

Instituto Tecnológico  
GeoMinero de España

**DOCUMENTOS SOBRE  
LA GEOLOGIA DEL SUBSUELO  
DE ESPAÑA**

**TOMO XIII**

**PLANOS DE POSICION DE LINEAS SISMICAS  
( ESCALA 1:50.000 )**

29044



T O M O X I I I

PLANOS DE POSICION DE LINEAS SISMICAS

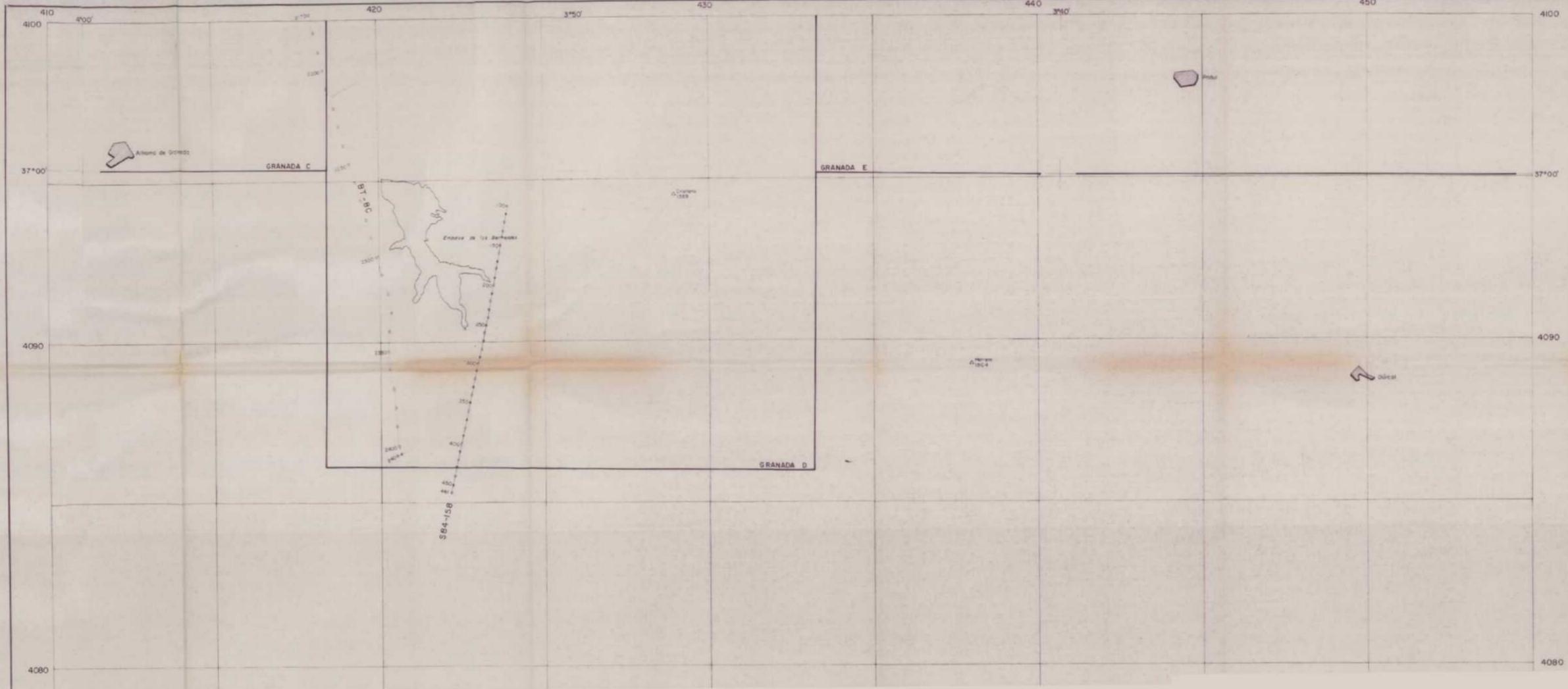
ESCALA 1:50.000

Del P1 - 365 al P1 - 392

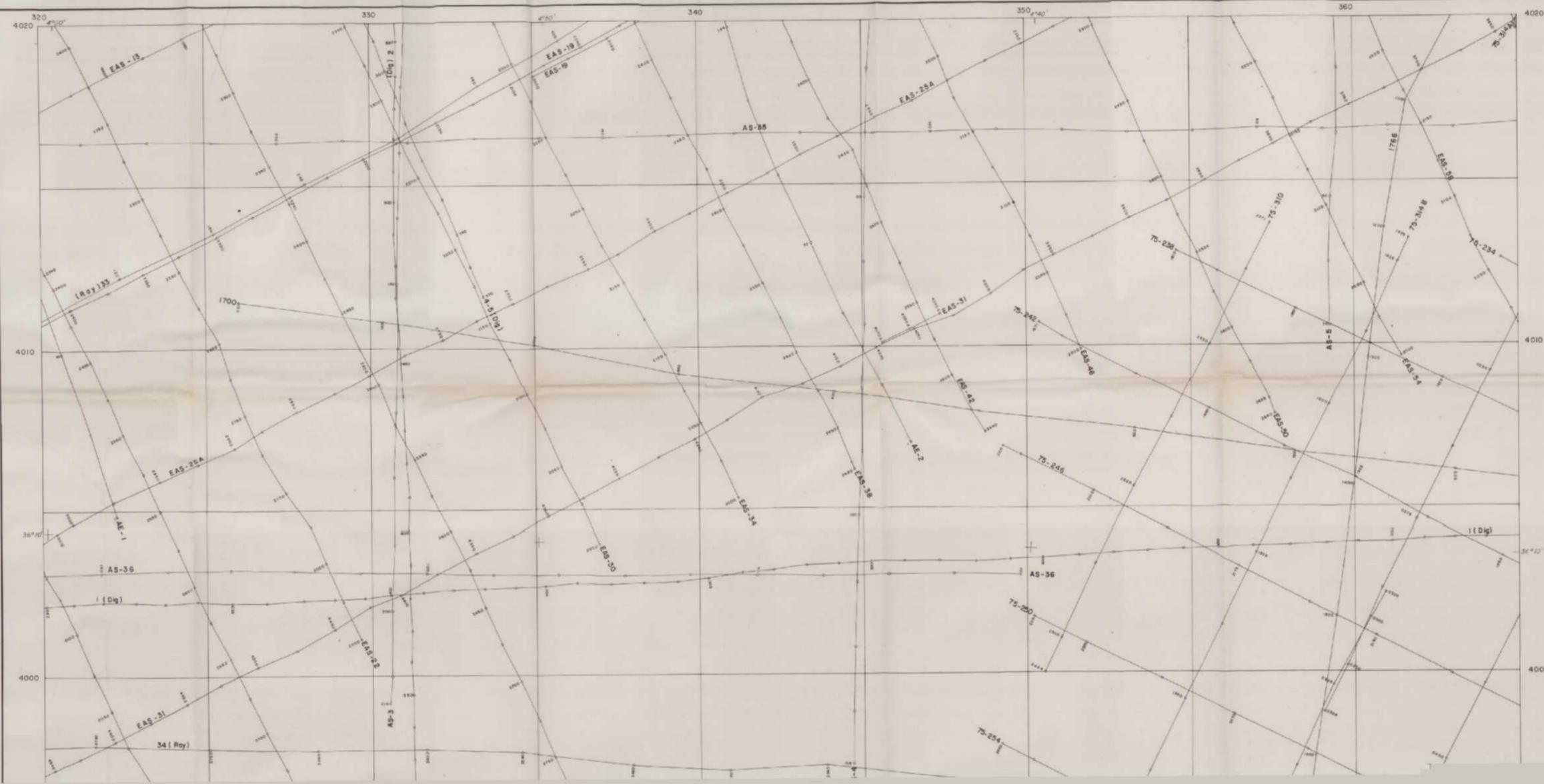


Esta recopilación ha sido promocionada por el Instituto Tecnológico Geominero de España, que se encarga de su distribución. El trabajo se basa en documentación, revisado y puesta al día, de proyectos de Repsol Exploración S.A. y de la Empresa Nacional de Residuos Radiactivos, S.A. (ENRESA). Ha sido realizado por GESSAL y financiado por ENRESA.

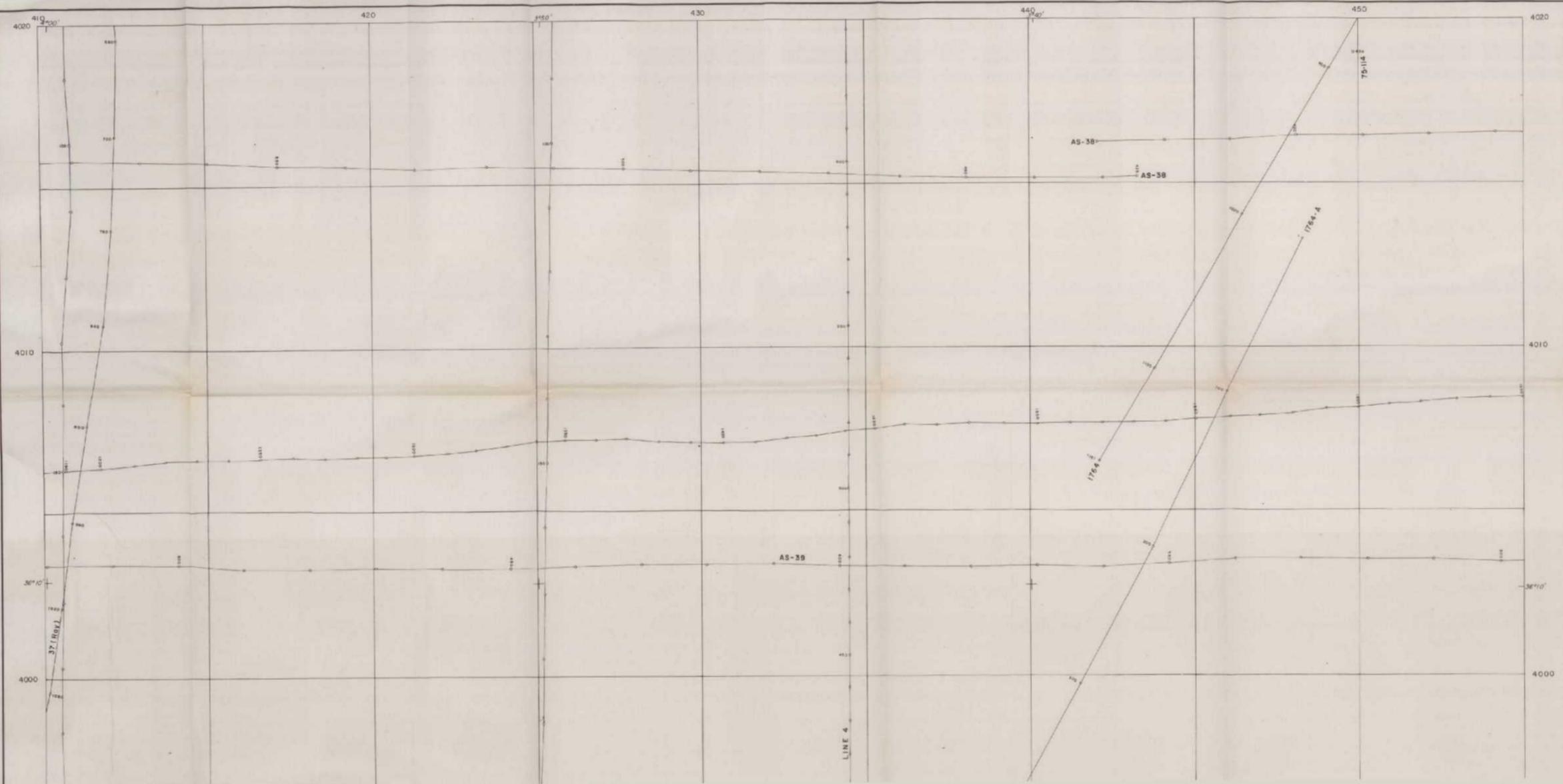




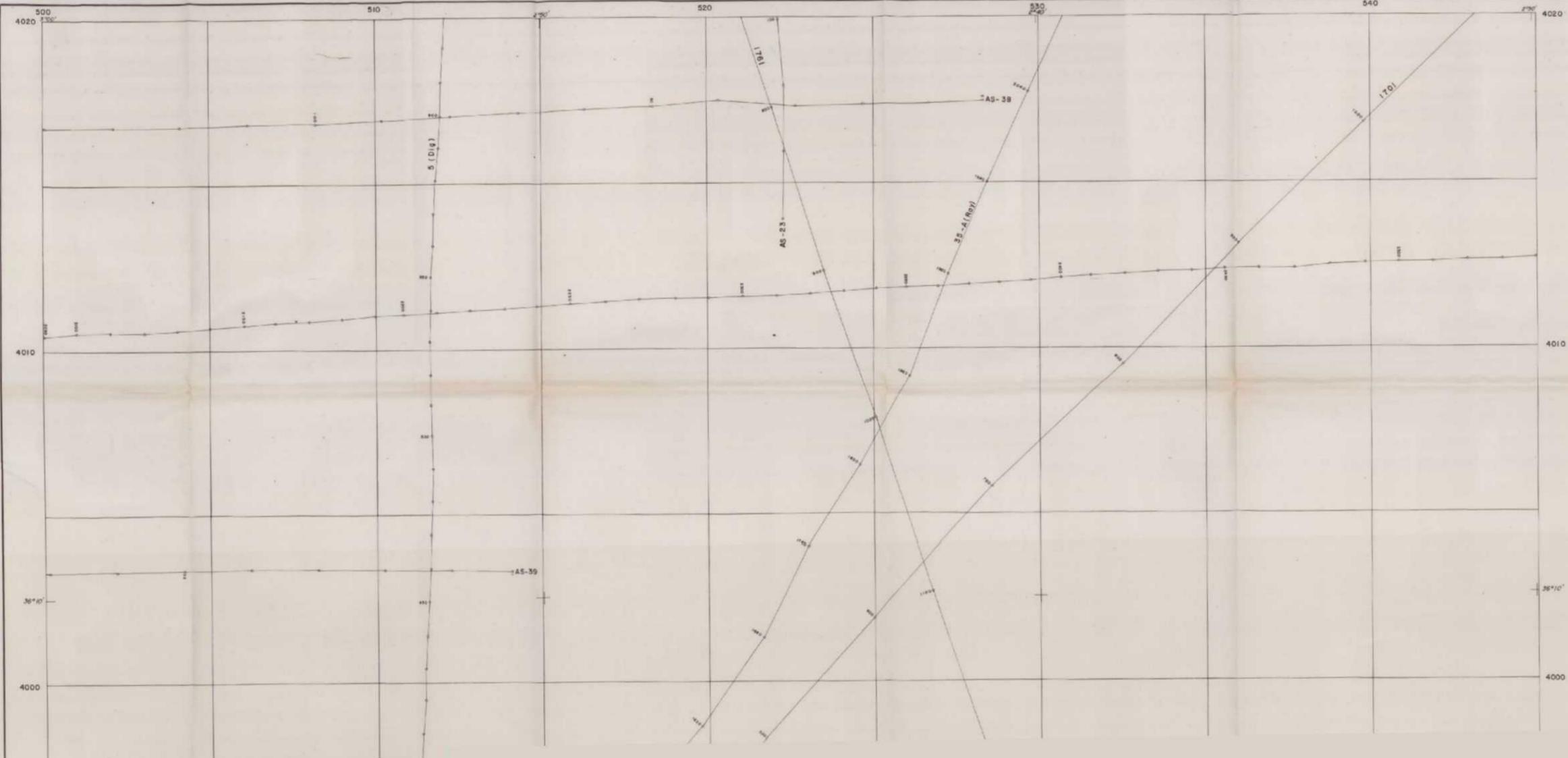
| CONTRATO | AÑO     | CONTRATISTA | PROYECTO | VALOR | ESTADO     |
|----------|---------|-------------|----------|-------|------------|
| BT       | 1977-80 | E.S.P.      | INTEPSA  | 1200  | Explicados |
| S-84     | 1984    | C.O.G.      | OSVOR    | 1200  | Explicados |



| CAMPANA | AÑO  | COMPARTICIÓN | ORGANISMO | COORDENADA | PROFUNDIDAD |
|---------|------|--------------|-----------|------------|-------------|
| EAS     | 1914 | SEL          | INGENIA   | 2400'      | Alcayán     |
| IT-     | 1971 | SIPM         | SIPM      | 1200'      | Alcayán     |
| RAY     | 1972 | RAY          | RAY       | 2400'      | Alcayán     |
| DIG     | 1972 | DIGICOM      | DIGICOM   | 2400'      | Alcayán     |
| AS      | 1977 | WESTERN      | ---       | 3400'      | Maripolce   |
| SE      | 1972 | C.G.S.       | INGENIA   | 1200'      | vaporchón   |
| TS-     | 1975 | G.S.I.       | SHELL     | 2400'      | ---         |



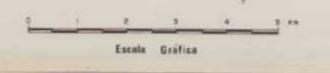
| CANADA | AM.  | CONTRACTOR | OPERATOR | COMPLETION | DEPTH IN FEET |
|--------|------|------------|----------|------------|---------------|
| 17-    | 1971 | SEPM       | SEPM     | 1200       | Algon         |
| 25     | 1977 | WESTERN    | ---      | 3600       | Manitoba      |
| 34     | 1972 | RAY        | RAY      | 2400       | Algon         |
| 79-    | 1975 | C.G.S.     | SHELL    | 2400       | ---           |



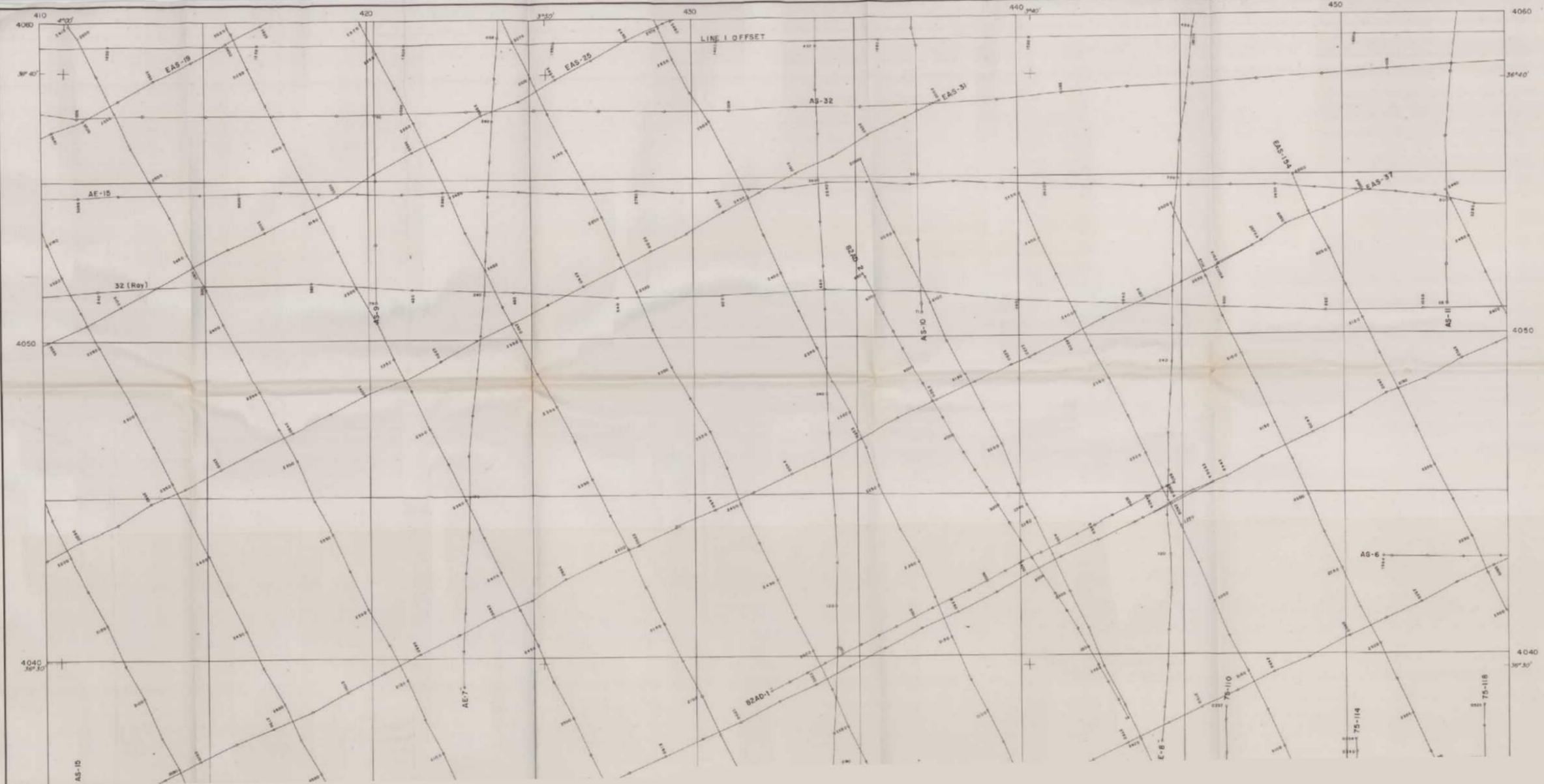
| CAMPAÑA<br>SISMICA | AÑO  | CRYSATISTA             | OPERADOR             | COORDENADA | FUENTE DE<br>ENERGIA |
|--------------------|------|------------------------|----------------------|------------|----------------------|
| RAY                | 1972 | RAY                    | RAY                  | 24004      | Airgun               |
| AS                 | 1977 | WESTERN<br>GEOPHYSICAL | ---                  | 24024      | Maripulas            |
| DIG                | 1972 | DIGICON                | DIGICON              | 24004      | Airgun               |
| IT-                | 1971 | SIPM<br>SHELL Inter.   | SIPM<br>SHELL Inter. | 22004      | Airgun               |



| CAMPAÑA GEOLÓGICA | AÑO  | ESTRATIGRAFÍA       | OPERADOR | ALTIMETRIA | TIPO DE INFORMACIÓN |
|-------------------|------|---------------------|----------|------------|---------------------|
| EAS               | 1974 | SEL                 | ENPARA   | 2400'      | Algun               |
| DIG               | 1972 | DIGICOM             | DIGICOM  | 2400'      | Algun               |
| BZAG              | 1982 | C.G.C.              | ENLESA   | 4800'      | ---                 |
| BZAM              | 1982 | C.G.C.              | ELF      | 4800'      | ---                 |
| AM                | 1981 | C.G.C.              | AGIP     | 4800'      | ---                 |
| RAY               | 1972 | RAY                 | RAY      | 2400'      | Algun               |
| 75-               | 1975 | G.S.I.              | ENEL     | 2400'      | ---                 |
| AE                | 1972 | C.G.C.              | ENPARA   | 1200'      | Vaporchoc           |
| AS                | 1977 | WESTERN GEOPHYSICAL | ---      | 1600'      | Maxipulsa           |



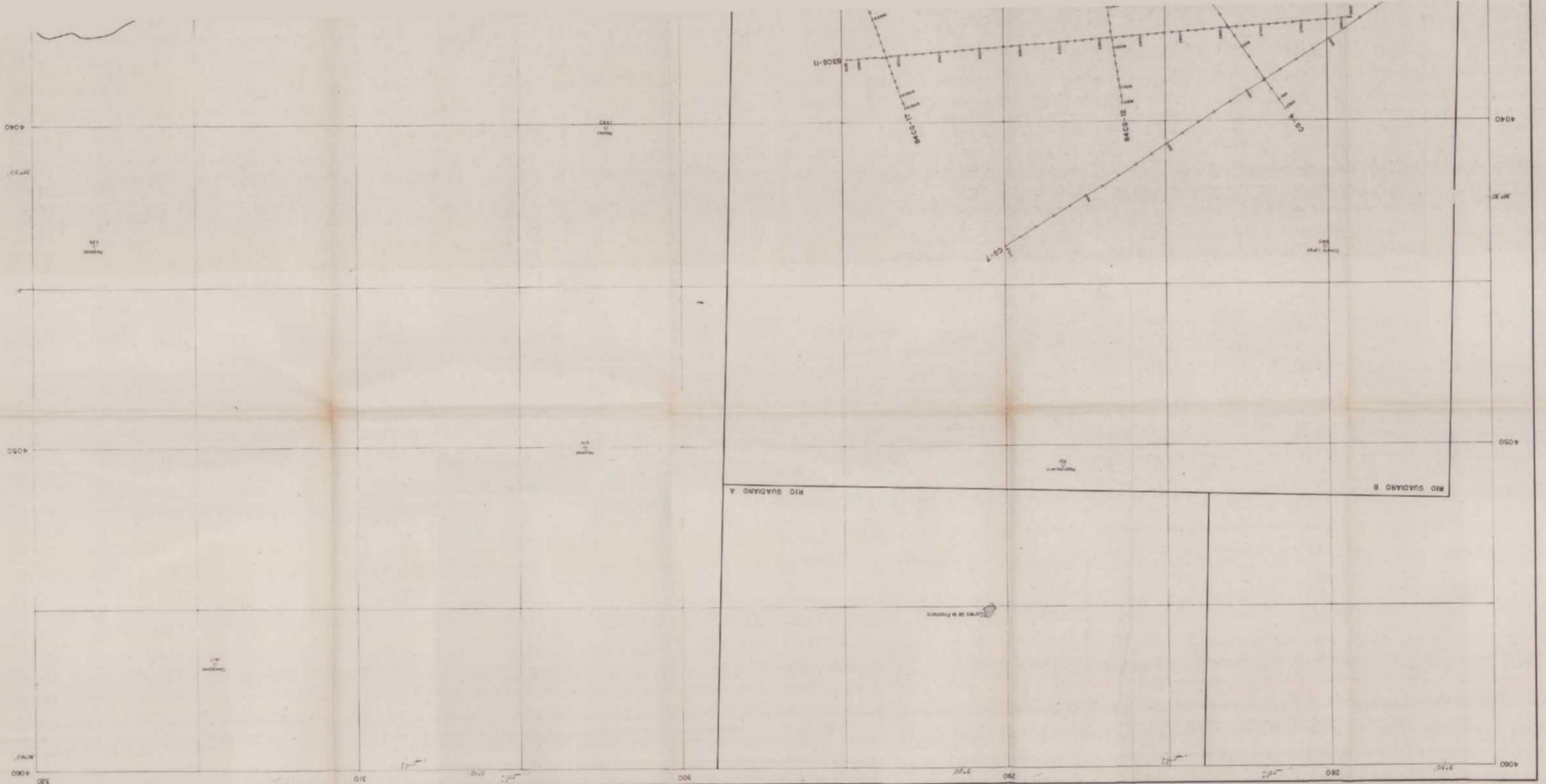
MAPA INDICE



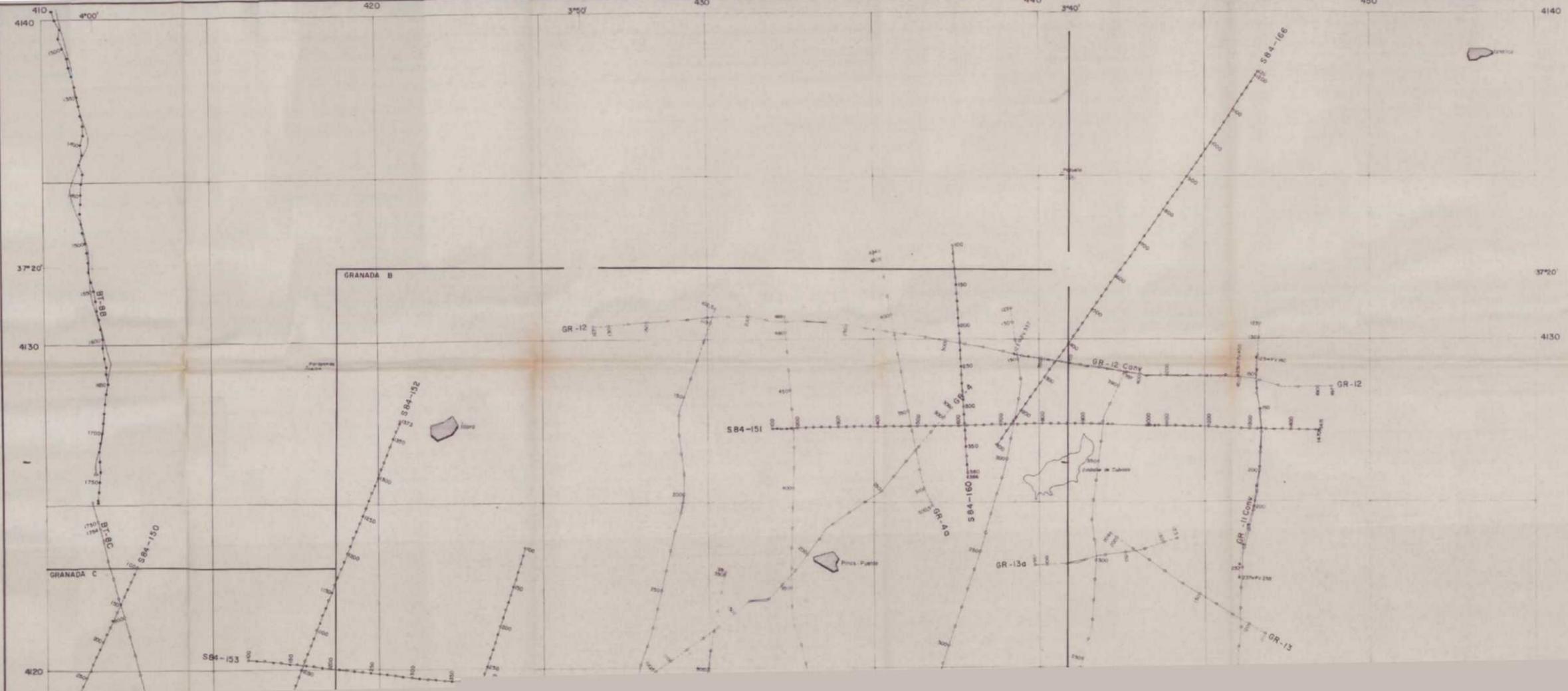
| CAMPAÑA | AÑO  | CONTRATISTA         | OPERADOR         | CANTIDAD   | PAÍS DE ORIGEN |
|---------|------|---------------------|------------------|------------|----------------|
| AS      | 1977 | WESTERN GEOPHYSICAL | ---              | 26000      | México         |
| 75-     | 1975 | G.S.I.              | SHELL            | 24000      | ---            |
| 17-     | 1971 | SEPH SHELL INTER    | SIPH SHELL INTER | 12000      | Airgun         |
| AG      | 1972 | C.G.G.              | ENPASA           | 24000      | Vaporchon      |
| 82AB    | 1982 | C.G.G.              | ELF              | ---        | ---            |
| EAS     | 1974 | BSL                 | ENPASA-ESSO      | 2400-48000 | Airgun         |
| AE      | 1972 | C.G.G.              | ENPASA           | 12000      | Vaporchon      |
| RAY     | 1972 | RAY                 | RAY              | 24000      | Airgun         |



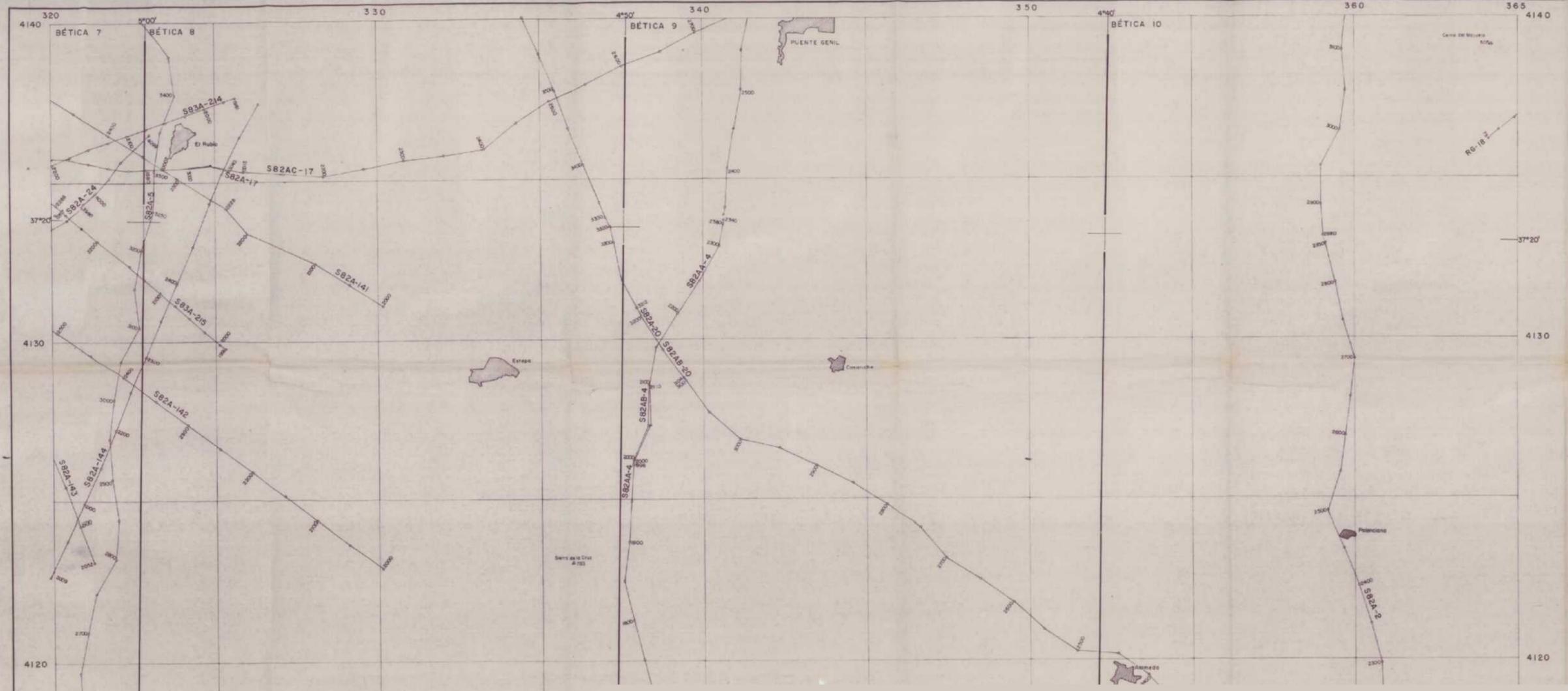
| DATE    | TIME | LOCATION      | DEPTH     | REMARKS   |
|---------|------|---------------|-----------|-----------|
| 1971-72 | 0800 | C.O.D.        | 1000-2000 | Vertical  |
| 1981    | ---  | WESTERN SHELL | ---       | Explosion |
| 1972    | 0800 | WESTERN SHELL | ---       | Explosion |
| 1968    | ---  | WESTERN SHELL | ---       | Explosion |
| 1962    | ---  | E.O.B.        | ---       | Explosion |



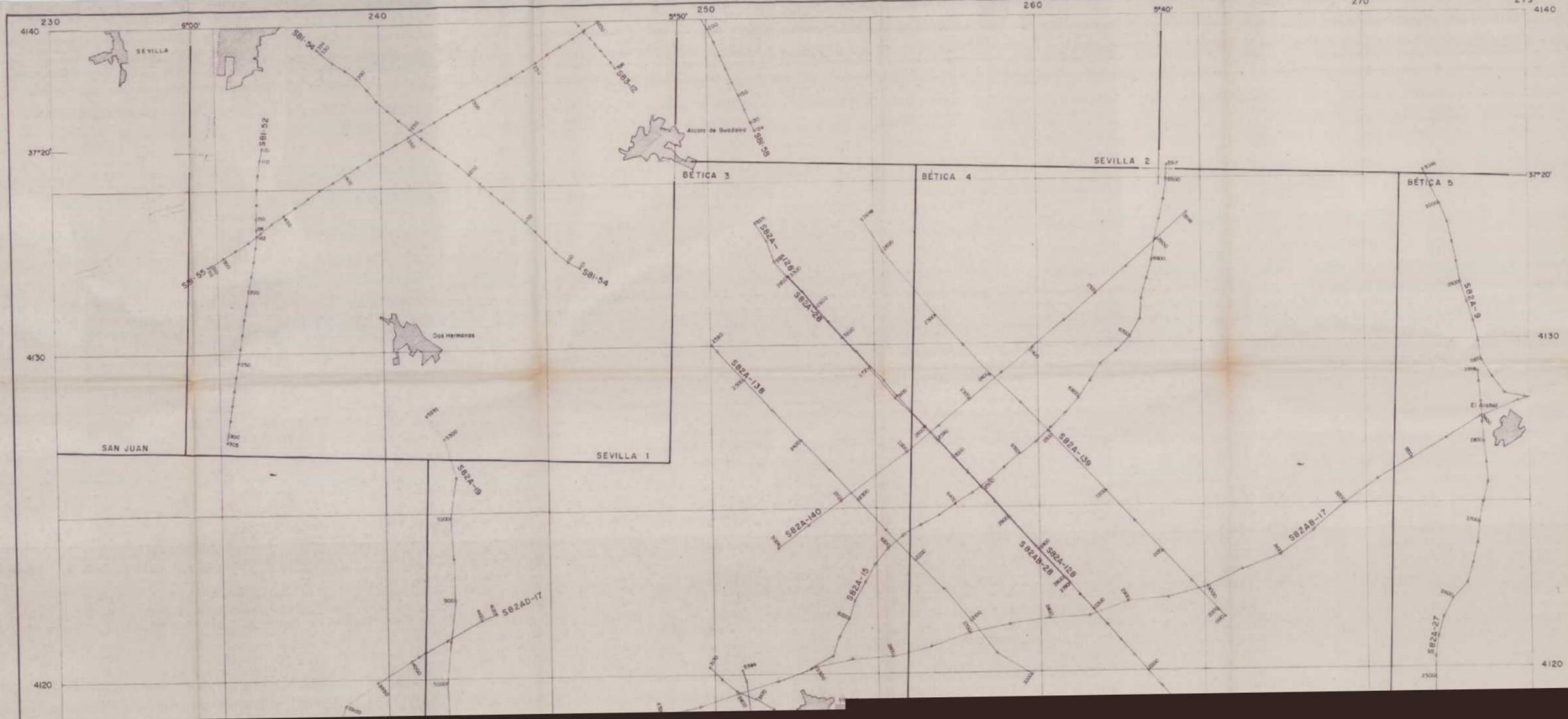




| CARPETA<br>SITIO | AÑO     | CONTRATISTA | OPERACION | CANTIDAD    | TIPO DE<br>SUSTANCIA |
|------------------|---------|-------------|-----------|-------------|----------------------|
| S-84             | 1984    | C.G.S.      | CHERVEN   | 12000       | Explosivos           |
| W                | 1977-80 | E.D.S.      | ENTEGA    | 12000       | Explosivos           |
| GR               | 1974    | E.D.S.      | ADXINI    | 12000-24000 | Vibrante.            |



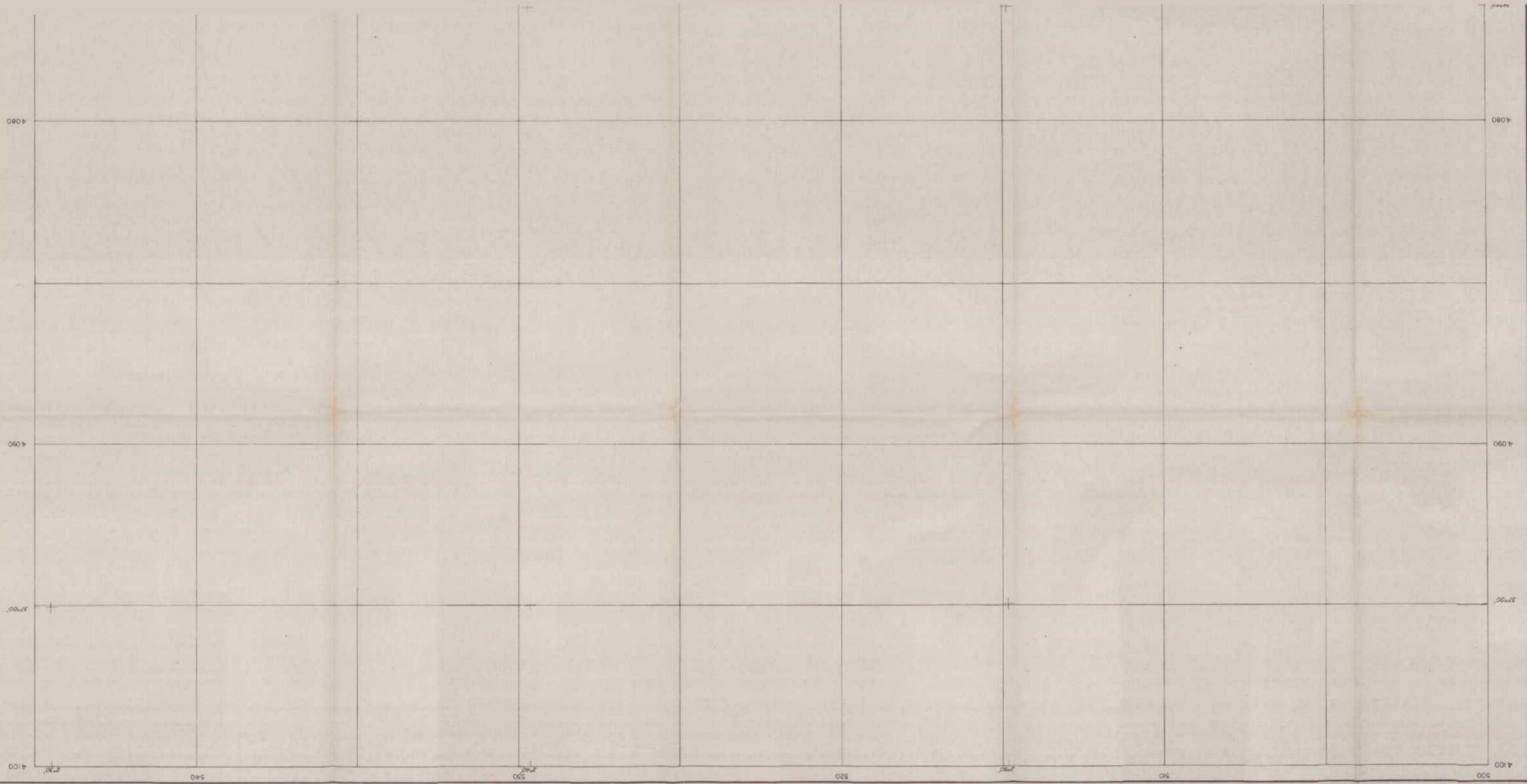
| CAMPANA | AÑO  | CONTRATISTA | OPERAÇÃO | COBERTURA   | PUNTEO DE |
|---------|------|-------------|----------|-------------|-----------|
| S-12A   | 1983 | C.G.O.      | EXON     | 14000       | Explicar  |
| S-12A   | 1982 | C.G.O.      | ESB      | 48000       | Explicar  |
| RG      | 1982 | E.D.S.      | INTEGRA  | 22000-24000 | Explicar  |



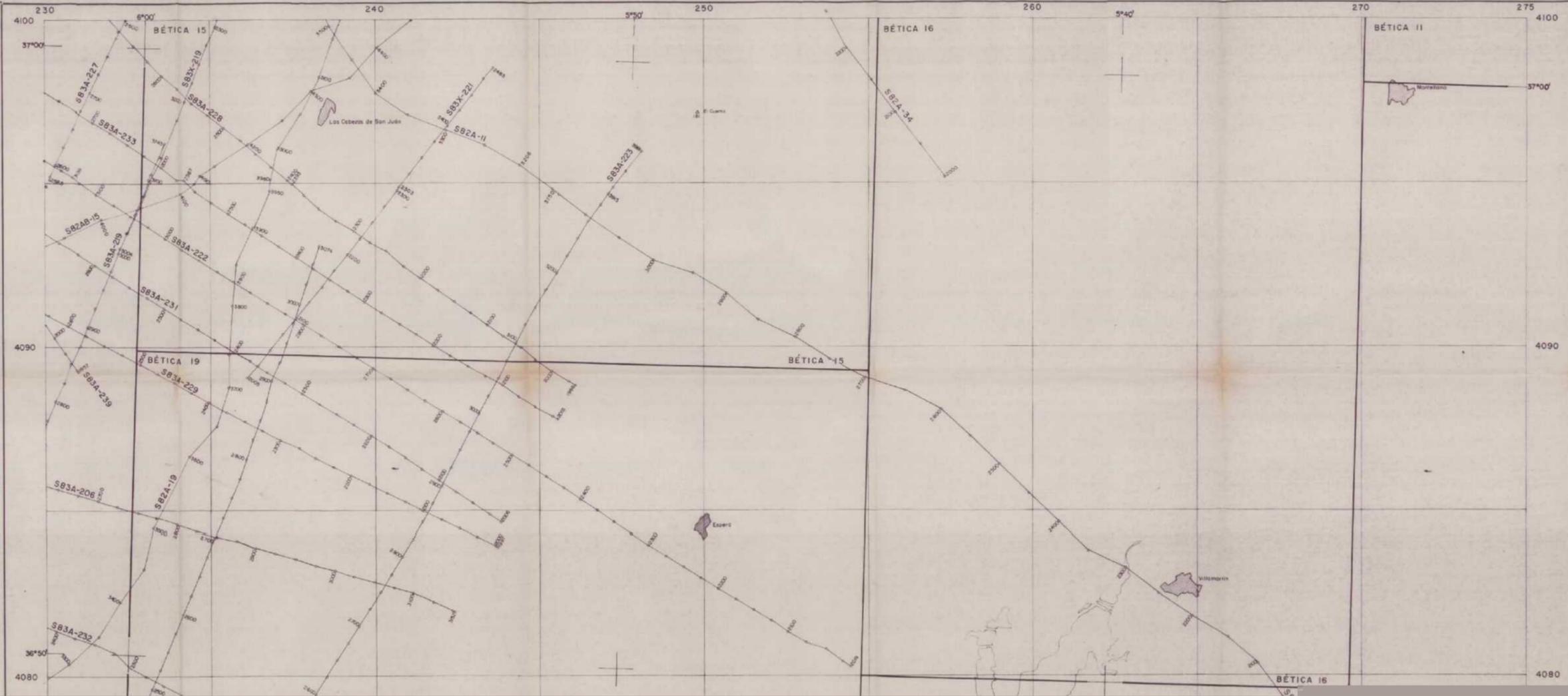
| CARROSA<br>SISTEMICA | AÑO  | CONTRATISTA | OPERADOR | COMPUTADA | PUNTO DE<br>ENTRADA |
|----------------------|------|-------------|----------|-----------|---------------------|
| S-61                 | 1961 | C.G.S.      | GEVICH   | 4800      | Explosivos          |
| S-67                 | 1963 | C.G.S.      | CHERVEN  | 3000      | Explosivos          |
| S-82A                | 1962 | C.G.S.      | ESRO     | 4800      | Válvulas            |
| S-83A                | 1963 | C.G.S.      | EXEK     | 2400      | Explosivos          |



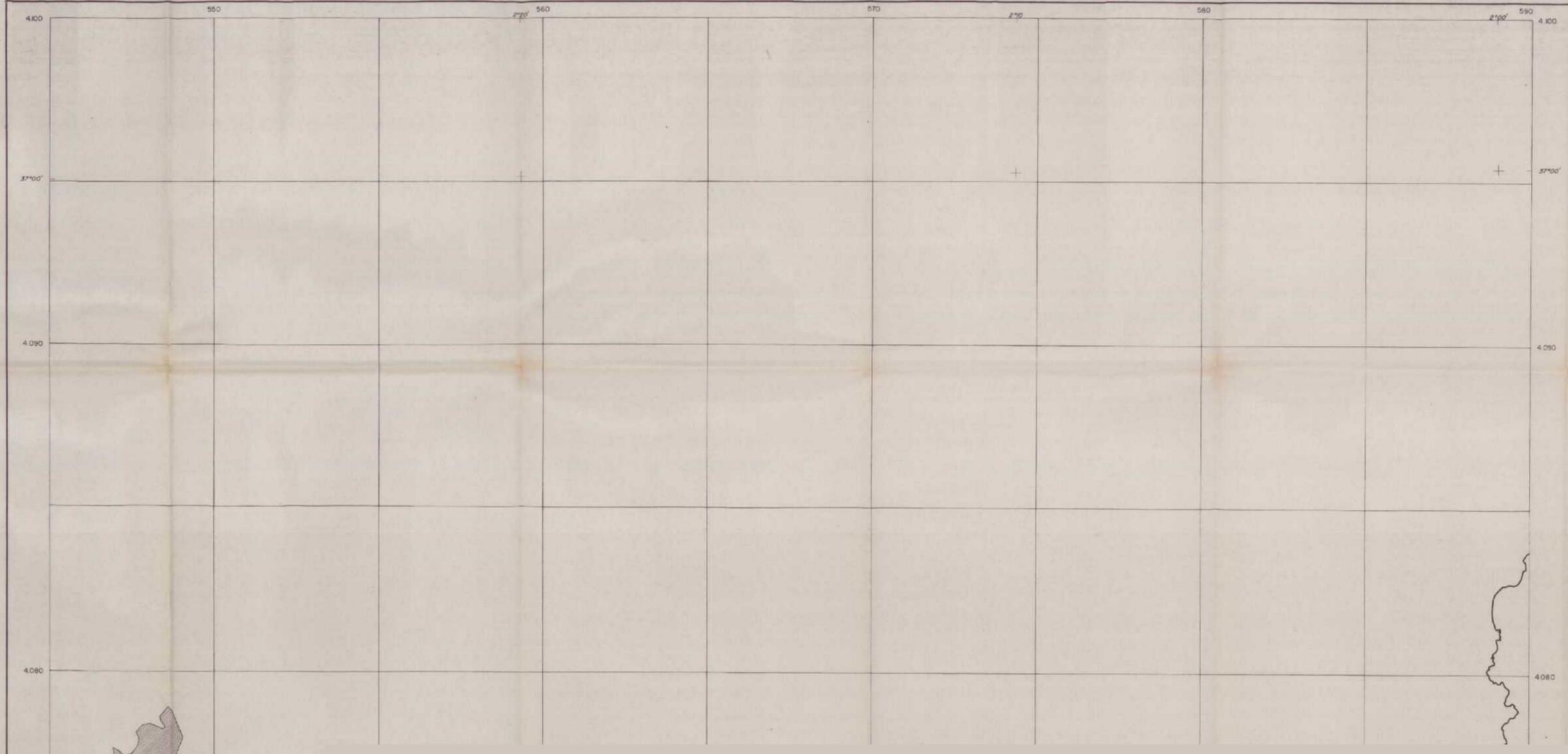
| Line No.  | Year | Company | Product   | Quantity    | Notes      |
|-----------|------|---------|-----------|-------------|------------|
| HV-85     | 1985 | SDE-1   | INIEPSA   | 15000-12000 | Explosivos |
| PF-1 + 13 | 1982 | C.G.O.  | INIEPSA   | 12000       | (Pop-shot) |
| PF-29, 30 |      |         |           | 18000-24000 | Explosivos |
| PF-64(H)  | 1984 | NOVISON | INIEPSA   | 24000       | Hidro Pula |
| PF-86     | 1986 | C.G.O.  | HISPANOIL | 30000-15000 | Explosivos |
| S-80      | 1980 | S.O.S.  | CHEVRON   | 12000       | (Pop Shot) |
| S-82      | 1982 | C.G.O.  | CHEVRON   | ---         | Explosivos |
| S-84      | 1984 | C.G.O.  | CHEVRON   | 12000       | Explosivos |
| S-85      | 1985 | C.G.O.  | CHEVRON   | 18000       | Explosivos |
| MA        | 1978 | E.D.S.  | INIEPSA   | 12000       | Explosivos |



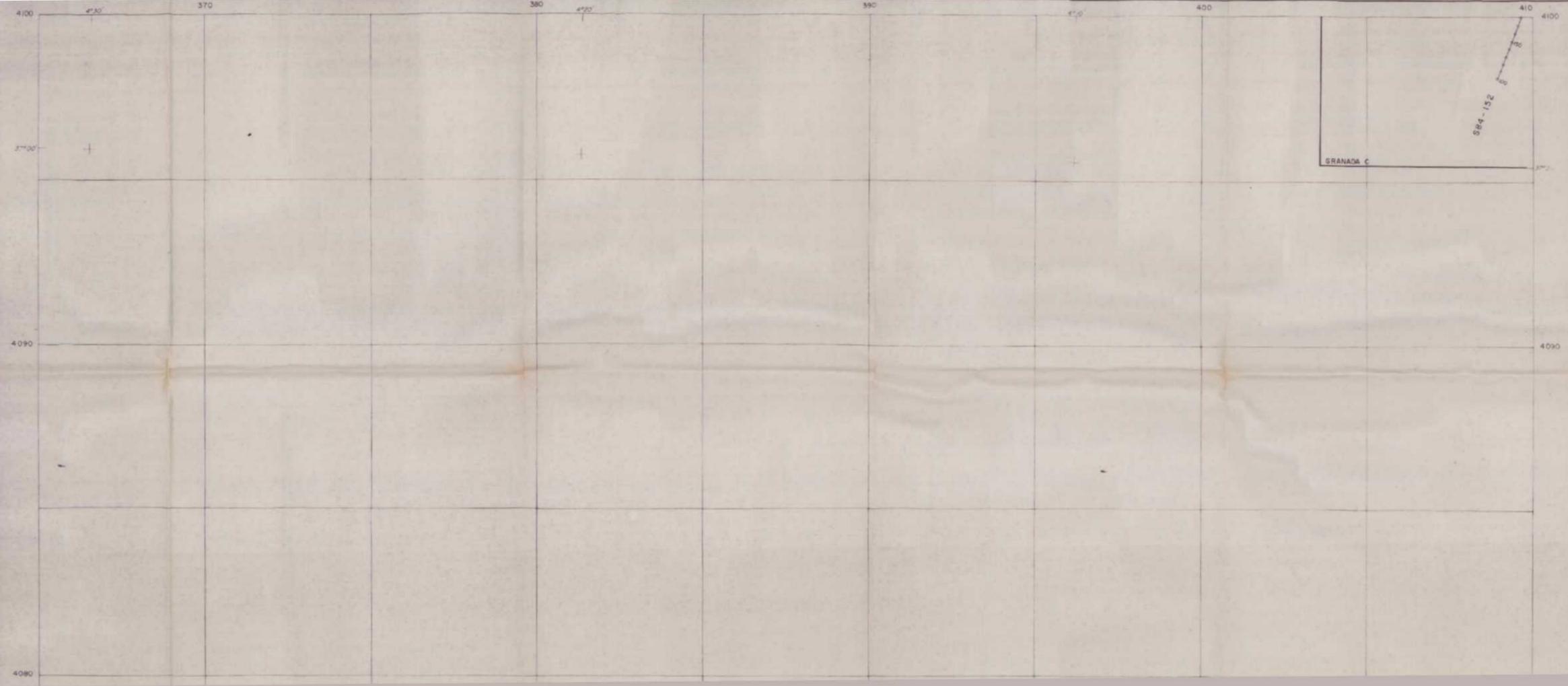
|      |         |      |         |        |           |          |
|------|---------|------|---------|--------|-----------|----------|
| 1975 | AT      | 1975 | C.O.G.  | ENYSSA | 1400      | VIETNAM  |
| 1976 | AM 1-10 | 1976 | SEEL    | ENYSSA | 1400      | ---      |
| 1978 | AM 1-10 | 1978 | C.O.G.  | ELF    | 2100-2600 | ---      |
| 1979 | AM 1-10 | 1979 | C.O.G.  | ELF    | 2600-3100 | ALYSSA   |
| 1972 | AT      | 1972 | DISCOM  | ENYSSA | 1200      | ALYSSA   |
| 1973 | AT      | 1973 | C.O.G.  | ENYSSA | 2000      | VERONICA |
| 1973 | AR      | 1973 | WESTERN | ---    | 3800      | MARSHALL |



| CAMPANA SISMICA | AÑO  | OPERARISTA | OPERADOR | COBERTURA | FUENTE DE ENERGIA    |
|-----------------|------|------------|----------|-----------|----------------------|
| S-83A           | 1983 | C.G.S.     | ESON     | 2400      | Explosivos           |
| S-82A           | 1982 | C.G.S.     | ESON     | 1800      | Explosivos Liberales |



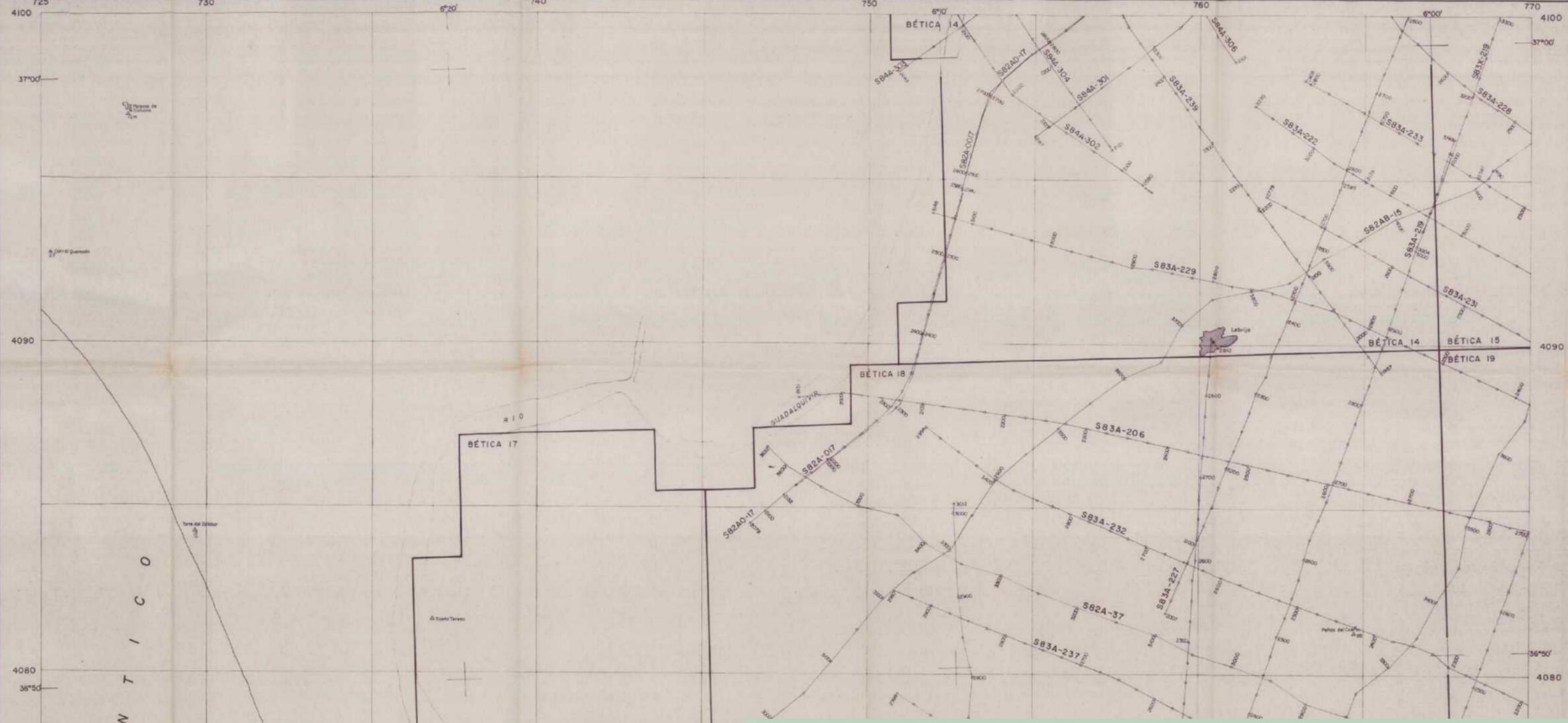
| CARVAIA SIBERICA | ANO  | ORIENTAÇÃO          | OPERADOR      | COORDENADAS | FUNÇÃO DE ENERGIA |
|------------------|------|---------------------|---------------|-------------|-------------------|
| AD               | 1972 | C.S.G.              | ESPANA        | 12004       | Vaporizador       |
| AM               | 1974 | SEEL                | ESPANA        | 24001       | ---               |
| AS               | 1971 | WESTPHAL GEOFISICAL | ---           | 16006       | Maxigulon         |
| AV               | 1972 | BY GEOFISICAL       | BY GEOFISICAL | 24004       | Airgun            |
| IV               | 1971 | SHELL Sinter        | SHELL Sinter  | 12001       | Airgun            |



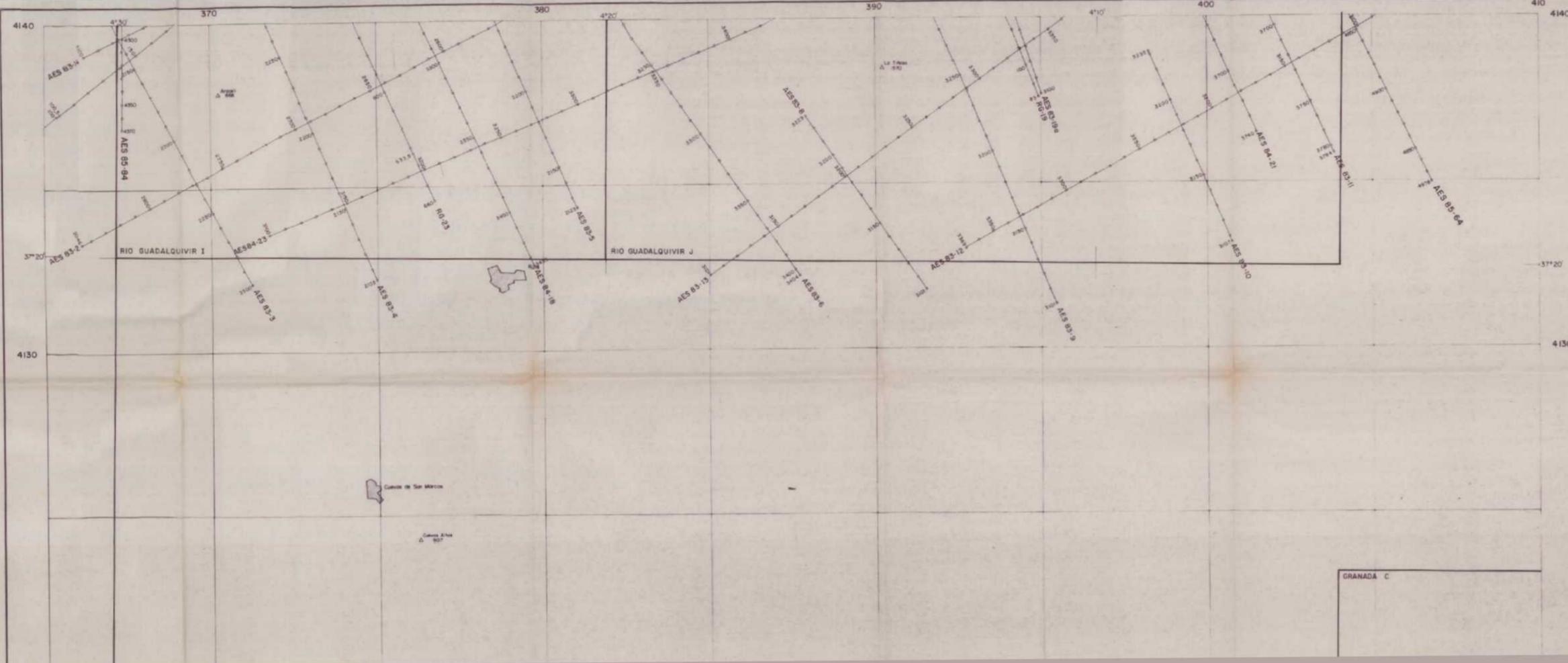
| CAMPUS | AGE  | CHARACTERISTICS            | OVERLAP | CLASSIFICATION | PHOTOGRAPHIC |
|--------|------|----------------------------|---------|----------------|--------------|
| AS     | 1977 | WESTERN<br>DECOMPOSITIONAL | ---     | 26001          | Maxipol      |
| AE     | 1972 | C.G.G.                     | BNPA    | 12001          | Vaporizer    |
| EAS    | 1974 | Seismograph                | ENOC    | 24001          | Airgun       |
| DIG    | 1972 | DIGICON                    | DIGICOM | 24001          | Airgun       |



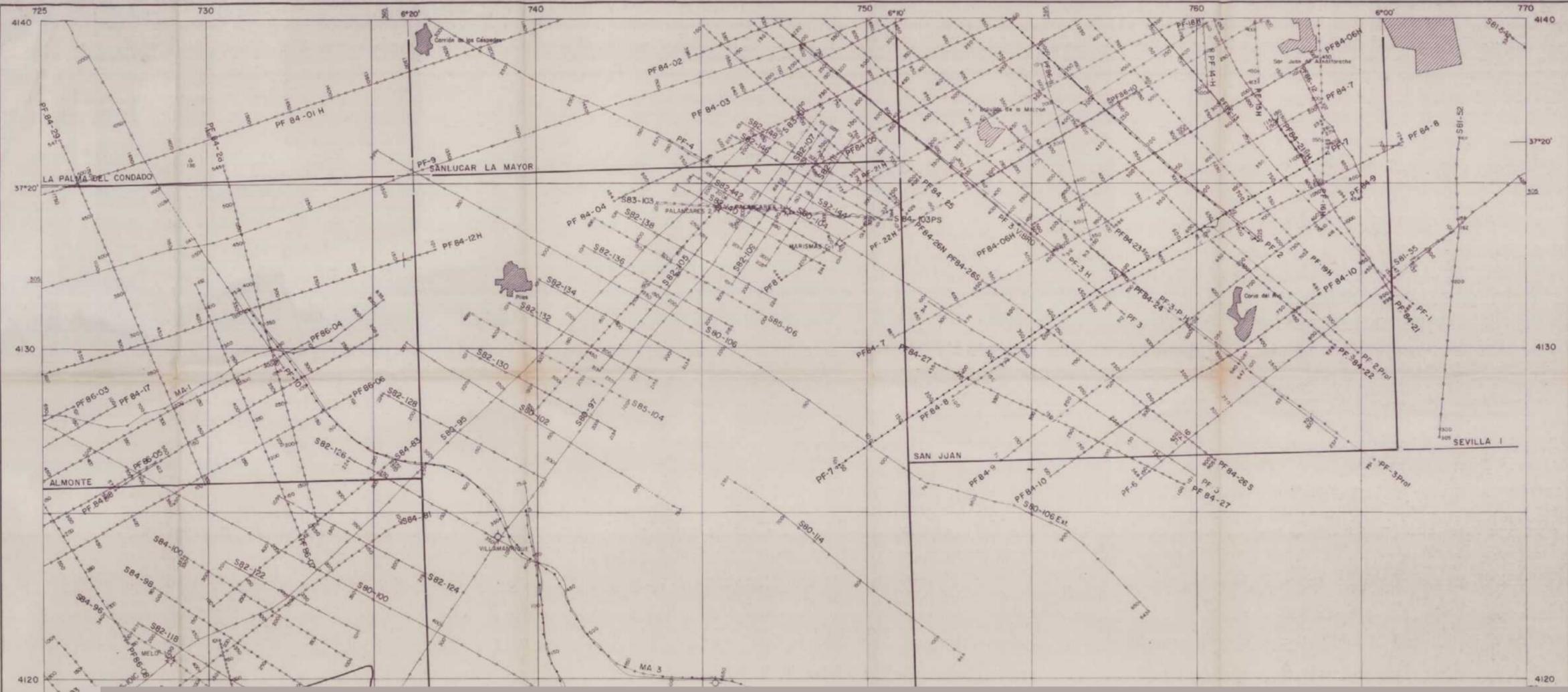
| CAMPAÑA | AÑO  | CONTRATISTA | OPERADOR | COBERTURA | FUENTE DE ENERGÍA   |
|---------|------|-------------|----------|-----------|---------------------|
| S-82-A  | 1982 | C.G.U.      | ESSE     | 43901     | VÍBORAS, INDICIALES |



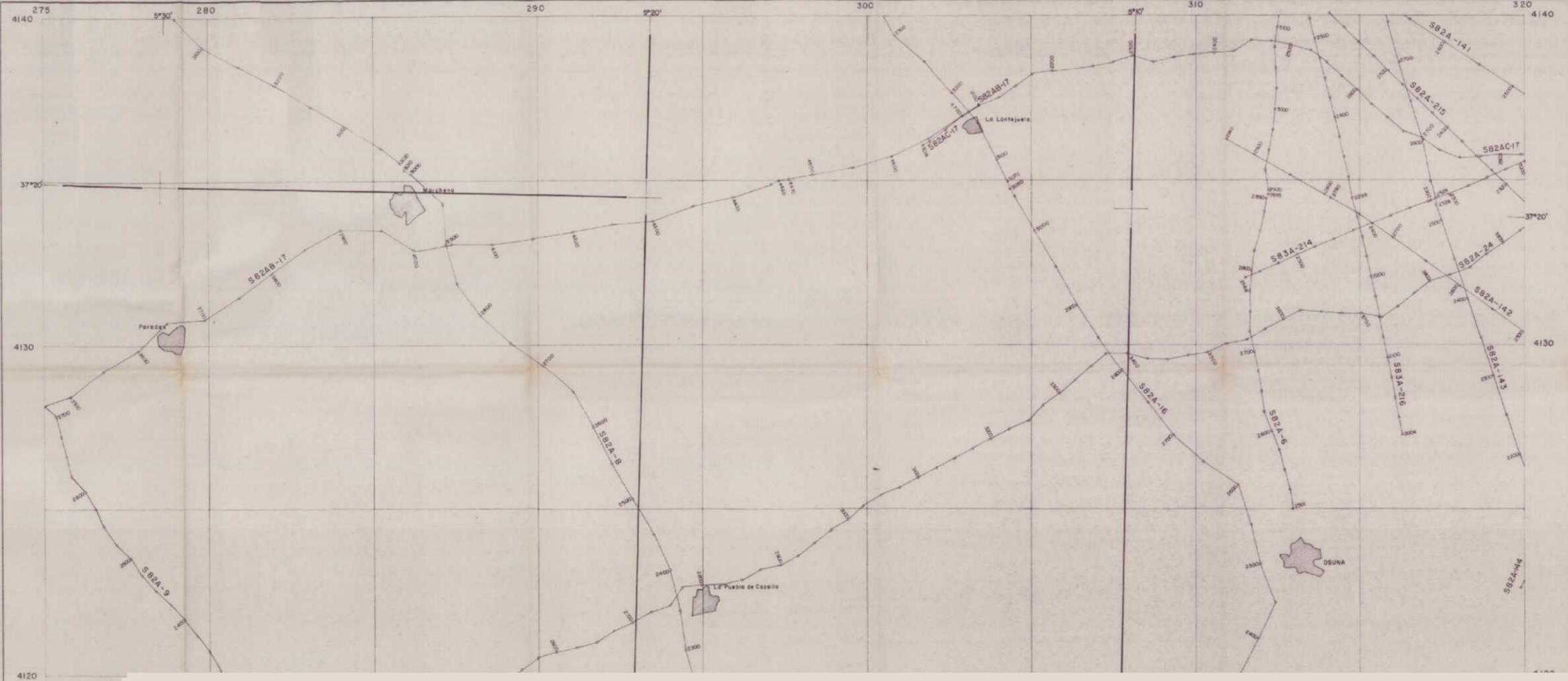
| CAMPORA ELÉCTRICA | AÑO  | CONTABILIDAD | OPERADOR | CATEGORÍA | PUNTO DE ENERGÍA     |
|-------------------|------|--------------|----------|-----------|----------------------|
| S-81A             | 1983 | C.G.C.       | ESXUN    | 2400      | Explosivos           |
| S-81A             | 1984 | PARALELA     | ESXUN    | 5200      | Explosivos           |
| S-82A             | 1982 | C.G.C.       | ESXUN    | 4800      | VÍCTORIA DE LOS RÍOS |



| CONTRATO | AÑO  | COMPAÑIA | VALOR    | VALOR       | VALOR       |
|----------|------|----------|----------|-------------|-------------|
| S-84     | 1984 | C.G.G.   | CHEVRON  | 15000       | Explicativo |
| AES-85   | 1985 | C.G.G.   | AMOCO    | 48000-12000 | Explicativo |
| AES-83   | 1983 | C.G.G.   | AMOCO    | 12.0000     | Explicativo |
| AES-84   | 1984 | C.G.G.   | AMOCO    | 12.0000     | Explicativo |
| 86       | 1982 | E.B.S.   | ENTEPISA | 12000-24000 | Explicativo |

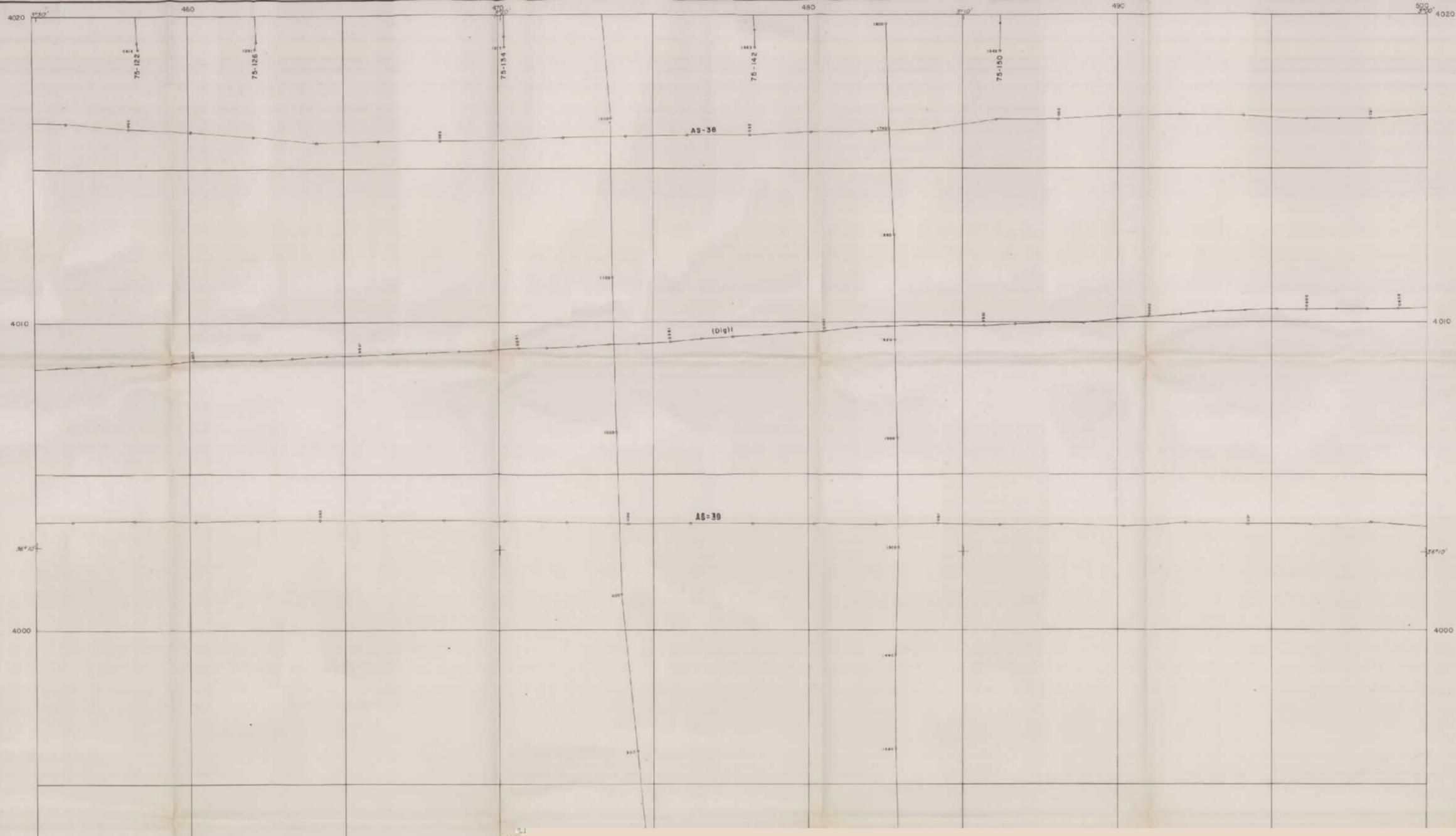


| CAMPANA        | ANIO | COMUNICACION | OPERACION | CANTIDAD            | TIPO DE ENERGIA |
|----------------|------|--------------|-----------|---------------------|-----------------|
| S-83A          | 1983 | C.G.G.       | KEKON     | 24000               | Explosivos      |
| S-84A          | 1984 | PAKLA        | ESSO      | 32000               | Explosivos      |
| S-82A          | 1982 | C.G.G.       | ESSO      | 48000               | Explosivos      |
| HA             | 1978 | S.S.S.       | ENI/ESA   | 12000               | Explosivos      |
| PF 1ml. 2ty 3E | 1982 | C.G.G.       | ENI/ESA   | 12000<br>1800-14000 | Explosivos      |
| PF-84(N)       | 1984 | MORISON      | ENI/ESA   | 24000               | hidra pulpa     |
| PF-89          | 1989 | C.G.G.       | HISPAOLIL | 15000-2000          | Pop. Soot.      |
| S-80           | 1980 | S.O.S.       | CHEVRON   | 12000               | Explosivos      |
| S-81           | 1981 | C.G.G.       | CHEVRON   | 48000               | Explosivos      |
| S-82           | 1982 | C.G.G.       | CHEVRON   | ...                 | Explosivos      |
| S-83           | 1983 | C.G.G.       | CHEVRON   | 32000               | Explosivos      |
| S-84           | 1984 | C.G.G.       | CHEVRON   | 12000               | Explosivos      |
| S-85           | 1985 | C.G.G.       | CHEVRON   | 16000               | Explosivos      |

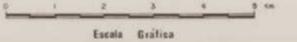


| CAMPO<br>ELIBICA | AÑO  | CONTRATISTA | GERADOS | COMERCIO | PUNTO DE<br>INSPECCIÓN   |
|------------------|------|-------------|---------|----------|--------------------------|
| S-82A            | 1982 | C.G.C.      | 2200    | 2000     | Vistorias,<br>Explosivos |
| S-83A            | 1983 | C.G.C.      | 2000    | 2000     | Explosivos               |





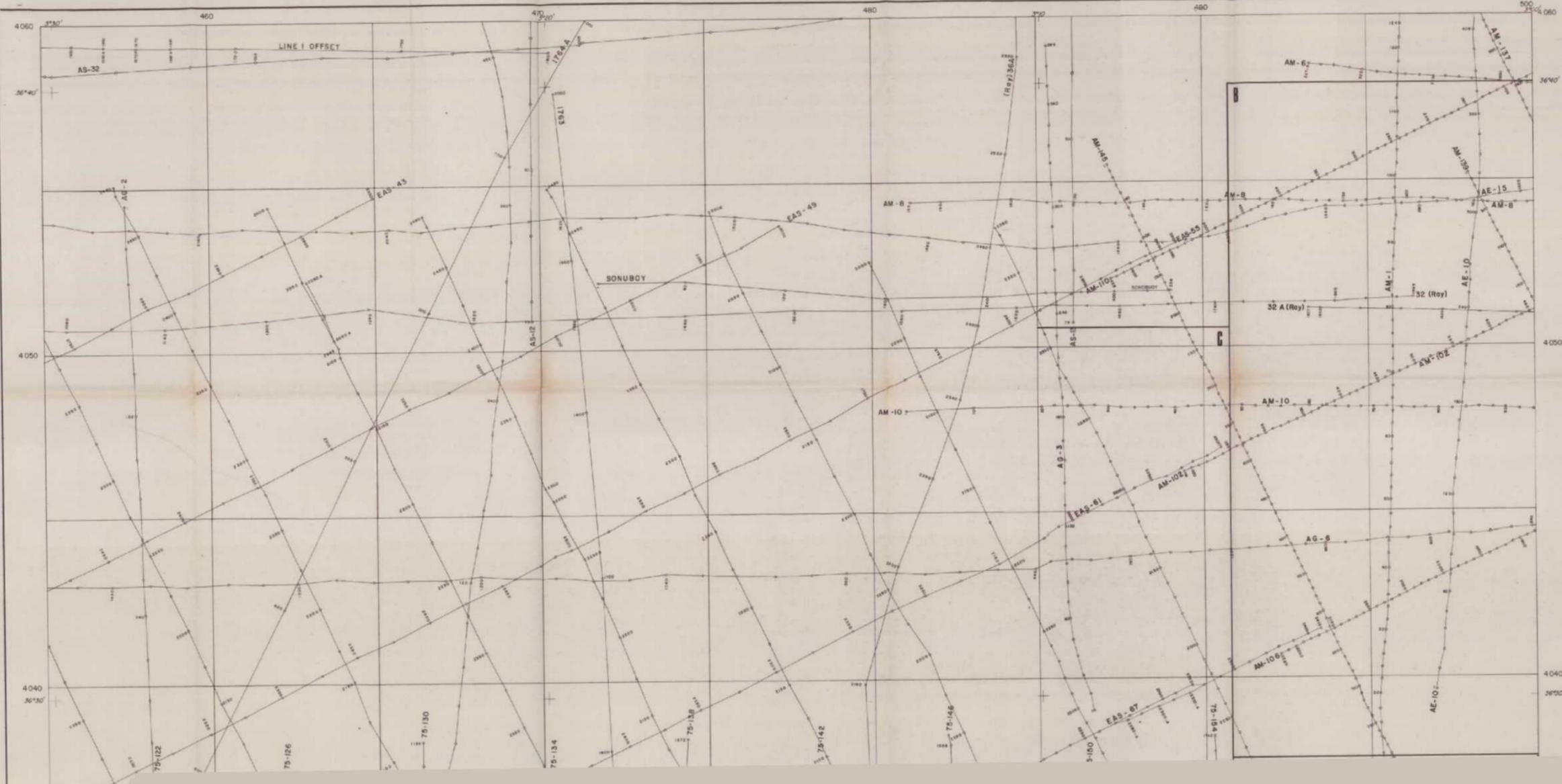
| CAMPAÑA<br>SIEFERA | AÑO  | CONTRATISTA            | OPERACION             | COBERTURA | FUENTE DE<br>ENERGIA |
|--------------------|------|------------------------|-----------------------|-----------|----------------------|
| RAY                | 1972 | RAY                    | RAY                   | 2409      | Airgué               |
| AS                 | 1977 | WESTERN<br>GEOPHYSICAL | ---                   | 3609      | Municipio            |
| DIO                | 1972 | DICIDON                | DICIDON               | 2408      | Airgué               |
| IS-                | 1975 | G.S.I.                 | SHELL                 | 2408      | ---                  |
| IT-                | 1971 | SIPM<br>SHELL Intern.  | SIPM<br>SHELL Intern. | 1208      | Airgué               |





| CAMPANA SIMICA | AÑO     | CONTRATISTA | OPERADOR                | EXMENSURA  | FUENTE DE ENERGIA |
|----------------|---------|-------------|-------------------------|------------|-------------------|
| BT             | 1977-80 | F.O.S.      | ENIEFRA                 | 32004      | Explosivos        |
| 1767-68<br>24  | 1971    | SHELL       | SHELL<br>Espectulativ   | 34004      | Airgun            |
| AE             | 1971-72 | C.O.G.      | SHPA                    | 1200-20004 | Vapores           |
| 4              | 1972    | DIJICOM     | DIJICOM<br>Espectulativ | 54004      | Airgun            |
| BA-CC          | 1984    | HORIZON     | SHELL                   | ---        | Explosivos        |





| WELL IDENTIFICATION | DATE | OPERATOR | DEPTH       | DEPTH     | TYPE OF WELL |
|---------------------|------|----------|-------------|-----------|--------------|
| AO                  | 1972 | C.O.G.   | ENPASA      | 2400      | Vaporizer    |
| EAS                 | 1974 | SEL      | ENPASA-ESSE | 2400-4200 | Airgun       |
| 75-                 | 1975 | G.N.I.   | SHELL       | 2400      | ---          |
| AK                  | 1972 | C.O.G.   | ENPASA      | 3200      | Vaporizer    |
| AM-10               | 1974 | SEL      | ENPASA      | 2400      | ---          |
| AM-10               | 1974 | C.O.G.   | SEL         | 2400-3400 | ---          |
| RAY                 | 1972 | RAY      | GEOPHYSICAL | 2400      | Airgun       |
| AS                  | 1977 | WESTERN  | ---         | 2600      | Refracted    |
| 17-                 | 1971 | SIN      | SIN         | 1200      | Airgun       |

