		Drill	Drill		Est.		
		Pipe	Pipe	Annulus	Blowout		
		FW	BW	B₩	Rate		
<u>Date</u>	<u>Time</u>	(psig)	(psig)	(psig)	(BWPM)	Remarks	
	7:50	450		270			
	7:52	210		5			
	7:54	205		5		Red beds	heaving
	8:00	220		5	8.5		
	8:28					Shut-in	
	8:28	310		175			
	8:30	430		225			
	8:35	475		290			
	8:40	485		300			
	8:45	490		300			

Pumped fresh water down drill pipe at the ate of 6 BPM at 1100 psi. Pumped 30 bbls of 17.3 PPG mud, broke off Kelly and Kelly sub and then installed lower Kelly valve. Nippled up drill string for running string shot. Rigged up Apollo Wireline Services. Pumped 40 bbls of fresh water down drill pipe at 6 BPM at 1100 psi to clear any mud from drill string. Ran into hole with string shot and landed string shot in bid sub. Pumped down drill string at 3-1/2 BPM at 600 psi. Shot string shot and then pumped down drill string at 3-1/2 BPM at 250 psi. Pulled out of hole with wireline. Pumped down drill string at 6 BPM at 600 psi.

Rigged up Halliburton to well. Pumped fresh water down drill string at 6 BPM at 700 psi. At 2:48 PM, started mixing and pumping cement in order to bring water blowout under control in compliance with NMOCD requirements. Mixed and pumped thixotropic cement down 9-5/8" casing X 4-1/2 DP annulus at an average rate of 32.5 BPM. After a total of 2300 sx of thixotropic cement had been pumped at the surface, started getting returns of cement back to surface through the drill pipe. By the time 2600 sx had been pumped at the surface, the returns were excellent quality cement and then after 3000 sx had been pumped, the returns again became water cut.

With a total of 4400 sx of thixotropic cement pumped, switched from pumping thixotropic cement to pumping a 50-50 blend of API Class-H cement and calseal. Pumped a total of 750 sx of calseal.

Although returns of thixotropic cement occurred after 2300 sx had been pumped, Jerry Sexton (District Supervisor of NMOCD District No. 1), so that quality of annular cement job could be ascertained, would not allow cement to be pumped down drill pipe as well as down annulus. Once returns back up drill pipe occurred, approximately 10 BPM out of 32.5 BPM being pumped into ground returned through the drill pipe. consequently, well annulus and blowout zone was cemented with a total of 4260 sx of thixotropic and calseal cement and approximately 877 sx of thixotropic cement was circulated back to surface.

In accordance with NMOCD instructions, continued to flow saturated brine back through drill string while cement in 9-5/8" casing X 4-1/2" DP annulus thoroughly set and reacted.

Also in accordance with NMOCD requirements, waited on cement for six hours to run into hole with temperature log to determine the net annular interval effectively cemented. Rigged up Apollo Wireline Services and attempted to go into hole with temperature tool, but did not have enough weight to get into hole. Checked shut-in pressure on drill pipe. Shut-in pressure was 900 psig which confirms that much of annulus is not cemented off and also proving that it might have been a catastrophe to have shut in well for any prolonged period of time before 9-5/8" casing X 4-1/2" DP annulus was thoroughly cemented. Now attempting to changeout Halliburton changeover swage so that a larger

RECEIVED .

JUN 2 1 1991

HOBBS OFFICE