

EL PASO NATURAL GAS COMPANY

*must file*

To Mr. A. J. Dudenhoeffer June 5, 1963  
From Production Engineering Dept. Farmington, New Mexico

SUBJECT: Water and Gas Flow from the Ground Bed Hole Drilled Near  
the San Juan 31-6 No. 7-1, NE Sec. 1-31-6, Rio Arriba  
County, New Mexico.

Well Data:

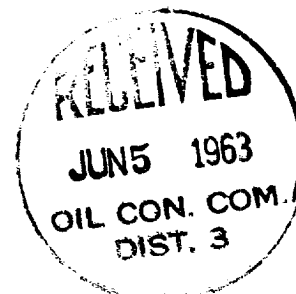
Completed: 7-6-55	T.D. 5325'
9-5/8" at 171'	S.O.P.
7" at 5080'	2-3/8" at 5797'
I.P. 3669 MCF/D	1962 Producing Rate = 145 MCF/D

Formation Tops:	Fruitland - 2874'
	P.C. - 3273'
	CH - 5163'
	Men. - 5251'
	P.L. - 5453'

The San Juan 31-6 No. 7-1 is one of the wells that is being brought under Cathodic Protection. During the drilling of the ground bed hole, approximately 150' from the well, a flow of water and gas was encountered at a depth of about 90 feet. The flow is not large, but it has continued for more than a week and does not show signs of stopping.

It was considered likely that the No. 7-1 could have a casing failure, therefore, the well was checked in the field on June 3, 1963, and the following information was obtained: FPT = 500 psig; FPC = 565 psig; Bradenhead Pressure = 135 lbs. The well was producing gas to the sales line. The bradenhead was opened to the atmosphere and it made gas for 30 seconds, then began making a solid stream of water. The flow of water continued for the one hour the bradenhead was left open, but it did diminish in rate after about 30 minutes and became more gas cut. The casing pressure did not change during this blow and the rate of production to the sales line remained constant.

From the above information, it is obvious that this well does not have a casing leak. It is very probable that the flow of gas and water has come up the wellbore outside of the 7" casing from possibly the Fruitland formation, and charged up the shallow formation. This is the flow that we now obtain from the bradenhead and from the ground bed hole. A water sample was obtained from both sources and should determine if both are coming from a common source.



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It should be pointed out that the Electrolysis Department was apparently able to drill another ground bed hole to a depth of 120' and obtain a successful ground bed. The location of this hole relative to the well is not known at this time. They made an attempt to plug the flowing hole with cuttings and a wooden plug, but were not successful, apparently, since the hole is still making water and gas.

  
D. C. Adams

Production Engineer

DCA:bjo

cc: J. E. Ashworth  
W. G. Cutler  
L. D. Galloway  
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