

STATE "B" COM #1E
SW NW Section 16-29N-10W
San Juan County, New Mexico

FORMATION TOPS

Ojo Alamo	850'
Kirtland	1020'
Lower Kirtland	1525'
Fruitland	1880'
Pictured Cliffs	2115'
Lewis	2200'
Upper Chacra	3125'
Lower Chacra	3205'
Measverde	3755'
Point Lookout	4515'
Upper Mancos	4745'
Gallup	5615'
Lower Mancos	6138'
Greenhorn	6380'
Graneros	6441'
Dakota A	6495'
Dakota B	6548'
Dakota C	6605'
Dakota D	6700'



- 12/18/81 425 Day-1, Ftg-425. Drlg insert flt & cmt. Mud: 8.4#, vis 28, WL NC. RU. SPUD 10:00 am 12/17/81. Drld. Survey. TOH. PU & run 10 jts 8-5/8", 24#, K-55, ST&C csg. Landed @ 425'. Used Texas Pattern shoe @ 425' & insert flt @ 379' w/cntrlzrs @ 379', 333', 243' & 152'. Strtd pmpg slurry @ 7:30 pm w/10 bbls fresh wtr flush w/300 sx C1 "B" cmt w/2% CaCl₂ & 1/4# Flocele/sx. Dropped plug @ 8:20 pm & bmpd plug @ 8:30 pm by displ'g w/fresh wtr. Reciprocated pipe by 6' to 8' during cmtg & had full returns thruout job. Circ'd cmt around @ 8:50 pm. NU & press tst pipe & BOP to 1500# @ 5:30 am - held f/30 min OK. Cmt samples cured @ 60° to 70° by 12 pm. 1/2° @ 230', 3/4° @ 425'.
- 12/19/81 2150 Day-2, Ftg-1755. Drlg. Mud: 8.5#, vis 28, WL NC. Drld flt & 45' cmt. Drld to 665'. POH f/plugged bit. Had wood in nozzle. Drld to 935'. Survey & rig service. Drld to 1269'. Survey. POH f/bit @ 3:30 am. RIH & drld @ 5:45 am. 1° @ 935', 7/8° @ 1269'.
- 12/20/81 3169 Day-3, Ftg-989. RIH w/new bit. Mud: 8.7#, vis 30, WL 28. Drld to 2456'. POH f/wshd out jet. RIH. Drld to 3169'. POH f/bit. 2-1/2° @ 3169'.
- 12/21/81 3753 Day-4, Ftg-584. Drlg ahead. Mud: 8.9#, vis 30, WL 11.2. TIH w/B#4. Resumed drlg @ 3154' @ 7:15 am. Drld to 3451'. TOH. PU B#5 @ 8:00 pm. TIH w/B#5, 7-7/8" F-2 & resumed drlg @ 12:00 pm. Drlg ahead @ 6:00 am @ 3753'. Chromates @ 250 ppm. Mud up @ 3150'. 1-3/4° @ 3451'.
- 12/22/81 4395 Day-5, Ftg-642. Drlg. Mud: 8.8#, vis 30, WL 10.4. Chromates @ 200 ppm. Drld to 3840'. TOH w/bit @ 9:15 am. TIH w/B#6, 7-7/8", F-2. Hole out of gauge. Rmd 80' to btm. Resumed drlg @ 1:45 pm. Drld to 4395'. 1-1/2° @ 3840', 1-1/4° @ 4369'.
- 12/23/81 4833 Day-6, Ftg-438. Drlg. Mud: 8.7#, vis 37, WL 9.8. Drld to 4545'. Lost circ @ 4545' @ 11 am. Sht trip 10 std. Lost complete returns. Took wtr & wk gas flw up hole. Lost 150 BM. Mixed pill w/5% LCM. Lost returns. Mixed pill w/10% LCM. Regained 75% circ. Killed flw. Pmpd total 200 bbls. Lost 250 BM. Regained full returns @ 1:30 pm. Used 68 sx Cedar Fibre, 5 sx cottonseed hulls, 32 sx Multi-seal, 113 sx gel. Build vol 1-2 pm & circ. Trip to btm & resumed drlg @ 2:30 pm w/75% returns. Drld to 5 pm @ 4665'. Regained 100% returns @ 3:30 pm. TOH f/B#7, 7-7/8" HTC, J-22. TIH & wshg to btm 10-10:30 pm. Resumed drlg @ 10:30 pm w/full returns. Lost full returns @ 11:15 pm @ 4707'. Sht trip 10 stds. Take same wtr & gas flw. Lost 225 BM. Pmpd 75 bbls @ 150 bbl pill w/10% & 20% LCM in ea. Mixed 106 sx Cedar Fibre, 35 sx cottonseed hulls, 24 sx Multi-seal, 82 sx gel. Pmpd away 1st pill - no returns. Regained full returns w/2nd pill & kill flw. Trip to btm & resumed drlg @ 2:30 am. Drlg @ 6 am w/full returns & 18% LCM. 2° @ 4365'.

12/24/81 5550 Day-7, Ftg-717. Drlg. Mud: 9.0#, vis 41, WL 9.6. Chromate @ 200 ppm. Carrying 10% LCM. No flows @ wt above 9.0 ppg & no further loss circ. Pit again vol in am yesterday when wt less than 9 ppg. Drld f/6 am 12/23 to 6 am 12/24 w/no problems. 2° @ 5155'.

12/25/81 5645 Day-8, Ftg-95. SD f/Xmas. Mud: 9.0#, vis 44, WL 11.8. Drld to 5645' @ 9:45 am. Lost compl returns. POH 10 stds. Mixed & pmpd 2 pills, total 250 bbls w/20% LCM. Regained circ temporarily & lost returns again. Mixed & pmpd 200 bbls @ 20% LCM, after 100 bbls regained circ. Went to btm @ 1:15 pm. Circ & cond mud & bld vol 1:30 pm to 3:30 pm. No flw or losses. Had vy sml wtr flw w/vy littel gas during loss of circ. POH to SD f/Xmas @ 3:30 pm. SD @ 6:30 pm f/Xmas till 8:00 am 12/26/81. 1-1/2° @ 5614', 3° @ 5645'.

12/26/81 5645 Day-9, Ftg-0. SD f/Xmas. Rig SD f/Xmas. Prep to resume operations @ 8:00 pm today, 12/26.

12/27/81 6050 Day-10, Ftg-405. Drlg. Mud: 9.0#, vis 42, WL 7.8. Resumed operations @ 6:00 am. Thaw lines & strt up. GIH & brk circ @ 800', 2600', 4300', 5200'. No loss circ, bridges or flws. Drld to 6050' @ 6:00 am. 3/4° @ 5863'.

12/28/81 6546 Day-11, Ftg-496. TIH w/B#8. Mud: 9.1#, vis 46, WL 8.8. Drld f/6-3 pm @ 6359'. Surveyed. Drld to 12:15 pm @ 6546'. Circ f/ 1/4 hr. TOH f/B#8, 7-7/8", J-33, HTC @ 1:00 pm. Dropped survey - misrun. TIH @ 6:00 am. No loss circ or vol gain recorded in last 24 hrs. LCM @ 10%. Chromates 300 ppm. 2-1/2° @ 6359', misrun @ 6546'.

12/29/81 6676 Day-12, Ftg-130. Drlg. Mud: 9.3#, vis 41, WL 8.4. Strap pipe on trip. 6546' drlrs record = 6546' SLM - no correction. TIH w/B#8, 7-7/8", J-33. Resumed drlg @ 7:30 am. Drld to 6567' @ 10:45 am. TOH f/bit. TIH w/B#9, 7-7/8", F-4. B#8 wore out in 23'. Rmd 20' to btm f/4:30 to 7:30 pm. 7:30 pm to 6:00 am drld w/no lost returns or flws. LCM @ 12%. Drlg brks @ 6617-6621', 6630-6635', 6639-6644', 6647-6651', 6656-6660' & 6665-6669'. Est Dakota top @ 6546' by drlg rate.

12/30/81 6791 Day-13, Ftg-115. Logging w/FDC-CNL/GR-Cal. Mud: 8.9#, vis 54, WL 9.2. Drld to 6791' @ 3 pm. Circ. Sht trip 15 stds - no tite spts or problems. Circ f/logs. POH f/logs. Strap pipe 6785' drillers TD corr'd to 6791' SLM (6' correction). RU loggers & log.well w/DIL-IES & Cal w/vol computed f/TD to 425'; FDC-CNL/GR f/TD to 5500', 4800-3700', 3300-3050', 2200-1800' & 1550-950'. Loggers TD @ 6792'. Mud contained 10% LCM. 2-3/4° @ 6791'. No lost circ or flw in last 24 hrs. Drlg brks 6694-6701', 6706-6728', 6730-6740', 6743-6749' & 6753-6765'.

12/31/81 6791 Day-14, Ftg-0. Setting csg slips & RDRT.
Fin'd logging w/FDC-CNL/GR-Cal. GIH. Circ. Prep to LD DP & DCs. POH & LD DP & DCs. RU & run csg. Csg 4-1/2", 10.5#, 8rd, K-55, STC; GS @ 6786'; FC @ 6742'; cntrlzrs @ 6764', 6718', 6674', 6609', 6521', 6474', 3408', 3318', 3230', & 3186' (total 10 cntrlzrs); DV tool @ 3361'; cmt bskt @ 3430' & 3386'; scratchers @ 6770', 6755', 6710', 6681', 6666', 6637', 6622', 6594', 6579', 6550', 6535', 6506', 6491', 3205', & 3215' (total 15 scratchers). Circ & RU Hallib. Cmt 1st stg w/20 BM flush, foll'd by 307 sx Hallib lite cmt w/6% add'l gel, 6-1/4# Gilsonite/sx & 1/4% CFR-2, 11.0#/gal; foll'd by tail slurry 150 sx Cl "B" neat cmt w/ 3/4% CFR-2, 15.7#/gal. Drop plug @ 10:50 pm. PD @ 11:15 pm. Dropped bomb @ 11:30 pm & opn stg tool @ 11:50 pm w/bomb w/1450 psi. Displ'd plug w/fresh wtr. Displ'd bomb w/mud. Had full returns thruout 1st stg. Wrkd pipe 10' & couldn't return to btm. New btm is 6786'. 12:00 pm to 4:00 am circ & prep to run 2nd stg w/mud. Cmt 2nd stg w/20 BM flush, foll'd by lead slurry of 739 sx Hallib lite w/6% add'l gel, 6-1/4# Gilsonite/sx & 1/4% CFR-2 @ 11.0#/gal; foll'd by tail of 100 sx Hallib lite w/ 3/4% CFR-2 & 10#/sx gilsonite @ 12.48#/gal. Had full returns. No lost circ or flws. 2nd stg cmt circ 5 bbls to surf. Will raise BOP & CO stack as soon as possible. Drop plug @ 5:45 am. Bmpd plug w/750-2500 psi @ 5:55 am. Plug held. Gd returns & samples.

1/1-4/82 6791 Day-15. TD - WO completion.
RD Howco. Set csg slips w/55M# & cut off csg. RR 8:00 am 12/31/81. RD & move. Set wellhd & Xmas tree. PU 4 jts 4-1/2" & 1 jt 8-5/8" & two cut offs to yard. Took samples to office.

1/5 6791 Day-15. TD - WO completion.

1/6/82 6791 Day-16. TD - Prep to drl out DV collar.
Dug out around cellar & filled w/gravel. MIRU Farmington Well Service. NU 6" 900 series double BOPs. PU 3-7/8" bit & 4-1/2" HOMCO csg scraper (bit is HTC, SN RL243). RIH 4 - 3-1/8" DCs & 104 jts 2-3/8" EUE K-55 8 rd tbq (3237.20') & tagged up @ 3347' KB. SDON.

1/7/82 6791 Day-17. TD - Prep to POH
MI & RU pump & pit. Tag cmt @ 3347', DV @ 3360'. Drld DV in 1 1/4 hrs. Circ hole clean. PU 108 jts 2 3/8" tbq. Total 212 jts. (6613.36') BHA 124.80'. String 6738.16'. Tag FC @ 6742'. RU HOWCO & pmpd 100 bbl 2% KCl wtr to displace hole. RO HOWCO. POH 10 stds. SDON.

1/8/82 6791 Day-17.. TD - Prep to spt acid.
Temp 10°F @ 7:00 am. Rig hard to strt. POH w/ 2-3/8" tbq. LD DC, bit & csg scraper. RU Schl to run CBL/VDL/GR log. Had 98-100% bonding f/btm up to 4950'. Top cmt @ 4410'. Top cmt above DV tool @ 1450'. Tstd csg to 4000 psi 15 min - OK. RIH w/ 213 jts 2-3/8" tbq. SDON.

1/9/82 6791 Day-18. TD - Prep to flw back.
RU Howco & spt 200 gal 15% HCl w/1 gal/1000 FEIA, 1 gal/1000 Cla-Sta, 1 gal/1000 frac flw. Spt f/6644-6351'. POH w/tbg. RU Schl w/full lubricator. Perf 1 SPF 6548-65', 6615-20', 6627-30'. RD Schl & RU Howco. Filled hole. Brk dn fm w/1650 psi. Est rate & press 6 BPM @ 1300 psi w/10 bbls 2% KCl wtr. RIH w/205 jts 2-3/8" tbg w/Howco RTTS pkr & SN above RTTS. Total 6004.69'. Set pkr @ 6400' after sptg acid to pkr. Pmpd 2000 gal acid as above w/50 ball sealers. Acidized @ 6.8 BPM @ 3000-3300 psi. Had gd ball action, but no ball off. Displ acid to perfs w/2% KCl wtr. ISIP 350 psi, 5 min 200 psi, 10 min 140 psi, 15 min 50 psi. SDON.

1/10/82 6791 Day-19. TD - Prep to SD f/Sunday.
SIIP 200 psi. Blew dn in 4 min. RU swb & RIH. FL @ 1100'. Made 6 runs & rec'd 20 BAW. Last 2 runs f/SN. No gas flw. Let std 1 hr. Ran swb & rec'd 1 BAW. No flw. Rel RTTS & POH. SI & SD f/Sunday.

1/11/82 6791 Day-19. TD - Prep to run temp survey.
SD f/Sunday.

1/12/82 6791 Day-20. TD - Prep to CO sd.
SICP 100 psi. Blew to 0 psi in 7 min. RU Schl & run baseline temp survey 5500-6720'. RU Howco to frac. Pmpd 27,500 gals pad w/40# Versagel, 1 gal/1000 frac flo CS, 1/2 gal/1000 bacteriacide, 1 gal/1000 Cla Sta, 2% KCl, 2% Diesel. Pmpd pad @ 39 BPM @ 2200 psi. Frac as foll: 1000 gals, 1#/gal sd, 38.5 BPM, 2870 psi; 8500 gals, 2#/gal sd, 38.5 BPM, 2200 psi; 11,000 gals, 3#/gal sd, 39 BPM, 2220 psi; 12,500 gals, 4#/gal sd, 37 BPM, 2230 psi; 15,000 gals, 5#/gal sd, 37 BPM, 2220 psi; 15,000 gals, 6#/gal sd, 35 BPM, 3160 psi. At end of 6# sd press incr'd to 3800 psi. Cut sd & rate decr'd to 2.6 BPM @ 3800 psi. Strtd flush. Flush pmpd @ 2 BPM w/3800-4000 psi. Rate gradually incr'd to 10 BPM & press strtd to decr. Pmpd last 1000 gals flush @ 21 BPM w/3100 psi. ISIP 1850 psi, 5 min 1450 psi, 10 min 1280 psi, 15 min 1150 psi. Total fld pmpd 102,750 gals, Total sd 16,340#. RD Howco & RU Schl. Ran temp survey #1 1 hr after frac to 6578'. Second run 1 hr after first to 6690'. Third 2 hrs after second to 6685' & fourth 4 hrs after third to 6677'. SI & SDON.

1/13/82 6791 Day-21. TD - Prep to swb or flw Dakota perfs (6548-6565', 6615-6620' & 6627-6630').
In am csg on strong vac. WIH w/notched clr, 1 jt 2-3/8" tbg, API SN, 213 jts 2-3/8" tbg - sd @ 6680' RKB. RU Howco N₂ truck, instl'd string flt. CO sd w/N₂ & CO sd to 6740' RKB. PI tbg w/10 bbls KCl wtr to kill tbg. POH to string flt & removed same. Landed 208 jts 2-3/8" tbg @ 6487.75'. Conn N₂ to annulus & blew around thru tbg to unload wtr. SI csg w/1500 psi N₂ press - left tbg opn unloading little wtr.

1/14/82 6791 Day-22. TD - Prep to resume swbg.
Chkd well @ 9 pm 1/12/82. Well dead. SI. In am 1/13/82 CP 1150 psi (N₂),
SITP 300 psi. Blew tbg dn in 1 min. Strtd swbg, FL 800'. Made 6 runs,
lowered FL to 1200' & well flwd f/35 min & died. Unloaded sml amt gas & gd
stream wtr. Made 12 swb runs - wtr heavily gas cut. FL to 3500' & kicked
off & flwd 20 min & died. Made 5 more runs & lowered FL to 3000'. SI well
@ 5 pm. CP @ end 600 psi. Est 85 BF rec'd today. SDON.

1/15/82 6791 Day-23. TD - Prep to resume swbg Dakota.
In am 1/14 SITP 700 psi, SICP 900 psi. Bled off tbg in 5 min. Strtd swbg,
FL 1700' f/surf. Made two runs & well KO & flwd mostly wtr f/20 min &
died. Made 2 more runs (1200' fld/run) & flwd 1 hr. Mostly gas N₂ w/spray
wtr - CP decr'd to 450 psi - & died. Made 4 runs & flwd f/30 min, mostly
wtr - FL @ 4000'. Made 5 runs, FL 5000' plg f/SN @ 6450' & flwd f/45 min &
died. SI well. CP 500 psi. Est rec 85 BW. SDON.

1/16/82 6791 Day-24. TD - Prep to bleed dn & swb.
In am 1/15 SICP 850 psi, SITP 800 psi. Bled tbg dn in 5 min. Made 1 swb
run, FL 1700' - KO & flwd 1-1/2 hrs & died to sml blow. Blew dn csg &
lowered tbg to sd top @ 6715'. Pld tbg up to 6499' RKB. Remove BOP & NU
tree. Made 5 swb runs & lowered FL to 5000', rec'd GCW. CP incr'd to 300
psi. Est rec'd 60 BW today - Howco chk'd recovery is frac fld. SI well &
SDON.

1/17/82 6791 Day-25. TD - Prep to SD f/Sunday.
7:30 am 1/16 SICP 850 psi & SITHP 800 psi. Blew well dn in 6 min thru a 2"
flw line. RU swb & ran swb - FL @ 1700'. Pld 1 swb & well KO - flwd 2 hrs
& died. While flwg RD FWS #10 & move to State "E" Com #1E & MI an FWS swb
unit. Made 10 swb runs - well flws & dies. At end of day est flw rate was
150 MCF w/FL @ 5500'. Will resume swbg on Monday.

1/18/82 6791 Day-25. TD - Prep to swb.
SD f/Sunday.

1/19/82 6791 Day-26. TD - Prep to bleed dn & swb Dakota zone.
In am SITP & SICP 1175 psi. Bled off on 3/4" chk & well flwd 4 hrs.
Highest rate about 3 MMCF decr'd to vy sml at end. CP decr'd to 400 psi.
Made 1 swb run to 6250' (FL 5000') flwd 1 hr & died. Swbd to 6200' - no
wtr rec'd. Swbd to SN @ 6467' & well flwd 2 hrs, decr'd to 200 MCF at
end. CP 325 psi. Est 50 bW recovered today. SI well & SDON.

1/20/82	6791	Day-25. TD - Prep to flw and/or swb Dakota perms (6548-6565', 6615-6620', & 6627-6630'). In am 1/19 SICP 900 psi, SITP 850 psi. Opnd @ 7:00 am on 3/4" chk. Unloaded gd spray fld, flwd f/3 hrs, decr'd to 100 MCF @ end fairly dry gas. SI 2 hrs. TP 500 psi, CP 600 psi. Bled TP dn in 15 min. Made 1 swb run to SN @ 6470', rec'd 200' GCW & flwd 3 hrs, decr'd to about 100 MCFD. Ran swb to SN & rec'd 200' fld. Flwd 1-1/2 hrs @ about 100 MCFD. FCP 280 psi. SI well & SDON.
1/21/82	6791	Day-25. TD - Well SI, prep to flw to pit - Dakota zone. In am SICP 900 psi, SITP 850 psi. Opnd thru 3/4" chk & blew gd spray wtr - flwd 3 hrs decr'd to about 100 MCFD @ end. Made 3 swb runs to SN @ 6470'. Rec'd 150' GCF ea run. Flw rate about 200 MCFD. Rel'd swbg unit 3:00 pm 1/20/82. SI Well.
1/22/82	6791	Day-25. TD - Well SI, prep to flw to unload. In am SICP 900 psi, SITP 850 psi. Opnd on 3/4" chk - unloaded gd slug wtr w/sml amt condensate. Flwd to pit f/ 2-1/2 hrs. CP 250 psi, rate about 200 MCFD. SI f/ 4-1/2 hrs, CP 650 psi, TP 450 psi. Opnd on 3/4" chk & blew 2 MMCFD f/4 min, then flw decr'd & unloaded slug of wtr f/10 min then hvy mist. Rate decr'd ea 10 min as follows: 940 MCFD, 650 MCFD, mostly gas, 500 MCFD, 350 MCFD, then fairly constant w/no wtr - CP 280 psi @ end. SI well.
1/23/82	6791	Day-25. TD - Well SI, prep to flw to cln up. In am SICP 900#, SITP 800#. Opnd to pit on 3/4" chk. Unloaded slug of wtr w/some condensate. Flwd 2 hrs & rate 300 MCFD. SI 3 hrs. SITP 500#, SICP 600#. Opnd & flwd 2 hrs. Spray wtr @ first, then fairly dry gas in 1 hr & constant rate 300 MCFD f/1 hr. SI Well.
1/24/82	6791	Day-25. TD - Well SI, WO AOF tst. In am SICP 900#, SITP 850#. Opnd on 3/4" positive chk & flwd 2 hrs. Unloaded little condensate, then slug of wtr, then dry gas @ rate of 350 MCFD. FCP 200#, FTP 15#. SI well @ 10 am 1/23/82. (Drop f/report until tstd.)
2/2/82	6791	Day-25. TD - FINAL REPORT - COMPLETED SI GAS WELL, 2/1/82, Dakota fm. 9 day SITP 1168#, SICP 1169#. 3 hr flw rate 320 MCFD, 7 BOPD & 38 BWPD f/Dakota perms 6548-65', 6615-20' & 6627-30'. FTP 39#, FCP 265#, 48/64" chk, cal AOF 321 MCFD, gvtty 62.8 API @ 60°F. 30 min SITP 235#, SICP 364#. LPP 6630'. (Dropped f/report of 1/23-25/82.)