ID 3715

CANADIAN SUPERIOR OIL LTD.

Tyrrhenian Sea Project

Zone E, Offshore West Coast, Italy

Block d 23-E-R-CC

RISERVATO

October, 1974

G. A. Mouritsen

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2. Water Depths (Feet)

I Operations

Date of Survey	- April 12th, 1974
Contractor (acquisition)	- Seismograph Services Ltd.
Boat	- M/V K. R. Toender
Quality Supervision	- J. E. Law of Exploration Consultants Ltd.
Number of Miles	- 22

II Recording

Seismograph Services Ltd.

Instruments	T.I. DFS III, 62 channel, Binary Gain
Filters	Hi Cut 62 hz. alias Lo Cut 8 hz., 18 db/Oct.
Sample Rate	4 mil
Tape	9 track
Geophones	Multidyne, 48 groups 50 meters in length at 50 meter intervals
Cable	Seismic Engineering 2400 meters at 15 meter depth.
Pop Interval	50 meters
Energy Source	8 unmodified 12" diam. Esso Prod. and Research sleeve exploders arranged in 4 pairs with a 1.7 sec. fill.
Shot Point Interval	500 meters
Type Shooting	2400%
Gun Depth	25 feet

III Navigation Systems and Ancillaries

1. 2 Decca DL21 Loran "C" Receivers
2. Magnavox 200 Dual Channel Integrated Sat/Nav System
3. Magnavox Satellite Receiver Dual Channel 400 mhz and 150 mhz.
4. Ametek - Straza 2020 Sonar Doppler
5. Sperry 227 Gyrocompass
6. Houston Instruments Omnigraphic Track Plotter
7. A5R 33 Teletype
8. SSL Data Logger
9. Krupp Atlas/Deso Fathometer

Loran "C" range - 1200 nautical miles over sea
- 900 nautical miles over land.

Boat - M/V K.R.Toender

Type - Converted Norwegian trawler built 1962

Dimensions - Gross tonnage - 984
Length - 200 feet
Beam - 30 feet
Draught - 16.6 feet
Cruise Speed - 13' knots

Bridge Equipment- 1 Kevin Hughes 1214 Radar, 1 Kevin Hughes 19 Radar,
1 Decca 101 Radar, 1 Anschultz Automatic Pilot,
1 Anschultz Gyrocompass, 2 Simrad Echo Sounder,
1 Radiphone VHF Radio and 1 Disa Ship to Shore Radio.

IV Data Processing: by Eldred Won

Data Processing was done entirely by Seiscan Delta. Testing and selection of processing parameters carried out by Seiscan Delta and was supervised by Canadian Superior Oil Ltd. Different types of deconvolution operators were tested on the data. The best results were obtained with predictive deconvolution with a predictive time of 36 milliseconds and an operator length of 400 MS and varied to 300 MS for the shallower water. The data was filtered before decon with a 6-56 hz. digital filter and filtered again with 6-56 digital filter after decon to minimize noise brought up by the decon operator.

Velocity spectrum locations were selected by Canadian Superior from the plots of the near traces and run and interpreted by Seiscan Delta. Velocity locations were selected at approximately one (1) every three (3) miles and also at line intersections.

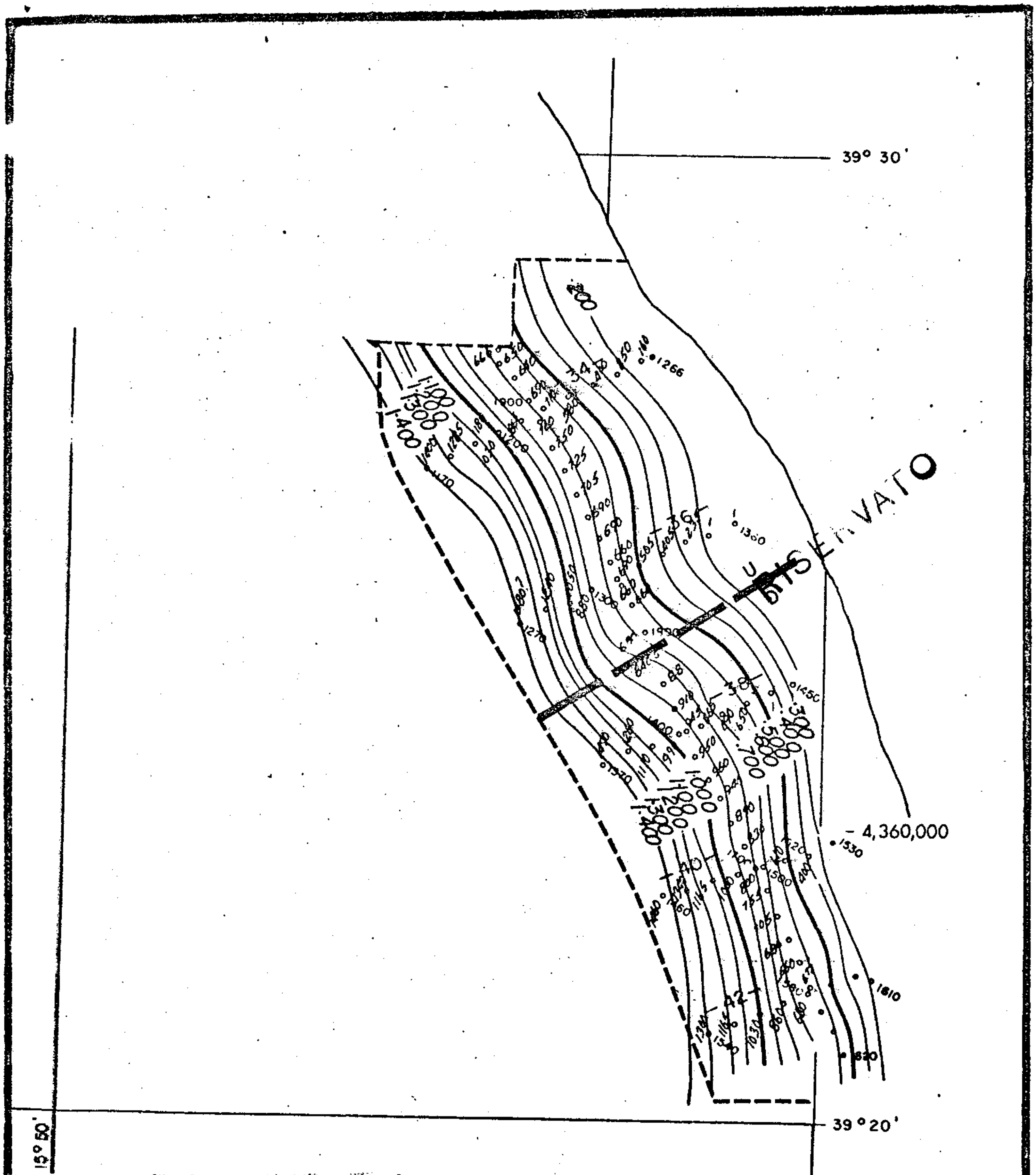
Final displays were filtered with a time and space variant digital filter. In general a 12-48 hz. filter was used on the shallow part of section, 6-40 hz. filter was used on the middle part of section, and 0-24 hz. filter was used on the deeper part of section. Complete processing sequence as follows:--

1. Data was edited.
2. Gain recovery and spherical divergence corrections applied.
3. CDP gathers.
4. Deconvolution performed on data.
5. Near traces plotted - 100% section.
6. Velocity locations selected, spectrum run and interpreted.
7. NMO applied.
8. Muting and verivels run to monitor the efficiency of velocity functions.
9. Digital filtering.
10. Trace equilization.
11. Display on film.

V Interpretation

The Base of Upper Miocene Unconformity is a uniform monocline which plunges rapidly seaward. The regional dip is southwest. One minor normal fualt is present but its strike is uncertain. No data below the Unconformity could be mapped.

Respectfully submitted
G. A. Mouritsen
G. A Mouritsen



CANADIAN SUPERIOR OIL LTD.

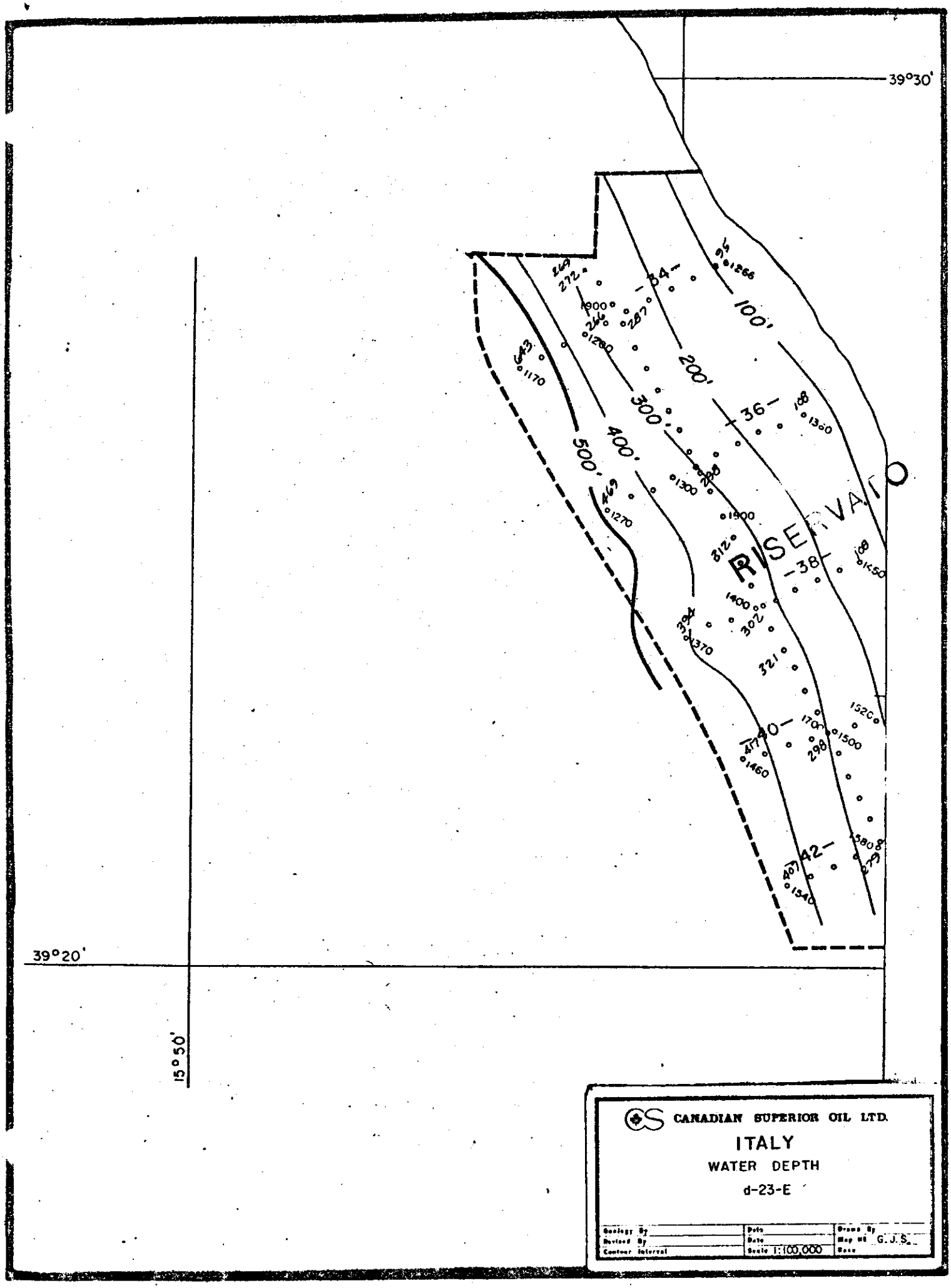
ITALY

TIME STRUCTURE
UNCONFORMITY (BASE UPP. MIOCENE)

d-23-E

Geology By	Date	Drawn By
Revised By	Date	Map Nº G.J.S.
Contour Interval	Scale 1:100,000	Date

16 OCT 1974



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WATER DEPTH

d-23-E

Geology By	Date	Drawn By
Revised By	Date	Map No G.J.S.
Contour Interval	Scale 1:100,000	Base

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