

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 ☐										
b. TYPE OF COMPLETION:		NEW WELL ☒	WORK OVER ☐	DEEP-EN ☐	PLUG BACK ☐	DIFF. RESVR. ☐	Other ☐								
2. NAME OF OPERATOR Atlantic Richfield Company						5. LEASE DESIGNATION AND SERIAL NO. SF-080472-A									
3. ADDRESS OF OPERATOR Suite 501, Lincoln Tower Bldg., Denver, Colorado 80295						6. IF INDIAN, ALLOTTEE OR TRIBE NAME -									
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface SE NE 1650' FNL & 850' FEL Section 30 At top prod. interval reported below Approx. same At total depth Approx. same						7. UNIT AGREEMENT NAME -									
14. PERMIT NO. Mr. Long						8. DATE ISSUED 8-23-78	9. WELL NO. 7								
12. COUNTY OR PARISH Rio Arriba						13. STATE New Mexico									
15. DATE SPUDDED 10-15-78						16. DATE T.D. REACHED 10-31-78									
17. DATE COMPL. (Ready to prod.) 11-14-78						18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 7098' GR; 7112' RKB									
19. ELEV. CASINGHEAD -						20. TOTAL DEPTH, MD & TVD 7663'									
21. PLUG, BACK T.D., MD & TVD 7548'						22. IF MULTIPLE COMPL., HOW MANY* 1									
23. INTERVALS DRILLED BY -						24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 7293' to 7344' Dakota "A" Zone 7413' to 7434' Dakota "B" Zone									
25. WAS DIRECTIONAL SURVEY MADE No						26. TYPE ELECTRIC AND OTHER LOGS RUN Dual Ind. Lat.; FDC-CNL; CBL-GR									
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" OD		24#		291' KB		12-1/4"		300 sz		None					
5-1/2" OD		15.5 & 17#		7663' KB		7-7/8"		450 sz		None					
29. LINER RECORD						30. TUBING RECORD									
SIZE		TOP (MD)		BOTTOM (MD)		SACKS CEMENT*		SCREEN (MD)		SIZE		DEPTH SET (MD)		PACKER SET (MD)	
None										2-3/8"		7244'		None	
31. PERFORATION RECORD (Interval, size and number) 7293-98', 7305-24', 7333-44' w/1 jet shot/ft (38 shots) - Dakota "A" 7413-24', 7428-7434' w/2 jet shots/ft (36 shots) - Dakota "B"						32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED 7293-7344' (OA) 250 gal 15% MCA " " " 32000 gals treated wtr w/38500#sd. 7413-7434' (OA) 250 gal 15% MCA " " " 32000 gals treated wtr w/38500# sd.									
33.* PRODUCTION DATE FIRST PRODUCTION 11-11-78 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing WELL STATUS (Producing or shut-in) Producing						34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) To be sold.									
DATE OF TEST 11-14-78		HOURS TESTED 24 hrs.		CHOKE SIZE Adjustable		PROD'N. FOR TEST PERIOD 201		OIL—BBL. 201 BOPD		GAS—MCF. 763 MCFPD		WATER—BBL. 172		GAS-OIL RATIO 3796:1	
FLOW. TUBING PRESS. 375#		CASING PRESSURE 785#		CALCULATED 24-HOUR RATE 201		OIL—BBL. 201		GAS—MCF. 763 MCFPD		WATER—BBL. 172		OIL GRAVITY-API (CORR.) 45.2°			
35. LIST OF ATTACHMENTS 2 each of #26 above; Daily Well History.						36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records SIGNED W.A. Walther Jr. TITLE Operations Manager, ST. 3 DATE 11-27-78									

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

INSTRUCTIONS

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 33: 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
No Cores and no Drill Stem Tests.				Pictured Cliffs	3096'	
				Mesaverde	4702'	
				Gallup	6310'	
				Greenhorn	7210'	
				Graneros	7280'	
				Dakota A	7292'	
				Dakota B	7410'	
				Dakota Silt	7463'	
				Dakota C	7495'	
				Borro Canyon	7561'	
				Morrison	7654'	
				(all measurements from RKH)		

11/3/78	7663	TD - Cleaning location & setting anchors.
11/4/78	7663	TD - WO weather, too muddy to clean location.
11/6/78	7663	TD - Prep to fill frac tks, hook up prod equip. WO compl unit. Fin cleaning location.
11/7/78	7663	TD - WO completion.
11/8/78	7663	TD - MI workover rig. Aztec well service (107).
11/9/78	7663	TD - GIH to log w/Welex. MI & RU Aztec. PU & tally 2-3/8" EUE tbgs, bit & csg scraper. Drld DV tool @ 3448'. Ran on in w/bit. Tagged cmt @ 7388'. Drld cmt @ 7388-7548' PBTD. Loaded hole w/1% KCl wtr w/1 gal/1000 gals demul. POH w/bit & RU Welex to run CBL.
11/10/78	7663	TD - Bleeding off press after "A" zone frac. Ran cmt bond w/var dens GR correl log 7518-6000' & 3300-2850'. Bond gd. Tstd csg to 4000#, OK. WIH w/ 2-3/8" tbgs & sptd 250 gal 15% MCA over Dakota "B" zone. POH. Perf'd Dak. "B" 7413-7424', 7428-7434' w/2 shots/ft. Frac'd Dak. "B" w/8000 gal pad 1% KCl, 2#/1000 gal FR20 & 1 gal/1000 gal frac flw + 15#/1000 gal Adomite Aqua, 32,000 gal treat wtr, 38,500# 40/60 sd, flushed w/7500 gal treated wtr WO Adomite Aqua. FBDP 2700#, avg TP 3150#, Max TP 3600#, AIR 44 BPM, hyd HP 3397. ISIP 1500#, 5 min SIP 1250#, 10 min SIP 1200#, 15 min 1200#. Lubricated HOWCO Spedi line BP set @ 7370'. Tstd BP 4000#, OK. Perf'd Dak. "A" w/1 shot/ft 7293-7298', 7305-7324', 7333-7344'. Spearheaded 250 gal 15% MCA & frac'd Dak. "A" w/8000 gal pad, 32,000 gal treated wtr, 38,500# 20/40 sd & flushed w/7100 gal 1% KCl wtr. FBDP 2700#, avg TP 3150#, Max TP 3600#, AIR 44 BPM, HHP 3397#. ISIP 1500#, 5 min 1250#, 10 min 1200#, 15 min 1100#, 3 hrs SIP 950#. Strtd bleed bk @ 6:30 am 11/10/78. Prep to GIH w/bit & tbgs & drl BP.
11/11/78	7663	TD - Prep to pmp in KCl wtr. Pmpg in KCl wtr to kill well. Bled frac press dn & WIH w/bit & jk bskt. Drld BP @ 7370' & CO to 7540'. Circ clean. POH. RU to run prod tbgs & well strtd kicking. Rigged kill truck.
11/12/78	7663	TD - Flwg f/clean up thru tst equip. Pmpd 150 bbls 2 % KCl wtr to kill. Ran 230 jts 2-3/8" 8R EUE 4.7# J-55 R-2 (7229.82') w/SN on top btm jt, btm'd 7243.92'. NU tree & pmpd out expend plug. RU & made 1 swb run & well kicked off flwg. Turned thru prod equip @ 4:30 pm. Rel compl rig 5 pm 11/11/78.
11/13/78	7663	TD - Cont to flw f/clean up. In 13-1/2 hrs flwd 160 BO, 241 MCFD, & 168 BW, CP 1225#. TP 350#.
11/14/78	7548	PB - Cont to flw f/clean up. In 24 hrs flwd 236 BO, 196 BW & 797 MCFGD, CP 785#, TP 375#.
11/15/78	7548	PB - COMPLETED OIL WELL, 11/14/78, Dakota Fm. 24 hr tst 11/14/78 (date oil first run to pit 11/11/78), flwd 201 BOPD, 172 BWPD (frac), 763 MCFGD, GOR 3796:l, oil gvty 45.2° API @ 60°F. Dakota "A" perfs 7293-7344', Dakota "B" perfs 7413-7434'. LPP 7434'.

(1)

10/16/78	290	WOC. SPUD 12-1/4" hole 5 pm 10/15/78. Ran 7 jts 8-5/8" OD 24# K-55 ST&C 8rd R3 new csg (274.59') set @ 290.59' KB (KB-GL 14'), cmt'd w/300 sx Cl "B" w/3% CaCl + 1/4# Flocele/sx. PD 3:30 am 10/16/78. Gd circ. Circ approx 12 bbls cmt to pit. Ran pipe w/GS & Cent @ 275', 210', & 130'. 3/4" @ 124'. 60 RPM, all wt. B#1, 12-1/4", HTC, OSC-1G, made 290'. Contr.-Arapahoe (#4).
10/17/78	848	Drlg. Cmt @ 250'. Tst BOP, manifold & valves to 1000# f/30 min, OK. 1-1/4" @ 631'. 60 RPM, 15M#. Mud: 8.9#, vis 38, WL 6.8, FC 2/32, Ph 9.6, oil 6%. (B#2).
10/18/78	1734	Drlg sd & sh. 1" @ 907', 1214' & 1429'. 60 RPM, 15M#. Mud: 8.8#, vis 50, WL 6.4, FC 1/32, Sd-tr, Ph 8.5, Pv 16, Yld 12, Gels 2/12, oil 5%, solids 3.5%. B#2, 7-7/8", Sm., DT, made 1139' in 21 hrs. (B#3).
10/19/78	2810	Drlg, sd & sh. 3/4" @ 2704'. 60 RPM, 25M#. Mud: 8.8#, vis 42, WL 5.6, FC 1/32, Sd 1/2%, Ph 9, oil 5%, Pv 13, Yld 9, Gels 1/5, solids 3.5%. (B#3).
10/20/78	3490	Drlg, sd & sh. 1" @ 2904'. 55 RPM, 40M#. Mud: 8#, vis 45, WL 5.2, FC 1/32, Sd-tr, Ph 8.5, Oil 6%, Pv 12, Yld 8, Gels 1/9, solids 4%. B#3, 7-7/8", Sm., SDG, made 1475' in 34-1/4 hrs. (B#4).
10/21/78	4195	Drlg. 55 RPM, 45M#. Mud: 9.0#, vis 39, WL 6.4, FC 2/32, Sd 1/2%, Ph 9, oil 6-1/2%, Pv 11, Yld 4, Gels 0/2, solids 5%. (B#4).
10/22/78	4670	Drlg, sd & sh. 1" @ 4512'. 55 RPM, 45M#. Mud: 9.1#, vis 44, WL 4, FC 1/32, Ph 9, oil 6%, Pv 11, Yld 3, Gels 1/2, solids 6%. (B#4).
10/23/78	5288	Survey prior to trip f/bit. 56 RPM, 45M#. Mud: 9.0#, vis 48, WL 4, FC 2/32, Sd 1%, Ph 8.5, oil 8%, Pv 12, Yld 6, Gels 1/3, solids 5%. B#4, 7-7/8", Sec., S84F, made 2384' in 86-1/2 hrs.
10/24/78	5788	Drlg sd & sh. 1/2" @ 5288'. 56 RPM, 45M#. Mud: 9.0#, vis 46, WL 5.2, FC 2/32, Sd 3/4%, Ph 9.0, Oil 7%, Pv 12, Yld 5, Gels 2/5, solids 5%. (B#5).
10/25/78	6340	Drlg sd & sh. Lost 50 bbls mud @ 6060'. 55 RPM, 45M#. Mud: 8.9#, vis 47, WL 5.2, FC 2/32, Sd 3/4%, Ph 8.5, Pv 14, Yld 6, Gels 2/4, oil 6%, solids 4.5%. (B#5).
10/26/78	6780	Drlg sd & sh. 3/4" @ 6560'. 55 RPM, 45M#. Mud: 9.0#, vis 45, WL 6.4, FC 2/32, Sd-tr, Ph 8.0, Pv 15, Yld 10, Gels 5/12, oil 5%, solids 4.5%. (B#5).
10/27/78	7299	Trip f/bit. 55 RPM, 45M#. Mud: 9.0#, vis 46, WL 5.6, FC 2/32, Sd 1/2%, Ph 8.0, Pv 15, Yld 16, Gels 5/12, oil 5%, solids 6%. B#5, 7-7/8", Hughes, J-22, made 2011' in 86-1/4 hrs.
10/28/78	7426	Drlg. On TI could not brk circ @ 7100'. Pmpd away. POH 5 stnds, mixed mud & LCM & brk circ & wsh'd to btm. 1/2" @ 7299'. 48 RPM, 40M#. Mud: 8.9#, vis 44, WL 6.0. (B#6).
10/29/78	7650	Circ to log. Lost 75 BM while cond hole, mixed LCM. 48 RPM, 40M#. Mud: 9.0#, vis 110, WL 7.0, FC 2/32, Sd 1/2%, Ph 8.0, oil 8%, solids 4.0%. B#6, 7-7/8", Sm., F-47, made 351' in 34-1/4 hrs.
10/30/78	7650	GIH to KO bridges @ 6870'. Ran DIL f/6870' up. Hit bridges. Mud: 8.9#, vis 105, WL 6.4, FC 2/32, Ph 8.5, Pv 32, Yld 30, Gels 5/8, LCM 8%, oil 7%, solids 8%. (B#7).
10/31/78	7650	Circ & cond hole after making 15 stnd short trip. Hit bridge @ 6860'. Wshd & drld bridges to 7000'. Strtd losing mud. Pmp press incr. Hole bridging above, pld 4 stnds, swbg hole all the way. Circ'd ea 3 stnds back to 7000'. Wshd & drld bridges to TD. Bridges & hard fill almost all the way f/6860' to TD.
		Prep to TO & attempt logs. Mud: 9.0#, vis 140, WL 5.2, FC 2/32, Sd 1%, Ph 8, Pv 44, Yld 36, Gels 5/12, oil 5%, solids 6%. (B#7).
11/1/78	7663	Rng 5-1/2" csg (approx 4200' in hole). Ran DIL f/TD to surf. 2nd run stopped @ 7162'. Ran FDL-CNL f/7160-6200', 5446-4550' & 3290-2850'.
11/2/78	7663	TD - Ran 107 jts 5-1/2" 17# & 15.5# K-55 ST&C 8rd Rge 3 new csg. Csg tally as foll: 33 jts 17# (1,385.78'), 154 jts 15.5# (6,285.00') + 6' f/DV & FC & GS. Total csg 7676.73', set @ 7663' KB. (KB 14'). Cmt'd 1st stage w/200 sx 50/50 Poz, 4% gel, 3/4" D-31 & 2/10" R-11, 6-1/2" gilsonite/sx foll by 150 sx Cl "B" neat. Did not bump plug. Over displ'd 9 bbls on the counter. Cmt'd 2nd stage w/130 sx 50/50 Poz, 4% gel, 6-1/2" gilsonite/sx, 3/4" D-31, foll w/120 sx Cl "B" neat. PD 4:30 pm 11/1/78. Pre-flushed both jobs w/500 gals mud flush. FC @ 7623', DV tools @ 3248', Cent @ 7650' & top of jts #2, 4, 6, 8, 10, 12, 14, 30 & 78. Also its #105, 107, 113. Riq rel 8 pm 11/1/78.