

Peterson "H" No. 1 Sec. 29, T-5-S, R-33-E Roosevelt County, New Mexico

Well History

May 1, 1981

Location: 660' FSL 510' FWL Sec 29, T-5-S, R-33-E, Roosevelt County, New Mexico.

Bit size 11". Ran 8-5/8" 24# K-55 STC R-3 csg set @ 3496'. Cmt w/ 800 sx Cl H w/ 30% DD 11.7 PPS + 200 H w/ 2% CaCl 15.7 pg. Circ 225 sxs.

Bit size 7-7/8". Ran 5-1/2" 15.5# K-55, 8rd, (4006. 86') x 100 jts 5-1/2" 14" K-55, 8rd, Set @ 7982'. Cmt w/ 350 sx H w/ 30% DD, 2% DCL. Tailed in w/ 450 sx H w/ 2% KCL. Plug to 7939' w/ 10 bbls 10% Acetic Acid + 185 BW. Temp survey by John West Engr TOC 5210'.

July 8, 1980

Perf'd 5-1/2" csg w/ 2 jet shots per foot at 7846-7852' and 7862-7866'. Ran 2-7/8" tbg and pkr, set tbg at 7801', pkr 7769'. Western trt'd dwn tbg through 5-1/2" csg perfs 7846-7866' w/ 500 gals 15% Ne HCl. Max press 3850#, min vacuum. Inj rate 1 BPM. Swbd 6 hrs, 2 BO, 57 BLW, 53 BSW. Ran Howco cmt retainer, set at 7825' on 2-7/8" tbg. Howco sqzd perfs 7846-7866' w/ 1000 gals Injectrol "G" followed by 20 sxs Class "H" cmt w/ 5/10% CFR-2. Flushed w/ 45 BW. Max Press 1800#, holding 975#. Pulled out of retainer, reversed 2 sxs cmt. Spotted 10 bbls Acetic acid.

Dresser Atlas perf'd 5-1/2" csg w/ 2 JSPF, 7792-7806'. Ran 2-7/8" tbg and pkr, set pkr at 7701', tbg 7760'. Western treated dwn tbg through 5-1/2" csg perfs 7792-7806' w/ 750 gals 15% NeHCl. Max press 4400#, min zero, ISIP zero, injection rate .75 BPM. Swbd 10 hrs, trace oil, 155 BSW. CRC ran tracer survey in 5-1/2" csg. Found fluid exit through perfs 7792-7806', channeling dwn to 7812'. Set Howco cmt ret at 7769'. Howco filled csg and tbg w/ produced wtr, established inj rate of 7 BPM at 250# in 5-1/2" csg perfs 7792-7806'. Pmpd in 5000 gals Injectrol "G" at 1500# to 1800#, followed by 100 sxs Class "C" cmt w/ 5/10% CRF-2. With 62 sxs in formation, press increased to 4000#, holding at 3800#. Pulled tbg out of ret, reversed 23 sxs. Circ'd tbg and csg clean. Ran 4-3/4" bit, 4--3-1/2" DC's on 2-7/8" tbg, tagged top cmt at 7757', drld cmt to 7769', started drlg on ret. Drld cmt ret at 7769', cmt to 7808'. Lowered bit to 7820', drld cmt to 7825'. Western spotted 10 bbls 10% Acetic acid.

Dresser Atlas perf'd 5-1/2" csg w/ 4 jet shots per foot, 7793-7801'. Set 2-7/8" tbg at 7787', Baker Model "R" pkr at 7728'. Western treated dwn 2-7/8" tbg through 5-1/2" csg perfs 7793-7801' w/ 250 gals 15% NeHCl. Max Pressure 3400#, min zero, inj rate 1/2 BPM. Swbd 10 hrs, trace oil, 87 BSW. Ran 2-7/8" tbg and cmt ret: set ret at 7780'. Howco cmt'd dwn tbg through csg perfs 7793-7801' w/ 1000 gals Injectrol "G" followed by 100 sxs Cl "H" cmt w/ 1/2% CFR-2. Sqzd 80 sxs in formation, reversed 20 sxs. Max press 4000#, holding 3800#.

Examiner<u>GAMETS</u> Case No. <u>7318</u> EXHIBIT NO. 15

August 1, 1980

Dresser Atlas perf'd 5-1/2" csg w/ 2 JSPF, 7616-7627', 7630-7636', 7646-7650', 7656-7662' 7676-7680', 7706-7710', 7716-7722', 7746-7760'. Ran tbg, pkr and BP, set BP at 7768', pkr at 7593'. Swbd 4 hrs, 41 BLW, no oil, swbd dry. Western spotted 1000 gals 15% NeHCl over 5-1/2" csg perfs 7606-7760'. Set pkr at 7788', pressured to 4000#, pkr leaked. Reset pkr at 7586', pressured to 3500# and leaked. Reversed acid to truck. Pulled tbg and pkr. Ran 2-7/8" tbg and new pkr. Western treated through 5-1/2" csg perfs 7606' to 7660' w/ 2500 gals 15% NeHCl flushed w/ 50 BW. Max press 4000#, min 3900#, inst SDP 3900#, inj rate 4 BPM. Swbd 4 hrs, 45 BLW, no oil. Swbd 10 hrs, 4 BO, 40 BLW. Swbg. Swbd 10 hrs, 8 BO, 23 BLW. Swbd 10 hrs, 6 BO, 8 BLW. Western trt'd dwn 2-7/8" tbg through 5-1/2" csg perfs 7616-7760' w/ 20,000 gals gelled 15% NeHCl as follows: A--5000 gals acid. B--15 ball sealers. C--5000 gals acid. D--10 ball sealers. E--10,000 gals acid. Flshd w/ 20,000 gals 2% KC1 wtr. Max press 6900#, min 5000#, inst SDP 4150#. Inj rate 6.2 BPM. Swbd 6 hrs, trace oil, 8 BLW, swbd dry. Swbg. Swbd 6 hrs, no oil, 5 BLW, swbd dry. Lowered tbg to 7668'. Reverse circ'd w/ 75 bbls 2% KCL wtr. Western spotted 1000 gals 15% NeHCl over perfs 7616-7660'. Reset pkr at 7602', flshd acid w/ 50 bbls 2% KCl wtr. Max press 3600#, min 3500#, inst SDP 3400#, inj rate 1.5 BPM. Ran 2-7/8" tbg and ret, set ret at 7499'. Running tbg and pkr. Howco sqzd perfs 7616-7660' w/ 200 sx Class "H" cmt. Pressed 180 sx in perfs, reversed 20 sx. Max press 4000#, holding 4000#.

Welex perf'd 5-1/2" csg w/ 2 JSPF, 7332-7341'. Ran tbg and pkr, set pkr at 7308'. Swbd 8 hrs, no oil, 78 BW. Swbd 8 hrs, no oil, 85 BSW. Swbd 8 hrs, no oil, 75 BSW. Swbd 6 hrs, 80 BW, no oil. Western trt'd dwn tbg. Csg perf 7332-7341', 5000 gals 28% acid, flshd w/ 47 BW. MP 4400#, MP 2700#, SD 2500#. Rate 3 BPM. Ran injectivity test. Ran tracer survey. Hold well for disposal purposes.