0007

#5 - SEPTEMBER -

EarthFax Engineering, Inc.
Engineers/Scientists

October 15, 1985 C-30

Mr. Dave Hooper
Reclamation Hydrologist
Utah Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Subject: Contract 85-5323
September Monthly Report

Dear Dave:

Project work on Contract No. 85-5323 continues to progress well. During the latter part of September and the first part of October, we changed charts on the water level recorders on Chalk Creek and the intermittent stream, changed the rain gage chart, collected streamflow data from Chalk Creek, and collected water samples from both the Morby and Boyer wells.

Stream Gaging Stations

Charts were changed on the Chalk Creek and intermittent stream water level recorders. Copies of the charts are included in Appendix A. As noted, no flow occurred in the intermittent stream during the previous month.

Although the pens smeared on the charts, a pen line id discernable on the originals. It is postulated that high humidity in the boxes surrounding the recorders is causing the pens to smear (the original pen type was replaced in August). Holes will be drilled in the boxes to allow better air circulation to prevent future smearing.

Streamflow measurements were collected from the upper and lower Chalk Creek stations on October 12, 1985. The field data from these measurements are included in Appendix A.

Recording Rain Gage

The chart on the recording raingage was changed and the bucket emptied during the September field trip. A copy of the chart is included in Appendix B. Three major rainfall events occurred during the previous month.

Water Quality Samples

Water quality samples were collected from the Boyer and Morby wells on October 12, 1985. Field water quality data are included in Appendix C. The samples were submitted to Chemical and Mineralogical Services for analyses.

Ephemeral Streams

No flow occurred in the ephemeral streams during the preceding month.

Future Field Trips

The seep and spring survey will be re-conducted on October 24th and 25th to determine seasonal variations in the mine plan and adjacent areas. During this period, channel samples will also be collected from appropriate outcrops to determine the physical and chemical characteristics of the overburden and underburden.

Our next regular monthly field trip is scheduled for October 30, 1985. If you have any questions or need additional information, please call.

Sincerely,

Richard B. White for

Randolph B. Gainer
Project Manager

Enclosures

EarthFax Engineering, Inc.
6542 South 670 West
Murray, Utah 84123

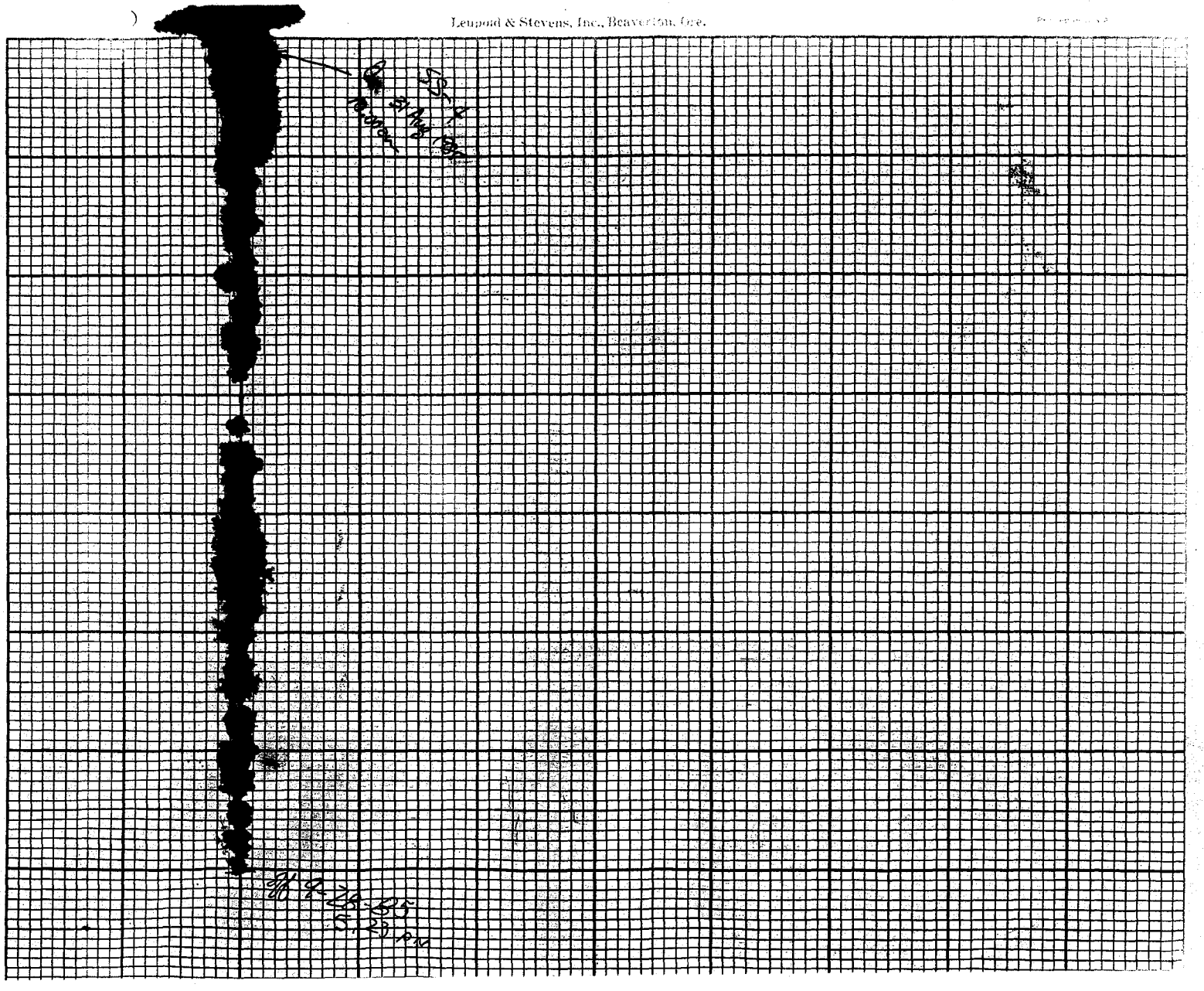
INVOICE NO. 5

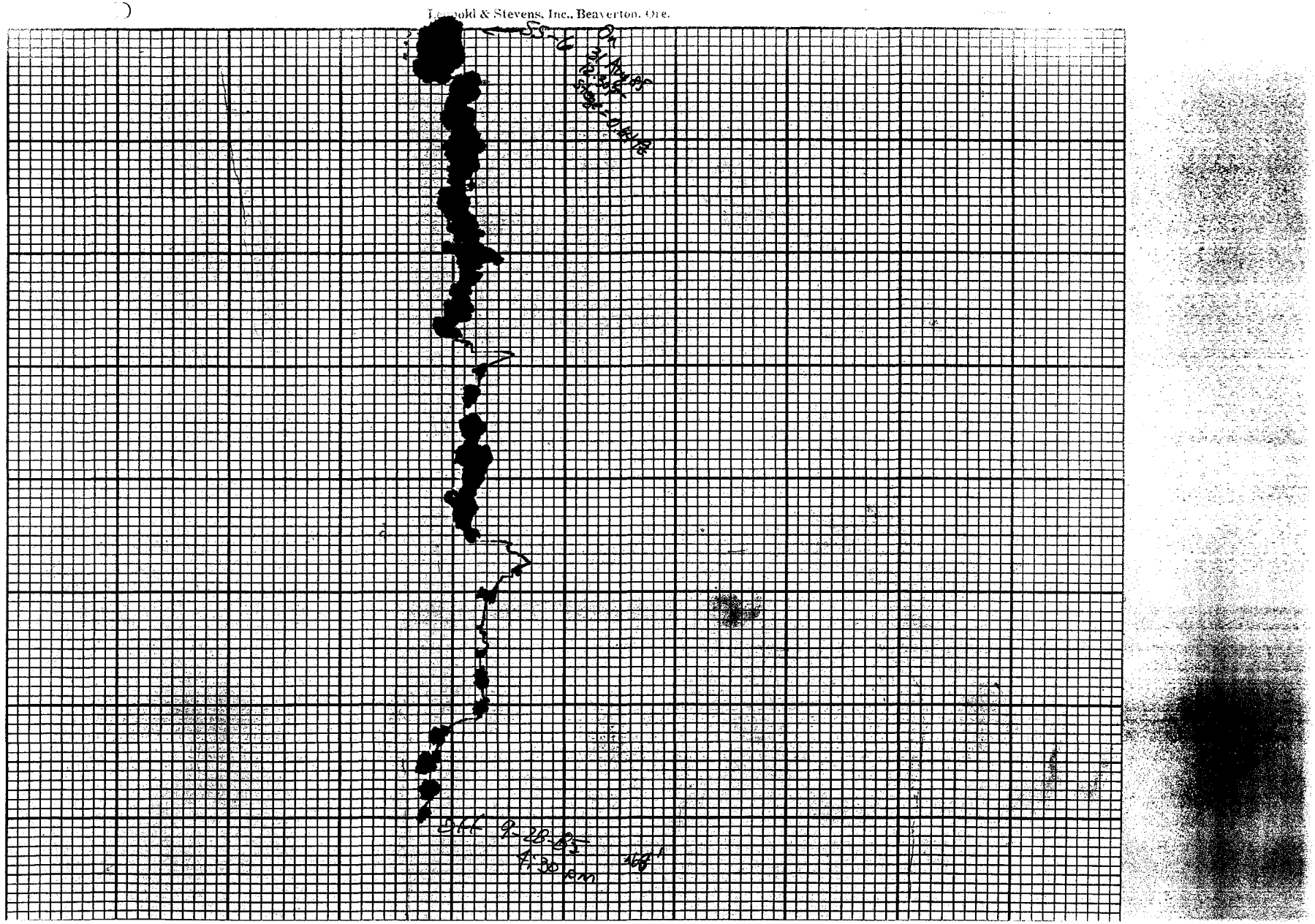
Client: Utah Division of Oil, Gas & Mining
Contract No.: 85-5323
EarthFax Project No.: C-30

Labor:		
Randolph B. Gainer	12.0 hr @ $30.00	$360.00
Daniel N. Gainer	6.0 hr @ $19.00	114.00
Expenses:		
Recorder Rental (2 @ $55.00)		110.00
Total		$584.00

APPENDIX A

Streamflow Data





12 Oct 1985

55-6

Width (ft)	Rev/min Clicks	Time	Depth	V (ft/s)	Q (cfs)
3	0		.8	0.00	0.00
3	3	70 sec	.35	0.11	0.12
3	10	40 sec	.5	0.56	0.84
3	25	45 sec	.65	1.23	2.40
2	15	55 sec	.8	0.62	1.49
3	40	44 sec	.7	2.00	4.20
3	50	55 sec	.7	2.00	4.20
3	50	40 sec	.65	2.74	5.34
3	40	40 sec	.5	2.20	3.30
3	50	40 sec	.7	2.74	5.75

TOTAL Q = 27.64 cfs

Stage .68'

12 Oct 1985

SS-5

Width (ft)	(Rev) Clicks	Time Sec	Depth (ft)	V (ft/s)	Q (cfs)
2	40	50 sec	.5	1.76	1.76
2	40	50 sec	.6	1.76	2.11
2	40	41 sec	.6	2.15	2.58
2	40	46 sec	.6	1.44	1.73
2	40	45 sec	.5	1.96	1.96
2	40	50 sec	.4	1.76	1.41
2	30	40 sec	.4	1.65	1.32
2	25	45 sec	.4	1.23	0.98
2	50	45 sec	.6	2.44	2.93

TOTAL Q = 16.78 cfs

APPENDIX B

Rainfall Data

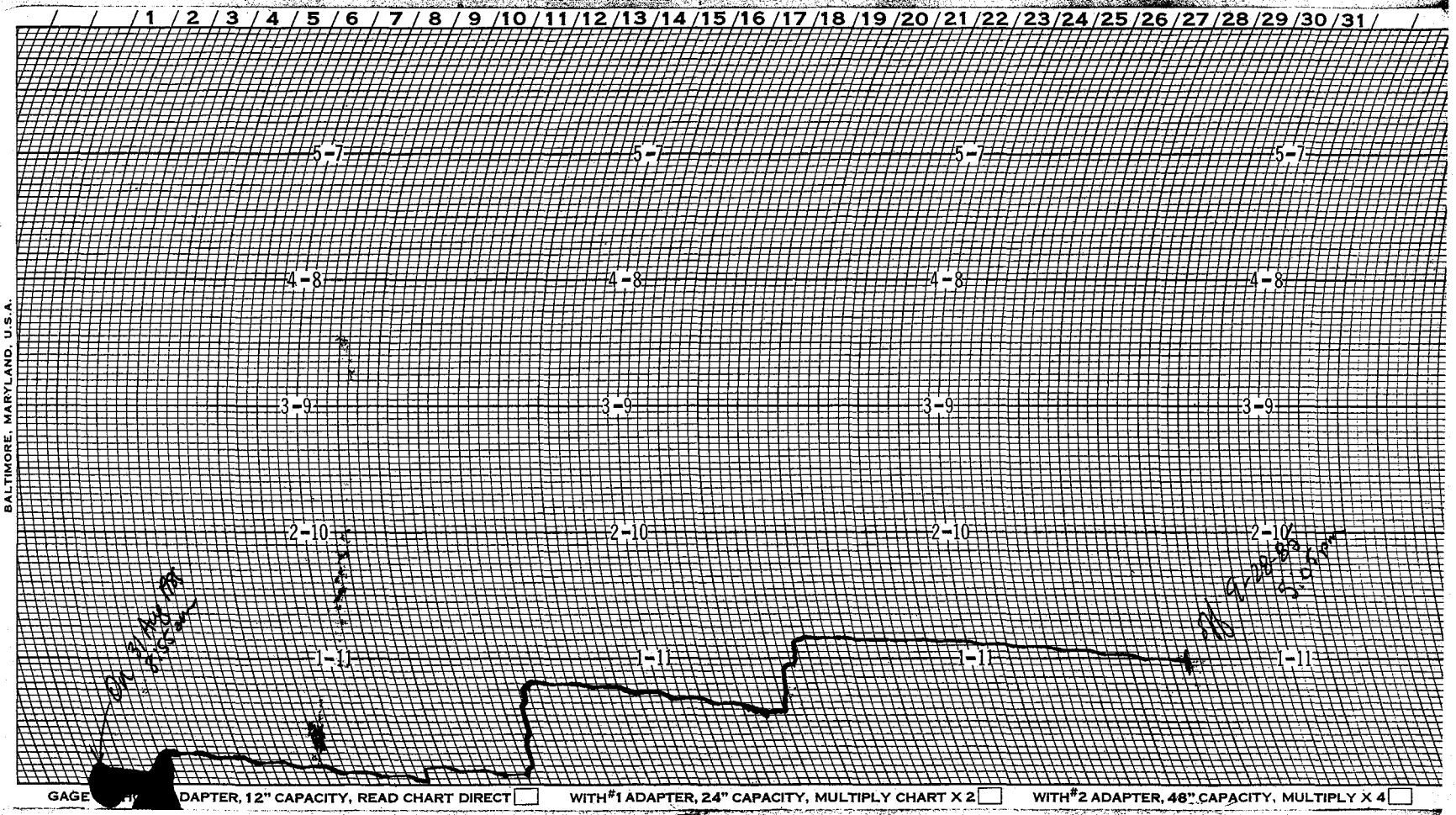


CHART NO. 15668
12-INCH DUAL TRAVERSE MONTHLY-861 HRS.
UNIVERSAL RAIN GAGE

BELFORT INSTRUMENT COMPANY
BALTIMORE, MARYLAND, U.S.A.

PRINTED IN U.S.A.

APPENDIX C

Water Quality Data