00	30244.50
04-Feb-94	3,4	14	6	297	39.00	14.50	-0.09	3331102	20.77	29907.00
07-Feb-94	3,4	14	5	293	39.00	14.42	-0.01	3420823	19.47	28035.00
09-Feb-94	3,4	14	4	316	39.00	14.33	0.08	3476893	20.11	28958.50
II-Feb-94	3,4	14	4	328	39.00	14.33	0.08	3534810	20.08	28913.29
28-Feb-94	3,4	14	9.5	363	39.00	14.79	-0.38	4026336	28.33	40788.00
Ol-Mar-94	3,4	14	9	356	39.00	14.75	-0.34	4067124	26.13	37630.00
03-Mar-94	3,4	14	10	355	39.00	14.83	-0.42	4142384	14.63	21062.50
07-Mar-94	3,4	15	0	354	39.00	15.00	-0.59	4226634	21.44	30875.50
09-Mar-94	3,4	15	1	359	39.00	15.08	-0.67	4288385	31.99	46063.50
II-Mar-94	3,4	15	2	365	39.00	15.17	-0.76	4380512	9.91	14264.33
14-Mar-94	3,4	15	3	372	40.00	15.25	-0.84	4423305	19.14	27568.00
16-Mar-94	3,4	15	3	368	40.00	15.25	-0.84	4478441	18.95	27293.00
18-Mar-94	3,4	15	3	392	40.00	15.25	-0.84	4533027	18.49	26619.00
22-Mar-94	3,4	15	3	416	39.00	15.25	-0.84	4639503	18.72	134.81

Appendix C

Gambell Observation Well #1

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
1	5	94	17	31	59	-10.1	0.74	3.65	247
1	5	94	20	31	59	-6.52	0.82	3.64	235
1	5	94	23	31	59	-7.5	0.83	3.63	232
1	6	94	2	31	59	-8.44	0.84	3.62	231
1	6	94	5	31	59	-8.86	0.85	3.61	232
1	6	94	8	31	59	-9.01	0.85	3.6	238
1	6	94	11	31	59	-9.06	0.85	3.6	249
1	6	94	14	31	59	-8.9	0.85	3.61	256
1	6	94	17	31	59	-8.78	0.85	3.61	253
1	6	94	20	31	59	-8.75	0.85	3.6	252
1	6	94	23	31	59	-9.03	0.84	3.6	249
1	7	94	2	31	59	-9.39	0.84	3.59	247
1	7	94	5	31	59	-9.22	0.84	3.59	247
1	7	94	8	31	59	-9.33	0.84	3.59	246
1	7	94	11	31	59	-9.43	0.83	3.58	246
1	7	94	14	31	59	-9.62	0.83	3.58	246
1	7	94	17	31	59	-9.73	0.83	3.57	246
1	7	94	20	31	59	-9.95	0.83	3.56	251
1	7	94	23	31	59	-10.4	0.83	3.56	277
1	8	94	2	31	59	-11.3	0.83	3.55	279
1	8	94	5	31	59	-11.8	0.82	3.54	277
1	8	94	8	31	59	-12.8	0.82	3.53	276
1	8	94	11	31	59	-12.8	0.82	3.52	273
1	8	94	14	31	59	-12.1	0.82	3.51	273
1	8	94	17	31	59	-12.2	0.82	3.5	273
1	8	94	20	31	59	-12.6	0.82	3.5	271
1	8	94	23	31	59	-12.9	0.82	3.49	272
1	9	94	2	31	59	-12.9	0.81	3.48	271
1	9	94	5	31	59	-12.9	0.81	3.47	272
1	9	94	8	31	59	-13	0.81	3.46	271
1	9	94	11	31	59	-12.9	0.81	3.46	269
1	9	94	14	31	59	-12.6	0.81	3.45	269
1	9	94	17	31	59	-12.3	0.81	3.44	270
1	9	94	20	31	59	-12.2	0.81	3.43	270
1	9	94	23	31	59	-12.1	0.81	3.43	269
1	10	94	2	31	59	-12	0.81	3.42	267
1	10	94	5	31	59	-12.1	0.8	3.41	265
1	10	94	8	31	59	-12.4	0.8	3.4	264
1	10	94	11	31	59	-12.4	0.8	3.39	263
1	10	94	14	31	59	-12.6	0.8	3.39	263
	10	94	17	31	59	-12.7	0.8	3.38	264
1	10	94	20	31	59	-12.8	0.8	3.37	263
1	10	94	23	31	59	-13.2	0.8	3.36	263
	11	94	2	31	59	-13.6	0.79	3.36	262
1	11	94	5	31	59	-13.8	0.79	3.35	263
	11	94	8	31	59	-14.1	0.79	3.35	263
	11	94	11	31	59	-14.5	0.79	3.34	263
1	11	94	14	31	59	-14.6	0.79	3.33	261
1	11	94	17	31	59	-14.8	0.78	3.33	263
	11	94	20	31	59	-15.1	0.78	3.32	261
	11	94	23	31	59	-15.2	0.78	3.31	261
1	12	94	2	31	59	-15.4	0.78	3.31	261
	12	94	5	31	59	-15.3	0.78	3.3	258
	12	94	8	31	59	-15.4	0.78	3.29	258
	12	94	11	31	59	-15.8	0.77	3.28	258
	12	94	14	31	59	-16.2	0.77	3.27	258
	12	94	17	31	59	-16	0.77	3.27	260
	12	94	20	31	59	-16.5	0.77	3.26	257
	12	94	23	31	59	-16.8	0.77	3.25	258
	13	94	2	31	59	-16.4	0.76	3.24	259
1	13	94	5	31	59	-16.1	0.76	3.23	258
	13	94	8	31	59	-15.7	0.76	3.23	256
	13	94	11	31	59	-15.6	0.76	3.22	258
1	13	94	14	31	59	-15.3	0.76	3.21	259
	13	94	17	31	59	-15.6	0.76	3.21	258
	13	94	20	31	59	-16	0.76	3.2	259
1	13	94	23	31	59	-16.1	0.75	3.19	258
1	14	94	2	31	59	-16	0.75	3.19	259
	14	94	5	31	59	-16.2	0.75	3.18	259
1	14	94	8	31	59	-16.3	0.75	3.18	260
1	14	94	11	31	59	-16.2	0.74	3.17	261
	14	94	14	31	59	-15.6	0.74	3.17	261
	14	94	17	31	59	-14.9	0.74	3.16	262
1	14	94	20	31	59	-14.3	0.74	3.15	262
	14	94	23	31	59	-13.9	0.74	3.15	263
	15	94	2		59	-13.5	0.74	3.14	264
1	15	94	5	5:	59	-13.2	0.74	3.13	266
1	15	94	8	31	59	-13.1	0.73	3.13	266
	15	94	11	31	59	-13.2	0.73	3.12	266
	15	94	14	31	59	-13.2	0.73	3.11	266

This is the raw data as recorded by the data logger, and is raw data for app. E.

Appendix C

Gambell Observation Well #1

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
1	15	94	17	31	59	-13.3	0.73	3.11	266
1	15	94	20	31	59	-13.5	0.73	3.1	267
1	15	94	23	31	59	-13.6	0.73	3.1	266
1	16	94	2	31	59	-14.2	0.73	3.09	266
1	16	94	5	31	59	-14.5	0.73	3.09	265
1	16	94	a	31	59	-14.6	0.73	3.08	266
1	16	94	11	31	59	-14.8	0.72	3.07	265
1	16	94	14	31	59	-14.5	0.72	3.07	264
1	16	94	17	31	59	-14.3	0.72	3.07	264
1	16	94	20	31	59	-14.2	0.72	3.06	265
1	16	94	23	31	59	-13.8	0.72	3.06	264
1	17	94	2	31	59	-13.7	0.71	3.05	265
1	17	94	5	31	59	-13.6	0.71	3.05	265
1	17	94	a	31	59	-13.6	0.71	3.04	264
1	17	94	11	31	59	-13.9	0.71	3.04	263
1	17	94	14	31	59	-14.3	0.71	3.03	262
1	17	94	17	31	59	-14.5	0.71	3.02	262
1	17	94	20	31	59	-14.3	0.71	3.01	262
1	17	94	23	31	59	-14.3	0.71	3.01	261
1	18	94	2	31	59	-14.1	0.7	3	261
1	18	94	5	31	59	-14	0.7	2.99	261
1	18	94	a	31	59	-14	0.7	2.98	261
1	18	94	11	31	59	-14.2	0.7	2.98	261
1	18	94	14	31	59	-14	0.7	2.97	260
1	18	94	17	31	59	-13.9	0.7	2.96	260
1	18	94	20	31	59	-14	0.7	2.95	259
1	18	94	23	31	59	-14.2	0.7	2.95	259
1	19	94	2	31	59	-14.4	0.7	2.94	258
1	19	94	5	31	59	-14.5	0.7	2.93	257
1	19	94	a	31	59	-14.7	0.7	2.92	258
1	19	94	11	31	59	-14.8	0.69	2.92	257
1	19	94	14	31	59	-14.8	0.69	2.91	257
1	19	94	17		59	-14.8	0.69	2.9	256
1	19	94	20	5:	59	-14.7	0.69	2.9	256
1	19	94	23	31	59	-14.6	0.69	2.89	256
1	20	94	2	31	59	-14.9	0.69	2.89	256
1	20	94	5	31	59	-15	0.69	2.88	256
1	20	94	a	31	59	-15.3	0.69	2.88	257
1	20	94	11	31	59	-15.6	0.69	2.87	255
1	20	94	14	31	59	-15.8	0.69	2.87	255
1	20	94	17	31	59	-15.5	0.69	2.87	254
1	20	94	20	31	59	-14.9	0.69	2.86	255
1	20	94	23	31	59	-14.8	0.69	2.86	254
1	21	94	2	31	59	-14.7	0.69	2.86	255
1	21	94	5	31	59	-14.5	0.69	2.86	254
1	21	94	a	31	59	-14.2	0.68	2.86	254
1	21	94	11	31	59	-14	0.68	2.85	255
1	21	94	14	31	59	-13.8	0.68	2.85	255
1	21	94	17	31	59	-13.3	0.68	2.84	256
1	21	94	20	31	59	-12.9	0.68	2.84	256
1	21	94	23	31	59	-12.5	0.69	2.84	256
1	22	94	2	31	59	-12.3	0.68	2.83	256
1	22	94	5	31	59	-12.1	0.68	2.83	257
1	22	94	a	31	59	-12	0.68	2.82	256
1	22	94	11	31	59	-11.9	0.68	2.82	257
1	22	94	14	31	59	-11.7	0.68	2.82	259
1	22	94	17	31	59	-11.6	0.69	2.81	260
1	22	94	20	31	59	-11.6	0.68	2.81	259
1	22	94	23	31	59	-11.6	0.68	2.81	261
1	23	94	2	31	59	-11.7	0.68	2.8	262
1	23	94	5	31	59	-11.9	0.68	2.8	262
1	23	94	8	31	59	-12.3	0.68	2.8	264
1	23	94	11	31	59	-12.7	0.68	2.79	266
1	23	94	14	31	59	-13.4	0.68	2.79	266
1	23	94	17	31	59	-14	0.68	2.79	269
1	23	94	20	31	59	-14.9	0.68	2.78	270
1	23	94	23	31	59	-15.8	0.68	2.78	271
1	24	94	2	31	59	-16.4	0.68	2.78	273
1	24	94	5	31	59	-16.9	0.68	2.77	274
1	24	94	8	31	59	-17.5	0.68	2.77	276
1	24	94	11	31	59	-17.7	0.68	2.77	277
1	24	94	14	31	59	-17.9	0.68	2.76	277
1	24	94	17	31	59	-17.9	0.68	2.76	278
1	24	94	20	31	59	-18.2	0.68	2.76	280
1	24	94	23	31	59	-18.1	0.68	2.75	282
1	25	94	2	31	59	-17.9	0.68	2.75	283
1	25	94	5	31	59	-17.6	0.68	2.74	285
1	25	94	8	31	59	-17.5	0.68	2.74	288
1	25	94	11	31	59	-17.5	0.68	2.74	290
1	25	94	14	31	59	-17.4	0.68	2.73	292
1	25	94	17	31	59	-17.4	0.69	2.73	293
1	25	94	20	31	59	-17.8	0.68	2.73	294
1	25	94	23	31	59	-17.9	0.69	2.72	296
1	26	94	2	31	59	-18	0.69	2.72	297

Appendix C

Gambell Observation Well #1

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
1	26	94	5	31	59	-18	0.69	2.72	299
1	26	94	8	31	59	-18.5	0.69	2.71	301
1	26	94	11	31	59	-18.6	0.69	2.71	302
1	26	94	14	31	59	-18.4	0.69	2.71	304
1	26	94	17	31	59	-18.2	0.69	2.71	305
1	26	94	20	31	59	-18.2	0.69	2.71	306
1	26	94	23	31	59	-18.2	0.69	2.71	307
1	27	94	2	31	59	-18	0.69	2.7	307
1	27	94	5	31	59	-18.1	0.69	2.7	309
1	27	94	8	31	59	-18.2	0.69	2.7	309
1	27	94	11	31	59	-18.4	0.69	2.7	309
1	27	94	14	31	59	-18.3	0.7	2.7	311
1	27	94	17	31	59	-18.2	0.7	2.7	312
1	27	94	20	31	59	-18.3	0.7	2.7	312
1	27	94	23	31	59	-18.5	0.7	2.69	313
1	28	94	2	31	59	-18.4	0.7	2.69	313
1	28	94	5	31	59	-18.3	0.7	2.69	314
1	28	94	8	31	59	-18.2	0.7	2.68	314
1	28	94	11	31	59	-18.1	0.7	2.68	314
1	28	94	14	31	59	-17.8	0.7	2.68	315
1	28	94	17	31	59	-17.6	0.7	2.67	316
1	28	94	20	31	59	-17.3	0.7	2.67	317
1	28	94	23	31	59	-16.9	0.7	2.67	317
1	29	94	2	31	59	-16.3	0.7	2.67	317
1	29	94	5	31	59	-15.7	0.7	2.66	320
1	29	94	8	31	59	-15.3	0.7	2.66	319
1	29	94	11	31	59	-15	0.7	2.66	319
1	29	94	14	31	59	-14.6	0.7	2.65	319
1	29	94	17	31	59	-14.4	0.7	2.65	319
1	29	94	20	31	59	-14.3	0.7	2.65	320
1	29	94	23	31	59	-14.2	0.7	2.65	320
1	30	94	2	31	59	-14.1	0.7	2.64	319
1	30	94	5	31	59	-13.9	0.7	2.64	319
1	30	94	8	31	59	-13.5	0.7	2.64	319
1	30	94	11	31	59	-13	0.7	2.64	320
1	30	94	14	31	59	-12.4	0.7	2.63	319
1	30	94	17	31	59	-11.3	0.69	2.63	321
1	30	94	20	31	59	-10	0.69	2.63	322
1	30	94	23	31	59	-9.84	0.69	2.63	320
1	31	94	2	31	59	-9.22	0.69	2.63	321
1	31	94	5	31	59	-8.98	0.69	2.63	321
1	31	94	8	31	59	-8.58	0.69	2.63	321
1	31	94	11	31	59	-7.82	0.69	2.62	322
1	31	94	14	31	59	-7.08	0.69	2.62	324
1	31	94	17	31	59	-6.36	0.69	2.63	324
1	31	94	20	31	59	-6.09	0.69	2.62	324
1	31	94	23	31	59	-5.59	0.69	2.62	325
2	1	94	2	31	59	-5.27	0.69	2.62	324
2	1	94	5	31	59	-4.99	0.69	2.62	326
2	1	94	8	31	59	-4.62	0.68	2.62	326
2	1	94	11	31	59	-4.23	0.68	2.63	326
2	1	94	14	31	59	-4.33	0.68	2.63	325
2	1	94	17	31	59	-4.34	0.68	2.64	326
2	1	94	20	31	59	-4.14	0.68	2.63	326
2	1	94	23	31	59	-4.01	0.67	2.64	327
2	2	94	2	31	59	-3.84	0.67	2.64	327
2	2	94	5	31	59	-4.01	0.67	2.64	326
2	2	94	8	31	59	-4.49	0.67	2.64	326
2	2	94	11	31	59	-4.61	0.66	2.65	326
2	2	94	14	31	59	-4.65	0.66	2.65	326
2	2	94	17	31	59	-4.61	0.66	2.65	326
2	2	94	20	31	59	-4.39	0.66	2.65	327
2	2	94	23	31	59	-4.45	0.66	2.65	327
2	3	94	2	31	59	-4.45	0.65	2.65	329
2	3	94	5	31	59	-4.4	0.65	2.66	328
2	3	94	8	31	59	-4.49	0.65	2.66	329
2	3	94	11	31	59	-4.63	0.64	2.66	328
2	3	94	14	31	59	-4.67	0.64	2.66	328
2	3	94	17	31	59	-4.72	0.64	2.67	329
2	3	94	20	31	59	-4.89	0.64	2.67	330
2	3	94	23	31	59	-4.96	0.63	2.67	330
2	4	94	2	31	59	-5.12	0.63	2.67	330
2	4	94	5	31	59	-5.07	0.63	2.67	330
2	4	94	8	31	59	-4.97	0.62	2.67	331
2	4	94	11	31	59	-4.88	0.62	2.68	331
2	4	94	14	31	59	-4.79	0.62	2.68	331
2	4	94	17	31	59	-4.69	0.62	2.68	333
2	4	94	20	31	59	-4.59	0.61	2.68	332
2	4	94	23	31	59	-4.54	0.61	2.69	333
2	5	94	2	31	59	-4.53	0.61	2.69	333
2	5	94	5	31	59	-4.58	0.6	2.69	333
2	5	94	8	31	59	-4.62	0.6	2.7	332
2	5	94	11	31	59	-4.61	0.6	2.7	333
2	5	94	14	31	59	-4.6	0.6	2.7	332

Appendix C

Gambell Observation Well #1

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
2	5	94	17	31	59	-4.54	0.59	2.7	333
2	5	94	20	31	59	-4.44	0.59	2.7	334
2	5	94	23	31	59	-4.54	0.59	2.71	333
2	6	94	2	31	59	-4.52	0.59	2.71	334
2	6	94	5	31	59	-4.44	0.59	2.71	331
2	6	94	8	31	59	-4.45	0.58	2.72	331
2	6	94	11	31	59	-4.44	0.58	2.72	332
2	6	94	14	31	59	-4.43	0.58	2.73	330
2	6	94	17	31	59	-4.41	0.58	2.73	330
2	6	94	20	31	59	-4.45	0.57	2.74	330
2	6	94	23	31	59	-4.42	0.57	2.74	330
2	7	94	2	31	59	-4.48	0.57	2.75	328
2	7	94	5	31	59	-4.55	0.56	2.75	328
2	7	94	a	31	59	-4.59	0.56	2.76	328
2	7	94	11	31	59	-4.64	0.56	2.76	328
2	7	94	14	31	59	-4.67	0.56	2.77	327
2	7	94	17	31	59	-4.65	0.55	2.78	325
2	7	94	20	31	59	-4.61	0.55	2.78	325
2	7	94	23	31	59	-4.54	0.55	2.79	325
2	a	94	2	31	59	-4.5	0.55	2.79	324
2	894		5	31	59	-4.59	0.54	2.8	324
2	a	94	a	31	59	-4.73	0.54	2.81	323
2	8	94	11	31	59	-4.83	0.54	2.81	322
2	a	94	14	31	59	-4.95	0.54	2.82	322
2	8	94	17	31	59	-4.87	0.53	2.82	321
2	a	94	20	31	59	-4.98	0.53	2.83	320
2	8	94	23	31	59	-4.97	0.53	2.83	321
2	9	94	2	31	59	-5.19	0.52	2.84	319
2	9	94	5	31	59	-5.38	0.52	2.84	318
2	9	94	a	31	59	-5.66	0.52	2.84	320
2	9	94	11	31	59	-5.81	0.51	2.85	318
2	9	94	14	31	59	-6.11	0.51	2.85	318
2	9	94	17	31	59	-6.68	0.51	2.86	317
2	9	94	20	31	59	-7.5	0.51	2.86	315
2	9	94	23	31	59	-8.76	0.51	2.86	315
2	10	94	2	31	59	-9.13	0.5	2.87	314
2	10	94	5	31	59	-9.97	0.5	2.87	313
2	10	94	8	31	59	-10.7	0.5	2.87	313
2	10	94	11	31	59	-11.2	0.49	2.87	312
2	10	94	14	31	59	-11.5	0.49	2.87	311
2	10	94	17	31	59	-11.9	0.49	2.87	310
2	10	94	20	31	59	-12.4	0.48	2.86	309
2	10	94	23	31	59	-12.6	0.48	2.86	309
2	11	94	2	31	59	-12.8	0.48	2.85	307
2	11	94	5	31	59	-13.1	0.48	2.85	307
2	11	94	8	31	59	-13.5	0.48	2.84	306
2	11	94	11	31	59	-13.6	0.47	2.84	307
2	11	94	14	31	59	-13.4	0.47	2.84	305
2	11	94	17	31	59	-12.9	0.47	2.84	305
2	11	94	20	31	59	-12.7	0.47	2.83	304
2	11	94	23	31	59	-12.6	0.47	2.83	304
2	12	94	2	31	59	-12.8	0.46	2.82	303
2	12	94	5	31	59	-13.1	0.46	2.82	303
2	12	94	8	31	59	-13	0.46	2.81	304
2	12	94	11	31	59	-12.5	0.46	2.81	303
2	12	94	14	31	59	-12.4	0.46	2.8	303
2	12	94	17	31	59	-12.1	0.45	2.8	302
2	12	94	20	31	59	-12.4	0.45	2.79	302
2	12	94	23	31	59	-12.4	0.45	2.79	303
2	13	94	2	31	59	-11.9	0.45	2.78	302
2	13	94	5	31	59	-11.6	0.45	2.78	303
2	13	94	8	31	59	-11.4	0.45	2.77	303
2	13	94	11	31	59	-11.2	0.45	2.76	303
2	13	94	14	31	59	-11	0.44	2.76	303
2	13	94	17	31	59	-10.8	0.44	2.75	304
2	13	94	20	31	59	-10.8	0.44	2.74	304
2	13	94	23	31	59	-10.8	0.44	2.74	304
2	14	94	2	31	59	-11.3	0.44	2.73	303
2	14	94	5	31	59	-11.9	0.44	2.72	304
2	14	94	8	31	59	-12.4	0.44	2.71	305
2	14	94	11	31	59	-12.9	0.43	2.71	305
2	14	94	14	31	59	-13.1	0.43	2.7	306
2	14	94	17	31	59	-12.9	0.43	2.7	306
2	14	94	20	31	59	-13.1	0.43	2.69	307
2	14	94	23	31	59	-13.8	0.43	2.69	308
2	15	94	2	31	59	-14.2	0.43	2.68	309
2	15	94	5	31	59	-14.5	0.43	2.67	309
2	15	94	a	31	59	-14.9	0.43	2.67	310
2	15	94	11	31	59	-14.9	0.42	2.66	310
2	15	94	14	31	59	-14.6	0.42	2.66	312
2	15	94	17	31	59	-14	0.42	2.65	312
2	15	94	20	31	59	-13.7	0.42	2.65	313
2	15	94	23	31	59	-13.8	0.42	2.64	314
2	16	94	2	31	59	-14.1	0.42	2.63	316

Appendix C

Gambell Observation Well #1

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
2	16	94	5	31	59	-14.4	0.42	2.63	316
2	16	94	8	31	59	-14.7	0.42	2.62	318
2	16	94	11	31	59	-14.6	0.41	2.62	319
2	16	94	14	31	59	-14.6	0.41	2.61	320
2	16	94	17	31	59	-14.5	0.41	2.61	322
2	16	94	20	31	59	-14.5	0.41	2.6	322
2	16	94	23	31	59	-14.5	0.41	2.6	323
2	17	94	2	31	59	-14.5	0.41	2.59	325
2	17	94	5	31	59	-14.6	0.41	2.59	327
2	17	94	8	31	59	-15.1	0.41	2.58	328
2	17	94	11	31	59	-15.5	0.41	2.58	330
2	17	94	14	31	59	-15.7	0.4	2.57	331
2	17	94	17	31	59	-15.5	0.4	2.57	333
2	17	94	20	31	59	-15.6	0.4	2.56	334
2	17	94	23	31	59	-15.8	0.4	2.56	337
2	18	94	2	31	59	-16	0.4	2.55	338
2	18	94	5	31	59	-16.1	0.4	2.55	340
2	18	94	8	31	59	-15.6	0.4	2.55	342
2	18	94	11	31	59	-15.5	0.4	2.54	343
2	18	94	14	31	59	-15.4	0.4	2.54	346
2	18	94	17	31	59	-15	0.39	2.54	347
2	18	94	20	31	59	-14.7	0.39	2.54	348
2	18	94	23	31	59	-14.4	0.39	2.53	350
2	19	94	2	31	59	-14.2	0.39	2.53	353
2	19	94	5	31	59	-14	0.39	2.53	355
2	19	94	8	31	59	-13.7	0.39	2.53	357
2	19	94	11	31	59	-13.5	0.39	2.52	359
2	19	94	14	31	59	-13.2	0.39	2.52	361
2	19	94	17	31	59	-12.9	0.39	2.52	364
2	19	94	20	31	59	-12.7	0.39	2.52	366
2	19	94	23	31	59	-12.5	0.39	2.51	369
2	20	94	2	31	59	-12.4	0.38	2.51	371
2	20	94	5	31	59	-12.3	0.38	2.51	373
2	20	94	8	31	59	-12.2	0.38	2.51	374
2	20	94	11	31	59	-12.1	0.38	2.5	376
2	20	94	14	31	59	-12.1	0.38	2.5	377
2	20	94	17	31	59	-12	0.38	2.5	380
2	20	94	20	31	59	-12.1	0.38	2.5	381
2	20	94	23	31	59	-12.2	0.37	2.49	382
2	21	94	2	31	59	-12.4	0.37	2.49	384
2	21	94	5	31	59	-12.4	0.37	2.49	385
2	21	94	8	31	59	-12.8	0.37	2.49	388
2	21	94	11	31	59	-13.2	0.37	2.49	389
2	21	94	14	31	59	-13.3	0.37	2.48	390
2	21	94	17	31	59	-13.1	0.37	2.48	392
2	21	94	20	31	59	-13	0.37	2.48	393
2	21	94	23	31	59	-12.9	0.37	2.48	394
2	22	94	2	31	59	-12.8	0.37	2.48	397
2	22	94	5	31	59	-12.8	0.36	2.48	397
2	22	94	8	31	59	-13	0.36	2.47	399
2	22	94	11	31	59	-13.1	0.36	2.47	401
2	22	94	14	31	59	-12.9	0.36	2.47	400
2	22	94	17	31	59	-12.6	0.36	2.47	401
2	22	94	20	31	59	-12.4	0.36	2.47	403
2	22	94	23	31	59	-12.2	0.36	2.47	404
2	23	94	2	31	59	-12.1	0.35	2.47	405
2	23	94	5	31	59	-12.1	0.35	2.47	406
2	23	94	8	31	59	-12	0.35	2.47	407
2	23	94	11	31	59	-12	0.35	2.47	407
2	23	94	14	31	59	-11.9	0.35	2.47	410
2	23	94	17	31	59	-11.8	0.35	2.47	410
2	23	94	20	31	59	-11.6	0.35	2.46	411
2	23	94	23	31	59	-11.5	0.35	2.46	412
2	24	94	2	31	59	-11.4	0.34	2.46	413
2	24	94	5	31	59	-11.5	0.34	2.46	414
2	24	94	8	31	59	-11.9	0.34	2.46	414
2	24	94	11	31	59	-12.4	0.34	2.46	415
2	24	94	14	31	59	-12.8	0.34	2.45	416
2	24	94	17	31	59	-12.9	0.34	2.45	416
2	24	94	20	31	59	-13	0.34	2.45	417
2	24	94	23	31	59	-13.2	0.33	2.44	418
2	25	94	2	31	59	-13.5	0.33	2.44	419
2	25	94	5	31	59	-13.5	0.33	2.44	419
2	25	94	8	31	59	-13.6	0.33	2.44	420
2	25	94	11	31	59	-13.7	0.33	2.43	422
2	25	94	14	31	59	-13.5	0.33	2.43	422
2	25	94	17	31	59	-13.2	0.33	2.43	423
2	25	94	20	31	59	-12.9	0.33	2.42	423
2	25	94	23	31	59	-12.8	0.33	2.42	424
2	26	94	2	31	59	-12.7	0.32	2.42	425
2	26	94	5	31	59	-12.6	0.32	2.41	426
2	26	94	8	31	59	-12.6	0.32	2.41	426
2	26	94	11	31	59	-12.7	0.32	2.41	427
2	26	94	14	31	59	-12.7	0.32	2.4	428

Appendix C

Gambell Observation Well #1

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
2	26	94	17	31	59	-12.9	0.32	2.4	429
2	26	94	20	31	59	-13.2	0.32	2.39	430
2	26	94	23	31	59	-13.8	0.31	2.39	431
2	27	94	2	31	59	-14.6	0.31	2.38	433
2	27	94	5	31	59	-15.1	0.31	2.38	432
2	27	94	8	31	59	-15.7	0.31	2.38	434
2	27	94	11	31	59	-16.4	0.31	2.37	434
2	27	94	14	31	59	-16.9	0.31	2.37	434
2	27	94	17	31	59	-17	0.31	2.37	436
2	27	94	20	31	59	-17.3	0.3	2.36	435
2	27	94	23	31	59	-18	0.3	2.36	436
2	28	94	2	31	59	-18.2	0.3	2.36	439
2	28	94	5	31	59	-18.7	0.3	2.35	439
2	28	94	8	31	59	-19.4	0.3	2.35	438
2	28	94	11	31	59	-19.7	0.3	2.34	439
2	28	94	14	31	59	-19.5	0.3	2.34	439
2	28	94	17	31	59	-19.1	0.29	2.34	439
2	28	94	20	31	59	-18.9	0.29	2.33	440
2	28	94	23	31	59	-18.9	0.29	2.33	441
3	1	94	2	31	59	-19	0.29	2.33	442
3	1	94	5	31	59	-19.1	0.29	2.32	441
3	1	94	a	31	59	-19.2	0.29	2.32	442
3	1	94	11	31	59	-20	0.29	2.31	443
3	1	94	14	31	59	-20.2	0.29	2.31	444
3	1	94	17	31	59	-20.2	0.29	2.31	444
3	1	94	20	31	59	-20.8	0.28	2.3	445
3	1	94	23	31	59	-21	0.28	2.3	446
3	2	94	2	31	59	-21.5	0.28	2.29	447
3	2	94	5	31	59	-21.8	0.28	2.29	447
3	2	94	8	31	59	-22.3	0.28	2.28	448
3	2	94	11	31	59	-22.6	0.28	2.28	448
3	2	94	14	31	59	-22.7	0.28	2.27	446
3	2	94	17	31	59	-22.7	0.28	2.27	447
3	2	94	20	31	59	-23.1	0.27	2.26	448
3	2	94	23	31	59	-23.3	0.27	2.26	446
3	3	94	2	31	59	-23.4	0.27	2.26	447
3	3	94	5	31	59	-23.4	0.27	2.25	447
3	3	94	a	31	59	-23.4	0.27	2.25	447
3	3	94	11	31	59	-23.1	0.27	2.24	449
3	3	94	14	31	59	-22.6	0.27	2.24	448
3	3	94	17	31	59	-22.2	0.27	2.23	447
3	3	94	20	31	59	-22	0.27	2.23	447
3	3	94	23	31	59	-21.9	0.26	2.23	448
3	4	94	2	31	59	-21.9	0.26	2.22	447
3	4	94	5	31	59	-21.9	0.26	2.22	447
3	4	94	8	31	59	-21.9	0.26	2.21	447
3	4	94	11	31	59	-21.7	0.26	2.21	446
3	4	94	14	31	59	-21	0.26	2.2	448
3	4	94	17	31	59	-20.4	0.26	2.2	447
3	4	94	20	31	59	-20.1	0.26	2.19	449
3	4	94	23	31	59	-20.2	0.26	2.19	447
3	5	94	2	31	59	-20.1	0.26	2.18	448
3	5	94	5	31	59	-20.3	0.26	2.17	446
3	5	94	8	31	59	-21	0.25	2.17	447
3	5	94	11	31	59	-20.8	0.25	2.16	448
3	5	94	14	31	59	-20.3	0.25	2.16	448
3	5	94	17	31	59	-19.8	0.25	2.15	448
3	5	94	20	31	59	-19.6	0.25	2.15	448
3	5	94	23	31	59	-19.6	0.25	2.14	448
3	6	94	2	31	59	-19.5	0.25	2.14	447
3	6	94	5	31	59	-19.5	0.25	2.13	448
3	6	94	8	31	59	-19.5	0.25	2.13	448
3	6	94	11	31	59	-19.6	0.25	2.13	448
3	6	94	14	31	59	-19.4	0.25	2.12	448
3	6	94	17	31	59	-19.1	0.24	2.12	449
3	6	94	20	31	59	-19	0.24	2.12	448
3	6	94	23	31	59	-19.1	0.24	2.11	448
3	7	94	2	31	59	-19.1	0.24	2.11	449
3	7	94	5	31	59	-19.1	0.24	2.11	448
3	7	94	a	31	59	-19.1	0.24	2.1	450
3	7	94	11	31	59	-19	0.24	2.1	449
3	7	94	14	31	59	-18.9	0.24	2.1	452
3	7	94	17		59	-18.6	0.24	2.09	452
3	7	94	20	7:	59	-18.4	0.24	2.09	453
3	7	94	23	31	59	-18.4	0.24	2.09	453
3	a	94	2	31	59	-18.6	0.23	2.08	453
3	8	94	5	31	59	-18.7	0.23	2.08	453
3	8	94	8	31	59	-18.7	0.23	2.08	454
3	8	94	11	31	59	-18.7	0.23	2.08	454
3	8	94	14	31	59	-18.6	0.23	2.07	455
3	8	94	17	31	59	-18.4	0.23	2.07	455
3	8	94	20	31	59	-18.3	0.23	2.06	456
3	8	94	23	31	59	-18.3	0.23	2.06	456
3	9	94	2	31	59	-18.3	0.23	2.06	458

Appendix C

Gambell Observation Well #1

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
3	9	94	5	31	59	-18.3	0.23	2.05	458
3	9	94	8	31	59	-18.4	0.23	2.05	458
3	9	94	11	31	59	-18.5	0.23	2.04	458
3	9	94	14	31	59	-18.5	0.22	2.04	460
3	9	94	17	31	59	-18.3	0.23	2.03	460
3	9	94	20	31	59	-18.3	0.22	2.03	459
3	9	94	23	31	59	-18.4	0.22	2.03	460
3	10	94	2	31	59	-18.5	0.22	2.02	460
3	10	94	5	31	59	-18.7	0.22	2.02	461
3	10	94	8	31	59	-18.8	0.22	2.01	461
3	10	94	11	31	59	-18.9	0.22	2.01	461
3	10	94	14	31	59	-18.8	0.22	2	462
3	10	94	17	31	59	-18.5	0.22	1.99	463
3	10	94	20	31	59	-18.4	0.22	1.99	463
3	10	94	23	31	59	-18.4	0.22	1.98	463
3	11	94	2	31	59	-18.6	0.22	1.98	465
3	11	94	5	31	59	-18.7	0.22	1.97	466
3	11	94	8	31	59	-18.9	0.21	1.97	465
3	11	94	11	31	59	-18.9	0.21	1.96	465
3	11	94	14	31	59	-18.7	0.21	1.96	466
3	11	94	17	31	59	-18.3	0.21	1.96	466
3	11	94	20	31	59	-18.5	0.21	1.95	466
3	11	94	23	31	59	-19	0.21	1.95	467
3	12	94	2	31	59	-19.4	0.21	1.94	467
3	12	94	5	31	59	-19.8	0.21	1.94	467
3	12	94	8	31	59	-20.2	0.21	1.94	467
3	12	94	11	31	59	-20.4	0.21	1.93	467
3	12	94	14	31	59	-20	0.21	1.93	467
3	12	94	17	31	59	-19.4	0.21	1.92	467
3	12	94	20	31	59	-19.2	0.21	1.92	468
3	12	94	23	31	59	-19.4	0.2	1.91	467
3	13	94	2	31	59	-19.4	0.2	1.91	469
3	13	94	5	31	59	-19.4	0.2	1.9	468
3	13	94	8	31	59	-19.7	0.2	1.9	468
3	13	94	11	31	59	-19.8	0.2	1.89	469
3	13	94	14	31	59	-19.2	0.2	1.89	468
3	13	94	17	31	59	-18.5	0.2	1.89	469
3	13	94	20	31	59	-18	0.2	1.89	470
3	13	94	23	31	59	-17.7	0.2	1.89	469
3	14	94	2	31	59	-17.5	0.2	1.88	470
3	14	94	5	31	59	-17.3	0.2	1.88	470
3	14	94	8	31	59	-17.1	0.2	1.88	471
3	14	94	11	31	59	-17	0.2	1.88	472
3	14	94	14	31	59	-16.7	0.2	1.88	473
3	14	94	17	31	59	-16.4	0.2	1.88	474
3	14	94	20	31	59	-16.1	0.2	1.88	476
3	14	94	23	31	59	-16.1	0.2	1.88	476
3	15	94	2	31	59	-16	0.2	1.88	477
3	15	94	5	31	59	-16	0.2	1.88	478
3	15	94	8	31	59	-16	0.2	1.88	479
3	15	94	11	31	59	-15.9	0.2	1.88	479
3	15	94	14	31	59	-15.7	0.2	1.89	481
3	15	94	17	31	59	-15.4	0.2	1.89	483
3	15	94	20	31	59	-15.1	0.2	1.89	484
3	15	94	23	31	59	-15	0.19	1.89	486
3	16	94	2	31	59	-14.8	0.19	1.89	488
3	16	94	5	31	59	-14.7	0.19	1.89	490
3	16	94	8	31	59	-14.7	0.19	1.89	491
3	16	94	11	31	59	-14.6	0.19	1.9	492
3	16	94	14	31	59	-14.5	0.19	1.9	493
3	16	94	17	31	59	-14.3	0.19	1.9	496
3	16	94	20	31	59	-14.2	0.19	1.9	499
3	16	94	23	31	59	-14.1	0.19	1.9	500
3	17	94	2	31	59	-14.1	0.19	1.9	503
3	17	94	5	31	59	-14.2	0.19	1.9	503
3	17	94	8	31	59	-14.3	0.19	1.9	507
3	17	94	11	31	59	-14.3	0.19	1.91	510
3	17	94	14	31	59	-14.2	0.19	1.91	514
3	17	94	17	31	59	-14	0.18	1.91	518
3	17	94	20	31	59	-13.9	0.18	1.92	521
3	17	94	23	31	59	-13.8	0.18	1.92	524
3	18	94	2	31	59	-13.8	0.18	1.92	529
3	18	94	5	31	59	-13.8	0.18	1.92	532
3	18	94	8	31	59	-13.9	0.18	1.93	537
3	18	94	11	31	59	-14.3	0.18	1.93	540
3	18	94	14	31	59	-14.7	0.18	1.93	543
3	18	94	17	31	59	-14.8	0.18	1.93	547
3	18	94	20	31	59	-15.4	0.18	1.94	552
3	18	94	23	31	59	-16.3	0.17	1.94	555
3	19	94	2	31	59	-17.1	0.17	1.94	560
3	19	94	5	31	59	-16.9	0.17	1.94	562
3	19	94	8	31	59	-17.3	0.17	1.94	566
3	19	94	11	31	59	-17.4	0.17	1.94	570
3	19	94	14	31	59	-17	0.17	1.94	574

Appendix C

Gambell Observation Well #1

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
3	19	94	17	31	59	-16.6	0.17	1.94	579
3	19	94	20	31	59	-16.6	0.16	1.94	583
3	19	94	23	31	59	-17.4	0.17	1.94	587
3	20	94	2	31	59	-17.8	0.16	1.94	591
3	20	94	5	31	59	-18.1	0.16	1.94	595
3	20	94	8	31	59	-18	0.16	1.94	598
3	20	94	11	31	59	-18	0.16	1.93	602
3	20	94	14	31	59	-17.3	0.16	1.93	607
3	20	94	17	31	59	-16.7	0.16	1.93	610
3	20	94	20	31	59	-16.4	0.16	1.93	613
3	20	94	23	31	59	-16.7	0.15	1.93	617
3	21	94	2	31	59	-17.6	0.15	1.93	620
3	21	94	5	31	59	-18.3	0.15	1.93	625
3	21	94	8	31	59	-18.5	0.15	1.93	628
3	21	94	11	31	59	-18.8	0.15	1.92	633
3	21	94	14	31	59	-20.3	0.15	1.93	644
3	21	94	17	31	59	-20.4	0.15	1.93	650
3	21	94	20	31	59	-21.8	0.14	1.93	656
3	21	94	23	31	59	-22.8	0.14	1.92	659
3	22	94	2	31	59	-24	0.14	1.92	662
3	22	94	5	31	59	-24.5	0.14	1.91	665
3	22	94	8	31	59	-25	0.14	1.91	667
3	22	94	11	31	59	-25.4	0.14	1.91	669
3	22	94	14	31	59	-25.3	0.13	1.91	673
3	22	94	17	31	59	-25	0.13	1.91	676
3	22	94	20	31	59	-26	0.13	1.9	680
3	22	94	23	31	59	-26.4	0.13	1.9	684
3	23	94	2	31	59	-26.4	0.13	1.9	687
3	23	94	5	31	59	-26.8	0.13	1.89	689
3	23	94	8	31	59	-27.2	0.13	1.89	691
3	23	94	11	31	59	-27	0.13	1.89	699
3	23	94	14	31	59	-25.5	0.12	1.89	705
3	23	94	17	31	59	-25	0.12	1.89	710
3	23	94	20	31	59	-25.4	0.12	1.89	712
3	23	94	23	31	59	-26.1	0.12	1.89	716
3	24	94	2	31	59	-26.7	0.12	1.89	720
3	24	94	5	31	59	-26.8	0.12	1.89	722
3	24	94	8	31	59	-26.7	0.12	1.89	724
3	24	94	11	31	59	-26.3	0.12	1.88	727
3	24	94	14	31	59	-24.9	0.12	1.88	732
3	24	94	17	31	59	-23.9	0.12	1.88	739
3	24	94	20	31	59	-24.1	0.12	1.88	741

Mm	Dd	Yy	Hr	Mn	Ss	AirT	Water1	Stage	Conductivity
3	24	94	23	31	59	-24.3	0.12	1.88	744
3	25	94	2	31	59	-24	0.11	1.88	747
3	25	94	5	31	59	-24.2	0.11	1.88	750
3	25	94	8	31	59	-23.9	0.11	1.87	753
3	25	94	11	31	59	-23.4	0.11	1.87	757
3	25	94	14	31	59	-21.8	0.11	1.87	763
3	25	94	17	31	59	-21.1	0.11	1.87	771
3	25	94	20	31	59	-21.3	0.11	1.87	776
3	25	94	23	31	59	-21	0.11	1.87	778
3	26	94	2	31	59	-20.6	0.11	1.87	782
3	26	94	5	31	59	-20	0.11	1.87	788
3	26	94	8	31	59	-19.5	0.11	1.86	794
3	26	94	11	31	59	-19.2	0.11	1.86	799
3	26	94	14	31	59	-18.8	0.11	1.86	803
3	26	94	17	31	59	-18.4	0.11	1.86	808
3	26	94	20	31	59	-18.1	0.11	1.87	811
3	26	94	23	31	59	-17.7	0.11	1.87	816
3	27	94	2	31	59	-17.3	0.11	1.87	820
3	27	94	5	31	59	-16.9	0.1	1.87	824
3	27	94	8	31	59	-16.9	0.1	1.87	828
3	27	94	11	31	59	-16.8	0.1	1.87	831
3	27	94	14	31	59	-16.8	0.1	1.87	834
3	27	94	17	31	59	-16.7	0.1	1.86	838
3	27	94	20	31	59	-16.8	0.1	1.86	841
3	27	94	23	31	59	-16.8	0.1	1.87	845
3	28	94	2	31	59	-16.8	0.1	1.86	847
3	28	94	5	31	59	-16.8	0.1	1.86	851
3	28	94	8	31	59	-16.7	0.1	1.86	854
3	28	94	11	31	59	-16.6	0.1	1.86	858
3	28	94	14	31	59	-16.5	0.1	1.86	862
3	28	94	17	31	59	-16.4	0.1	1.86	865
3	28	94	20	31	59	-16.3	0.09	1.86	869
3	28	94	23	31	59	-16.3	0.09	1.86	872
3	29	94	2	31	59	-16.2	0.09	1.86	875
3	29	94	5	31	59	-16.1	0.09	1.86	878
3	29	94	8	31	59	-16.1	0.09	1.85	882
3	29	94	11	31	59	-16	0.09	1.85	885
3	29	94	14	31	59	-15.7	0.09	1.85	889
3	29	94	17	31	59	-15.4	0.09	1.85	891
3	29	94	20	31	59	-15.3	0.09	1.85	894
3	29	94	23	31	59	-15.2	0.09	1.84	897
3	30	94	2	31	59	-15.1	0.09	1.84	901

Appendix C

Gambell Observation Well #1

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
3	30	94	5	31	59	-15.1	0.09	1.84	903
3	30	94	8	31	59	-15.2	0.09	1.84	906
3	30	94	11	31	59	-15.1	0.08	1.84	909
3	30	94	14	31	59	-14.9	0.08	1.84	912
3	30	94	17	31	59	-14.6	0.08	1.83	915
3	30	94	20	31	59	-14.4	0.08	1.83	918
3	30	94	23	31	59	-14.3	0.08	1.83	921
3	31	94	2	31	59	-14.1	0.08	1.83	924
3	31	94	5	31	59	-13.9	0.08	1.83	927
3	31	94	8	31	59	-13.5	0.08	1.83	930
3	31	94	11	31	59	-13.1	0.08	1.83	932
3	31	94	14	31	59	-12.5	0.08	1.83	935
3	31	94	17	31	59	-11.9	0.08	1.83	938
3	31	94	20	31	59	-11.8	0.08	1.83	940
3	31	94	23	31	59	-11.9	0.08	1.83	943
4	1	94	2	31	59	-12	0.08	1.84	946
4	1	94	5	31	59	-12.1	0.08	1.84	949
4	1	94	8	31	59	-12.1	0.07	1.84	951
4	1	94	11	31	59	-12.1	0.07	1.85	954
4	1	94	14	31	59	-12.1	0.07	1.85	957
4	1	94	17	31	59	-12	0.07	1.85	960
4	1	94	20	31	59	-11.9	0.07	1.86	964
4	1	94	23	31	59	-11.8	0.07	1.86	966
4	2	94	2	31	59	-11.6	0.07	1.86	969
4	2	94	5	31	59	-11.5	0.07	1.86	972
4	2	94	8	31	59	-11.3	0.07	1.86	975
4	2	94	11	31	59	-11.1	0.07	1.86	977
4	2	94	14	31	59	-10.5	0.07	1.87	980
4	2	94	17	31	59	-9.98	0.07	1.87	981
4	2	94	20	31	59	-9.79	0.07	1.87	984
4	2	94	23	31	59	-9.75	0.06	1.86	988
4	3	94	2	31	59	-9.66	0.06	1.86	991
4	3	94	5	31	59	-9.97	0.06	1.86	995
4	394		8	31	59	-10.1	0.06	1.86	998
4	3	94	11	31	59	-10.1	0.06	1.86	1000
4	3	94	14	31	59	-9.99	0.06	1.86	1004
4	3	94	17	31	59	-9.59	0.06	1.86	1007
4	3	94	20	31	59	-9.42	0.06	1.86	1010
4	3	94	23	31	59	-9.33	0.06	1.86	1014
4	494		2	31	59	-9.16	0.06	1.86	1017
4	494		5	31	59	-9	0.06	1.86	1019
4	4	94	8	31	59	-8.84	0.05	1.86	1023
4	4	94	11	31	59	-8.51	0.05	1.86	1026
4	4	94	14	31	59	-8.15	0.05	1.87	1029
4	4	94	17	31	59	-7.7	0.05	1.87	1033
4	4	94	20	31	59	-7.56	0.05	1.87	1035
4	4	94	23	31	59	-7.37	0.05	1.88	1038
4	5	94	2	31	59	-7.46	0.05	1.88	1041
4	5	94	5	31	59	-7.58	0.05	1.89	1043
4	5	94	8	31	59	-7.68	0.05	1.89	1047
4	5	94	11	31	59	-7.66	0.04	1.89	1049
4	5	94	14	31	59	-7.57	0.04	1.89	1051
4	5	94	17	31	59	-7.33	0.04	1.9	1055
4	5	94	20	31	59	-7.08	0.04	1.9	1058
4	5	94	23	31	59	-7.06	0.04	1.9	1060
4	694		2	31	59	-7.23	0.04	1.9	1064
4	6	94	5	31	59	-7.43	0.04	1.91	1068
4	6	94	8	31	59	-7.77	0.04	1.91	1070
4	6	94	11	31	59	-8.02	0.04	1.91	1073
4	6	94	14	31	59	-7.83	0.04	1.91	1075
4	6	94	17	31	59	-7.79	0.03	1.91	1078
4	6	94	20	31	59	-8	0.03	1.91	1081
4	6	94	23	31	59	-8.46	0.03	1.91	1086
4	7	94	2	31	59	-8.77	0.03	1.91	1089
4	7	94	5	31	59	-9.1	0.03	1.91	1092
4	7	94	8	31	59	-9.5	0.03	1.91	1096
4	7	94	11	31	59	-9.54	0.03	1.9	1099
4	7	94	14	31	59	-9.28	0.03	1.91	1102
4	7	94	17	31	59	-9.19	0.03	1.91	1104
4	7	94	20	31	59	-9.49	0.03	1.91	1109
4	7	94	23	31	59	-10	0.02	1.91	1114
4	8	94	2	31	59	-10.3	0.03	1.91	1119
4	894		5	31	59	-10.6	0.02	1.92	1123
4	8	94	8	31	59	-10.8	0.02	1.92	1127
4	8	94	11	31	59	-10.6	0.02	1.92	1129
4	8	94	14	31	59	-10.5	0.02	1.92	1132
4	8	94	17	31	59	-10.4	0.02	1.92	1134
4	8	94	20	31	59	-10.5	0.02	1.92	1138
4	8	94	23	31	59	-10.7	0.02	1.93	1141
4	994		2	31	59	-10.8	0.02	1.92	1145
4	994		5	31	59	-10.9	0.02	1.92	1148
4	994		8	31	59	-11.1	0.01	1.92	1150
4	9	94	11	31	59	-11.1	0.01	1.92	1153
4	9	94	14	31	59	-10.9	0.01	1.92	1153

Appendix C

Gambell Observation Well #1

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
4	9	94	17	31	59	-10.7	0.01	1.92	1154
4	9	94	20	31	59	-10.7	0.01	1.92	1156
4	9	94	23	31	59	-10.8	0.01	1.92	1159
4	10	94	2	31	59	-10.8	0.01	1.92	1161
4	10	94	5	31	59	-11	0.01	1.91	1163
4	10	94	8	31	59	-11.2	0.01	1.91	1165
4	10	94	11	31	59	-11.2	0.01	1.91	1167
4	10	94	14	31	59	-10.9	0.01	1.9	1166
4	10	94	17	31	59	-10.7	0.01	1.89	1167
4	10	94	20	31	59	-10.6	0.01	1.89	1167
4	10	94	23	31	59	-10.6	0	1.89	1169
4	11	94	2	31	59	-10.5	0	1.88	1170
4	11	94	5	31	59	-10.6	0	1.88	1172
4	11	94	8	31	59	-10.7	0	1.87	1174
4	11	94	11	31	59	-10.7	0	1.87	1174
4	11	94	14	31	59	-10.5	0	1.87	1174
4	11	94	17	31	59	-10.4	0	1.87	1176
4	11	94	20	31	59	-10.3	0	1.86	1177
4	11	94	23	31	59	-10.4	0	1.86	1178
4	12	94	2	31	59	-10.8	0	1.85	1181
4	12	94	5	31	59	-11.1	0	1.85	1183
4	12	94	8	31	59	-11.5	0	1.84	1188
4	12	94	11	31	59	-11.5	0	1.84	1188
4	12	94	14	31	59	-11.4	0	1.83	1186
4	12	94	17	31	59	-11.3	0	1.83	1189
4	12	94	20	31	59	-11.2	0	1.82	1189
4	12	94	23	31	59	-11.6	0	1.82	1193
4	13	94	2	31	59	-11.9	-0.01	1.82	1195
4	13	94	5	31	59	-12.2		1.81	1199
4	13	94	8	31	59	-12.4	8	1.8	1200
4	13	94	11	31	59	-12.2	-0.01	1.8	1199
4	13	94	14	31	59	-11.8	0	1.8	1198
4	13	94	17	31	59	-11.5	0	1.79	1197
4	13	94	20	31	59	-11.3	-0.01	1.79	1197
4	13	94	23	31	59	-11.3	-0.01	1.79	1199
4	14	94	2	31	59	-11.6	-0.01	1.78	1201
4	14	94	5	31	59	-12	-0.01	1.78	1204
4	14	94	8	31	59	-12.3	-0.01	1.78	1206
4	14	94	11	31	59	-12.3	-0.01	1.77	1207
4	14	94	14	31	59	-12	-0.01	1.77	1206
4	14	94	17	31	59	-11.7	-0.01	1.77	1205
4	14	94	20	31	59	-11.6	-0.01	1.76	1205
4	14	94	23	31	59	-12	-0.01	1.76	1209
4	15	94	2	31	59	-12.5	-0.01	1.76	1213
4	15	94	5	31	59	-13	-0.01	1.76	1216
4	15	94	8	31	59	-13.6	-0.01	1.76	1219
4	15	94	11	31	59	-13.4	-0.01	1.76	1220
4	15	94	14	31	59	-12.9	-0.01	1.76	1219
4	15	94	17	31	59	-12.5	-0.01	1.76	1219
4	15	94	20	31	59	-12.6	-0.01	1.76	1221
4	15	94	23	31	59	-12.8	-0.01	1.75	1222
4	16	94	2	31	59	-13.2	-0.01	1.75	1226
4	16	94	5	31	59	-13.8	-0.01	1.75	1230
4	16	94	8	31	59	-14.2	-0.01	1.75	1235
4	16	94	11	31	59	-14.2	-0.01	1.75	1236
4	16	94	14	31	59	-13.8	-0.01	1.75	1234
4	16	94	17	31	59	-13.4	-0.02	1.75	1235
4	16	94	20	31	59	-13.3	-0.02	1.75	1238
4	16	94	23	31	59	-13.7	-0.02	1.75	1241
4	17	94	2	31	59	-14.2	-0.02	1.75	1246
4	17	94	5	31	59	-14.7	-0.02	1.75	1251
4	17	94	8	31	59	-14.9	-0.02	1.75	1253
4	17	94	11	31	59	-14.6	-0.02	1.75	1254
4	17	94	14	31	59	-14.1	-0.02	1.75	1256
4	17	94	17	31	59	-13.7	-0.02	1.76	1256
4	17	94	20	31	59	-13.4	-0.02	1.76	1257
4	17	94	23	31	59	-13.6	-0.02	1.76	1261
4	18	94	2	31	59	-14	-0.02	1.76	1265
4	18	94	5	31	59	-14.1	-0.02	1.76	1268
4	18	94	8	31	59	-14.2	-0.02	1.76	1269
4	18	94	11	31	59	-14.1	-0.02	1.76	1272
4	18	94	14	31	59	-13.7	-0.02	1.77	1272
4	18	94	17	31	59	-13.3	-0.02	1.77	1274
4	18	94	20	31	59	-13	-0.02	1.77	1277
4	18	94	23	31	59	-12.9	-0.02	1.77	1279
4	19	94	2	31	59	-13.1	-0.02	1.77	1283
4	19	94	5	31	59	-13.4	-0.02	1.77	1285
4	19	94	8	31	59	-13.4	-0.02	1.77	1286
4	19	94	11	31	59	-13.3	-0.02	1.77	1288
4	19	94	14		59	-12.9	-0.02	1.77	1289
4	19	94	17	5:	59	-12.5	-0.03	1.77	1290
4	19	94	20	31	59	-12.2	-0.03	1.77	1291
4	19	94	23	31	59	-12.1	-0.03	1.77	1292
4	20	94	2	31	59	-12.2	-0.03	1.77	1295

Appendix C

Gambell Observation Well #1

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
4	20	94	5	31	59	-12.4	-0.03	1.77	1297
4	20	94	a	31	59	-12.5	-0.03	1.77	1300
4	20	94	11	31	59	-12.4	-0.03	1.77	1301
4	20	94	14	31	59	-12.1	-0.03	1.76	1301
4	20	94	17	31	59	-11.8	-0.03	1.76	1303
4	20	94	20	31	59	-11.5	-0.03	1.76	1303
4	20	94	23	31	59	-11.4	-0.03	1.75	1304
4	21	94	2	31	59	-11.6	-0.03	1.75	1307
4	21	94	5	31	59	-11.8	-0.03	1.75	1310
4	21	94	a	31	59	-12	-0.03	1.75	1310
4	21	94	11	31	59	-11.8	-0.03	1.75	1311
4	21	94	14	31	59	-11.5	-0.03	1.74	1311
4	21	94	17	31	59	-11.1	-0.03	1.74	1311
4	21	94	20	31	59	-10.7	-0.03	1.74	1312
4	21	94	23	31	59	-10.8	-0.03	1.74	1314
4	22	94	2	31	59	-11.1	-0.03	1.74	1316
4	22	94	5	31	59	-11.6	-0.03	1.74	1319
4	22	94	a	31	59	-11.8	-0.03	1.74	1321
4	22	94	11	31	59	-11.5	-0.03	1.74	1322
4	22	94	14	31	59	-11.1	-0.03	1.73	1321
4	22	94	17	31	59	-10.7	-0.03	1.73	1320
4	22	94	20	31	59	-10.5	-0.03	1.73	1320
4	22	94	23	31	59	-10.7	-0.03	1.73	1322
4	23	94	2	31	59	-11.1	-0.04	1.73	1325
4	23	94	5	31	59	-11.4	-0.03	1.72	1326
4	23	94	8	31	59	-11.5	-0.03	1.72	1329
4	23	94	11	31	59	-11.2	-0.03	1.72	1327
4	23	94	14	31	59	-10.9	-0.04	1.72	1328
4	23	94	17	31	59	-10.6	-0.03	1.72	1329
4	23	94	20	31	59	-10.3	-0.04	1.72	1329
4	23	94	23	31	59	-10.5	-0.04	1.72	1332
4	24	94	2	31	59	-10.7	-0.04	1.71	1333
4	24	94	5	31	59	-10.6	-0.04	1.71	1335
4	24	94	8	31	59	-10.8	-0.04	1.71	1336
4	24	94	11	31	59	-10.6	-0.04	1.71	1335
4	24	94	14	31	59	-10.3	-0.04	1.71	1336
4	24	94	17	31	59	-9.98	-0.04	1.71	1337
4	24	94	20	31	59	-9.7	-0.04	1.71	1338
4	24	94	23	31	59	-9.64	-0.04	1.71	1338
4	25	94	2	31	59	-9.85	-0.04	1.71	1340
4	25	94	5	31	59	-10.2	-0.04	1.71	1343
4	25	94	8	31	59	-10.3	-0.04	1.71	1345
4	25	94	11	31	59	-10.2	-0.04	1.71	1344
4	25	94	14	31	59	-9.87	-0.04	1.71	1346
4	25	94	17	31	59	-9.55	-0.04	1.71	1349
4	25	94	20	31	59	-9.26	-0.04	1.71	1349
4	25	94	23	31	59	-9.24	-0.04	1.71	1351
4	26	94	2	31	59	-9.41	-0.04	1.71	1352
4	26	94	5	31	59	-9.56	-0.04	1.71	1355
4	26	94	8	31	59	-9.61	-0.04	1.71	1357
4	26	94	11	31	59	-9.45	-0.04	1.71	1358
4	26	94	14	31	59	-9.15	-0.04	1.71	1359
4	26	94	17	31	59	-8.82	-0.04	1.71	1360
4	26	94	20	31	59	-8.55	-0.04	1.71	1362
4	26	94	23	31	59	-8.46	-0.04	1.71	1363
4	27	94	2	31	59	-8.47	-0.04	1.71	1364
4	27	94	5	31	59	-8.49	-0.04	1.71	1366
4	27	94	8	31	59	-8.52	-0.05	1.71	1367
4	27	94	11	31	59	-8.43	-0.04	1.71	1368
4	27	94	14	31	59	-8.26	-0.04	1.71	1370
4	27	94	17	31	59	-7.98	-0.05	1.7	1372
4	27	94	20	31	59	-7.74	-0.05	1.7	1373
4	27	94	23	31	59	-7.74	-0.04	1.7	1375
4	28	94	2	31	59	-7.81	-0.05	1.7	1375
4	28	94	5	31	59	-7.98	-0.05	1.7	1376
4	28	94	a	31	59	-8.08	-0.05	1.69	1378
4	28	94	11	31	59	-8.03	-0.05	1.69	1378
4	28	94	14	31	59	-7.87	-0.05	1.69	1379
4	28	94	17	31	59	-7.57	-0.05	1.69	1380
4	28	94	20	31	59	-7.3	-0.05	1.69	1381
4	28	94	23	31	59	-7.05	-0.05	1.68	1383
4	29	94	2	31	59	-7.04	-0.05	1.68	1384
4	29	94	5	31	59	-6.92	-0.05	1.68	1384
4	29	94	8	31	59	-6.86	-0.05	1.68	1385
4	29	94	11	31	59	-6.62	-0.05	1.68	1387
4	29	94	14	31	59	-6.03	-0.05	1.68	1389
4	29	94	17	31	59	-5.89	-0.05	1.68	1390
4	29	94	20	31	59	-5.63	-0.05	1.68	1392
4	29	94	23	31	59	-5.84	-0.05	1.68	1394
4	30	94	2	31	59	-6.16	-0.05	1.68	1396
4	30	94	5	31	59	-6.45	-0.05	1.68	1398
4	30	94	a	31	59	-6.63	-0.05	1.68	1399
4	30	94	11	31	59	-6.57	-0.05	1.68	1400
4	30	94	14	31	59	-6.39	-0.05	1.68	1402

Appendix C

Gambell Observation Well #I

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
4	30	94	17	31	59	-6.25	-0.05	1.69	1404
4	30	94	20	31	59	-6.34	-0.05	1.69	1406
4	30	94	23	31	59	-6.57	-0.05	1.69	1410
5	1	94	2	31	59	-6.69	-0.05	1.7	1411
5	1	94	5	31	59	-6.8	-0.05	1.7	1414
5	1	94	8	31	59	-6.79	-0.05	1.7	1417
5	1	94	11	31	59	-6.56	-0.05	1.71	1418
5	1	94	14	31	59	-6.34	-0.05	1.71	1422
5	1	94	17	31	59	-6.17	-0.05	1.72	1426
5	1	94	20	31	59	-6.14	-0.05	1.72	1429
5	1	94	23	31	59	-6.38	-0.05	1.72	1434
5	2	94	2	31	59	-6.45	-0.05	1.73	1436
5	2	94	5	31	59	-6.53	-0.05	1.74	1439
5	2	94	8	31	59	-6.56	-0.05	1.74	1442
5	2	94	11	31	59	-6.48	-0.05	1.75	1445
5	2	94	14	31	59	-6.29	-0.05	1.75	1447
5	2	94	17	31	59	-6.13	-0.05	1.76	1452
5	2	94	20	31	59	-6.03	-0.05	1.77	1455
5	2	94	23	31	59	-5.97	-0.05	1.77	1458
5	3	94	2	31	59	-6.06	-0.05	1.78	1461
5	3	94	5	31	59	-6.09	-0.05	1.78	1464
5	3	94	8	31	59	-6.07	-0.05	1.79	1466
5	3	94	11	31	59	-5.96	-0.05	1.79	1470
5	3	94	14	31	59	-5.75	-0.05	1.79	1474
5	3	94	17	31	59	-5.45	-0.05	1.8	1476
5	3	94	20	31	59	-5.09	-0.05	1.8	1479
5	3	94	23	31	59	-4.83	-0.05	1.8	1483
5	4	94	2	31	59	-4.83	-0.05	1.81	1485
5	4	94	5	31	59	-4.93	-0.05	1.81	1488
5	494		8	31	59	-4.84	-0.05	1.81	1489
5	4	94	11	31	59	-4.72	-0.05	1.82	1492
5	4	94	14	31	59	-4.31	-0.05	1.82	1495
5	4	94	17	31	59	-3.71	-0.05	1.82	1500
5	4	94	20	31	59	-3.42	-0.05	1.83	1502
5	4	94	23	31	59	-3.52	-0.05	1.83	1503
5	5	94	2	31	59	-3.6	-0.05	1.83	1506
5	5	94	5	31	59	-3.8	-0.05	1.83	1507
5	5	94	8	31	59	-3.9	-0.05	1.84	1508
5	5	94	11	31	59	-3.85	-0.05	1.84	1508
5	5	94	14	31	59	-3.68	-0.05	1.84	1510
5	5	94	17	31	59	-3.46	-0.05	1.85	1512
5	5	94	20	31	59	-3.24	-0.05	1.85	1515
5	5	94	23	31	59	-3.22	-0.05	1.85	1516
5	6	94	2	31	59	-3.33	-0.05	1.85	1518
5	6	94	5	31	59	-3.47	-0.05	1.86	1520
5	6	94	8	31	59	-3.52	-0.05	1.86	1523
5	6	94	11	31	59	-3.39	-0.05	1.87	1524
5	6	94	14	31	59	-3.22	-0.05	1.87	1525
5	6	94	17	31	59	-3.09	-0.05	1.88	1528
5	6	94	20	31	59	-3.09	-0.05	1.88	1530
5	6	94	23	31	59	-3.27	-0.05	1.89	1533
5	7	94	2	31	59	-3.46	-0.05	1.89	1536
5	7	94	5	31	59	-3.61	-0.05	1.9	1538
5	7	94	8	31	59	-3.68	-0.05	1.91	1539
5	7	94	11	31	59	-3.63	-0.05	1.91	1539
5	7	94	14	31	59	-3.5	-0.05	1.91	1541
5	7	94	17	31	59	-3.34	-0.05	1.92	1541
5	7	94	20	31	59	-3.4	-0.05	1.92	1542
5	7	94	23	31	59	-3.51	-0.05	1.93	1545
5	a	94	2	31	59	-3.54	-0.05	1.93	1547
5	8	94	5	31	59	-3.57	-0.05	1.93	1548
5	8	94	8	31	59	-3.61	-0.05	1.93	1548
5	8	94	11	31	59	-3.46	-0.05	1.93	1548
5	8	94	14	31	59	-3.15	-0.05	1.94	1550
5	8	94	17	31	59	-2.81	-0.05	1.94	1552
5	8	94	20	31	59	-2.78	-0.05	1.94	1552
5	8	94	23	31	59	-2.96	-0.05	1.94	1554
5	9	94	2	31	59	-3.15	-0.05	1.94	1555
5	9	94	5	31	59	-3.33	-0.05	1.94	1557
5	9	94	8	31	59	-3.39	-0.05	1.94	1558
5	9	94	11	31	59	-3.21	-0.05	1.93	1556
5	9	94	14	31	59	-2.83	-0.05	1.93	1556
5	9	94	17	31	59	-2.45	-0.05	1.92	1557
5	9	94	20	31	59	-2.25	-0.05	1.92	1557
5	9	94	23	31	59	-2.51	-0.05	1.92	1557
5	10	94	2	31	59	-3.11	-0.05	1.92	1560
5	10	94	5	31	59	-3.4	-0.05	1.92	1563
5	10	94	8	31	59	-3.38	-0.05	1.92	1563
5	10	94	11	31	59	-3.13	-0.05	1.92	1563
5	10	94	14	31	59	-2.76	-0.05	1.92	1562
5	10	94	17	31	59	-2.7	-0.05	1.93	1562
5	10	94	20	31	59	-3.01	-0.05	1.94	1563
5	10	94	23	31	59	-3.15	-0.05	1.94	1566
5	11	94	2	31	59	-3.19	-0.05	1.94	1568

Appendix C

Gambell Observation Well #1

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
5	11	94	5	31	59	-3.21	-0.05	1.94	1569
5	11	94	a	31	59	-3.15	-0.05	1.95	1568
5	11	94	11	31	59	-3	-0.05	1.95	1569
5	11	94	14	31	59	-2.82	-0.05	1.95	1569
5	11	94	17	31	59	-2.63	-0.05	1.95	1570
5	11	94	20	31	59	-2.64	-0.05	1.95	1570
5	11	94	23	31	59	-2.7	-0.05	1.95	1572
5	12	94	2	31	59	-2.8	-0.06	1.94	1574
5	12	94	5	31	59	-2.88	-0.05	1.94	1577
5	12	94	a	31	59	-2.89	-0.05	1.94	1577
5	12	94	11	31	59	-2.5	-0.05	1.94	1576
5	12	94	14	31	59	-2.49	-0.05	1.94	1578
5	12	94	17	31	59	-1.99	-0.05	1.94	1579
5	12	94	20	31	59	-1.74	-0.06	1.95	1578
5	12	94	23	31	59	-1.94	-0.05	1.94	1579
5	13	94	2	31	59	-2.22	-0.05	1.93	1580
5	13	94	5	31	59	-2.39	-0.05	1.92	1582
5	13	94	a	31	59	-2.41	-0.05	1.92	1584
5	13	94	11	31	59	-2.09	-0.05	1.92	1585
5	13	94	14	31	59	-1.67	-0.05	1.93	1585
5	13	94	17	31	59	-1.49	-0.05	1.93	1584
5	13	94	20	31	59	-1.64	-0.05	1.94	1585
5	13	94	23	31	59	-1.87	-0.06	1.94	1586
5	14	94	2	31	59	-1.94	-0.05	1.94	1589
5	14	94	5	31	59	-1.92	-0.05	1.94	1590
5	14	94	8	31	59	-1.86	-0.05	1.94	1591
5	14	94	11	31	59	-1.66	-0.05	1.94	1591
5	14	94	14	31	59	-1.18	-0.06	1.94	1592
5	14	94	17	31	59	-0.73	-0.06	1.95	1592
5	14	94	20	31	59	-0.53	-0.06	1.96	1595
5	14	94	23	31	59	-0.56	-0.06	1.96	1597
5	15	94	2	31	59	-1.04	-0.06	1.96	1603
5	15	94	5	31	59	-1.51	-0.06	1.96	1605
5	15	94	a	31	59	-1.34	-0.06	1.96	1606
5	15	94	11	31	59	-0.61	-0.06	1.97	1605
5	15	94	14	31	59	-0.41	-0.06	1.97	1598
5	15	94	17	31	59	-0.37	-0.06	1.98	1597
5	15	94	20	31	59	-0.44	-0.06	1.98	1599
5	15	94	23	31	59	-0.59	-0.06	1.99	1602
5	16	94	2	31	59	-0.78	-0.06	1.99	1609
5	16	94	5	31	59	-0.93	-0.06	2	1611
5	16	94	8	31	59	-0.86	-0.06	2	1613
5	16	94	11	31	59	-0.59	-0.06	2.01	1612
5	16	94	14	31	59	-0.39	-0.05	2.01	1605
5	16	94	17	31	59	-0.34	-0.06	2.02	1602
5	16	94	20	31	59	-0.5	-0.06	2.03	1602
5	16	94	23	31	59	-0.94	-0.06	2.04	1609
5	17	94	2	31	59	-1.38	-0.06	2.05	1614
5	17	94	5	31	59	-1.59	-0.06	2.05	1616
5	17	94	8	31	59	-1.48	-0.06	2.06	1619
5	17	94	11	31	59	-1.03	-0.06	2.07	1618
5	17	94	14	31	59	-0.67	-0.06	2.07	1611
5	17	94	17	31	59	-0.71	-0.06	2.08	1609
5	17	94	20	31	59	-0.95	-0.06	2.09	1609
5	17	94	23	31	59	-1.17	-0.06	2.09	1613
5	18	94	2	31	59	-1.26	-0.06	2.09	1614
5	18	94	5	31	59	-1.2	-0.06	2.09	1616
5	18	94	8	31	59	-1.08	-0.06	2.1	1616
5	18	94	11	31	59	-0.89	-0.06	2.1	1615
5	18	94	14	31	59	-0.56	-0.06	2.11	1612
5	18	94	17	31	59	-0.47	-0.06	2.11	1610
5	18	94	20	31	59	-0.43	-0.06	2.12	1612
5	18	94	23	31	59	-0.44	-0.06	2.13	1612
5	19	94	2	31	59	-0.46	-0.05	2.14	1615
5	19	94	5	31	59	-0.49	-0.06	2.15	1616
5	19	94	8	31	59	-0.47	-0.06	2.16	1619
5	19	94	11	31	59	-0.38	-0.06	2.17	1618
5	19	94	14	31	59	-0.29	-0.05	2.19	1618
5	19	94	17	31	59	-0.24	-0.05	2.21	1624
5	19	94	20	31	59	-0.2	-0.05	2.24	1616
5	19	94	23	31	59	-0.26	-0.05	2.29	1611
5	20	94	2	31	59	-0.33	-0.05	2.33	1603
5	20	94	5	31	59	-0.38	-0.05	2.36	1598
5	20	94	8	31	59	-0.34	-0.05	2.38	1593
5	20	94	11	31	59	-0.27	-0.05	2.4	1585
5	20	94	14	31	59	-0.15	-0.05	2.43	1584
5	20	94	17	31	59	-0.07	-0.05	2.47	1584
5	20	94	20	31	59	-0.04	-0.05	2.53	1581
5	20	94	23	31	59	-0.08	-0.05	2.61	1578
5	21	94	2	31	59	-0.18	-0.05	2.67	1578
5	21	94	5	31	59	-0.27	-0.05	2.72	1579
5	21	94	a	31	59	-0.22	-0.05	2.76	1578
5	21	94	11	31	59	-0.06	-0.05	2.79	1576
5	21	94	14	31	59	0.12	-0.05	2.82	1578

Appendix C

Gambell Observation Well #1

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stω	Conductivity
5	21	94	17	31	59	0.18	-0.05	2.85	1583
5	21	94	20	31	59	0.13	-0.05	2.92	1576
5	21	94	23	31	59	-0.1	-0.05	3.01	1572
5	22	94	2	31	59	-0.23	-0.05	3.08	1572
5	22	94	5	31	59	-0.27	-0.05	3.13	1572
5	22	94	8	31	59	-0.2	-0.05	3.16	1569
5	22	94	11	31	59	-0.01	-0.05	3.19	1583
5	22	94	14	31	59	0.03	-0.05	3.21	1582
5	22	94	17	31	59	-0.1	-0.05	3.22	1579
5	22	94	20	31	59	-0.23	-0.05	3.24	1580
5	22	94	23	31	59	-0.46	-0.05	3.26	1577
5	23	94	2	31	59	-0.65	-0.05	3.26	1572
5	23	94	5	31	59	-0.79	-0.05	3.27	1569
5	23	94	8	31	59	-0.75	-0.05	3.27	1571
5	23	94	11	31	59	-0.54	-0.05	3.26	1571
5	23	94	14	31	59	-0.21	-0.05	3.26	1568
5	23	94	17	31	59	-0.16	-0.05	3.26	1566
5	23	94	20	31	59	-0.39	-0.05	3.26	1565
5	23	94	23	31	59	-0.6	-0.05	3.25	1562
5	24	94	2	31	59	-0.82	-0.05	3.25	1564
5	24	94	5	31	59	-0.91	-0.05	3.24	1566
5	24	94	8	31	59	-0.89	-0.05	3.23	1566
5	24	94	11	31	59	-0.63	-0.05	3.22	1565
5	24	94	14	31	59	-0.2	-0.05	3.21	1565
5	24	94	17	31	59	-0.02	-0.06	3.21	1564
5	24	94	20	31	59	-0.32	-0.05	3.2	1561
5	24	94	23	31	59	-0.78	-0.06	3.19	1563
5	25	94	2	31	59	-1.05	-0.06	3.19	1567
5	25	94	5	31	59	-1.16	-0.06	3.18	1568
5	25	94	8	31	59	-0.98	-0.06	3.18	1570
5	25	94	11	31	59	-0.55	-0.06	3.17	1568
5	25	94	14	31	59	0.01	-0.06	3.16	1572
5	25	94	17	31	59	0.21	-0.06	3.16	1571
5	25	94	20	31	59	0.22	-0.06	3.17	1565
5	25	94	23	31	59	-0.2	-0.06	3.18	1562
5	26	94	2	31	59	-0.56	-0.06	3.19	1560
5	26	94	5	31	59	-0.62	-0.06	3.19	1561
5	26	94	8	31	59	-0.49	-0.06	≡3.2	1562
5	26	94	11	31	59	-0.02	-0.06	.19	1567
5	26	94	14	31	59	0.34	-0.06	-.19	1567
5	26	94	17	31	59	0.34	-0.06	≡3.2	1564
5	26	94	20	31	59	-0.1	-0.06	-21	1561
5	26	94	23	31	59	-0.37	-0.06	3.22	1558
5	27	94	2	31	59	-0.58	-0.06	3.24	1560
5	27	94	5	31	59	-0.56	-0.06	3.24	1560
5	27	94	8	31	59	-0.49	-0.06	3.24	1560
5	27	94	11	31	59	-0.02	-0.06	3.24	1561
5	27	94	14	31	59	0.63	-0.06	3.24	1569
5	27	94	17	31	59	0.61	-0.06	3.27	1562
5	27	94	20	31	59	0.38	-0.05	3.3	1559
5	27	94	23	31	59	0.06	-0.06	3.33	1557
5	28	94	2	31	59	-0.24	-0.05	3.35	1554
5	28	94	5	31	59	-0.38	-0.05	3.37	1553
5	28	94	8	31	59	-0.23	-0.06	3.37	1549
5	28	94	11	31	59	0.25	-0.05	3.38	1552
5	28	94	14	31	59	0.7	-0.05	3.39	1543
5	28	94	17	31	59	0.99	-0.05	3.42	1519
5	28	94	20	31	59	1.07	-0.06	3.48	1498
5	28	94	23	31	59	0.8	-0.05	3.57	1469
5	29	94	2	31	59	-0.33	-0.06	3.63	1381
5	29	94	5	31	59	-0.46	-0.06	3.67	1319
5	29	94	8	31	59	-0.36	-0.07	3.7	1269
5	29	94	11	31	59	0.09	-0.07	3.72	1196
5	29	94	14	31	59	0.52	-0.07	3.73	1118
5	29	94	17	31	59	0.67	-0.07	3.75	1095
5	29	94	20	31	59	0.4	-0.07	3.77	1082
5	29	94	23	31	59	-0.21	-0.07	3.79	1074
5	30	94	2	31	59	-0.55	-0.07	3.81	1059
5	30	94	5	31	59	-0.7	-0.08	3.82	1045
5	30	94	8	31	59	-0.57	-0.08	3.83	1032
5	30	94	11	31	59	-0.31	-0.08	3.83	1018
5	30	94	14	31	59	-0.04	-0.08	3.83	1011
5	30	94	17	31	59	0.03	-0.08	3.83	1003
5	30	94	20	31	59	-0.28	-0.08	3.82	996
5	30	94	23	31	59	-0.67	-0.08	3.82	986
5	31	94	2	31	59	-0.73	-0.08	3.81	981
5	31	94	5	31	59	-0.67	-0.08	3.8	974
5	31	94	8	31	59	-0.47	-0.08	3.79	970
5	31	94	11	31	59	-0.2	-0.08	3.78	964
5	31	94	14	31	59	0.06	-0.08	3.77	962
5	31	94	17	31	59	0.44	-0.08	3.77	962
5	31	94	20	31	59	0.73	-0.08	3.79	961
5	31	94	23	31	59	0.48	-0.08	3.83	948
6	1	94	2	31	59	0.06	-0.08	3.84	944

Appendix C

Gambell Observation Well #1

M m	D d	Y y	H r	M n	Ss	AirT	WaterT	Stage	Conductivity
6	194		5	31	59	-0.23	-0.08	3.84	938
6	194		8	31	59	-0.29	-0.08	3.85	929
6	1 9 4	1 1	3	1	59	-0.02	-0.08	3.85	922
6	1	94	14	31	59	0.5	-0.08	3.85	928
6	1	94	17	31	59	1.11	-0.08	3.87	939
6	1	94	20	31	59	1.15	-0.08	3.89	944
6	1 9 4	2 3	3	1	59	0.68	-0.08	3.93	951
6	294		2	31	59	0.08	-0.08	3.97	956
6	294		5	31	59	-0.06	-0.08	3.99	950
6	294		8	31	59	0.07	-0.08	4	939

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
1	6	94	13	37	42	-3.85	0.5	6.74	399
1	6	94	16	37	42	-5.26	0.58	6.74	392
1	6	94	19	37	42	-6.79	0.58	6.74	393
1	6	94	22	37	42	-7.88	0.59	6.74	393
1	7	94	1	37	42	-8.74	0.58	6.74	393
1	7	94	4	37	42	-9.27	0.58	6.73	392
1	7	94	7	37	42	-9.27	0.58	6.73	393
1	7	94	10	37	42	-9.38	0.58	6.73	394
1	7	94	13	37	42	-9.7	0.58	6.72	395
1	7	94	16	37	42	-9.89	0.57	6.72	397
1	7	94	19	37	42	-10.1	0.57	6.72	394
1	7	94	22	37	42	-10.6	0.57	6.72	396
1	8	94	1	37	42	-11.6	0.57	6.71	395
1	8	94	4	37	42	-13.1	0.57	6.71	395
1	8	94	7	37	42	-14	0.57	6.7	396
1	8	94	10	37	42	-14.7	0.57	6.69	397
1	8	94	13	37	42	-14.6	0.57	6.69	396
1	8	94	16	37	42	-14.3	0.56	6.68	396
1	8	94	19	37	42	-14.3	0.56	6.68	396
1	8	94	22	37	42	-14.4	0.56	6.67	399
1	9	94	1	37	42	-14.5	0.55	6.66	397
1	9	94	4	37	42	-14.8	0.55	6.66	399
1	9	94	7	37	42	-14.9	0.55	6.65	398
1	9	94	10	37	42	-14.9	0.55	6.64	401
1	9	94	13	37	42	-14.7	0.55	6.64	402
1	9	94	16	37	42	-14.3	0.55	6.63	402
1	9	94	19	37	42	-14.2	0.55	6.62	401
1	9	94	22	37	42	-14	0.54	6.61	400
1	10	94	1	37	42	-13.9	0.54	6.61	400
1	10	94	4	37	42	-13.9	0.54	6.6	400
1	10	94	7	37	42	-13.9	0.54	6.59	402
1	10	94	10	37	42	-14.1	0.54	6.58	401
1	10	94	13	37	42	-14.3	0.54	6.58	402
1	10	94	16	37	42	-14.4	0.54	6.57	402
1	10	94	19	37	42	-14.5	0.53	6.56	402
1	10	94	22	37	42	-14.7	0.53	6.55	401
1	11	94	1	37	42	-15.1	0.53	6.55	403
1	11	94	4	37	42	-15.4	0.53	6.54	403
1	11	94	7	37	42	-15.8	0.53	6.53	401
1	11	94	10	37	42	-16.1	0.53	6.53	403
1	11	94	13	37	42	-16.3	0.52	6.52	402
	11	94	16	37	42	-16.3	0.52	6.52	401
	11	94	19	37	42	-16.5	0.52	6.51	402
	11	94	22	37	42	-16.7	0.52	6.5	403
	12	94	1	37	42	-16.9	0.52	6.5	403
	12	94	4	37	42	-17	0.51	6.49	404
1	12	94	7	37	42	-17.1	0.51	6.48	406
1	12	94	10	37	42	-17.2	0.51	6.48	406
	12	94	13	37	42	-17.4	0.51	6.47	406
1	12	94	16	37	42	-17.5	0.51	6.46	405
	12	94	19	37	42	-17.8	0.5	6.46	406
	12	94	22	37	42	-18.4	0.5	6.46	404
1	13	94	1	37	42	-18.1	0.5	6.45	406
	13	94	4	37	42	-17.8	0.5	6.44	405
	13	94	7	37	42	-17.3	0.5	6.44	404
1	13	94	10	37	42	-17.2	0.5	6.43	404
1	13	94	13	37	42	-16.9	0.5	6.42	404
	13	94	16	37	42	-16.5	0.5	6.42	404
1	13	94	19	37	42	-16.7	0.49	6.41	402
1	13	94	22	37	42	-16.9	0.49	6.41	403
	14	94	1	37	42	-16.9	0.49	6.4	402
	14	94	4	37	42	-16.9	0.49	6.39	402
	14	94	7	37	42	-17	0.49	6.39	401
	14	94	10	37	42	-17	0.49	6.38	400
	14	94	13	37	42	-16.7	0.48	6.38	400
1	14	94	16	37	42	-16.1	0.48	6.38	401
	14	94	19	37	42	-15.5	0.48	6.37	400
	14	94	22	37	42	-15.1	0.48	6.37	400
1	15	94	1	37	42	-14.7	0.48	6.36	400
1	15	94	4	37	42	-14.4	0.48	6.35	400
	15	94	7	37	42	-14.3	0.48	6.35	402
1	15	94	10	37	42	-14.3	0.48	6.34	403
1	15	94	13	37	42	-14.3	0.47	6.34	401
	15	94	16	37	42	-14.4	0.47	6.33	401
	15	94	19	37	42	-14.6	0.47	6.33	400
1	15	94	22	37	42	-14.6	0.47	6.32	400
	16	94	1	37	42	-15	0.47	6.32	402
	16	94	4	37	42	-15.5	0.47	6.31	402

This is data as recorded by the data logger and is raw data for app. E.

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
1	16	94	7	37	42	-15.7	0.47	6.31	402
1	16	94	10	37	42	-15.7	0.47	6.3	401
1	16	94	13	37	42	-15.6	0.46	6.3	401
1	16	94	16	37	42	-15.3	0.46	6.29	402
1	16	94	19	37	42	-15.2	0.46	6.29	403
1	16	94	22	37	42	-15.2	0.46	6.28	402
1	17	94	1	37	42	-15.2	0.46	6.27	403
1	17	94	4	37	42	-15.2	0.45	6.27	401
1	17	94	7	37	42	-15.3	0.46	6.26	401
1	17	94	10	37	42	-15.5	0.45	6.26	402
1	17	94	13	37	42	-15.6	0.45	6.25	402
1	17	94	16	37	42	-15.7	0.45	6.24	401
1	17	94	19	37	42	-15.5	0.45	6.24	403
1	17	94	22	37	42	-15.6	0.45	6.23	403
1	18	94	1	37	42	-15.6	0.44	6.22	402
1	18	94	4	37	42	-15.6	0.44	6.22	402
1	18	94	7	37	42	-15.8	0.44	6.21	403
1	18	94	10	37	42	-15.9	0.44	6.21	401
1	18	94	13	37	42	-16	0.44	6.2	403
1	18	94	16	37	42	-16	0.43	6.19	401
1	18	94	19	37	42	-16.1	0.43	6.19	402
1	18	94	22	37	42	-16.2	0.43	6.18	402
1	19	94	1	37	42	-16.3	0.43	6.17	403
1	19	94	4	37	42	-16.4	0.43	6.17	405
1	19	94	7	37	42	-16.5	0.43	6.16	407
1	19	94	10	37	42	-16.6	0.42	6.15	408
1	19	94	13	37	42	-16.6	0.42	6.15	409
1	19	94	16	37	42	-16.6	0.42	6.14	408
1	19	94	19	37	42	-16.5	0.42	6.14	410
1	19	94	22	37	42	-16.4	0.42	6.13	410
1	20	94	1	37	42	-16.5	0.42	6.13	410
1	20	94	4	37	42	-16.6	0.41	6.13	411
1	20	94	7	37	42	-16.7	0.42	6.12	411
1	20	94	10	37	42	-17.3	0.41	6.12	412
1	20	94	13	37	42	-17.1	0.41	6.12	411
1	20	94	16	37	42	-17.2	0.41	6.11	410
1	20	94	19	37	42	-16.9	0.41	6.11	409
1	20	94	22	37	42	-16.8	0.41	6.11	408
1	21	94	1	37	42	-16.7	0.41	6.11	407
1	21	94	4	37	42	-16.7	0.41	6.11	407
1	21	94	7	37	42	-16.6	0.41	6.11	406
1	21	94	10	37	42	-16.5	0.41	6.11	406
1	21	94	13	37	42	-16.2	0.41	6.11	407
1	21	94	16	37	42	-15.8	0.41	6.11	407
1	21	94	19	37	42	-15.3	0.41	6.11	406
1	21	94	22	37	42	-14.8	0.41	6.11	406
1	22	94	1	37	42	-14.1	0.41	6.11	406
1	22	94	4	37	42	-13.9	0.41	6.1	406
1	22	94	7	37	42	-13.8	0.4	6.1	406
1	22	94	10	37	42	-13.8	0.4	6.1	405
1	22	94	13	37	42	-13.8	0.4	6.1	405
1	22	94	16	37	42	-13.8	0.4	6.1	404
1	22	94	19	37	42	-13.6	0.4	6.09	405
1	22	94	22	37	42	-13.5	0.4	6.09	404
1	23	94	1	37	42	-13.3	0.4	6.09	404
1	23	94	4	37	42	-13.2	0.4	6.09	403
1	23	94	7	37	42	-13.2	0.39	6.08	403
1	23	94	10	37	42	-13.3	0.39	6.08	403
1	23	94	13	37	42	-13.7	0.39	6.08	403
1	23	94	16	37	42	-14.3	0.39	6.08	402
1	23	94	19	37	42	-15.4	0.39	6.07	402
1	23	94	22	37	42	-16.4	0.38	6.07	402
1	24	94	1	37	42	-17.2	0.38	6.07	402
1	24	94	4	37	42	-18.3	0.38	6.06	402
1	24	94	7	37	42	-18.8	0.37	6.06	402
1	24	94	10	37	42	-19.5	0.37	6.06	402
1	24	94	13	37	42	-20	0.37	6.05	401
1	24	94	16	37	42	-20.3	0.37	6.05	401
1	24	94	19	37	42	-20.5	0.36	6.05	402
1	24	94	22	37	42	-20.6	0.36	6.04	401
1	25	94	1	37	42	-20.5	0.36	6.04	401
1	25	94	4	37	42	-20.2	0.36	6.04	400
1	25	94	7	37	42	-20	0.35	6.04	400
1	25	94	10	37	42	-19.9	0.35	6.03	400
1	25	94	13	37	42	-19.8	0.35	6.03	400
1	25	94	16	37	42	-19.7	0.35	6.03	400
1	25	94	19	37	42	-19.8	0.34	6.03	400
1	25	94	22	37	42	-20.1	0.34	6.03	400
1	26	94	1	37	42	-20.1	0.34	6.03	400
1	26	94	4	37	42	-20.2	0.33	6.03	400
1	26	94	7	37	42	-20.5	0.33	6.03	400
1	26	94	10	37	42	-20.8	0.33	6.02	400
1	26	94	13	37	42	-21.1	0.32	6.02	400
1	26	94	16	37	42	-21.1	0.32	6.02	401

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
1	26	94	19	37	42	-21.2	0.32	6.02	400
1	26	94	22	37	42	-21.3	0.31	6.02	399
1	27	94	1	37	42	-21.2	0.31	6.02	399
1	27	94	4	37	42	-21.3	0.31	6.02	400
1	27	94	7	37	42	-21.5	0.31	6.02	399
1	27	94	10	37	42	-21.7	0.3	6.02	399
1	27	94	13	37	42	-21.9	0.3	6.02	400
1	27	94	16	37	42	-21.9	0.3	6.01	400
1	27	94	19	37	42	-22	0.29	6.01	399
1	27	94	22	37	42	-22.1	0.29	6.01	399
1	28	94	1	37	42	-22.2	0.29	6.01	399
1	28	94	4	37	42	-22.1	0.29	6.01	399
1	28	94	7	37	42	-21.9	0.28	6.01	398
1	28	94	10	37	42	-21.7	0.28	6	398
1	28	94	13	37	42	-21.5	0.28	6	398
1	28	94	16	37	42	-21.2	0.27	6	398
1	28	94	19	37	42	-20.9	0.27	6	398
1	28	94	22	37	42	-20.6	0.27	5.99	398
1	29	94	1	37	42	-20.2	0.27	5.99	397
1	29	94	4	37	42	-19.7	0.27	5.99	399
1	29	94	7	37	42	-19.1	0.26	5.99	398
1	29	94	10	37	42	-18.8	0.26	5.98	397
1	29	94	13	37	42	-18.5	0.25	5.98	398
1	29	94	16	37	42	-18.2	0.25	5.98	398
1	29	94	19	37	42	-17.8	0.25	5.97	397
1	29	94	22	37	42	-17.5	0.25	5.97	397
1	30	94	1	37	42	-17.2	0.25	5.97	397
1	30	94	4	37	42	-16.9	0.24	5.96	397
1	30	94	7	37	42	-16.6	0.24	5.96	397
1	30	94	10	37	42	-16.3	0.24	5.96	397
1	30	94	13	37	42	-15.9	0.24	5.96	397
1	30	94	16	37	42	-15.5	0.23	5.96	397
1	30	94	19	37	42	-15	0.23	5.96	397
1	30	94	22	37	42	-12.9	0.23	5.96	398
1	31	94	1	37	42	-12.6	0.23	5.96	397
1	31	94	4	37	42	-12.2	0.22	5.95	397
1	31	94	7	37	42	-11.4	0.22	5.95	399
1	31	94	10	37	42	-10.7	0.22	5.95	399
1	31	94	13	37	42	-9.75	0.22	5.95	397
1	31	94	16	37	42	-9.15	0.21	5.95	398
1	31	94	19	37	42	-9.3	0.21	5.95	397
1	31	94	22	37	42	-10.5	0.21	5.96	396
2	1	94	1	37	42	-10.4	0.21	5.96	396
2	1	94	4	37	42	-8.96	0.2	5.96	398
2	1	94	7	37	42	-7.97	0.2	5.97	398
2	1	94	10	37	42	-6.61	0.2	5.98	397
2	1	94	13	37	42	-6.05	0.2	5.98	396
2	1	94	16	37	42	-7.26	0.19	5.99	396
2	1	94	19	37	42	-7.73	0.19	5.99	395
2	1	94	22	37	42	-6.94	0.18	6	395
2	2	94	1	37	42	-6.19	0.18	6	395
2	2	94	4	37	42	-6.09	0.18	6.01	394
2	2	94	7	37	42	-5.83	0.17	6.01	394
2	2	94	10	37	42	-4.99	0.17	6.01	393
2	2	94	13	37	42	-5.03	0.17	6.02	391
2	2	94	16	37	42	-5.31	0.16	6.02	391
2	2	94	19	37	42	-5.16	0.16	6.03	391
2	2	94	22	37	42	-4.85	0.16	6.03	390
2	3	94	1	37	42	-3.84	0.15	6.03	390
2	3	94	4	37	42	-3.61	0.15	6.04	390
2	3	94	7	37	42	-3.88	0.15	6.04	389
2	3	94	10	37	42	-3.97	0.14	6.05	388
2	3	94	13	37	42	-4.18	0.14	6.05	388
2	3	94	16	37	42	-4.35	0.14	6.05	386
2	3	94	19	37	42	-4.55	0.13	6.06	385
2	3	94	22	37	42	-4.76	0.13	6.06	386
2	4	94	1	37	42	-4.78	0.13	6.07	385
2	4	94	4	37	42	-4.69	0.12	6.07	384
2	4	94	7	37	42	-4.7	0.12	6.07	383
2	4	94	10	37	42	-4.93	0.12	6.07	382
2	4	94	13	37	42	-5.21	0.11	6.08	382
2	4	94	16	37	42	-5.34	0.11	6.08	381
2	4	94	19	37	42	-5.17	0.11	6.08	381
2	4	94	22	37	42	-5.09	0.11	6.08	380
2	5	94	1	37	42	-4.99	0.1	6.08	381
2	5	94	4	37	42	-4.98	0.1	6.08	381
2	5	94	7	37	42	-4.94	0.1	6.09	381
2	5	94	10	37	42	-4.73	0.1	6.09	383
2	5	94	13	37	42	-4.43	0.09	6.09	383
2	5	94	16	37	42	-4.53	0.09	6.09	383
2	5	94	19	37	42	-4.71	0.09	6.1	383
2	5	94	22	37	42	-3.97	0.08	6.1	384
2	6	94	1	37	42	-3.62	0.08	6.11	387
2	6	94	4	37	42	-3.89	0.08	6.11	388

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
2	6	94	7	37	42	-4.2	0.07	6.12	390
2	6	94	10	37	42	-4.64	0.07	6.13	391
2	6	94	13	37	42	-4.98	0.07	6.14	392
2	6	94	16	37	42	-5.03	0.06	6.15	396
2	6	94	19	37	42	-4.93	0.06	6.15	396
2	6	94	22	37	42	-4.73	0.06	6.17	398
2	7	94	1	37	42	-4.51	0.05	6.17	400
2	7	94	4	37	42	-4.28	0.05	6.18	402
2	7	94	7	37	42	-4.18	0.04	6.19	402
2	7	94	IO	37	42	-4.03	0.04	6.2	405
2	7	94	13	37	42	-3.9	0.04	6.21	406
2	7	94	16	37	42	-3.87	0.03	6.22	406
2	7	94	19	37	42	-3.86	0.03	6.23	408
2	7	94	22	37	42	-3.89	0.03	6.24	409
2	8	94	1	37	42	-3.93	0.02	6.24	409
2	8	94	4	37	42	-3.99	0.02	6.25	409
2	8	94	7	37	42	-4.19	0.02	6.26	411
2	8	94	10	37	42	-4.37	0.01	6.26	411
2	8	94	13	37	42	-4.53	0.01	6.27	412
2	8	94	16	37	42	-4.52	0.01	6.27	413
2	8	94	19	37	42	-4.58	0.01	6.27	411
2	8	94	22	37	42	-4.64	0.01	6.28	412
2	9	94	1	37	42	-4.74	0	6.28	411
2	9	94	4	37	42	-5.04	0	6.28	412
2	[illegible]		10 7	37	42	-5.4	-0.01	6.29	413
				37	42	-5.56	-0.01	6.29	413
2	9	94	13	37	42	-5.73	-0.01	6.29	414
2	9	94	16	37	42	-5.75	-0.02	6.29	413
2	9	94	19	37	42	-6	-0.02	6.29	412
2	9	94	22	37	42	-6.91	-0.02	6.3	413
2	10	94	1	37	42	-8.22	-0.02	6.29	414
2	10	94	4	37	42	-9.16	-0.02	6.29	413
2	10	94	7	37	42	-10.2	-0.03	6.29	414
2	10	94	10	37	42	-10.9	-0.03	6.28	414
2	10	94	13	37	42	-11.4	-0.03	6.28	413
2	10	94	16	37	42	-11.6	-0.03	6.27	413
2	10	94	19	37	42	-12.1	-0.03	6.27	414
2	IO	94	22	37	42	-12.5	-0.04	6.26	413
2	11	94	1	37	42	-12.9	-0.04	6.25	413
2	11	94	4	37	42	-13.3	-0.04	6.24	413
2	11	94	7	37	42	-13.8	-0.04	6.24	411
2	11	94	IO	37	42	-14.1	-0.05	6.23	412
2	11	94	13	37	42	-13.9	-0.04	6.22	411
2	11	94	16	37	42	-13.3	-0.05	6.22	411
2	11	94	19	37	42	-13.1	-0.05	6.21	412
2	11	94	22	37	42	-13.3	-0.05	6.2	411
2	12	94	1	37	42	-13.6	-0.05	6.19	411
2	12	94	4	37	42	-14	-0.05	6.19	412
2	12	94	7	37	42	-13.9	-0.05	6.18	411
2	12	94	IO	37	42	-13.6	-0.05	6.17	411
2	12	94	13	37	42	-13.3	-0.05	6.16	410
2	12	94	16	37	42	-13	-0.05	6.15	410
2	12	94	19	37	42	-13	-0.05	6.14	411
2	12	94	22	37	42	-13.2	-0.05	6.14	409
2	13	94	1	37	42	-12.8	-0.05	6.13	411
2	13	94	4	37	42	-12.4	-0.05	6.12	410
2	13	94	7	37	42	-12.2	-0.05	6.11	411
2	13	94	IO	37	42	-11.9	-0.05	6.1	411
2	13	94	13	37	42	-11.7	-0.05	6.09	410
2	13	94	16	37	42	-11.2	-0.05	6.08	410
2	13	94	19	37	42	-11.1	-0.05	6.07	412
2	13	94	22	37	42	-11.2	-0.05	6.07	412
2	14	94	1	37	42	-11.9	-0.06	6.06	412
2	14	94	4	37	42	-12.4	-0.06	6.05	414
2	14	94	7	37	42	-13.6	-0.06	6.04	411
2	14	94	IO	37	42	-14.2	-0.06	6.03	412
2	14	94	13	37	42	-14.5	-0.06	6.02	411
2	14	94	16	37	42	-14.1	-0.06	6.02	412
2	14	94	19	37	42	-14.1	-0.06	6.01	412
2	14	94	22	37	42	-14.4	-0.07	6	418
2	15	94	1	37	42	-14.5	-0.07	6	420
2	15	94	4	37	42	-14.7	-0.07	5.99	425
2	15	94	7	37	42	-14.8	-0.07	5.98	426
2	15	94	IO	37	42	-14.9	-0.08	5.98	421
2	15	94	13	37	42	-14.8	-0.08	5.97	419
2	15	94	16	37	42	-14.3	-0.08	5.96	419
2	15	94	19	37	42	-14	-0.08	5.96	436
2	15	94	22	37	42	-14.3	-0.08	5.95	420
2	16	94	1	37	42	-14.6	-0.1	5.94	435
2	16	94	4	37	42	-15	-0.08	5.94	426
2	16	94	7	37	42	-15.7	-0.08	5.93	421
2	16	94	IO	37	42	-16.3	-0.09	5.93	435
2	16	94	13	37	42	-16.7	-0.09	5.92	439
2	16	94	16	37	42	-16.4	-0.08	5.92	446

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
2	16	94	19	37	42	-16.4	-0.08	5.91	441
2	16	94	22	37	42	-16.1	-0.08	5.9	431
2	17	94	1	37	42	-15.9	-0.08	5.9	428
2	17	94	4	37	42	-15.8	-0.09	5.9	434
2	17	94	7	37	42	-16.2	-0.09	5.89	439
2	17	94	10	37	42	-16.7	-0.09	5.89	443
2	17	94	13	37	42	-16.9	-0.09	5.88	431
2	17	94	16	37	42	-16.7	-0.09	5.88	429
2	17	94	19	37	42	-16.6	-0.09	5.88	447
2	17	94	22	37	42	-16.8	-0.09	5.87	432
2	18	94	1	37	42	-17	-0.09	5.87	438
2	18	94	4	37	42	-17.1	-0.1	5.87	437
2	18	94	7	37	42	-16.7	-0.1	5.87	432
2	18	94	10	37	42	-16.6	-0.11	5.86	441
2	18	94	13	37	42	-16.5	-0.11	5.86	444
2	18	94	16	37	42	-16.1	-0.1	5.86	442
2	18	94	19	37	42	-15.7	-0.09	5.86	430
2	18	94	22	37	42	-15.4	-0.1	5.86	432
2	19	94	1	37	42	-15.1	-0.1	5.85	448
2	19	94	4	37	42	-14.7	-0.1	5.85	461
2	19	94	7	37	42	-14.4	-0.1	5.85	444
2	19	94	10	37	42	-14.1	-0.1	5.85	439
2	19	94	13	37	42	-13.6	-0.11	5.85	455
2	19	94	16	37	42	-13.2	-0.11	5.85	472
2	19	94	19	37	42	-12.9	-0.11	5.85	447
2	19	94	22	37	42	-12.6	-0.11	5.85	457
2	20	94	1	37	42	-12.4	-0.11	5.85	450
2	20	94	4	37	42	-12.3	-0.11	5.85	456
2	20	94	7	37	42	-12.2	-0.12	5.85	461
2	20	94	10	37	42	-12.2	-0.1	5.84	469
2	20	94	13	37	42	-12.2	-0.12	5.85	474
2	20	94	16	37	42	-12.2	-0.13	5.84	493
2	20	94	19	37	42	-12.3	-0.12	5.84	473
2	20	94	22	37	42	-12.5	-0.11	5.84	474
2	21	94	1	37	42	-12.8	-0.12	5.84	508
2	21	94	4	37	42	-13	-0.13	5.84	495
2	21	94	7	37	42	-13.3	-0.12	5.84	503
2	21	94	10	37	42	-13.6	-0.14	5.84	511
2	21	94	13	37	42	-13.8	-0.12	5.84	493
2	21	94	16	37	42	-13.6	-0.13	5.84	517
2	21	94	19	37	42	-13.3	-0.14	5.84	513
2	21	94	22	37	42	-13.4	-0.14	5.84	512
2	22	94	1	37	42	-13.4	-0.14	5.84	509
2	22	94	4	37	42	-13.4	-0.13	5.84	524
2	22	94	7	37	42	-13.4	-0.13	5.84	521
2	22	94	10	37	42	-13.5	-0.13	5.84	508
2	22	94	13	37	42	-13.3	-0.13	5.83	533
2	22	94	16	37	42	-13.1	-0.13	5.83	520
2	22	94	19	37	42	-12.7	-0.13	5.83	517
2	22	94	22	37	42	-12.5	-0.13	5.83	524
2	23	94	1	37	42	-12.3	-0.14	5.83	539
2	23	94	4	37	42	-12.2	-0.16	5.83	569
2	23	94	7	37	42	-12.2	-0.14	5.82	548
2	23	94	10	37	42	-12.3	-0.14	5.82	539
2	23	94	13	37	42	-12.2	-0.15	5.82	565
2	23	94	16	37	42	-11.7	-0.15	5.82	577
2	23	94	19	37	42	-11.3	-0.15	5.81	591
2	23	94	22	37	42	-11.2	-0.16	5.81	580
2	24	94	1	37	42	-11.5	-0.16	5.81	601
2	24	94	4	37	42	-12.1	-0.15	5.81	574
2	24	94	7	37	42	-13.2	-0.15	5.8	571
2	24	94	10	37	42	-14.4	-0.15	5.8	578
2	24	94	13	37	42	-14.9	-0.15	5.8	581
2	24	94	16	37	42	-14.7	-0.16	5.79	586
2	24	94	19	37	42	-14.7	-0.16	5.79	591
2	24	94	22	37	42	-15	-0.17	5.79	599
2	25	94	1	37	42	-15.2	-0.17	5.79	606
2	25	94	4	37	42	-15.2	-0.17	5.78	607
2	25	94	7	37	42	-15.2	-0.17	5.78	611
2	25	94	10	37	42	-15.2	-0.17	5.77	620
2	25	94	13	37	42	-15	-0.17	5.77	627
2	25	94	16	37	42	-14.7	-0.17	5.76	632
2	25	94	19	37	42	-14.2	-0.17	5.76	640
2	25	94	22	37	42	-14	-0.17	5.75	641
2	26	94	1	37	42	-13.8	-0.17	5.75	642
2	26	94	4	37	42	-13.6	-0.17	5.74	644
2	26	94	7	37	42	-13.5	-0.17	5.74	653
2	26	94	10	37	42	-13.6	-0.17	5.73	674
2	26	94	13	37	42	-13.8	-0.17	5.73	693
2	26	94	16	37	42	-14	-0.17	5.72	694
2	26	94	19	37	42	-14.7	-0.16	5.71	699
2	26	94	22	37	42	-15.8	-0.16	5.71	703
2	27	94	1	37	42	-16.9	-0.16	5.7	706
2	27	94	4	37	42	-17.6	-0.17	5.7	713

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
2	27	94	7	37	42	-18	-0.18	5.7	708
2	27	94	10	37	42	-18.6	-0.18	5.69	720
2	27	94	13	37	42	-19	-0.18	5.69	734
2	27	94	16	37	42	-18.8	-0.18	5.69	742
2	27	94	19	37	42	-19.1	-0.18	5.68	756
2	27	94	22	37	42	-19.9	-0.19	5.68	769
2	28	94	1	37	42	-20.4	-0.19	5.67	777
2	28	94	4	37	42	-20.7	-0.19	5.67	781
2	28	94	7	37	42	-21.2	-0.19	5.67	790
2	28	94	IO	37	42	-21.6	-0.19	5.66	800
2	28	94	13	37	42	-21.5	-0.19	5.66	804
2	28	94	16	37	42	-20.6	-0.19	5.66	809
2	28	94	19	37	42	-20	-0.19	5.65	811
2	28	94	22	37	42	-19.9	-0.19	5.65	813
3	1	94	1	37	42	-20.1	-0.19	5.65	816
3	1	94	4	37	42	-20.4	-0.19	5.64	801
3	1	94	7	37	42	-20.6	-0.2	5.64	818
3	1	94	IO	37	42	-21.1	-0.2	5.63	825
3	1	94	13	37	42	-21.8	-0.19	5.63	809
3	1	94	16	37	42	-21.5	-0.2	5.62	832
3	1	94	19	37	42	-21.9	-0.2	5.62	828
3	1	94	22	37	42	-22	-0.19	5.61	839
3	2	94	1	37	42	-22.3	-0.2	5.61	844
3	2	94	4	37	42	-22.8	-0.2	5.6	833
3			7	37	42	-23.4	-0.2	5.6	853
3	2 2 94 94		10	37	42	-23.9	-0.19	5.6	841
3	2	94	13	37	42	-23.9	-0.2	5.59	859
3	2	94	16	37	42	-23.7	-0.2	5.59	857
3	2 2 94 94		19	37	42	-23.8	-0.19	5.58	843
				37	42	-24.1	-0.19	5.58	851
3	3	94	1	37	42	-24.3	-0.19	5.57	858
3	3 9 4		4	37	42	-24.2	-0.19	5.57	859
3	3 9 4		7	37	42	-24.1	-0.2	5.56	867
3	3	94	IO	37	42	-23.9	-0.19	5.56	873
3	3	94	13	37	42	-23.4	-0.2	5.55	889
3	3	94	16	37	42	-22.9	-0.2	5.55	894
3	3	94	19	37	42	-22.6	-0.2	5.54	898
3	3	94	22	37	42	-22.4	-0.21	5.54	903
3	4	94	1	37	42	-22.6	-0.2	5.53	905
3	494		4	37	42	-22.7	-0.2	5.53	910
3	4	94	7	37	42	-22.8	-0.21	5.53	914
3	4	94	IO	37	42	-22.7	-0.21	5.52	916
3	4	94	13	37	42	-21.9	-0.21	5.51	919
3	4	94	16	37	42	-21	-0.21	5.51	925
3	4	94	19	37	42	-20.6	-0.2	5.5	927
3	4	94	22	37	42	-20.8	-0.21	5.5	932
3	5	94	1	37	42	-21	-0.21	5.49	935
3	5	94	4	37	42	-21.2	-0.21	5.49	937
3	5	94	7	37	42	-22.2	-0.21	5.48	941
3	5	94	10	37	42	-22.1	-0.21	5.48	943
3	5	94	13	37	42	-21.8	-0.21	5.47	946
3	5	94	16	37	42	-21.2	-0.21	5.47	947
3	5	94	19	37	42	-20.5	-0.21	5.46	948
3	5	94	22	37	42	-20.5	-0.21	5.46	936
3	6	94	1	37	42	-20.4	-0.21	5.45	939
3	6	94	4	37	42	-20.5	-0.21	5.45	932
3	6	94	7	37	42	-20.6	-0.21	5.44	943
3	6	94	10	37	42	-20.7	-0.21	5.44	941
3	6	94	13	37	42	-20.6	-0.21	5.44	938
3	6	94	16	37	42	-20	-0.22	5.43	940
3	6	94	19	37	42	-19.8	-0.21	5.43	950
3	6	94	22	37	42	-20	-0.22	5.43	941
3	7	94	1	37	42	-20.1	-0.22	5.42	947
3	7	94	4	37	42	-20.2	-0.22	5.42	939
3	7	94	7	37	42	-20.3	-0.22	5.42	940
3	7	94	10	37	42	-20.2	-0.22	5.42	943
3	7	94	13	37	42	-19.9	-0.22	5.41	910
3	7	94	16	37	42	-19.3	-0.22	5.41	912
3	7	94	19	37	42	-19	-0.22	5.41	914
3	7	94	22	37	42	-19	-0.22	5.4	908
3	8	94	1	37	42	-19.2	-0.22	5.4	910
3	8	94	4	37	42	-19.6	-0.22	5.4	913
3	8	94	7	37	42	-19.7	-0.22	5.39	957
3	8	94	10	37	42	-19.7	-0.23	5.39	943
3	8	94	13	37	42	-19.5	-0.23	5.38	932
3	8	94	16	37	42	-19.1	-0.23	5.38	955
3	8	94	19	37	42	-18.9	-0.23	5.38	972
3	8	94	22	37	42	-19	-0.23	5.37	952
3	9	94	1	37	42	-19.1	-0.23	5.37	914
3	9	94	4	37	42	-19.1	-0.23	5.36	920
3	9	94	7	37	42	-19.1	-0.23	5.36	915
3	9	94	10	37	42	-19.4	-0.23	5.35	918
3	9	94	13	37	42	-19.4	-0.22	5.35	943
3	9	94	16	37	42	-19	-0.23	5.34	936

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
3	9	94	19	37	42	-18.9	-0.23	5.34	924
3	9	94	22	37	42	-19.2	-0.22	5.33	927
3	10	94	1	37	42	-19.4	-0.23	5.33	935
3	10	94	4	37	42	-19.6	-0.23	5.32	939
3	10	94	7	37	42	-19.8	-0.22	5.32	931
3	ID	94	10	37	42	-19.9	-0.23	5.31	934
3	10	94	13	37	42	-19.7	-0.23	5.31	932
3	10	94	16	37	42	-19.3	-0.22	5.3	935
3	10	94	19	37	42	-19.1	-0.23	5.3	935
3	10	94	22	37	42	-19	-0.22	5.29	936
3	11	94	1	37	42	-19.1	-0.22	5.28	936
3	11	94	4	37	42	-19.3	-0.22	5.28	937
3	11	94	7	37	42	-19.4	-0.22	5.27	943
3	11	94	10	37	42	-19.6	-0.22	5.27	941
3	11	94	13	37	42	-19.5	-0.22	5.27	942
3	11	94	16	37	42	-19.1	-0.22	5.26	946
3	11	94	19	37	42	-19	-0.23	5.26	947
3	11	94	22	37	42	-19.4	-0.22	5.25	950
3	12	94	1	37	42	-19.9	-0.22	5.25	949
3	12	94	4	37	42	-20.5	-0.23	5.24	960
3	12	94	7	37	42	-21	-0.23	5.24	968
3	12	94	10	37	42	-21.3	-0.23	5.24	987
3	12	94	13	37	42	-21.2	-0.23	5.24	1000
3	12	94	16	37	42	-20.6	-0.23	5.23	992
3	12	94	19	37	42	-20.1	-0.22	5.23	990
3	12	94	22	37	42	-20.1	-0.23	5.23	997
3	13	94	1	37	42	-20.3	-0.23	5.23	995
3	13	94	4	37	42	-20.5	-0.23	5.22	963
3	13	94	7	37	42	-20.8	-0.23	5.22	961
3	13	94	10	37	42	-21.4	-0.23	5.22	963
3	13	94	13	37	42	-21	-0.23	5.22	962
3	13	94	16	37	42	-20.5	-0.23	5.22	961
3	13	94	19	37	42	-20.1	-0.23	5.22	961
3	13	94	22	37	42	-19.7	-0.23	5.23	960
3	14	94	1	37	42	-19.4	-0.23	5.23	962
3	14	94	4	37	42	-19.2	-0.24	5.23	1013
3	14	94	7	37	42	-19	-0.24	5.23	996
3	14	94	10	37	42	-18.8	-0.24	5.24	1014
3	14	94	13	37	42	-18.7	-0.24	5.24	998
3	14	94	16	37	42	-18.4	-0.24	5.24	999
3	14	94	19	37	42	-18.1	-0.24	5.25	985
3	14	94	22	37	42	-17.9	-0.24	5.25	1003
3	15	94	1	37	42	-17.8	-0.24	5.25	996
3	15	94	4	37	42	-17.7	-0.24	5.26	988
3	15	94	7	37	42	-17.6	-0.24	5.26	971
3	15	94	10	37	42	-17.5	-0.24	5.26	953
3	15	94	13	37	42	-17.4	-0.24	5.27	951
3	15	94	16	37	42	-17.1	-0.24	5.27	953
3	15	94	19	37	42	-16.7	-0.24	5.27	956
3	15	94	22	37	42	-16.4	-0.23	5.28	953
3	16	94	1	37	42	-16.2	-0.24	5.28	954
3	16	94	4	37	42	-16	-0.24	5.28	955
3	16	94	7	37	42	-15.7	-0.24	5.29	957
3	16	94	10	37	42	-14.6	-0.24	5.29	960
3	16	94	13	37	42	-14	-0.24	5.29	962
3	16	94	16	37	42	-13.3	-0.24	5.3	971
3	16	94	19	37	42	-13.1	-0.24	5.3	978
3	16	94	22	37	42	-13.5	-0.24	5.3	988
3	17	94	1	37	42	-14	-0.24	5.31	998
3	17	94	4	37	42	-14.4	-0.24	5.31	996
3	17	94	7	37	42	-14.7	-0.25	5.32	998
3	17	94	10	37	42	-14.7	-0.25	5.32	1003
3	17	94	13	37	42	-14.6	-0.25	5.32	989
3	17	94	16	37	42	-14.2	-0.25	5.33	991
3	17	94	19	37	42	-13.9	-0.25	5.33	994
3	17	94	22	37	42	-13.9	-0.25	5.34	997
3	18	94	1	37	42	-14	-0.25	5.34	1002
3	18	94	4	37	42	-14.1	-0.25	5.34	1005
3	18	94	7	37	42	-14.3	-0.25	5.35	1011
3	18	94	ID	37	42	-14.7	-0.25	5.35	1016
3	18	94	13	37	42	-15.2	-0.25	5.35	1021
3	18	94	16	37	42	-15.4	-0.26	5.35	1025
3	18	94	19	37	42	-15.9	-0.26	5.35	1028
3	18	94	22	37	42	-17.1	-0.26	5.35	1038
3	19	94	1	37	42	-18.4	-0.26	5.35	1041
3	19	94	4	37	42	-17.9	-0.26	5.35	1045
3	19	94	7	37	42	-18	-0.26	5.35	1048
3	19	94	10	37	42	-18.1	-0.26	5.35	1053
3	19	94	13	37	42	-18	-0.26	5.35	1057
3	19	94	16	37	42	-17.6	-0.26	5.35	1060
3	19	94	19	37	42	-17.3	-0.26	5.35	1063
3	19	94	22	37	42	-17.3	-0.26	5.35	1066
3	20	94	1	37	42	-17.3	-0.27	5.34	1070
3	20	94	4	37	42	-17.5	-0.27	5.34	1074

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
3	20	94	7	37	42	-17.3	-0.26	5.34	1076
3	20	94	10	37	42	-17.4	-0.27	5.34	1078
3	20	94	13	37	42	-17.3	-0.27	5.33	1079
3	20	94	16	37	42	-17.1	-0.27	5.33	1081
3	20	94	19	37	42	-16.8	-0.27	5.33	1079
3	20	94	22	37	42	-17.1	-0.27	5.33	1087
3	21	94	1	37	42	-17.2	-0.28	5.33	1101
3	21	94	4	37	42	-17.6	-0.27	5.32	1101
3	21	94	7	37	42	-19.7	-0.27	5.32	1104
3	21	94	10	37	42	-22	-0.28	5.31	1113
3	21	94	13	37	42	-23.2	-0.28	5.32	1121
3	21	94	16	37	42	-21.7	-0.28	5.31	1112
3	21	94	19	37	42	-22.5	-0.28	5.31	1114
3	21	94	22	37	42	-23.6	-0.28	5.3	1123
3	22	94	1	37	42	-25	-0.28	5.3	1128
3	22	94	4	37	42	-26.1	-0.28	5.29	1119
3	22	94	7	37	42	-26.6	-0.28	5.29	1123
3	22	94	10	37	42	-27.3	-0.29	5.29	1125
3	22	94	13	37	42	-27	-0.29	5.28	1143
3	22	94	16	37	42	-26.4	-0.29	5.28	1143
3	22	94	19	37	42	-26.9	-0.29	5.28	1135
3	22	94	22	37	42	-27.7	-0.29	5.28	1137
3	23	94	1	37	42	-27.9	-0.28	5.27	1129
3	23	94	4	37	42	-28.1	-0.28	5.27	1126
3	23	94	7	37	42	-28.7	-0.28	5.27	1128
3	23	94	10	37	42	-29	-0.28	5.27	1129
3	23	94	13	37	42	-27.8	-0.29	5.27	1128
3	23	94	16	37	42	-26.9	-0.29	5.26	1125
3	23	94	19	37	42	-26.9	-0.28	5.26	1126
3	23	94	22	37	42	-27.5	-0.29	5.26	1129
3	24	94	1	37	42	-27.9	-0.29	5.26	1131
3	24	94	4	37	42	-28.2	-0.29	5.26	1135
3	24	94	7	37	42	-28.6	-0.29	5.26	1138
3	24	94	10	37	42	-28.5	-0.29	5.26	1136
3	24	94	13	37	42	-27.6	-0.29	5.25	1135
3	24	94	16	37	42	-26.4	-0.29	5.25	1137
3	24	94	19	37	42	-25.8	-0.29	5.25	1140
3	24	94	22	37	42	-26.5	-0.29	5.25	1140
3	25	94	1	37	42	-26.4	-0.28	5.24	1142
3	25	94	4	37	42	-26.5	-0.29	5.24	1145
3	25	94	7	37	42	-25.9	-0.29	5.24	1149
3	25	94	10	37	42	-25.5	-0.29	5.24	1150
3	25	94	13	37	42	-24.8	-0.29	5.23	1150
3	25	94	16	37	42	-24.3	-0.29	5.23	1151
3	25	94	19	37	42	-23.7	-0.29	5.23	1151
3	25	94	22	37	42	-23.4	-0.29	5.23	1152
3	26	94	1	37	42	-23.1	-0.29	5.23	1154
3	26	94	4	37	42	-22.6	-0.29	5.23	1155
3	26	94	7	37	42	-22.1	-0.29	5.23	1153
3	26	94	10	37	42	-21.5	-0.29	5.22	1155
3	26	94	13	37	42	-21	-0.28	5.22	1161
3	26	94	16	37	42	-21	-0.29	5.22	1163
3	26	94	19	37	42	-20.9	-0.29	5.23	1166
3	26	94	22	37	42	-20.6	-0.29	5.23	1167
3	27	94	1	37	42	-19.9	-0.29	5.22	1169
3	27	94	4	37	42	-19.1	-0.29	5.23	1174
3	27	94	7	37	42	-19	-0.29	5.22	1176
3	27	94	10	37	42	-18	-0.29	5.22	1179
3	27	94	13	37	42	-17.7	-0.29	5.22	1180
3	27	94	16	37	42	-17.5	-0.29	5.22	1185
3	27	94	19	37	42	-18	-0.29	5.23	1188
3	27	94	22	37	42	-18.3	-0.29	5.23	1191
3	28	94	1	37	42	-18.3	-0.29	5.23	1193
3	28	94	4	37	42	-18.4	-0.29	5.23	1196
3	28	94	7	37	42	-18.3	-0.29	5.23	1199
3	28	94	10	37	42	-18	-0.29	5.23	1203
3	28	94	13	37	42	-17.5	-0.29	5.23	1206
3	28	94	16	37	42	-17.4	-0.29	5.23	1210
3	28	94	19	37	42	-17.4	-0.29	5.22	1212
3	28	94	22	37	42	-17.5	-0.29	5.22	1216
3	29	94	1	37	42	-17.4	-0.29	5.22	1216
3	29	94	4	37	42	-17.3	-0.3	5.22	1221
3	29	94	7	37	42	-17.2	-0.29	5.21	1226
3	29	94	10	37	42	-17.1	-0.29	5.21	1227
3	29	94	13	37	42	-16.5	-0.29	5.21	1229
3	29	94	16	37	42	-16.3	-0.29	5.21	1232
3	29	94	19	37	42	-15.7	-0.29	5.21	1237
3	29	94	22	37	42	-15.7	-0.29	5.2	1241
3	30	94	1	37	42	-15.7	-0.3	5.2	1242
3	30	94	4	37	42	-15.7	-0.3	5.2	1244
3	30	94	7	37	42	-15.9	-0.29	5.2	1249
3	30	94	10	37	42	-15.9	-0.3	5.2	1252
3	30	94	13	37	42	-15.5	-0.29	5.2	1255
3	30	94	16	37	42	-15.1	-0.3	5.2	1257

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
3	30	94	19	37	42	-14.7	-0.29	5.2	1256
3	30	94	22	37	42	-14.5	-0.3	5.2	1263
3	31	94	1	37	42	-14.2	-0.3	5.2	1267
3	31	94	4	37	42	-14	-0.3	5.2	1268
3	31	94	7	37	42	-13.7	-0.3	5.2	1264
3	31	94	10	37	42	-13.4	-0.3	5.2	1271
3	31	94	13	37	42	-12.8	-0.29	5.2	1274
3	31	94	16	37	42	-11.9	-0.3	5.21	1275
3	31	94	19	37	42	-11.3	-0.3	5.21	1278
3	31	94	22	37	42	-10.8	-0.3	5.21	1281
4	1	94	1	37	42	-10.7	-0.3	5.21	1283
4	1	94	4	37	42	-10.2	-0.3	5.22	1287
4	1	94	7	37	42	-10.2	-0.3	5.22	1290
4	1	94	10	37	42	-10.2	-0.3	5.22	1292
4	1	94	13	37	42	-10.4	-0.3	5.23	1294
4	1	94	16	37	42	-10.2	-0.3	5.23	1297
4	1	94	19	37	42	-10.2	-0.3	5.23	1300
4	1	94	22	37	42	-10.2	-0.3	5.23	1303
4	2	94	1	37	42	-10.1	-0.3	5.24	1306
4	2	94	4	37	42	-9.91	-0.3	5.24	1310
4	2	94	7	37	42	-9.71	-0.3	5.24	1311
4	2	94	10	37	42	-9.7	-0.3	5.24	1314
4	2	94	13	37	42	-9.08	-0.3	5.25	1319
4	2	94	16	37	42	-8.69	-0.3	5.25	1322
4	2	94	19	37	42	-8.48	-0.3	5.25	1325
4	2	94	22	37	42	-8.27	-0.3	5.25	1328
4	3	94	1	37	42	-8.24	-0.3	5.25	1331
4	3	94	4	37	42	-8.07	-0.3	5.25	1334
4	3	94	7	37	42	-8.38	-0.3	5.25	1336
4	3	94	10	37	42	-6.76	-0.3	5.25	1342
4	3	94	13	37	42	-5.42	-0.3	5.25	1346
4	3	94	16	37	42	-4.31	-0.3	5.25	1349
4	3	94	19	37	42	-3.33	-0.3	5.25	1352
4	3	94	22	37	42	-3.47	-0.3	5.25	1352
4	4	94	1	37	42	-3.36	-0.3	5.26	1355
4	4	94	4	37	42	-3.26	-0.3	5.26	1359
4	4	94	7	37	42	-3.64	-0.3	5.26	1360
4	4	94	10	37	42	-3.73	-0.3	5.26	1364
4	4	94	13	37	42	-3.7	-0.3	5.27	1365
4	4	94	16	37	42	-4.06	-0.3	5.27	1367
4	4	94	19	37	42	-4.5	-0.3	5.27	1370
4	4	94	22	37	42	-4.91	-0.3	5.27	1375
4	5	94	1	37	42	-5.42	-0.3	5.28	1378
4	5	94	4	37	42	-5.92	-0.3	5.28	1381
4	5	94	7	37	42	-6.34	-0.3	5.28	1385
4	5	94	10	37	42	-6.59	-0.3	5.28	1386
4	5	94	13	37	42	-6.77	-0.3	5.29	1387
4	5	94	16	37	42	-6.78	-0.3	5.29	1388
4	5	94	19	37	42	-6.73	-0.3	5.29	1391
4	5	94	22	37	42	-6.8	-0.3	5.29	1394
4	6	94	1	37	42	-7.08	-0.3	5.3	1397
4	6	94	4	37	42	-7.32	-0.3	5.3	1400
4	6	94	7	37	42	-7.6	-0.3	5.29	1402
4	6	94	10	37	42	-7.95	-0.3	5.29	1404
4	6	94	13	37	42	-8.19	-0.3	5.3	1407
4	6	94	16	37	42	-8.28	-0.31	5.3	1407
4	6	94	19	37	42	-8.37	-0.31	5.29	1410
4	6	94	22	37	42	-8.51	-0.31	5.29	1413
4	7	94	1	37	42	-8.69	-0.31	5.29	1415
4	7	94	4	37	42	-8.8	-0.31	5.29	1417
4	7	94	7	37	42	-9	-0.31	5.29	1420
4	7	94	10	37	42	-9.12	-0.3	5.29	1422
4	7	94	13	37	42	-9.17	-0.31	5.29	1423
4	7	94	16	37	42	-9.15	-0.31	5.29	1426
4	7	94	19	37	42	-9.15	-0.31	5.29	1427
4	7	94	22	37	42	-9.27	-0.31	5.29	1431
4	8	94	1	37	42	-9.4	-0.31	5.29	1433
4	8	94	4	37	42	-9.59	-0.31	5.3	1437
4	8	94	7	37	42	-9.91	-0.31	5.3	1441
4	8	94	10	37	42	-10.1	-0.31	5.3	1440
4	8	94	13	37	42	-10.2	-0.31	5.3	1442
4	8	94	16	37	42	-10.1	-0.31	5.3	1443
4	8	94	19	37	42	-10.1	-0.31	5.31	1444
4	8	94	22	37	42	-10.3	-0.31	5.3	1446
4	9	94	1	37	42	-10.5	-0.31	5.3	1448
4	9	94	4	37	42	-10.8	-0.31	5.3	1451
4	9	94	7	37	42	-11.1	-0.31	5.3	1453
4	9	94	10	37	42	-11.2	-0.31	5.29	1454
4	9	94	13	37	42	-11.1	-0.31	5.29	1452
4	9	94	16	37	42	-10.9	-0.31	5.28	1456
4	9	94	19	37	42	-10.8	-0.31	5.28	1459
4	9	94	22	37	42	-10.9	-0.31	5.28	1461
4	10	94	1	37	42	-11	-0.31	5.27	1462
4	10	94	4	37	42	-11	-0.31	5.26	1463

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
4	10	94	7	37	42	-11.3	-0.31	5.26	1466
4	10	94	IO	37	42	-11.3	-0.31	5.25	1468
4	10	94	13	37	42	-11.2	-0.31	5.24	1469
4	IO	94	16	37	42	-11	-0.31	5.24	1469
4	IO	94	19	37	42	-10.8	-0.31	5.23	1471
4	IO	94	22	37	42	-10.8	-0.31	5.23	1466
4	11	94	1	37	42	-10.8	-0.31	5.22	1473
4	11	94	4	37	42	-11	-0.31	5.21	1475
4	11	94	7	37	42	-11.3	-0.31	5.21	1476
4	11	94	10	37	42	-11.5	-0.31	5.2	1472
4	11	94	13	37	42	-11.2	-0.31	5.19	1477
4	11	94	16	37	42	-10.9	-0.31	5.19	1477
4	11	94	19	37	42	-10.7	-0.31	5.18	1478
4	11	94	22	37	42	-10.8	-0.31	5.18	1472
4	12	94	1	37	42	-11.3	-0.31	5.17	1478
4	12	94	4	37	42	-11.8	-0.31	5.16	1480
4	12	94	7	37	42	-12.3	-0.31	5.16	1483
4	12	94	10	37	42	-12.5	-0.31	5.15	1482
4	12	94	13	37	42	-12.1	-0.31	5.15	1482
4	12	94	16	37	42	-11.8	-0.31	5.14	1481
4	12	94	19	37	42	-11.6	-0.31	5.14	1482
4	12	94	22	37	42	-11.7	-0.31	5.13	1482
4	13	94	1	37	42	-12.2	-0.31	5.13	1483
4	13	94	4	37	42	-12.7	-0.31	5.12	1486
4	13	94	7	37	42	-13	-0.31	5.12	1486
4	13	94	10	37	42	-12.9	-0.31	5.12	1485
4	13	94	13	37	42	-12.4	-0.31	5.11	1485
4	13	94	16	37	42	-11.9	-0.31	5.11	1486
4	13	94	19	37	42	-11.6	-0.31	5.1	1485
4	13	94	22	37	42	-11.6	-0.31	5.1	1486
4	14	94	1	37	42	-11.8	-0.31	5.1	1487
4	14	94	4	37	42	-12.1	-0.31	5.1	1489
4	14	94	7	37	42	-12.6	-0.31	5.09	1490
4	14	94	IO	37	42	-13	-0.31	5.09	1490
4	14	94	13	37	42	-12.6	-0.31	5.09	1490
4	14	94	16	37	42	-12.2	-0.31	5.09	1484
4	14	94	19	37	42	-12	-0.31	5.08	1491
4	14	94	22	37	42	-12.3	-0.31	5.08	1491
4	15	94	1	37	42	-12.9	-0.31	5.08	1495
4	15	94	4	37	42	-13.5	-0.31	5.08	1495
4	15	94	7	37	42	-14	-0.31	5.08	1497
4	15	94	10	37	42	-14.2	-0.31	5.08	1498
4	15	94	13	37	42	-13.7	-0.31	5.08	1491
4	15	94	16	37	42	-13.3	-0.31	5.08	1497
4	15	94	19	37	42	-13.2	-0.31	5.08	1499
4	15	94	22	37	42	-13.7	-0.31	5.08	1493
4	16	94	1	37	42	-14.3	-0.31	5.08	1501
4	16	94	4	37	42	-14.9	-0.31	5.08	1504
4	16	94	7	37	42	-15.7	-0.31	5.08	1507
4	16	94	IO	37	42	-16.2	-0.31	5.08	1509
4	16	94	13	37	42	-15.5	-0.31	5.09	1505
4	16	94	16	37	42	-14.9	-0.32	5.09	1506
4	16	94	19	37	42	-14.6	-0.31	5.09	1508
4	16	94	22	37	42	-14.9	-0.31	5.09	1509
4	17	94	1	37	42	-15.5	-0.32	5.09	1511
4	17	94	4	37	42	-16.1	-0.32	5.1	1514
4	17	94	7	37	42	-16.6	-0.32	5.1	1517
4	17	94	IO	37	42	-16.7	-0.32	5.1	1517
4	17	94	13	37	42	-15.9	-0.31	5.1	1515
4	17	94	16	37	42	-15.1	-0.32	5.11	1515
4	17	94	19	37	42	-14.7	-0.32	5.11	1515
4	17	94	22	37	42	-14.7	-0.32	5.11	1516
4	18	94	1	37	42	-15.1	-0.32	5.12	1512
4	18	94	4	37	42	-15.5	-0.32	5.12	1519
4	18	94	7	37	42	-15.7	-0.32	5.12	1518
4	18	94	10	37	42	-15.7	-0.32	5.12	1518
4	18	94	13	37	42	-15	-0.32	5.12	1520
4	18	94	16	37	42	-14.3	-0.32	5.13	1514
4	18	94	19	37	42	-13.8	-0.32	5.13	1514
4	18	94	22	37	42	-13.6	-0.32	5.13	1521
4	1994		1	37	42	-13.6	-0.32	5.13	1522
4	19	94	4	37	42	-13.9	-0.32	5.13	1523
4	19	94	7	37	42	-14.2	-0.32	5.13	1522
4	19	94	10	37	42	-14.3	-0.32	5.12	1523
4	19	94	13	37	42	-13.7	-0.32	5.12	1524
4	19	94	16	37	42	-13.1	-0.32	5.12	1524
4	19	94	19	37	42	-12.7	-0.32	5.12	1525
4	19	94	22	37	42	-12.5	-0.32	5.12	1525
4	20	94	1	37	42	-12.6	-0.32	5.12	1525
4	20	94	4	37	42	-12.9	-0.32	5.12	1525
4	20	94	7	37	42	-13.1	-0.32	5.12	1518
4	20	94	IO	37	42	-13.2	-0.32	5.11	1525
4	20	94	13	37	42	-12.7	-0.32	5.11	1524
4	20	94	16	37	42	-12.2	-0.32	5.11	1526

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
4	20	94	19	37	42	-11.8	-0.32	5.11	1528
4	20	94	22	37	42	-11.6	-0.32	5.1	1527
4	21	94	1	37	42	-11.7	-0.32	5.1	1522
4	21	94	4	37	42	-11.9	-0.32	5.1	1527
4	21	94	7	37	42	-12.2	-0.32	5.09	1526
4	21	94	10	37	42	-12.2	-0.31	5.09	1527
4	21	94	13	37	42	-11.8	-0.32	5.09	1526
4	21	94	16	37	42	-11.3	-0.31	5.08	1527
4	21	94	19	37	42	-10.9	-0.32	5.08	1528
4	21	94	22	37	42	-10.8	-0.32	5.08	1528
4	22	94	1	37	42	-11.1	-0.31	5.08	1529
4	22	94	4	37	42	-11.4	-0.31	5.07	1527
4	22	94	7	37	42	-11.7	-0.31	5.07	1528
4	22	94	10	37	42	-11.8	-0.32	5.07	1521
4	22	94	13	37	42	-11.4	-0.31	5.06	1527
4	22	94	16	37	42	-11	-0.32	5.06	1529
4	22	94	19	37	42	-10.7	-0.31	5.06	1530
4	22	94	22	37	42	-10.6	-0.31	5.06	1529
4	23	94	1	37	42	-10.9	-0.31	5.06	1530
4	23	94	4	37	42	-11.3	-0.31	5.05	1530
4	23	94	7	37	42	-11.6	-0.31	5.05	1531
4	23	94	10	37	42	-11.6	-0.31	5.05	1530
4	23	94	13	37	42	-11.2	-0.32	5.05	1531
4	23	94	16	37	42	-10.7	-0.31	5.05	1531
4	23	94	19	37	42	-10.4	-0.31	5.05	1532
4	23	94	22	37	42	-10.4	-0.32	5.05	1532
4	24	94	1	37	42	-10.7	-0.32	5.05	1531
4	24	94	4	37	42	-10.7	-0.32	5.05	1531
4	24	94	7	37	42	-10.8	-0.31	5.05	1532
4	24	94	10	37	42	-10.7	-0.31	5.05	1532
4	24	94	13	37	42	-10.5	-0.32	5.05	1532
4	24	94	16	37	42	-10.1	-0.31	5.05	1534
4	24	94	19	37	42	-9.74	-0.31	5.05	1534
4	24	94	22	37	42	-9.61	-0.31	5.05	1536
4	25	94	1	37	42	-9.7	-0.31	5.05	1535
4	25	94	4	37	42	-10.1	-0.31	5.05	1535
4	25	94	7	37	42	-10.4	-0.32	5.05	1537
4	25	94	10	37	42	-10.4	-0.31	5.05	1536
4	25	94	13	37	42	-9.93	-0.32	5.05	1535
4	25	94	16	37	42	-9.53	-0.31	5.05	1537
4	25	94	19	37	42	-9.22	-0.32	5.06	1538
4	25	94	22	37	42	-9.1	-0.32	5.06	1537
4	26	94	1	37	42	-9.22	-0.32	5.06	1538
4	26	94	4	37	42	-9.44	-0.31	5.06	1538
4	26	94	7	37	42	-9.61	-0.32	5.06	1538
4	26	94	10	37	42	-9.55	-0.31	5.05	1538
4	26	94	13	37	42	-9.1	-0.31	5.05	1538
4	26	94	16	37	42	-8.68	-0.31	5.05	1539
4	26	94	19	37	42	-8.34	-0.31	5.05	1541
4	26	94	22	37	42	-8.23	-0.31	5.05	1542
4	27	94	1	37	42	-8.22	-0.31	5.05	1541
4	27	94	4	37	42	-8.26	-0.31	5.04	1542
4	27	94	7	37	42	-8.3	-0.32	5.04	1542
4	27	94	10	37	42	-8.25	-0.31	5.04	1543
4	27	94	13	37	42	-8.01	-0.32	5.04	1543
4	27	94	16	37	42	-7.65	-0.31	5.03	1544
4	27	94	19	37	42	-7.33	-0.31	5.03	1545
4	27	94	22	37	42	-7.22	-0.31	5.03	1544
4	28	94	1	37	42	-7.3	-0.31	5.03	1545
4	28	94	4	37	42	-7.49	-0.31	5.02	1546
4	28	94	7	37	42	-7.75	-0.31	5.02	1546
4	28	94	10	37	42	-7.81	-0.31	5.02	1544
4	28	94	13	37	42	-7.65	-0.31	5.02	1545
4	28	94	16	37	42	-7.33	-0.31	5.01	1546
4	28	94	19	37	42	-6.93	-0.31	5.01	1546
4	28	94	22	37	42	-6.65	-0.31	5.01	1544
4	29	94	1	37	42	-6.6	-0.31	5.01	1546
4	29	94	4	37	42	-6.61	-0.31	5.01	1545
4	29	94	7	37	42	-6.63	-0.31	5.01	1546
4	29	94	10	37	42	-6.43	-0.31	5.01	1547
4	29	94	13	37	42	-5.82	-0.31	5.01	1548
4	29	94	16	37	42	-5.32	-0.31	5.01	1546
4	29	94	19	37	42	-5.2	-0.31	5.01	1547
4	29	94	22	37	42	-5.34	-0.31	5.01	1548
4	30	94	1	37	42	-5.68	-0.31	5.02	1550
4	30	94	4	37	42	-6.03	-0.31	5.02	1549
4	30	94	7	37	42	-6.28	-0.32	5.02	1548
4	30	94	10	37	42	-6.39	-0.32	5.03	1548
4	30	94	13	37	42	-6.31	-0.31	5.03	1549
4	30	94	16	37	42	-6.08	-0.32	5.04	1548
4	30	94	19	37	42	-5.97	-0.32	5.05	1550
4	30	94	22	37	42	-6.11	-0.32	5.05	1550
5	1	94	1	37	42	-6.31	-0.32	5.06	1552
5	1	94	4	37	42	-6.46	-0.31	5.06	1553

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
5	1	94	7	37	42	-6.56	-0.32	5.07	1551
5	1	94	10	37	42	-6.47	-0.32	5.08	1552
5	1	94	13	37	42	-6.23	-0.32	5.09	1552
5	1	94	16	37	42	-5.9	-0.32	5.1	1552
5	1	94	19	37	42	-5.73	-0.32	5.1	1552
5	1	94	22	37	42	-5.81	-0.32	5.11	1552
5	2	94	1	37	42	-6.06	-0.32	5.12	1552
5	2	94	4	37	42	-6.18	-0.32	5.12	1551
5	2	94	7	37	42	-6.27	-0.32	5.13	1551
5	2	94	10	37	42	-6.23	-0.32	5.14	1550
5	2	94	13	37	42	-6.01	-0.32	5.14	1550
5	2	94	16	37	42	-5.76	-0.32	5.15	1549
5	2	94	19	37	42	-5.55	-0.32	5.16	1547
5	2	94	22	37	42	-5.45	-0.32	5.17	1546
5	3	94	1	37	42	-5.46	-0.32	5.17	1544
5	3	94	4	37	42	-5.54	-0.32	5.18	1540
5	3	94	7	37	42	-5.54	-0.32	5.18	1543
5	3	94	10	37	42	-5.45	-0.32	5.19	1541
5	3	94	13	37	42	-5.24	-0.32	5.19	1540
5	3	94	16	37	42	-4.89	-0.32	5.2	1540
5	3	94	19	37	42	-4.49	-0.32	5.2	1539
5	3	94	22	37	42	-4.15	-0.32	5.2	1539
5	4	94	1	37	42	-4.18	-0.32	5.2	1538
5	4	94	4	37	42	-4.32	-0.32	5.21	1538
5	4	94	7	37	42	-4.41	-0.32	5.21	1538
5	4	94	10	37	42	-4.37	-0.32	5.21	1538
5	4	94	13	37	42	-4.02	-0.32	5.22	1538
5	4	94	16	37	42	-3.53	-0.32	5.22	1539
5	4	94	19	37	42	-3.29	-0.32	5.22	1539
5	4	94	22	37	42	-3.3	-0.32	5.23	1536
5	594		1	37	42	-3.44	-0.32	5.23	1537
5	5	94	4	37	42	-3.55	-0.32	5.23	1536
5	5	94	7	37	42	-3.76	-0.32	5.24	1536
5	5	94	10	37	42	-3.67	-0.32	5.24	1534
5	5	94	13	37	42	-3.43	-0.32	5.24	1536
5	5	94	16	37	42	-3.18	-0.32	5.25	1537
5	5	94	19	37	42	-2.96	-0.32	5.25	1537
5	5	94	22	37	42	-2.85	-0.32	5.26	1537
5	6	94	1	37	42	-2.92	-0.32	5.26	1536
5	6	94	4	37	42	-3.07	-0.32	5.26	1535
5	6	94	7	37	42	-3.21	-0.32	5.27	1535
5	6	94	10	37	42	-3.22	-0.32	5.27	1533
5	6	94	13	37	42	-3.04	-0.32	5.28	1534
5	6	94	16	37	42	-2.91	-0.32	5.28	1533
5	6	94	19	37	42	-2.76	-0.32	5.29	1532
5	6	94	22	37	42	-2.84	-0.32	5.29	1532
5	7	94	1	37	42	-3	-0.32	5.3	1532
5	7	94	4	37	42	-3.14	-0.32	5.3	1530
5	7	94	7	37	42	-3.27	-0.32	5.3	1532
5	7	94	10	37	42	-3.3	-0.32	5.3	1529
5	7	94	13	37	42	-3.23	-0.32	5.31	1530
5	7	94	16	37	42	-3.05	-0.32	5.31	1529
5	7	94	19	37	42	-2.96	-0.32	5.31	1529
5	7	94	22	37	42	-3.03	-0.32	5.31	1528
5	8	94	1	37	42	-3.08	-0.32	5.31	1529
5	8	94	4	37	42	-3.12	-0.32	5.31	1528
5	8	94	7	37	42	-3.17	-0.32	5.31	1530
5	8	94	10	37	42	-3.1	-0.32	5.31	1527
5	8	94	13	37	42	-2.91	-0.32	5.31	1527
5	8	94	16	37	42	-2.58	-0.32	5.31	1529
5	8	94	19	37	42	-2.39	-0.32	5.31	1527
5	8	94	22	37	42	-2.45	-0.32	5.3	1528
5	994		1	37	42	-2.66	-0.32	5.3	1530
5	9	94	4	37	42	-2.84	-0.32	5.3	1530
5	9	94	7	37	42	-2.99	-0.32	5.3	1531
5		94	10	37	42	-2.98	-0.32	5.29	1531
5	8	94	13	37	42	-2.74	-0.32	5.29	1529
5	9	94	16	37	42	-2.39	-0.32	5.28	1530
5	9	94	19	37	42	-2.14	-0.32	5.28	1531
5	9	94	22	37	42	-2.15	-0.32	5.28	1529
5	10	94	1	37	42	-2.55	-0.32	5.28	1528
5	10	94	4	37	42	-3.07	-0.32	5.28	1529
5	10	94	7	37	42	-3.31	-0.32	5.29	1526
5	10	94	10	37	42	-3.15	-0.32	5.29	1526
5	10	94	13	37	42	-2.89	-0.32	5.3	1525
5	10	94	16	37	42	-2.64	-0.32	5.31	1522
5	10	94	19	37	42	-2.74	-0.32	5.31	1522
5	10	94	22	37	42	-2.86	-0.32	5.32	1519
5	11	94	1	37	42	-2.93	-0.32	5.32	1518
5	11	94	4	37	42	-2.95	-0.32	5.33	1516
5	11	94	7	37	42	-2.94	-0.32	5.33	1515
5	11	94	10	37	42	-2.8	-0.32	5.33	1515
5	11	94	13	37	42	-2.63	-0.32	5.33	1514
5	11	94	16	37	42	-2.52	-0.32	5.33	1512

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
5	11	94	19	37	42	-2.5	-0.32	5.33	1509
5	11	94	22	37	42	-2.45	-0.32	5.32	1509
5	12	94	1	37	42	-2.5	-0.32	5.32	1508
5	12	94	4	37	42	-2.58	-0.32	5.32	1508
5	12	94	7	37	42	-2.62	-0.32	5.32	1505
5	12	94	10	37	42	-2.62	-0.32	5.32	1506
5	12	94	13	37	42	-2.47	-0.32	5.31	1505
5	12	94	16	37	42	-2.04	-0.32	5.31	1505
5	12	94	19	37	42	-1.78	-0.32	5.32	1504
5	12	94	22	37	42	-1.64	-0.32	5.32	1504
5	13	94	1	37	42	-1.82	-0.32	5.31	1503
5	13	94	4	37	42	-2.03	-0.32	5.31	1501
5	13	94	7	37	42	-2.16	-0.32	5.31	1500
5	13	94	10	37	42	-2.1	-0.32	5.31	1499
5	13	94	13	37	42	-1.95	-0.32	5.31	1496
5	13	94	16	37	42	-1.78	-0.32	5.32	1495
5	13	94	19	37	42	-1.74	-0.32	5.33	1492
5	13	94	22	37	42	-1.8	-0.32	5.33	1491
5	14	94	1	37	42	-1.89	-0.32	5.32	1491
5	14	94	4	37	42	-1.89	-0.32	5.32	1490
5	14	94	7	37	42	-1.87	-0.32	5.33	1489
5	14	94	10	37	42	-1.75	-0.32	5.34	1489
5	14	94	13	37	42	-1.35	-0.32	5.32	1490
5	14	94	16	37	42	-0.72	-0.32	5.34	1489
5	14	94	19	37	42	-0.42	-0.32	5.35	1489
5	14	94	22	37	42	-0.3	-0.32	5.35	1486
5	15	94	1	37	42	-0.38	-0.32	5.35	1486
5	15	94	4	37	42	-0.56	-0.32	5.36	1483
5	15	94	7	37	42	-0.74	-0.32	5.37	1483
5	15	94	10	37	42	-0.65	-0.32	5.38	1482
5	15	94	13	37	42	-0.47	-0.32	5.38	1479
5	15	94	16	37	42	-0.37	-0.32	5.39	1415
5	15	94	19	37	42	-0.33	-0.32	5.4	1453
5	15	94	22	37	42	-0.32	-0.32	5.4	1446
5	16	94	1	37	42	-0.35	-0.33	5.41	1439
5	16	94	4	37	42	-0.4	-0.33	5.41	1438
5	16	94	7	37	42	-0.48	-0.32	5.42	1437
5	16	94	10	37	42	-0.47	-0.33	5.42	1439
5	16	94	13	37	42	-0.35	-0.33	5.43	1444
5	16	94	16	37	42	-0.28	-0.33	5.44	1446
5	16	94	19	37	42	-0.25	-0.33	5.45	1429
5	16	94	22	37	42	-0.32	-0.33	5.46	1464

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
5	17	94	1	37	42	-0.54	-0.33	5.46	1457
5	17	94	4	37	42	-0.77	-0.33	5.47	1415
5	17	94	7	37	42	-0.93	-0.33	5.48	1418
5	17	94	10	37	42	-0.93	-0.33	5.48	1418
5	17	94	13	37	42	-0.78	-0.33	5.48	1428
5	17	94	16	37	42	-0.66	-0.33	5.49	1432
5	17	94	19	37	42	-0.69	-0.33	5.49	1433
5	17	94	22	37	42	-0.8	-0.33	5.5	1426
5	18	94	1	37	42	-0.86	-0.33	5.49	1424
5	18	94	4	37	42	-0.9	-0.33	5.49	1424
5	18	94	7	37	42	-0.83	-0.33	5.5	1423
5	18	94	10	37	42	-0.74	-0.33	5.5	1427
5	18	94	13	37	42	-0.5	-0.32	5.5	1373
5	18	94	16	37	42	-0.33	-0.32	5.51	1364
5	18	94	19	37	42	-0.22	-0.33	5.52	1483
5	18	94	22	37	42	-0.16	-0.33	5.54	1300
5	19	94	1	37	42	-0.13	-0.33	5.55	1270
5	19	94	4	37	42	-0.12	-0.33	5.56	1317
5	19	94	7	37	42	-0.11	-0.33	5.57	1301
5	19	94	10	37	42	-0.1	-0.33	5.58	1293
5	19	94	13	37	42	-0.06	-0.33	5.58	1492
5	19	94	16	37	42	-0.03	-0.33	5.6	1448
5	19	94	19	37	42	-0.02	-0.32	5.63	1548
5	19	94	22	37	42	-0.01	-0.33	5.67	1547
5	20	94	1	37	42	-0.01	-0.33	5.71	1544
5	20	94	4	37	42	-0.02	-0.33	5.73	1550
5	20	94	7	37	42	-0.01	-0.33	5.76	1552
5	20	94	10	37	42	0	-0.33	5.77	1510
5	20	94	13	37	42	0.05	-0.32	5.79	1524
5	20	94	16	37	42	0.12	-0.32	5.82	1548
5	20	94	19	37	42	0.15	-0.32	5.88	1518
5	20	94	22	37	42	0.14	-0.32	5.94	1487
5	21	94	1	37	42	0.08	-0.32	5.99	1482
5	21	94	4	37	42	0.05	-0.32	6.03	1467
5	21	94	7	37	42	0.03	-0.31	6.06	1463
5	21	94	10	37	42	0.1	-0.31	6.08	1481
5	21	94	13	37	42	0.17	-0.31	6.1	1469
5	21	94	16	37	42	0.27	-0.31	6.14	1486
5	21	94	19	37	42	0.32	-0.31	6.19	1520
5	21	94	22	37	42	0.18	-0.31	6.26	1500
5	22	94	1	37	42	0.09	-0.31	6.32	1492
5	22	94	4	37	42	0.04	-0.3	6.36	1506

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
5	22	94	7	37	42	0.04	-0.31	6.39	1518
5	22	94	10	37	42	0.13	-0.31	6.4	1527
5	22	94	13	37	42	0.19	-0.31	6.42	1539
5	22	94	16	37	42	0.16	-0.31	6.43	1540
5	22	94	19	37	42	0.09	-0.31	6.44	1530
5	22	94	22	37	42	-0.02	-0.31	6.45	1515
5	23	94	1	37	42	-0.18	-0.31	6.46	1509
5	23	94	4	37	42	-0.34	-0.31	6.46	1534
5	23	94	7	37	42	-0.42	-0.31	6.46	1530
5	23	94	10	37	42	-0.42	-0.31	6.45	1535
5	23	94	13	37	42	-0.22	-0.31	6.45	1523
5	23	94	16	37	42	-0.02	-0.31	6.45	1506
5	23	94	19	37	42	-0.08	-0.31	6.45	1498
5	23	94	22	37	42	-0.24	-0.31	6.44	1499
5	24	94	1	37	42	-0.46	-0.31	6.44	1503
5	24	94	4	37	42	-0.62	-0.31	6.44	1504
5	24	94	7	37	42	-0.71	-0.31	6.43	1517
5	24	94	10	37	42	-0.71	-0.31	6.42	1526
5	24	94	13	37	42	-0.41	-0.31	6.41	1541
5	24	94	16	37	42	-0.11	-0.31	6.4	1524
5	24	94	19	37	42	-0.11	-0.31	6.4	1550
5	24	94	22	37	42	-0.49	-0.31	6.39	1558
5	25	94	1	37	42	-0.81	-0.31	6.39	1566
5	25	94	4	37	42	-1.06	-0.31	6.38	1578
5	25	94	7	37	42	-1.17	-0.31	6.38	1566
5	25	94	10	37	42	-0.91	-0.31	6.37	1596
5	25	94	13	37	42	-0.3	-0.31	6.36	1632
5	25	94	16	37	42	0.17	-0.31	6.36	1689
5	25	94	19	37	42	0.24	-0.31	6.37	1676
5	25	94	22	37	42	0.09	-0.31	6.38	1657
5	26	94	1	37	42	-0.2	-0.31	6.39	1655
5	26	94	4	37	42	-0.37	-0.31	6.39	1644
5	26	94	7	37	42	-0.45	-0.31	6.4	1640
5	26	94	10	37	42	-0.18	-0.3	6.39	1646
5	26	94	13	37	42	0.22	-0.3	6.4	1668
5	26	94	16	37	42	0.3	-0.31	6.4	1667
5	26	94	19	37	42	0.18	-0.3	6.41	1670
5	26	94	22	37	42	0	-0.31	6.42	1648
5	27	94	1	37	42	-0.18	-0.31	6.43	1652
5	27	94	4	37	42	-0.27	-0.31	6.43	1662
5	27	94	7	37	42	-0.3	-0.31	6.43	1664
5	27	94	10	37	42	-0.03	-0.31	6.43	1675
5	27	94	13	37	42	0.47	-0.31	6.43	1756
5	27	94	16	37	42	0.7	-0.31	6.45	1792
5	27	94	19	37	42	0.54	-0.31	6.48	1785
5	27	94	22	37	42	0.37	-0.31	6.5	1771
5	28	94	1	37	42	0.12	-0.31	6.52	1736
5	28	94	4	37	42	-0.01	-0.31	6.53	1721
5	28	94	7	37	42	-0.01	-0.31	6.54	1733
5	28	94	10	37	42	0.37	-0.31	6.53	1739
5	28	94	13	37	42	0.89	-0.31	6.54	1826
5	28	94	16	37	42	1.12	-0.31	6.56	1828
5	28	94	19	37	42	1.21	-0.31	6.6	1803
5	28	94	22	37	42	1.06	-0.32	6.66	1775
5	29	94	1	37	42	0.15	-0.32	6.72	1796
5	29	94	4	37	42	-0.21	-0.32	6.74	1768
5	29	94	7	37	42	-0.18	-0.32	6.76	1755
5	29	94	10	37	42	0.16	-0.32	6.77	1751
5	29	94	13	37	42	0.63	-0.32	6.79	1785
5	29	94	16	37	42	0.84	-0.32	6.8	1800
5	29	94	19	37	42	0.7	-0.32	6.83	1791
5	29	94	22	37	42	0.2	-0.32	6.84	1775
5	30	94	1	37	42	-0.15	-0.32	6.85	1759
5	30	94	4	37	42	-0.3	-0.32	6.86	1754
5	30	94	7	37	42	-0.34	-0.32	6.87	1751
5	30	94	ID	37	42	-0.22	-0.32	6.86	1748
5	30	94	13	37	42	0.03	-0.32	6.86	1750
5	30	94	16	37	42	0.14	-0.32	6.86	1760
5	30	94	19	37	42	0.07	-0.32	6.86	1763
5	30	94	22	37	42	-0.2	-0.32	6.86	1761
5	31	94	1	37	42	-0.41	-0.32	6.85	1779
5	31	94	4	37	42	-0.43	-0.32	6.84	1778
5	31	94	7	37	42	-0.31	-0.31	6.83	1776
5	31	94	10	37	42	-0.09	-0.31	6.83	1770
5	31	94	13	37	42	0.29	-0.31	6.82	1795
5	31	94	16	37	42	0.58	-0.31	6.82	1814
5	31	94	19	37	42	0.82	-0.31	6.83	1803
5	31	94	22	37	42	0.74	-0.31	6.86	1787
6	1	94	1	37	42	0.41	-0.31	6.87	1772
6	1	94	4	37	42	0.05	-0.31	6.88	1760
6	1	94	7	37	42	-0.06	-0.31	6.87	1750
6	1	94	10	37	42	0.09	-0.31	6.88	1741
6	1	94	13	37	42	0.45	-0.31	6.87	1732
6	1	94	16	37	42	1.03	-0.31	6.89	1769

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	UaterT	Stage	Conductivity
6	1	94	19	37	42	1.3	-0.31	6.91	1779
6	1	94	22	37	42	1.04	-0.31	6.94	1755
6	2	94	1	37	42	0.42	-0.31	6.97	1735
6	294		4	37	42	0.18	-0.31	6.98	1717
6	2	94	7	37	42	0.19	-0.31	6.99	1706
6	2	94	10	37	42	0.46	-0.31	7	1705
6	2	94	13	37	42	3.01	-0.31	7.12	1726
6	2	94	16	37	42	2.07	-0.31	7.02	1708
6	2	94	19	37	42	1.72	-0.31	7.07	1751
6	2	94	22	37	42	1.15	-0.31	7.14	1746
6	394		1	37	42	0.61	-0.32	7.19	1731
6	394		4	37	42	0.33	-0.32	7.21	1723
6	394		7	37	42	0.37	-0.32	7.24	1709
6	3	94	10	37	42	0.69	-0.32	7.25	1709
6	3	94	13	37	42	0.79	-0.32	7.27	1726
6	3	94	16	37	42	0.98	-0.32	7.29	1739
6	3	94	19	37	42	0.92	-0.32	7.34	1743
6	3	94	22	37	42	0.68	-0.31	7.37	1735
6	4	94	1	37	42	0.41	-0.32	7.4	1724
6	4	94	4	37	42	0.27	-0.32	7.43	1724
6	494		7	37	42	0.26	-0.31	7.47	1716
6	4	94	10	37	42	0.5	-0.32	7.48	1722
6	4	94	13	37	42	0.66	-0.32	7.49	1732
6	4	94	16	37	42	0.86	-0.32	7.52	1741
6	4	94	19	37	42	0.78	-0.31	7.56	1739
6	4	94	22	37	42	0.53	-0.31	7.59	1733
6	5	94	1	37	42	0.3	-0.31	7.62	1727
6	5	94	4	37	42	0.13	-0.31	7.63	1727
6	5	94	7	37	42	0.12	-0.31	7.64	1723
6	5	94	10	37	42	0.4	-0.31	7.64	1738
6	5	94	13	37	42	0.96	-0.31	7.65	1781
6	5	94	16	37	42	1.39	-0.31	7.67	1798
6	5	94	19	37	42	1.56	-0.31	7.75	1787
6	5	94	22	37	42	1.2	-0.31	7.82	1775
6	6	94	1	37	42	0.64	-0.31	7.89	1745
6	6	94	4	37	42	0.15	-0.31	7.92	1733
6	6	94	7	37	42	0.26	-0.31	7.94	1724
6	6	94	10	37	42	1.04	-0.31	7.96	1782
6	6	94	13	37	42	1.75	-0.31	7.99	1791
6	6	94	16	37	42	2.39	-0.31	a	1778
6	6	94	19	37	42	2.99	-0.31	8.05	1788
6	6	94	22	37	42	2.94	-0.31	8.14	1782
6	7	94	1	37	42	2.21	-0.31	a.22	1778
6	7	94	4	37	42	1.65	-0.31	a.27	1766
6	7	94	7	37	42	1.57	-0.31	a.3	1758
6	7	94	10	37	42	2.15	-0.31	a.32	1785
6	7	94	13	37	42	2.89	-0.31	a.34	1772
6	7	94	16	37	42	3.01	-0.31	8.38	1756
6	7	94	19	37	42	2.57	-0.31	8.46	1754
6	7	94	22	37	42	1.7	-0.31	8.55	1748
6	a	94	1	37	42	1.04	-0.31	8.62	1742
6	a	94	4	37	42	0.63	-0.31	a.64	1741
6	a	94	7	37	42	0.51	-0.31	8.68	1735
6	a	94	10	37	42	0.83	-0.31	8.67	1729
6	a	94	13	37	42	1.4	-0.31	8.68	1745
6	a	94	16	37	42	1.8	-0.31	8.71	1741
6	a	94	19	37	42	1.95	-0.31	8.76	1725
6	a	94	22	37	42	1.75	-0.31	8.82	1718
6	9	94	1	37	42	1.33	-0.31	8.87	1713
6	9	94	4	37	42	1.1	-0.31	8.89	1716
6	9	94	7	37	42	1.08	-0.31	8.91	1711
6	9	94	10	37	42	1.21	-0.3	a.92	1707
6	9	94	13	37	42	1.96	-0.31	8.96	1719
6	9	94	16	37	42	3.24	-0.3	a.97	1713
6	9	94	19	37	42	4.05	-0.3	9.06	1694
6	9	94	22	37	42	4.38	-0.3	9.19	1679
6	10	94	1	37	42	3.12	-0.3	9.28	1688
6	10	94	4	37	42	2.08	-0.3	9.32	1688
6	10	94	7	37	42	2.62	-0.3	9.33	1684
6	10	94	10	37	42	3.88	-0.3	9.33	1692
6	10	94	13	37	42	5.83	-0.3	9.37	1647
6	10	94	16	37	42	6.1	-0.3	9.4	1641
6	10	94	19	37	42	6.37	-0.3	9.46	1632
6	10	94	22	37	42	6.12	-0.29	9.57	1631
6	11	94	1	37	42	4.82	-0.29	9.64	1643
6	11	94	4	37	42	3.73	-0.3	9.64	1653
6	11	94	7	37	42	3.64	-0.3	9.65	1658
6	11	94	10	37	42	4.35	-0.3	9.66	1657
6	11	94	13	37	42	5.92	-0.3	9.68	1635
6	11	94	16	37	42	7.18	-0.29	9.73	1626
6	11	94	19	37	42	7.43	-0.29	9.87	1625
6	11	94	22	37	42	5.47	-0.28	9.96	1630
6	12	94	1	37	42	3.89	-0.29	10	1642
6	12	94	4	37	42	3.12	-0.29	10	1652

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
6	12	94	7	37	42	3.69	-0.3	9.98	1652
6	12	94	10	37	42	5.23	-0.3	9.98	1650
6	12	94	13	37	42	7.14	-0.3	10	1625
6	12	94	16	37	42	a.49	-0.29	10.01	1614
6	12	94	19	37	42	8.34	-0.29	10.14	1613
6	12	94	22	37	42	5.14	-0.29	10.19	1626
6	13	94	1	37	42	3.72	-0.29	10.2	1637
6	13	94	4	37	42	3	-0.3	10.23	1641
6	13	94	7	37	42	2.96	-0.3	10.19	1642
6	13	94	IO	37	42	3.8	-0.3	10.2	1633
6	13	94	13	37	42	5.27	-0.3	10.22	1636
6	13	94	16	37	42	6	-0.3	10.24	1632
6	13	94	19	37	42	5.36	-0.29	10.29	1630
6	13	94	22	37	42	4.11	-0.3	10.34	1625
6	14	94	1	37	42	4.41	-0.3	10.36	1622
6	14	94	4	37	42	4.48	-0.3	10.37	1622
6	14	94	7	37	42	5.17	-0.3	10.36	1624
6	14	94	IO	37	42	6.61	-0.3	10.38	1627
6	14	94	13	37	42	6.5	-0.3	10.37	1615
6	14	94	16	37	42	7.02	-0.29	10.41	1617
6	14	94	19	37	42	5.51	-0.29	10.48	1615
6	14	94	22	37	42	4.76	-0.3	10.47	1610
6	15	94	1	37	42	4.34	-0.3	10.5	1613
6	15	94	4	37	42	4.23	-0.29	10.46	1611
6	15	94	7	37	42	5.44	-0.3	10.41	1609
6	15	94	10	37	42	8.02	-0.29	10.4	1609
6	15	94	13	37	42	9.7	-0.29	10.41	1592
6	15	94	16	37	42	10.83	-0.29	10.46	1590
6	15	94	19	37	42	8.34	-0.29	10.57	1587
6	15	94	22	37	42	7.47	-0.29	10.56	1590
6	16	94	1	37	42	7.15	-0.29	10.58	1591
6	16	94	4	37	42	6.58	-0.29	10.57	1589
6	16	94	7	37	42	6.6	-0.29	10.54	1581
6	16	94	10	37	42	7.97	-0.29	10.51	1582
6	16	94	13	37	42	9.79	-0.29	10.52	1585
6	16	94	16	37	42	11.1	-0.29	10.54	1574
6	16	94	19	37	42	10.81	-0.29	10.61	1561
6	16	94	22	37	42	8.96	-0.29	10.69	1561
6	17	94	1	37	42	6.91	-0.29	10.7	1558
6	17	94	4	37	42	5.72	-0.29	10.67	1550
6	17	94	7	37	42	6.11	-0.29	10.63	1544
6	17	94	10	37	42	7.99	-0.29	10.61	1546
6	17	94	13	37	42	7.1	-0.29	10.64	1535
6	17	94	16	37	42	6.53	-0.29	10.63	1522
6	17	94	19	37	42	5.78	-0.29	10.63	1511
6	17	94	22	37	42	4.82	-0.29	10.63	1501
6	18	94	1	37	42	4.2	-0.29	10.62	1488
6	18	94	4	37	42	4.07	-0.29	10.61	1474
6	18	94	7	37	42	4.02	-0.29	10.6	1458
6	18	94	IO	37	42	3.5	-0.29	10.58	1440
6	18	94	13	37	42	3.24	-0.29	10.56	1430
6	18	94	16	37	42	3.29	-0.29	10.53	1423
6	18	94	19	37	42	3.28	-0.29	10.52	1401
6	18	94	22	37	42	3.15	-0.3	10.53	1374
6	19	94	1	37	42	2.95	-0.29	10.49	1352
6	19	94	4	37	42	2.81	-0.3	10.48	1334
6	19	94	7	37	42	2.67	-0.3	10.46	1318
6	19	94	IO	37	42	2.6	-0.29	10.44	1302
6	19	94	13	37	42	2.58	-0.3	10.42	1284
6	19	94	16	37	42	2.72	-0.3	10.4	1267
6	19	94	19	37	42	2.87	-0.3	10.38	1246
6	19	94	22	37	42	2.79	-0.3	10.37	1221
6	20	94	1	37	42	2.47	-0.3	10.38	1203
6	20	94	4	37	42	2.18	-0.3	10.36	1186
6	20	94	7	37	42	2.04	-0.3	10.34	1169
6	20	94	IO	37	42	3.19	-0.3	10.31	1164
6	20	94	13	37	42	3.6	-0.3	10.28	1138
6	20	94	16	37	42	3.77	-0.3	10.29	1116
6	20	94	19	37	42	3.59	-0.3	10.26	1096
6	20	94	22	37	42	3.08	-0.3	10.28	1083
6	21	94	1	37	42	2.68	-0.3	10.22	1069
6	21	94	4	37	42	2.39	-0.3	10.21	1057
6	21	94	7	37	42	2.3	-0.3	10.22	1043
6	21	94	10	37	42	2.34	-0.3	10.18	1030
6	21	94	13	37	42	2.41	-0.3	10.16	1019
6	21	94	16	37	42	2.61	-0.3	10.15	1008
6	21	94	19	37	42	2.73	-0.3	10.14	993
6	21	94	22	37	42	2.65	-0.3	10.13	979
6	22	94	1	37	42	2.4	-0.3	10.11	967
6	22	94	4	37	42	2.25	-0.31	10.12	956
6	22	94	7	37	42	2.13	-0.3	10.08	944
6	22	94	10	37	42	2.1	-0.3	IO.07	934
6	22	94	13	37	42	2.13	-0.31	10.07	926

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
6	22	94	16	37	42	2.18	-0.31	10.08	917
6	22	94	19	37	42	2.14	-0.3	10.06	907
6	22	94	22	37	42	2.03	-0.3	10.07	898
6	23	94	1	37	42	1.94	-0.3	10.05	889
6	23	94	4	37	42	1.83	-0.3	10.05	881
6	23	94	7	37	42	1.77	-0.3	10.05	873
6	23	94	10	37	42	1.75	-0.3	10.06	866
6	23	94	13	37	42	1.79	-0.3	10.07	860
6	23	94	16	37	42	2	-0.3	10.11	857
6	23	94	19	37	42	2.13	-0.3	10.09	848
6	23	94	22	37	42	2.19	-0.3	10.13	840
6	24	94	1	37	42	2.15	-0.3	10.11	832
6	24	94	4	37	42	2.09	-0.3	10.14	823
6	24	94	7	37	42	2.04	-0.3	10.14	816
6	24	94	10	37	42	2.14	-0.3	10.12	810
6	24	94	13	37	42	2.45	-0.3	10.12	809
6	24	94	16	37	42	2.76	-0.31	10.1	800
6	24	94	19	37	42	4.63	-0.3	10.07	793
6	24	94	22	37	42	5.11	-0.3	10.11	777
6	25	94	1	37	42	4.34	-0.3	10.11	773
6	25	94	4	37	42	2.85	-0.3	10.1	771
6	25	94	7	37	42	2.84	-0.3	10.09	763
6	25	94	10	37	42	2.8	-0.3	10.08	760
6	25	94	13	37	42	3.12	-0.3	10.07	758
6	25	94	16	37	42	3.54	-0.3	10.06	746
6	25	94	19	37	42	3.89	-0.3	10.05	732
6	25	94	22	37	42	4.06	-0.3	10.04	726
6	26	94	1	37	42	2.87	-0.3	10.05	726
6	26	94	4	37	42	1.31	-0.3	10.03	723
6	26	94	7	37	42	2.06	-0.3	10.02	714
6	26	94	10	37	42	2.54	-0.31	10.01	720
6	26	94	13	37	42	2.93	-0.3	9.99	713
6	26	94	16	37	42	3.36	-0.3	10	703
6	26	94	19	37	42	3.43	-0.3	9.98	691
6	26	94	22	37	42	3.53	-0.3	9.98	685
6	27	94	1	37	42	2.44	-0.3	9.96	684
6	27	94	4	37	42	2.22	-0.31	9.95	680
6	27	94	7	37	42	3.28	-0.31	9.92	673
6	27	94	10	37	42	4.17	-0.31	9.91	668
6	27	94	13	37	42	4.85	-0.3	9.9	663
6	27	94	16	37	42	5.61	-0.3	9.9	659
6	27	94	19	37	42	5.62	-0.3	9.9	656
6	27	94	22	37	42	4.81	-0.3	9.91	650
6	28	94	1	37	42	4.14	-0.31	9.87	644
6	28	94	4	37	42	3.73	-0.3	9.86	641
6	28	94	7	37	42	4.03	-0.3	9.85	638
6	28	94	10	37	42	4.68	-0.3	9.84	632
6	28	94	13	37	42	5.7	-0.3	9.83	631
6	28	94	16	37	42	5.8	-0.3	9.87	628
6	28	94	19	37	42	5.34	-0.3	9.87	624
6	28	94	22	37	42	4.54	-0.3	9.84	618
6	29	94	1	37	42	4.12	-0.3	9.84	614
6	29	94	4	37	42	4.01	-0.31	9.83	612
6	29	94	7	37	42	3.87	-0.3	9.83	610
6	29	94	10	37	42	4.02	-0.31	9.83	606
6	29	94	13	37	42	4.31	-0.31	9.82	602
6	29	94	16	37	42	4.65	-0.31	9.82	599
6	29	94	19	37	42	4.4	-0.31	9.82	597
6	29	94	22	37	42	3.94	-0.31	9.82	593
6	30	94	1	37	42	3.57	-0.31	9.83	589
6	30	94	4	37	42	3.44	-0.31	9.8	587
6	30	94	7	37	42	3.59	-0.31	9.79	583
6	30	94	10	37	42	3.73	-0.31	9.79	582
6	30	94	13	37	42	4.23	-0.31	9.82	590
6	30	94	16	37	42	4.15	-0.3	9.81	580
6	30	94	19	37	42	3.95	-0.31	9.79	574
6	30	94	22	37	42	3.54	-0.31	9.78	567
7	1	94	1	37	42	3.3	-0.31	9.77	564
7	1	94	4	37	42	3.12	-0.31	9.79	559
7	1	94	7	37	42	3.06	-0.31	9.78	556
7	1	94	10	37	42	3.08	-0.31	9.78	556
7	1	94	13	37	42	3.18	-0.31	9.78	553
7	1	94	16	37	42	3.28	-0.31	9.77	550
7	1	94	19	37	42	3.29	-0.31	9.79	548
7	1	94	22	37	42	3.25	-0.31	9.77	544
7	2	94	1	37	42	3.19	-0.31	9.77	542
7	2	94	4	37	42	3.13	-0.31	9.8	540
7	2	94	7	37	42	3.08	-0.31	9.78	537
7	2	94	10	37	42	3.1	-0.31	9.78	537
7	2	94	13	37	42	3.19	-0.31	9.78	536
7	2	94	16	37	42	3.28	-0.31	9.78	534
7	2	94	19	37	42	3.44	-0.31	9.8	531
7	2	94	22	37	42	3.44	-0.31	9.78	527
7	3	94	1	37	42	3.39	-0.31	9.79	523

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
7		394	4	37	42	3.21	-0.31	9.8	520
7		394	7	37	42	3.16	-0.31	9.77	518
7	3	94	10	37	42	3.25	-0.31	9.77	517
7	3	94	13	37	42	3.38	-0.31	9.76	516
7	3	94	16	37	42	3.7	-0.31	9.76	517
7	3	94	19	37	42	3.89	-0.31	9.75	513
7	3	94	22	37	42	4.31	-0.31	9.76	511
7		494	1	37	42	4.34	-0.31	9.75	506
7		494	4	37	42	4.18	-0.31	9.73	504
7		494	7	37	42	4.64	-0.31	9.72	501
7	4	94	10	37	42	5.28	-0.31	9.7	499
7	4	94	13	37	42	6.53	-0.31	9.68	500
7	4	94	16	37	42	6.4	-0.31	9.73	500
7	4	94	19	37	42	5.1	-0.31	9.7	496
7	4	94	22	37	42	4.73	-0.31	9.69	494
7		S94	1	37	42	4.52	-0.31	9.7	49s
7	5	94	4	37	42	4.41	-0.31	9.7	496
7	5	94	7	37	42	4.17	-0.31	9.7	49s
7	s	94	10	37	42	4.43	-0.31	9.67	490
7	5	94	13	37	42	7.31	-0.31	9.65	511
7	5	94	16	37	42	9	-0.31	9.66	488
7	5	94	19	37	42	7.97	-0.31	9.71	484
7	5	94	22	37	42	6.91	-0.31	9.69	482
7		694	1	37	42	6.15	-0.31	9.69	481
7		694	4	37	42	6.12	-0.31	9.68	482
7		694	7	37	42	6.08	-0.31	9.68	482
7	6	94	10	37	42	5.41	-0.31	9.69	481
7	6	94	13	37	42	5.22	-0.31	9.69	479
7	6	94	16	37	42	5.7	-0.31	9.68	477
7	6	94	19	37	42	5.16	-0.31	9.68	478
7	6	94	22	37	42	4.62	-0.31	9.71	475
7		794	1	37	42	4.3	-0.31	9.68	474
7		794	4	37	42	4.43	-0.31	9.68	473
7		794	7	37	42	4.56	-0.31	9.68	471
7	7	94	10	37	42	5.82	-0.31	9.65	470
7	7	94	13	37	42	7.91	-0.31	9.67	482
7	7	94	16	37	42	7.37	-0.31	9.69	468
7	7	94	19	37	42	8.12	-0.31	9.66	467
7	7	94	22	37	42	7.51	-0.31	9.71	465
7	a	94	1	37	42	5.83	-0.31	9.69	464
7	a	94	4	37	42	5.32	-0.31	9.7	462
7		894	7	37	42	5.35	-0.31	9.64	461
7	8	94	10	37	42	8.34	-0.31	9.6	476
7	8	94	13	37	42	9.96	-0.31	9.7	468
7	8	94	16	37	42	9.58	-0.31	9.63	454
7	8	94	19	37	42	9.83	-0.31	9.68	461
7	8	94	22	37	42	8.61	-0.31	9.7	457
7	9	94	1	37	42	7.14	-0.31	9.68	458
7	9	94	4	37	42	6.26	-0.31	9.65	455
7	9	94	7	37	42	6.13	-0.31	9.66	449
7	9	94	10	37	42	7.7	-0.31	9.6	457
7	9	94	13	37	42	10.04	-0.31	9.58	459
7	9	94	16	37	42	8.38	-0.31	9.66	448
7	9	94	19	37	42	7.87	-0.31	9.63	445
7	9	94	22	37	42	7.11	-0.31	9.63	450
7	10	94	1	37	42	6.52	-0.31	9.62	449
7	10	94	4	37	42	6.12	-0.31	9.61	447
7	10	94	7	37	42	5.79	-0.31	9.63	446
7	10	94	10	37	42	5.56	-0.31	9.6	442
7	10	94	13	37	42	5.49	-0.31	9.61	441
7	10	94	16	37	42	6.18	-0.31	9.57	457
7	10	94	19	37	42	7.24	-0.31	9.62	443
7	10	94	22	37	42	6.6	-0.31	9.6	437
7	11	94	1	37	42	5.84	-0.31	9.58	438
7	11	94	4	37	42	5.21	-0.31	9.59	437
7	11	94	7	37	42	5.26	-0.31	9.56	435
7	11	94	10	37	42	6.4	-0.31	9.53	433
7	11	94	13	37	42	8.89	-0.31	9.5	446
7	11	94	16	37	42	10.5	-0.31	9.52	429
7	11	94	19	37	42	10.14	-0.31	9.57	426
7	11	94	22	37	42	8.82	-0.31	9.58	427
7	12	94	1	37	42	6.82	-0.31	9.55	428
7	12	94	4	37	42	5.83	-0.31	9.52	426
7	12	94	7	37	42	5.76	-0.31	9.5	424
7	12	94	10	37	42	8.12	-0.31	9.44	438
7	12	94	13	37	42	10.15	-0.31	9.48	431
7	12	94	16	37	42	11.16	-0.31	9.47	420
7	12	94	19	37	42	10.73	-0.31	9.49	419
7	12	94	22	37	42	8.75	-0.31	9.52	423
7	13	94	1	37	42	7.38	-0.31	9.46	420
	13	94	4	37	42	6.73	-0.31	9.46	421
3	13	94	7	37	42	6.61	-0.31	9.43	417
7	13	94	10	37	42	8.43	-0.31	9.38	420
7	13	94	13	37	42	11.32	-0.31	9.35	432

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	Water1	Stage	Conductivity
7	13	94	16	37	42	11.88	-0.31	9.41	412
7	13	94	19	37	42	11	-0.31	9.45	415
7	13	94	22	37	42	8.99	-0.31	9.45	418
7	14	94	1	37	42	7.81	-0.31	9.42	414
7	14	94	4	37	42	7.89	-0.31	9.37	413
7	14	94	7	37	42	7.89	-0.31	9.36	412
7	14	94	10	37	42	8.6	-0.31	9.35	411
7	14	94	13	37	42	9.3	-0.31	9.38	415
7	14	94	16	37	42	9.54	-0.31	9.3s	414
7	14	94	19	37	42	9.45	-0.31	9.35	410
7	14	94	22	37	42	8.57	-0.31	9.37	410
7	15	94	1	37	42	7.64	-0.31	9.34	409
7	15	94	4	37	42	7.66	-0.31	9.33	406
7	15	94	7	37	42	7.71	-0.31	9.34	407
7	15	94	10	37	42	7.59	-0.31	9.33	408
7	15	94	13	37	42	7.99	-0.31	9.3	415
7	15	94	16	37	42	7.34	-0.31	9.35	416
7	15	94	19	37	42	6.73	-0.31	9.31	408
7	15	94	22	37	42	6.33	-0.31	9.33	404
7	16	94	1	37	42	6.1	-0.31	9.29	403
7	16	94	4	37	42	5.89	-0.31	9.31	400
7	16	94	7	37	42	5.65	-0.31	9.28	397
7	16	94	10	37	42	5.59	-0.31	9.28	394
7	16	94	13	37	42	5.95	-0.31	9.27	395
7	16	94	16	37	42	6.16	-0.31	9.27	389
7	16	94	19	37	42	6.21	-0.31	9.27	388
7	16	94	22	37	42	6.16	-0.31	9.29	389
7	17	94	1	37	42	5.96	-0.31	9.26	388
7	17	94	4	37	42	5.81	-0.31	9.26	389
7	17	94	7	37	42	5.74	-0.31	9.25	390
7	17	94	10	37	42	6.2	-0.31	9.24	390
7	17	94	13	37	42	6.97	-0.31	9.22	389
7	17	94	16	37	42	7.7	-0.31	9.22	388
7	17	94	19	37	42	10.25	-0.31	9.21	388
7	17	94	22	37	42	9.51	-0.31	9.26	388
7	18	94	1	37	42	8.73	-0.31	9.27	391
7	18	94	4	37	42	8.24	-0.31	9.26	391
7	18	94	7	37	42	8.09	-0.31	9.24	390
7	18	94	IO	37	42	8.73	-0.31	9.19	390
7	18	94	13	37	42	11.17	-0.31	9.18	388
7	18	94	16	37	42	10.8	-0.31	9.26	388
7	18	94	19	37	42	9.35	-0.31	9.28	390
7	18	94	22	37	42	7.45	-0.31	9.26	389
7	19	94	1	37	42	6.3	-0.31	9.22	390
7	19	94	4	37	42	5.78	-0.31	9.2	390
7	19	94	7	37	42	5.97	-0.31	9.19	392
7	19	94	IO	37	42	6.6	-0.31	9.19	386
7	19	94	13	37	42	7.78	-0.31	9.18	387
7	19	94	16	37	42	8.86	-0.31	9.18	386
7	19	94	19	37	42	8.59	-0.31	9.2	386
7	19	94	22	37	42	7.81	-0.31	9.22	384
7	20	94	1	37	42	7.3	-0.31	9.2	383
7	20	94	4	37	42	7.05	-0.31	9.18	385
7	20	94	7	37	42	7.09	-0.31	9.18	385
7	20	94	10	37	42	7.65	-0.31	9.17	382
7	20	94	13	37	42	8.39	-0.31	9.17	397
7	20	94	16	37	42	8.36	-0.31	9.17	390
7	20	94	19	37	42	8.92	-0.31	9.17	384
7	20	94	22	37	42	8.55	-0.31	9.19	378
7	21	94	1	37	42	8.02	-0.31	9.18	382
7	21	94	4	37	42	7.63	-0.31	9.16	381
7	21	94	7	37	42	7.33	-0.31	9.16	381
7	21	94	IO	37	42	7.62	-0.31	9.16	380
7	21	94	13	37	42	7.79	-0.31	9.16	381
7	21	94	16	37	42	8.53	-0.31	9.12	378
7	21	94	19	37	42	8.06	-0.31	9.18	381
7	21	94	22	37	42	7.21	-0.31	9.16	377
7	22	94	1	37	42	6.91	-0.31	9.16	378
7	22	94	4	37	42	6.81	-0.31	9.14	380
7	22	94	7	37	42	6.85	-0.31	9.14	379
7	22	94	10	37	42	7.28	-0.31	9.14	378
7	22	94	13	37	42	7.87	-0.31	9.13	378
7	22	94	16	37	42	8.24	-0.31	9.15	379
7	22	94	19	37	42	8.05	-0.31	9.14	378
7	22	94	22	37	42	7.69	-0.31	9.14	377
7	23	94	1	37	42	7.42	-0.31	9.13	377
7	23	94	4	37	42	7.08	-0.31	9.14	378
7	23	94	7	37	42	6.48	-0.31	9.15	378
7	23	94	10	37	42	5.99	-0.31	9.15	376
7	23	94	13	37	42	5.79	-0.31	9.15	377
7	23	94	16	37	42	5.88	-0.31	9.16	381
7	23	94	19	37	42	6.27	-0.31	9.14	386
7	23	94	22	37	42	6.58	-0.31	9.15	379
7	24	94	1	37	42	6.19	-0.31	9.17	375

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
7	24	94	4	37	42	5.78	-0.31	9.17	373
7	24	94	7	37	42	6.08	-0.31	9.13	373
7	24	94	10	37	42	7.03	-0.31	9.13	377
7	24	94	13	37	42	8.2	-0.31	9.14	383
7	24	94	16	37	42	9.75	-0.31	9.15	374
7	24	94	19	37	42	10.37	-0.31	9.15	369
7	24	94	22	37	42	9.67	-0.31	9.18	371
7	25	94	1	37	42	7.23	-0.31	9.19	372
7	25	94	4	37	42	5.41	-0.31	9.15	372
7	25	94	7	37	42	5.57	-0.32	9.08	365
7	25	94	10	37	42	6.95	-0.31	9.12	369
7	25	94	13	37	42	7.3	-0.31	9.12	391
7	25	94	16	37	42	9.06	-0.31	9.08	384
7	25	94	19	37	42	9.75	-0.31	9.11	372
7	25	94	22	37	42	8.96	-0.31	9.15	373
7	26	94	1	37	42	8.18	-0.31	9.15	376
7	26	94	4	37	42	7.79	-0.31	9.12	375
7	26	94	7	37	42	7.56	-0.31	9.13	376
7	26	94	10	37	42	8.12	-0.31	9.08	375
7	26	94	13	37	42	8.83	-0.31	9.1	379
7	26	94	16	37	42	10.56	-0.31	9.05	380
7	26	94	19	37	42	10.43	-0.31	9.11	372
7	26	94	22	37	42	9.77	-0.31	9.11	373
7	27	94	1	37	42	8.82	-0.31	9.09	375
7	27	94	4	37	42	8.24	-0.31	9.09	375
7	27	94	7	37	42	7.79	-0.31	9.07	374
7	27	94	10	37	42	7.82	-0.31	9.04	369
7	27	94	13	37	42	8.23	-0.31	9.04	386
7	27	94	16	37	42	8.05	-0.31	9.05	377
7	27	94	19	37	42	7.99	-0.31	9.06	370
7	27	94	22	37	42	8.05	-0.31	9.03	367
7	28	94	1	37	42	8.11	-0.31	9.02	367
7	28	94	4	37	42	8.57	-0.31	9.05	367
7	28	94	7	37	42	0.49	-0.31	9.03	369
7	28	94	10	37	42	8.76	-0.31	9.03	371
7	28	94	13	37	42	9.1	-0.31	9.02	370
7	28	94	16	37	42	9.44	-0.31	9.04	370
7	28	94	19	37	42	9.11	-0.31	9.05	371
7	28	94	22	37	42	8.26	-0.31	9.06	372
7	29	94	1	37	42	7.58	-0.31	9.04	372
7	29	94	4	37	42	7.41	-0.31	9.04	372
7	29	94	7	37	42	7.33	-0.31	9.04	373
7	29	94	10		42	8.04	-0.31	9.01	373
7	29	94	13	73	42	8.32	-0.31	9.01	381
7	29	94	16	37	42	8.42	-0.31	9.02	377
7	29	94	19	37	42	8.12	-0.31	9.04	373
7	29	94	22	37	42	7.62	-0.31	9.03	374
7	30	94	1	37	42	7	-0.31	9.03	375
7	30	94	4	37	42	6.62	-0.31	9.01	374
7	30	94	7	37	42	6.4	-0.31	9.01	373
7	30	94	10	37	42	6.3	-0.31	9.01	374
7	30	94	13	37	42	6.52	-0.31	9	371
7	30	94	16	37	42	7.45	-0.31	9.01	372
7	30	94	19	37	42	7.53	-0.31	9	370
7	30	94	22	37	42	7.47	-0.31	9.02	369
7	31	94	1	37	42	7.34	-0.31	9.03	370
7	31	94	4	37	42	7.25	-0.31	9.03	371
7	31	94	7	37	42	7.42	-0.31	9.03	370
7	31	94	10	37	42	7.83	-0.31	9.06	370
7	31	94	13	37	42	9.89	-0.31	9.05	373
7	31	94	16	37	42	9.75	-0.31	9.13	374
7	31	94	19	37	42	9.24	-0.31	9.17	374
7	31	94	22	37	42	8.81	-0.31	9.16	375
8	1	94	1	37	42	8.41	-0.31	9.17	374
8	1	94	4	37	42	8.4	-0.31	9.2	376
8	1	94	7	37	42	8.42	-0.31	9.21	374
8	1	94	10	37	42	8.6	-0.31	9.23	374
8	1	94	I3	37	42	8.69	-0.31	9.28	376
8	1	94	16	37	42	8.86	-0.31	9.29	374
8	1	94	19	37	42	8.83	-0.31	9.35	376
8	1	94	22	37	42	8.35	-0.31	9.4	378
8	2	94	1	37	42	7.93	-0.31	9.47	380
8	2	94	4	37	42	7.41	-0.31	9.48	381
8	2	94	7	37	42	7.13	-0.31	9.52	383
8	2	94	10	37	42	8.18	-0.31	9.53	381
8	2	94	13	37	42	9.46	-0.31	9.55	386
8	2	94	16	37	42	10.19	-0.31	9.61	386
8	2	94	19	37	42	10.27	-0.31	9.69	383
8	2	94	22	37	42	8.58	-0.31	9.71	382
8	3	94	1	37	42	7.93	-0.31	9.69	381
8	394		4	37	42	7.54	-0.31	9.71	384
8	394		7	37	42	7.47	-0.31	9.71	383
8	3	94	10	37	42	8.35	-0.31	9.72	382
8	3	94	13	37	42	9.18	-0.31	9.76	390

Appendix D

Gambell Observation Well #2

Mm	Dd	Yy	Hr	Mn	Ss	AirT	WaterT	Stage	Conductivity
8	3	94	16	37	42	9.93	-0.31	9.77	391
8	3	94	19	37	42	9.61	-0.31	9.79	386
8	3	94	22	37	42	8.79	-0.31	9.82	384
8	4	94	1	37	42	8.1	-0.31	9.81	384
8	4	94	4	37	42	7.48	-0.31	9.81	386
8	4	94	7	37	42	7.06	-0.31	9.84	386
8	4	94	10	37	42	7.35	-0.31	9.81	387
8	4	94	13	37	42	8.34	-0.31	9.79	388
8	4	94	16	37	42	9.46	-0.31	9.71	407
8	4	94	19	37	42	8.73	-51.77	26.33	392
8	4	94	22	37	42	7.89	-76.23	26.3	391
8	5	94	1	37	42	7.18	-17.85	26.3	394
8	5	94	4	37	42	6.83	-17.98	26.28	397
8	5	94	7	37	42	7.34	-31.76	0.5	-110
8	5	94	10	37	42	15.27	-26.68	0.68	-109
8	5	94	13	37	42	18.08	-25.19	0.93	-109
8	5	94	16	37	42	16.67	-26.07	0.88	-108
8	5	94	19	37	42	18.93	-20.39	1.22	-624
8	5	94	22	37	42	19.17	-22.88	1.07	-624
8	6	94	1	37	42	20.12	-24.08	1.16	-624
8	6	94	4	37	42	20.1	-24.75	1.18	624
8	6	94	7	37	42	19.81	-25.42	1.16	-624
8	6	94	10	37	42	19.7	-25.75	1.12	-624
8	6	94	13	37	42	20.1	-25.79	1.25	-624
8	6	94	16	37	42	20.07	-25.98	1.24	-624
8	6	94	19	37	42	20.09	-26.09	1.25	-624
8	6	94	22	37	42	20	-26.41	1.22	-625
8	7	94	1	37	42	19.71	-26.01	1.06	-625
8	7	94	4	37	42	19.4	-26.64	1.02	-625
8	7	94	7	37	42	19	-27.06	0.97	-625
8	7	94	10	37	42	18.74	-27.06	0.96	-625
8	7	94	13	37	42	18.96	-26.92	0.93	-625
8	7	94	16	37	42	18.94	-27.3	0.93	-625
8	7	94	19	37	42	18.92	-28.19	0.82	-625
8	7	94	22	37	42	18.32	-28.41	0.81	-625
8	8	94	1	37	42	17.4	-29.22	0.76	-625
8	8	94	4	37	42	16.58	-30	0.71	-625
8	8	94	7	37	42	19.6	-28.47	0.69	-625
8	8	94	10	37	42	20.28	-33.47	-0.01	-625
8	8	94	13	37	42	20.61	-36.17	-0.17	-625
8	8	94	16	37	42	20.73	-38.5	-0.26	-625
8	8	94	19	37	42	20.92	-41.79	-0.3	-624
8	8	94	22	37	42	20.91	-44.41	-0.31	-624
8	9	94	1	37	42	20.75	-47.22	-0.31	-624
8	9	94	4	37	42	20.7	-48.8	-0.3	-624
8	9	94	7	37	42	20.93	-50.69	-0.27	-624
8	9	94	10	37	42	164.9	-55.81	-0.28	-624
8	9	94	13	37	42	28.13	-59.6	-0.29	-624
8	9	94	16	37	42	20.69	-63.43	-0.31	-624
8	9	94	19	37	42	20.32	-68.41	-0.34	-624
8	9	94	22	37	42	20.07	-72.85	-0.39	-624
8	10	94	1	37	42	19.46	-78.56	-0.42	-624
8	10	94	4	37	42	20.01	-84.38	-0.43	-624
8	10	94	7	37	42	20.76	-88	-0.44	-624
8	10	94	10	37	42	19.92	164.94	-0.46	-624
8	10	94	13	37	42	20.01	164.94	-0.49	-624
8	10	94	16	37	42	18.64	164.94	-0.52	-623
8	10	94	19	37	42	17.5	164.94	-0.55	-624
8	10	94	22	37	42	17.29	164.94	-0.57	-624
8	11	94	1	37	42	17.13	164.94	-0.58	-624
8	11	94	4	37	42	17.48	164.94	-0.59	-623

Appendix E

Gambell Observation wells Gambell #1, Gambell #2 & the Production well - Daily averages

Date	Time	G1-Air	G1-Uater	C1-Stage	G1-Cond	G1-Elev	G2-Air	G2-Water	G2-Stage	G2-Cond	G2-Elev	W3-AIR	W3-TEMPF	W3-STGE	W3-COND	W3-ELEV	WELLS	W3-TEMPC
10/20/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	NA	36.00	10.06	150	4.35	1	2.22
10/21/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	9.88	160	4.54	1	3.33
10/22/92	WA	NA	NA	NA	NA	NA	NA	NA	NA	WA	WA	NA	38.00	9.60	170	4.81	1	3.33
10/23/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	9.50	170	4.91	1	3.33
10/24/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	9.56	170	4.85	1	3.33
10/25/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	9.44	170	4.97	1	3.33
11/02/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	10.06	170	4.35	1	3.33
11/03/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	10.17	190	4.24	1	3.89
11/04/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	10.25	190	4.16	1	3.89
11/05/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	10.34	190	4.07	1	2.78
11/06/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	10.35	200	4.06	1	3.89
11/07/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	10.32	210	4.09	1	3.33
11/08/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	10.33	210	4.08	1	3.33
11/16/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	10.73	200	3.68	1	3.33
11/17/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	10.83	200	3.58	1	3.33
11/18/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	10.90	180	3.51	1	3.33
11/19/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	10.96	180	3.45	1	3.33
11/20/92	NA	NA	NA	WA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	10.98	200	3.43	1	3.33
11/21/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	10.94	190	3.47	1	3.33
11/22/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	10.83	200	3.58	1	3.33
11/23/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	10.21	200	4.20	1	3.33
11/24/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	9.33	220	5.08	1	2.22
11/25/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	9.17	200	5.24	1	2.22
11/27/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.00	9.58	240	4.83	1	1.67
11/30/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	10.17	NA	4.24	1	2.78
12/01/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	10.38	NA	4.04	1	2.22
12/02/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	10.56	NA	3.85	1	2.78
12/03/92	WA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	10.73	NA	3.68	1	2.78
12/04/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.00	10.90	NA	3.51	1	4.44
12/05/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	11.06	NA	3.35	1	3.89
12/06/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	WA	37.00	11.25	NA	3.16	1	2.78
12/07/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	11.40	210	3.01	1	3.89
12/08/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	11.48	200	2.93	1	3.33
12/09/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	11.63	200	2.79	1	3.33
12/10/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	11.75	210	2.66	1	3.33
12/11/92	NA	WA	NA	WA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	11.90	200	2.51	1	2.78
12/13/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	12.10	210	2.31	1	2.78
12/14/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	NA	36.00	12.17	160	2.24	1	2.22
12/15/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	38.00	12.21	160	2.20	3	3.33

This is computed daily average data for all wells and is the source data for the graphs, app F.

Appendix E

Gambell Observation wells Gambell #1, Gambell #2 & the Production well - Daily averages

Date	Time	Gl-Air	Gl-Water	Gl-Stage	G1-Cond	G1-Elev	G2-Air	G2-Water	G2-Stage	G2-Cond	G2-Elev	W3-AIR	W3-TEMPF	W3-STGE	W3-COND	W3-ELEV	WELLS	W3-TEMPC
12/16/92	NA	NA	NA	WA	NA	WA	NA	NA	NA	NA	NA	NA	38.00	12.29	170	2.12	3	3.33
12/17/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	12.42	200	1.99	3	2.78
12/18/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	12.48	200	1.93	3	3.33
12/19/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	12.63	200	1.79	3	3.33
12/20/92	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	NA	NA	38.00	12.67	200	1.74	3	3.33
12/21/92	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	NA	NA	37.00	12.67	190	1.74	3	2.78
12/22/92	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	NA	NA	37.00	12.71	200	1.70	3	2.78
12/27/92	NA	NA	NA	NA	NA	WA	NA	NA	NA	NA	NA	NA	38.00	13.00	200	1.41	3	3.33
12/28/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	13.00	210	1.41	3	3.33
01/01/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	WA	36.00	13.33	200	1.08	3	2.22
01/07/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	13.08	210	1.33	3	2.78
01/08/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	13.13	220	1.29	3	3.33
01/09/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	13.13	220	1.29	3	2.78
01/10/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	13.08	220	1.33	3	2.78
01/11/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	13.08	230	1.33	3	2.78
01/12/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	13.08	220	1.33	3	2.78
01/16/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.00	13.17	230	1.24	3	1.67
01/17/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.00	13.25	230	1.16	3	1.67
01/18/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.00	13.25	230	1.16	3	1.67
01/19/93	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	NA	NA	34.00	13.25	230	1.16	3	1.11
01/20/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	13.25	220	1.16	3	2.78
01/25/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	13.67	304	0.74	3,4	2.22
01/26/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.00	13.67	308	0.74	3'4	1.67
01/27/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.00	13.58	200	0.83	3,4	1.11
01/28/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	13.67	216	0.74	3,4	2.78
01/29/93	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	NA	NA	38.00	13.67	193	0.74	3,4	3.33
02/01/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	37.00	13.92	194	0.49	3.4	2.78
02/02/93	NA	NA	NA	NA	NA	NA	NA	WA	NA	NA	NA	NA	38.00	13.92	199	0.49	3,4	3.33
02/03/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	13.88	277	0.54	3,4	3.33
02/04/93	NA	NA	NA	NA	NA	WA	NA	NA	WA	NA	NA	NA	38.00	13.92	214	0.49	3,4	3.33
02/05/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	13.92	198	0.49	3,4	2.78
02/06/93	WA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	13.00	198	1.41	3,4	2.22
02/07/93	NA	NA	NA	NA	MA	NA	NA	NA	NA	NA	NA	NA	34.00	13.00	204	1.41	3.4	1.11
02/08/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	14.08	207	0.33	3,4	2.78
02/09/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	13.00	204	1.41	3.4	2.78
02/10/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	NA	37.00	14.08	214	0.33	3,4	2.78
02/11/93	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	NA	WA	37.00	14.08	304	0.33	3,4	2.78
02/12/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	WA	37.00	14.08	315	0.33		2.78
02/13/93	NA	NA	WA	WA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	14.08	314	0.33	5;4	2.78
02/14/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	14.08	325	0.33	3,4	2.78
02/15/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.08	332	0.33	3.4	2.22

Appendix E

Gambell Observation wells Gambell #1, Gambell #2 & the Production well - Daily averages

Date	Time	G1-Air	G1-Water	G1-Stage	G1-Cond	G1-Elev	G2-Air	G2-Water	G2-Stage	G2-Cond	G2-Elev	W3-AIR	W3-TEMPF	W3-STGE	W3-COND	M-ELEV	UELLS	W3-TEMPC
02/16/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	14.08	330	0.33	3,4	2.78
02/17/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.08	320	0.33	3,4	2.22
02/18/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	14.08	337	0.33	3.4	2.78
02/19/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.08	331	0.33	3,4	2.22
02/20/93	NA	NA	NA	NA	NA	NA	NA	WA	NA	NA	NA	NA	36.00	14.08	338	0.33	3,4	2.22
02/21/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.08	335	0.33	3,4	2.22
02/22/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.08	339	0.33	3,4	2.22
02/23/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.08	340	0.33	3,4	2.22
02/24/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.08	351	0.33	3.4	2.22
02/25/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.17	352	0.24	3,4	2.22
02/26/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.17	352	0.24	3,4	2.22
02/27/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.08	345	0.33	3,4	2.22
02/28/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.17	365	0.24	3,4	2.22
03/01/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.25	388	0.16	3,4	2.22
03/02/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	14.25	348	0.16	3,4	2.78
03/03/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	14.25	367	0.16	3,4	3.33
03/04/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	14.33	332	0.08	3,4	2.78
03/05/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.33	334	0.08	3,4	2.22
03/06/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.25	325	0.16	3.4	2.22
03/07/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.25	400	0.16	3,4,5	2.22
03/08/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	NA	380	NA	3,4,5	2.78
03/09/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	WA	36.00	NA	420	NA	3,4,5	2.22
03/10/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	14.33	356	0.08	3,4,5	2.78
03/11/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA	391	NA	3,4,5	2.22
03/12/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	14.33	365	0.08	3,4,5	2.78
03/13/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	NA	375	NA	3,4,5	2.78
03/14/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA	380	NA	3,4,5	2.22
03/15/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.67	393	-0.26	3,4,5	2.22
03/16/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA	372	NA	3,4,5	2.22
03/17/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.75	367	-0.34	3,4,5	2.22
03/18/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA	364	NA	3,4,5	2.22
03/19/93	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	NA	NA	36.00	14.75	364	-0.34	3,4,5	2.22
03/20/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA	356	NA	3,4,5	2.22
03/21/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA	321	NA	3,4,5	2.22
03/22/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	14.75	356	-0.34	3,4,5	2.78
03/23/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	NA	372	NA	3,4,5	2.78
03/24/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	WA	37.00	14.92	388	-0.51	3,4,5	2.78
03/25/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	NA	446		3,4,5	2.78
03/27/93	NA	NA	NA	NA	NA	NA	WA	NA	NA	NA	NA	NA	37.00	14.92	388	-0.::	3,4,5	2.78
03/29/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	14.92	355	-0.51	3,4,5	2.78
03/30/93	NA	NA	NA	NA	NA	NA	NA	WA	NA	NA	NA	NA	37.00	NA	374	NA	3,4,5	2.78

Appendix E

Gambell Observation wells Gambell #1, Gambell #2 & the Production well - Daily averages

Date	Time	G1-Air	GI-Uater	GI-Stage	G1-Cond	G1-Elev	G2-Air	G2-Water	G2-Stage	G2-Cond	G2-Elev	W3-AIR	W3-TEMPF	W3-STGE	W3-COND	W3-ELEV	WELLS	W3-TEMPC
03/31/93	NA	NA	NA	NA	WA	NA	NA	NA	NA	WA	NA	NA	37.00	14.92	411	-0.51	3,4,5	2.78
04/01/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	NA	302	NA	3,4,5	2.78
04/02/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	36.00	14.92	354	-0.51	3,4,5	2.22
04/03/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA	434	NA	3,4,5	2.22
04/04/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA	463	NA	3,4,5	2.22
04/05/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.75	426	-0.34	3,4,5	2.22
04/06/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA	416	NA	3,4,5	2.22
04/07/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.75	421	-0.34	3,4,5	2.22
04/08/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA		NA	3,4,5	2.22
04/09/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.83	400	-0.42	3,4,5	2.22
04/10/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA	440	NA	3,4,5	2.22
04/11/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA	474	NA	3,4,5	2.22
04/12/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	14.92	483	-0.51	3,4,5	2.22
04/13/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA	456	NA	3,4,5	2.22
04/14/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	14.75	435	-0.34	3,4,5	2.78
04/15/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	NA	445	NA	3,4,5	2.78
04/16/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	15.08	400	-0.67	3,4,5	3.33
04/28/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.00	NA	527	WA	3,4	1.67
04/29/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.00	NA	493	NA	3,4	1.67
04/30/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.00	NA	524	NA	3,4	1.67
05/24/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA	292	NA	4	2.22
05/25/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	36.00	NA	296	NA	4	2.22
05/28/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	NA	283	NA	4	2.78
06/01/93	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	NA	NA	38.00	NA	NA	NA	4	3.33
06/03/93	NA	NA	WA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	WA	NA	NA	4	2.22
06/05/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA	NA	NA	4	2.22
06/07/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA	WA	NA		2.22
06/09/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	8.67	NA	5.74	4	2.22
06/11/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	8.83	NA	5.58		2.22
06/18/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	8.75	137	5.66	4	2.22
06/21/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA	136	NA	4	2.22
06/22/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	NA		NA	3.4	2.22
06/24/93	NA	NA	NA	NA	WA	NA	NA	NA	NA	NA	NA	NA	36.00	7.75	NA	6.66	3,4	2.22
06/25/93	NA	NA	NA	WA	NA	WA	NA	NA	NA	NA	NA	NA	WA	8.92	140	6.41 5.49	3,4	2.22
06/28/93	NA	NA	NA	WA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	8.00			3,4	2.78
06/29/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	9.08	140	5.33	3,4	2.78
07/02/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	9.00	143	5.41	3,4	2.78
07/05/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	NA	148	WA	3,4	2.78
07/07/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	NA	151	NA	3.4	2.78
07/08/93	NA	NA	NA	NA	NA	HA	NA	NA	NA	NA	WA	NA	37.00	9.50	151	4.91	3.4	2.78
07/09/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	9.58	144	4.83	3.4	2.78

Appendix E

Gambell Observation wells Gambell #1, Gambell #2 & the Production well - Daily averages

Date	Time	Gl-Air	Cl-Uater	Gl-Stage	G1-Cond	G1-Elev	G2-Air	G2-Water	G2-Stage	G2-Cond	G2-Elev	W3-AIR	W3-TEMPF	W3-STGE	W3-COND	W3-ELEV	UELLS	W3-TEMPC
07/12/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	9.75	150	4.66	3,4	2.78
07/14/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	9.83	151	4.58	3.4	2.78
07/16/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	9.83	150	4.58	3.4	2.78
07/19/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	10.00	158	4.41	3.4	2.78
07/21/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	10.00	162	4.41	3,4	2.78
07/23/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	10.29	182	4.12	3,4	3.89
07/26/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	10.46	169	3.95	3,4	3.33
07/28/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	10.63	216	3.79	3,4	2.22
07/30/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	10.71	202	3.70	3.4	2.22
08/02/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	10.88	182	3.54	3,4	2.22
08/04/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	10.71	183	3.70	3,4	2.22
08/06/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	11.00	182	3.41	3,4	2.22
08/09/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	ii.08	186	3.33	3,4	2.22
08/11/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	11.17	179	3.24	3,4	2.22
08/13/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	11.25	230	3.16	3,4	2.22
08/16/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	11.13	la6	3.29	3.4	2.78
08/18/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	11.04	194	3.37	3,4	2.78
08/20/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	10.38	186	4.04	3,4	2.78
08/23/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	9.83	189	4.58	3,4	3.33
08/25/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	10.04	177	4.37	3,4	3.33
08/27/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.13	179	4.29	3,4	NA
08/30/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	185	NA	3,4	NA
08/31/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	182	NA	3,4	NA
09/08/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.00	10.29	195	4.12	3,4	4.44
09/10/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.00	10.50	195	3.91	3,4	4.44
09/13/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	10.83	193	3.58	3,4	2.22
09/15/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	10.54	189	3.87	3,4	2.22
09/17/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	11.00	191	3.41	3,4	3.33
09/20/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	10.71	la6	3.70	3,4	3.89
09/22/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.00	10.46	192	3.95	3,4	4.44
09/24/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.00	10.33	190	4.08	3.4	4.44
09/27/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	10.63	189	3.79	3,4	3.33
09/29/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	10.63	188	3.79	3,4	3.33
10/01/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	38.00	9.83	205	4.58	3,4	3.33
10/06/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	9.75	189	4.66	3,4	2.22
10/08/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	9.83	la6	4.58	3,4	2.22
10/11/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	9.96	188	4.45	3,4	2.22
10/13/93	NA	NA	HA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	9.92	197	4.49	3,4	2.22
10/15/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	9.88	201	4.54	3,4	3.33
10/18/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42.00	10.13	195	4.29	3,4	5.56
10/20/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	39.00	10.17	207	4.24	3.4	3.89

Appendix E

Gambell Observation wells Gambell #1, Gambell #2 & the Production well - Daily averages

Date	Time	Gl-Air	Gl-Uater	Gl-Stage	G1-Cond	Gl-Elev	G2-Air	G2-Water	G2-Stage	G2-Cond	G2-Elev	W3-AIR	W3-TEMPF	W3-STGE	W3-COND	W3-ELEV	WELLS	W3-TEMPC
10/22/93	NA	NA	NA	NA	NA	WA	NA	NA	NA	NA	NA	NA	39.00	10.13	200	4.29	3.4	3.89
11/01/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	10.42	198	3.99	3.4	3.89
11/03/93	NA	NA	NA	NA	WA	NA	NA	NA	NA	NA	NA	NA	41.00	10.38	195	4.04	3.4	5.00
11/05/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.00	10.17	198	4.24	3.4	4.44
11/08/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	10.04	193	4.37	3,4	3.89
11/10/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	9.63	192	4.79	3,4	3.89
11/12/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	8.54	198	5.87	3,4	3.89
11/15/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	7.83	215	6.58	3,4	3.89
11/17/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	8.46	212	5.9s	3.4	3.89
11/19/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	9.17	211	5.24	3.4	3.89
11/24/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.00	10.00	214	4.41	3.4	3.33
11/26/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	10.04	221	4.37	3.4	3.89
11/29/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	10.46	21s	3.95	3.4	3.89
12/01/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	10.54	225	3.87	3,4	3.89
12/03/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	11.17	227	3.24	3.4	2.78
12/06/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	11.00	230	3.41	3.4	2.22
12/08/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	11.21	233	3.20	3,4	3.89
12/10/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.00	11.54	247	2.87	3,4	3.89
12/13/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	12.00	249	2.41	3,4	2.78
12/15/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	12.08	250	2.33	3.4	2.78
12/17/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.00	12.00	249	2.41	3,4	2.78
12/20/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	12.42	243	1.99	3.4	2.22
12/22/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.00	12.33	245	2.08	3,4	2.22
01/05/94	24:00	-8.05	0.80	3.64	238.00	1.11	NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
01/06/94	24:00	-8.85	0.85	3.61	245.00	1.08	-5.95	0.2	6.74	394.25	1.03	NA	NA	NA	NA	NA	NA	NA
01/07/94	24:00	-9.63	0.83	3.58	250.75	1.05	-9.61	0.58	6.73	394.25	1.02	NA	NA	NA	WA	NA	NA	NA
01/08/94	24:00	-12.30	0.82	3.52	274.25	0.99	-13.88	0.57	6.69	396.25	0.98	NA	NA	NA	NA	NA	NA	NA
01/09/94	24:00	-12.61	0.81	3.45	270.13	0.92	-14.52	0.55	6.64	400.00	0.93	NA	NA	NA	NA	NA	NA	NA
01/10/94	24:00	-12.53	0.80	3.39	264.00	0.86	-14.20	0.54	6.58	401.25	0.87	NA	NA	NA	NA	NA	NA	NA
01/11/94	24:00	-14.47	0.79	3.34	262.13	0.81	-16.02	0.53	6.53	402.25	0.82	NA	NA	NA	NA	NA	NA	NA
01/12/94	24:00	-15.90	0.77	3.28	258.50	0.75	-17.41	0.51	6.48	405.00	0.76	NA	NA	WA	WA	NA	NA	NA
01/13/94	24:00	-15.84	0.76	3.22	258.13	0.69	-17.16	0.50	6.43	404.00	0.72	NA	NA	NA	NA	NA	NA	NA
01/14/94	24:00	-15.42	0.74	3.17	260.88	0.64	-16.42	0.49	6.38	400.75	0.67	NA	NA	NA	NA	NA	NA	NA
01/15/94	24:00	-13.32	0.73	3.12	265.88	0.59	-14.46	0.48	6.34	400.88	0.63	NA	NA	NA	NA	NA	NA	WA
01/16/94	24:00	-14.3s	0.72	3.07	264.88	0.54	-15.42	0.47	6.30	401.88	0.59	NA	NA	NA	NA	NA	NA	NA
01/17/94	24:00	-14.00	0.71	3.03	263.00	0.50	-15.45	0.45	6.25	402.00	0.54	NA	NA	NA	NA	NA	NA	NA
01/18/94	24:00	-14.07	0.70	2.97	260.25	0.44	-15.89	0.44	6.20	402.00	0.49	NA	39.00	14.13	261	0.29	3,4	3.89
01/19/94	24:00	-14.64	0.69	2.91	256.88	0.38	-16.51	0.42	6.15	407.50	0.44	NA	NA	NA	WA	NA	NA	NA
01/20/94	24:00	-15.23	0.69	2.87	255.25	0.34	-16.89	0.41	6.12	410.25	0.41	NA	39.00	14.17	271	0.24	3,4	3.89
01/21/94	24:00	-13.74	0.68	2.85	255.13	0.32	-16.07	0.41	6.11	406.50	0.40	NA	NA	NA	NA	NA	NA	NA
01/22/94	24:00	-11.84	0.68	2.82	258.13	0.29	-13.79	0.40	6.10	405.13	0.39	NA	39.00	14.08	271	0.33	3,4	3.89

Appendix E

Gambell Observation wells Gambell #1, Gambell #2 & the Production well - Daily averages

Date	Time	Gl-Air	Gl-Water	Gl-Stage	Gl-Cond	G1-Elev	G2-Air	G2-Water	G2-Stage	G2-Cond	G2-Elev	W3-AIR	W3-TEMPF	W3-STGE	W3-COND	W3-ELEV	WELLS	W3-TEMPC
01/23/94	24:00	-13.33	0.68	2.79	266.25	0.26	-14.10	0.39	6.08	402.75	0.37	NA	NA	NA	NA	NA	NA	NA
01/24/94	24:00	-17.57	0.68	2.77	277.13	0.23	-19.40	0.37	6.06	401.63	0.34	NA	39.00	14.00	285	0.41	3,4	3.89
01/25/94	24:00	-17.64	0.68	2.74	290.13	0.21	-19.99	0.35	6.03	400.13	0.32	NA	NA	NA	NA	NA	NA	NA
01/26/94	24:00	-18.28	0.69	2.71	302.63	0.18	-20.78	0.33	6.02	400.00	0.31	NA	39.00	13.96	288	0.45	3,4	3.89
01/27/94	24:00	-18.24	0.70	2.70	310.25	0.17	-21.68	0.30	6.02	399.38	0.31	NA	NA	NA	NA	NA	NA	NA
01/28/94	24:00	-17.83	0.70	2.68	315.00	0.15	-21.50	0.28	6.00	398.25	0.29	NA	39.00	13.88	288	0.54	3.4	3.89
01/29/94	24:00	-14.97	0.70	2.66	319.13	0.13	-18.72	0.26	5.98	397.63	0.27	NA	WA	NA	NA	NA	NA	NA
01/30/94	24:00	-12.24	0.70	2.64	319.88	0.10	-15.80	0.24	5.96	397.13	0.25	NA	NA	NA	NA	NA	NA	NA
01/31/94	24:00	-7.47	0.69	2.63	322.75	0.10	-10.69	0.22	5.95	397.50	0.24	NA	39.00	14.50	294	-0.09	3,4	3.89
02/01/94	24:00	-4.49	0.68	2.63	325.75	0.10	-7.74	0.20	5.98	396.38	0.27	NA	NA	NA	NA	NA	NA	NA
02/02/94	24:00	-4.38	0.66	2.65	326.38	0.12	-5.43	0.17	6.02	392.38	0.31	NA	39.00	14.50	295	-0.09	3,4	3.89
02/03/94	24:00	-4.65	0.64	2.66	328.88	0.13	-4.14	0.14	6.05	387.75	0.34	NA	NA	NA	NA	NA	NA	NA
02/04/94	24:00	-4.83	0.62	2.68	331.38	0.15	-4.99	0.12	6.08	382.25	0.37	NA	39.00	14.50	297	-0.09	3,4	3.89
02/05/94	24:00	-4.56	0.60	2.70	332.88	0.17	-4.66	0.09	6.09	382.38	0.38	NA	NA	NA	NA	NA	NA	NA
02/06/94	24:00	-4.45	0.58	2.73	331.00	0.20	-4.50	0.07	6.14	392.25	0.42	NA	NA	NA	NA	NA	NA	NA
02/07/94	24:00	-4.59	0.56	2.77	326.75	0.24	-4.07	0.04	6.21	404.75	0.50	NA	39.00	14.42	293	-0.01	3,4	3.89
02/08/94	24:00	-4.80	0.54	2.81	322.13	0.28	-4.34	0.01	6.26	411.00	0.55	NA	NA		NA	NA	NA	NA
02/09/94	24:00	-6.39	0.51	2.85	317.50	0.32	-5.64	-0.01	6.29	412.63	0.58	NA	39.00	14.::	316	0.08	3,4	3.89
02/10/94	24:00	-11.17	0.49	2.87	311.38	0.34	-10.77	-0.03	6.28	413.50	0.57	NA	NA	NA	NA	NA	NA	NA
02/11/94	24:00	-13.07	0.47	2.84	305.63	0.31	-13.46	-0.05	6.23	411.75	0.52	NA	39.00	14.33	328	0.08	3,4	3.89
02/12/94	24:00	-12.58	0.46	2.81	302.88	0.27	-13.45	-0.05	6.17	410.63	0.46	NA	NA	NA	NA	NA	NA	NA
02/13/94	24:00	-11.18	0.45	2.76	303.25	0.23	-11.81	-0.05	6.10	410.88	0.39	NA	NA	NA	NA	NA	NA	NA
02/14/94	24:00	-12.68	0.43	2.71	305.50	0.18	-13.64	-0.06	6.03	412.75	0.32	NA	NA	NA	NA	NA	NA	NA
02/15/94	24:00	-14.34	0.42	2.66	311.13	0.13	-14.54	-0.08	5.97	423.25	0.26	NA	NA	NA	NA	NA	NA	NA
02/16/94	24:00	-14.49	0.41	2.62	319.50	0.09	-15.90	-0.09	5.92	434.25	0.21	NA	NA	NA	NA	NA	NA	NA
02/17/94	24:00	-15.29	0.41	2.58	330.63	0.05	-16.45	-0.09	5.89	435.38	0.18	NA	NA	NA	NA	NA	NA	NA
02/18/94	24:00	-15.33	0.40	2.54	344.25	0.01	-16.39	-0.10	5.86	437.00	0.15	NA	NA	NA	NA	NA	HA	NA
02/19/94	24:00	-13.34	0.39	2.52	360.50	-0.01	-13.82	-0.11	5.85	452.88	0.14	NA	WA	NA	NA	NA	NA	NA
02/20/94	24:00	-12.19	0.38	2.50	376.75	-0.03	-12.29	-0.12	5.85	468.7s	0.13	NA	NA	NA	WA	NA	HA	NA
02/21/94	24:00	-12.87	0.37	2.49	389.38	-0.04	-13.34	-0.13	5.84	506.50	0.13	NA	NA	WA	NA	NA	NA	NA
02/22/94	24:00	-12.72	0.36	2.47	400.25	-0.06	-13.17	-0.13	5.84	519.50	0.13	NA	NA	NA	NA	WA	NA	HA
02/23/94	24:00	-11.88	0.35	2.47	408.50	-0.06	-11.93	-0.15	5.82	563.50	0.11	NA	NA	NA	NA	NA	NA	NA
02/24/94	24:00	-12.39	0.34	2.45	415.38	-0.08	-13.81	-0.16	5.80	585.13	0.09	NA	NA	WA	NA	NA	NA	NA
02/25/94	24:00	-13.34	0.33	2.43	421.50	-0.10	-14.83	-0.17	5.77	623.00	0.06	NA	WA	NA	NA	NA	NA	NA
02/26/94	24:00	-12.89	0.32	2.40	427.75	-0.13	-14.09	-0.17	5.73	675.25	0.02	NA	NA	NA	NA	NA	NA	NA
02/27/94	24:00	-16.37	0.31	2.37	434.25	-0.16	-18.47	-0.18	5.69	731 .00	-0.02	NA	NA	NA	WA	NA	NA	NA
02/28/94	24:00	-19.05	0.30	2.34	439.25	-0.19	-20.72	-0.19	5.66	798.13	-0.05	NA	39.00	14.79	363	-0.38	3,4	3.89
03/01/94	24:00	-19.93	0.29	2.31	443.38	-0.22	-21.16	-0.20	5.63	821.00	-0.08	NA	39.00	14.75	356	-0.34	3,4	3.89
03/02/94	24:00	-22.49	0.28	2.28	447.13	-0.25	-23.50	-0.20	5.59	847.63	-0.12	NA	NA	NA	NA	NA	NA	NA
03/03/94	24:00	-22.76	0.27	2.24	447.50	-0.29	-23.47	-0.20	5.56	880.13	-0.16	NA	39.00	14.83	355	-0.42	3,4	3.89
03/04/94	24:00	-21.14	0.26	2.21	447.25	-0.32	-21.87	-0.21	5.52	918.50	-0.19	NA	NA	NA	NA	NA	NA	NA

Appendix E

Gambell Observation wells Gambell #1, Gambell #2 & the Production well - Daily averages

Date	Time	Gl-Air	Gl-Water	Gl-Stage	Gl-Cond	G1-Elev	G2-Air	G2-Water	G2-Stage	G2-Cond	G2-Elev	W3-AIR	W3-TEMPF	W3-STGE	W3-COND	W3-ELEV	WELLS	W3-TEMPC
03/05/94	24:00	-20.17	0.25	2.16	447.63	-0.37	-21.31	-0.21	5.48	941.63	-0.24	NA	NA	WA	WA	NA	WA	NA
03/06/94	24:00	-19.34	0.25	2.13	448.00	-0.40	-20.33	-0.21	5.44	940.50	-0.27	NA	NA	NA	NA	NA	NA	NA
03/07/94	24:00	-18.84	0.24	2.10	450.75	-0.43	-19.76	-0.22	5.41	926.63	-0.30	NA	39.00	15.00	354	-0.59	3,4	3.89
03/08/94	24:00	-18.51	0.23	2.07	454.50	-0.46	-19.33	-0.23	5.39	941.75	-0.32	NA	NA	NA	NA	NA	NA	NA
03/09/94	24:00	-18.37	0.23	2.04	458.88	-0.49	-19.14	-0.23	5.35	924.63	-0.36	NA	39.00	15.08	359	-0.67	3,4	3.89
03/10/94	24:00	-18.62	0.22	2.00	461.75	-0.53	-19.47	-0.23	5.31	934.63	-0.40	NA	NA	NA	NA	NA	NA	NA
03/11/94	24:00	-18.69	0.21	1.96	465.75	-0.57	-19.29	-0.22	5.27	942.75	-0.44	NA	39.00	15.17	365	-0.76	3,4	3.89
03/12/94	24:00	-19.73	0.21	1.93	467.13	-0.60	-20.59	-0.23	5.24	980.38	-0.47	NA	NA	NA	NA	NA	NA	NA
03/13/94	24:00	-18.97	0.20	1.90	468.75	-0.63	-20.53	-0.23	5.22	965.75	-0.49	NA	NA		NA	NA	NA	NA
03/14/94	24:00	-16.78	0.20	1.88	472.75	-0.65	-18.68	-0.24	5.24	996.25	-0.47	NA	40.00	15.::	372	-0.84	3,4	4.44
03/15/94	24:00	-15.63	0.20	1.89	480.88	-0.65	-17.28	-0.24	5.27	965.13	-0.45	NA	NA	NA	NA	NA	NA	NA
03/16/94	24:00	-14.48	0.19	1.90	493.63	-0.63	-14.53	-0.24	5.29	965.63	-0.42	NA	40.00	15.25	368	-0.84	3,4	4.44
03/17/94	24:00	-14.09	0.19	1.91	512.50	-0.62	-14.31	-0.25	5.32	995.75	-0.39	NA	NA	NA	NA	NA	NA	NA
03/18/94	24:00	-14.62	0.18	1.93	541.88	-0.60	-15.12	-0.25	5.35	1018.25	-0.36	NA	40.00	15.25	392	-0.84	3,4	4.44
03/19/94	24:00	-17.03	0.17	I.94	572.63	-0.59	-17.81	-0.26	5.35	1054.13	-0.36	NA	NA	NA	NA	NA	NA	NA
03/20/94	24:00	-17.40	0.16	1.93	604.13	-0.60	-17.23	-0.27	5.34	1078.00	-0.38	NA	NA	NA	NA	NA	NA	NA
03/21/94	24:00	-19.81	0.15	I.93	639.38	-0.60	-20.94	-0.28	5.32	1111.13	-0.40	NA	NA		NA	NA	NA	NA
03/22/94	24:00	-25.20	0.14	1.91	672.00	-0.62	-26.62	-0.29	5.29	1131.63	-0.42	NA	39.00	15.::	416	-0.84	3'4	3.89
03/23/94	24:00	-26.16	0.13	1.89	701.13	-0.64	-27.82	-0.28	5.27	1127.50	-0.44	NA	WA	NA	NA	NA	NA	NA
03/24/94	24:00	-25.45	0.12	I.88	731.13	-0.65	-27.42	-0.29	5.26	1136.50	-0.46	NA	NA	NA	NA	NA	NA	NA
03/25/94	24:00	-22.58	0.11	1.87	761.88	-0.66	-25.06	-0.29	5.24	1148.75	-0.47	NA	WA	NA	NA	NA	NA	NA
03/26/94	24:00	-19.02	0.11	1.87	800.13	-0.66	-21.60	-0.29	5.23	1159.25	-0.48	NA	NA	NA	NA	NA	NA	NA
03/27/94	24:00	-16.87	0.10	1.87	832.63	-0.66	-18.41	-0.29	5.22	1180.25	-0.49	NA	NA	NA	NA	NA	WA	NA
03/28/94	24:00	-16.54	0.10	I.86	859.75	-0.67	-17.85	-0.29	5.23	1204.38	-0.48	NA	NA	NA	NA	NA	NA	WA
03/29/94	24:00	-15.75	0.09	1.85	886.38	-0.68	-16.64	-0.29	5.21	1228.63	-0.50	NA	NA	NA	WA	NA	WA	NA
03/30/94	24:00	-14.83	0.08	I.84	910.63	-0.69	-15.36	-0.30	5.20	1252.25	-0.51	NA	NA	NA	NA	NA	NA	NA
03/31/94	24:00	-12.84	0.08	1.83	933.63	-0.70	-12.76	-0.30	5.20	1272.25	-0.51	NA	NA	NA	NA	NA	NA	NA
04/01/94	24:00	-11.99	0.07	1.85	955.88	-0.68	-10.28	-0.30	5.22	1293.25	-0.49	NA	NA	NA	NA	NA	NA	NA
04/02/94	24:00	-10.69	0.07	1.86	978.25	-0.67	-9.24	-0.30	5.25	1316.88	-0.46	NA	NA	NA	NA	NA	NA	NA
04/03/94	24:00	-9.78	0.06	I.86	1002.38	-0.67	-6.00	-0.30	5.25	1342.75	-0.46	NA	NA	NA	NA	NA	NA	NA
04/04/94	24:00	-8.29	0.05	I.87	1027.50	-0.66	-3.90	-0.30	5.27	1364.38	-0.45	NA	NA	NA	NA	NA	NA	NA
04/05/94	24:00	-7.43	0.04	I.89	1050.50	-0.64	-6.42	-0.30	5.29	1386.25	-0.42	NA	NA	NA	NA	NA	NA	NA
04/06/94	24:00	-7.82	0.04	1.91	1074.38	-0.62	-7.91	-0.30	5.30	1405.00	-0.42	NA	WA	WA	WA	NA	NA	NA
04/07/94	24:00	-9.36	0.03	1.91	1100.63	-0.62	-9.04	-0.31	5.29	1422.63	-0.42	NA	NA	WA	NA	NA	NA	NA
04/08/94	24:00	-10.56	0.02	1.92	1130.38	-0.61	-9.95	-0.31	5.30	1440.75	-0.41	NA	NA	NA	WA	NA	WA	NA
04/09/94	24:00	-10.90	0.01	1.92	1152.25	-0.61	-10.92	-0.31	5.29	1454.25	-0.42	NA	NA	NA	WA	WA	NA	NA
04/10/94	24:00	-10.87	0.01	1.90	1165.63	-0.63	-11.03	-0.31	5.25	1466.75	-0.46	NA	NA	NA	NA	NA	WA	WA
04/11/94	24:00	-10.52	0.00	1.87	1174.38	-0.66	-11.03	-0.31	5.20	1475.00	-0.51	NA	NA	NA	NA	NA	NA	NA
04/12/94	24:00	-11.29	0.00	I.84	1187.13	-0.69	-11.89	-0.31	5.15	1481.25	-0.56	NA	NA	NA	NA	NA	NA	NA
04/13/94	24:00	-11.82	-0.01	I.80	1198.00	-0.73	-12.28	-0.31	5.11	1485.25	-0.60	NA	NA	NA	NA	NA	NA	WA
04/14/94	24:00	-11.93	-0.01	I.77	1205.38	-0.76	-12.31	-0.31	5.09	1489.00	-0.62	NA	NA	NA	WA	NA	WA	NA

Appendix E

Gambell Observation wells Gambell #1, Gambell #2 & the Production well - Daily averages

Date	Time	Gl-Air	Gl-Water	G1-Stage	Gl-Cond	G1-Elev	G2-Air	G2-Water	G2-Stage	G2-Cond	G2-Elev	W3-AIR	W3-TEMPF	W3-STGE	W3-COND	W3-ELEV	WELLS	W3-TEMPC
04/15/94	24:00	-12.89	-0.01	1.76	1218.63	-0.77	-13.55	-0.31	5.08	1495.63	-0.63	NA	NA	NA	NA	WA	NA	NA
04/16/94	24:00	-13.70	-0.01	1.75	1234.38	-0.78	-15.13	-0.31	5.09	1506.13	-0.63	NA	NA	NA	NA	NA	NA	WA
04/17/94	24:00	-14.14	-0.02	1.75	1254.25	-0.78	-15.64	-0.32	5.10	1515.00	-0.61	NA	NA	NA	WA	WA	NA	NA
04/18/94	24:00	-13.66	-0.02	1.77	1272.00	-0.76	-14.82	-0.32	5.12	1517.00	-0.59	NA	NA	NA	NA	WA	NA	NA
04/19/94	24:00	-12.86	-0.02	1.77	1288.00	-0.76	-13.52	-0.32	5.12	1523.50	-0.59	NA	NA	NA	NA	WA	NA	NA
04/20/94	24:00	-12.04	-0.03	1.76	1300.50	-0.77	-12.50	-0.32	5.11	1524.75	-0.60	NA	NA	NA	NA	NA	NA	NA
04/21/94	24:00	-11.42	-0.03	1.75	1310.75	-0.78	-11.60	-0.32	5.09	1526.38	-0.62	NA	NA	WA	WA	NA	NA	NA
04/22/94	24:00	-11.12	-0.03	1.74	1320.13	-0.80	-11.21	-0.31	5.07	1527.50	-0.64	NA	NA	NA	NA	NA	WA	NA
04/23/94	24:00	-10.94	-0.04	1.72	1328.13	-0.81	-11.01	-0.31	5.05	1530.88	-0.66	NA	NA	NA	NA	NA	NA	NA
04/24/94	24:00	-10.29	-0.04	1.71	1336.00	-0.82	-10.35	-0.31	5.05	1532.75	-0.66	NA	NA	NA	NA	NA	NA	NA
04/25/94	24:00	-9.80	-0.04	1.71	1345.88	-0.82	-9.79	-0.32	5.05	1536.25	-0.66	NA	NA	NA	NA	NA	NA	NA
04/26/94	24:00	-9.13	-0.04	1.71	1358.25	-0.82	-9.02	-0.31	5.05	1539.00	-0.66	NA	NA	NA	NA	NA	NA	NA
04/27/94	24:00	-8.20	-0.04	1.71	1369.38	-0.82	-7.91	-0.31	5.04	1543.00	-0.67	NA	NA	NA	NA	WA	NA	NA
04/28/94	24:00	-7.71	-0.05	1.69	1378.75	-0.84	-7.36	-0.31	5.02	1545.25	-0.69	NA	NA	NA	NA	NA	NA	NA
04/29/94	24:00	-6.35	-0.05	1.68	1388.13	-0.85	-5.99	-0.31	5.01	1546.63	-0.70	NA	NA	NA	NA	NA	NA	NA
04/30/94	24:00	-6.42	-0.05	1.68	1401.88	-0.85	-6.11	-0.32	5.03	1549.00	-0.68	NA	NA	NA	NA	NA	NA	NA
05/01/94	24:00	-6.48	-0.05	1.71	1421.38	-0.82	-6.18	-0.32	5.08	1552.00	-0.63	NA	NA	NA	NA	NA	NA	NA
05/02/94	24:00	-6.31	-0.05	1.75	1446.75	-0.78	-5.94	-0.32	5.14	1549.50	-0.57	NA	NA	NA	NA	NA	NA	NA
05/03/94	24:00	-5.66	-0.05	1.79	1471.63	-0.74	-5.10	-0.32	5.19	1540.75	-0.52	NA	NA	NA	NA	NA	NA	NA
05/04/94	24:00	-4.29	-0.05	1.82	1494.25	-0.71	-3.93	-0.32	5.22	1538.00	-0.50	NA	NA	NA	NA	NA	NA	NA
05/05/94	24:00	-3.59	-0.05	1.84	1510.25	-0.69	-3.36	-0.32	5.24	1536.25	-0.47	NA	NA	NA	NA	NA	WA	NA
05/06/94	24:00	-3.30	-0.05	1.87	1525.13	-0.66	-3.00	-0.32	5.28	1533.75	-0.43	NA	NA	NA	NA	WA	WA	NA
05/07/94	24:00	-3.52	-0.05	1.91	1540.13	-0.62	-3.12	-0.32	5.31	1529.88	-0.41	NA	NA	NA	WA	NA	NA	NA
05/08/94	24:00	-3.24	-0.05	1.94	1549.88	-0.59	-2.85	-0.32	5.31	1528.13	-0.40	NA	NA	NA	NA	WA	NA	NA
05/09/94	24:00	-2.89	-0.05	1.93	1556.63	-0.60	-2.61	-0.32	5.29	1530.13	-0.42	NA	NA	NA	NA	WA	WA	NA
05/10/94	24:00	-3.08	-0.05	1.93	1562.75	-0.60	-2.90	-0.32	5.30	1524.63	-0.41	NA	NA	NA	NA	NA	NA	NA
05/11/94	24:00	-2.92	-0.05	1.95	1569.38	-0.58	-2.72	-0.32	5.33	1513.50	-0.38	NA	NA	NA	NA	NA	NA	NA
05/12/94	24:00	-2.40	-0.05	1.94	1577.25	-0.59	-2.28	-0.32	5.32	1505.63	-0.39	NA	NA	NA	NA	NA	WA	NA
05/13/94	24:00	-1.97	-0.05	1.93	1583.88	-0.60	-1.92	-0.32	5.32	1497.13	-0.39	NA	NA	NA	NA	NA	NA	NA
05/14/94	24:00	-1.30	-0.06	1.95	1592.13	-0.58	-1.27	-0.32	5.33	1489.13	-0.38	NA	NA	NA	NA	NA	NA	NA
05/15/94	24:00	-0.79	-0.06	1.97	1601.88	-0.56	-0.48	-0.32	5.38	1465.88	-0.33	NA	NA	NA	NA	NA	NA	NA
05/16/94	24:00	-0.67	-0.06	2.01	1607.88	-0.52	-0.36	-0.33	5.43	1442.00	-0.28	NA	NA	NA	NA	NA	NA	NA
05/17/94	24:00	-1.12	-0.06	2.07	1613.63	-0.46	-0.76	-0.33	5.48	1428.38	-0.23	NA	NA	NA	NA	NA	NA	WA
05/18/94	24:00	-0.79	-0.06	2.11	1613.38	-0.42	-0.57	-0.33	5.51	1402.25	-0.20	NA	NA	NA	NA	NA	WA	NA
05/19/94	24:00	-0.35	-0.05	2.19	1617.13	-0.34	-0.07	-0.33	5.59	1402.00	-0.12	NA	NA	NA	WA	NA	NA	NA
05/20/94	24:00	-0.21	-0.05	2.44	1588.25	-0.09	0.05	-0.33	5.80	1529.13	0.09	NA	NA	NA	NA	NA	WA	NA
05/21/94	24:00	-0.05	-0.05	2.82	1577.50	0.29	0.15	-0.31	6.11	1483.50	0.40	NA	NA	NA	NA	NA	NA	NA
05/22/94	24:00	-0.18	-0.05	3.19	1576.75	0.66	0.09	-0.31	6.40	1520.88	0.69	NA	NA	NA	NA	NA	NA	NA
05/23/94	24:00	-0.51	-0.05	3.26	1568.00	0.73	-0.24	-0.31	6.45	1516.75	0.74	WA	NA	NA	NA	NA	WA	NA
05/24/94	24:00	-0.57	-0.05	3.22	1564.25	0.69	-0.45	-0.31	6.42	1527.88	0.71	NA	NA	NA	NA	NA	NA	NA
05/25/94	24:00	-0.44	-0.06	3.17	1567.88	0.64	-0.47	-0.31	6.37	1620.00	0.66	WA	NA	NA	NA	NA	NA	NA

Appendix E

Gambell Observation wells Gambell #1 , Gambell #2 & the Production well • Daily averages

Date	Time	G1-Air	G1-Water	G1-Stage	G1-Cond	G1-Elev	G2-Air	G2-Water	G2-Stage	G2-Cond	G2-Elev	W3-AIR	W3-TEMPF	W3-STGE	W3-COND	W3-ELEV	WELLS	W3-TEMPC
05/26/94	24:00	-0.19	-0.06	3.20	1562.50	0.67	-0.06	-0.31	6.40	1654.75	0.69	NA	NA	NA	NA	NA	NA	NA
05/27/94	24:00	0.00	-0.06	3.26	1561.00	0.73	0.16	-0.31	6.45	1719.63	0.74	NA	NA	NA	NA	NA	NA	NA
05/28/94	24:00	0.37	-0.05	3.42	1529.63	0.89	0.59	-0.31	6.56	1770.13	0.85	NA	NA	NA	NA	NA	NA	NA
05/29/94	24:00	0.04	-0.07	3.72	1191.75	1.19	0.29	-0.32	6.78	1777.63	1.07	NA	NA	NA	NA	NA	NA	NA
05/30/94	24:00	-0.39	-0.08	3.82	1018.75	1.29	-0.12	-0.32	6.86	1755.75	1.15	NA	NA	NA	NA	NA	MA	NA
05/31/94	24:00	-0.05	-0.08	3.79	965.25	1.26	0.15	-0.31	6.84	1787.75	1.13	NA	NA	NA	NA	NA	MA	NA
06/01/94	24:00	0.37	-0.08	3.87	936.88	1.34	0.54	-0.31	6.89	1757.25	1.38	NA	NA	NA	NA	NA	NA	NA
06/02/94	24:00	0.03	-0.08	3.99	948.44	1.46	0.31	-0.31	6.99	1715.75	1.28	NA	NA	NA	NA	NA	NA	NA
06/03/94	24:00	NA	NA	NA	NA	NA	0.67	-0.32	7.27	1726.88	1.56	NA	NA	NA	NA	NA	NA	NA
06/04/94	24:00	NA	NA	NA	NA	NA	0.53	-0.32	7.49	1728.88	1.78	NA	NA	NA	NA	NA	NA	NA
06/05/94	24:00	NA	NA	NA	NA	NA	0.76	-0.31	7.68	1757.00	1.97	NA	NA	NA	NA	NA	NA	NA
06/06/94	24:00	NA	NA	NA	NA	NA	1.52	-0.31	7.99	1765.38	2.28	NA	NA	NA	NA	NA	NA	NA
06/07/94	24:00	NA	NA	NA	NA	NA	2.22	-0.31	8.46	1764.63	2.65	NA	NA	NA	NA	NA	NA	NA
06/08/94	24:00	NA	NA	NA	NA	NA	1.24	-0.31	8.70	1734.50	2.99	NA	NA	NA	NA	NA	NA	NA
06/09/94	24:00	NA	NA	NA	NA	NA	2.29	-0.31	8.97	1706.50	3.26	NA	NA	NA	NA	NA	NA	NA
06/10/94	24:00	NA	NA	NA	NA	NA	4.52	-0.40	9.38	1662.88	3.67	NA	NA	NA	NA	NA	NA	NA
06/11/94	24:00	NA	NA	NA	NA	NA	5.32	-0.29	9.73	1640.88	4.02	NA	NA	NA	NA	NA	NA	NA
06/12/94	24:00	NA	NA	NA	NA	NA	5.63	-0.29	10.04	1634.25	4.33	NA	NA	NA	NA	NA	NA	NA
06/13/94	24:00	NA	NA	NA	NA	NA	4.28	-0.30	10.24	1634.50	4.53	NA	NA	NA	MA	NA	NA	NA
06/14/94	24:00	NA	NA	NA	NA	NA	5.56	-0.30	10.40	1619.00	4.69	NA	NA	NA	NA	NA	NA	NA
06/15/94	24:00	NA	NA	NA	NA	NA	7.30	-0.29	10.47	1600.13	4.76	NA	NA	NA	NA	NA	NA	NA
06/16/94	24:00	NA	NA	NA	NA	NA	8.62	-0.29	10.57	1578.00	4.86	NA	NA	NA	NA	NA	NA	NA
06/17/94	24:00	NA	NA	NA	NA	NA	6.37	-0.29	10.64	1533.38	4.93	NA	NA	NA	NA	NA	MA	NA
06/18/94	24:00	NA	NA	NA	NA	NA	3.59	-0.29	10.57	1436.00	4.86	NA	NA	NA	NA	NA	NA	NA
06/19/94	24:00	NA	NA	NA	NA	NA	2.75	-0.30	10.43	1260-SO	4.72	NA	NA	NA	NA	NA	NA	NA
06/20/94	24:00	NA	NA	NA	NA	NA	2.99	-0.40	10.31	1144.38	4.60	NA	NA	NA	NA	NA	NA	NA
06/21/94	24:00	NA	NA	NA	NA	NA	2.51	-0.30	10.18	1024.75	4.47	NA	NA	NA	NA	NA	NA	NA
06/22/94	24:00	NA	NA	NA	NA	NA	2.17	-0.30	10.08	931.13	4.37	NA	NA	NA	NA	NA	NA	NA
06/23/94	24:00	NA	NA	NA	NA	NA	1.93	-0.30	10.08	864.25	4.37	NA	NA	NA	NA	NA	NA	NA
06/24/94	24:00	NA	NA	NA	NA	NA	2.92	-0.30	10.11	807.50	4.40	NA	NA	NA	NA	NA	NA	NA
06/25/94	24:00	NA	NA	NA	NA	NA	3.43	-0.30	10.08	753.63	4.37	NA	NA	NA	NA	NA	NA	NA
06/26/94	24:00	NA	NA	NA	NA	NA	2.75	-0.30	10.01	709.38	4.30	NA	NA	NA	NA	NA	NA	NA
06/27/94	24:00	NA	NA	NA	NA	NA	4.13	-0.30	9.92	666.64	4.21	NA	NA	NA	NA	NA	NA	NA
06/28/94	24:00	NA	NA	NA	NA	NA	4.75	-0.30	9.85	632.00	4.14	NA	NA	NA	NA	NA	NA	NA
06/29/94	24:00	NA	NA	NA	NA	NA	4.17	-0.31	9.83	604.13	4.12	NA	NA	NA	NA	NA	NA	NA
06/30/94	24:00	NA	NA	NA	NA	NA	3.78	-0.31	9.80	581.50	4.09	NA	NA	NA	NA	NA	NA	NA
07/01/94	24:00	NA	NA	NA	NA	NA	3.20	-0.31	9.78	553.75	4.07	NA	NA	NA	NA	NA	NA	NA
07/02/94	24:00	NA	NA	NA	NA	NA	3.23	-0.31	9.78	535.50	4.07	NA	NA	NA	NA	NA	NA	NA
07/03/94	24:00	NA	NA	NA	NA	NA	3.54	-0.31	9.80	516.88	4.06	NA	MA	NA	NA	NA	NA	NA
07/04/94	24:00	NA	NA	NA	NA	NA	5.15	-0.31	9.71	500.00	4.00	NA	NA	NA	NA	NA	NA	NA
07/05/94	24:00	NA	NA	NA	NA	NA	6.09	-0.31	9.69	492.63	3.98	NA	NA	NA	NA	NA	NA	NA

Appendix E

Gambell Observation wells Gambell #1, Gambell #2 & the Production well - Daily averages

Date	Time	Gl-Air	Gl-Water	Gl-Stage	G1-Cond	G1-Elev	G2-Air	G2-Water	G2-Stage	G2-Cond	G2-Elev	W3-AIR	W3-TEMPF	W3-STGE	W3-COND	W3-ELEV	UELLS	W3-TEMPC
07/06/94	24:00	NA	NA	NA	NA	NA	5.56	-0.31	9.69	479.38	3.98	NA	NA	NA	NA	NA	NA	NA
07/07/94	24:00	NA	NA	NA	NA	NA	6.25	-0.31	9.68	471.25	3.97	NA	NA	NA	NA	NA	NA	NA
07/08/94	24:00	NA	NA	NA	NA	NA	7.85	-0.31	9.67	462.88	3.96	NA	NA	NA	NA	NA	NA	NA
07/09/94	24:00	NA	NA	NA	NA	NA	7.58	-0.31	9.64	452.63	3.93	NA	NA	NA	NA	NA	NA	NA
07/10/94	24:00	NA	NA	NA	NA	NA	6.19	-0.31	9.61	445.25	3.90	NA	NA	NA	NA	NA	NA	NA
07/11/94	24:00	NA	NA	NA	NA	NA	7.63	-0.31	9.55	433.88	3.84	NA	NA	NA	NA	NA	NA	NA
07/12/94	24:00	NA	NA	NA	NA	NA	8.42	-0.31	9.50	426.13	3.79	NA	NA	NA	WA	NA	NA	NA
07/13/94	24:00	NA	NA	NA	NA	NA	9.04	-0.31	9.42	419.38	3.71	NA	NA	NA	NA	NA	NA	NA
07/14/94	24:00	NA	NA	NA	NA	NA	8.63	-0.31	9.37	412.38	3.66	NA	NA	NA	NA	NA	NA	NA
07/15/94	24:00	NA	NA	NA	NA	NA	7.37	-0.31	9.33	409.13	3.62	NA	NA	NA	NA	NA	NA	NA
07/16/94	24:00	NA	NA	NA	NA	NA	5.96	-0.31	9.28	394.38	3.57	NA	NA	NA	NA	NA	NA	NA
07/17/94	24:00	NA	NA	NA	NA	NA	7.27	-0.31	9.24	388.75	3.53	NA	NA	NA	NA	NA	NA	NA
07/18/94	24:00	NA	NA	NA	NA	NA	9.07	-0.31	9.24	389.63	3.53	NA	NA	NA	NA	NA	NA	NA
07/19/94	24:00	NA	NA	NA	NA	NA	7.21	-0.31	9.20	387.63	3.49	NA	NA	NA	WA	NA	NA	NA
07/20/94	24:00	NA	NA	NA	NA	NA	7.91	-0.31	9.18	385.50	3.47	NA	NA	NA	NA	NA	NA	NA
07/21/94	24:00	NA	NA	NA	NA	NA	7.77	-0.31	9.16	380.13	3.45	NA	NA	NA	NA	NA	NA	NA
07/22/94	24:00	NA	NA	NA	NA	NA	7.46	-0.31	9.14	378.38	3.43	NA	NA	NA	NA	NA	NA	NA
07/23/94	24:00	NA	NA	NA	NA	NA	6.44	-0.31	9.15	379.00	3.44	NA	NA	NA	NA	NA	NA	NA
07/24/94	24:00	NA	NA	NA	NA	NA	7.88	-0.31	9.15	374.38	3.44	NA	NA	NA	NA	NA	NA	NA
07/25/94	24:00	NA	NA	NA	NA	NA	7.53	-0.31	9.13	374.75	3.42	NA	NA	NA	NA	NA	NA	NA
07/26/94	24:00	NA	NA	NA	NA	NA	8.91	-0.31	9.11	375.75	3.40	NA	NA	NA	NA	NA	NA	NA
07/27/94	24:00	NA	NA	NA	NA	NA	8.12	-0.31	9.06	374.13	3.35	NA	NA	NA	NA	NA	NA	NA
07/28/94	24:00	NA	NA	NA	NA	NA	8.73	-0.31	9.04	369.63	3.33	NA	NA	NA	NA	NA	NA	NA
07/29/94	24:00	NA	NA	NA	NA	NA	7.86	-0.31	9.03	374.38	3.32	NA	NA	NA	NA	NA	NA	NA
07/30/94	24:00	NA	NA	NA	NA	NA	6.91	-0.31	9.01	372.25	3.30	NA	NA	NA	NA	WA	NA	NA
07/31/94	24:00	NA	NA	NA	NA	NA	8.44	-0.31	9.08	372.13	3.37	NA	NA	NA	NA	NA	NA	NA
08/01/94	24:00	NA	NA	NA	NA	NA	8.57	-0.31	9.27	375.25	3.56	NA	NA	NA	NA	NA	NA	NA
08/02/94	24:00	NA	NA	NA	NA	NA	8.64	-0.31	9.57	382.75	3.86	NA	NA	NA	NA	NA	NA	NA
08/03/94	24:00	NA	NA	NA	NA	NA	8.60	-0.31	9.75	385.13	4.04	NA	NA	NA	NA	NA	NA	NA
08/04/94	24:00	NA	NA	NA	NA	NA	8.05	-0.32	9.80	390.13	4.09	NA	NA	NA	NA	NA	NA	NA
08/05/94	24:00	NA	NA	NA	NA	NA	13.68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08/06/94	24:00	NA	NA	NA	NA	NA	20.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08/07/94	24:00	NA	NA	NA	NA	NA	19.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08/08/94	24:00	NA	NA	NA	NA	NA	19.63	NA	NA	NA	NA	NA	NA	NA	WA	NA	NA	NA
08/09/94	24:00	NA	NA	NA	NA	NA	39.57	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08/10/94	24:00	NA	NA	NA	NA	NA	19.20	NA	NA	NA	NA	NA	NA	NA	NA	WA	NA	NA
08/11/94	24:00	NA	NA	NA	NA	NA	17.31	NA	NA	NA	NA	WA	NA	NA	NA	NA	NA	NA

Appendix F

DISCUSSION OF GRAPHS

These graphs were created in order to present the data in more informative ways than simple tabulation. This was especially important in showing the relationships between the parameters monitored during the study period. All graphs were derived from appendix E, the daily averaged data for each of the three wells. The other appendices are briefly cited.

The series of graphs were divided into three sections: the first (A) being the combined graphs for each of the three wells for each of the four environmental conditions monitored, the second (B) being another series of graphs, by individual well, comparing each of the environmental conditions, one against another, and the third (C) being a graph of the mean aquifer elevation, for the three wells, compared to rates of pumping at the production well. A discussion of each graph follows.

A) Series of combined graphs.

Graph 1 - Water Conductivity. The production wells, being fairly remote (2500 ft) from the source of increased conductivity (assumed to be mainly sodium chloride from sea water), had a low range of encountered conductivity values (180 - 560 umhos/cm) as compared to those at the observation wells (Gambell #1 230 - 1624 umhos/cm, Gambell #2 392 - 1828 umhos/cm). Gambell #2, 1700 ft from saltwater, had the highest values and the greatest range in values. This is shown in the graph where the small range of the production wells show on the left and the high ranges of the observation wells shows on the right. There is only a short period of overlapping data for the three wells. Initially, the observation wells had similar, if somewhat higher, conductivities than at the production well, but the conductivity rose rapidly in the observation wells and only slowly in the production wells. If the production well curve for 1994 was similar to that of 1993, by late May it's conductivity would drop off, preceding the drop observed at the monitoring wells. Timing of events at Gambell #2 lead Gambell # 1 by 3 to 4 weeks due to its closer proximity to the saltwater, and its graph also showed a greater rate of change than Gambell #1's graph. The graph curves from the three wells mirrored each other both in timing, except for small delays due to location, and in the shape of the curves, though the dynamic ranges were different (higher peaks and lower troughs). The graph curve from Gambell #2 shows several pairs of small peaks, which may have been caused by the action of seasonal/tidal events in the nearby ocean. They either do not show on the graphs of the other wells or are much reduced. The unexpected rise of conductivity at Gambell #1 to values higher than that at Gambell #2 in mid May '94 is not simply explained. A dilution affect, possibly surface snow melt, may have caused the Gambell #2 well to temporarily drop from its steady rise in observed conductivity, or some feature of the system may have allowed water with higher conductivity to bypass the lower well, Gambell #2, and yet still have affected the upper well. This affect was not observed at the production well.

Graph 2 - Water Surface Elevations Relative to Mean Low Low Water (MLLW) The production well had a higher initial static water elevation than the monitoring wells at the start of the monitoring period on January 5, 1994. This caused concern that there could have been an error in the survey and installation of the recording devices and that the water levels might actually have been closer than indicated in the graph. Further scrutiny of the data showed this was not the case, since the production well water elevation rapidly dropped down to near and even below the water elevations of the monitoring wells, shortly after January 23, 1994. The differences were caused by pumping from the production well. On June 17, 1994, after a period of recovery, the elevation in the monitoring wells rose to a level only slightly below the maximum observed at the production well on June 24, 1993.

The smoothing effect of the 24 period moving average on the production well graph lowered the graphed values to 5.2 ft instead of 6.66 ft as recorded in the dataset, app E on June 24, 1993. The high porosity of the gravel and the lower pumping rate at those times allowed this comparison. Because of the high porosity, the differences between the water elevations at each well was small when compared to the total change in water elevation observed within the aquifer. The graph also showed a cyclic periodicity to the drawdowns and recoveries, although the decline in the second period was more rapid and resulted in a longer low water surface elevation period than that of the first period. Lack of production well data for the end of this period prevented confirmation of any distorted periodicity.

The water elevations in the production well dropped steadily down as the season progressed: to the zero level (MLLW) in late March 1993 and late February '94, and then below the zero level to the extreme lows encountered in late March and early April (data from the production well ceased before the minimum was reached in 1994). The observation wells dropped to still lower elevations in late April and early May 1994, with Gambell #1 lower than Gambell #2, indicating that the production well should drop similarly. This was not directly verifiable because of only a small overlap in the period of data collection between the monitoring wells and the production well, complete 1994 data not having been presented for inclusion in the report. Changes in water elevation were mirrored in both observation wells, with Gambell #2 less effected than Gambell #1, and both less affected than the production wells. This was true for both increases and decreases in water elevation, with the production wells having the greatest dynamic range in water elevation and Gambell #2 , the least. Prior years data indicated that the production well should recover to a higher elevation than the observation wells.

Graph 3 -Air Temperature. This figure was included to show the very similar atmospheric temperatures experienced by sensors located at each observation well. While most of the two graphs overlap, Gambell #2 showed a greater dynamic range than Gambell #1. The overall patterns were very consistent. No air temperature was available from the pumphouse. Lows occurred in late March and highs in late August, at which time data collection ceased.

Graph 4 - Water Temperature. The water temperature in the production well was relatively high, and it fluctuated between 2.3°C and 4.2°C through the year. This may have been due to standing time in the heated pumphouse, because it is unlikely for the groundwater at that location to reach so high a temperature. The observation wells started out at just below 0.8°C and declined to below 0.0°C with Gambell #2, reaching to -0.32°C, being about 0.25°C colder than Gambell #1 . This may have been related to the distance from the point of recharge, the main thermal input into the system, and also to the close proximity of the underlaying permafrost. No evidence of thermal recovery was apparent when data gathering ceased. The pressure transducer indicated freezing at the bottom of the well when the temperature at Gambell #2 dropped from -0.31 °C to -0.32°C on August 4, 1994.

B) Individual Well Graphs, with combined parameters.

Graphs 5, 8 & 11 Water Conductivity and Water Surface Elevation. These graphs showed an almost inverse relationship between water elevation and conductivity at each of the observation wells and at the production well. The "inverse" relationship held for the production well, Gambell #1 and most of Gambell #2. During May and early June at Gambell #2, an anomaly occurred when the conductivity rose at a rate similar to the rise in water elevation, after having started to decline as expected. After reaching a new high, the conductivity levels then declined again, having been delayed by about a month

as compared to Gambell #1 and the production well. At the end of this graph there was an indication that the inverse relationship was being restored and conductivity had regained it's initial values. This anomaly may be related to the unexpected rise in conductivity at Gambell #1 to levels higher than at Gambell #2, during the preceding two weeks, as discussed above for Figure 7. Gambell #2 had the greatest dynamic range in both graphs and the production well the least.

Graphs 6, 9 & 12 - Water Conductivity and Water Temperature. These graphs show that initially the conductivity rose as the temperature dropped but as the temperature leveled out at the low for the remainder of the period, the conductivity rapidly rose, reached a maximum and then dropped down to its initial values with almost no change in temperature. This is shown in Figure 15, at Gambell #2, and, by extrapolation of the graphs, also at Gambell #1 where the relevant data was lost and the pumphouse where it was not recorded. This extrapolation is justified by the repetitive pattern shown at the pumphouse. The graphs indicate that the conductivity and temperature were not directly related and that the initial inverse relation was just circumstantial - this is especially evident in the graph for Gambell #2. The graph for the production well does not yield any useful temperature information since the water temperature is questionable, probably having been heated.

Graphs 7, 10 & 13 - Water Temperature and Water Surface Elevation. These graphs show a steady, almost linear relationship between declining temperature and declining water elevation and then an abrupt break in the relationship as water elevation rapidly rose while temperatures remained more or less constant at their seasonal lows. Unfortunately, monitoring ceased before the temperature recovery took place. This recovery must take place between late August, which showed constant low temperatures, and late December, where the decline in temperatures had already begun again, if the temperature environment was cyclical as expected. Thermal degradation, that is intrusion of permafrost into the aquifer, could have distorted this cycle. Recovery in temperature is expected to be slow and uniform due to the thermal inertia of the gravels and the infiltration of "warmer" water from the sources being not much warmer since it was mostly snow melt or runoff from groundwater springs. Once again, the data from the pumphouse were almost meaningless due to the questionable water temperatures.

C) Mean Aauifer Water Surface Elevation and Pumping Rate.

Graph 14 - Mean Aauifer Water Surface Elevation and Pumping Rate. This graph shows that the mean pumping rate varied seasonally, with the highest rates of pumping occurring in the late winter and early spring, coinciding with the lowest water elevation levels in the aquifer. Mean aquifer levels were used since the porosity of the gravels reduced the differences between the wells to negligible amounts as compared to the total dynamic range in water elevation within the aquifer itself, as confirmed by the short period of overlapping water elevation data, as shown in Graph 2.

Water elevation of the aquifer varied almost independently of the rate of pumping, even though it appears to have an inverse relationship in the graph. It was more a function of recharge from the sources and discharge into the ocean than management of the rates of pumping. This is shown in the period from 08/30/93 to 01/23/94, where the stage fell rapidly, despite the rate of pumping having been relatively low. This non-relationship only held when aquifer elevations were relatively high; where they were low, excess pumping caused the levels to drop below the otherwise equilibrium condition. The equilibrium condition was approached when recharge from the sources reached minimum levels in late winter, and appears to have matched the reduced outflow into the ocean. At that time the minimal

recharge would have allowed a density gradient to be established between the saltwater and fresh water interface. At equilibrium, the greater density of saltwater would have caused the elevation of fresh water in the aquifer to be somewhat higher than MLLW. A reduction of fresh water surface elevation in the aquifer a this time would be balanced by the influx of saltwater, resulting in the restoration of the equilibrium water elevation to some extent, but with an intrusion of saltwater into the body of the aquifer.

The graph suggests that the aquifer can easily take a rate of pumping of about 14 gallons per minute (gpm), while a rate of 16 to 17 gpm is barely sustainable during periods of low water elevation (notice the two short low gradient parts of the water elevation curve that occurred in late February of both 1993 and 1994). It appears that rates exceeding 17 gpm caused the mean water elevation to dip below MLLW elevation and hence allowed saline penetration into the aquifer. Low pumping rates at this time would be expected to allow the equilibrium level to be established and maintained. Any reduction of water elevation to below this level (by pumping) would cause a reversal of flow direction within the aquifer. Higher pumping rates are feasible during the period from early June through late December when water elevation within the aquifer is also high (3-5 ft above MLLW), but that lower levels of pumping should be observed through the remainder of the year (late December through early June). This is especially true when the water elevation drops to near 0.33 ft above MLLW. Low water elevation pumping rates should probably not exceed 16 gpm (23,000 gallons per day), while high water elevation pumping rates could easily exceed 18 gpm (26,000 gallons per day) with 21 gpm (30,000 gallons per day) appearing quite sustainable. This was evidenced by the fact that the graph tended to level off even during the high pumping rates encountered during February 1994, a low water elevation period. If this pumping had taken place during high water, the effect would have been minimal.

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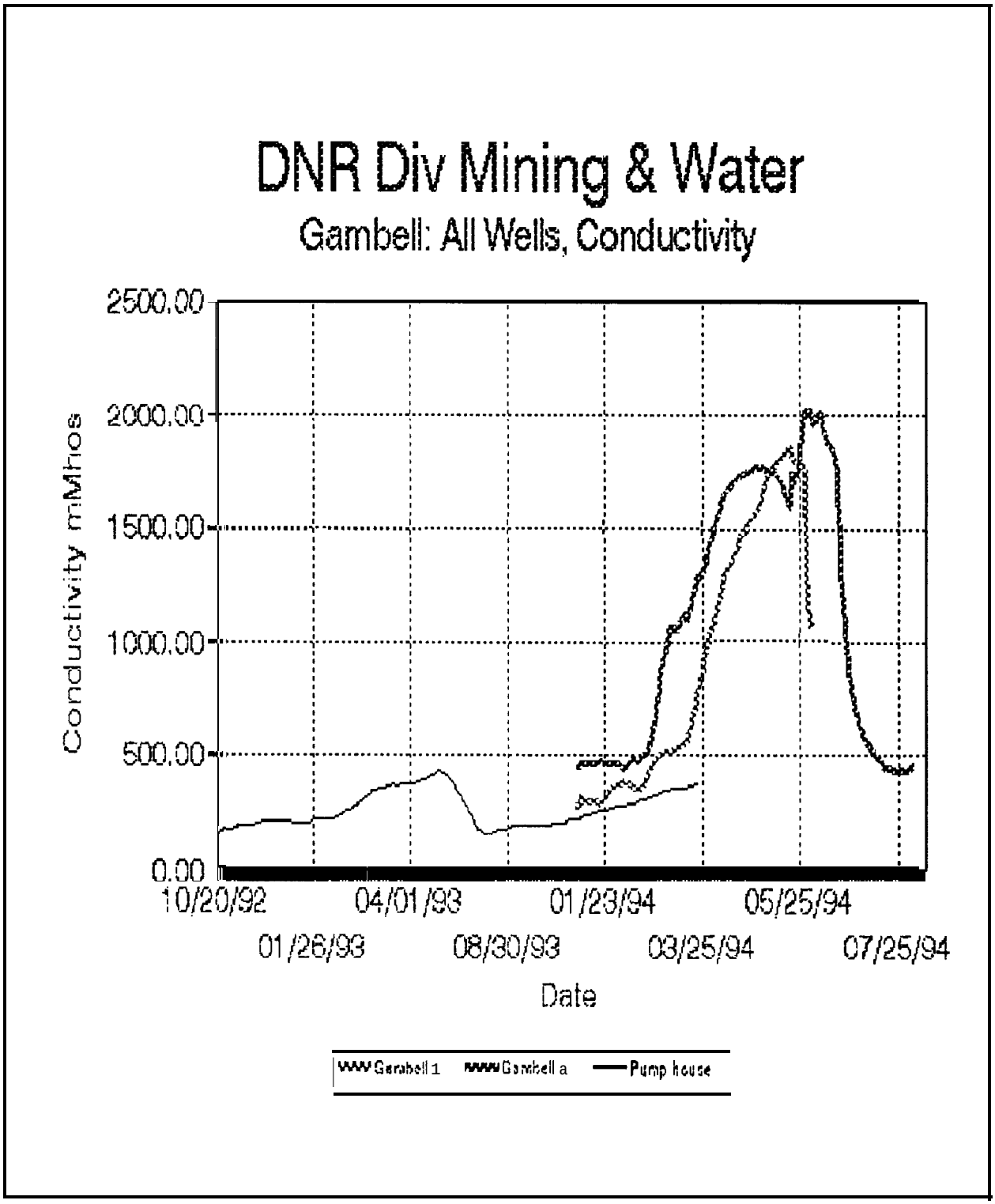
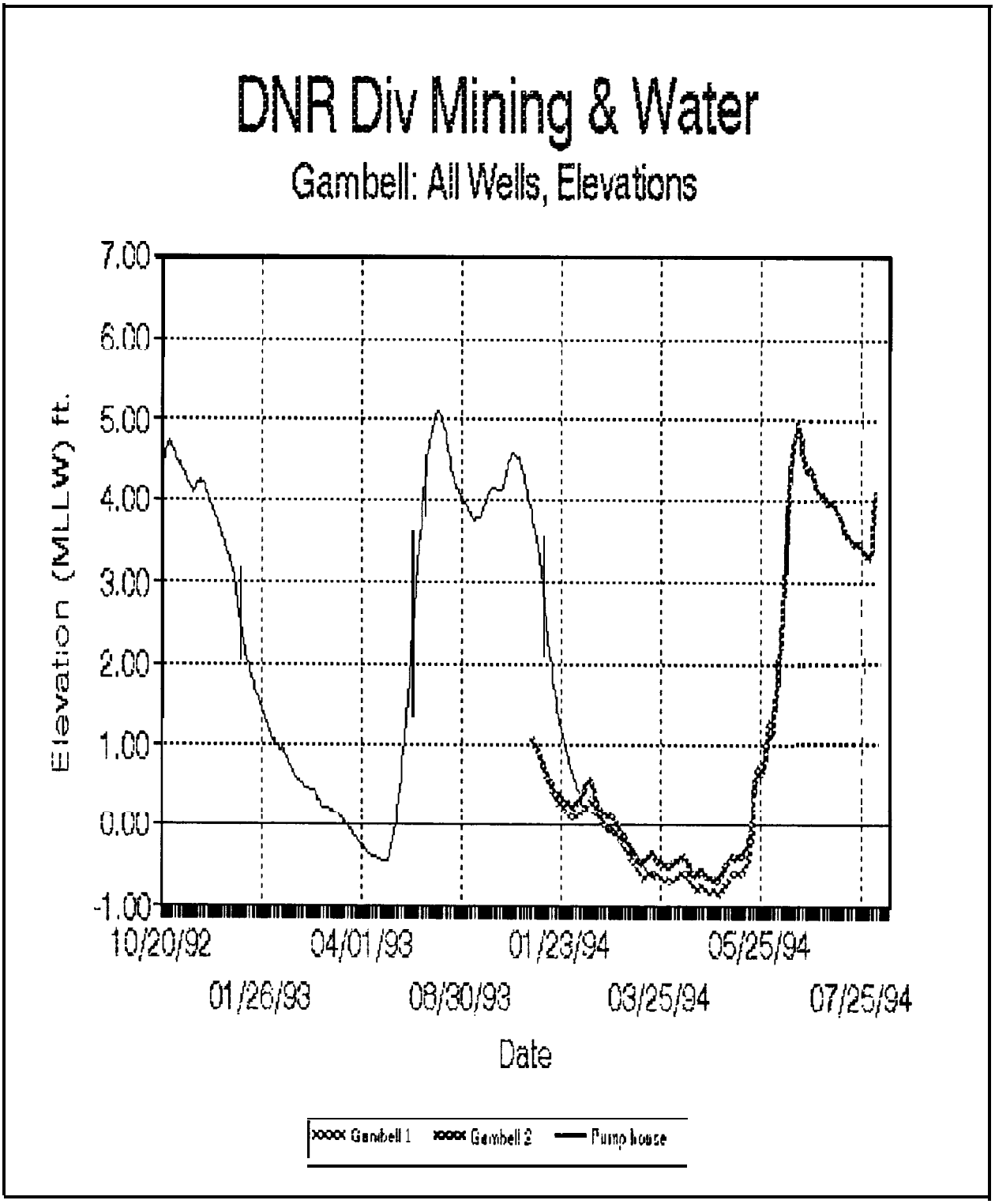
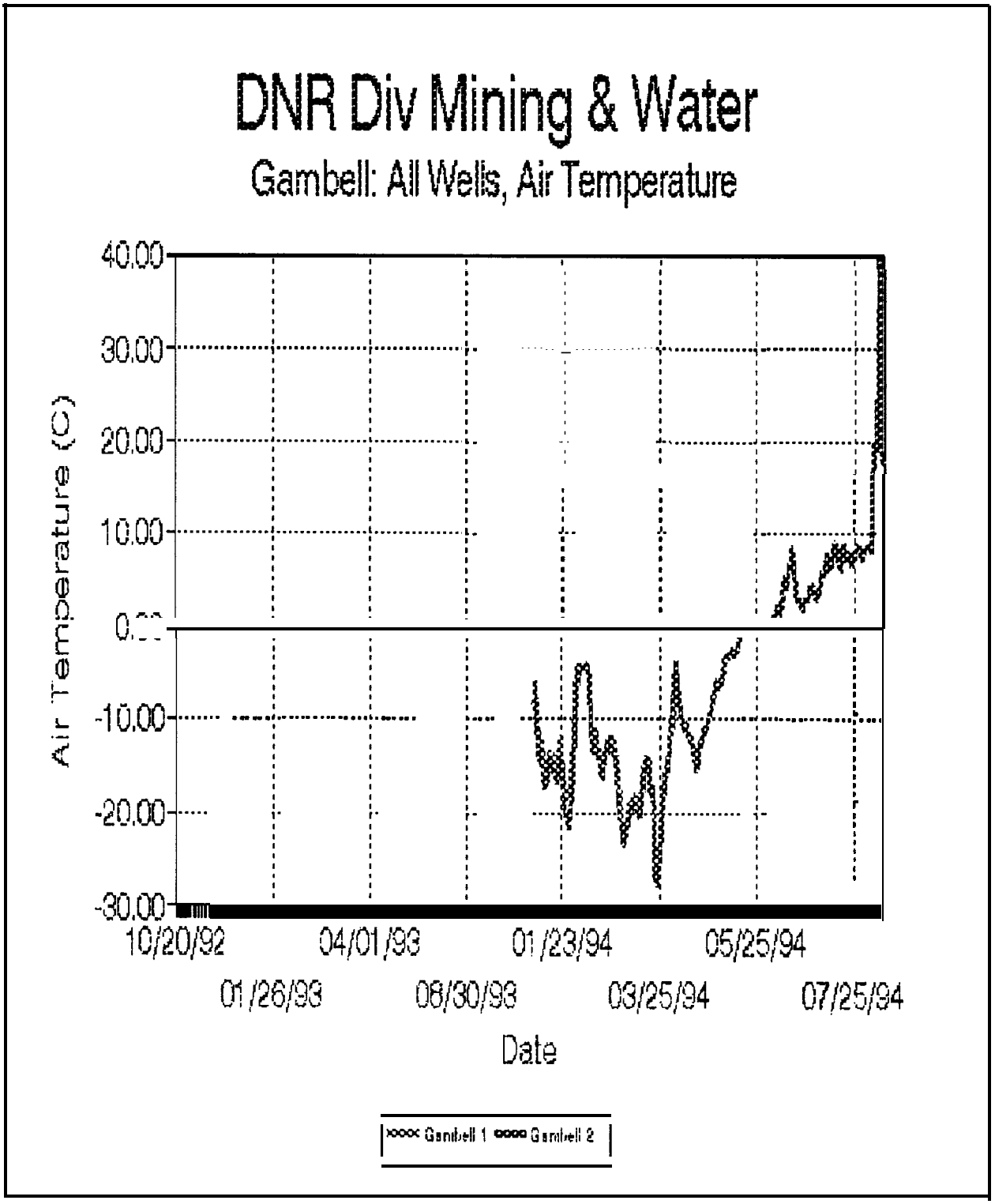

DNR Div Mining & Water
Gambell: All Wells, Conductivity
Conductivity mMhos
2500.00
2000.00
1500.00
1000.00
500.00
0.00
10/20/92
01/26/93
04/01/93
08/30/93
01/23/94
03/25/94
05/25/94
07/25/94
Date
Gambell 1
Gambell a
Pump house

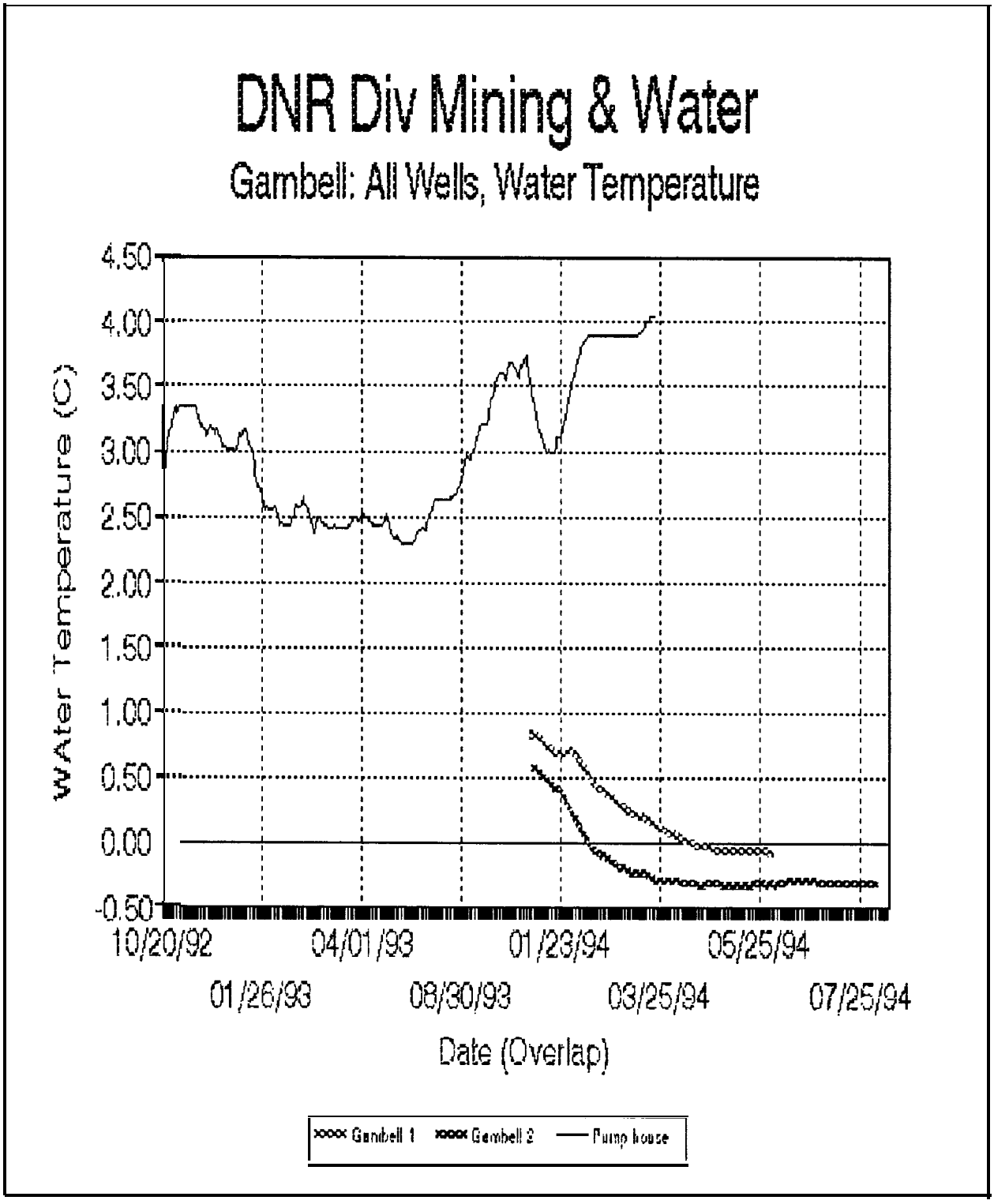
Graph 1


DNR Div Mining & Water
Gambell: All Wells, Elevations
Elevation (MLLW) ft.
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
-1.00
10/20/92
01/26/93
04/01/93
08/30/93
01/23/94
03/25/94
05/25/94
07/25/94
Date
Gambell 1
Gambell 2
Pump house

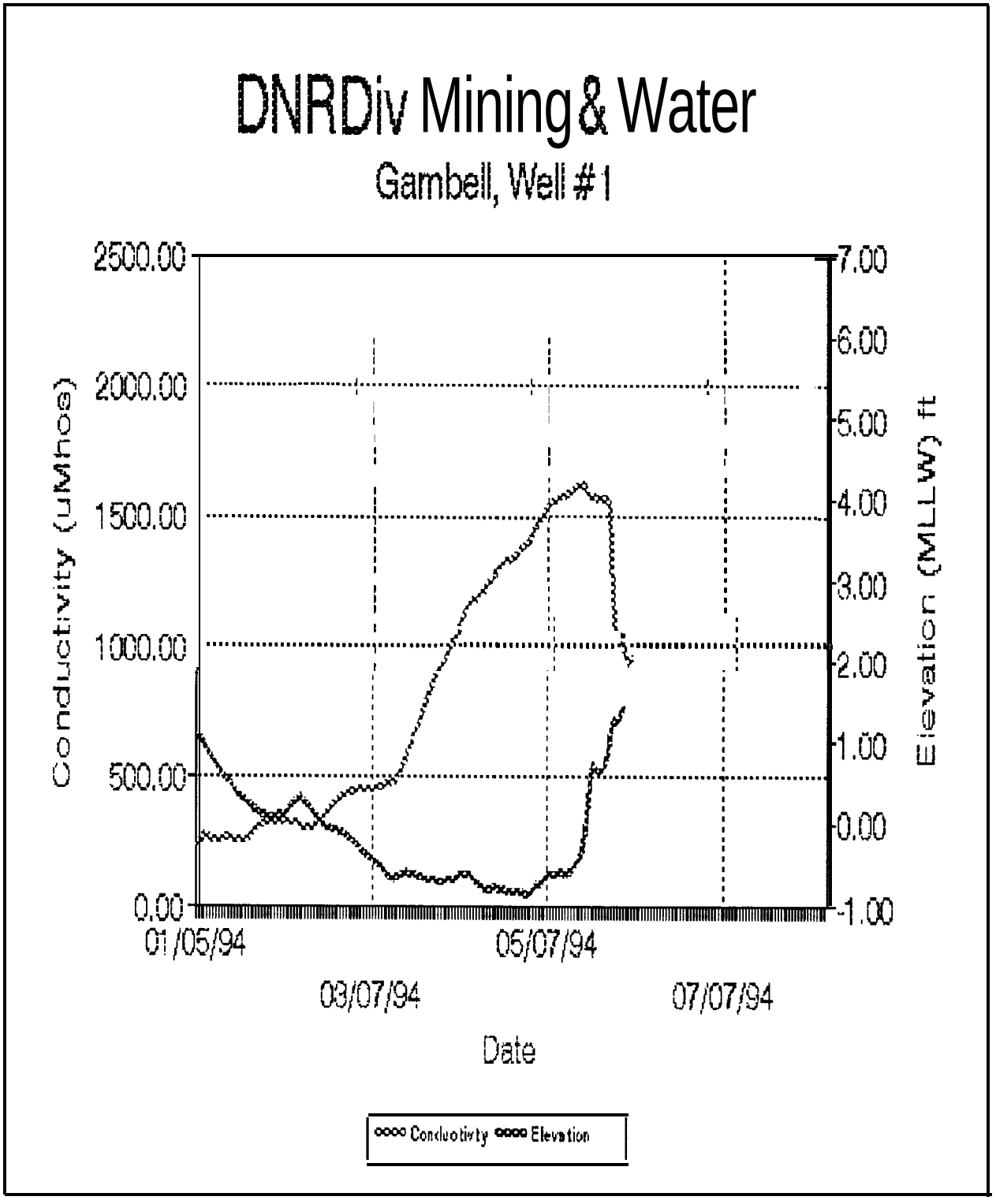
Graph 2


DNR Div Mining & Water
Gambell: All Wells, Air Temperature
40.00
30.00
20.00
10.00
0.00
-10.00
-20.00
-30.00
Air Temperature (C)
10/20/92
01/26/93
04/01/93
08/30/93
01/23/94
03/25/94
05/25/94
07/25/94
Date
Gambell 1
Gambell 2

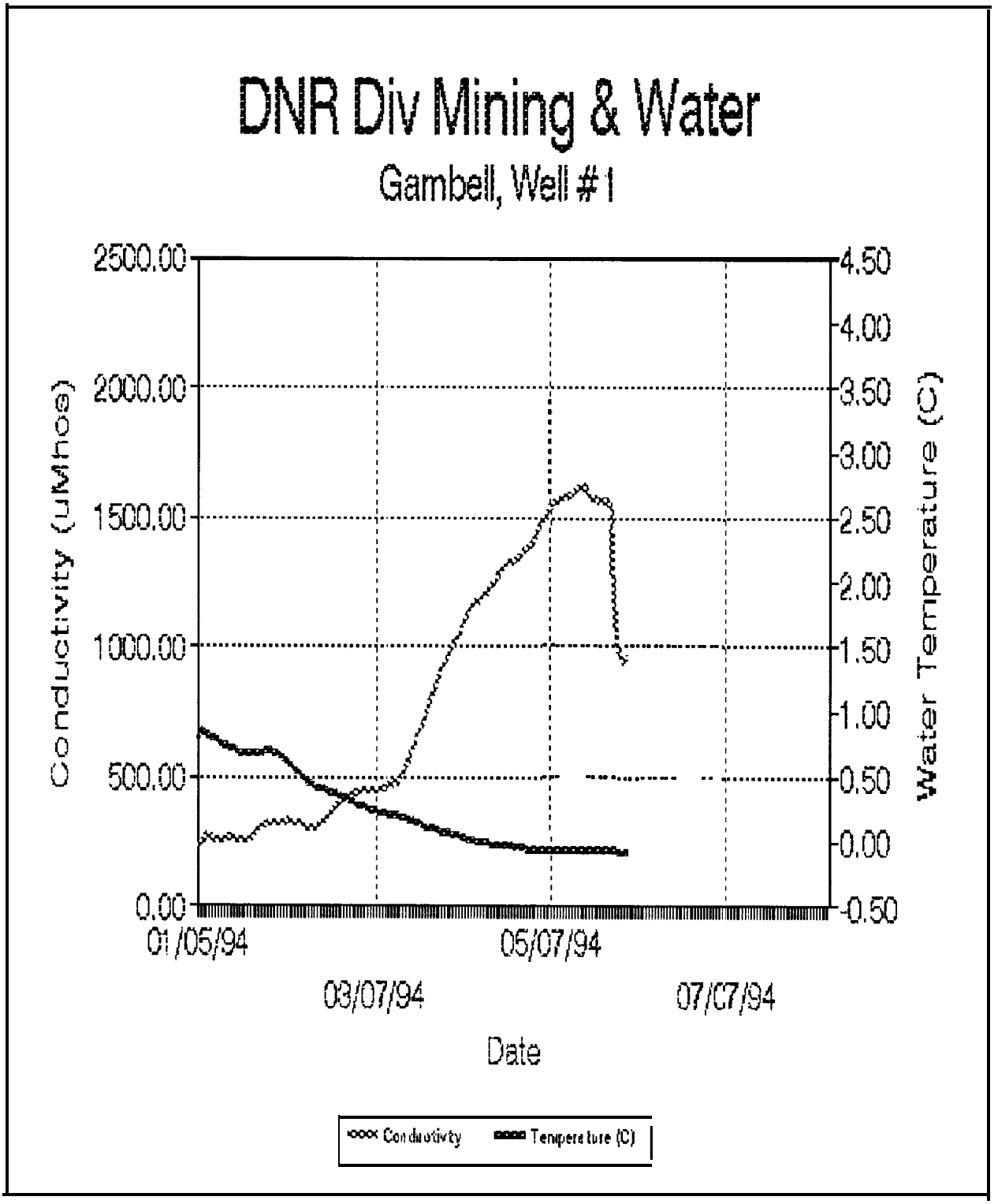
Graph 3


DNR Div Mining & Water
Gambell: All Wells, Water Temperature
WAter Temperature (C)
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
-0.50
10/20/92
04/01/93
01/23/94
05/25/94
01/26/93
08/30/93
03/25/94
07/25/94
Date (Overlap)
Gambell 1
Gambell 2
Pump house

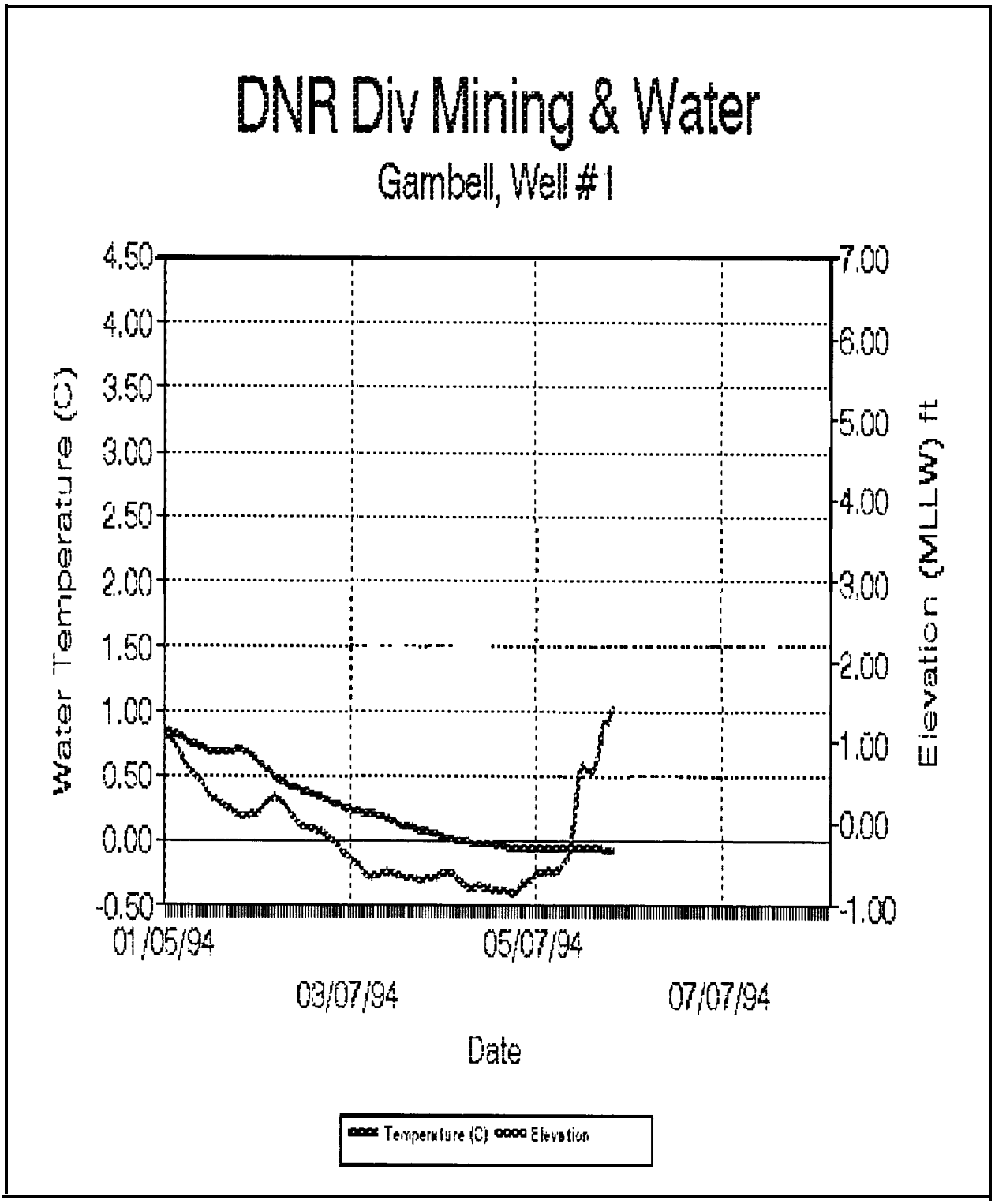
Graph 4


DNRDiv Mining & Water
Gambell, Well #1
2500.00
2000.00
1500.00
1000.00
500.00
0.00
Conductivity (uMhos)
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
-1.00
Elevation (MLLW) ft
01/05/94
03/07/94
05/07/94
07/07/94
Date
Conductivity
Elevation

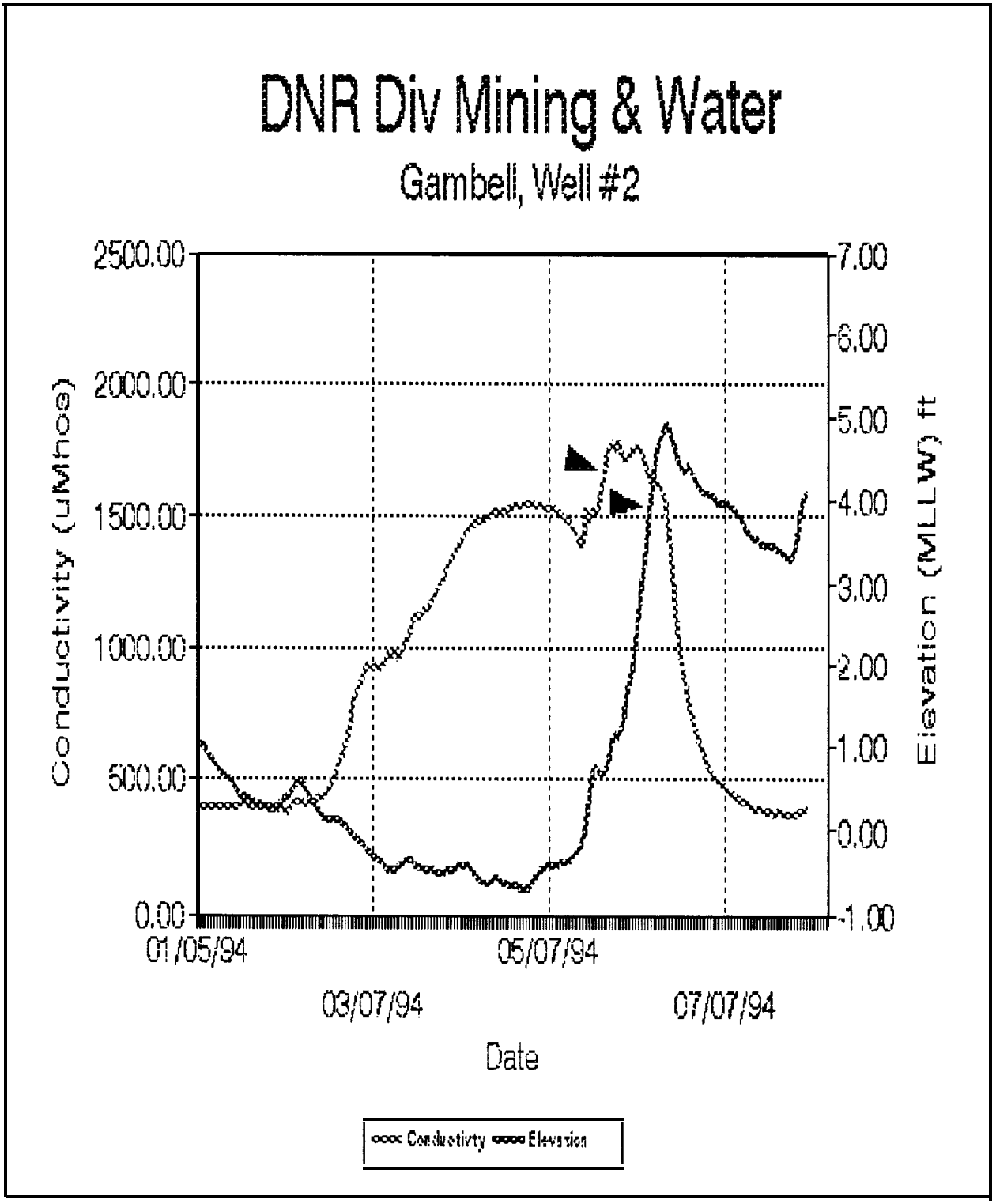
Graph 5


DNR Div Mining & Water
Gambell, Well #1
2500.00
2000.00
1500.00
1000.00
500.00
0.00
Conductivity (uMhos)
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
-0.50
Water Temperature (C)
01/05/94
03/07/94
05/07/94
07/07/94
Date
Conductivity
Temperature (C)

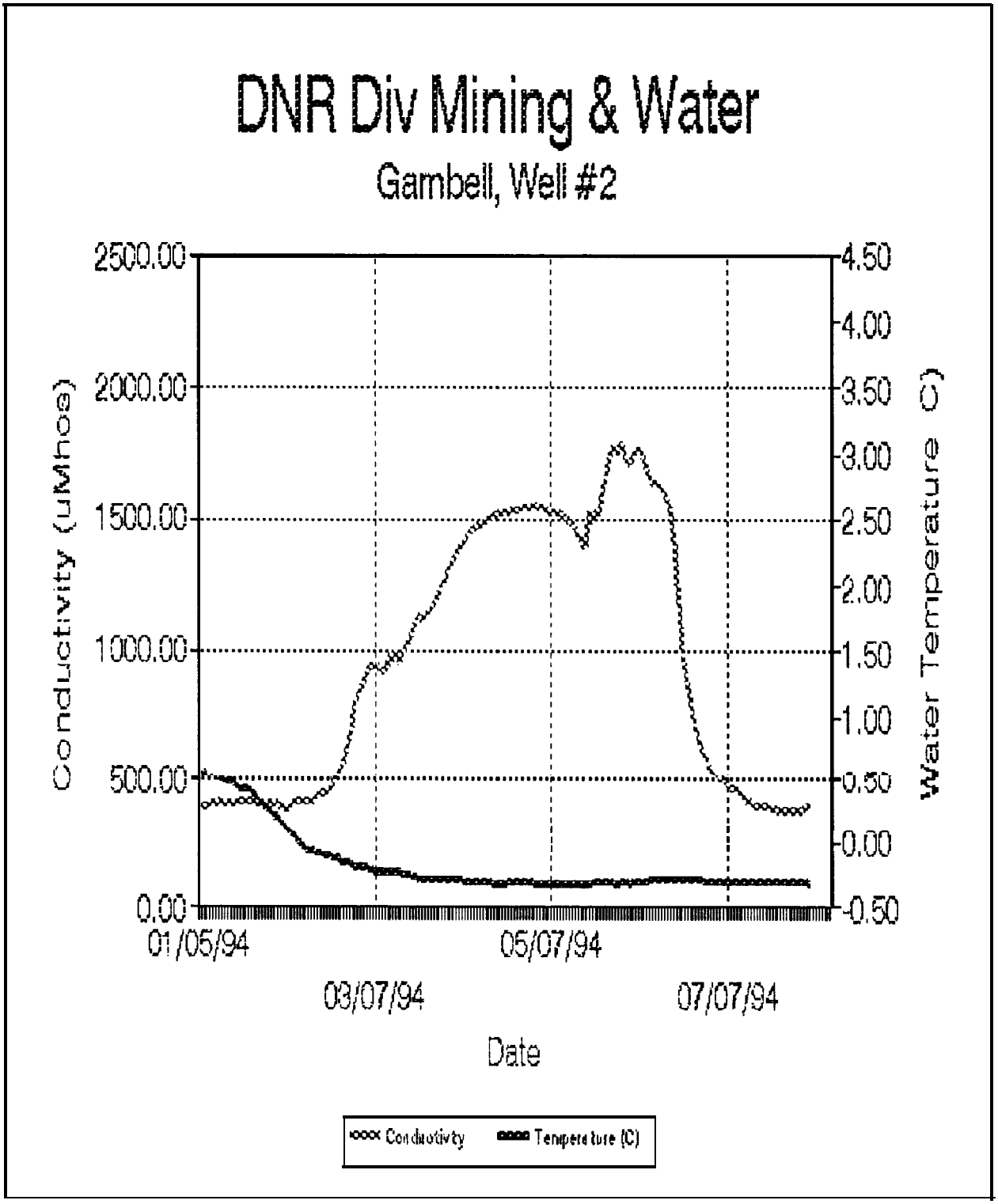
Graph 6


DNR Div Mining & Water
Gambell, Well #1
Water Temperature (C)
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
-0.50
Elevation (MLLW) ft
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
-1.00
01/05/94
03/07/94
05/07/94
07/07/94
Date
Temperature (C)
Elevation

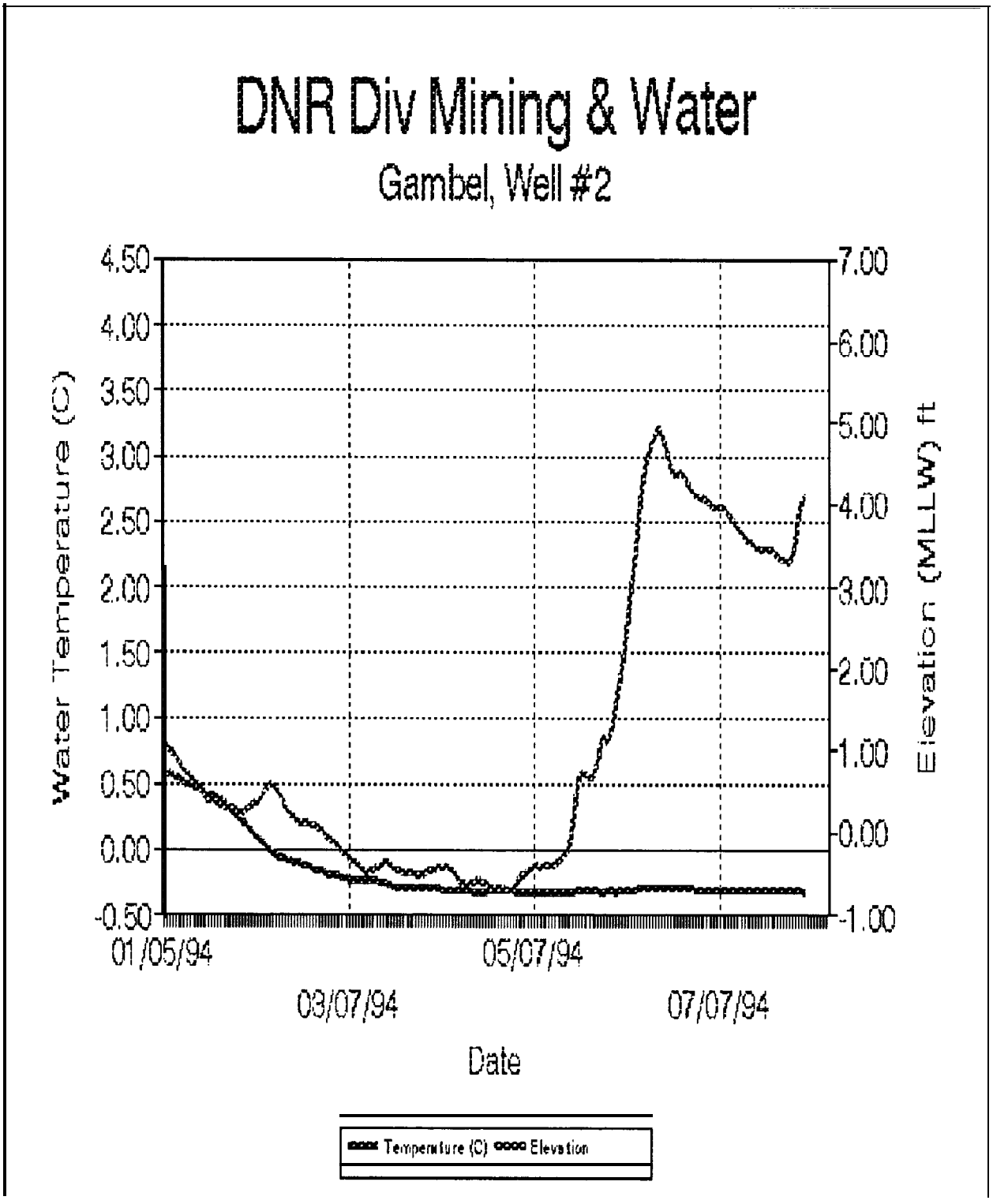
Graph 7


DNR Div Mining & Water
Gambell, Well #2
2500.00
2000.00
1500.00
1000.00
500.00
0.00
Conductivity (uMhos)
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
-1.00
Elevation (MLLW) ft
01/05/94
03/07/94
05/07/94
07/07/94
Date
Conductivty
Elevation

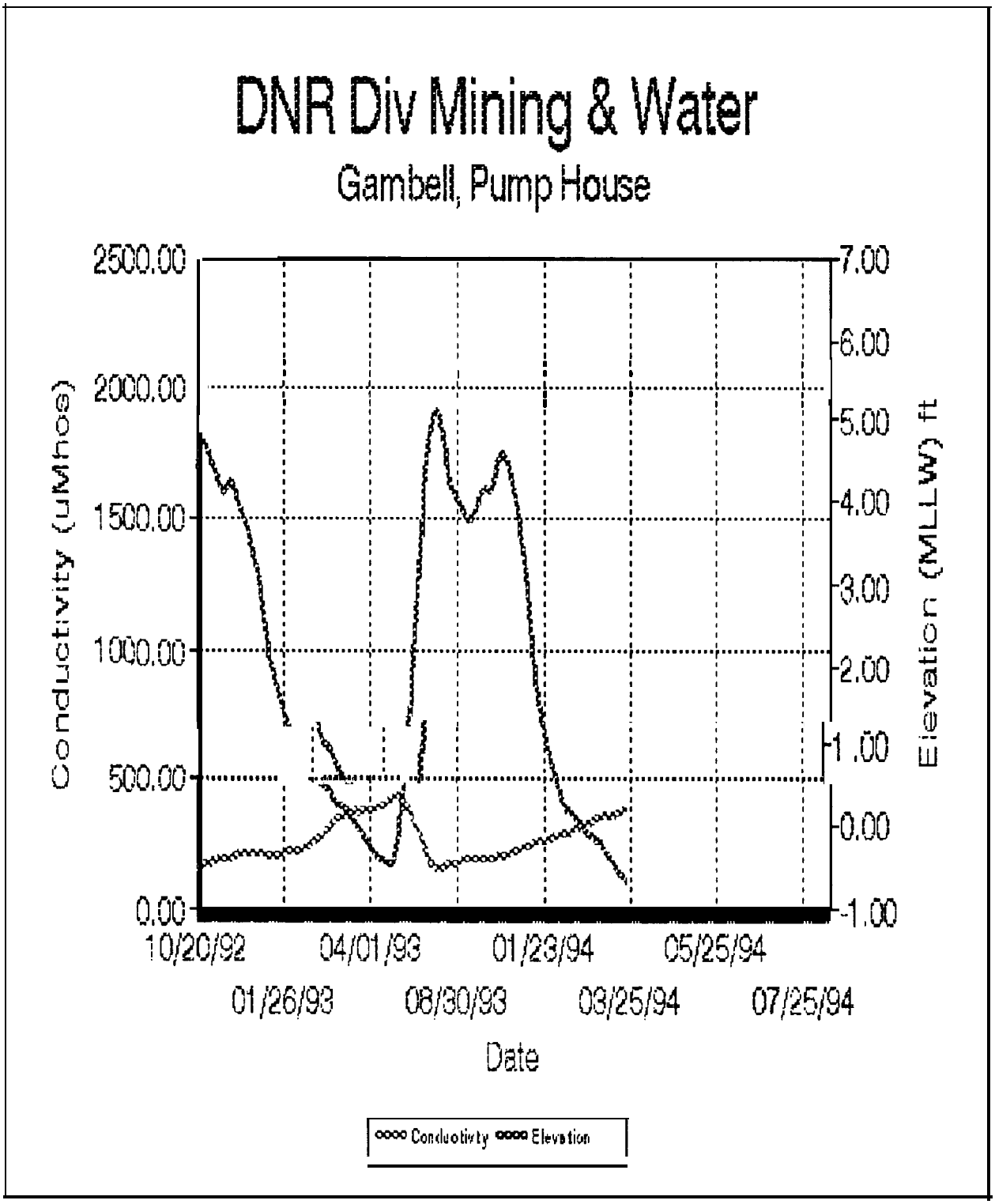
Graph 8


DNR Div Mining & Water
Gambell, Well #2
2500.00
2000.00
1500.00
1000.00
500.00
0.00
Conductivity (uMhos)
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
-0.50
Water Temperature (C)
01/05/94
03/07/94
05/07/94
07/07/94
Date
Conductivity
Temperature (C)

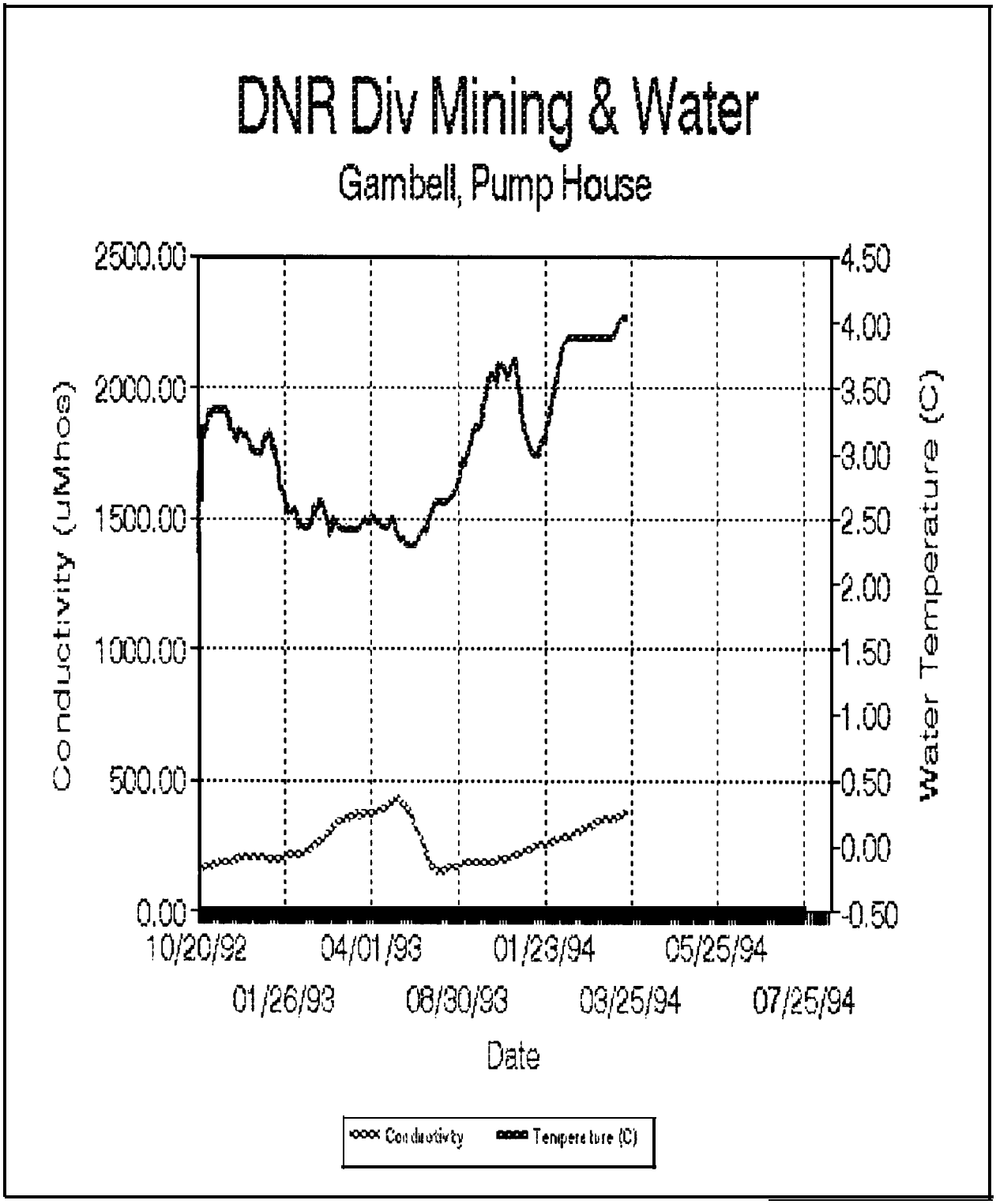
Graph 9


DNR Div Mining & Water
Gambel, Well #2
Water Temperature (C)
Elevation (MLLW) ft
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
-0.50
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
-1.00
01/05/94
03/07/94
05/07/94
07/07/94
Date
Temperature (C)
Elevation

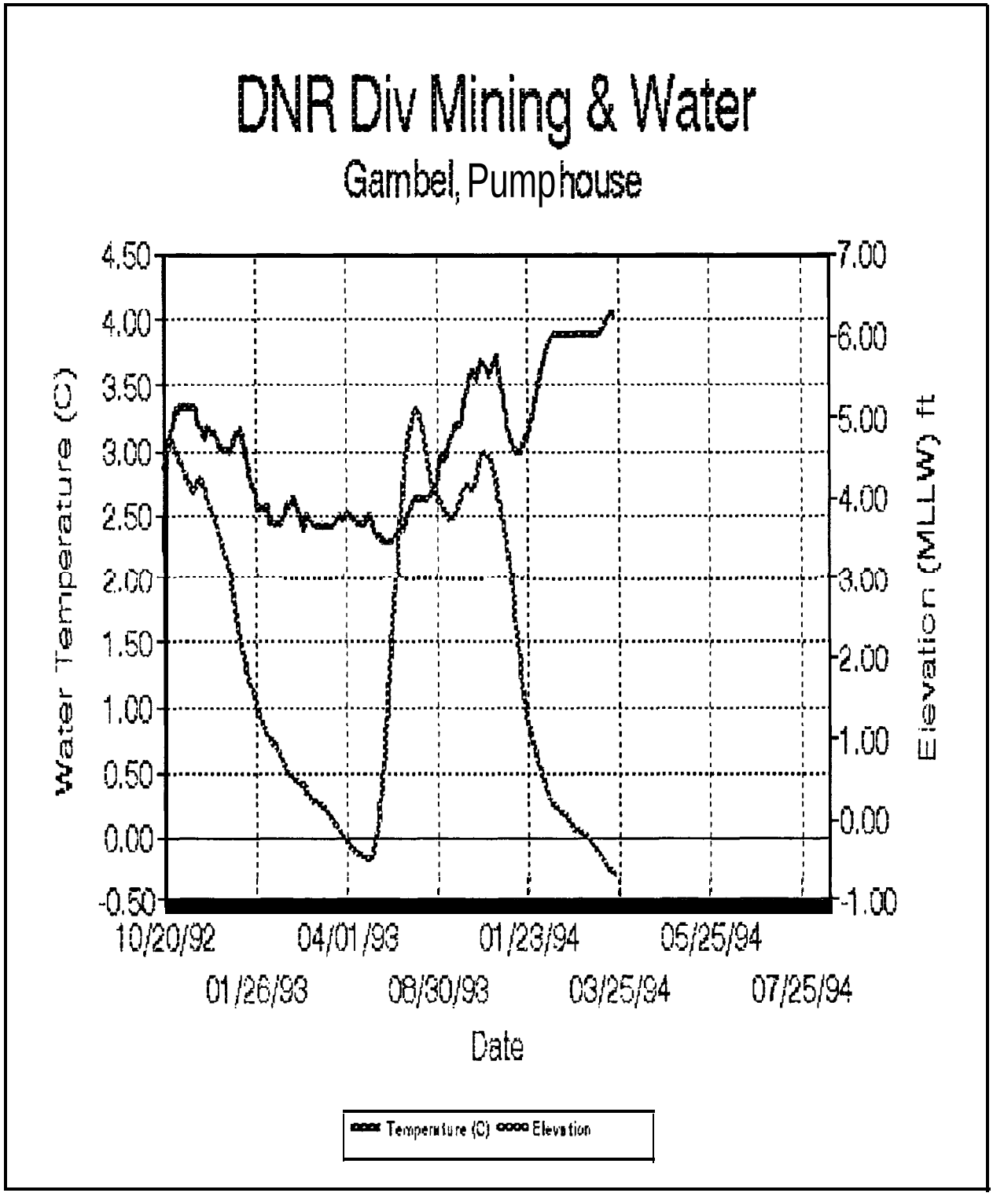
Graph 10


DNR Div Mining & Water
Gambell, Pump House
Conductivity (uMhos)
2500.00
2000.00
1500.00
1000.00
500.00
0.00
Elevation (MLLW) ft
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
-1.00
10/20/92
04/01/93
01/23/94
05/25/94
01/26/93
08/30/93
03/25/94
07/25/94
Date
Conductivity
Elevation

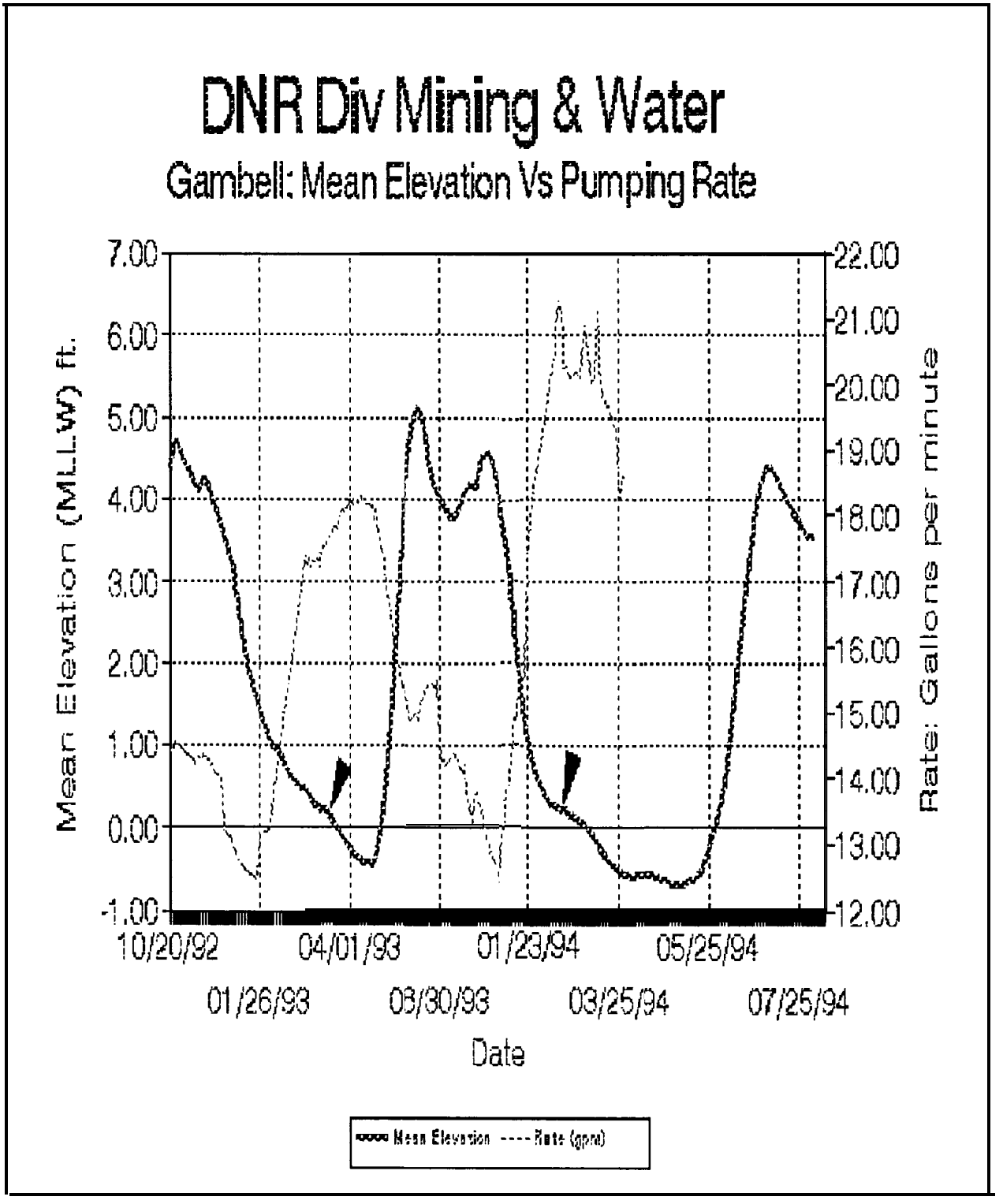
Graph 11


DNR Div Mining & Water
Gambell, Pump House
Conductivity (uMhos)
Water Temperature (C)
2500.00
2000.00
1500.00
1000.00
500.00
0.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
-0.50
10/20/92
01/26/93
04/01/93
08/30/93
01/23/94
03/25/94
05/25/94
07/25/94
Date
Conductivity
Temperature (C)

Graph 12


DNR Div Mining & Water
Gambel, Pumphouse
Water Temperature (C)
Elevation (MLLW) ft
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
-0.50
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
-1.00
10/20/92
01/26/93
04/01/93
08/30/93
01/23/94
03/25/94
05/25/94
07/25/94
Date
Temperature (C)
Elevation

Graph 13


DNR Div Mining & Water
Gambell: Mean Elevation Vs Pumping Rate
Mean Elevation (MLLW) ft.
Rate: Gallons per minute
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
-1.00
22.00
21.00
20.00
19.00
18.00
17.00
16.00
15.00
14.00
13.00
12.00
10/20/92
01/26/93
04/01/93
03/30/93
01/23/94
03/25/94
05/25/94
07/25/94
Date
Mean Elevation
Rate (gpm)

Graph 14