QUARTERLY REPORT - 3rd QUARTER 1982

Q-Sand In-Situ Uranium Recovery R&D Project

Converse County, Wyoming

NRC Source Material License SUA-1387

NRC Docket No. 40-8768

Project Status

Leaching operations continued as scheduled. Fluid production and injection during the period totaled 12.53 million gallons and 12.14 million gallons, respectively. Over-recovery during the period totaled 0.39 million gallons (3.0 gpm). Waste water routed to the evaporation ponds during the quarter totaled 71,722 gallons.

Excursion Monitoring

There were no excursions or pond leaks detected during the quarter. Excursion monitoring data is presented in both tabular and graphical form in Attachment A. Monitor well fluid level data is presented in tabular and graphical form in Attachment B. The data continues to indicate confinement and control of the leach solutions, therefore, no significant changes in aquifer control techniques are anticipated.

Water Quality Data

Included in Attachment C are the required analyses for the evaporation ponds and bleed stream samples.

Radon Survey

The radon-222 levels determined by continuous passive radon detectors during the period are as follows:

	7/19/82	8/19/82	9-19-82
Upwind Location	.17 pCi/L	.20 pCi/L	1.0 pCi/L
Downwind Location	.27 pCi/L	<.01 pCi/L	2.0 pCi/L
Surge Tank Location	.90 pCi/L	1.00 pCi/L	5.3 pCi/L

Radon level determination will be made on a quarterly basis in future reports.

Direct Gamma Survey

Operational direct gamma surveys conducted for the 3rd Quarter, 1982, are as follows:

Upwind Radon Sample Location	20 µR/hr.
Downwind Radon Sample Location	26 µR/hr.
Pregnant Surge Tank Area	84 µR/hr.
Evaporation Pond Area	22 µR/hr.

Sediment/Soil Surveys

Operational surveys for radium^{226} in the sediment in the Bill Smith Mine water treatment system drainage are as follows:

Outfall from Final Treatment	2.07 pCi/g
At Ross Road	1.68 pCi/g
1½ Miles Below Discharge Point	3.40 pCi/g

Water Survey

The operational survey for radium^{226} and thorium^{230} at the outfall of the final treatment unit consist of composite samples for radium^{226} and grab samples for thorium^{230}. The radium^{226}, as shown on the NPDES report, varied from a minimum of 0.05 pCi/L to a maximum of 4.9 pCi/L, and averaged 1.6 pCi/L.

A grab sample, taken at the outfall on 8/12/82, and analyzed for thorium^{230}, contained 0.04 pCi/L thorium^{230}.

NPDES

A copy of the quarterly report required under NPDES Permit No. WY-0022411 is included in Attachment D.

ATTACHMENT A

MONITOR WELL EXCURSION PARAMETERS ANALYSES

Monitor well excursion parameter analyses data and NRC upper control limit (UCL) values for the eleven monitor wells are presented in tabular form in Tables A-1 through A-11, and are presented in graphical form in Figures A-1 through A-22.

There were no excursions during the report period.

Table A-1

Monitor Well QM-1 Excursion Parameter Data

Q-Sand ISL Project SPRB, Wyoming

Sample Date	CO_3	HCO_3	Cl	U	TDS	Na	SO_4	Mo	ALK[1]
NRC UCL	43	289	71	0.48	494	65	240	.02	4.7
7-8-82	ND	234	9	.10	362	24	114	<,01	3.8
7-22-82	ND	222	7	.11	382	-	-	-	-
8-5-82	ND	248	7	.12	402	25	105	<.01	4.1
8-19-82	ND	268	11	.09	303	-	-	-	-
9-9-82	ND	246	7	.08	416	20	95	<.01	4.0
9-23-82	ND	240	7	.04	368	-	-	-	-

(1) ALK in meg/l; all others mg/l

Table A-2

Monitor Well QM-2 Excursion Parameter Data

Q-Sand ISL Project SPRB, Wyoming

Sample Date	CO_3	HCO_3	Cl	U	TDS	Na	SO_4	Mo	ALK[1]
NRC UCL	43	289	71	0.48	494	65	240	.02	4.7
7-8-82	ND	239	8	.06	378	25	116	<.01	3.9
7-22-82	ND	224	7	.06	376	-	-	-	-
8-5-82	ND	245	7	.05	414	24	105	<.01	4.0
8-19-82	ND	256	10	.06	332	-	-	-	-
9-9-82	ND	244	7	.04	393	20	95	<.01	4.0
9-23-82	ND	248	7	.04	392	-	-	-	-

(1) ALK in meg/l; all others mg/l

Table A-3

Monitor Well QM-3 Excursion Parameter Data

Q-Sand ISL Project SPRB, Wyoming

Sample Date	CO_3	HCO_3	Cl	U	TDS	Na	SO_4	Mo	ALK[1]
NRC UCL	43	289	71	0.48	494	65	240	.02	4.7
7-8-82	ND	234	8	.06	372	24	112	<.01	3.8
7-22-82	ND	222	8	.07	376	-	-	-	-
8-5-82	ND	243	8	.05	407	25	95	<.01	4.0
8-19-82	ND	256	9	.05	302	-	-	-	-
9-9-82	ND	239	8	.04	390	21	100	<.01	3.9
9-23-82	ND	239	8	.04	397	-	-	-	-

(1) ALK in meg/l; all others mg/l

Table A-4

Monitor Well QM-4 Excursion Parameter Data

Q-Sand ISL Project SPRB, Wyoming

Sample Date	CO_3	HCO_3	Cl	U	TDS	Na	SO_4	Mo	ALK[1]
NRC UCL	43	289	71	0.48	494	65	240	.02	4.7
7-8-82	ND	229	8	.08	366	26	108	<.01	3.8
7-22-82	ND	229	7	.08	370	-	-	-	-
8-5-82	ND	240	7	.09	396	25	115	<.01	3.9
8-19-82	ND	256	9	.07	289	-	-	-	-
9-9-82	ND	134	9	.02	300	21	80	<.01	2.2
9-23-82	ND	232	8	.03	398	-	-	-	-

(1) ALK in meg/l; all others mg/l

Table A-5

Monitor Well QM-5 Excursion Parameter Data

Q-Sand ISL Project SPRB, Wyoming

Sample Date	CO_3	HCO_3	Cl	U	TDS	Na	SO_4	Mo	ALK[1]
NRC UCL	43	289	71	0.48	494	65	240	.02	4.7
7-8-82	ND	229	8	.06	348	25	100	<.01	3.8
7-22-82	ND	234	7	.06	358	-	-	-	-
8-5-82	ND	239	7	.06	405	24	90	<.01	3.9
8-19-82	ND	244	8	.06	295	-	-	-	-
9-9-82	ND	239	7	.04	384	21	85	<.01	3.9
9-23-82	ND	232	7	.02	381	-	-	-	-

(1) ALK in meg/l; all others mg/l

Table A-6

Monitor Well QM-6 Excursion Parameter Data

Q-Sand ISL Project SPRB, Wyoming

Sample Date	CO_3	HCO_3	Cl	U	TDS	Na	SO_4	Mo	ALK[1]
NRC UCL	43	289	71	0.48	494	65	240	.02	4.7
7-8-82	ND	229	8	.05	350	24	98	<.01	3.8
7-22-82	ND	234	8	.06	358	-	-	-	-
8-5-82	ND	239	8	.05	402	26	88	<.01	3.9
8-19-82	ND	244	9	.05	288	-	-	-	-
9-9-82	ND	238	8	.03	380	21	90	<.01	3.9
9-23-82	ND	232	8	.05	373	-	-	-	-

(1) ALK in meg/l; all others mg/l

Table A-7

Monitor Well QM-7 Excursion Parameter Data

Q-Sand ISL Project SPRB, Wyoming

Sample Date	CO_3	HCO_3	Cl	U	TDS	Na	SO_4	Mo	ALK[1]
NRC UCL	43	289	71	0.48	494	65	240	.02	4.7
7-8-82	ND	234	8	.05	368	26	117	<.01	3.8
7-22-82	ND	237	7	.05	382	-	-	-	-
8-5-82	ND	232	8	.03	419	24	95	<.01	3.8
8-19-82	ND	244	8	.05	241	-	-	-	-
9-9-82	ND	239	8	.03	392	22	80	<.01	3.9
9-23-82	ND	240	8	.03	385	-	-	-	-

(1) ALK in meg/l; all others mg/l

Table A-8

Monitor Well QM-8 Excursion Parameter Data

Q-Sand ISL Project SPRB, Wyoming

Sample Date	CO_3	HCO_3	Cl	U	TDS	Na	SO_4	Mo	ALK[1]
NRC UCL	43	289	71	0.48	494	65	240	.02	4.7
7-8-82	ND	234	8	.08	344	26	100	<.01	3.8
7-22-82	ND	238	7	.08	372	-	-	-	-
8-5-82	ND	244	7	.07	425	24	90	<.01	4.0
8-19-82	ND	256	10	.10	259	-	-	-	-
9-9-82	ND	239	7	.03	396	22	90	<.01	3.9
9-23-82	ND	243	7	.03	394	-	-	-	-

(1) ALK in meg/l; all others mg/l

Table A-9

Monitor Well QMO-1 Excursion Parameter Data

Q-Sand ISL Project SPRB, Wyoming

Sample Date	CO_3	HCO_3	Cl	U	TDS	Na	SO_4	Mo	ALK[1]
NRC UCL	18	247	37	0.06	660	38	336	.005	3.8
7-8-82	ND	220	6	.02	464	32	209	.001	3.6
7-22-82	ND	222	6	.02	508	-	-	-	-
8-5-82	ND	220	5	.03	555	29	195	<.001	3.6
8-19-82	ND	232	11	.04	423	-	-	-	-
9-9-82	ND	218	5	.02	549	26	190	<.001	3.6
9-23-82	ND	212	4	.01	538	-	-	-	-

(1) ALK in meg/l; all others mg/l

Table A-10

Monitor Well QMS-1 Excursion Parameter Data

Q-Sand ISL Project SPRB, Wyoming

Sample Date	CO_3	HCO_3	Cl	U	TDS	Na	SO_4	Mo	ALK[1]
NRC UCL	18	298	20	0.08	533	46.8	216	.003	4.3
7-8-82	ND	244	9	.04	414	25	127	.002	4.0
7-22-82	ND	252	8	.04	418	-	-	-	-
8-5-82	ND	251	8	.04	447	24	113	<.001	4.1
8-19-82	ND	244	11	.04	339	-	-	-	-
9-9-82	ND	249	8	.03	448	21	105	<.001	4.1
9-23-82	ND	248	8	.02	435	-	-	-	-

(1) ALK in meg/l; all others mg/l

Table A-11

Monitor Well QMW-1 Excursion Parameter Data

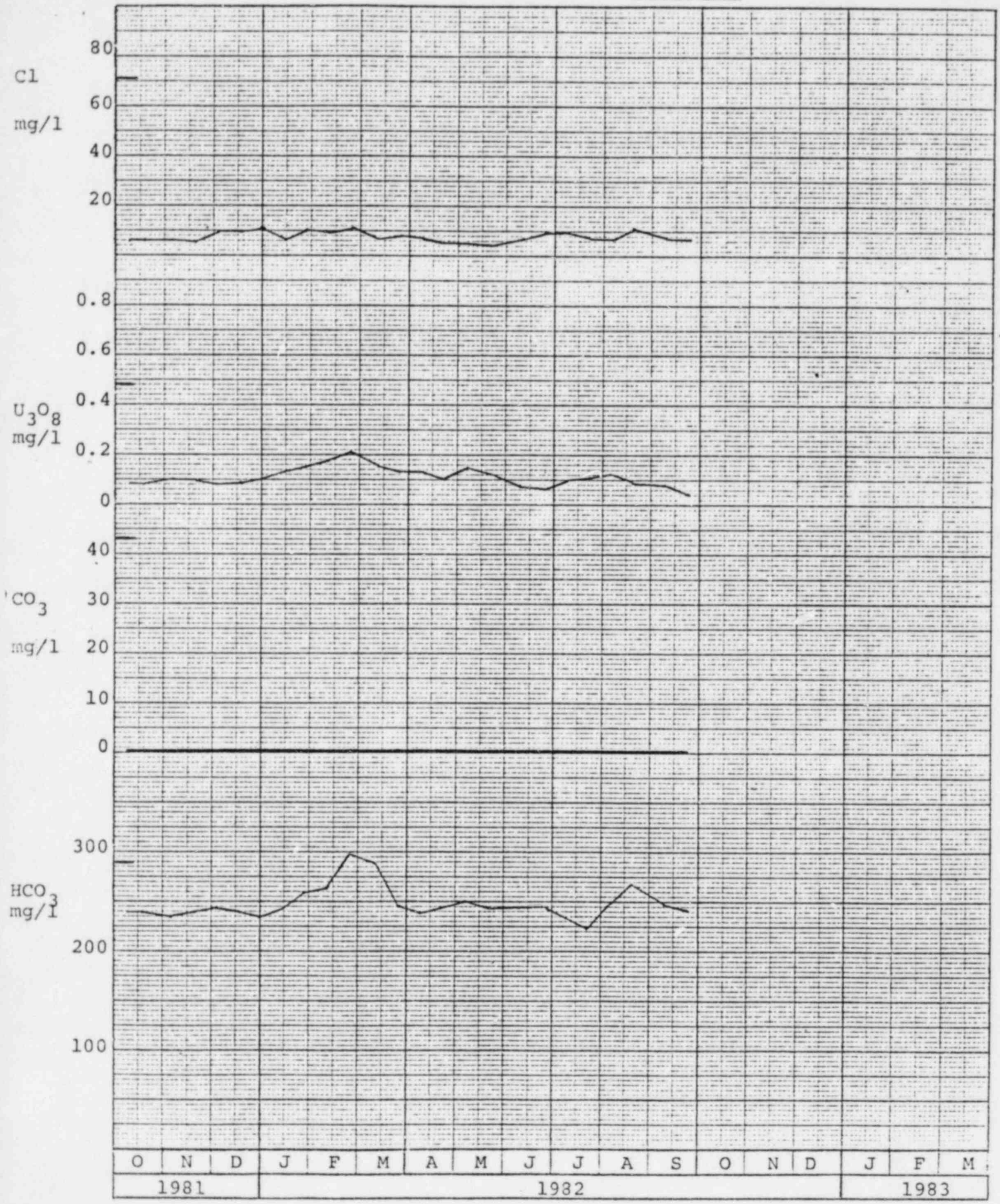
Q-Sand ISL Project SPRB, Wyoming

Sample Date	CO_3	HCO_3	Cl	U	TDS	Na	SO_4	Mo	ALK[1]
NRC UCL	18	206	22	0.05	428	18	186	.003	2.6
7-8-82	ND	137	20	.03	422	9	143	<.001	2.3
7-22-82	ND	144	17	.03	434	-	-	-	-
8-5-82	ND	150	18	.02	447	9	125	<.001	2.5
8-19-82	ND	134	21	.03	319	-	-	-	-
9-9-82	ND	144	18	.03	461	8	120	<.001	2.4
9-23-82	ND	142	18	.01	416	-	-	-	-

(1) ALK in meg/l; all others mg/l

Figure A-1

Q-Sand ISL Monitor Well QM-1



UCL Value

Figure A-2

Q-Sand ISL Monitor Well QM-1

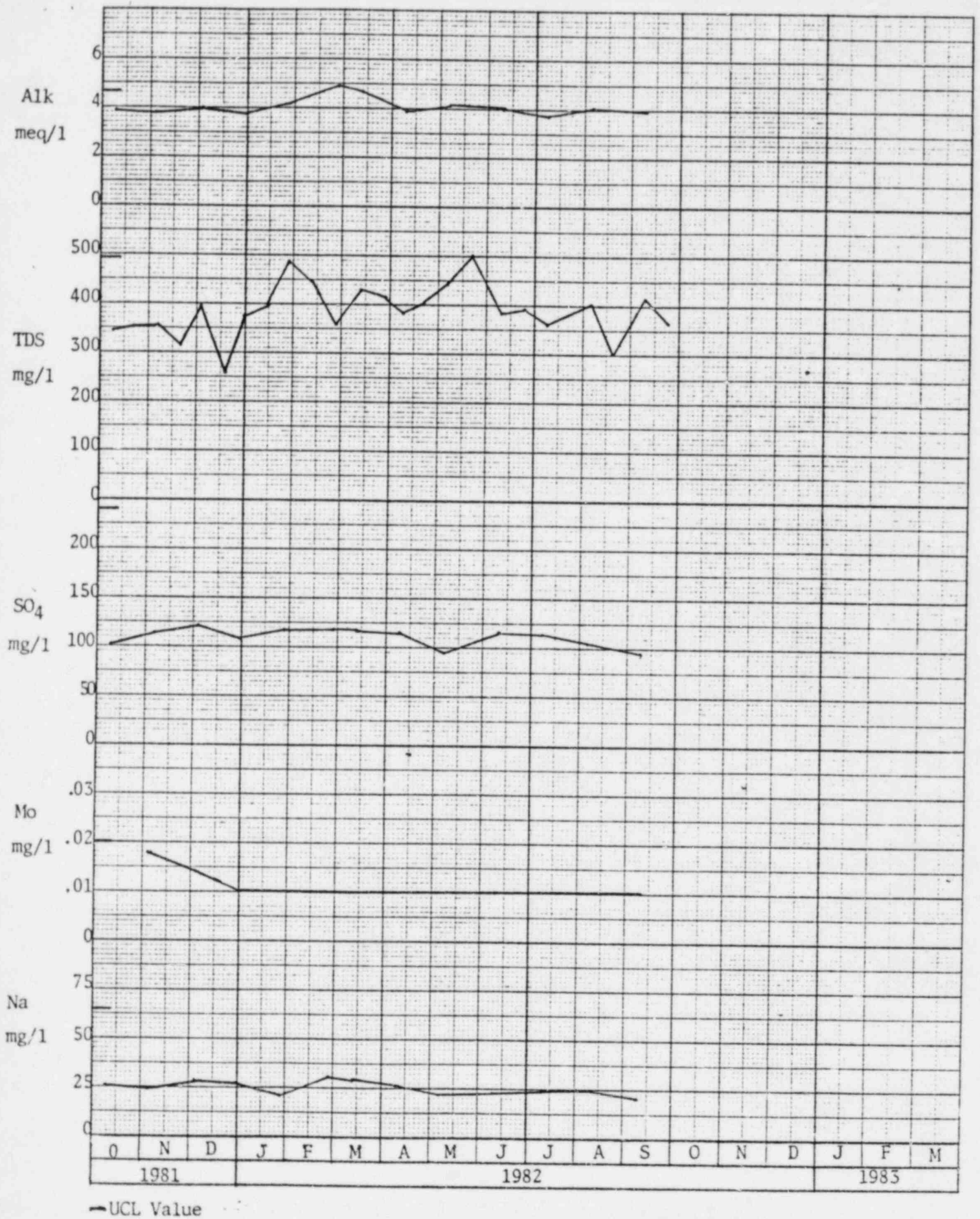
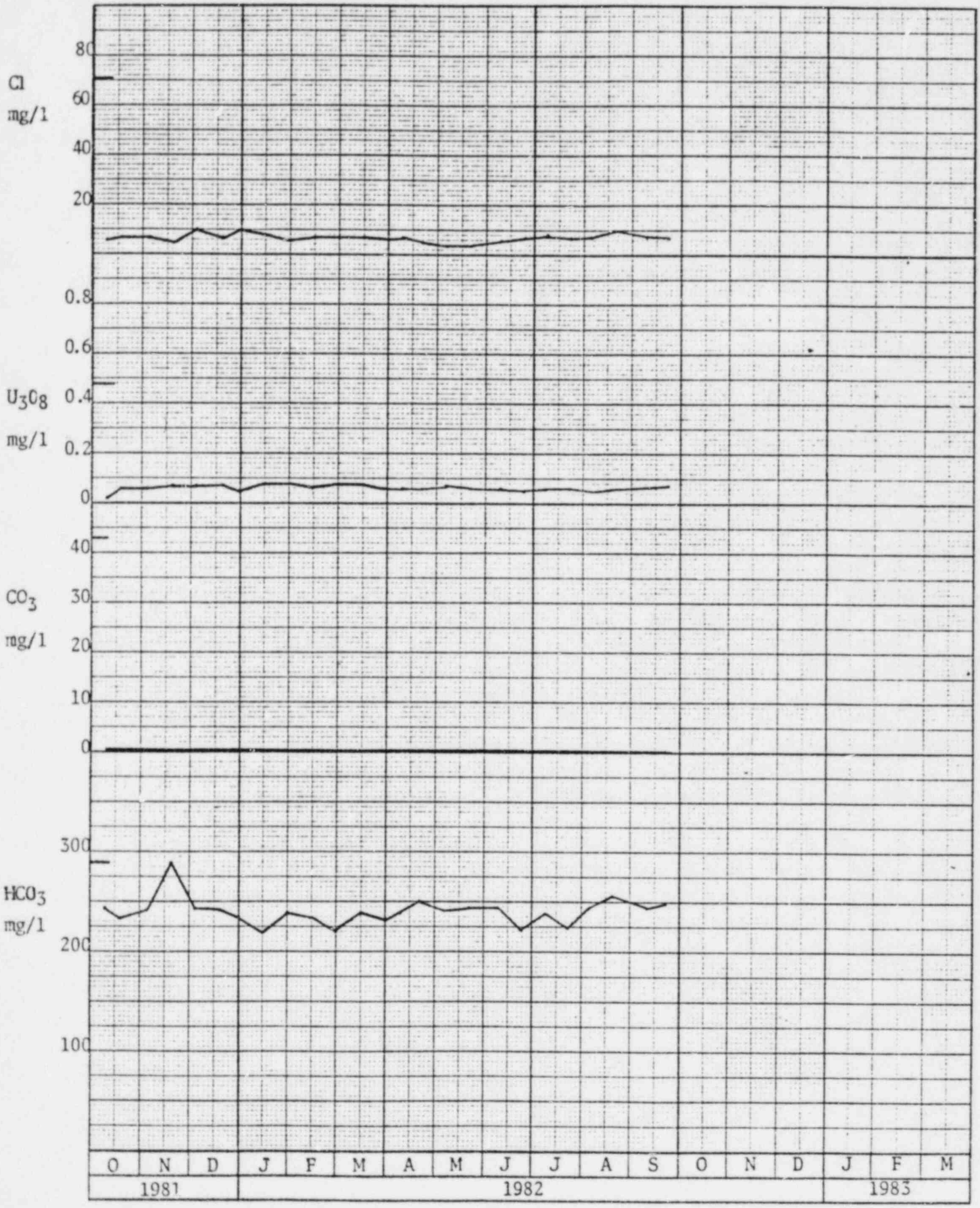


Figure A-3

Q-Sand ISL Monitor Well QM-2



— UCL Value

Figure A-4

Q-Sand ISL Monitor Well QM-2

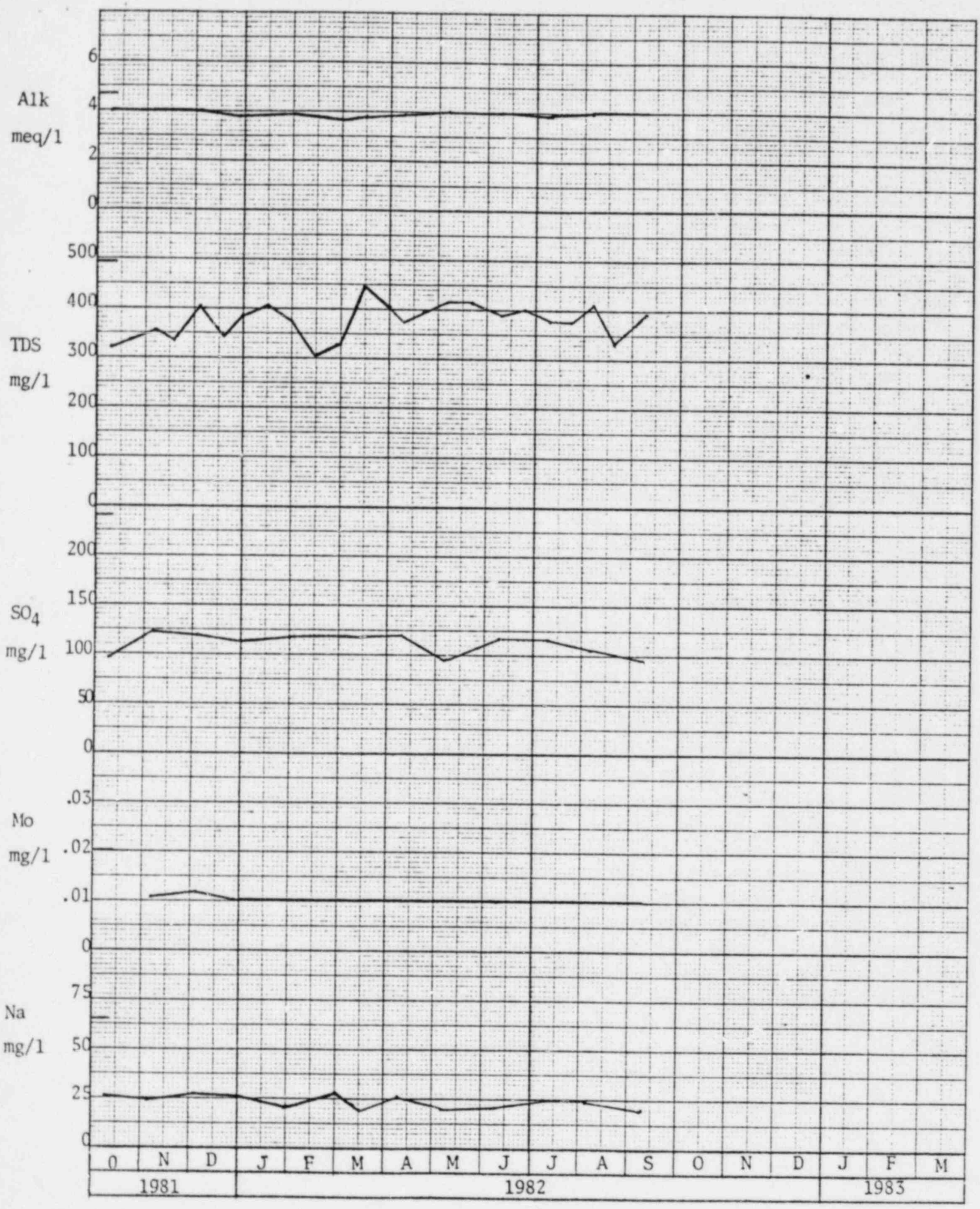
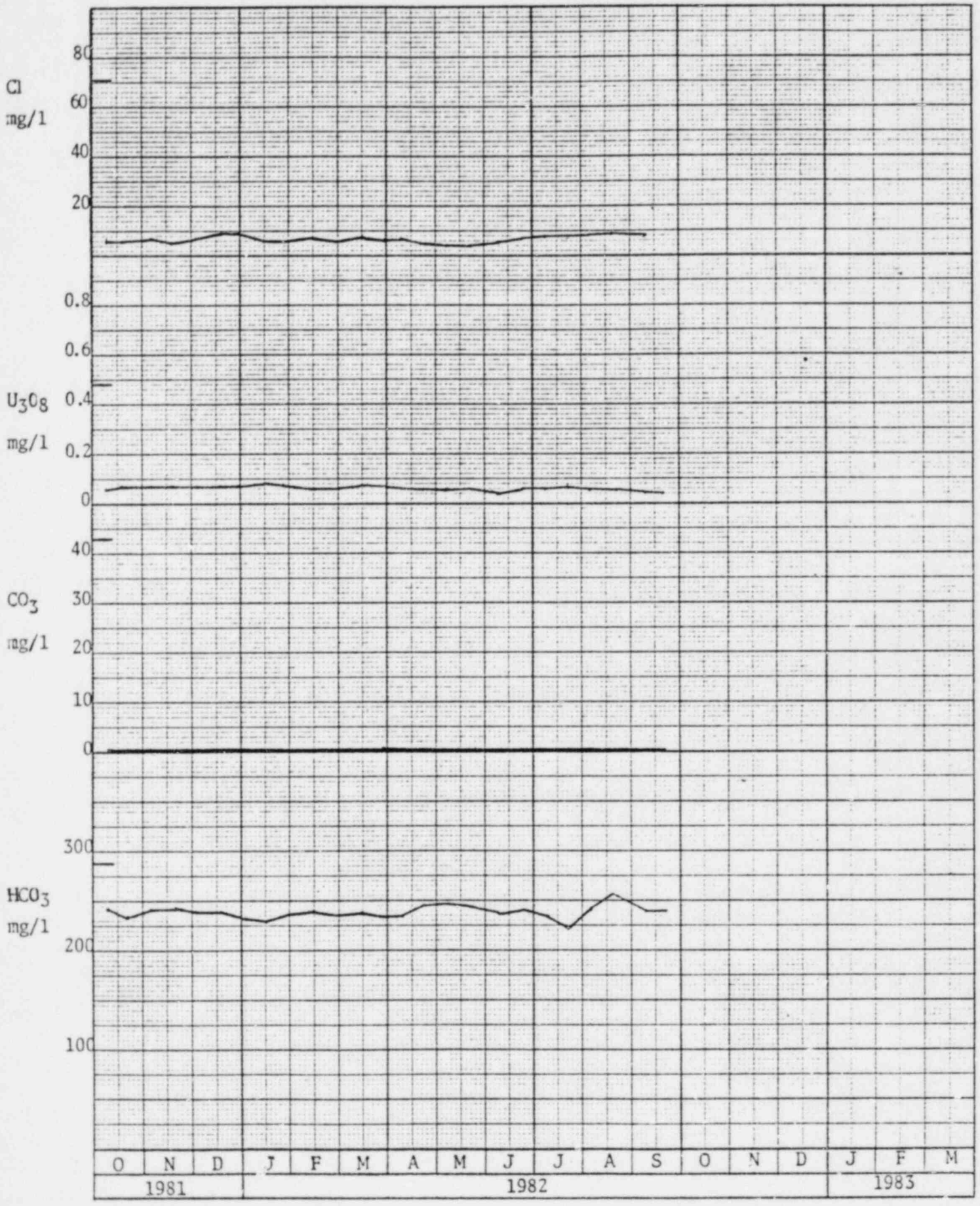


Figure A-5

Q-Sand ISL Monitor Well QM-3



— UCL Value

Figure A-6

Q-Sand ISL Monitor Well QM-3

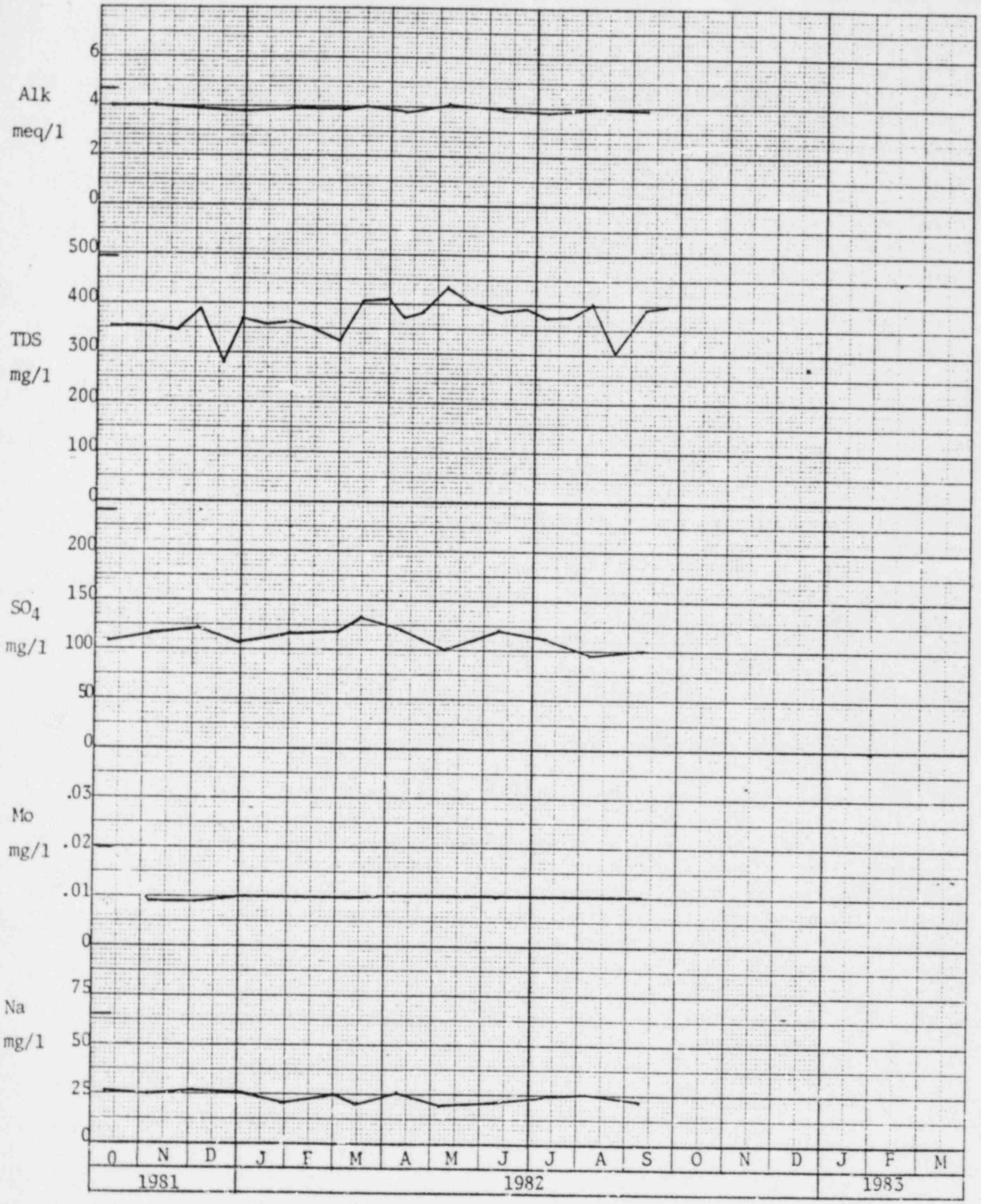
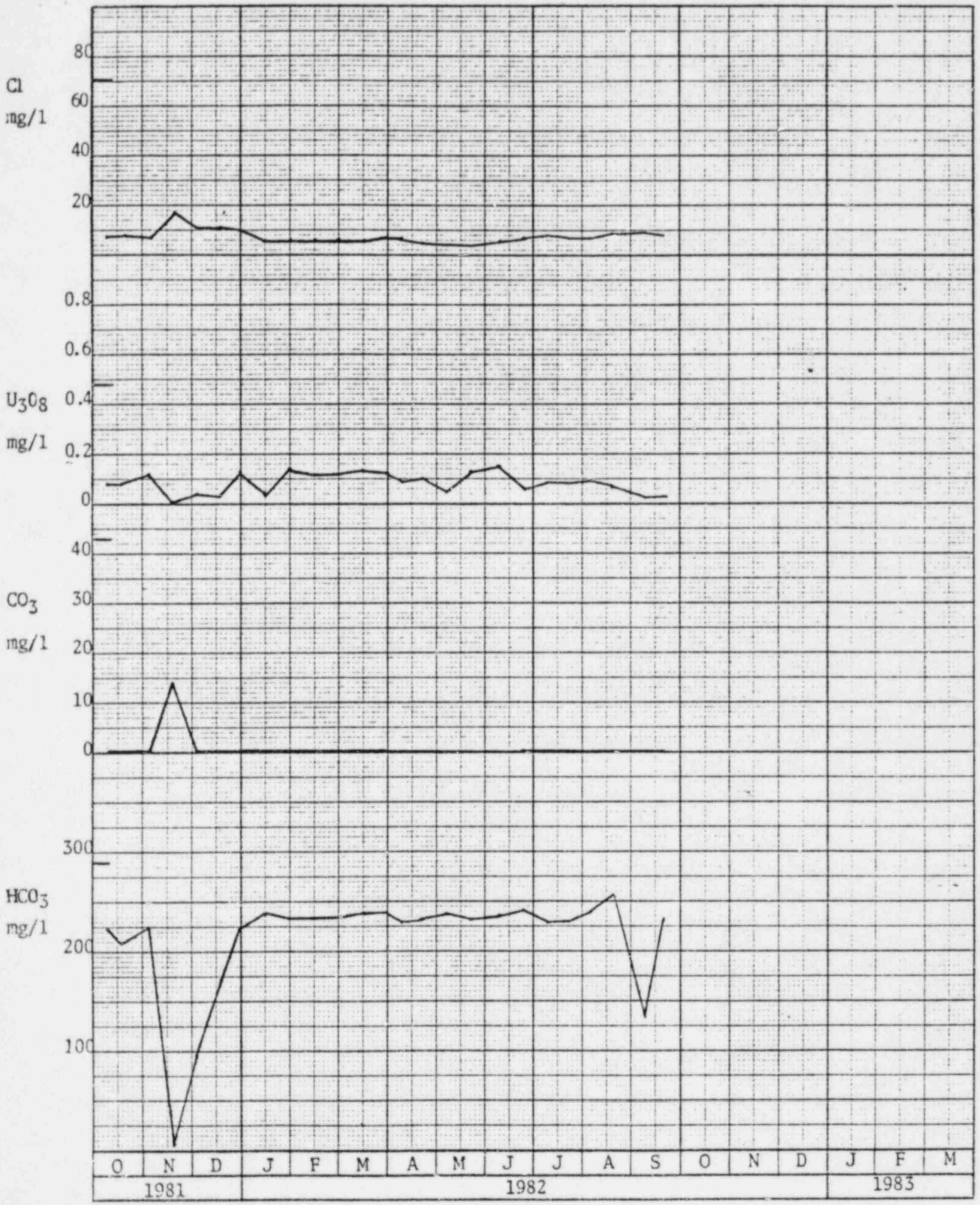


Figure A-7

Q-Sand ISL Monitor Well QM-4



— UCL Value

Figure A-8

Q-Sand ISL Monitor Well QM-4

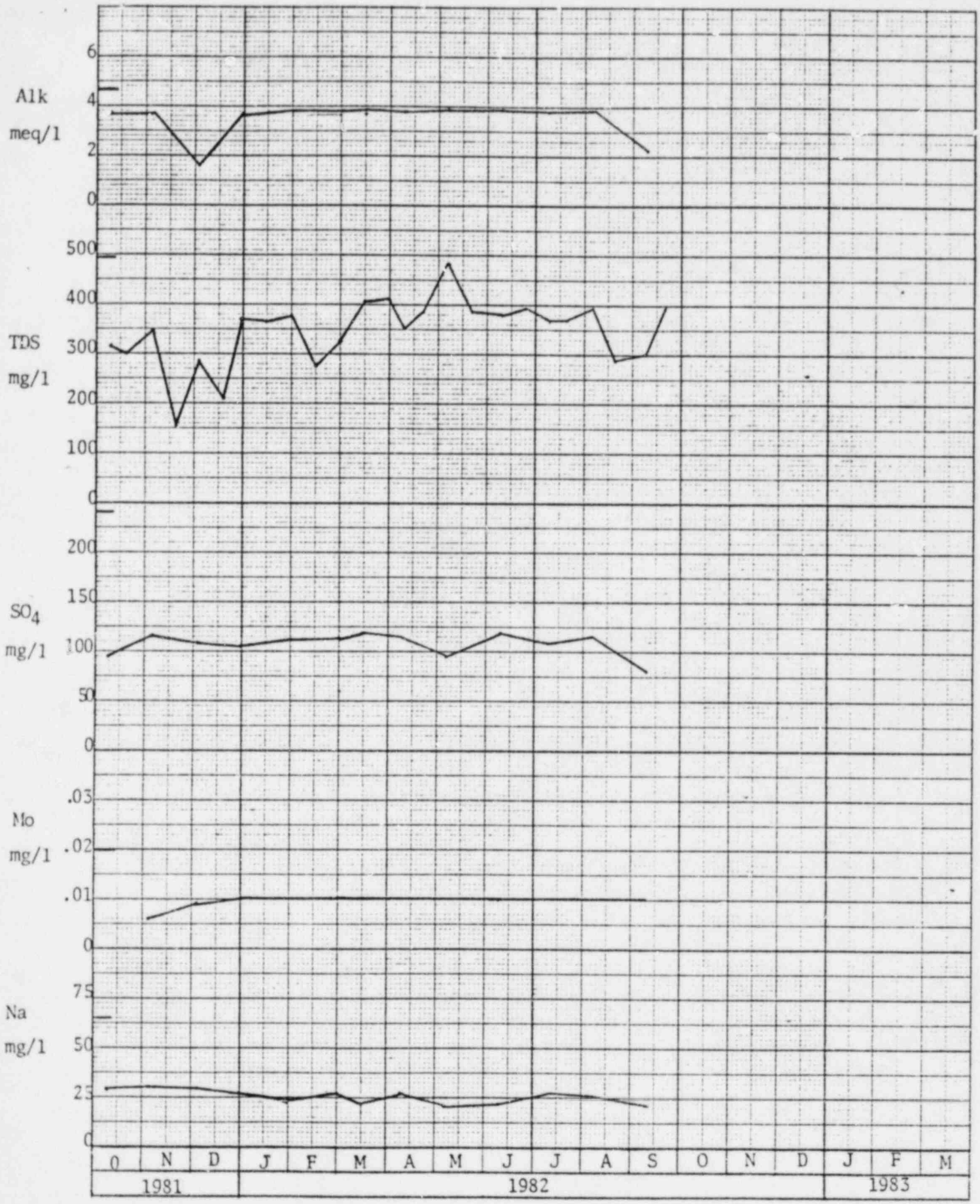
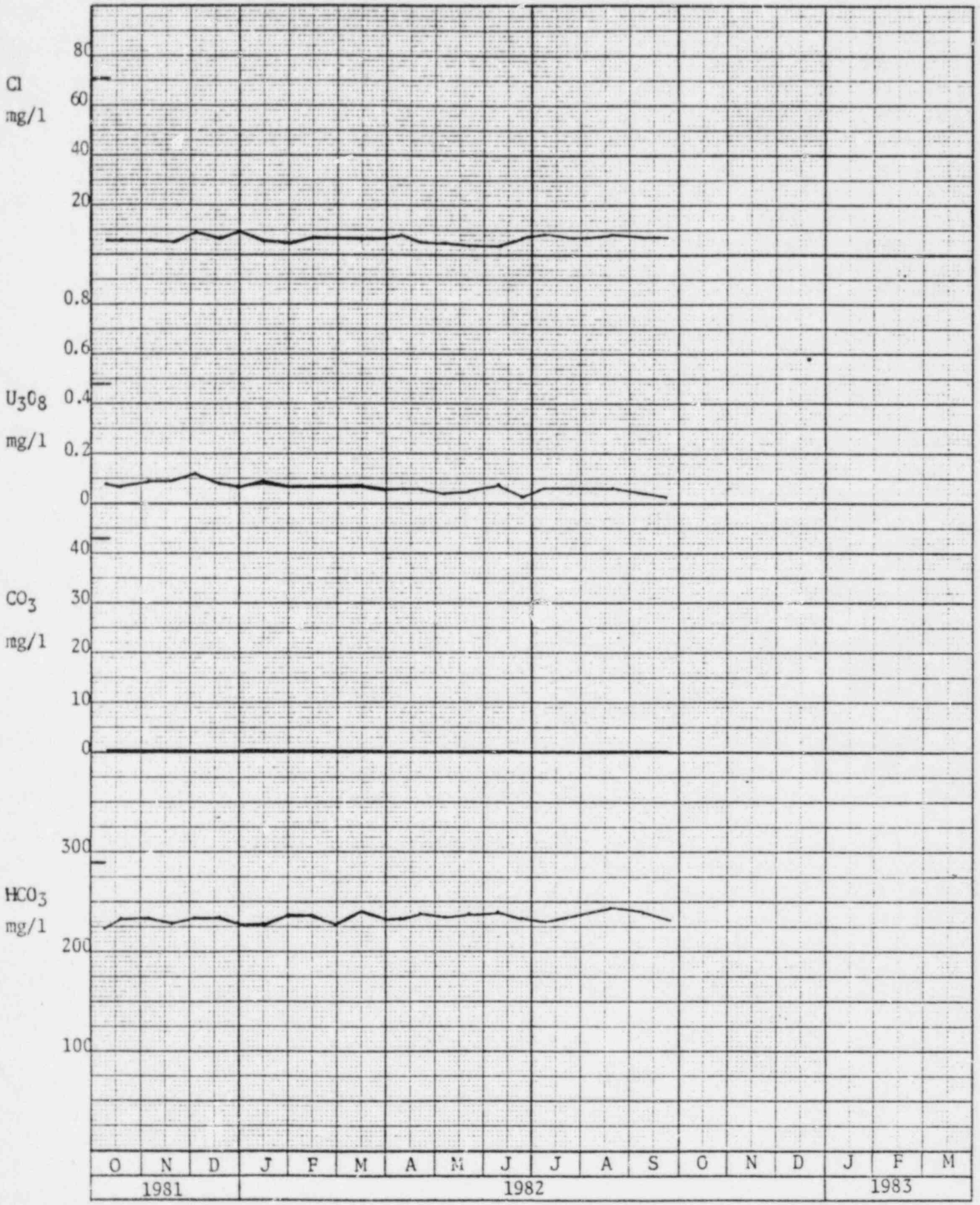


Figure A-9

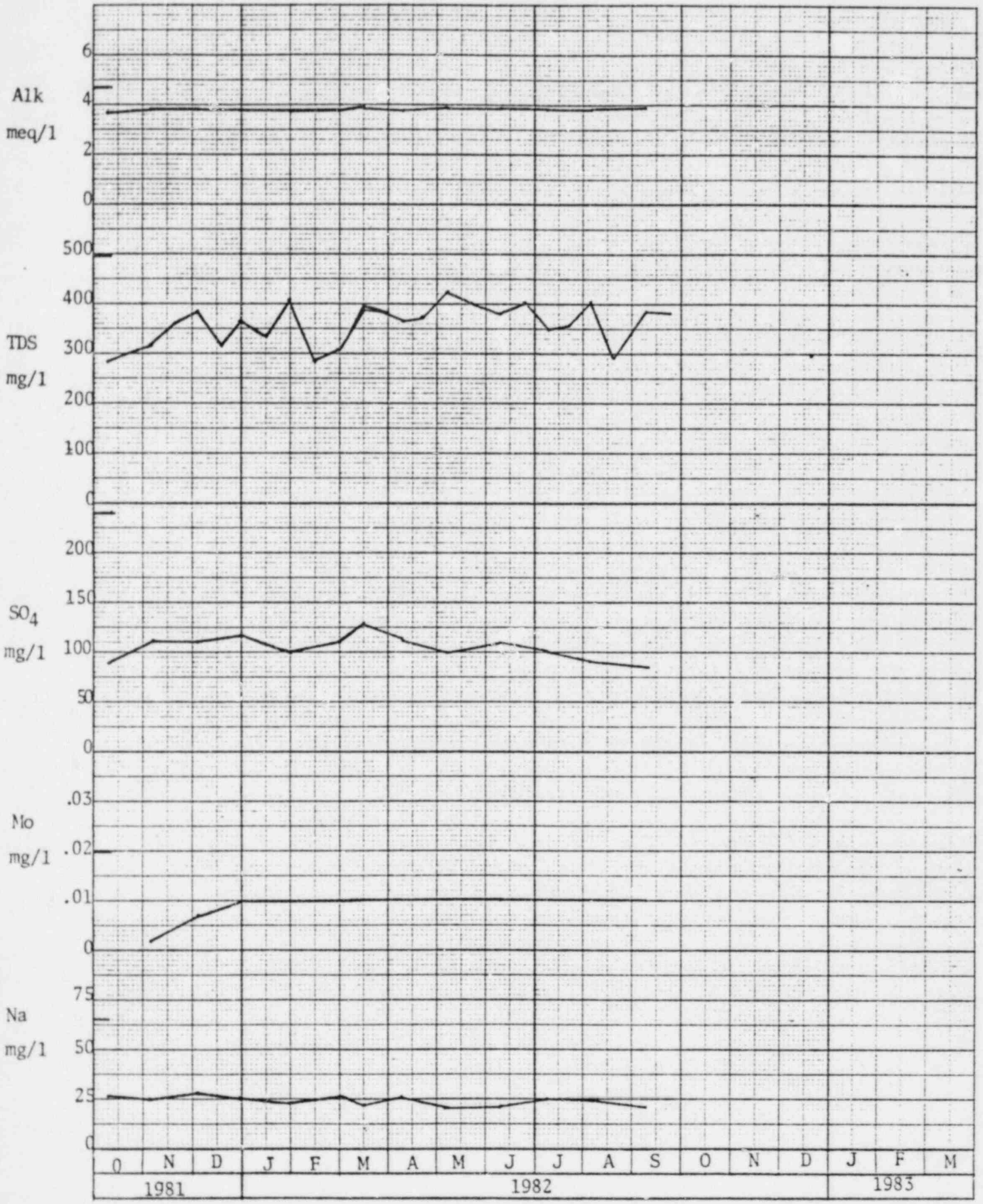
Q-Sand ISL Monitor Well QM-5



— UCL Value

Figure A-10

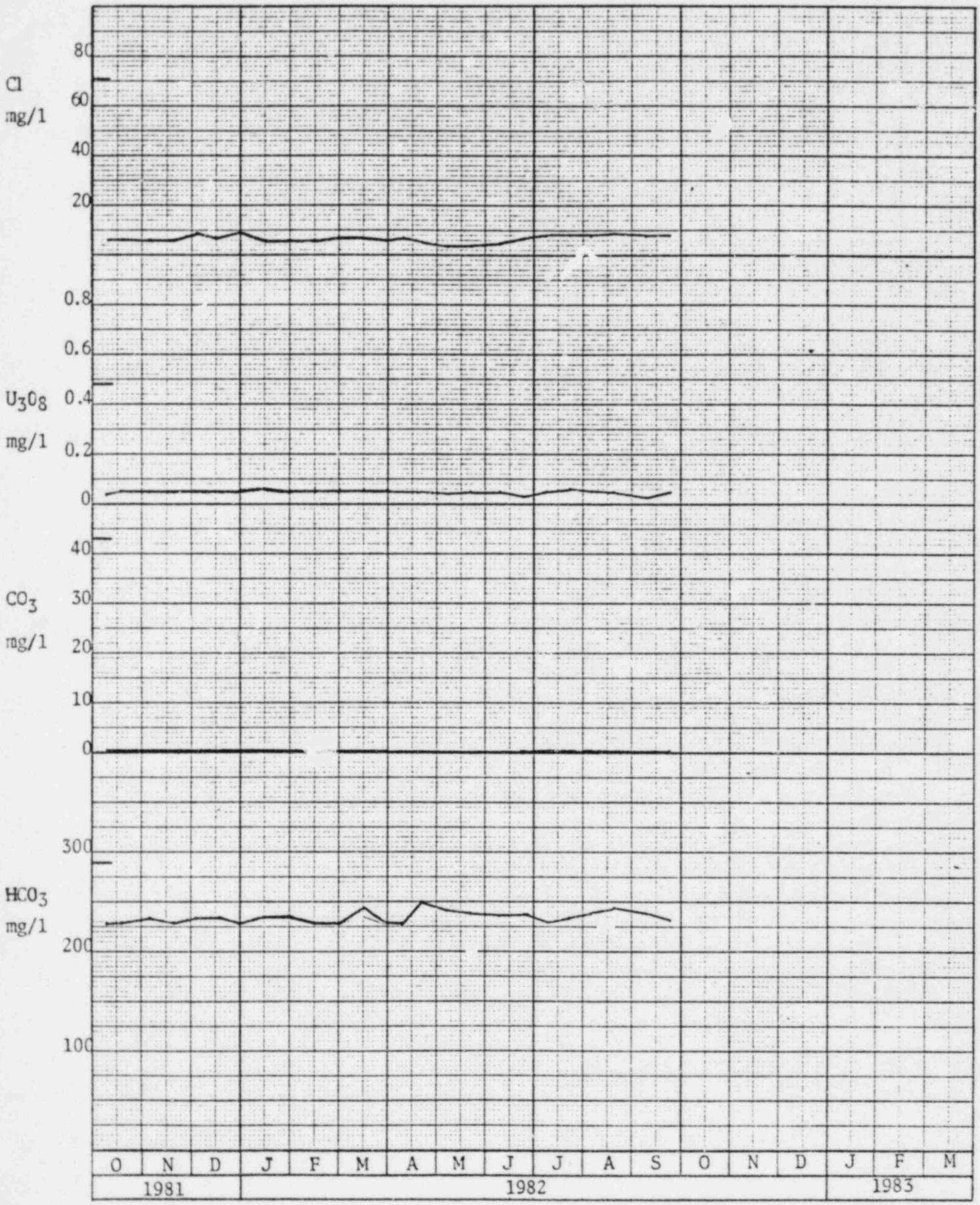
Q-Sand ISL Monitor Well QM-5



—UCL Value

Figure A-11

Q-Sand ISL Monitor Well QM-6



— UCL Value

Figure A-22

Q-Sand ISL Monitor Well QM-6

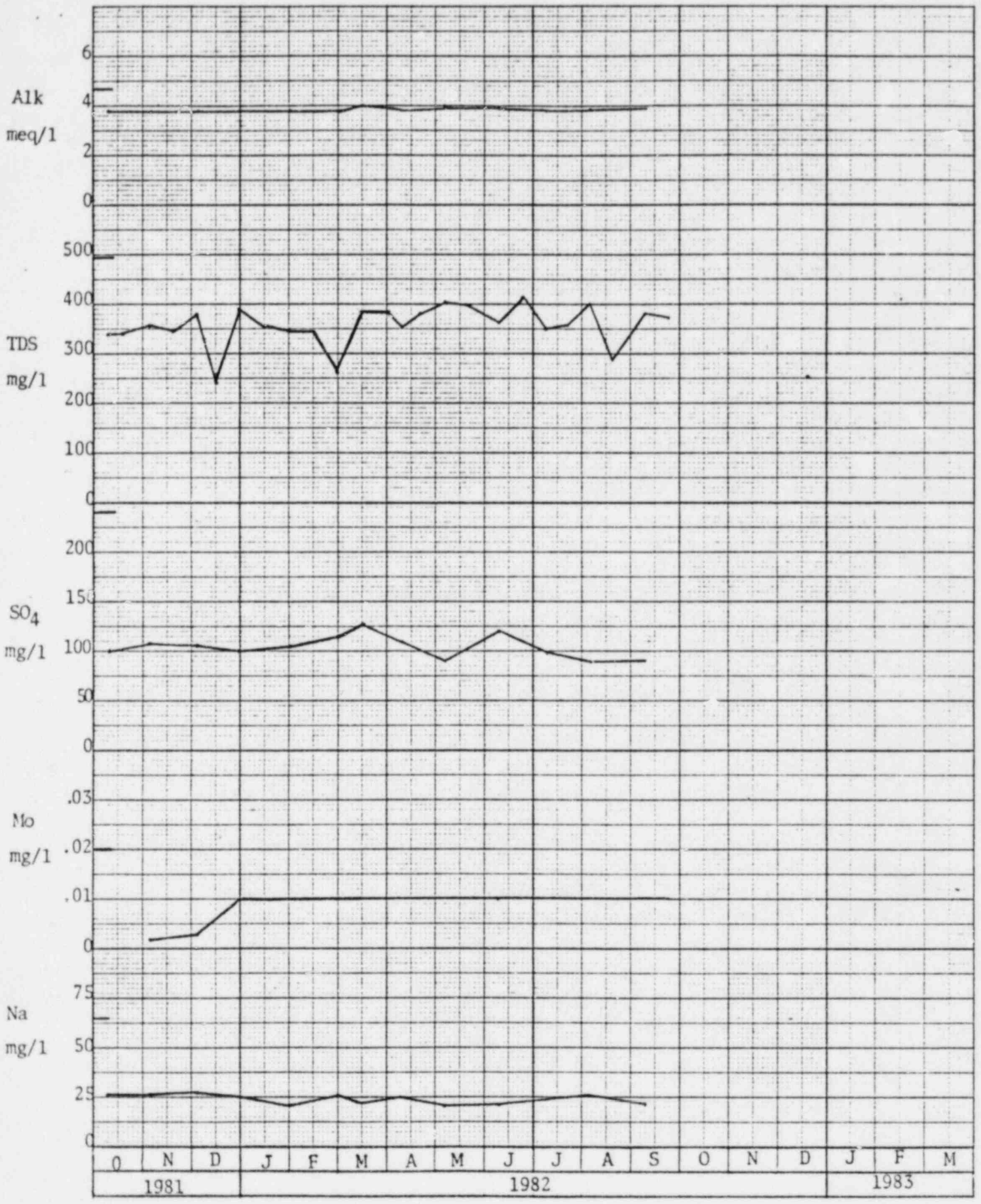
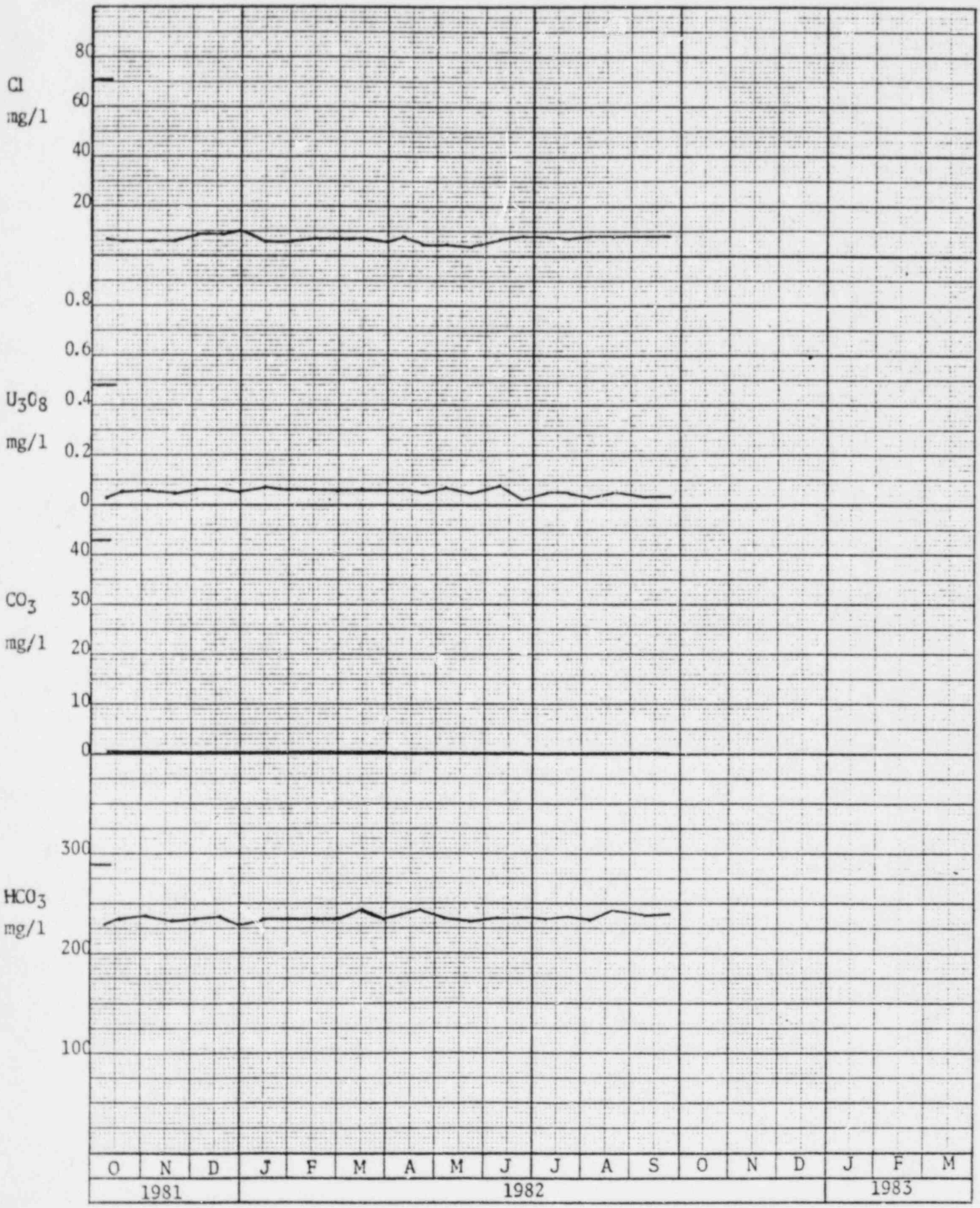


Figure A-13

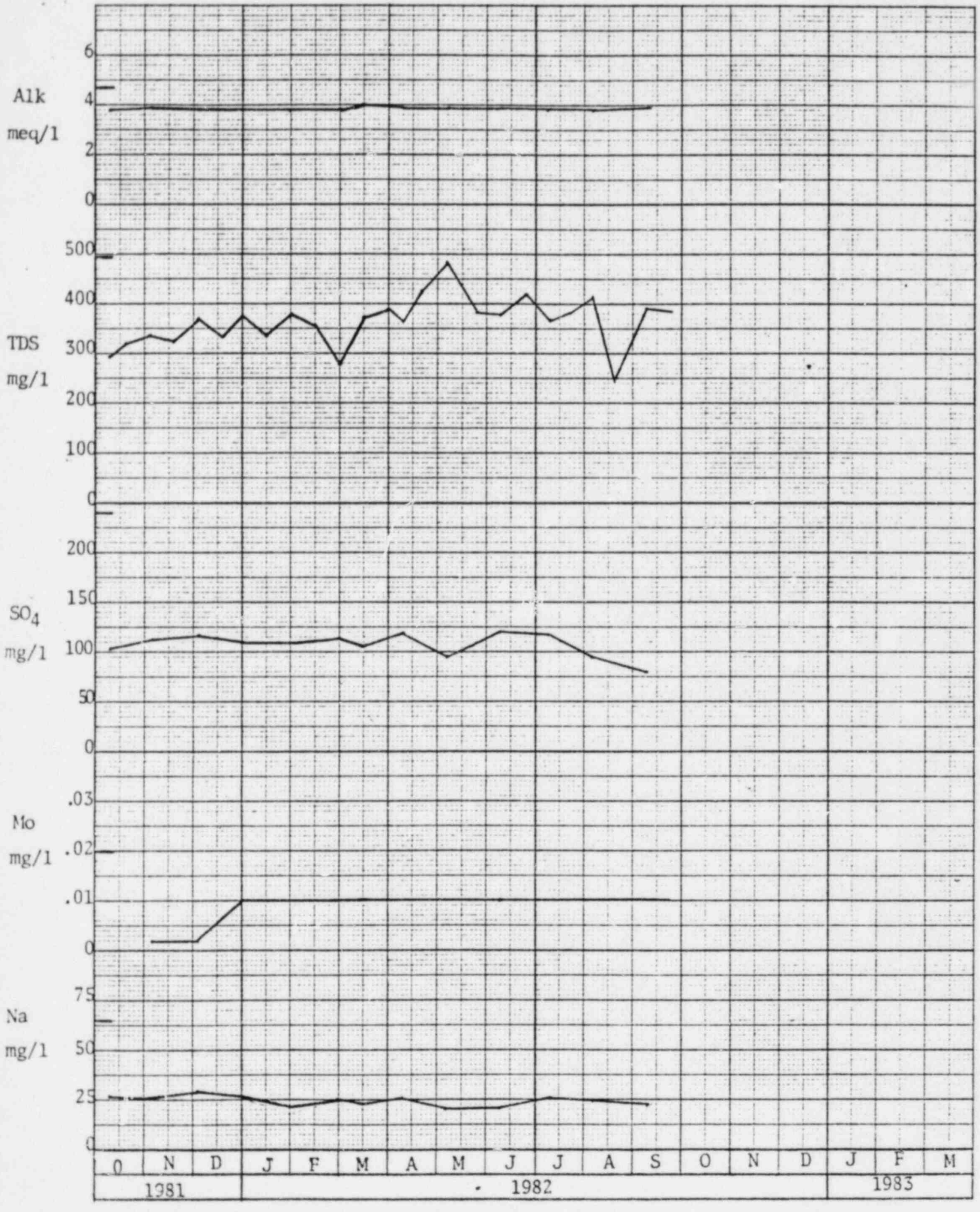
Q-Sand ISL Monitor Well QM-7



— UCL Value

Figure A-14

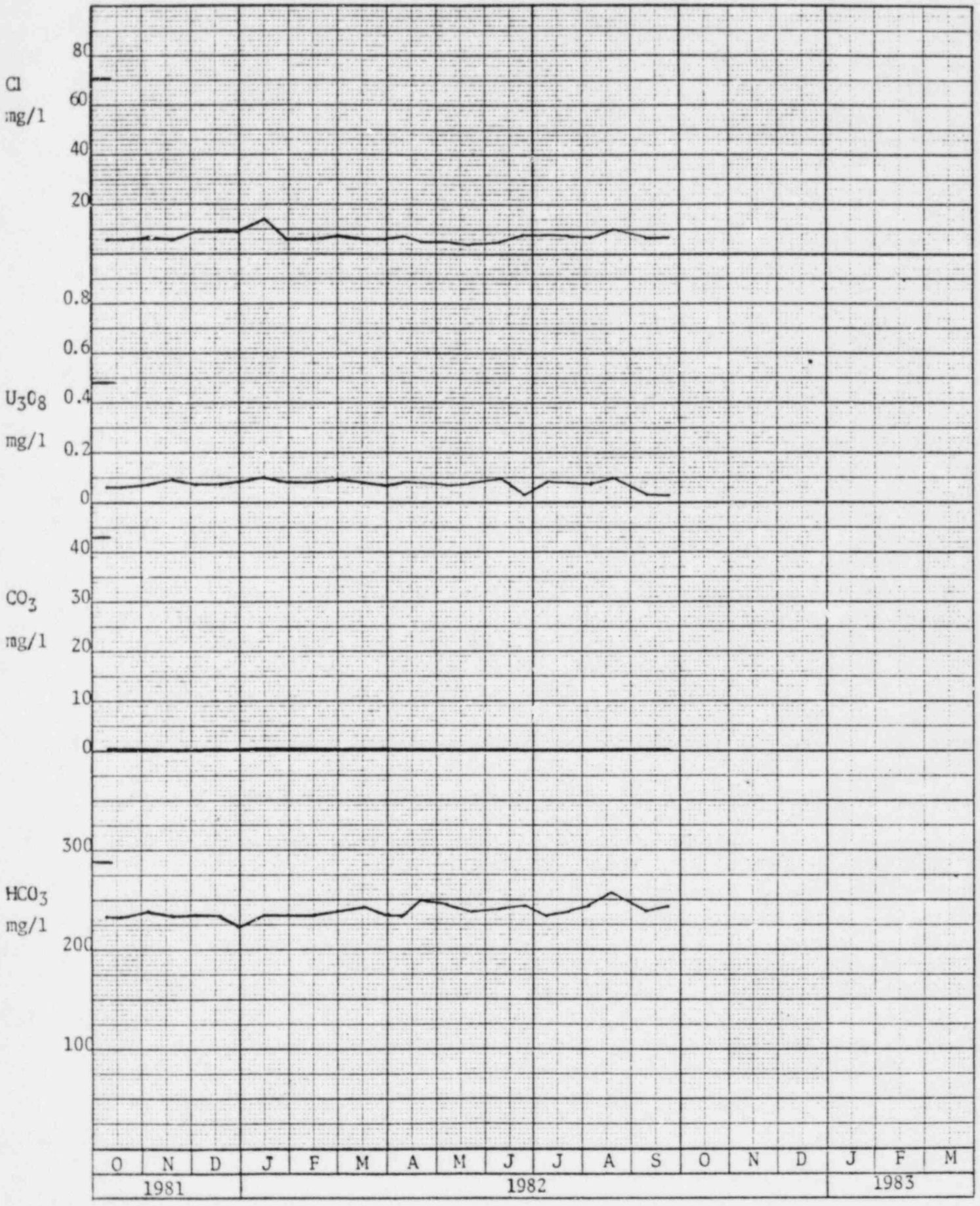
Q-Sand ISL Monitor Well QM-7



—UCL Value

Figure A-15

Q-Sand ISL Monitor Well QM-8



— UCL Value

Figure A-16

Q-Sand ISL Monitor Well QM-8

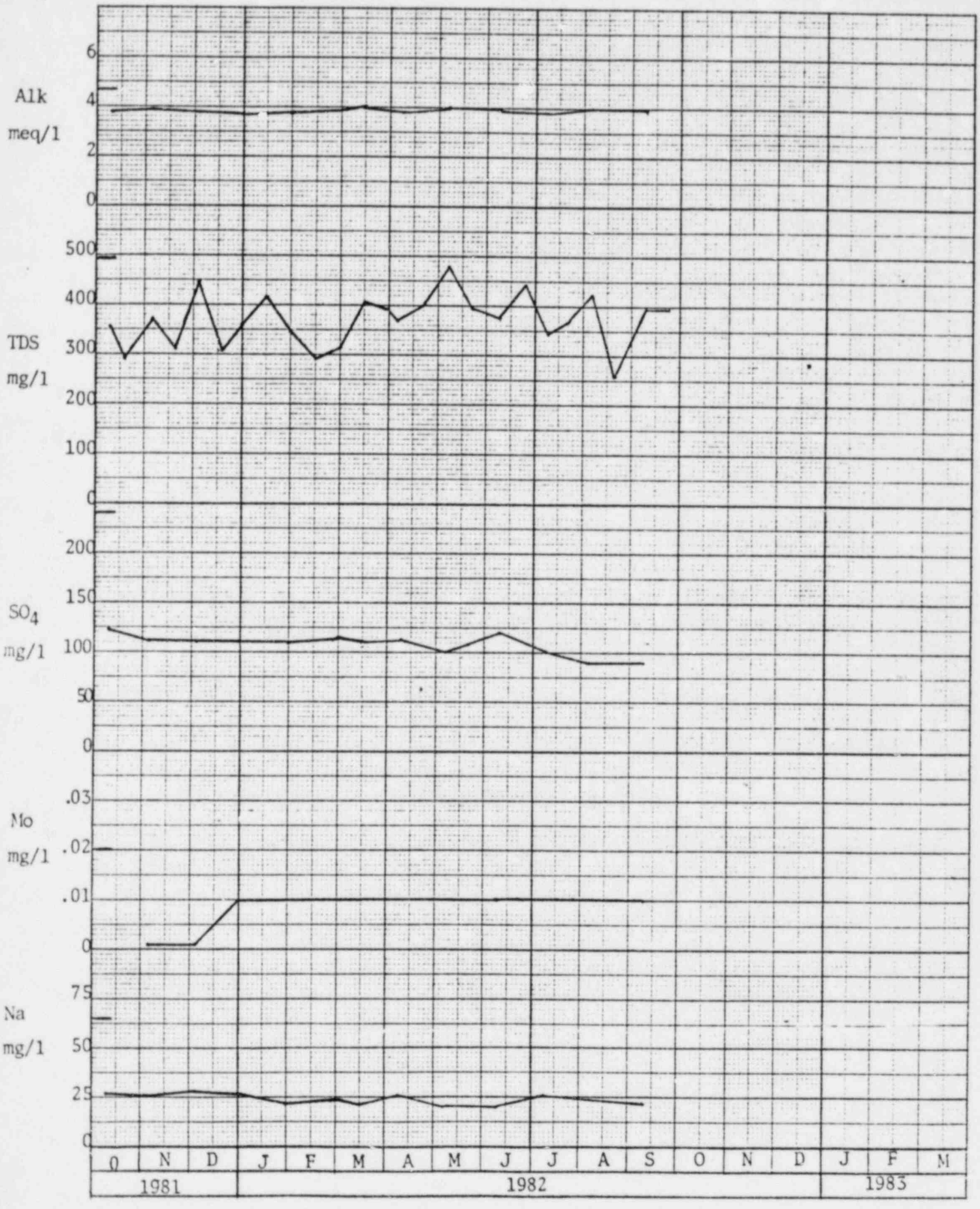
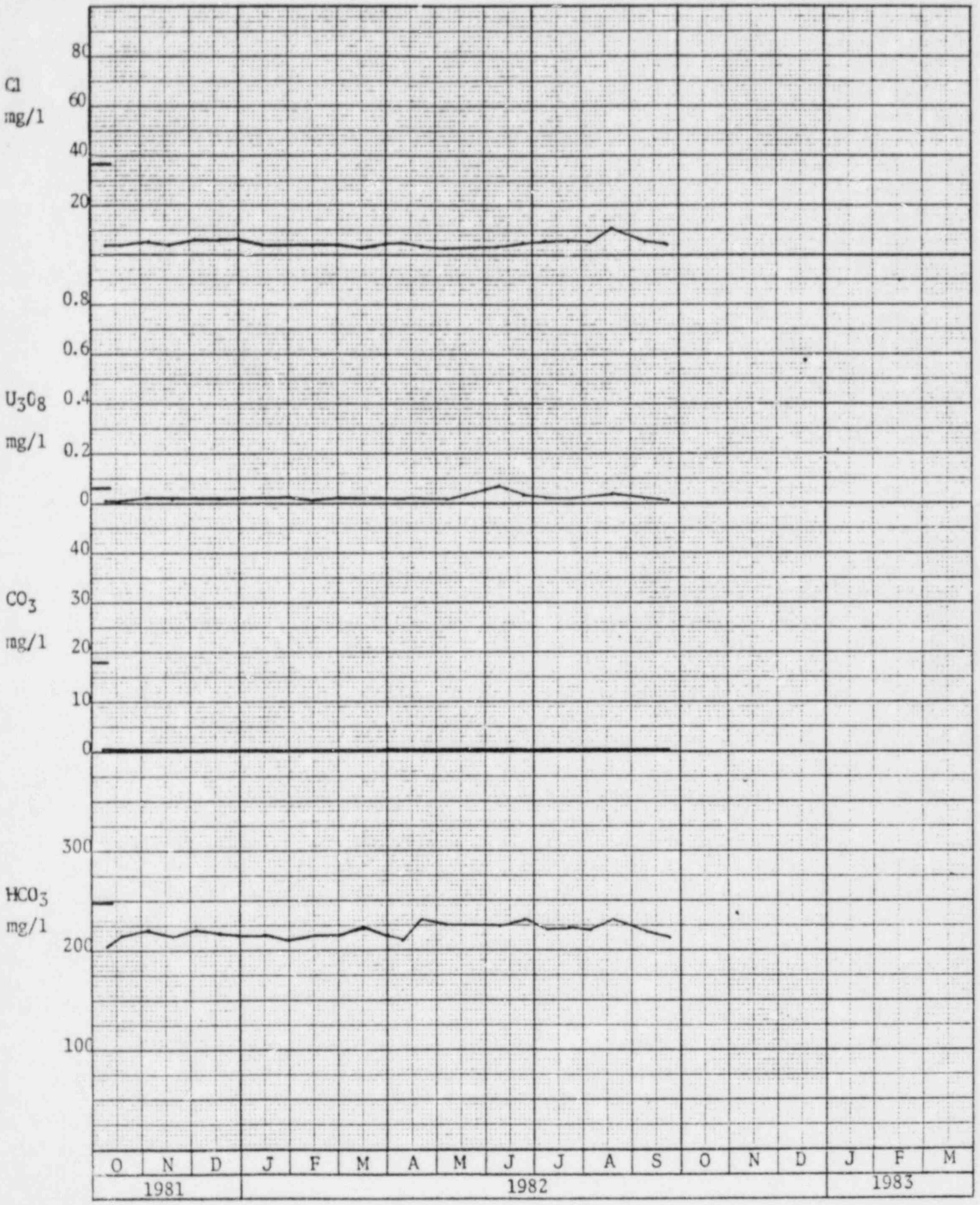


Figure A-17

Q-Sand ISL Monitor Well QMO-1



— UCL Value

Figure A-18

Q-Sand ISL Monitor Well QMO-1

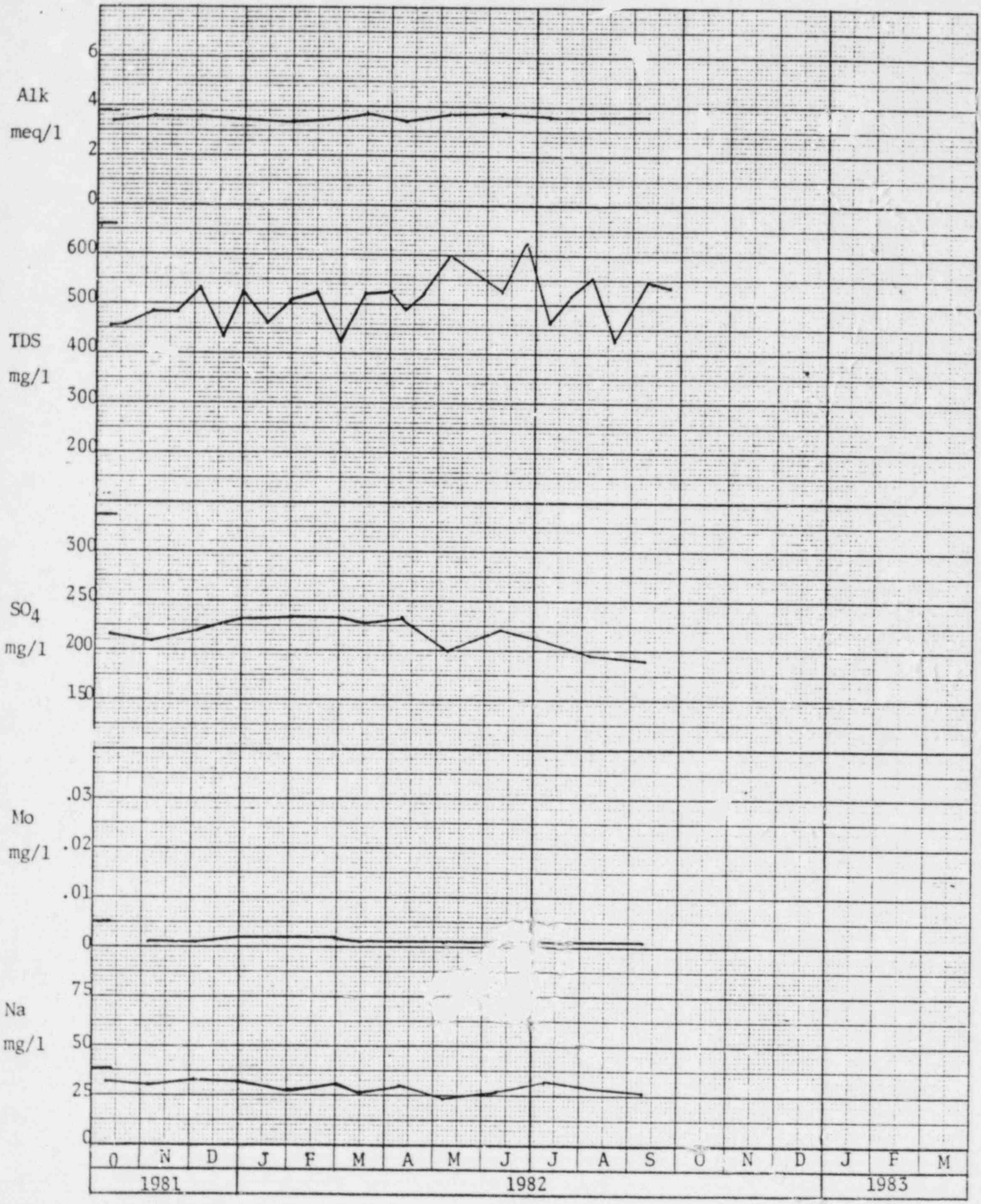
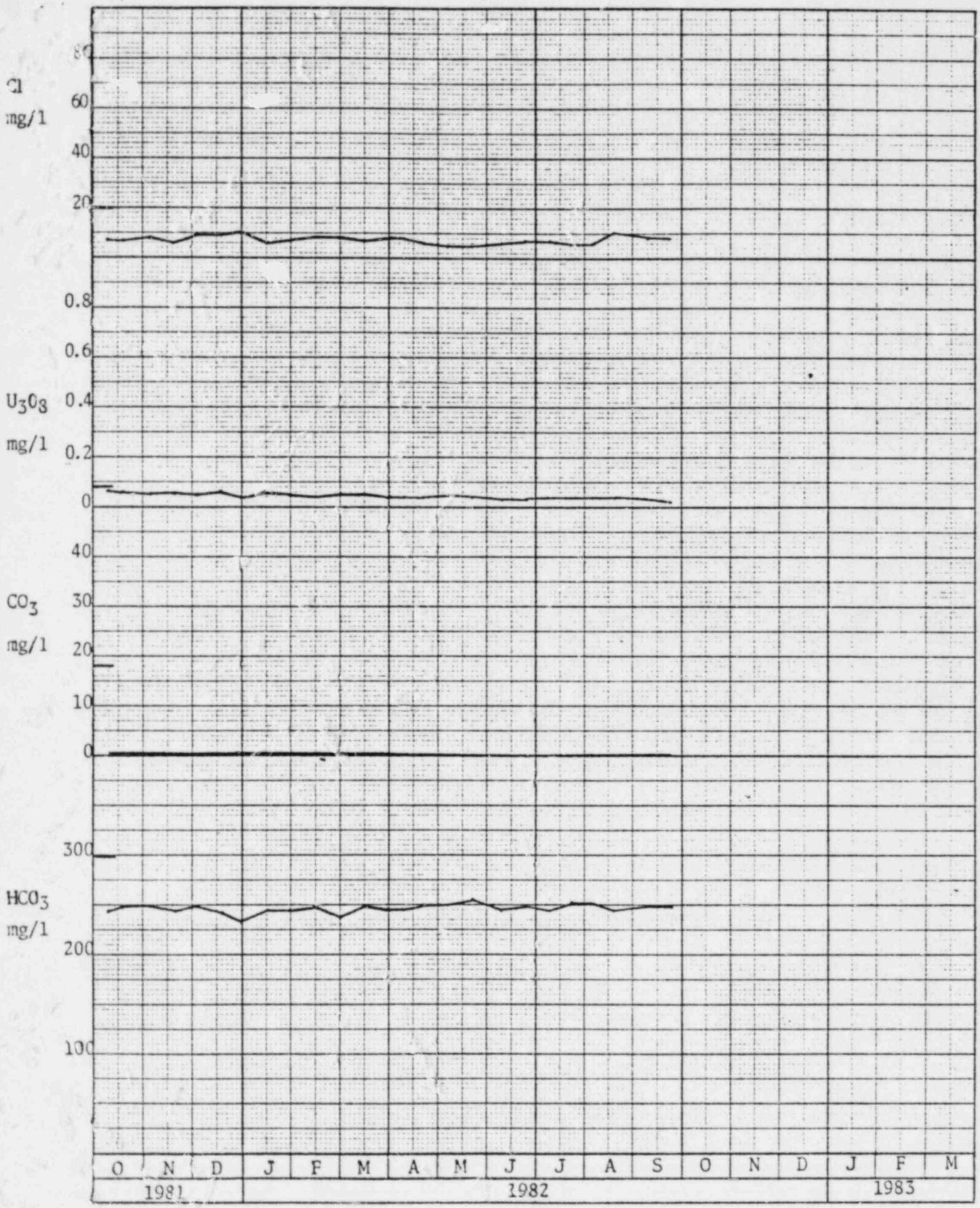


Figure A-19

Q-Sand ISL Monitor Well QMS-1



— UCL Value

Figure A-20

Q-Sand ISL Monitor Well QMS-1

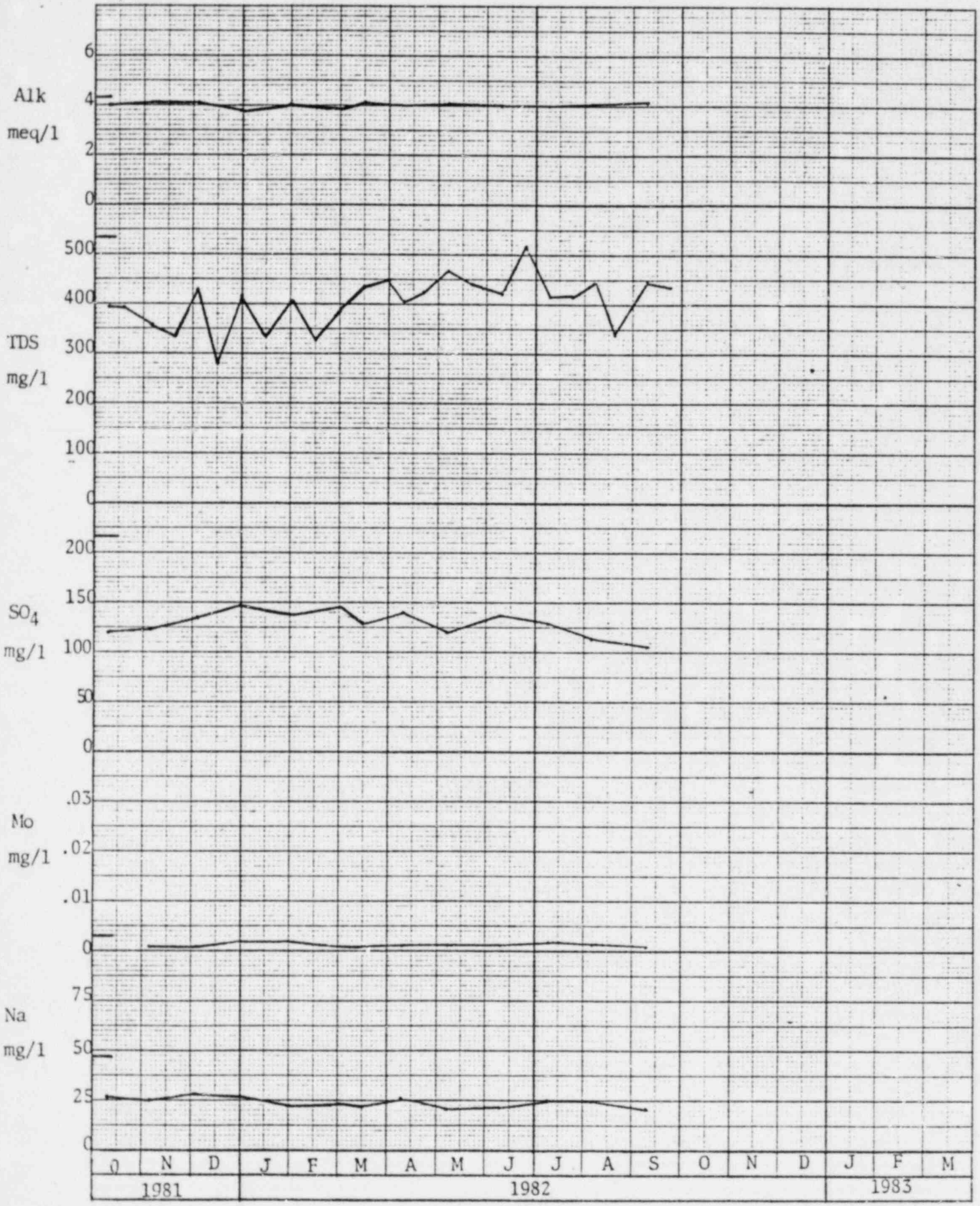
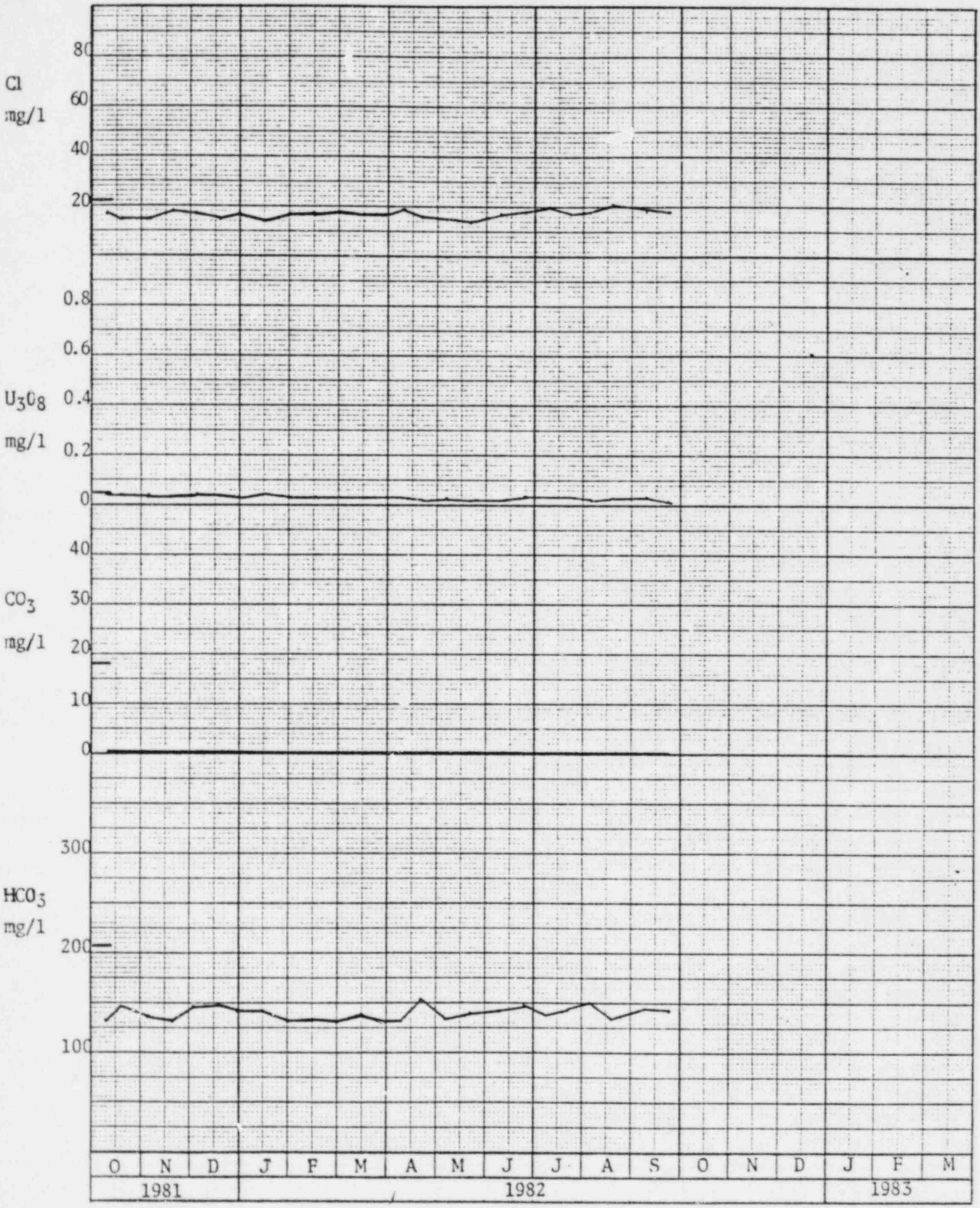


Figure A-21

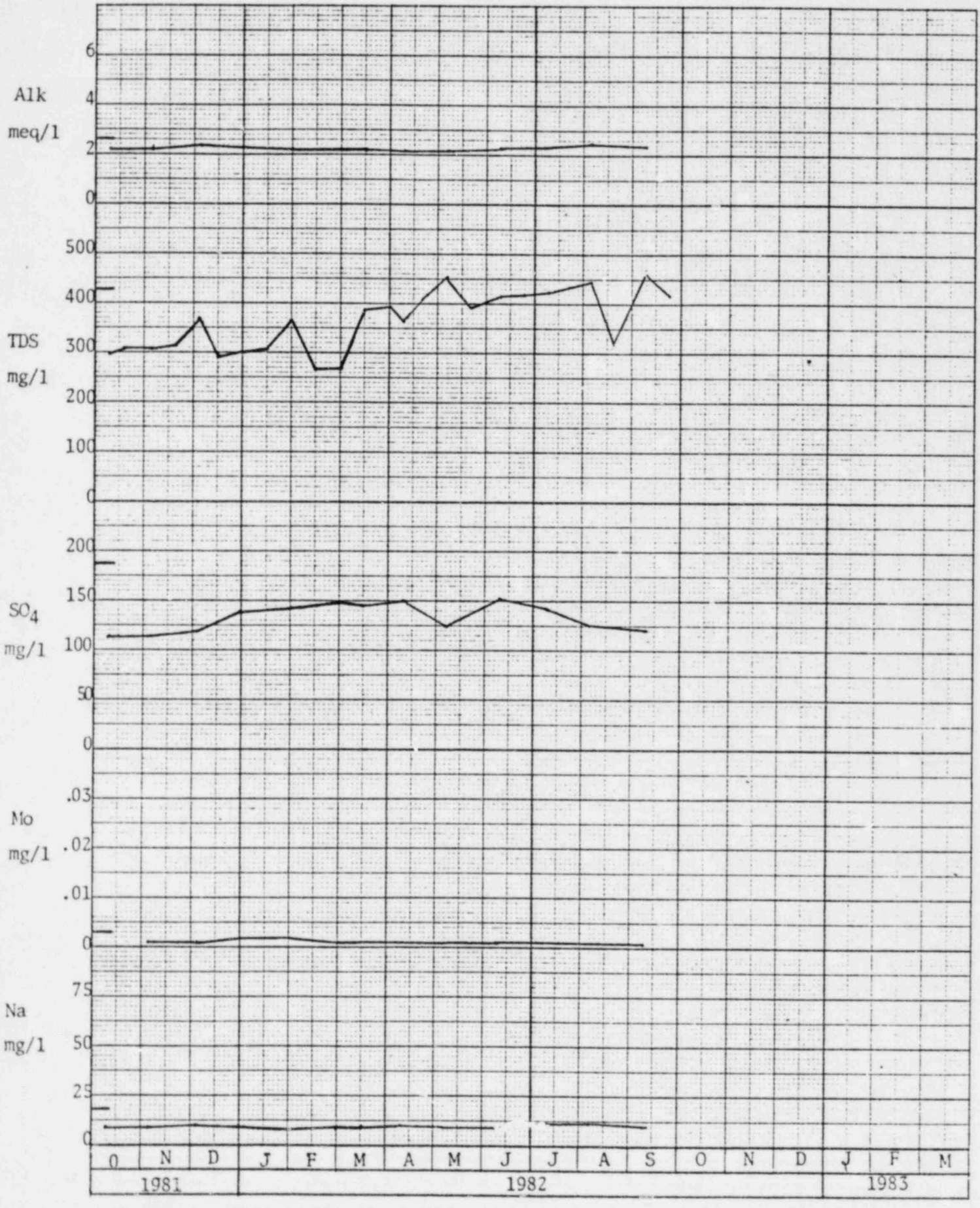
Q-Sand ISL Monitor Well QMW-1



— UCL Value

Figure A-22

Q-Sand ISL Monitor Well QMW-1



—UCL Value

ATTACHMENT B

MONITOR WELL FLUID LEVEL DATA

Monitor well fluid level data, barometric pressure data, and net production from the well field are presented in tabular form in Table B-1 and in graphical form on Figures B-1, B-2, and B-3. Background water levels are recorded in parentheses next to the well title. The fluid level data indicates that the cone of depression generated by the net production (bleed stream) from the Q-Sand aquifer typically varies between eight and thirteen feet of negative head at the ring of monitor wells.

The overlying and underlying aquifer monitor well data, Figure B-3, does not exhibit any significant trend or pattern.

The attached data indicates good confinement and control of the leach solutions, therefore, no significant changes in the excursion control program are anticipated at this time.

Table B-1

Q-Sand ISL Monitor Well Fluid Level Data

Feet Above MSL

Date	QM-1	QM-2	QM-3	QM-4	QM-5	QM-6	QM-7	QM-8
7-7-82	5162.6	5163.4	5161.2	5161.7	5161.1	5161.1	5162.7	5166.4
7-21-82	5162.5	5163.1	5162.0	5161.2	5161.1	5159.6	5159.9	5166.6
8-4-82	5163.1	5161.8	5161.2	5160.1	5161.3	5161.3	5163.2	5165.2
8-18-82	5162.4	5166.4	5162.7	5165.2	5165.8	5163.6	5163.5	5168.2
9-8-82	5163.8	5160.9	5161.2	5159.2	5160.5	5161.5	5160.3	5165.8
9-23-82	5166.2	5165.4	5165.0	5164.2	5163.7	5163.3	5163.3	5167.5

Table B-1

Date	QMO-1	QMS-1	QMW-1	Barometric Pressure In. Hg	Net Production gpm
7-7-82	4962.5	5239.8	5370.2	30.12	4.9
7-21-82	4961.7	5240.2	5371.6	30.02	3.1
8-4-82	4958.7	5237.6	5371.5	29.94	1.2
8-18-82	4958.2	5238.7	5369.1	29.94	0.4
9-8-82	4959.6	5238.6	5371.4	29.89	2.8
9-23-82	4956.5	5241.0	5373.3	29.84	3.5

Figure B-1

Q-Sand ISL Monitor Well Fluid Level Data

Feet Above MSL

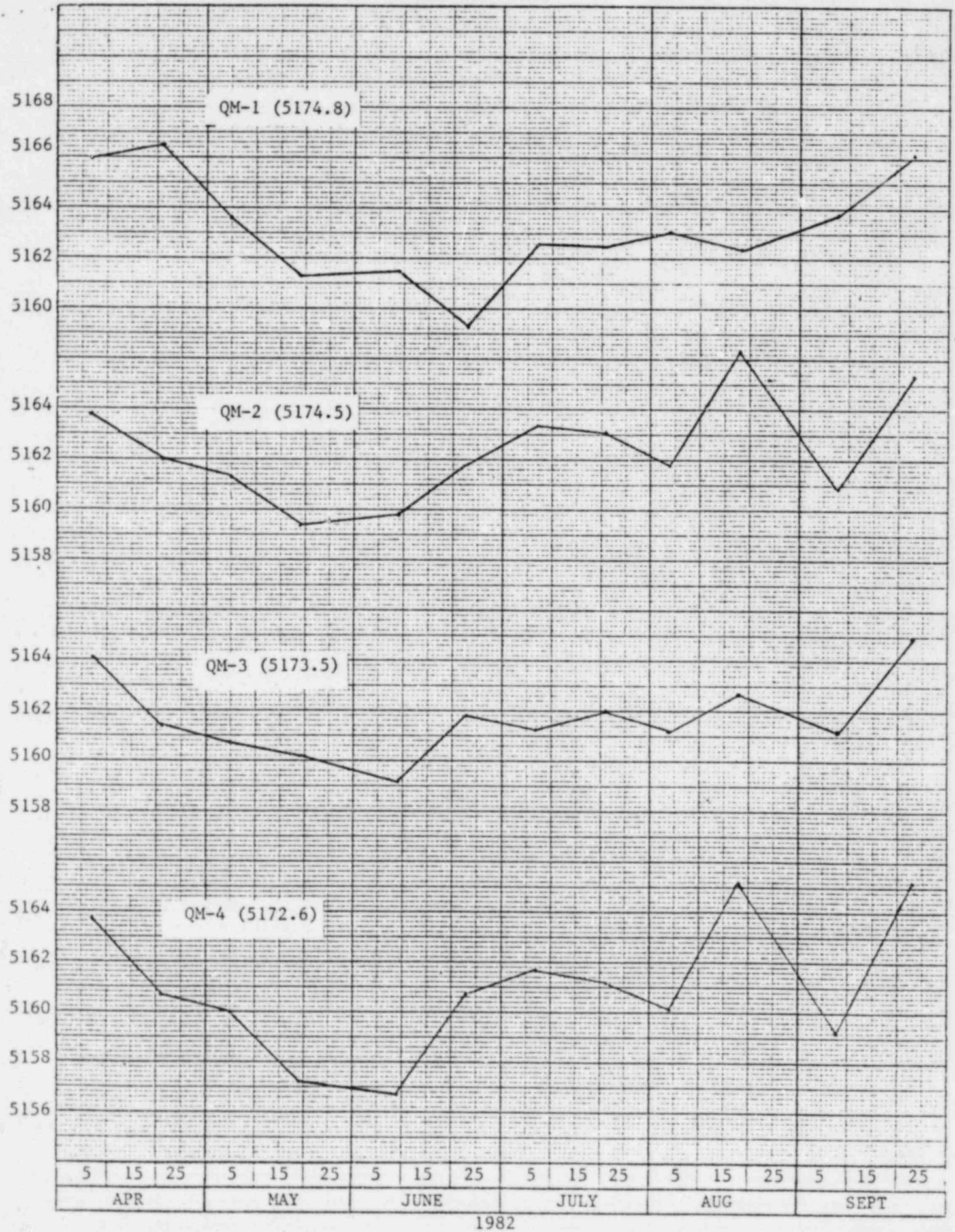


Figure B-2

Q-Sand ISL Monitor Well Fluid Level Data

Feet Above MSL

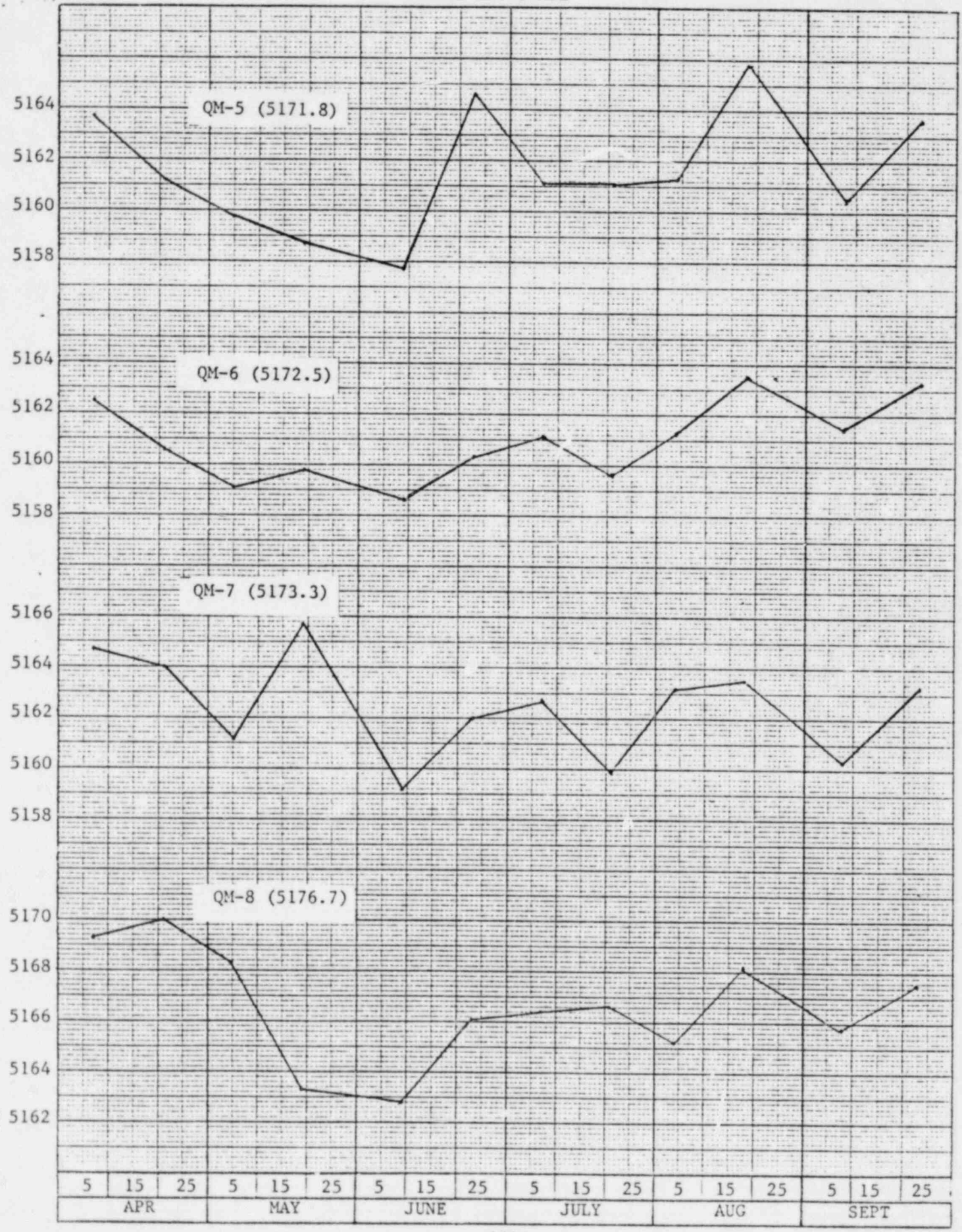


Figure B-3

Q-Sand ISL Monitor Well Fluid Level Data

Feet Above MSL

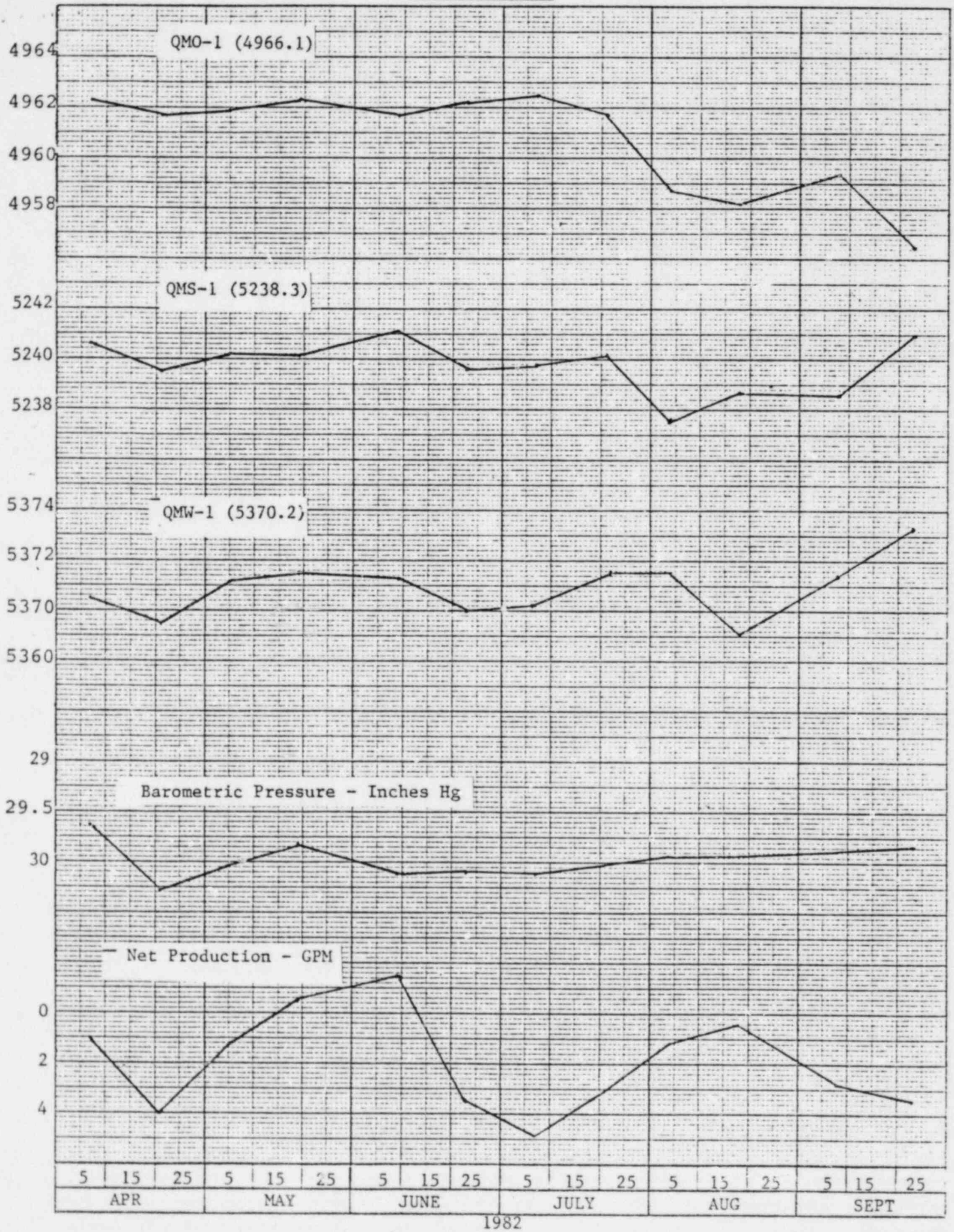
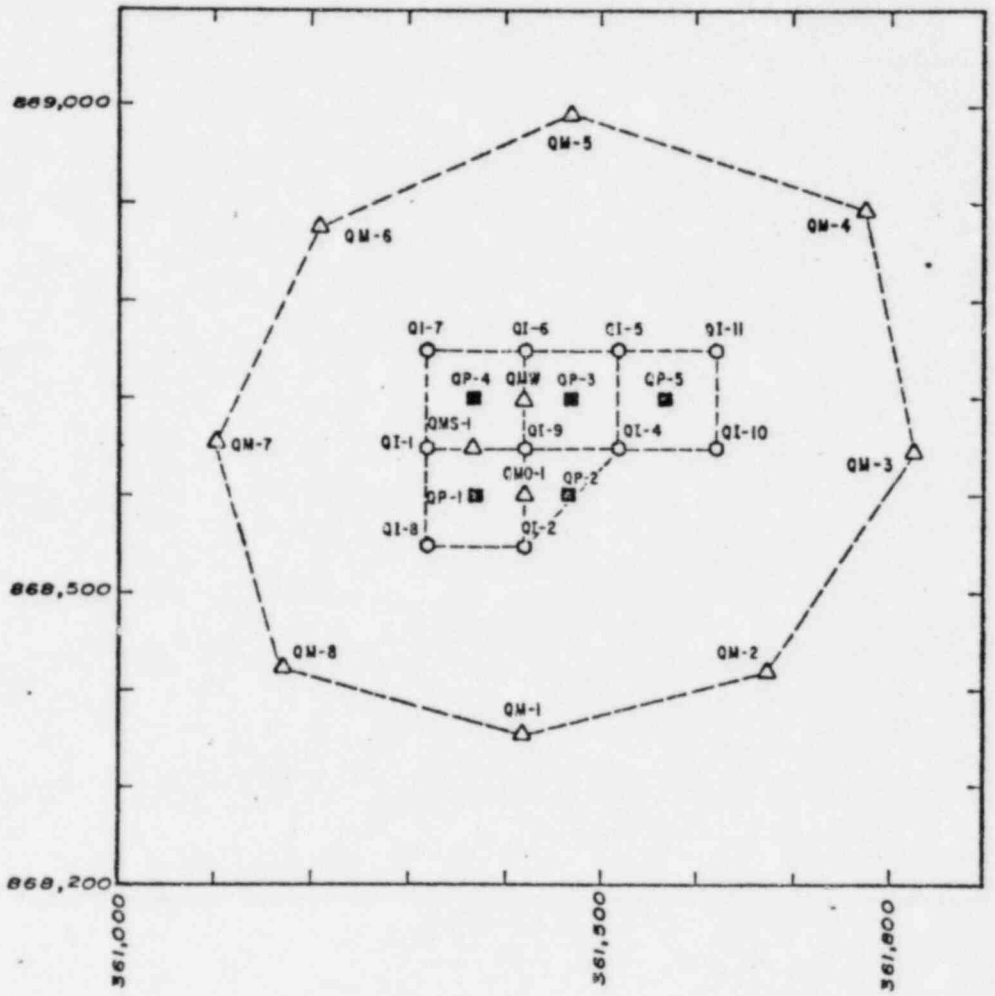


Figure B-4

IN SITU R&D PROJECT WELL PATTERN
"Q" SAND DEPOSIT
SECTION 36-T36N, R74W
CONVERSE COUNTY, WYOMING



LEGEND

△ MONITOR WELL

■ PRODUCTION WELL

○ INJECTION WELL

N

SCALE 1" = 200'

FEB. 1980
REV. JULY 1980

KERR-McGEE NUCLEAR CORPORATION

ATTACHMENT C

WATER QUALITY DATA

Analyses of the evaporation pond water samples are shown on Table C-1 and analyses of the bleed stream samples are shown on Table C-2.

Table C-1

Evaporation Pond Water Analyses
Q-Sand ISL Pilot

Parameter	Units	West Pond 9/9/82	East Pond 9/9/82
Chloride	g/L	36.9	51.7
Sodium	g/L	8.5	6.2
TDS	g/L	51.7	36.9
Arsenic	mg/L	0.64	<.001
Calcium	mg/L	281	265
Selenium	mg/L	0.02	<.001
Sulfate	mg/L	448	576
Uranium	mg/L	132	38
Alkalinity	meq/L	14.6	0.64
$Radium^{226}$	pCi/L	2,119	100
Gross Alpha	pCi/L	30,931	22,523
Gross Beta	pCi/L	26,757	5,315

Table C-2

Bleed Stream Water Analysis
Q-Sand ISL Pilot

Parameter[1]	7/26/82	8/19/82	9/9/82
Bicarbonate	1,395	1,330	939
Carbonate	ND	ND	ND
Chloride	317	310	460
Selenium	.03	.03	.06
Sodium	301	315	321
Sulfate	317	290	270
Uranium	15.93	.32	1.51
TDS	2,058	1,847	1,720
Alkalinity	22.9	21.8	15.4

(1) All units in mg/l except Alkalinity which is meg/L

ATTACHMENT D

NPDES PERMIT NO. WY-0022411

Attached are copies of the discharge monitoring reports submitted to the Wyoming Department of Environmental Quality for the 3rd Quarter, 1982. The report titled 5 RD "Q" Sand Project (Location 003) shows an average flow of 0.004 million gallons per day (MGD) or 2.5 gpm from the Q-Sand Project to the mine water treatment system. All parameters for this flow are well within the control limits.

KERR-McGEE NUCLEAR CORPORATION
P.O. BOX 1130 • GLENROCK, WYOMING 82637

October 26, 1982

Mr. John Wagner
Wyoming Department of
Environmental Quality
Water Quality Division
1111 East Lincolnway
Cheyenne, WY 82002

Re: Discharge Monitoring Reports
Permit WY 0022411

Dear Mr. Wagner:

Enclosed are the discharge monitoring reports for the Bill Smith Mine, Permit WY 0022411, for the quarterly report period ending October 1, 1982.

The pumps were removed from the underground mine and discharge of minewater ceased at discharge point 001 on September 21, 1982. Pumping from the shaft is expected to begin again at a much reduced rate in early November. At that time, water sampling at the discharge point will resume.

The "O" Sand project (4 RD) was completed prior to flooding the mine. Please inactivate discharge point 002 and we will omit it in future reports. Removal of equipment from the underground mine started on the first of September, and discharge point 002 was inaccessable after that date. Therefore, the last water samples were taken in August.

Sincerely,

Calvin D. Fletcher
Wyoming Uranium Operations

CDF/dw

Encl. Discharge Monitoring Reports

cc: U. S. Environmental Protection Agency
Suite 900
1860 Lincoln Street
Denver, CO 80295
Attn: Enforcement - Permits

Kerr-McGee Nuclear Corp.
P. O. Box 1120
Glenrock, WY

Bill Smith Ming

0022411 — PERMIT NUMBER

001 — OIS

1094 — NC

43°03'10" — LATITUDE

105°41'00" — LONGITUDE

REPORTING PERIOD FROM 82 07 01 (YEAR MO DAY) TO 82 10 01 (YEAR MO DAY)

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is occurring. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days. (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "___ hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

PARAMETER		QUANTITY (if used only) MINIMUM	QUANTITY AVERAGE	QUANTITY MAXIMUM	QUANTITY UNITS	NO. EX	CONCENTRATION (if used only) MINIMUM	CONCENTRATION AVERAGE	CONCENTRATION MAXIMUM	CONCENTRATION UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow in Conduit 50050	REPORTED	1.9	2.2	2.3	MGD		****	****	****				****
	PERMIT CONDITION	*****	****	****	MGD		****	****	****				****
Radium-226 Diss. (Dissolved) 09503	REPORTED	*****	****	****			0.05	1.6	4.9	PC/L	0	14/90	Co
	PERMIT CONDITION	*****	****	****			****	3.0	10.0	PC/L		1/30	Co
Zinc, Total (as Zn) 01092	REPORTED	*****	****	****			****	.003	.004	MG/L	0	4/90	Co
	PERMIT CONDITION	*****	****	****			****	0.5	1.0	MG/L		1/90	Co
Solids,Tot,SUS (Suspended) 00530	REPORTED	*****	****	****			LT 2.0	2.0	2.0	MG/L	0	12/90	Co
	PERMIT CONDITION	*****	****	****			****	20.0	20.0	MG/L		1/30	Co
Uranium, Total A0001	REPORTED	*****	****	****			0.31	0.41	0.60	MG/L	0	12/90	Co
	PERMIT CONDITION	*****	****	****			****	2.0	4.0	MG/L		1/30	Co
Oil & Grease (Visual) A0002	REPORTED	*****	****	****			None Visible				0	4/90	Vis
	PERMIT CONDITION	*****	****	****			****	****	10.0	MG/L		1/90	Vis
pH, Field 00400	REPORTED	*****	****	****			7.9	****	8.0	SU	0	3/90	Gr.
	PERMIT CONDITION	*****	****	****			6.0		9.0	SU		1/90	Gr
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER: Stevens Bill (LAST FIRST MI)

TITLE OF THE OFFICER: President (TITLE)

DATE: 82 10 25 (YEAR MO DAY)

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

ORIGINAL

Kerr-McGee Nuclear Corp.
P. O. Box 1120
Glenrock, WY 82637

4 RD

Bill Smith Mine J

NPDES	PERMIT NUMBER	OUTFALL	MINE	LATITUDE	LONGITUDE
WY	0022411	002	1094	43°03'10"	105°41'00"

REPORTING PERIOD FROM 82 07 01 (YEAR MO DAY) TO 82 10 01 (YEAR MO DAY)

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is occurring. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days (e.g., "3/7" is equivalent to 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "___ hr. composite") as applicable. If frequency was continuous, enter "N/A".
6. Appropriate signature is required at bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail Original to office specified in permit.

PARAMETER		QUANTITY MINIMUM	QUANTITY AVERAGE	QUANTITY MAXIMUM	QUANTITY UNITS	NO. EX.	CONCENTRATION MINIMUM	CONCENTRATION AVERAGE	CONCENTRATION MAXIMUM	CONCENTRATION UNITS	NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow in Conduit	REPORTED	0	.0007	.002	MGD		****	****	****			Dy Tot	****
50050	PERMIT CONDITION	****	****	0.12	MGD		****	****	****			Dy Tot	****
	REPORTED	****	****	****			31	33	35	MG/L	0	2/60	Gr
Sodium	PERMIT CONDITION	****	****	****			****	****	1660	MG/L		1/90	Gr
	REPORTED	****	****	****			210	215	220	MG/L	0	2/60	Gr
Bicarbonate	PERMIT CONDITION	****	****	****			****	****	3000	MG/L		1/90	Gr
	REPORTED	****	****	****			4	5	6	MG/L	0	2/60	Gr
Chloride	PERMIT CONDITION	****	****	****			****	****	500			1/90	Gr
	REPORTED	****	****	****			LT .002	LT .002	LT .002	MG/L	0	1/90	Gr
Arsenic	PERMIT CONDITION	****	****	****			****	****	****			1/90	Gr
	REPORTED	****	****	****			LT .002	LT .002	LT .002	MG/L	0	1/90	Gr
Selenium	PERMIT CONDITION	****	****	****			****	****	****			1/90	Gr
	REPORTED	****	****	****			7.5	****	7.5	SU		1/90	Gr
pH, Field	PERMIT CONDITION	****	****	****			6.0		9.0	SU		1/90	Gr
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE
Stevens Bill	President	82 10 25
LAST FIRST MI	TITLE	YEAR MO DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

Bill Stevens
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Form 6-74

ORIGINAL

Kerr-McGee Nuclear Corp.
P. O. Box 1120
Glenrock, WY 82637

CORRECTED COPY

Bill Smith Mine

WY | 0022411 (PERMIT NUMBER) | 003 (OUT) | 1094 (MI) | 43°03'10" (LATITUDE) | 105°41'00" (LONGITUDE)

REPORTING PERIOD FROM 8 | 20 | 7 | 01 (YEAR | MO | DAY) TO 8 | 21 | 00 | 1 (YEAR | MO | DAY)

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual (not calendar) time unless otherwise specified. "MAXIMUM" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as the analyses were done (e.g., "1/7" is equivalent to 3 analyses performed every 7 days). If continuous, enter "Cont".
5. Specify sample type ("grab" or "___ hr. composite") as applicable. If frequency was continuous, enter "NA".
6. Appropriate signature is required on bottom of this form.
7. Remove carbon and retain copy for your records.
8. Fold along dotted lines, staple and mail original to office specified in permit.

PARAMETER		QUANTITY (lbs/day) MINIMUM	QUANTITY (lbs/day) AVERAGE	QUANTITY (lbs/day) MAXIMUM	QUANTITY UNITS	NO. EX.	CONCENTRATION (mg/l) MINIMUM	CONCENTRATION (mg/l) AVERAGE	CONCENTRATION (mg/l) MAXIMUM	CONCENTRATION UNITS	NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow in Conduit 50050	REPORTED	.003	.004	.005	MGD	0	****	****	****			0/1 Mo	AAAA
	PERMIT CONDITION	****	****	0.12	MGD		****	****	****			0/1 Mo	AAAA
Sodium	REPORTED	****	****	****			301	313	321	MG/L	0	3/90	Gr
	PERMIT CONDITION	****	****	****			****	****	1000	MG/L		3/90	Gr
Bicarbonate	REPORTED	****	****	****			939	1221	1395	MG/L	0	3/90	Gr
	PERMIT CONDITION	****	****	****			****	****	3000	MG/L		3/90	Gr
Chloride	REPORTED	****	****	****			310	362	460	MG/L	0	3/90	Gr
	PERMIT CONDITION	****	****	****			****	****	500			3/90	Gr
Arsenic	REPORTED	****	****	****			0.013	0.013	0.013	MG/L	0	1/90	Gr
	PERMIT CONDITION	****	****	****			****	****	****			1/90	Gr
Selenium	REPORTED	****	****	****			0.03	0.04	0.06	MG/L	0	1/90	Gr
	PERMIT CONDITION	****	****	****			****	****	****			1/90	Gr
pH, Field	REPORTED	****	****	****			7.63	****	7.63	SU	0	1/90	Gr
	PERMIT CONDITION	****	****	****			6.0		9.0	SU		1/90	Gr
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE
Stevens Bill	President	8 2 10 27
LAST FIRST MI	TITLE	YEAR MO DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

Bill Stevens
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

ORIGINAL