

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. SF-080472-A	
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESER. ☐ Other _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME _____	
2. NAME OF OPERATOR ARCO Oil and Gas Company, Division of Atlantic Richfield Company		7. UNIT AGREEMENT NAME _____	
3. ADDRESS OF OPERATOR Suite 501, 1860 Lincoln Street, Denver, Colorado 80295		8. FARM OR LEASE NAME Tonkin	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface SW SW 890' FSL & 700' FWL Section 17 (Unit M) At top prod. interval reported below Approx. same At total depth Approx. same API #30-039-21959		9. WELL NO. 3	
14. PERMIT NO. Mr. Barrick		DATE ISSUED 11-22-78	
15. DATE SPUDDED 12-10-78		16. DATE T.D. REACHED 12-30-78	
17. DATE COMPL. (Ready to prod.) 4-5-79		18. ELEVATIONS (DF, REB, RT, GR, ETC.)* 6933' GR; 6947' KB	
19. ELEV. CASINGHEAD 6933'		10. FIELD AND POOL, OR WILDCAT West Lindrith Gallup-Dakota	
20. TOTAL DEPTH, MD & TVD 7675'		21. PLUG, BACK T.D., MD & TVD - -	
22. IF MULTIPLE COMPL., HOW MANY? 1		23. INTERVALS DRILLED BY 0 - 7675'	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* Dakota "A" - 7302-7274' & 7270-7262' Dakota "B" - 7390-7384' Dakota "C" - 7492-7468'		25. WAS DIRECTIONAL SURVEY MADE No	
26. TYPE ELECTRIC AND OTHER LOGS RUN FDC-CNL-GR; DIL-SFL; CBL		27. WAS WELL CORED No	
28. CASING RECORD (Report all strings set in well)			
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE
8-5/8"	24#	333'	12-1/4"
5-1/2"	35.5# & 17#	7634'	7-7/8"
CEMENTING RECORD		AMOUNT PULLED	
300 sx (Circul. approx. 100 sx emt.)		None	
650 sx (in 2 stages)		None	
29. LINER RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*
None			
30. TUBING RECORD			
SIZE	DEPTH SET (MD)	PACKER SET (MD)	
2-3/8"	7211'	- - -	
31. PERFORATION RECORD (Interval, size and number)			
Dakota "C" - 7492-7468' w/2 jet shots/ft.			
Dakota "B" - 7390-7384' w/4 jet (48 holes) shots/ft (24 holes)			
Dakota "A" - 7302-7274' & 7270-7262' w/1 jet shots/ft (36 holes)			
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED	
7493'		500 gal 15% MCA	
7492-68'		32,000 gals wtr w/38,500# sd.	
7399'		250 gal 15% MCA	
7390-84'		32,000 gals wtr w/38,500# sd.	
33. PRODUCTION			
DATE FIRST PRODUCTION 4-4-79		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing	
DATE OF TEST 4-5-79		WELL STATUS (Producing or shut-in) Producing	
HOURS TESTED 24 hrs.	CHOKE SIZE Adjustable	PROD'N. FOR TEST PERIOD 181 BOFPD	GAS—MCF. 623 MCFD
FLOW. TUBING PRESS. 155#	CASING PRESSURE 910#	WATER—BBL. 181 BOFPD	GAS—OIL RATIO 3442:1
CALCULATED 24-HOUR RATE 181 BOFPD		WATER—BBL. 623 MCFD	
OIL—BBL. 181 BOFPD		OIL GRAVITY-API (CORR.) 42.4° @ 60° F	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) To be sold.			
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. Walcher, Jr.		TITLE Operations Manager	
DATE 4-10-79.		DATE 4-10-79.	

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

U. S. GEOLOGICAL SURVEY

3/27/79	7675	TD - Prep to MI frac tks.
3/28/79	7675	TD - Prep to MI completion unit 3/29/79. MI 14 frac tks & set same. Hauling frac wtr.
3/29/79	7675	TD - Hauling frac wtr. MI completion rig.
3/30/79	7675	TD - Prep to run CBL. Now rng tbg & bit to btm. MIRU Aztec Well serv 3/29/79. Instl'd tbg head & BOP. Unloaded 247 jts 2-3/8" tbg 4.7# 8rd EUE, meas'd. RIH w/bit & csg scraper. Drld DV tool 4115'.
3/31/79	7675	TD - GIH opn ended. Ran bit & scraper to 7577', circ'd clean & POH. D-A ran CBL w/var dens & GR w/CCL f/7552-6170' & 4125-2850'. Bond log indicated 80-95% bonding in intervals between 7552-7108'. Ran tbg opn ended to 7493', displ'd w/KCl wtr & sptd 500 gals MCA. Perf'd Dakota "C" f/7492-68' w/2 JSPF; frac'd w/8,000 gal pad, 32,000 gals slick wtr, 38,500# sd & 7,250 gals flush. Fm brk dn 2000#, max press 2500#, AIR 39 BPM. Set CIBP @ 7430' & strtd in hole w/tbg.
4/1/79	7675	TD - GIH w/ 4-3/4" mill. Ran tbg to 7399' & sptd 250 gals MCA. Perf'd Dakota "B" 7390-7384' w/4 JSPF; frac'd w/8,000 gals pad, 32,000 gals slick wtr, 38,500# sd & 7,150 gals flush. Fm brk dn 2800#, avg press 2800#, max press 3300#, AIR 43 BPM. Set CIBP @ 7350' & perf'd Dakota "A" 7302-7274' & 7270-7262' w/1 JSPF; frac'd w/250 gals MCA, 80,000# sd, 18,000 gals pad, 62,000 gals slick wtr & 7,050 gals flush. Flw back press 3400#, avg press 2500#, max press 2800#, AIR 48 BPM. WIH w/4-3/4" mill.
4/2/79	7675	TD - Prep to pmp out tbg plug & flw tst Dakota fms. RIH w/ 4-3/4" mill & jk bskt. Milled out CIBP @ 7350' & 7430' & CO to 7577' (tbg meas). POH w/mill. RIH w/tbg to tst Dakota A, B & C zones after frac. 230 jts 2-3/8" EUE tbg (7201') set @ 7211' KB w/API SN 1 jt above btm. Removed BOP, instl'd Xmas tree. At 6 a.m., well flwg 2-2" streams of frac fld to pit f/csg. WO pmp truck to pmp out tbg plug. Well showed 1800 psig on csg when SI.
4/3/79	7675	TD - Prep to tst thru separator. WO Halliburton pmp truck (brk dn 1 mile f/loc.) Pmpd out expendable plug w/5200 psig. RU swb & made 4 runs to kick well off, flwg frac wtr to reserve pit. 1:30 p.m. CP 750#, 3:30 p.m. CP 750#, 6:30 p.m. CP 770#, 9:30 p.m. CP 1000#, 12:30 a.m. CP 925#, 5:30 a.m. CP 775#. Well cleaned up sufficiently, will put thru separator this a.m.
4/4/79	7675	TD - Prep to cont tstg. Tstg Dakota zones thru sep to storage tks. 16 hr tst produced oil avg 155 BOPD, 209 MCFD (CV), 3/4" chk flwg by heads. CP varies 850-1100#. Sep press 100#, intermittent 2" stream of wtr to pit. Oil gvty 42.4° @ 60°F.
4/5/79	7675	TD - Prep to cont tstg. On 24 hr tst, flwd 118 B0 & 209 MCFD. Rel Aztec Well Serv rig @ 4 p.m. 4/4/79.
4/6/79	7675	TD - COMPLETED OIL WELL, 4/5/79, Dakota fm. On 24 hr tst, 4/5/79, flwd 181 BOPD & 623 MCFD f/Dakota "A" perfs 7302-7274', Dakota "B" perfs 7390-84' & Dakota "C" perfs 7492-68'. CP 910#, TP 155#, adjustable chk, GOR 3442:1. LPP 7492'.

12/11/78	334	WOC. Spud 12-1/4" surf hole @ 5:45 12/10/78. Ran & cmtd 8 jts 8-5/8" 24# K-55 ST&C Rge 3 csg (315'), set @ 333'KB, w/GS @ 333', 3 Cent on btm 3 jts. Cmtd w/300 sx Cl "B" neat cmt w/3% CaCl + 1/4# Flocele/sx. Displ'd cmt w/top plug & 18 BW. PD 5:30 p.m. 12/10/78. Circ'd est 100 sx cmt. 1/4" @ 324'. 70 RPM, all wt. B#1, 12-1/4", Sm., DG, made 334' in 5 hrs.
12/12/78	1309	Drlg 70'/hr, sd & sh. 70 RPM, 20M#. Mud: 8.5#, vis 41, WL 7.2, FC 1/32, Sd-tr, salt 400 ppm, Ph 9, Pv 13, Yld 6, Gels 5/19, akal 1/10 of 1%, oil 0%, solids 1%. (B#2).
12/13/78	2170	Drlg 40'/hr. 3-1/2" @ 1601'. 70 RPM, 20M#. Mud: 8.9#, vis 50, WL 8, FC 2/32, Sd .3%, Ph 9.5, Pv 21, Yld 18, Gels 12/23, solids 3%, oil 4%. B#2, 7-7/8", HTC, OSC-3, made 1267' in 15 hrs. (B#3).
12/14/78	2821	Drlg sd & sh. 2" @ 2472'. 55 RPM, 20M#. Mud: 9.1#, vis 42, WL 4, FC 1/32, Sd-tr, salt 600 ppm, Ph 9, Pv 19, Yld 15, Gels 11/21, oil 6%. B#3, 7-7/8", HTC, XIG, made 1141' in 33 hrs. (B#4).
12/15/78	3533	Drlg, sd & sh. Lost 100 BM @ 3185', 50 BM @ 3490'. 55 RPM, 30M#. Mud: 8.9#, vis 54, WL 4.5, FC 1/32, Sd-tr, Ph 9, Pv 21, Yld 13, Gels 15/18, oil 6%, solids 5%. (B#4).
12/16/78	4048	Drlg sd & sh. 54 RPM, 40M#. Mud: 9.0#, vis 46, WL 5.0, FC 2/32, Sd 1/2%, salt 700 ppm, Ph 9.0, Pv 18, Yld 12, Gels 11/17, oil 5%. (B#4).
12/17/78	4458	Circ f/trip, sd & sh. 55 RPM, 30M#. Mud: 9.1#, vis 57, WL 6.0, FC 2/32, Sd 1/2%, Ph 9.5, Pv 24, Yld 17, oil 6%. B#4, 7-7/8", Sm., F-2, made 1716' in 74-1/2 hrs.
12/18/78	4770	Drlg, Cliffhouse. 1" @ 4458'. 56 RPM, 40M#. Mud: 9.1#, vis 48, WL 7, FC 2/32, Sd 1/2%, salt 800 ppm, Ph 8.5, Pv 19, Yld 26, Gels 16/21, solids 5%, oil 6%. (B#5).
12/19/78	5270	Drlg sd & sh. 56 RPM, 40M#. Mud: 8.9, vis 56, WL 7, FC 2/32, Sd 1/4%, salt 700 ppm, Ph 8.5, Pv 26, Yld 18, Gels 13/17, solids 4%, oil 7%. (B#5).
12/20/78	5708	Drlg sd & sh. 60 RPM, 20M#. Mud: 8.8#, vis 54, WL 6.8, FC 2/32, Sd .5%, salt 700 ppm, Ph 8, Pv 26, Yld 17, Gels 12/18, oil 6%, solids 5%. (B#5).
12/21/78	6262	Drlc sd & sh. 56 RPM, 40M#. Mud: 9#, vis 52, WL 7, FC 2/32, Sd .5%, salt 700 ppm, Ph 8.5, Pv 25, Yld 15, Gels 11/18, solids 5.7%, oil 6%. (B#5).
12/22/78	6521	Drlg sd & sh. 1" @ 6498'. 56 RPM, 40M#. Mud: 8.9#, vis 44, WL 6.8, FC 2/32, Sd .5%, salt 700 ppm, Ph 8.5, Pv 22, Yld 14, Gels 12/17, LCM 2%, solids 4%, oil 6%. B#5, 7-7/8", Sm., F-2, made 2040' in 104-3/4 hrs. (B#6).
12/23/78	6955	Drlg sd & sh. 56 RPM, 40M#. Mud: 8.8#, vis 54, WL 7.4, FC 2/32, Sd .5%, salt 700 ppm, Ph 8.5, Pv 24, Yld 14, Gels 13/20, oil 6.0%. (B#6).
12/24/78	7250	Draining up to SD f/Xmas. Drld to 7250'. Circ & cond hole & mud. POH & prep to SD. Plan to resume 7 a.m. 12/26/78. 1" @ 7250'. 55 RPM, 40M#. Mud: 8.9#, vis 60, WL 5.6, FC 2/32, Sd .4%, salt 300 ppm, Ph 9.0, Pv 11, Yld 7, Gels 1/3, oil 6.5%, solids 4.4%. B#6, 7-7/8", Sec., S-86, made 752' in 38-3/4 hrs.
12/25/78	7250	SD f/Xmas. Fin draining rig & SD f/holiday @ 8 a.m. 12/24/78.
12/26/78	7250	SD f/Xmas. Expect to resume operations 7 a.m. 12/26/78.
12/27/78	7402	Drlg, Dakota. 48 RPM, 40M#. Mud: 8.9#, vis 46, WL 4.8, FC 2/32, Sd-tr, salt 600 ppm, Ph 9.5, Pv 23, Yld 16, Gels 2/6, oil 6%, solids 5%. (B#7).
12/28/78	7635	Drlg, Dakota. Drlg 20'/hr. 48 RPM, 40M#. Mud: 8.9#, vis 56, WL 6.0, FC 2/32, Sd 5/10%, Ph 9.5, Pv 24, Yld 15, Gels 19/10, Ch 650, oil 7%, solids 5%. (B#7).
12/29/78	7675	Logging w/Schl. Schl logging tools stopped @ 7117'. Ran back in hole w/DP & circ to btm. PDH. 1-1/2" @ 7675'. 48 RPM, 40M#. Mud: 8.9#, vis 80, WL 5.0, FC 2/32, Sd 3/10%, salt 650 ppm, Ph 8.5, oil 6%. B#7, 7-7/8", Sm., F-5, made 425' in 45-3/4 hrs.
12/30/78	7675	TD - Rng 5-1/2" csg (100 jts ln). Schl fin'd rng DIL-SFL f/7644-329'; CNL-FDC w/caliper f/7649-2730' across selected intervals. Mud: 8.9#, vis 80, WL 5.0, FC 2/32, Sd 3/10%, salt 650 ppm, Ph 8.5, Pv 24, Yld 15, Gels 10/19, oil 6%.
12/31/78	7675	TD - Tearing dn rig. Fin rng 188 jts 5-1/2" OD 15.5# & 17.0# K-55 csg (7640.78' w/float equip) to 7634', FC @ 7592', DV @ 4115'. Cmtd 1st stage w/500 gal mud flush; foll by 250 sx 50/50 Pozmix w/4% gel & 6-1/2# gilsonite/sx; foll by 150 sx neat cmt. PD 1 p.m. 12/30/78. Cmtd 2nd stage thru DV @ 4115' w/500 gal mud flush; foll by 150 sx 50/50 Pozmix & 4% gel & 6-1/2# gilsonite/sx; foll by 100 sx neat cmt. PD 4:45 p.m. Set 5-1/2" hanger w/95,000#. ND BOP, cleaned tks & RR 9 p.m. 12/30/78. Bot ctmg stages gd circ & returns. Formation Tops: Pictured Cliffs 3050', Chacra 3905' to 4039', Mesaverde 4682', Gallup 6299', Greenhorn 7183', Graneros 7246', Dakota A 7260', Dakota B 7380', Dakota Silt 7431', Dakota C 7462', Burro Canyon 7544', Morrison 7629'.
1/1&2/79	7675	TD - Prep to move off rig.
1/3/79	7675	TD - Prep to move off rig.
1/4/79	7675	TD - MORT.
1/5- 3/26	7675	TD - WO completion.

