

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ Other _____										5. LEASE DESIGNATION AND SERIAL NO. NM-02402	
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESEV. ☐ Other _____										6. IF INDIAN, ALLOTTEE OR TRIBE NAME - - -	
2. NAME OF OPERATOR Atlantic Richfield Company										7. UNIT AGREEMENT NAME - - -	
3. ADDRESS OF OPERATOR Suite 501, 1860 Lincoln Street, Denver, Colorado 80295										8. FARM OR LEASE NAME Chacon Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface Unit D (NW NW) 790' FNL & 790' FNL At top prod. interval reported below Approx. Same At total depth Approx. Same										9. WELL NO. 6	
14. PERMIT NO. 30-039-21810										DATE ISSUED 8-24-78	
15. DATE SPUDDED 9-9-78										10. FIELD AND POOL, OR WILDCAT Chacon-Dakota	
16. DATE T.D. REACHED 9-24-78										11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA 20-24N-3W	
17. DATE COMPL. (Ready to prod.) 10-25-78										12. COUNTY OR PARISH Rio Arriba	
18. ELEVATIONS (DF, R&B, RT, GR, ETC.)* 5879' GL - 6893' KB										13. STATE New Mexico	
19. ELEV. CASINGHEAD - -										24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVR)* 7187-7194', 7198-7202' & 7208-7228' 1 jet shot/ft. Dakota A Zone 7307-7316' 2 jet shots/ft. Dakota B Zone	
20. TOTAL DEPTH, MD & TVD 7571' KB										21. PLUG, BACK T.D., MD & TVD 7380' KB (BP)	
22. IF MULTIPLE COMPL., HOW MANY* - - -										23. INTERVALS DRILLED BY - - -	
25. WAS DIRECTIONAL SURVEY MADE No										26. TYPE ELECTRIC AND OTHER LOGS RUN DIL, FDC/CNL-GR & Cement Bond Log	
27. WAS WELL CORED No										28. CASING RECORD (Report all strings set in well)	
CASING SIZE		WEIGHT, LB./FT.		DEPTH SET (MD)		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED	
8-5/8"		24		332' KB		12-1/4"		275 sx.		None	
5-1/2"		15.5 & 17		7571' KB		7-7/8"		455 sx.		None	
29. LINER RECORD											
SIZE		TOP (MD)		BOTTOM (MD)		SACKS CEMENT*		SCREEN (MD)		TUBING RECORD	
- -										SIZE	
										DEPTH SET (MD)	
										PACKER SET (MD)	
										7119'	
										7380' KB (drill-able Bridge Plug)	
31. PERFORATION RECORD (Interval, size and number)											
7187-7194', 7198-7202' & 7208-7228' 1 jet shot/ft., 7307-7316' 2 jet shots/ft., 7396-7406' 2 jet shots/ft.											
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.											
DEPTH INTERVAL (MD)				AMOUNT AND KIND OF MATERIAL USED							
7396-7406'				250 gals. 15% MCA/47,200 gals. trtd wtr., 38,500# sand							
7307-7316'				250 gals. 15% MCA/32,000 gals. trtd wtr., 38,500# sand (con't on reserve)							
33. PRODUCTION											
DATE FIRST PRODUCTION 10-15-78		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing						WELL STATUS (Producing or shut-in) Producing			
DATE OF TEST 10-25/26-78		HOURS TESTED 24		WORK SIZE 30/64"		PROD'N. FOR TEST PERIOD - - -		OIL—BBL. 312		GAS—MCF. 590	
FLOW. TUBING PRESS. 300#		CASING PRESSURE 750#		CALCULATED 24-HOUR RATE - - -		OIL—BBL. 312		GAS—MCF. 590		WATER—BBL. 82	
										OIL GRAVITY-API (CORR.) 46.2	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) To be sold										TEST WITNESSED BY J. E. Taylor	
35. LIST OF ATTACHMENTS 2 ea. #26 and Daily Well History											
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records											
SIGNED <u>W.A. Walther</u>				TITLE <u>Operations Manager</u>				DATE <u>11-7-78</u>			

*(See Instructions and Spaces for Additional Data on Reverse Side)

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See Instructions on Items 22 and 24, and 33, below regarding separate reports for separate completions. If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see Item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 31: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES				38. GEOLOGIC MARKERS		
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Item #32 (cont.) 7187-7194, 7198-7202, 7208-7228, 250 gals. 15% MCA, 62,000 gals. trd. wtr. & 80,000# sand.				Pictured Cliffs Mesaverde Gallup Green Horn Graneros Dakota A " B " C Burro Canyon Morrison	2965' 4614' 6220' 7106' 7171' 7186' 7305' 7391' 7471' 7558'	

10/18/78	7571	TD - Cont to swb tst. Swb tst'g Dak "C" zone. Pkr set @ 7373'. Swbd 22 hrs, rec'd est 200 BF. Now plg swb every 1-1/2 hrs. Recover approx 1/2 B0 & 1-1/2 BW ea swb pull. After ea swb pull, well flws pretty gd head of gas f/30 min, then dies. Presently rec'y rate 8 BOPD, 24 BWPD.
10/19/78	7571	TD - TIH w/tbg to spt 250 gal. 15% MCA acid. Swb tst'd 8 hrs, Dakota "C" zone @ rate of 8 BOPD & 24 BWPD. POH w/pkr & tbg. McCull set HOWCO speedy drill BP @ 7380'. Press tstd BP to 4000#, OK. Dmpd 1 sx cmt on BP. Wait on Aztec Well Serv to make rig repairs (7 hrs).
10/20/78	7571	TD - Prep to drl out BP. Sptd 250 gals 15% MCA @ 7326'. POH & perf Dak "B" w/2 shots/ft (7307-7316'). Frac'd Dak "B" zone w/8000 gal pad, 1% KCl wtr, 2#/1000 gal FR-20, 15#/1000 gal Adomite Aqua, 32,000 gal treated wtr, 38,500 40/60 sd flushed w/7300 gals treated wtr. Brk dn @ 3000#. Avg treating press 3000#, max treating press 3050#, AIR 43 BPM. Used 3164 Hyd hp. 1SIP 1500#, 5 min SIP 1400#, 10 min SIP 1300#, 15 min SIP 1300#. Lubricated HOWCO Speedy drl BP set @ 7260'. Tstd BP to 4000#, OK. Sptd 250 gals 15% MCA @ 7230'. Perf'd Dak "A" zone 1 shot/ft 7187-7194', 7198-7202', 7208-7228'. Frac'd "A" zone w/18,000 gal treated wtr pad, 62,000 gals treated wtr, 80,000# 20/40 sd. Brk dn & PI @ 1500#. Avg treating press 3100#, max treating press 3250#, AIR 48 BPM (3647 Hyd hp). 1SIP 1650#, 5 min SIP 1600#, 10 min SIP 1550#, 15 min SIP 1500#, 3-1/2 hrs SIP 1200#. Bleeding off press 1-1/2 hrs (presently 925#) f/Dakota "A" frac.
10/21/78	7571	TD - WO wtr. Bled well bk 9 hrs making oil, wtr & kicking gas. Mixed 9.5#/gal CaCl2, wtr (300 bbls). Pmpd 150 bbls & killed well. TIH w/bit & tbg. Strtd drlg on BP @ 7260'. Hole taking fld after drlg top of BP. Used remainder of weighted wtr 150 bbls. Still drlg BP.
10/22/78	7571	TD - Swbg. Drld BP @ 7260'. CO to 7360'. Ran 225 jts 2-3/8" EUE tbg (7105.27') w/API SN on top of btm jt. Tbg landed 7119'KB. Swbd 7 hrs, FL @ 6500'. Rec'd sli GCW. CP 0#. Swbg estimated 20 BPH.
10/23/78	7571	TD - Prep to hook well into separator & cont to tst. Prep to move rig to Chacon #8. Swbd well to pit f/ 6-1/2 hrs. Swbd & flwd to pit f/12 hrs. Recovering gas, wtr & oil. Well SI 5-1/2 hrs. TP 1000#, CP 1000#, 5-1/2 hrs. Serv unit rel 7 a.m. 10/23/78.
10/24/78	7571	TD - To cont tstg. Put well thru separator @ 1 pm 10/23/78. CP 1100#, TP 900#, ch 30/64". Tstg. Venting gas. Flwd 17-1/2 hrs, 170 B0, 160 BW, 354 MCFPD gas rate. CP 1200#, TP 450#, separator press 140#.
10/25/78	7571	TD - Flwg f/tst.
10/26/78	7571	TD - COMPLETED OIL WELL, Dakota Fm 10/25/78. 24 hrs tst, 10/25/78, flwd 312 BOPD, 590 MCFPD, 82 BWPD f/Dakota "A" perfs 7187-7228' OA & Dakota "B" perfs 7307-7316' OA. GOR 1891:1. First delivery to tks 10/23/78. FCP 750#. FTP 300#. Separator press 200#, 2" meter run, 1-1/4" plate.

9/10/78	335	WOC. Spud 2:00 p.m. 9/9/78. Ran 8 jts 6-3/8" 24# N 80 on btm & 154 jts (317.14') set @ 332' RKB, cmt'd w/275 sx CI "B" + 2% CaCl ₂ + 1/4# Flocele/sx. PD @ 8:00 p.m. 9/9/78. Gd circ thruout, circ'd about 4 bbls cmt. Ran GS & 3 Cent. 1° @ 330'. 100 RPM, all wt. Mud: 8.8#, vis 45, spud mud. B#1 12-1/4", HTC, OSC-3, made 335' in 3 hrs.
9/11/78	920	Drlg. 3/4" @ 920'. 70 RPM, 25M#. Mud: 8.7#, vis 38, WL 8, FC 2/32, Pn 9, oil 7%. (B#2).
9/12/78	2180	Drlg. 3/4" @ 1000', 1/4" @ 1930'. Mud: 8.9#, vis 38, WL 6.2, FC 1/32, Sd-tr, Ph 7.6, Pv 15, Yld 5, Gels 2/11, solids 5.5%. B#2, 7-7/8", Sm., DT, made 1596' in 22-3/4 hrs. (B#3).
9/13/78	3073	Drlg. 1° @ 2720'. 65 RPM, 45M#. Mud: 8.9#, vis 39, WL 5.2, FC 1/32, Sd-tr, Ph 9.5, Pv 10, Yld 2, Gels 0/1, solids 4%, oil 5%. B#3, 7-7/8", HTC, OSC-1G, made 789' in 14-1/2 hrs. (B#4).
9/14/78	3640	Drlg. 1° @ 3408'. 58 RPM, 45M#. Mud: 9#, vis 41, WL 6.2, FC 1/32, Ph 8.5, Pv 14, Yld 8, Gels 1/3, oil 5%, solids 3%. B#4, 7-7/8", HTC, OSC-1G, made 688' in 21 hrs. (B#5).
9/15/78	4230	Drlg. 58 RPM, 40M#. Mud: 8.9#, vis 45, WL 6.2, FC 1/32, Sd 1/2%, Ph 8.5, Pv 10, Yld 4, Gels 1/5, oil 6%, solids 3.5%. (B#5).
9/16/78	4780	Drlg. 60 RPM, 40M#. Mud: 8.8#, vis 47, WL 5.6, FC 1/32, Sd-tr, salt 300,000 ppm, Ph 8.5, Pv 20, Yld 10, Gels 2/5, solids 3.5%, oil 7%. (B#5).
9/17/78	5340	Drlg sd & sh. 60 RPM, 40M#. Mud: 8.8#, vis 39, WL 5.9, FC 1/32, Sd 1/2%, Ph 8.5, oil 6%, solids 3.5%. (B#5).
9/18/78	5880	Drlg sd & sh. 60 RPM, 40M#. Mud: 9.0#, vis 45, WL 8.6, FC 2/32, Sd 5/10%, Ph 8.5, Pv 16, Yld 8, Gels 2/9, oil 6%, solids 4.5%. (B#5).
9/19/78	6295	Mix mud & LCM. Lost approx. 150 BM @ 6295' while drlg. 1° @ 6060'. 60 RPM, 40M#. Mud: 8.8#, vis 38, WL 7, FC 1/32, Sd-tr, salt 225,000 ppm, Ph 8.5, Pv 11, Yld 6, Gels 1/2, oil 5%, solids 4%. B#5, 7-7/8", HTC, made 2652' in 11-1/4 hrs. (B#6).
9/20/78	6725	Drlg sd & sh. 60 RPM, 40M#. Mud: 8.7#, vis 41, WL 6.8, FC 1/32, Sd-tr, salt 300,000 ppm, Ph 8.5, Pv 15, Yld 5, Gels 1/3, oil 4%, solids 3%. (B#6).
9/21/78	7214	Trip f/bit, sd & sh. 60 RPM, 40M#. Mud: 9.1#, vis 39, WL 6.4, FC 1/32, Ph 8.5, Pv 15, Yld 5, Gels 1/6, solids 5.5%, oil 7%. B#6, 7-7/8", Sm., F-2, made 1154' in 56 hrs.
9/22/78	7251	Drlg sd & sh. Hit bridge GIH @ 3000', spud thru bridge, worked pipe dn to 3600' (approx.), could not brk circ. Pld up to 3000', circ'd, went back to 3600'. Bit partially plugged, regained circ, came out of hole & chg'd bit. 1° @ 7214'. 60 RPM, 35M#. Mud: 9.1#, vis 40, WL 6.3, FC 1/32, Sd-tr, salt 325,000 ppm, Ph 9, Pv 18, Yld 7, Gels 1/8, oil 6%, solids 6.5%. (B#7).
9/23/78	7400	Drlg sd & sh. 44 RPM, 45M#. Mud: 9.0#, vis 51, WL 6.4, FC 1/32, Sd 1/2%, salt 300M ppm, Ph 7.0, Pv 13, Yld 9, Gels 3/6, oil 6%, solids 4.5%. (B#7).
9/24/78	7571	Circ f/logs. 50 RPM, 45M#. Mud: 9.0#, vis 88, WL 5.6, FC 1/32, Sd 1/2%, salt 300M ppm, Ph 7.0, Pv 13, Yld 9, Gels 3/6, oil 6%, solids 4.5%. B#7, 7-7/8", HTC, J-55, Made 187' in 28 hrs. B#8, 7-7/8", Reed, FP-62, made 170' in 13-1/4 hrs.
9/25/78	7571	TIH to cond f/csg. Made 10 stnd short trip. DTD 7571', LTD 7570'. Ran DIL log & CNL-FDC w/GR. Mud: 9.0#, vis 120, WL 4.8, FC 1/32, Sd-tr, salt 400M ppm, Ph 7.2, Pv 20, Yld 50, Gels 8/15, oil 5%, solids 5%.
9/26/78	7571	TD - Cmtg csg. Circ'd hole. Pld & LD DP. Ran 5-1/2" OD csg. Details to follow.
9/27/78	7571	TD - WOC. Ran 5-1/2" OD csg as foll: 34 jts (1266') 17# N-80 on btm & 154 jts (6324') 15.5# K-55 ST&C on top; total 188 jts (7595') set @ 7571' KB, DV tool @ 3141'. Cmt 1st stage w/175 sx 50/50 Poz, 4% gel, 2/10% HR-4, 3/4% CFR-2 & 150 sx CI "B" neat. Gd ret. PD 11:30 pm 7/25/78. Circ thru DV tool 3 hrs. Cmt 2nd stage w/130 sx 50/50 Poz, 4% gel, 3/4% CFR-2 & 6.5# gilsonite/sx. Gd ret thruout. PD 4 am 7/26/78. Rig rel 6 am 9/26/78.
9/28/78	7571	TD - WO trucks to move rig.
9/29/78	7571	TD - MORT
9/30/78	7571	TD - MORT. Prep to clean loc.
10/1 & 2/78	7571	TD - Cleaning loc. SD over Sunday.
10/3/78	7571	TD - Moving in frac tks. Setting prod tks. Prep to set tst separator.
10/4/78	7571	TD - Prep to set tst separator.
10/5/78	7571	TD - Ditto
10/6-13/78	7571	TD - WO completion.
10/14/78	7571	TD - Prep to MO compl rig.
10/15/78	7571	TD - WO McCull 2nd logging truck. MI RU Aztec Well Serv. Set pipe racks, unload & tally 2-3/8" EUE tbg. WIH w/ 4-3/4" bit & 5-1/2" csg scraper. Drl'd DV tool @ 3141' & CO to 7514'. POH. RU McCull & had trouble w/depthometer. Called another truck.
10/16/78	7571	TD - Cont to tst. Ran CBL & GR correl var dens log (6100-7470'). (2850-3150') tstd 5-1/2" csg to 4000#, OK. TIH w/tbg, displ'd hole 1% KCl wtr. Sp'd 250 gals 15% MCA @ 7415'. Perf'd Dak. "C" zone w/2 JSPF 7396-7406'. Displ'd MCA into fm w/10 BW. Brk fm @ 2600#. Pmp'd in 10 bbls @ 1700#. ISIP 1200#, 15 min SIP 750#. Ran Bkr ret pkr, set @ 7373'. Swbd wtr & acid wtr back. Gd blw of gas & oil. Let blw 1 hr. Ran swb. Rec'd 1/2 BW & some condensate. Let flw to pit f/2 hrs. Rec'd 1 bbl lite oil & no wtr. SI.
10/17/78	7571	TD - Prep to tst "C" zone. GIH w/pkr. Pld tbg & pkr. RU HOWCO. Frac Dak. "C" zone (perfs 7396-7406') w/8,000 gals pad containing 1% KCl wtr, 2#/1000 gal FR-20, 15#/1000 gals Adomite Aqua, 47,200 gals treated wtr & 38,500# 40/60 sd, flush w/7200 gals treated wtr. Brk fm & PI @ 3200#. Avg treating press 3150#, Max 3360#, AIR 42 BPM (Hyd hp 3243#). ISIP 1600#, 5 min 1220#, 10 min 1100#, 15 min 1090#, 4 hrs 900#. Strtd bleeding back to pit after 5 hrs 250#. 6:00