

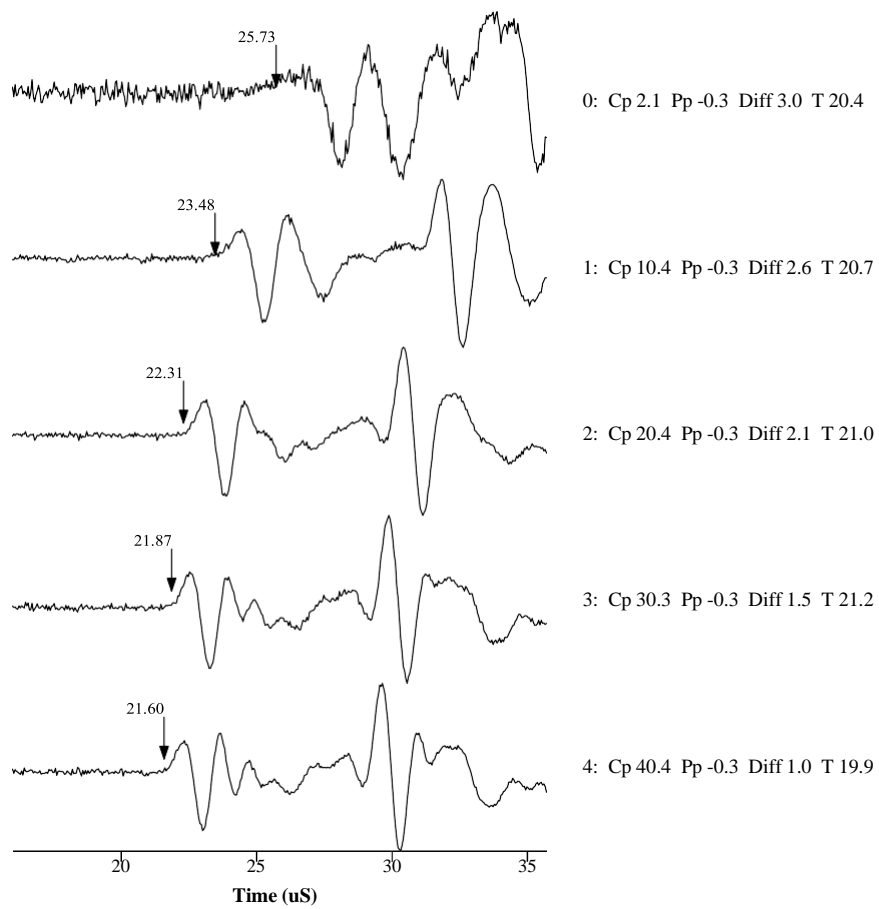
## Ultrasonic Velocity Measurement Report

| Sample and Experiment Information |                         |                 |                 |
|-----------------------------------|-------------------------|-----------------|-----------------|
| Well:                             | JROC                    | Organization:   | UND/EERC        |
| Depth:                            | 4731 ft                 | Transducer:     | Vel_1in_new     |
| Formation:                        | Opeche                  | Rock type:      | Shaly-sandstone |
| Dry bulk density:                 | 2.380 g/cm <sup>3</sup> | Porosity:       | 12.28%          |
| Sat. bulk density:                |                         | Pore fluids:    |                 |
| Diameter:                         | 25.40 mm                | Entered Length: | 54.20 mm        |

Expt name: Ultrasonic Velocity Measurement at Different Confining Pressures

| Observed Velocities and Moduli for<br>Opeche Sample |      |      |       |             |             |                    |                    |
|---|------|------|-------|-------------|-------------|--------------------|--------------------|
| Event   | Conf | Diff | $V_p$ | $V_s^{(1)}$ | $V_s^{(2)}$ | Young's<br>Modulus | Poisson's<br>Ratio |
|   | MPa  | MPa  | m/s   | m/s         | m/s         | GPa                |                    |
| 0   | 2.1  | -    | 2908  | 1938        | 1955        | 19.73              | 0.094              |
| 1   | 10.4 | -    | 3345  | 2125        | 2129        | 24.99              | 0.161              |
| 2   | 20.4 | -    | 3628  | 2259        | 2263        | 28.77              | 0.182              |
| 3   | 30.3 | -    | 3747  | 2308        | 2324        | 30.41              | 0.191              |
| 4   | 40.4 | -    | 3826  | 2330        | 2349        | 31.30              | 0.201              |

| Waveform waterfall for <b>p</b> arrivals |         |
|--|---------|
| Well:                                    |         |
| Depth:                                   | 4731 ft |
| File name:                               | Opeche  |

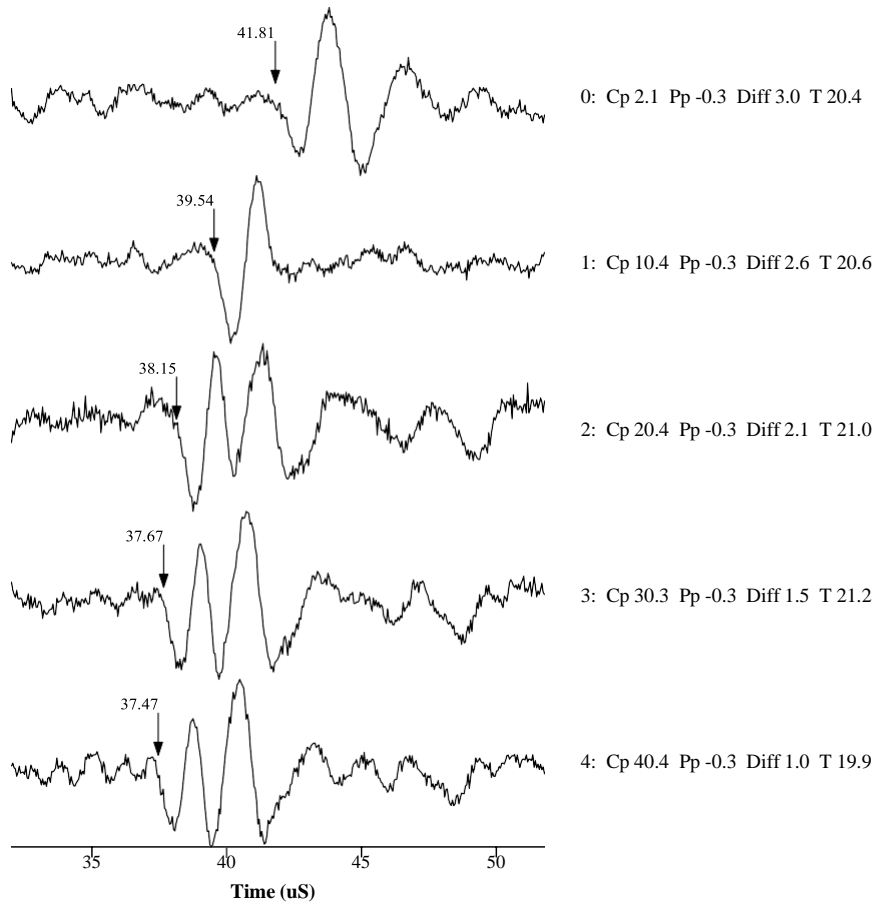


# Waveform waterfall for s1 arrivals

Well:

Depth: 4731 ft

File name: Opeche



# Waveform waterfall for s2 arrivals

Well:

Depth: 4731 ft

File name: Opeche

