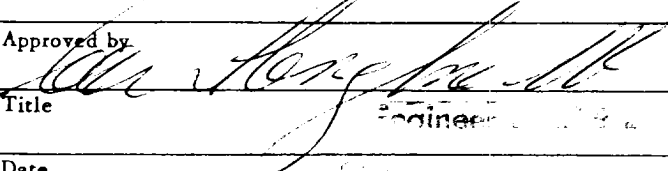


## NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103  
(Rev 3-55)

## MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

Name of Company <b>Western Natural Gas Company</b>				Address <b>823 Midland Tower, Midland, Texas</b>			
Lease <b>State McDonald</b>		Well No. <b>21</b>	Unit Letter <b>A</b>	Section <b>24</b>	Township <b>22-S</b>	Range <b>36-E</b>	
Date Work Performed <b>9-20-60 - 9-30-60</b>		Pool <b>Yates Gas Undesignated</b>			County <b>Lee</b>		
THIS IS A REPORT OF: (Check appropriate block)							
<input type="checkbox"/> Beginning Drilling Operations		<input checked="" type="checkbox"/> Casing Test and Cement Job		<input checked="" type="checkbox"/> Other (Explain): <b>Recompletion from Queens Arrowhead Pool to Yates Gas Undesignated</b>			
<input type="checkbox"/> Plugging		<input type="checkbox"/> Remedial Work					
<p>Detailed account of work done, nature and quantity of materials used, and results obtained.</p> <p>On 9-20-60 pulled old 2" FUE tubing. Ran Lane-Wells Gamma Ray-Neutron log and neutron log. Old cement top at 2480' behind the 4 1/2" casing according to logs. Set Lane-Wells C.I. bridge plug with one sack cement on top off of wire line at 3310'. Went in hole with 8-80 2 1/2" FUE tubing and Halliburton RTTE packer. Tested casing and plug to 1200 psig. Found holes in casing at intervals 560-600' and 710-800'. Perforated w/2 holes at 815' pumped in with water at 6 BPM at 750 psig. Cemented down 4 1/2" casing with 80 sx neat mixed with 10 sx calseal and 1 1/2 sx floeal - No circulation to surface, put 45 sx behind 4 1/2" casing with 1100 psig squeeze pressure leaving 35 sx inside the 4 1/2" casing. Drilled out cement to 620' - pressured to 1000 psig - pumped into formation at 1.5 BPM at 800 psig. Second stage bradenhead squeeze down the 4 1/2" casing consisted of 75 sx neat cement with 3 1/2 BA 5 (accelerator) had 100% circulation to surface behind the 4 1/2" casing of old drilling mud. Put 70 sx cement behind the 4 1/2" leaving 5 sx inside casing w/150 psig on cement. After 36 hours drilled back out to 620', pressured to 1000 psig for 30 min - pressure held O.K. Continued washing out cement - pressured up to 1000 psig after drilling all of cement in the casing - pressure held satisfactorily for 30 min. Perforated 2 jets shots per foot at following intervals: <b>SEE ATTACHED SHEET</b></p>							
Witnessed by <b>W. F. Cook</b>		Position <b>Div. Petr. Engineer</b>		Company <b>Western Natural Gas Company</b>			
FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY							
ORIGINAL WELL DATA							
D F Elev.		T D		P B T D		Producing Interval	
Tubing Diameter		Tubing Depth		Oil String Diameter		Oil String Depth	
Perforated Interval(s)							
Open Hole Interval				Producing Formation(s)			
RESULTS OF WORKOVER							
Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD	
Before Workover							
After Workover							
OIL CONSERVATION COMMISSION				I hereby certify that the information given above is true and complete to the best of my knowledge.			
Approved by 				Name <b>MR. Cook</b>			
Title <b>Engineer</b>				Position <b>Division Petroleum Engineer</b>			
Date <b>10/1/60</b>				Company <b>Western Natural Gas Company</b>			

CONTINUED

3282-90, 3262-70, 3230-40, 3204-10, 3178-84, 3016-26, 2780-88, 2748-58, 2720-30 feet in the Yates formation. Fraced with 27,000 gallons water - 27,000 lbs. sand through 2½" EUE tubing with packer set at 2600' as follows: Broke formation with 12 barrels acid at 2100 psig fraced at 3000 psig at 15 BPM using 60 ball sealers. 10 min shut down pressure was 1600 psig.

NOTE: The 70 sacks of cement pumped behind the 4½" casing on the second stage of cementing was sufficient cement to tie back into the 8 5/8" surface casing set at 332 feet.

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