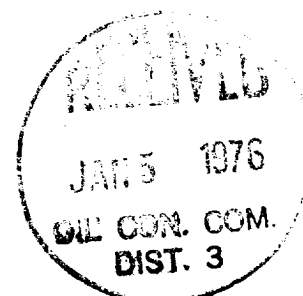


dugan production corp.

W. P. Carr
Larcher #1-A
1044' FNL - 1847' FWL
Sec 7, T31N, R10W
San Juan County, New Mexico
Elevation - 5882' GR

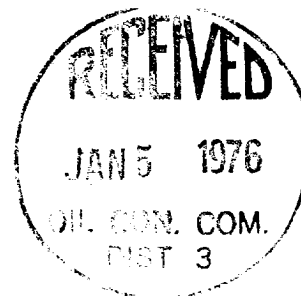
DAILY REPORT

- 12-13-75 Moved in Young Drilling Company rig, started drlg @ 5:00 PM 12-12-75 8-3/4" hole. Drlg @ 1340' w/Bit #2. Bit #1 out @ 1276'. Drlg w/wtr. Dev 1/4" @ 1276'.
- 12-14-75 Trip for Bit #4 @ 2448'. Dev 3/4" @ 2448'.
- 12-15-75 Finished drlg 8-3/4" hole to 2805' (driller's depth). Laid down drill pipe and ran 80 jts 7" OD 23# K-55 8R LT&C csg. TE 2827.50 set @ 2822' RKB. Cemented by HOWCO w/175 sx Halliburton lite w/4% excess gel and 12 1/2# gilsonite/sk, followed by 100 sx Class "B" w/1/4# flocele/sk (total slurry 535 cu ft). Had mud returns through-out job (no cement to surface). Worked pipe free while cementing. POB 1:50 AM 12-15-75. (Had fresh wtr flow after cementing csg, set slips, and closed in bradenhead valve). Note 17' difference in driller's TD and csg tally depth. WOC.
- 12-16-75 Depth 2811', drlg w/gas.
- 12-17-75 Drilling w/gas at 3912', Bit #6. Bit #5 made 1050' in 19 Hrs. Dev. 1" @ 3855'.
- 12-18-75 4734'. Drilling w/gas, Bit #6.
- 12-19-75 TD 5184'. While drlg w/gas hit fracture @ 5175', well making est 7000 MCFGPD plus 100 BOPD. Natural gas gauge @ 4842', 15" wtr on 2" line - 456 MCF.
- 12-20-75 TD 5184'. Waiting on csg and laying down drill pipe. Est flow from well @ 3:00 PM after blowing 8 hrs 3000 MCF plus 300 BOPD. Killed well @ 4:00 PM w/133 bbls wtr. Halliburton continued to pump one bbl wtr/min while laying down drill collars, changing rams, and running csg. Pumped approx 650 bbls wtr in hole, hole on vacuum entire time. Ran 133 jts 4-1/2" OD 10.5# J-55 8R ST&C csg set @ 5135' w/Halliburton formation packer shoe on btm. Cemented w/200 sx Halliburton lite plus 12 1/2# gilsonite/sk (total slurry 400 cu ft). Max cementing press 450 psi, no returns while cementing. POB 1:00 AM 12-20-75. WOC.



DAILY REPORT (Cont'd)

- 12-21-75 Opened bleed-off line, well making est 450 MCF from behind 4-1/2" csg. Go International ran gamma-ray neutron log and temp log. Temp indicated top of cement @ 5090'. Halliburton cemented down 4-1/2" - 7" annulus w/150 sx Halliburton lite plus 12 1/2# gilsonite per sk and 1/4# flow seal/sk, followed cement w/10 bbls wtr, well on strong vacuum. WOC.
- 12-22-75 Opened bleed-off line, well dead on csg annulus. Go International ran bond log. Good bond 5070-5100', no other bond indicated in well. Ran temp survey, no indication of cement top 2800-5100'. Pulled BOP, installed csg spool, set 4-1/2" slips w/55,000# on slips, installed tbg head and BOP. Completed nipping, Halliburton filled annulus w/13-1/2 bbls wtr, pressure to 500 psi, held OK. Press tested BOP and 4-1/2" csg to 2000 psi, held OK. Go International perforated 2 squeeze holes @ 4800', Halliburton squeezed down 4-1/2" csg with 100 sx Halliburton lite plus 50 sx Class "B" cement. Mixed 15 millicuries ITW-131 radioactive iodine in cement mixing wtr, well on vac while mixing. Displaced cement to 4700', last 40 bbls displacement on vac, not using pump, shut well in on vac. Job complete 2:15 AM 12-22-75. WOC.
- 12-23-75 Go International rigged up to run bond log, tool malfunction, 3 hrs to repair tool. Went in hole, found fluid level @ 2220', hit bridge in hole @ 2967', pulled bond tool. Went in hole w/sinker bars, drove thru obstruction @ 2967', ran tool to 4800'. Went in hole w/bond logging tool, had trouble getting down, ran bond log 4800' to 4000', 100% bond 4800' to 4775', 70% bond 4374-84', remainder of interval 0-20% bond. Ran gamma-ray log, greatly increased radioactivity 4800-3600' but did not find significant cement top. Went in hole w/3-7/8" bit on tbg, picked up 120 jts 2-3/8" OD 4.7# tbg.
- SHUT DOWN FOR CHRISTMAS
- 12-26-75 Start up rig after Christmas shut-down
- 12-27-75 TD 5200'. Jetted hole down w/gas, drld 20' cement 4800-4820', well making est 100 MCF thru squeeze holes @ 4800'. Drld csg shoe @ 5135', drld 20' cement 5135-55', open hole 5155-5180'. Cleaned out to 5184', blew well 2 hrs to clean up, well making est 500 MCF with 1/2" stream wtr. Drld 3-7/8" hole to 5190', no visible increase in gas. Drld to 5200', no increase in gas. Blew hole 8 hrs to clean up, gas volume remained about the same, oil increased, well making 1/2" stream of fluid (1/2" oil, 1/2" wtr). Started out of hole.
- 12-28-75 TD 5200'. Pulled tbg and bit, rigged up Western Company, frac open hole 5135-5200' plus 2 holes @ 4800', spearheaded frac w/500 gal 15% HCl, used total 40,000 lbs 20-40, 1736 bbls wtr, IF 3500 psi, broke to 2650 psi @ 40 B/M, dropped 4 balls to shut off holes @ 4800' (good ball action). Started sand @ 1#/gal, well sanded off with 12,600 lbs sand in well, cut sand, press increased to 4000 psi, IR 17 B/M, pumped 225 bbls wtr, shut down.



DAILY REPORT (Cont'd)

- 12-28-75
(Cont'd) Hooked up and injected 500 gal 15% HCl, resumed frac, no press break when acid hit, pumped 150 bbls wtr, injection rate increasing, started sand @ 1/2#/gal, pumped 300 bbls, increased sand to 3/4#/gal, pumped 400 bbls wtr, increased sand to 1#/gal, completed frac. Avg frac press 3800 psi, Avg IR 27 B/M, Instant shut-down press 800 psi, 10-min shut-down 150 psi, on vac in 20 min. Go International went in hole w/bridge plug, hit bridge @ 4912', pulled bridge plug. Went in hole w/gun, solid bridge @ 4912', believe sand flowed back from open hole to perf @ 4800'. Perforated one hole/ft 4900-06', 4886-92', 4874-80', and 4820-28'. Western Company fractured Point Lookout fm with 40,000 lbs 20-40, 10,000 lbs 10-20, 1448 bbls wtr. IF 3000 psi, Max 3400 psi, Avg 3300 psi, Final 1800 psi, Avg IR 47 B/M, ISDP 100 psi, on vac in 2 min. Go International set bridge plug @ 4780', perf one jet/ft 4742-48', 4654-60', 4492-98', 4480-86', 4440-46', 4410-16', 4385-90'. Frac Cliff House and Menefee fm using 30,000 lbs 20-40 plus 10,000 lbs 10-20, 1190 bbls wtr. IF 2400 psi, Max 3000 psi, Avg 2600 psi, Final 3000 psi, Avg IR 45 B/M, ISDP 100 psi, on vac in 2 min. Made 3 ball drops of 10 balls each, had 75 psi press increase on each drop. Installed rotating head, went in hole with 2-3/8" tbg jetting hole @ 2500'.
- 12-29-75 TD 5200'. Jetted hole down to bridge plug @ 4780', blew hole to clean up 6 hrs, gauged Cliff House and Menefee zones 3758 MCFGPD. Drilled bridge plug @ 4780', well unloaded frac wtr and frac sand from lower zone while drilling, no communication between zones. Blew well 10 hrs to clean up @ 4900'. Well making est 10,000 MCF, spray wtr and show of oil.
- 12-30-75 TD 5200'. Hit sand bridge @ 4934'. Drilled remainder of bridge plug and sand bridge to 4980'. After drilling plug well making large quantities of wtr and frac sand, believe open hole not producing until this time. Blew well 6 hrs to clean up. Well making est 13,000 MCF, oil is increasing. Cleaned out to 5165', having trouble cleaning out open hole, sticking tbg at times, unable to clean out to TD. Landed tbg w/bit and bit sub on btm. Ran 164 jts 2-3/8" OD 4.7# JE 8R EUE Hylsa tbg set @ 5133'. Landed donut, flanged up tree, and released rig 11:30 PM 12-29-75.
- 12-31-75 SICP 760 psi, SITP zero. Go International perforated 10 holes in tbg 5122-5127'. Blew well 15 min, good communication between tbg and csg. Shut well in for test.

SHUT IN FOR INITIAL POTENTIAL TEST (by Woodrow Stiles)