

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 ARCO Oil and Gas Company Division of Atlantic Richfield Company								
3. ADDRESS OF OPERATOR P.O. Box 5540, Denver, Colorado 80217								
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 2310' FSL & 900' FEL (NE SE) At top prod. interval reported below At total depth Approx same								
14. PERMIT NO.		DATE ISSUED		12. COUNTY OR PARISH				13. STATE
Mr. Sims		2/20/80		Rio Arriba				New Mexico
15. DATE SPUDDED		16. DATE T.D. REACHED		17. DATE COMPL. (Ready to prod.)		18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*		19. ELEV. CASINGHEAD
3/24/80		4/10/80		6/17/80		6705' GL; 6718' DE; 6719' KB		
20. TOTAL DEPTH, MD & TVD		21. PLUG, BACK T.D., MD & TVD		22. IF MULTIPLE COMPL., HOW MANY*		23. INTERVALS DRILLED BY		ROTARY TOOLS
7344' TD		7304' PB		1		0 - 7344'		CABLE TOOLS
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* Dakota 7054' - 7108'; Gallup 6131' - 6174' & 5986' - 5977'								25. WAS DIRECTIONAL SURVEY MADE No
26. TYPE ELECTRIC AND OTHER LOGS RUN DIL; FDC/CNL/GR								27. WAS WELL CORED Yes
28. CASING RECORD (Report all strings set in well)								
CASING SIZE		WEIGHT, LB./FT.		DEPTH SET (MD)		HOLE SIZE		CEMENTING RECORD
8-5/8		24#		325'		12-1/4"		300 sxs
5-1/2"		17# & 15.5#		7343'		7-7/8"		900 sxs (2 stages)
29. LINER RECORD								
SIZE		TOP (MD)		BOTTOM (MD)		SACKS CEMENT*		SCREEN (MD)
None								
30. TUBING RECORD								
SIZE		DEPTH SET (MD)		CCT SET (MD)		None		
2-3/8"		7021'						
31. PERFORATION RECORD (Interval, size and number)								
Dakota 7054 - 7108' 20 shots Gallup 6131 - 6174' 16 shots Gallup 5986 - 5977' 22 shots								
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.								
DEPTH INTERVAL (MD)				AMOUNT AND KIND OF MATERIAL USED				
7120'				350 gals 15% MCA				
7054 - 7108'				86900 gals 1% KCL wtr & 80000# 20/40 mesh sand				
6131 - 6174'				1000 gals 15% HCL & 32 ball sealers				
33.* PRODUCTION (OVER)								
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)					WELL STATUS (Producing or shut-in)	
6/5/80		Flowing					Producing	
DATE OF TEST		HOURS TESTED		CHOKE SIZE		PROD'N. FOR TEST PERIOD		OIL—BBL.
6/17/80		24		48/64"				58
FLOW. TUBING PRESS.		CASING PRESSURE		CALCULATED 24-HOUR RATE		OIL—BBL.		GAS—MCF.
140#		140#				58		76
						WATER—BBL.		GAS-OIL RATIO
						10		1310:1
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)								TEST WITNESSED BY
To be sold								Rex Hitchcock
35. LIST OF ATTACHMENTS								
2 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		TITLE				DATE		
W. A. Walther, Jr.		Operations Manager				6-26-80		

*(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: "Seals 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 PRESSURE, AND RECOVERIES			38. GEOLOGIC MARKERS			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Morrison	7052	7112	Cored 60', recov'd 60' SD, MD GRN, F GRN, SH LAM Shale, No Analysis SD, DK GRN, VF GRN, SH LAM SD, LT GRN, F GRN, SH LAM SD, LT GRN, F GRN SD, DK GRN, VF GRN, V/SHLY FRAC	Pictured Cliffs Lewis Shale Chacra Base of Chacra Mesaverde Upper Mancos Gallup Greenhorn Graneros Dakota Burro Canyon Morrison	2709' 2755' 3550' 3695' 4337' 5060' 5976' 6830' 6893' 7050' 7144' 7329'	
No DST's						
#32. 6180' 6131 - 6174'	200 gals 15% HCL 71,000 gals 1% KCL wtr, 25,000# 100 mesh sd & 123,000# 20/40 mesh sd					
6090'	200 gals 15% HCL					
6090	1600 gals 15% HCL & 4# ball sealers					
5986 - 6077'	127,800 gals 1% KCL, 50,000# 100 mesh sd & 246,000# 20/40 mesh sd.					

4-12-80
4-13-80
4-14-80
4-15-80
4-30-80

7344 PB - Prep to perf & frac Dakota. MI & RU Big "A" Well Serv. Unload 224 jts 2-3/8" EUE tbg f/warehouse. Transfer 20 jts 2-3/8" f/Jicarilla #111. Tally tbg. TIH w/tbg, 4-3/4" bit & csg scraper & tag cmt @ 3790'. CO to & drl DV tool @ 3803'. CO & tag cmt @ 7278'. Drld cmt & CO to flt clr @ 7302'. Mix KCl & displ hole w/1% KCl wtr. POH. Ran Blue Jet CBL log w/var dens f/PBTD 7304-5200' - Top cmt @ 5300'. Ran logs f/3900-2700'. Top cmt @ 2870'. Press csg to 1000#. Rerun Amplitude log 7304-5700' - 100% bonding.

5-1-80

5/2/80

7344 SIP 2340#. Avg rate 38 BPM, avg press 3700#. PB - GIH w/tbg & bit to CO sd. Set BP on WL @ 6509'. Dump 3 sx sd on plug. Press tstd to 4000#, held OK. Perf'd Gallup Stage 1 @ foll'g: 6131', 36', 39', 42', 45', 48', 51', 54', 57', 60', 63', 66', 68', 70', 72', 74' (16 shots). Blue Jet GR Clr correl log correl to Schl CNL/FDC log. TIH w/tbg & RTTS pkr to 5990'. Fm brk @ 3800#. Trtd w/1000 gals 15% HCl, 32 ball sealers @ 3 BPM @ 3600#. Completely balled off @ 4000#. Ran tbg to 6184' to knock off balls. POH. RU to frac Gallup perfs 6131-74'. Press to 4000#. Couldn't PI. Re-perf'd Gallup same depth. TIH w/pkr to 6180'. Sptd 200 gals 15% HCl. PU & reset pkr @ 6000'. Fm brk @ 3800#. Trtd 11 BPM @ 3700#. ISIP 1000#. POH. Frac trt Gallup perfs 6131-74' w/67,000 gals HOWCO 40# Versagel, 1% KCl, 25M# 100 mesh sd & 123M# 20/40 mesh sd. Frac trtd as foll: 5,000 gals pad, 31 BPM, 1750#; 5,000 gals, 1# sd/gal (100), 31 BPM, 1600#; 10,000 gals, 2# sd/gal (100), 31 BPM, 1600#; 6,000 gals, 1# sd/gal (20/40), 31 BPM, 1500#; 10,000 gals, 2# sd/gal (20/40), 30 BPM, 1500#; 10,000 gals, 3# sd/gal (20/40), 30 BPM, 1450#; 8,000 gals, 4# sd/gal (20/40), 31 BPM, 1250#; 11,000 gals, 5# sd/gal (20/40), 31 BPM, 1350#; 6,000 gals flush, 32 BPM, 1550#. ISIP 1100#, 5 min SIP 970#, 10 min SIP 930#. Set BP @ 6100'. Dump 1 sx sd on plug. Tst to 4000#, held OK 5 min. TIH to perf. Could only get to 6038'.

3/25/80	328	WOC, sd & sh. Spudded @ 3:30 pm, 3/24/80. Ran 8 jts 8-5/8" 24# K-55 R3 ST&C, GS & 3 ctrlzrs; landed @ 325' KB. (KB to GL 14'). Cmt'd w/300 sx Cl "B", 2% CaCl, 1/4# flocele/sx. Circled 22 bbls slurry. Gd cmt job. 1° @ 328'. 120 RPM, 15M#. Mud: 8.8#, Vis 50. B#1, 12 1/4", Smith, DT, made 328' in 5 hrs.
3-26-80	1188	Drlg sd & sh. WOC. Press tstd blind & pipe rams to 1000#, held OK. Resum'd drlg. 1° @ 800'. 90 RPM, 30M#. Mud: 8.9#, vis 36, WL 8.9, FC 2/32, Sd-tr, salt 400, Ph 8.5, Pv 16, Yld 4, Gels 1/3, solids 4%, Ca 60, oil 6%. (B#2).
3-27-80	2417	Trip f/B#4, sd & sh. 1/2° @ 1536'. 90 RPM, 30M#. Mud: 9#, vis 38, WL 5.6, FC 2/32, Sd-tr, salt 400, Ph 9.5, Pv 18, Yld 10, Gels 2/5, solids 5%, Ca 20, oil 7%. B#2, 7-7/8", Sm., DT, made 1211' in 14 hrs. B#3, 7-7/8", Sm., DG, made 878' in 12 hrs.
3-28-80	3080	Drlg sd & sh. 3/4° @ 2417'. 70 RPM, 40M#. Mud: 9#, vis 38, WL 6.6, FC 2/32, Sd-tr, salt 450, Ph 8.5, Pv 12, Yld 3, Gels 0/1, solids 5%, Ca 60, Oil 6.5%. (B#4).
3-29-80	3675	Drlg sd & sh. 1° @ 3185'. 70 RPM, 45M#. Mud: 9#, vis 42, WL 6.8, FC 2/32, Sd-tr, salt 400, Ph 8.5, Pv 15, Yld 5, Gels 1/3, solids 5, Ca 80, oil 6%.
3-30-80	4150	Drlg sd & sh. 70 RPM, 45M#. Mud: 9.1#, vis 37, WL 6.2, FC 2/32, Sd-tr, salt 400, Ph 8.5, Pv 12, Yld 4, Gels 0/1, solids 6%, Ca 40, oil 6% (B#4).
3-31-80	4512	Drlg sd & sh. 1° @ 4260'. 70 RPM, 45M#. Mud: 9.2#, vis 40, WL 7.2, FC 2/32, Sd-tr, salt 500, Ph 8.5, Pv 14, Yld 4, Gels 1/1, solids 6%, Ca 60, oil 6%. (B#4).
4-1-80	5043	Drlg sd & sh. 1° @ 4830'. 70 RPM, 45M#. Mud: 9.3#, vis 40, WL 4.4, FC 2/32, Sd-tr, salt 400, Ph 8.5, Pv 16, Yld 5, Gels 1/1, solids 7%, Ca 60, oil 6%. (B#4).
4-2-80	5424	Trip f/B#5, sd & sh. 70 RPM, 45M#. Mud: 9.3#, vis 39, WL 6.2, FC 2/32, Sd-tr, salt 400, Ph 8.5, Pv 16, Yld 5, Gels 1/2, solids 7%, Ca 80, oil 6%. B#4, 7-7/8", HTC, J-22, made 3007' in 130 hrs.
4-3-80	5735	Drlg sd & sh. 3/4° @ 5424'. 60 RPM, 45M#. Mud: 9.2#, vis 40, WL 7, FC 2/32, Sd-tr, salt 400, Ph 8.5, Pv 17, Yld 6, Gels 3/5, solids 7%, Ca 80, oil 6%. (B#5).
4-4-80	6142	Drlg sd & sh. 60 RPM, 45M#. Mud: 9.3#, vis 40, WL 6.4, FC 2/32, Sd-tr, salt 400, Ph 8, Pv 16, Yld 6, Gels 2/4, solids 6%, Ca 60, oil 6%. (B#5).
4-5-80	6421	Drlg sd & sh. 3/4° @ 6400'. 60 RPM, 45M#. Mud: 9.3#, vis 40, WL 6.2, FC 2/32, Sd tr, Salt 400, Ph 8, Pv 16, Yld 7, Gels 2/4, solids 7%, Ca 60, oil 7%. (B#5).
4-6-80	6853	Drlg sd & sh. 60 RPM, 45M#. Mud: 9.3#, vis 39, WL 6.8, FC 2/32, Sd tr, salt 400, Ph 8, Pv 16, Yld 8, Gels 3/4, solids 7%, Ca 60, Oil 7%. (B#5).
4-7-80	7052	Trip f/core bbl, Dakota fm. 60 RPM, 45M#. Mud: 9.4#, vis 52, WL 6.2, FC 2/32, Sd 1/4%, salt 400, Ph 8, Pv 17, Yld 8, Gels 4/5, solids 9%, Ca 70, oil 7%. B#5, 7-7/8" HTC, J-22, made 1628' in 95-1/2 hrs.
4-8-80	7110	TO w/CB, Dakota fm. 20-30 MPH winds all day long, gusting to 52 MPH - trouble making trip. 1° @ 7052'. 55 RPM, 22M#. Mud: 9.4#, vis 60, WL 6, FC 2/32, Sd 1/4%, salt 400, Ph 8, Pv 16, Yld 7, Gels 2/4, solids 7%, Ca 80, oil 6%. B#6, 7-7/8", Christ., MC-23, Dia core head, cored 58' in 13 hrs.
4-9-80	7338	Drlg, Morrison fm. Cored 60', rec'd 60' f/7052-7112', Core #1. Sent to Core Lab. 65 RPM, 45M#. Mud: 9.4#, vis 80, WL 6.2, FC 2/32, Sd-tr, salt 400, Ph 8, Pv 16, Yld 6, Gels 2/4, solids 7%, Ca 80, oil 6%. (B#7).
4-10-80	7344	TD - LD DP, Morrison fm. Ran DIL log f/TD to btm of surf pipe; CNL-FDC/GR/Cal TD-6100', 5200-4250', 3900-3450'; Cal only f/3450-2900', all f/2900-2400'. 65 RPM, 45M#. Mud: 9.5#, vis 100/50 (logging), WL 6.4, FC 2/32, Sd 1/4%, salt 400, Ph 8.5, Pv 40, Yld 26, Gels 20/40, solids 9%, Ca 40, oil 6%. B#7, 7-7/8", Sm., F-5, made 232' in 15-1/2 hrs.

5/3/80 7344 PB - Prep to CO BP w/tbg. & bit. RIH w/tbg & bit. Sand @ 6038' CO to BP @ 6100' Circ hole cleaner. POH. Perf Gallup stage 2 @ 5986, 89, 98, 6013, 15, 27, 34, 36, 38, 40, 44, 46, 48, 50, 54, 56, 64, 66, 68, 73, 75, 77' (22 shots). Meas Blue Jet GR/CCL to Schl FDC/CNL. RIH w/tbg & pkr to 6090'. Sptd 200 gal 15% HCl. PU & set pkr @ 5900'. Brk fm w/2800 psi. Trtd w/1600 gal 15% HCl & 44 ball sealers. Trt @ 6 BPM & 2400 Psi. Balled off @ 4000 psi. Lowered pkr thru perfs, POH. Frac treat 5986-6077' w/HOWCO 40# Versa-gel 127,800 gal 1% KCl wtr, 50,000# 100M sand, 246,000# 20/40 M sand. Treat as foll: 10,000 gal pad, 40 BPM, 2150#; 10,000 gals, 1# sd/gal (100M), 42 BPM, 2100#; 20,000 gals, 2# sd/gal (100M), 42 BPM, 2050#; 12,000 gals, 1# sd/gal (20/40), 41 BPM, 2200#; 20,000 gals, 2# sd/gal (20/40), 42 BPM, 2150#; 20,000 gals, 3# sd/gal (20/40), 39 BPM, 1800#; 16,000 gals, 4# sd/gal (20/40), 38 BPM, 1950#; 14,000 gals, 5# sd/gal (20/40), 37 BPM, 1980#; 5,800 gals, flush, 32 BPM, 2300#. ISIP 1400#, 10 min SIP 1290#. SI and wait on gel to brk. Open on 18/64" choke after 2 hrs open to 32/64" choke. Pres decr. to 250 psi. Rec 246 Bbls load wtr. Load yet to rec 6460 Bbl.

5/4/80 7344 PB - Prep to cont swab for clean up. Flow to pit thru 2". Pres decr to 50 psi from 250 psi. RIH w/tbg & bit to BP @ 6100'. CO BP and down to 6509'. Drill BP @ 6509' and CO to FC @ 7302'. Circ hole clean. POH. RIH w/227 jts 2-3/8" EUE 4.7#, J-55 tbg (7007') Set @ 7021' KB w/SN @ 6990'. ND BOPE. NU Xmas tree. Pmpd out plug. Flow to test tank. Rec 34 Bbl load wtr. Swb f/SN. Fld level sc'd f/surf to SN. Rec 139 Bbl wtr. Csg press. 25 psi. Last 24 hrs rec 173 Bbl load. Accum rec 419 Bbl. Yet to rec 6287 Bbls.

5/5/80 7344 PB - Prep to cont swab for clean up. Flow to pit thru 2". Pres decr to 50 psi from 250 psi. RIH w/tbg & bit to BP @ 6100'. CO BP and down to 6509'. Drill BP @ 6509' and CO to FC @ 7302'. Circ hole clean. POH. RIH w/227 jts 2-3/8" EUE 4.7# J-55 tbg (7007') Set @ 7021' KB w/SN @ 6990'. ND BOPE. NU Xmas tree. Pmpd out plug. Flow to test tank. Rec 34 Bbl load wtr. Swb f/SN. Fld level sc'd f/surf to SN. Rec 139 Bbl wtr. Csg press. 25 psi. Last 24 hrs rec 173 Bbl load. Accum rec 419 Bbl. Yet to rec 6287 Bbls.

5/6/80 7344 PB - To cont swbg. Swbg f/SN. Fld level scattered f/2000' to SN. CP-725#. Rec'd 583 BL in 24 hrs. Sample @ 5:00 am 20% oil & 80% wtr, hvy black oil & show of gas. Accum load recov'd 1566 bbls. Load yet to recover 5141 bbls.

5/7/80 7344 PB - To cont swbg. Swbg f/6000'. Fld scattered f/2500-6000'. CP 800#. Rec'd 335 bbls, 20% oil & 80% wtr. Last 24 hrs rec'd 67 BO & 268 BW. Accum load rec'd 1834 bbls. Load yet to recover 4873 bbls.

5/8/80 7344 PB - WO pmpg unit. Swbg f/6000'. Fld scattered f/2000-6000'. Rec'd 212 BF (63 oil & 149 wtr). Accum load rec'd 1983 bbls. Load yet to recov 4724 bbls. RR 6:00 am 5/8/80.

6/20/80 7344 TD - COMPLETED OIL WELL, 6/17/80, Gallup/Dakota fm. Tst date 6/17/80. Flwg thru adj chk on 24 hr tst, 58 BOPD, 76 MCFD gas, 10 BW (frac wtr) f/Dakota perfs 7054-7108' & f/Gallup perfs 6131-6174' & 5986-6077'. TP 140#, CP 140#. Oil gvty 38.2° API @ 60°F. GOR 1310:1. LPP 7108'.