

## WELL HISTORY

REMARKS This well was drilled as a joint venture, Buffalo operating, for the purpose of injecting gas in the Maljamar Pool under the Maljamar Cooperative Repressuring Association Agreement. The interests are represented in the table below:

Buffalo Oil Company (Operator)	28.125%
R. W. Fair, et al	40.625%
Kewanee Oil Co.	31.250%

### PIPE PROGRAM

Surface 219.61', 8 5/8" OD, 24#, J-55 set at 143' and cemented with 100 sacks 2% Gel. One centralizer on each of bottom 2 joints. Cement circulated.

Intermediate None.

Production 126 jts., 4089.41', 5 1/2" OD, 15.5#, J-55, LT&C, set at 4099' and cemented with 610 sacks 8% Gel Incor and 100 sacks 2% Gel Incor cement. Baker guide shoe at 4099'. Baker Float collar at 4031'. One Baker ridge centralizer on each of bottom 7 jts. Float collar and bottom 3 jts. welded. Cement was calculated from Caliper Survey to come back to 850' from the surface.

DRILL STEM TESTS None.

### CORED INTERVALS

The following intervals were cored with a Hillmac Inc. 7 5/8" OD diamond core head, 80' barrel, using water base mud (Salt-starch crude Gel) of 44 sec. viscosity and water loss below 10 sec/40 min.

Core No. 1,	3785-3860'	Recovery 100%
Core No. 2,	3860-3940'	Recovery 100%
Core No. 3,	3940-4020'	Recovery 100%
Core No. 4,	4020-4100'	Recovery 100%

### SURVEYS

HOWCO, Caliper Survey, TD - 143'  
Lane-Wells, Gamma Ray, Neutron, 2" Scale, 4084' to surface  
5" scale, 4084 to 2000'

### COMPLETION DATA

Cement was drilled out to PBTD 4093' with tubing and pipe was tested at 1000 psi. for 30 min. OK.  
Ran Lane-Wells Gamma Ray and Neutron logs. Perforated intervals below with Lane-Wells "E" gun perforator.

4087--80	7'	4 shots/ft	28 shots
4047-35	12'	4 shots/ft	48 shots
3970-37	33'	4 shots/ft	132 shots
	52'		208 shots

Ran tubing with Baker retrievable bridge plug on bottom and Baker Model D, full bore, set down, retrievable packer just above. Set RBP at 4092', released, pulled packer up and set at 3989'. Swabbed well dry, small show of gas.

ACIDIZED perforations 4087-80', 4047-35' (8th zone) with 500 gal. 15% Dowell mud acid with W-17. (Non-Emulsifying). Maximum pressure 3000 psi. treating pressure 2800 psi., breaking to 1800 psi. injection rate 1-2 BPM. Swabbed well in and it kicked off flowing. Flowed 6.87 bbls. oil in form of spray in 14 hours.

FRACTURE TREATED perforations 4087-80', 4047-35' with 2000 gal. Western Control-Frac and 3000# sand. Flush 3600 psi. Treated 4600 psi., over-flush 3500 psi. After shut in 5 min. 1800 psi. injection rate 4 BPM. Swabbed 82.27 bbls. fluid of which 80% was water. Pulled and dressed packer, went back in hole, but could not circulate down to pick up RBP. Came out of hole and went back in with bit, but could not get down to RBP because of frac sand bridge. LEFT BAKER RETRIEVABLE BRIDGE PLUG IN HOLE AT 4092'. Set Baker Model N cast iron bridge plug at 4015'. Went back in hole with packer and set at 3892'.

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1. The first step is to identify the problem. This involves understanding the situation and the goals that need to be achieved.

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1. The first step in the process of the investigation is to identify the problem. This is done by gathering information about the situation and the people involved. The next step is to analyze the information and determine the cause of the problem. This is done by looking at the data and identifying patterns. The third step is to develop a plan of action. This is done by deciding what needs to be done to solve the problem. The fourth step is to implement the plan. This is done by putting the plan into action. The fifth step is to evaluate the results. This is done by looking at the data and seeing if the problem has been solved. The sixth step is to make adjustments. This is done by making changes to the plan if necessary. The seventh step is to document the results. This is done by writing a report about the investigation. The eighth step is to share the results. This is done by presenting the report to the people involved. The ninth step is to follow up. This is done by checking back on the situation to see if the problem has been solved. The tenth step is to conclude. This is done by summarizing the findings of the investigation.

1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Lichtenthaler and Whistler (1973). The total chlorophyll content was determined by the method of Arar and Cook (1980). The carotenoid content was determined by the method of Lichtenthaler and Whistler (1973). The total carotenoid content was determined by the method of Arar and Cook (1980). The total protein content was determined by the method of Lowry et al. (1951). The total lipid content was determined by the method of Bligh and Dyer (1959). The total carbohydrate content was determined by the method of Dubois and Gilles (1950). The total nucleic acid content was determined by the method of Burton (1956). The total ash content was determined by the method of AOAC (1990). The total moisture content was determined by the method of AOAC (1990). The total dry matter content was determined by the method of AOAC (1990). The total organic acid content was determined by the method of AOAC (1990). The total alkaloid content was determined by the method of AOAC (1990). The total saponin content was determined by the method of AOAC (1990). The total tannin content was determined by the method of AOAC (1990). The total flavonoid content was determined by the method of AOAC (1990). The total phenolic content was determined by the method of AOAC (1990). The total terpenoid content was determined by the method of AOAC (1990). The total steroid content was determined by the method of AOAC (1990). The total glycoside content was determined by the method of AOAC (1990). The total alkaloid content was determined by the method of AOAC (1990). The total saponin content was determined by the method of AOAC (1990). The total tannin content was determined by the method of AOAC (1990). The total flavonoid content was determined by the method of AOAC (1990). The total phenolic content was determined by the method of AOAC (1990). The total terpenoid content was determined by the method of AOAC (1990). The total steroid content was determined by the method of AOAC (1990). The total glycoside content was determined by the method of AOAC (1990).

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Y. Zhang

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1. The first part of the document is a letter from the President of the United States to the Congress, dated January 1, 1861. It is a very important document, as it is the first official communication from the President to the Congress since the inauguration of Abraham Lincoln. The letter discusses the state of the Union and the challenges facing the country at the time.