

	1778.000	176.500	1771.000	172.600	1778.000	171.900	1800.000	170.900	1900.000
	2000.000	174.500	2100.000	173.700	2200.000	173.000	2300.000	173.700	2400.000
	2500.000	173.000	2600.000	180.000	2830.000	183.500	2865.000	0.000	0.000
	0.000	0.060	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.000	9.100	9.100	9.100	9.100	935.000	1760.000
	3.110	1380.000	1735.000	0.000	0.000	0.000	0.000	0.000	0.000

** CIA-12 TRSF & EXL WITH NET GR UPPER ELEV NCB **

	30.000	1680.000	1710.000	45.000	45.000	45.000	0.000	0.000	0.000
	930.000	173.900	1000.000	172.700	1035.000	172.300	1045.000	172.300	1100.000
GR	1200.000	172.300	1300.000	172.500	1400.000	173.500	1500.000	172.800	1600.000
GR	1680.000	171.000	1681.000	171.200	1695.000	171.600	1708.000	172.000	1710.000
GR	1742.000	175.600	1745.000	176.500	1771.000	172.600	1778.000	171.900	1800.000
	1900.000	173.600	2000.000	174.500	2100.000	173.700	2200.000	173.000	2300.000
	2400.000	173.500	2500.000	173.000	2600.000	180.000	2800.000	187.300	2900.000
ET	0.000	0.000	0.000	9.100	9.100	9.100	9.100	935.000	2210.000
ET	0.000	3.110	1380.000	1870.000	0.000	0.000	0.000	0.000	0.000

** CIA-12 EXT ON LOR **

	30.000	1680.000	1710.000	320.000	320.000	320.000	0.000	0.000	0.000
	930.000	173.900	1000.000	172.700	1035.000	172.300	1045.000	172.300	1100.000
GR	1200.000	172.300	1300.000	172.500	1400.000	173.500	1500.000	172.800	1600.000
GR	1680.000	172.400	1681.000	172.600	1695.000	173.000	1708.000	173.400	1710.000
GR	1742.000	175.800	1745.000	176.500	1771.000	172.600	1778.000	171.900	1800.000
	1900.000	172.600	2000.000	174.500	2100.000	173.700	2200.000	173.000	2300.000
	2400.000	173.500	2500.000	173.000	2600.000	180.100	2700.000	187.300	2800.000
EJ	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

 17 NOV 76 UPDATED AUG 77

COMP - 01,02
 MODIFICATION - 50,51,52,53

 AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

TANK CH
 SUMMARY PRINTOUT

SECD	CASEL	EG	ELMIN	ELLC	10KAS	G
0.110	142.01	142.48	125.30	0.00	20.08	5670.00
0.110	142.01	142.48	125.30	0.00	20.08	5670.00
0.109	142.01	142.48	125.30	0.00	20.06	5670.00
0.109	142.01	142.48	125.30	0.00	20.06	5670.00
0.108	142.01	142.48	125.30	0.00	20.05	5670.00
0.108	142.01	142.48	125.30	0.00	20.05	5670.00
0.105	142.02	142.49	125.30	0.00	20.01	5670.00
0.105	142.02	142.49	125.30	0.00	20.01	5670.00
0.100	142.03	142.50	125.30	0.00	19.95	5670.00
0.100	142.03	142.50	125.30	0.00	19.95	5670.00
0.800	142.08	142.54	125.30	0.00	19.76	5670.00
0.800	142.08	142.54	125.30	0.00	19.76	5670.00
0.400	142.16	142.62	125.30	0.00	19.21	5670.00
0.400	142.16	142.62	125.30	0.00	19.21	5670.00
0.010	142.24	142.70	125.40	0.00	19.30	5670.00
0.010	142.24	142.70	125.40	0.00	19.30	5670.00
1.000	142.64	142.77	125.30	0.00	4.66	2710.00
1.000	142.63	142.76	125.30	0.00	4.91	2710.00
15.000	142.64	142.77	125.50	0.00	4.92	2710.00
15.000	142.63	142.77	125.50	0.00	5.15	2710.00
50.000	142.64	142.78	125.80	0.00	5.33	2710.00
50.000	142.63	142.76	125.80	0.00	5.50	2710.00
50.000	142.65	142.80	126.20	0.00	5.92	2710.00
50.000	142.64	142.80	126.20	0.00	6.05	2710.00
100.000	142.77	142.86	128.10	0.00	4.82	2710.00
100.000	142.77	142.86	128.10	0.00	4.87	2710.00

FORM N 5111

	EL	EG	ELMIN	ELLC	LUKAS	G
	142.95	143.38	133.30	0.00	36.03	2710.00
	142.95	143.38	133.30	0.00	36.03	2710.00
500.000	142.95	143.47	133.60	0.00	40.36	2710.00
500.000	142.95	143.47	133.60	0.00	40.36	2710.00
	143.00	143.58	134.00	0.00	47.26	2710.00
	143.00	143.58	134.00	0.00	47.25	2710.00
770.000	144.13	145.74	137.50	0.00	182.94	2710.00
770.000	144.13	145.74	137.50	0.00	182.86	2710.00
	145.19	146.87	138.50	0.00	185.01	2710.00
	145.19	146.87	138.50	0.00	184.99	2710.00
890.000	146.24	147.71	138.30	0.00	101.36	2710.00
890.000	146.24	147.71	138.30	0.00	101.36	2710.00
	145.40	148.28	138.30	150.30	29.43	2710.00
	145.40	148.28	138.30	150.30	29.43	2710.00
972.000	146.40	148.64	138.30	150.30	26.36	2710.00
972.000	146.40	148.64	138.30	150.30	26.36	2710.00
	147.87	148.86	138.30	0.00	55.29	2710.00
	147.87	148.86	138.30	0.00	55.29	2710.00
1020.000	148.66	149.19	138.30	0.00	34.69	2710.00
1020.000	148.67	149.19	138.30	0.00	33.90	2710.00
	149.45	150.03	139.00	0.00	34.23	2710.00
	149.45	150.03	139.00	0.00	34.36	2710.00
1930.000	151.24	151.43	138.60	0.00	12.91	2710.00
1930.000	151.36	151.60	138.60	0.00	16.90	2710.00
2060.000	151.34	151.79	139.20	0.00	32.82	2710.00
2060.000	151.57	152.00	139.20	0.00	30.24	2710.00
2260.000	151.97	153.10	140.30	0.00	102.51	2710.00
2260.000	152.13	153.24	140.30	0.00	92.27	2710.00
2340.000	152.74	153.97	140.70	0.00	96.65	2710.00
2340.000	152.83	154.02	140.70	0.00	92.86	2710.00
2700.000	155.88	156.95	144.00	0.00	70.46	2710.00
2700.000	155.87	156.95	144.00	0.00	70.64	2710.00
3170.000	159.36	160.03	148.30	0.00	57.80	2710.00
3170.000	159.37	160.07	148.30	0.00	59.64	2710.00
3340.000	160.47	160.77	148.50	0.00	28.34	2710.00
3340.000	160.46	160.93	148.50	0.00	39.30	2710.00
3390.000	160.62	160.91	148.90	0.00	27.49	2710.00
3390.000	160.67	161.13	148.90	0.00	37.66	2710.00

BUREAU OF
 OIL & GAS
 REPORT
 FORM NO. 1
 (REV. 1-60)

	FE	ELMIN	ELLC	10x6	G	
	165.65	152.50	0.00	52.96	2710.00	
	166.33	152.50	0.00	45.37	2710.00	
8500.000	167.46	167.77	156.20	0.00	34.16	2260.00
8100.000	167.91	168.25	156.20	0.00	32.81	2260.00
	169.55	169.60	161.90	0.00	10.65	2260.00
	170.65	170.12	161.90	0.00	11.33	2260.00
8100.000	172.84	172.90	168.30	0.00	30.97	2260.00
8100.000	173.38	173.45	168.30	0.00	28.63	2260.00
	174.30	174.33	170.30	0.00	18.71	2260.00
	174.83	174.87	170.30	0.00	19.87	2260.00
8795.000	175.07	175.10	170.80	0.00	12.32	2260.00
8795.000	175.06	175.12	170.80	0.00	32.31	2260.00
	176.83	176.84	170.80	176.90	2.50	2260.00
	177.43	177.45	170.80	176.90	5.85	2260.00
8850.000	176.84	176.85	171.00	0.00	3.20	2260.00
8850.000	177.45	177.46	171.00	0.00	6.86	2260.00
8170.000	176.92	176.92	170.90	0.00	1.54	2260.00
8170.000	177.67	177.69	171.20	0.00	6.16	2260.00

FORM NO. 6411

SECNO	LNSEL	SSTA	STCHL	STCHR	ENRST	TOPID
	142.01	954.85	1000.00	1083.00	1115.10	160.25
	142.01	954.85	1000.00	1083.00	1115.10	160.25
0.109	142.01	954.82	1000.00	1083.00	1115.12	160.30
0.109	142.01	954.82	1000.00	1083.00	1115.12	160.30
	142.01	954.79	1000.00	1083.00	1115.14	160.36
	142.01	954.74	1000.00	1083.00	1115.14	160.36
0.105	142.02	954.69	1000.00	1083.00	1115.21	160.51
0.105	142.02	954.69	1000.00	1083.00	1115.21	160.51
	142.03	954.53	1000.00	1083.00	1115.31	160.78
	142.03	954.53	1000.00	1083.00	1115.31	160.78
0.800	142.08	953.51	1000.00	1083.00	1115.72	161.81
0.800	142.08	953.51	1000.00	1083.00	1115.72	161.81
0.400	142.16	952.66	1000.00	1083.00	1116.56	163.90
0.400	142.16	952.66	1000.00	1083.00	1116.56	163.90
0.010	142.24	952.27	1000.00	1083.00	1116.42	163.55
0.010	142.24	952.27	1000.00	1083.00	1116.42	163.55
1.000	142.64	1103.48	1112.00	1172.00	1236.89	153.41
1.000	142.63	1105.00	1112.00	1172.00	1180.00	75.00
15.000	142.64	1084.90	1112.00	1172.00	1236.57	148.67
15.000	142.63	1105.00	1112.00	1172.00	1180.00	75.00
30.000	142.64	1087.14	1112.00	1172.00	1228.35	141.18
30.000	142.63	1105.00	1112.00	1172.00	1180.00	75.00
50.000	142.65	1091.10	1112.00	1172.00	1221.43	131.33
50.000	142.64	1105.00	1112.00	1172.00	1180.00	75.00
180.000	142.77	1071.10	1090.00	1177.00	1194.90	123.80
180.000	142.77	1080.00	1090.00	1177.00	1180.00	100.00
520.000	142.89	1322.95	1336.00	1397.00	1398.75	75.00
520.000	142.89	1323.00	1336.00	1397.00	1398.00	75.00
540.000	142.95	1323.70	1336.00	1397.00	1398.50	74.89
540.000	142.95	1323.64	1336.00	1397.00	1398.00	74.30
560.000	143.00	1324.69	1336.00	1397.00	1398.30	73.69
560.000	143.00	1324.64	1336.00	1397.00	1398.00	73.31
770.000	144.13	1326.35	1355.00	1390.00	1408.75	62.40
770.000	144.13	1326.30	1355.00	1390.00	1408.75	62.40
830.000	145.19	1325.94	1355.00	1390.00	1400.00	74.06
830.000	145.19	1325.94	1355.00	1390.00	1400.00	74.06

Durrough
 104 N 4111

SECNO	CWSEL	SSIA	SICHL	SICHR	EADSI	TDFALG
890.000	145.24	1355.00	1355.00	1390.00	1390.00	35.00
890.000	146.24	1355.00	1355.00	1390.00	1390.00	35.00
891.000	145.40	1355.00	1355.00	1390.00	1390.00	35.00
891.000	145.40	1355.00	1355.00	1390.00	1390.00	35.00
892.000	146.40	1355.00	1355.00	1390.00	1390.00	35.00
892.000	146.40	1355.00	1355.00	1390.00	1390.00	35.00
973.000	147.87	1355.00	1355.00	1390.00	1390.00	35.00
973.000	147.87	1355.00	1355.00	1390.00	1390.00	35.00
1020.000	148.66	1303.98	1355.00	1390.00	1400.00	96.02
1020.000	148.67	1305.00	1355.00	1390.00	1400.00	95.00
1260.000	149.45	1226.47	1264.00	1301.00	1304.62	70.16
1260.000	149.45	1228.00	1264.00	1301.00	1303.00	75.00
1530.000	151.24	1536.12	1562.00	1611.00	1794.95	258.83
1530.000	151.36	1555.00	1562.00	1611.00	1655.00	100.00
2060.000	151.34	1506.46	1576.00	1611.00	1660.05	153.59
2060.000	151.57	1536.00	1576.00	1611.00	1630.00	100.00
2200.000	151.97	1079.93	1143.00	1174.00	1195.05	115.12
2200.000	152.15	1095.00	1143.00	1174.00	1195.00	100.00
2340.000	152.74	1124.20	1143.00	1174.00	1204.26	80.06
2340.000	152.83	1124.00	1143.00	1174.00	1204.00	80.00
2700.000	155.88	1078.01	1135.00	1161.00	1184.40	111.39
2700.000	155.87	1078.17	1135.00	1161.00	1188.00	109.83
3170.000	159.36	1047.16	1184.00	1211.00	1235.07	187.22
3170.000	159.37	1070.00	1184.00	1211.00	1220.00	150.00
3340.000	160.47	1080.27	1184.00	1211.00	1267.31	187.03
3340.000	160.46	1140.00	1184.00	1211.00	1240.00	100.00
3390.000	160.62	1079.05	1184.00	1211.00	1267.60	188.55
3390.000	160.67	1140.00	1184.00	1211.00	1240.00	100.00
4650.000	165.21	1040.96	1122.00	1139.00	1231.35	190.37
4650.000	165.90	1075.00	1122.00	1139.00	1175.00	100.00
5140.000	167.46	1306.83	1393.00	1412.00	1483.09	176.26
5140.000	167.91	1358.00	1393.00	1412.00	1458.00	100.00
6150.000	169.55	982.99	1342.00	1376.00	1487.65	504.66
6150.000	170.05	1128.00	1342.00	1376.00	1403.00	275.00
8100.000	172.84	630.68	1680.00	1710.00	1846.00	1209.32
8100.000	173.38	1050.00	1680.00	1710.00	1750.00	700.00
8700.000	174.30	975.00	1680.00	1710.00	1740.00	765.00
8700.000	174.83	1255.00	1680.00	1710.00	1740.00	485.00

SECNO	PROFI	SSIA	STCHL	SICHR	ENDSI	TOPWID
8805.000	176.83	930.00	1660.00	1710.00	1710.00	780.00
8805.000	177.43	1275.00	1660.00	1710.00	1710.00	435.00
8805.000	176.83	935.00	1660.00	1710.00	1760.00	825.00
8805.000	177.45	1300.00	1660.00	1710.00	1735.00	435.00
9170.000	176.92	935.00	1680.00	1710.00	2210.00	1275.00
9170.000	177.67	1380.00	1680.00	1710.00	1870.00	490.00

SUMMARY OF ERRORS

SECNO= 8795.000 PROFILE= 1 CRITICAL DEPTH ASSUMED
 SECNO= 8795.000 PROFILE= 1 PROBABLE MINIMUM SPECIFIC ENERGY
 SECNO= 8795.000 PROFILE= 1 20 TRIALS ATTEMPTED TO BALANCE WSEL
 CAUTION SECNO= 8805.000 PROFILE= 1 HYDRAULIC JUMP U.S.
 CAUTION SECNO= 8805.000 PROFILE= 2 HYDRAULIC JUMP U.S.

FORM NO. 8111

DATA CR

STATION	FLOODWAY			WATER SURFACE ELEVATION		
	WIDTH (FT)	SECTION AREA	MEAN VELOCITY	WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
0.100	160.	1108.	5.1	142.0	142.0	0.0
0.109	160.	1108.	5.1	142.0	142.0	0.0
0.109	160.	1109.	5.1	142.0	142.0	0.0
0.105	161.	1110.	5.1	142.0	142.0	0.0
0.160	161.	1112.	5.1	142.0	142.0	0.0
0.200	162.	1118.	5.1	142.1	142.1	0.0
0.400	164.	1132.	5.0	142.2	142.2	0.0
0.010	164.	1130.	5.0	142.2	142.2	0.0
1.000	75.	949.	2.9	142.6	142.6	0.0
15.000	75.	935.	2.9	142.6	142.6	0.0
30.000	75.	913.	3.0	142.6	142.6	0.0
38.000	75.	883.	3.1	142.6	142.6	0.0
45.000	100.	1035.	2.6	142.8	142.8	0.0
520.000	75.	499.	5.4	142.9	142.9	0.0
540.000	74.	480.	5.6	142.9	142.9	0.0
560.000	73.	455.	6.0	143.0	143.0	0.0
580.000	82.	328.	8.3	144.1	144.1	0.0
600.000	74.	318.	8.5	145.2	145.2	0.0
620.000	35.	278.	9.6	146.2	146.2	0.0
891.000	35.	199.	13.6	145.4	145.4	0.0
972.000	35.	226.	12.0	146.4	146.4	0.0
973.000	35.	335.	8.1	147.9	147.9	0.0
1000.000	95.	613.	4.4	148.7	148.7	0.0
1020.000	75.	535.	5.1	149.4	149.4	0.0
1040.000	100.	748.	3.6	151.3	151.2	0.1
12060.000	100.	657.	4.1	151.5	151.5	0.2
2260.000	100.	411.	6.6	152.2	152.0	0.2
2340.000	80.	382.	7.5	152.8	152.7	0.1
2800.000	110.	433.	6.3	155.9	155.9	0.0
3220.000	150.	597.	4.5	159.4	159.4	0.0
3380.000	100.	662.	4.1	160.5	160.5	0.0
3390.000	100.	672.	4.0	160.6	160.6	0.0
4650.000	100.	680.	4.0	165.9	165.2	0.7
5140.000	100.	659.	3.4	167.9	167.5	0.4
6150.000	275.	1398.	1.6	170.0	169.5	0.5
8100.000	700.	1527.	1.5	173.3	172.8	0.5
8700.000	485.	1509.	1.5	174.8	174.3	0.5
6795.000	435.	1237.	1.8	175.1	175.1	0.0
8805.000	435.	2066.	1.1	177.4	176.8	0.6
8850.000	435.	2086.	1.1	177.4	176.8	0.6
9170.000	490.	2281.	1.0	177.7	176.9	0.8

1010 M. W. 1010