

WELL: GOVERNMENT JACKSON NO. 2-18

8/13/60

Washing frac sand at 6400'. Sand-water fraced yesterday as follows:

Stage No. 1: (See perforations in 8/12/60 report)

Soaked acid away. Began injecting at 2200 psig at 36 bpm with 3 Dowell pumps. Started 3/4 lbs. per gallon, increasing rapidly to 1 lb. per gallon. Injected 25,000 lbs. sand at above conditions - dropped 25 balls with no response - increased to 1-1/4 lbs. sand per gallon - dropped 15 balls with slight pressure increase after 35,000 lbs. injected. All sand injected in water treated with J-101 Fluid Loss Additive. Flushed with 220 barrels. Standing pressure 300 psig in 30 minutes with fluid level depressing to 350' in 120 minutes. Set cast iron bridge plug at 6803'.

Stage Summary:

40,000 lbs. (40-60 mesh) sand
500 gal. 15% Dowell Breakdown Acid
50,000 gal. Water (All water but flush treated with J-101)
40 Balls
35-1/2 bpm
2000 to 2200 psig

Stage No. 2: (Perforated with 2 bullets and 2 jets per foot 6762' to 6801')

Started injecting at 35 bpm at 2300 psig with 3 Dowell pumps. Started 3/4 lbs. per gallon, increasing rapidly to 1 lb. sand per gallon, increasing to 1-1/4 lbs. per gallon during latter half of job. After 20,000 lbs. injected, dropped 25 balls - noted slight pressure increase - injected 6,000 gallons with J-101 with pressure decreasing from 2500 to 2300 psig. After 30,000 lbs. sand injected, dropped 10 balls - dropped 15 balls after 40,000 lbs. - dropped 5 balls after 45,000 lbs. - dropped 10 balls after 48,000 lbs. All balls provided pressure increase which slowly built from 3400 to 3600 psig with a final screen-out at 3800 psig. Standing pressure 250 psig in 30 minutes, 100 psig in 60 minutes, 0 psig in 120 minutes. Found 560' of sand in hole.

Stage Summary:

60,000 lbs. (40-60 mesh) sand. (57,000 lbs. sand in formation)
45,000 gal. Water
65 Balls
2900 bpm
2200-3400 psig

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8/14/60

Drilling on bridge plug at 6803'. Cleaned frac sand and frac balls to bridge plug and spent last 18 hours drilling on plug. Have lost approximately 200 barrels water to upper perforations.

8/15/60

Preparing to swab. Drilled out bridge plug and cleaned to PBDT 6872'. Lost approximately 300 barrels additional water to lower perforations. Pulled and laid down 2-1/2" workover tubing string and picked up and ran 1-1/4" EUE completion tubing - landed at 6710' K.B. (212 joints including 1 2' x 2" EUE pup joint below wellhead.) Jet collars at 5193', 5698', 6109'.

8/16/60

Swabbing frac water from 4500'. Beginning to see considerable gas. Now have 325 psig on casing.

8/17/60

Swabbing frac water. Now have 600 psig on casing.

8/18/60

Blowing frac water. Well came in about 11:00 p.m.

8/19/60

Shut in for initial pressure buildup and subsequent frac water cleanup. Well blowing at about 1800 MCFD with 1,000 psig on casing this morning.

8/20/60

Shut in for seven day official pressure buildup and potential test. Well continued to blow strong while cleaning up frac water. Over weekend surface pressure would build to 1725 psig overnight.

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8/29/60

Shut in after running potential tests 8/27/60 following an initial 7-day shut in period. Test data as follows, with well still blowing a misty stream of frac water:

Time	Tubing Pressure	Casing Pressure	Temperature
7 Days	1819	1823	-
60 Min. Blowing	223	1494	59
120 Min. Blowing	197	1397	60
180 Min. Blowing	*** 184	1323	62

*** 2620 MCFD

