

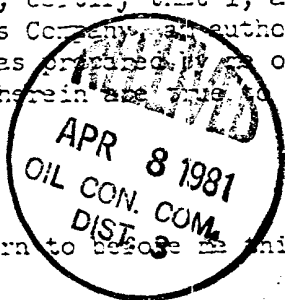
EL PASO NATURAL GAS COMPANY

DEVIATION REPORT

Name of Company EL PASO NATURAL GAS COMPANY		Address BOX 289, FARMINGTON, NEW MEXICO					
Lease Farmington A	Well No 1E	Unit Letter O	Section 1	Township 29N	Range 13W		
Pool Basin Dakota			County San Juan				

DEPTH	DEVIATION	DEPTH	DEVIATION	DEPTH	DEVIATION	DEPTH	DEVIATION
322'	1 1/4°	1757'	6 1/4°	2670'	10 1/4°	3784'	17 1/4°
839'	1°	1820'	8 1/4°	2702'	11 1/2°	3877'	17°
1368'	3/4°	1851'	9°	2735'	12 3/4°	4003'	17°
1544'	1°	2040'	10 1/4°	2765'	15°	4160'	15 1/2°
1570'	0°	2072'	10 1/4°	2826'	15 3/4°	4226'	15 1/2°
1602'	1 1/4°	2180'	9 3/4°	2888'	16°	4322'	14 1/2°
1664'	3 3/4°	2244'	9 1/4°	2980'	17 3/4°	4382'	14 1/2°
1633'	2 1/2°	2304'	9 1/2°	3104'	19°	4410'	14 1/4°
1664'	3 3/4°	2370'	9 3/4°	3188'	19°	4441'	14 1/4°
1689'	4 1/2°	2471'	10°	3313'	18°	4475'	14°
1691'	4 1/2°	2553'	10°	3438'	17 1/2°	4514'	14°
1723'	5 1/4°	2614'	10°	3534'	18°	4556'	14 1/2°
				3650'	17 1/2°	4621'	15°

I, the undersigned, certify that I, acting in my capacity as Petroleum Engineer of El Paso Natural Gas Company, am authorized by said Company to make this report; and that this report was prepared by me or under my supervision and directions and that the facts stated therein are true to the best of my knowledge and belief.



Subscribed and sworn to before me this 7th day of April, 1981.

Notary Public in and for San Juan County, New Mexico

My commission expires October 5, 1984

EL PASO NATURAL GAS COMPANY

DEVIATION REPORT

Page 2

Name of Company EL PASO NATURAL GAS COMPANY		Address BOX 289, FARMINGTON, NEW MEXICO			
Lease Farmington A	Well No. 1E (Cont'd)	Well Letter O	Section 1	Township 29N	Range 13W
Pool Basin Dakota			County San Juan		

DEPTH	DEVIATION	DEPTH	DEVIATION
4694'	15 1/2°	5745'	16°
4704'	15 1/2°	5902'	16 1/4°
4757'	15 1/2°	6118'	14 3/4°
4822'	15 1/4°	6200'	12°
4875'	15"	6238'	12°
4947'	15 1/4°		
4978'	15°		
5036'	14 3/4°		
5102'	14 1/2°		
5166'	15°		
5340'	16 1/2°		
5531'	17 1/2°		

I, the undersigned, certify that I, acting in my capacity as Petroleum Engineer of El Paso Natural Gas Company, am authorized by said Company to make this report; and that this report was prepared by me or under my supervision and directions and that the facts stated therein are true to the best of my knowledge and belief.

Don Walker

Subscribed and sworn to before me this 7th day of April, 1981.

Nora G. Guisco

Notary Public in and for San Juan County, New Mexico

My commission expires October 5, 1984

**REPORT
of
SUB-SURFACE
DIRECTIONAL
SURVEY**

EL PASO NATURAL GAS COMPANY
COMPANY

FARMINGTON A NO. 1E
WELL NAME

SAN JUAN COUNTY, NEW MEXICO
LOCATION

JOB NUMBER

RM281-D0749

TYPE OF SURVEY

MAGNETIC SINGLE SHOT

DATE

3/20/81

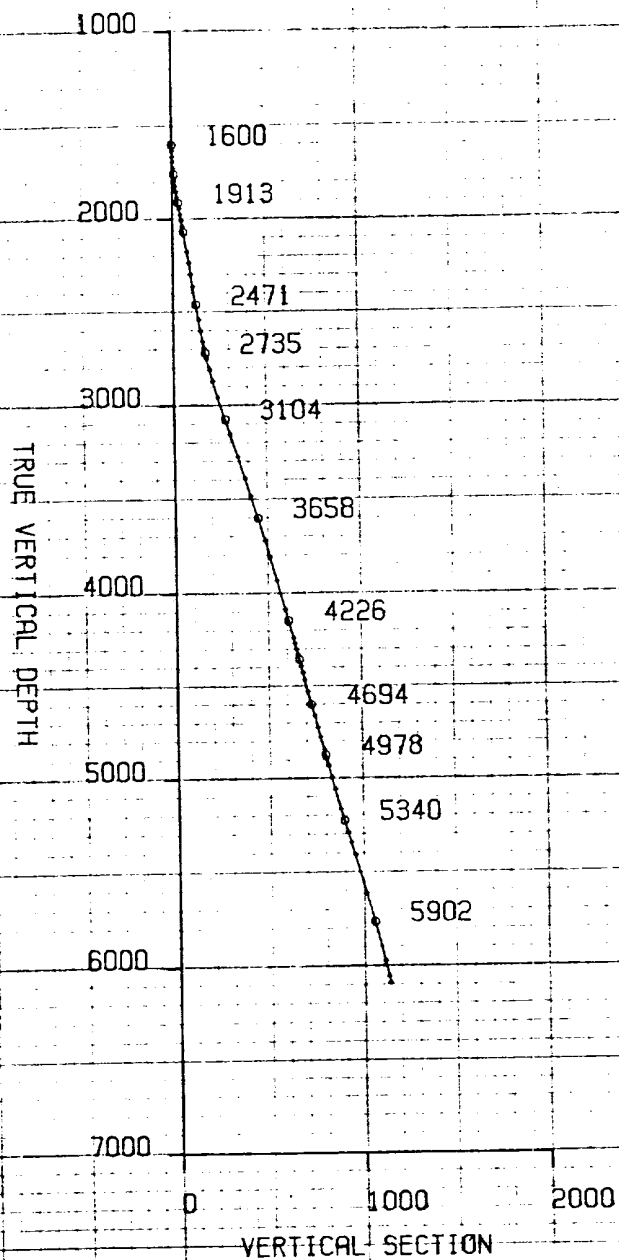
SURVEY BY
BILL WOMACK, JR.

OFFICE
ROCKY MOUNTAIN 410

EL PASO NATURAL GAS COMPANY
WELL NO.: FARMINGTON A NO.1E
LOCATION: SAN JUAN COUNTY, NEW MEXICO

VERTICAL PROJECTION
SCALE 1 IN. = 1000 FEET

EASTMAN WHIPSTOCK, INC.

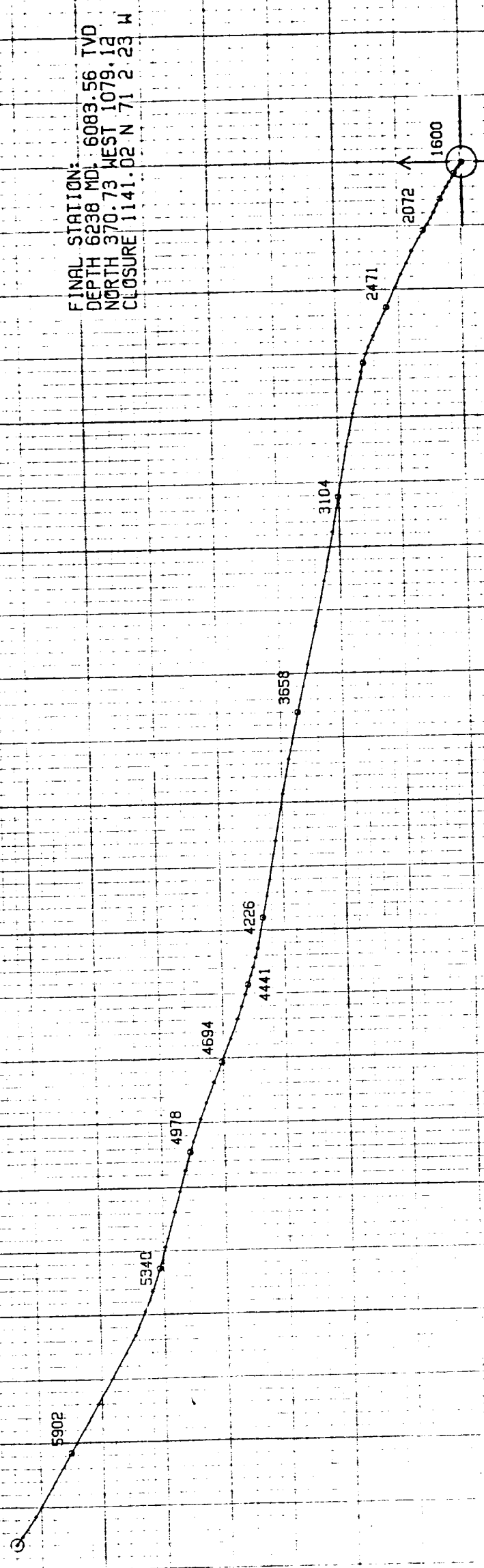


CLOSURE 1141.02 N 71 2 23 W

EL PASO NATURAL GAS COMPANY
WELL NO.: FARMINGTON A NO. 1E
LOCATION: SAN JUAN COUNTY, NEW MEXICO

EASTMAN WHIPSTOCK, INC.

HORIZONTAL PROJECTION
SCALE 1 IN. = 100 FEET
DEPTH INDICATOR: MD



EL F O NATURAL GAS COMPANY
WELL NO.: FARMINGTON A NO.1E
LOCATION: SAN JUAN COUNTY, NEW MEXICO
FILE NO.: D1-6
JOB NO.: RM281-D0749
DATE: 20 MARCH 1981
TYPE: MAGNETIC SINGLE SHOT
SECTION BEARING: N71 59 00W
DECLINATION: 13 EAST
SURVEYOR: BILL WOMACK

VERTICAL SECTION CALCULATED IN PLANE OF PROPOSAL
DIRECTION: N 71 DEG. 59 MIN. W

RECORD OF SURVEY

RADIUS OF CURVATURE METHOD

TIME DATE

40:49:16 19-MAR-61

MEASURED DEPTH FEET	DRIFT ANGLE D M	DRIFT DIRECTION D M	COURSE LENGTH FEET	TRUE		VERTICAL SECTION FEET	RECTANGULAR		DISTANCE FEET	CLOSURE		DOUBL SEVER DG/10
				VERTICAL DEPTH FEET	VERTICAL SECTION FEET		CORR D I N A T E S	FEET		DIRECTION D M		
1600.00	0 0	0 0	0.0	1600.00	0.00	0.00	0.00	0.00	0.00	0 0	0.00	0.00
1633.00	2 30	N 56 0 W	33.0	1632.99	0.69	0.69	0.40 N	0.60 W	0.72	N 56 0 W	0.72	7.5
1664.00	3 45	N 45 0 W	31.0	1663.94	2.26	2.26	1.48 N	1.90 W	2.40	N 52 9 W	2.40	4.4
1689.00	4 30	N 46 0 W	25.0	1688.88	3.87	3.87	2.74 N	3.18 W	4.20	N 49 18 W	4.20	3.0
1723.00	5 15	N 57 0 W	34.0	1722.75	6.57	6.57	4.53 N	5.44 W	7.08	N 50 12 W	7.08	3.5
1757.00	6 15	N 65 0 W	34.0	1756.58	9.92	9.92	6.18 N	8.42 W	10.44	N 53 42 W	10.44	3.7
1789.00	7 15	N 61 0 W	32.0	1788.36	13.63	13.63	7.39 N	11.77 W	14.17	N 56 10 W	14.17	3.4
1820.00	8 15	N 57 0 W	31.0	1819.08	17.70	17.70	10.04 N	15.35 W	18.34	N 56 48 W	18.34	3.6
1851.00	9 0	N 59 0 W	31.0	1849.73	22.21	22.21	12.51 N	19.29 W	22.99	N 57 3 W	22.99	2.6
1882.00	9 30	N 60 0 W	31.0	1880.32	27.08	27.08	15.03 N	23.58 W	27.97	N 57 29 W	27.97	1.6
1913.00	9 45	N 62 0 W	31.0	1910.39	32.17	32.17	17.55 N	28.12 W	33.14	N 58 2 W	33.14	1.1
1945.00	10 0	N 63 0 W	32.0	1942.41	37.58	37.58	20.08 N	32.98 W	38.62	N 58 40 W	38.62	0.7
1977.00	10 15	N 66 0 W	32.0	1973.91	43.16	43.16	22.50 N	38.06 W	44.22	N 59 25 W	44.22	1.3
2009.00	10 15	N 60 0 W	32.0	2005.40	48.78	48.78	25.09 N	43.13 W	49.90	N 59 49 W	49.90	3.1
2040.00	10 15	N 57 0 W	31.0	2035.91	54.14	54.14	27.97 N	47.84 W	55.41	N 59 41 W	55.41	1.1
2072.00	10 15	N 54 0 W	32.0	2067.40	59.60	59.60	31.19 N	52.53 W	61.09	N 59 18 W	61.09	1.1
2130.00	9 45	N 67 0 W	108.0	2173.76	77.94	77.94	40.41 N	68.82 W	79.80	N 59 35 W	79.80	2.1
2242.00	9 15	N 64 0 W	62.0	2234.91	88.11	88.11	44.65 N	78.13 W	89.99	N 60 15 W	89.99	1.1
2304.00	9 30	N 63 0 W	62.0	2296.03	98.10	98.10	49.16 N	87.16 W	100.07	N 60 35 W	100.07	0.1
2370.00	9 45	N 66 0 W	66.0	2361.15	109.03	109.03	53.91 N	97.12 W	111.08	N 60 58 W	111.08	0.1
2471.00	10 0	N 66 0 W	101.0	2460.65	126.26	126.26	60.95 N	112.95 W	128.34	N 61 39 W	128.34	0.1
2553.00	10 0	N 63 0 W	82.0	2541.41	140.38	140.38	67.08 N	125.80 W	142.56	N 61 56 W	142.56	0.1
2614.00	10 0	N 65 0 W	61.0	2601.48	150.87	150.87	71.72 N	135.32 W	153.15	N 62 4 W	153.15	0.1
2670.00	10 15	N 64 0 W	56.0	2656.61	160.63	160.63	75.96 N	144.20 W	162.99	N 62 13 W	162.99	0.1
2702.00	11 30	N 72 0 W	32.0	2688.03	166.64	166.64	78.22 N	149.60 W	168.99	N 62 26 W	168.99	6.1
2735.00	12 45	N 76 0 W	33.0	2720.30	173.57	173.57	80.13 N	156.46 W	175.78	N 62 53 W	175.78	4.1
2765.00	15 0	N 77 0 W	30.0	2749.42	180.74	180.74	81.31 N	163.45 W	182.73	N 63 25 W	182.73	7.1
2826.00	15 45	N 77 0 W	61.0	2808.23	196.85	196.85	85.45 N	179.21 W	198.54	N 64 30 W	198.54	1.1
2888.00	16 0	N 77 0 W	62.0	2867.37	213.75	213.75	89.27 N	195.74 W	215.13	N 65 29 W	215.13	0.1
2980.00	17 45	N 79 0 W	92.0	2955.91	240.30	240.30	94.82 N	221.86 W	241.27	N 66 52 W	241.27	2.1

MEASURED DEPTH FEET	DRIFT ANGLE D M	DRIFT DIRECTION D M	COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	VERTICAL SECTION FEET	R E C T A N G U L A R C O O R D I N A T E S FEET	C L O S U R E DISTANCE FEET	D I R E C T I O N D M	DOGS SEVERE DG/10
3104.00	19 0	N 80	124.0	3073.58	279.06	101.94 N 260.29 W	279.54	N 68 37 W	1.0
3188.00	19 0	N 79	84.0	3153.00	306.17	106.93 N 287.18 W	306.44	N 69 35 W	0.5
3313.00	18 0	N 79	125.0	3271.54	345.53	114.49 N 326.11 W	345.63	N 70 39 W	0.8
3433.00	17 30	N 78	120.0	3385.83	381.88	121.79 N 361.96 W	381.90	N 71 24 W	0.4
3534.00	18 0	N 77	101.0	3482.02	412.53	128.45 N 392.02 W	412.53	N 71 51 W	0.5
3658.00	17 30	N 77	124.0	3600.12	450.18	136.95 N 428.85 W	450.19	N 72 17 W	0.4
3784.00	17 15	N 78	126.0	3720.37	487.64	145.10 N 465.59 W	487.67	N 72 41 W	0.5
3877.00	17 0	N 79	93.0	3809.25	514.84	150.56 N 492.42 W	514.92	N 73 0 W	0.4
4003.00	17 0	N 81	126.0	3929.74	551.32	156.95 N 528.70 W	551.51	N 73 28 W	0.4
4160.00	15 30	N 79	157.0	4080.46	594.82	164.58 N 571.96 W	595.17	N 73 57 W	1.0
4226.00	15 30	N 79	66.0	4144.06	612.33	167.95 N 589.23 W	612.74	N 74 6 W	0.5
4322.00	14 30	N 78	96.0	4236.79	637.01	172.90 N 613.62 W	637.52	N 74 16 W	1.0
4352.00	14 45	N 77	30.0	4265.82	644.55	174.34 N 621.02 W	645.03	N 74 13 W	1.0
4382.00	14 30	N 71	30.0	4294.85	652.12	176.63 N 628.30 W	652.65	N 74 18 W	5.0
4410.00	14 15	N 73	28.0	4321.97	659.07	178.73 N 634.91 W	659.60	N 74 16 W	1.0
4441.00	14 15	N 73	31.0	4352.02	666.70	181.01 N 642.20 W	667.23	N 74 16 W	0.5
4475.00	14 0	N 73	34.0	4384.99	674.99	183.43 N 650.14 W	675.52	N 74 15 W	0.5
4515.00	14 0	N 72	40.0	4423.80	684.67	186.34 N 659.37 W	685.19	N 74 13 W	0.5
4556.00	14 30	N 70	41.0	4463.54	694.76	189.63 N 668.91 W	695.27	N 74 10 W	1.0
4621.00	15 0	N 69	65.0	4526.40	711.29	195.42 N 684.41 W	711.76	N 74 4 W	0.5
4694.00	15 30	N 68	73.0	4596.83	730.46	202.46 N 702.27 W	730.83	N 73 55 W	0.5
4757.00	15 30	N 67	63.0	4657.54	747.24	208.90 N 717.83 W	747.61	N 73 46 W	0.5
4822.00	15 15	N 69	65.0	4720.21	764.44	215.36 N 733.81 W	764.76	N 73 39 W	0.5
4875.00	15 0	N 70	53.0	4771.37	778.25	220.20 N 746.76 W	778.55	N 73 34 W	0.5
4947.00	15 15	N 72	72.0	4840.88	797.04	226.32 N 764.52 W	797.32	N 73 31 W	0.5
4978.00	15 0	N 73	31.0	4870.81	805.12	228.75 N 772.24 W	805.41	N 73 30 W	1.0
5036.00	14 45	N 74	58.0	4926.86	820.01	232.98 N 786.51 W	820.30	N 73 30 W	0.5
5102.00	14 30	N 75	66.0	4990.72	836.65	237.43 N 802.57 W	836.96	N 73 31 W	0.5
5166.00	15 0	N 75	64.0	5052.61	852.93	241.65 N 818.31 W	853.24	N 73 33 W	0.5
5277.00	15 30	N 74	111.0	5159.71	882.10	249.45 N 846.44 W	882.44	N 73 35 W	0.5

MEASURED DEPTH FEET	DRIFT ANGLE		DRIFT DIRECTION		COURSE LENGTH FEET	TRUE VERTICAL DEPTH FEET	VERTICAL SECTION FEET	RECTANGULAR COORDINATES		CLOSURE DISTANCE FEET	DIRECTION		DOUBL SEVER DG/10			
	D	M	D	M				D	M		D	M				
5340.00	16	30	N	75	0 W	63.0	5220.26	899.44	254.09	N	863.18	W	899.80	N 73 36	W	1.6
5406.00	17	0	N	68	0 W	66.0	5283.46	918.45	260.12	N	881.20	W	918.80	N 73 33	W	3.1
5462.00	17	30	N	70	0 W	56.0	5336.94	935.03	266.08	N	896.71	W	935.35	N 73 28	W	1.5
5531.00	17	30	N	64	0 W	69.0	5402.75	955.69	274.18	N	915.80	W	955.96	N 73 20	W	2.6
5745.00	16	0	N	58	0 W	214.0	5607.67	1016.21	304.06	N	969.71	W	1016.27	N 72 35	W	1.0
5902.00	16	15	N	61	0 W	157.0	5758.49	1058.78	326.19	N	1007.28	W	1058.78	N 72 3	W	0.5
6118.00	14	45	N	58	0 W	216.0	5966.63	1115.13	355.49	N	1057.01	W	1115.19	N 71 25	W	0.7
6200.00	12	0	N	54	0 W	82.0	6046.39	1133.36	366.09	N	1072.73	W	1133.48	N 71 9	W	3.5
THE NEXT STATION IS PROJECTED																
6238.00	12	0	N	54	0 W	38.0	6083.56	1140.88	370.73	N	1079.12	W	1141.03	N 71 2	W	0.0

FINAL CLOSURE - DIRECTION:

N 71 DEGS 2 MINS 23 SECS W

DISTANCE:

1141.03 FEET

THE NEXT STATION IS PROJECTED

40:47:16

19-MAR-81

FILE NUMBER: 6

EL PASO NATURAL GAS COMPANY

WELL NO.: FARMINGTON A NO.1E

LOCATION: SAN JUAN COUNTY, NEW MEXICO

(COMPLETION REPORT)

CONVERSATIONAL SURVEY PROGRAM V02.11