

Velocity measurements on core samples (4467.5', 4531', and 4678.5') from the Phillips Petroleum North Cook Inlet Unit A-2 well

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Total of 3 pages in report

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Dry lab test (Pages 1/3 + 2/3) JLR

The initial and less accurate lab test (wet and dry) results are given on page 3/3, JLR

## Velocity Measurements on Core Samples from Phillips North Cook Inlet A-2 Well

Depth: 4467.5'

Grain Density: 2.667 g/cc

Density, Dry: 1.679 g/cc

<u>Effective Pressure, psi</u>	<u>V<sub>p</sub>, ft/s</u>	<u>V<sub>s</sub>, ft/s</u>
251.2	4810	—
499.2	5233	—
745.1	5423	3120
1007.9	5792	3310
1500.1	6281	3600
1998.0	6630	3895
2497.7	6939	4226
3003.3	7278	4381

Depth: 4531'

Grain Density: 2.447 g/cc

Density, Dry: 1.879 g/cc

<u>Effective Pressure, psi</u>	<u>V<sub>p</sub>, ft/s</u>	<u>V<sub>s</sub>, ft/s</u>
242.6	5764	—
499.5	6202	—
744.2	6458	—
1000.5	6675	—
1502.0	7080	3868
2004.7	7379	4094
2494.3	7789	4243
2993.8	7966	4403

Depth: 4678.5'

Grain Density: 2.663 g/cc

Density, Dry: 1.804 g/cc

<u>Effective Pressure, psi</u>	<u>V<sub>p</sub>, ft/s</u>	<u>V<sub>s</sub>, ft/s</u>
242.6	5383	—
499.5	5756	—
744.2	5939	3738
1000.5	6035	3864
1502.0	6397	4119
2004.7	6804	4272
2494.3	6930	4450
2993.8	7339	4601

Initial lab test (wet+dry) page 3/3  
 Not as accurate as second lab test (dry only)  
 results shown on pages 1/3 + 2/3. JAR

FILE: ALASKACO SCRIPT A VM/XA SP 2.1 CMS 5.6

ALASKAN COOK INLET SAMPLES

*Continuing*

DRY RUNS: ..note no Vs measured..too slow..will try to get data when raw waveforms are sent back from the field.

Depth: 4467.5

Press	Vp
297.3	0.0?
493.7	0.0?
743.4	4616.3?
985.4	4997.5?
1490.1	5506.6?

Depth: 4531

Press	Vp
296.4	0.0?
493.7	0.0?
741.3	5116.3?
986.3	5466.2?
1485.9	5785.6?

WET RUNS: saturated with 25,000ppm brine

Depth: 4467.5

Press	Vp	Vs11	Vs22
317.2	6720.5?	3895.0?	3928.3?
471.5	6822.1	3959.7?	3990.2?
694.1	7084.6	4050.6?	4082.6?
988.7	7223.1	4112.3?	4119.9?
1459.3	7546.0	4214.9?	4214.2?

Depth: 4531

Press	Vp	Vs11	Vs22
316.6	7404.0?	4168.5?	4232.9?
500.0	7510.8?	4206.5?	4254.5?
744.5	7720.1	4258.3?	4303.0?
990.3	7926.3	4311.2?	4357.2?
1483.3	8065.0	4370.2?	4403.3?

?...questionable pick for this velocity

*Handwritten:*  
 0.7.1  
 1.7.5