

OIL CONSERVATION COMMISSION
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO

September 12, 1966

Mr. Buck Willcoxson
Grants, New Mexico

Dear Mr. Willcoxson:

We have your letter of August 30, 1966, to Mr. A. R. Kendrick of this office. In this letter you have inquired whether or not the work which has been done on the Santa Fe B #1 well, which is located in Section 25 Township 18 North Range 9 West, properly complies with our previous instructions in order that the well may be left as a water well.

Information has been filed with this office indicating that the well was plugged back to a depth of 2719 feet, which would be below the Gallup formation, which was encountered at 1955 feet. Therefore, as I understand it, in its present state the Hospah-Gallup and Point Lookout sandstones are all open in the well bore. We also have no information indicating the source of the water which is to be produced in the well, although I presume that it is from the Gallup formation.

Tidewater Oil Company and other operators in the area have been notified by this office of our requirements in converting this type well to a water well in this area. If the water is to be produced from the Gallup formation we will require that casing be run to the water sand and cemented so that artesian water from the Gallup formation will not be dissipated in shallower formations. Some wells in the area have been converted to water wells in the Point Lookout sandstone which is much shallower and occurs at a depth of 696 feet in the Santa Fe B Well. In the case of a completion in the Point Lookout zone we would require a cement plug below the Point Lookout Sandstone so that the Hospah-Gallup and Point Lookout zones will be separated. We would also require that casing be installed to the Point Lookout Sandstone in these wells.

We are sending Tidewater Oil Company a copy of this letter and requesting that they take action in the immediate future to either convert the well to a water well in the manner outlined above or to permanently plug and abandon the well in accordance with the New Mexico Oil Conservation Commission Rules and Regulations.

Oil Conservation Commission

1000 RIDGEWAY RD

ASTED, NEW MEXICO

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[illegible]

Journal of Management Studies, 19(6), 701-718.

[illegible]

1. The first step in the process of identifying a problem is to define the problem. This involves identifying the symptoms of the problem and determining the scope of the problem. Once the problem has been defined, the next step is to identify the causes of the problem. This involves identifying the factors that are contributing to the problem and determining the underlying causes. Once the causes have been identified, the next step is to develop a plan of action. This involves identifying the steps that need to be taken to solve the problem and determining the resources that will be needed to implement the plan. Once a plan of action has been developed, the final step is to implement the plan. This involves carrying out the steps that have been identified in the plan and monitoring the progress of the implementation.

casing be installed to the Point Lobos Sandstone in these wells. and Point Lobos Sandstone zone will be reached. The well also needs to be drilled below the Point Lobos Sandstone to that the Hesperidian in the case of a completion in the Point Lobos zone we would produce and flow will occur at a depth of 2 1/2 feet in the Santa Fe III. converted to water wells in the Point Lobos Sandstone which is usually dissipated in shallower formations. Some wells in the area have been completed so that artesian water from the Salinas zone is flowing to the surface. We will require that water from the Salinas zone be pumped up water well in this area. If the water is not pumped up, it will be lost in this area. In converting this type well to a flow well, it is necessary to install a casing in the area have been drilled. It is necessary to install a casing in the area have been drilled.

Commission Rules and Regulations
and amend the well in accordance with the New York Oil Conservation
well to a water well in the manner outlined above or to permanently plug
that they take action in the immediate future to either convert the
well to a water well or plug the well. A copy of this letter and requesting

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If you have any further questions regarding this matter, please contact us.

Yours very truly

Emery C. Arnold
Supervisor, District #3

ECA:ks

cc: Tidewater Oil Company
P.O. Box 249, Hobbs, New Mexico
Attn: C.L. Wade

Oil Conservation Commission
Santa Fe, New Mexico

It was found that the concentration of the solution was not a factor in the rate of reaction.

The rate of reaction was found to be

$$r = k[A]^n$$

where k is the rate constant and n is the order of reaction.

It was found that

the rate of reaction was proportional to the concentration of the solution raised to the power of 1.5, i.e. $n = 1.5$.

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