



Primary Fuels, Inc.
A Subsidiary of Houston Industries Incorporated

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O. C. D.
ARTESIA, OFFICE

March 14, 1988

Bureau of Land Management
P. O. Box 1778
Carlsbad, New Mexico 88220

Re: Report on Cementing 8-5/8" Intermediate
PFI - Amoco 19 Federal #3
Eddy County, New Mexico

Gentlemen:

As witnessed by BLM representatives Jose Sanchez, Tom Hare, and Shannon Shaw, several problems were encountered attempting to cement the 8-5/8" intermediate casing on the PFI-Amoco 19 Federal #3 well.

After drilling out of the 13-3/8" surface casing, returns were lost at 650' and the hole was dry drilled with fresh water to 2190'. Fifty joints of 8-5/8" 24# J-55 ST&C casing were run to TD at 2190'. Halliburton mixed and pumped 525 sacks of cement. Before mixing the tail slurry, the pump pressure increased to 1950 psig and forced the 8-5/8" casing out of the hole 25' with the shoe at 2190'. No returns were seen out of the 8-5/8" x 13-3/8" annulus during the cementing.

The BLM representative was consulted by Tom Mendenhall, PFI's representative on location, and the proposal to run a cement bond log, perforate above the cement top, and cement was approved. Cement was drilled out of the 8-5/8" casing to 2100'. A GR-CCL-CBL log was run which indicated the cement top to be at 1430'. Perforations were made in the 8-5/8" casing from 1364'-1366'.

A packer was run on drill pipe and set below the perforations. The drill pipe was pressured to 1500 psig without loss and the packer then set above the perforations. A rate of 5 BPM at 300 psi was observed pumping thru the perforations. After pulling the packer an EZSV cement retainer was set at 1340' for cementing the upper portion of the 8-5/8" casing.

During displacement of the 475 sacks of cement, the pressure increased to 1400 psig, then fell to 900 psig with circulation between the 4-1/2" x 8-5/8" annulus. Attempts to pull out of the EZSV were unsuccessful with a maximum pull of 236,000 lbs.