

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 & Gas Company, division of Atlantic Richfield Company					
3. ADDRESS OF OPERATOR Suite 501, 1860 Lincoln Street, Denver, Colo. 80295					
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 500' FNL & 450' FEL Section 7 (NE NE) (Unit A) At top prod. interval reported below Approx. same At total depth Approx. same					
14. PERMIT NO.		DATE ISSUED			
Mr. Barrick		8-8-79			
15. DATE SPUDDED		16. DATE T.D. REACHED		17. DATE COMPL. (Ready to prod.)	
8/27/79		9-12-79		10-17-79	
20. TOTAL DEPTH, MD & TVD		21. PLUG, BACK T.D., MD & TVD		22. IF MULTIPLE COMPL., HOW MANY*	
7370'		--		1	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* Gallup: 6269-6054'; Dakota: 7214-7152'				25. WAS DIRECTIONAL SURVEY MADE No	
26. TYPE ELECTRIC AND OTHER LOGS RUN FDC-CNL-GR; DIL; 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	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	302'	12-1/4"	300 sx	None
5-1/2"	15.5 & 17#	7369'	7-7/8"	825 sx (2 stages)	None
29. LINER RECORD					
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	
None					
30. TUBING RECORD					
SIZE	DEPTH SET (MD)	PACKER SET (MD)			
2-3/8"	7114'	None			
31. PERFORATION RECORD (Interval, size and number)					
Gallup: 6269-6054' - 33 holes Dakota: 7214-7152' - 23 holes					
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.					
DEPTH INTERVAL (MD)			AMOUNT AND KIND OF MATERIAL USED		
7224'			350 gals 15% MCA		
7214-7152'			97M gals 1% KCL wtr, 97M#sd.		
" "			350 gals 15% MCA		
6269-6054'			2500 gals 15% HCl; 275M gals		
33.* PRODUCTION			1% KCL wtr, 215M# sd.		
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)			WELL STATUS (Producing or shut-in)
10-15-79					
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.
10-17-79	24	Adjustable		66 BO	123 MCF
WATER—BBL.	GAS-OIL RATIO				
65 (frac wtr)	1864:1				
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.
100#	750#		66 BOPD	123 MCFPD	65 BWPD
OIL GRAVITY-API (CORR.) 46.1°					
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) To be sold.					TEST WITNESSED BY C. R. Thompson
35. LIST OF ATTACHMENTS 1 each of #26 above; Daily Well History. (2 more copies of logs in #26 above will be forwarded when received.)					
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		DATE 10-22-79.	

*(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 or drill stem tests.				Pictured Cliffs	2757'	
				Lewis Shale	2808'	
				Chacra	3591'	
				Mesaverde	4382'	
				Upper Mancos	5115'	
				Gallup	6045'	
				Greenhorn	6927'	
				Graneros	6990'	
				Dakota	7147'	
				Burro Canyon	7245'	
				Morrison	7352'	

10/2/79 7370 TD - MIRU Big 'A' Well Servc. NU BOP unloaded & tallied 235 jts 2-3/8" EUE tbgs. Present-y PU tbgs & GIH 4-3/4" bit & 5-1/2" csg scraper. Dropped f/report of 9/25/79.

10/3/79 7370 TD - Re-rng CBL. TIH w/4-3/4" big & 5-1/2" csg scrpr. Tagged cmt @ 3718'. Drid DV t1 @ 3803'. CO to FC @ 7330'. Circd hole w/1% KCl wtr. Press tstd csg to 4000#; held OK f/5 min. POH. Ran CBL w/GR, Ctr Crl log w/var dens log 7326-5500' & 4000-2600'. Bond lg showd poor bondg. Rng CBL #2 w/1200# press; shows gd bond f/7164'-TD; poor bond 7150-6400'; gd bond 7140-7150'; 5510-6250' looks lk 100% bond. 6250-6300' 70-80% bonding.

10/4/79 7370 TD - Frac Dakota perfs. Ran CBL #2 undr 1200# press & analyzed same. TIH to 7224'. Sptd 350 gals 15% MCA. POH. Perf Dakota @ foll intrvls: 7214', 12', 11', 09', 08', 06', 05', 03', 02'; 7199', 97', 96', 94', 93', 82', 81', 79', 68', 66', 57', 55', 54', 52'. CBL #2 meas corrd to Sch CNL-FDC log. RU Western Co. & mxg slick wtr.

10/5/79 7370 TD - Prep to GIH & drl out bridge plg. Frac Dak perfs 7152-7214' w/97M gals 1% KCl wtr, containing 2#/1000 gals FR, 30#/1000 gals fld loss add, 90M# 20/40 sd. Brk fm w/350 gals, 15% MCA @ 2000#. Frac as foll: 20M gals pad, 3100# @ 46 BPM; 18M gals, 1/2# sd/gal, 2350# @ 45 BPM; 15M gals 1# sd/gal, 3300# @ 45 BPM; 16M gals 1-1/2# sd/gal, 3200# @ 46 BPM; 21M gals 2# sd/gal, 3100# @ 46 BPM; 7M gals flush, 3400# @ 44 BPM. Total frac: 70M gals wtr & 90M# sd. ISIP 2500#, 5 mins, SIP 2150# 10 min, SIP 2100# 15 mins, SIP 2M#. Set Bkr Drillable Bridge Plg @ 7100'; tstd to 4M#. Perf Gallup as foll: 6267', 64', 62', 58', 44', 40', 32', 29', 26', 23', 20', 17', 14', 11', 8'; 6152', 49', 38', 36', 29', 26', 23', 20', 17', 14', 11', 8'; 6098', 89', 81', 70', 66', 52'. CBL #2 meas corrd to Sch CNL-FDC log. TIH w/tbgs & retr pkr to 5933'. Treated w/2500 gals 15% HCl acid & 66 ball slrs. Fm brk @ 3400#. Treated @ 10 BPM w/3400#. Completely balled off. Ran 12 jts tbgs to 6295' to knock off balls. POH. Filling wtr tnk to frac Gallup perfs. Frac Gallup 6054-6269' w/275,900 gals, 1% KCl wtr, containing 2#/1000 gals FR, 15#/1000 gals FL add, & 215M# 20/40 sd. Frac as foll: 40M gals pad, 2600# @ 66 BPM; 30M gals 1/2# sd/gal, 2700# @ 66 BPM; 200M gals 1# sd/gal, 2500# @ 67 BPM; 5900 gals flush, 1700# @ 28 BPM. Total frac: 235900 gals wtr & 215M# sd. Running out of wtr, flush all in. ISIP 1100#, 5 min; SIP 1100#, 15 min; SIP 1100#. Open well to pit on 20/64" chk. Press decrd f/1100# to 200#. Well is flwg full 2" strm of wtr. Est 500 bbls recovd, 8378 bbls yet to recovr.

10/6/79 7370 TD - Swbg well. 6 hrs flwg to pit on 3/4" chk & rec 30 BW. WIH & tagged sd @ 6932' & drid BP @ 7100' & cle to FC 7330'. POH w/tbgs & bit. TIH w/tbgs opn ended to 7114' w/seating np @ 7083'. NU on top of BOP. Swbg s/FL @ surf. Rec 97 BW. No oil or gas.

10/7/79 7370 TD - Flwg well. Swbd f/seating np FL 300'. Rec 86 BLW & tbgs began flwg. Flwd to frac tank on 3/4" chk. TP = 50#, CP = 0#. Rec 853 BLW w/tr oil on last 2 hrs. 1936 bbls recovd, 7083 yet to recovr.

10/8/79 7370 TD - Flwg to frac tank. 32/64" chk. CP = 1050#, TP = 75#. Rec 543 BF = 68 BO & 475 BW. Total fld 2479 bbls; yet to recovr 6540 bbls. Gd show gas.

10/9/79 7370 TD - Flwg to frac tk. Flwg on 32/64" chk. 1050# CP, 75# TP. 20% oil, 80% wtr. Killed well w/1% KCl wtr. Lowrd tbgs & tagged btm @ 7324'. Eset tbgs @ 7114' w/SN @ 7083'. Total tbgs 228 jts 2-3/8" OD, EUE, 4.7#, J-55. ND BOP, NU Xtree. Swbg. Found FL @ 3400'. Recovd 30 BW. Csg incrd f/50#-525#. Well strt'd flwg. Flwg on 32/64" chk. 975# CP, 75# TP. Recovd 355 BF. Last sample 50% oil, 50% wtr. Gd shw gas. Ttle fld recovd-2874 bbls, frac fld yet to recovr 6155 bbls.

10/10/79 7370 TD - Flwg well thru prod equip to tst. Flw w/ 32/64". CP 900#, TP 75#. Recovd 68 BF - 50% oil, 50% wtr. Tied well into prod equip. RR 6 pm 10/9/79.

10/11/79 7370 TD - Prep to flwg f/tst. SI to repair flw line.

10/12/79 7370 TD - Prep to MI swb unit today. Well logged off. CP 1250#.

10/13/79 7370 TD - Well opn to pit. MI swb unit & swbd well 4 times & KO. Prod 71 BO & died. Had to let swb unit move out.

10/14/79 7370 TD - SI, will attempt to KO.

10/15/79 7370 TD - Well logged off. Swbg unit going in today.

10/16/79 7370 TD - Prep to swb if nec. Made 2 runs w/swb. Well KO flwg, CP 1025#, TP 250#. Well made 52 BO in 14-1/2 hrs. 24 hr rate = 85 BOPD. Oil gvty 46.1° API @ 60°F. Adj chk. Well may have died.

10/17/79 7370 TD - Cont to flw f/tst. Flwg by heads thru prod equip, 66 BO, est 120 BW, gas TSTM, CP 875#, TP 0-150#.

10/18/79 7370 TD - COMPLETED OIL WELL, 10/17/79, Dakota & Gallup fms. Made 2 runs w/swb, well KO & flwd f/5 hrs & strt'd to load up. CP dropped 1100-725#. Tst for 10/17/79 66 BO, 65 BW (frac) & 123 MCFD f/Dakota perfs 7214-7152' & Gallup perfs 6269-6054'. GOR 1864:1, CP 750#, TP 100#, adj chk, oil gvty 46.1° API @ 60°F. LPP 7214'.

8/28/79	312	WOC, sd & sh. Spudded 8/27. Ran 8 jts 8-5/8" 24# K-55 R3 ST&C csg w/GS & baffle plate (330'), landed @ 302' KB. Cmtd w/300 sx Cl "B" 2% CaCl. PD 1 am 8/28/79. Circ'd some gd cmt. 1/2° @ 300'. 120 RPM, 15M#. Mud: 8.9#, vis 50, B#1, 12-1/4", Sm., made 312' in 5-3/4 hrs. (KB to GL 14').
8/29/79	1580	Trip f/bit, sd & sh. WOC. NU & press tstd blind & pipe rams & csg to 1000#, held OK. 3/4° @ 890', 1° @ 1580'. 65 RPM, 40M#. Mud: 8.6#, vis 36, WL 7.2, FC 1/32, Sd-tr, salt 450, Ph 8.5, Pv 13, Yld 7, Gels 1/3, solids 3%, Ca 80, oil 6%. B#2, 7-7/8", Hughes, OSC3A, made 1268' in 7-1/2 hrs.
8/30/79	2526	Drlg sd & sh. 1° @ 2080', 3-3/4° @ 2176', 4° @ 2364'. 60 RPM, 20-40M#. Mud: 8.9#, vis 39, WL 7.4, FC 1/32, Sd-tr, salt 400, Ph 9.5, Pv 11, Yld 6, Gels 1/6, solids 4%, Ca 20, oil 7%. (B#3).
8/31/79	2939	Drlg sd & sh. 3° @ 2647'. 70 RPM, 25M#. Mud: 8.9#, vis 37, WL 7.6, FC 2/32, Sd-tr, salt 500, Ph 8.5, Pv 10, Yld 4, Gels 0/2, solids 4%, Ca 20, oil 6%. B#3, 7-7/8", Hughes, OSC1G, made 1067' in 25 hrs. (B#4).
9/1/79	3575	Drlg sd & sh. 2-1/4° @ 3030'. 60 RPM, 25M#. Mud: 9#, vis 41, WL 7, FC 2/32, Ph 8.5, Pv 13, Yld 7, Gels 1/3, Ca 20, oil 6%. (B#4).
9/2/79	3795	Drlg sd & sh. 1-1/2° @ 3622'. 65 RPM, 40M#. Mud: 8.9#, vis 58, WL 7.2, FC 2/32, Sd-tr, salt 450, Ph 8.5, Pv 22, Yld 11, Gels 2/7, solids 4%, Ca 20, oil 6%. B#4, 7-7/8", HTC, OSC1G, made 975' in 32-1/2 hrs. (B#5).
9/3/79	4280	Drlg sd & sh. 1-1/2° @ 4185'. 60 RPM, 40M#. Mud: 9.0#, vis 39, WL 7.0, FC 2/32, Sd-tr, salt 450, Ph 8.5, Pv 14, Yld 6, solids 5%, Gels 1/3, Ca 20, oil 6%. (B#5).
9/4/79	4845	Drlg sd & sh. 1° @ 4687'. 60 RPM, 40M#. Mud: 9#, vis 35, WL 7.8, FC 2/32, Sd-tr, salt 650, Ph 8.5, Pv 8, Yld 4, Gels 1/3, solids 5%, Ca 40, oil 6%. (B#5).
9/5/79	5340	Drlg sd & sh. 1° @ 5224'. 60 RPM, 40M#. Mud: 9.0#, vis 42, WL 7.0, FC 2/32, Sd-tr, salt 600, Ph 8.5, Pv 12, Yld 8, Gels 3/10, solids 6%, Ca 40, oil 6%. (B#5).
9/6/79	5656	Drlg sd & sh. 1-1/4° @ 5414'. 60 RPM, 40M#. Mud: 9#, vis 38, WL 6.8, FC 2/32, Sd-tr, salt 650, Ph 8.5, Pv 10, Yld 6, Gels 2/5, solids 5.5%, Ca 60, oil 6.5%. B#5, 7-7/8", HTC, J-22, made 1792' in 81-1/4 hrs. (B#6).
9/7/79	6102	Drlg, Gallup fm. 1-1/4° @ 6042'. 60 RPM, 40M#. Mud: 9.2#, vis 40, WL 6.8, FC 2/32, Sd-tr, salt 600, Ph 8.5, Pv 12, Yld 6, Gels 2/6, solids 6%, Ca 60, oil 6%. (B#6).
9/8/79	6450	Drlg sd & sh. 60 RPM, 42M#. Mud: 9.3#, vis 42, WL 6.2, FC 2/32, Sd-tr, Salt 600, Ph 8.5, Pv 16, Yld 10, Gels 3/10, solids 7%, Ca 60, oil 6%. (B#6).
9/9/79	6823	Drlg sd & sh. 60 RPM, 42M#. Mud: 9.3#, vis 50, WL 5.8, FC 2/32, Sd 1/4", salt 600, Ph 8.5, Pv 14, Yld 6, Gels 3/9, solids 8%, Ca 40, oil 5.5%. (B#6).
9/10/79	7020	Drlg, Dakota fm. 60 RPM, 42M#. Mud: 9.1#, vis 53, WL 6.2, FC 2/32, Sd 1/2", salt 550, Ph 8.5, Pv 10, Yld 6, Gels 1/4, solids 6%, Ca 40, oil 6%. (B#6).
9/11/79	7170	Drlg, Dakota. 1-1/2° @ 7055'. 60 RPM, 42M#. Mud: 9.2#, vis 45, WL 6, FC 2/32, Sd 1/4", salt 600, Ph 8.5, Pv 10, Yld 8, Gels 0/2, solids 6%, Ca 40, oil 6%. B#6, 7-7/8", HTC, J-22, made 1636' in 96-3/4 hrs. (B#7).
9/12/79	7365	Drlg, Morrison. Morrison top @ 7344'. 60 RPM, 42M#. Mud: 9.3#, vis 80, WL 5.8, FC 2/32, Sd 1/2", salt 500, Ph 8.5, Pv 21, Yld 10, Gels 1/3, solids 7%, Ca 40, oil 6.5%. (B#7).
9/13/79	7370	TD - Logging s/Sch, Morrison fm. Ran DIL f/TD to btm surf pipe (302'). WIH w/CNL-FDC, worked f/few min, dens side quit. Got a new tool, hole stood up OK. Should fin logging by 9 am 9/13/79. 1° @ 7370'. (WLTD 7373') 60 RPM, 42M#. Mud: 9.4#, Vis 91, WL 4.4, FC 2/32, Sd 1/2", Salt 400, Ph 8.5, Pv 31, Yld 18, Gels 3/12, Solids 7.5%, Ca 40, Oil 5.5%. B#7, 7-7/8", Sm, F-5, made 320' in 31-1/2 hrs.
9/14/79	7370	TD - Circ'g btwn stages. Ran 187 jts 5-1/2" csg, GS, Diff fill up clr, DV tool (7380.11'), 32 jts 17# N-80 R3 LT&C (1327.58'), 146 jts 15.5# K-55 R3 ST&C (6047.08') (tools 5.45'), landed @ 7369' KB. Scrtchrs f/7300-6850' spaced 20' apart. Scrtchrs f/6520-6270' spaced 20' apart. Cntrlzrs on jts 1,3,5,7,9,11,13,15,17,19,21,23,25. DV tool top jt 86 @ 3808' KB. Cmt bskt on jt 84 & 85. Cntrlzrs on jts 85,87,89,91,93. Cmtd first stage w/10 BW, 1000 gals mud flsh, 300 sx 50/50 poz, 2% gel, 6-1/4" gilsonite/sx & 3/4 of 1% fric reducer/sx, foll w/150 sx Cl "B". 109 bbls slurry displ w/174 BW. Circ press 1000#. Bmpd plug w/1500#, flt held. PD 2:45 am 9/14/79. Worked csg while circ'g & displ'g cmt to within 5 bbls of bmp'g plug.
9/15/79	7309	TD - Prep to clean location. Cmtd 2nd stage thru DV @ 3808' 10 BW & 1000 gals mud flush w/275 sx 50/50 poz & 4% gel, 6-1/4" gilsonite/sx, foll w/100 sx neat Cl "B". PD 7:30 am 9/14/79. Had gd returns thruout. Hung csg w/ 96M# & removd BOP. RR 11 am 9/14/79.
9/16/79	7309	TD - Cleaning loc.
9/18/79	7309	TD - WO completion.
9/20/79	7309	"
9/21/79	7309	"
9/22,29,24	7309	"
9/25/79	7309	"

Drop f/report until compltn commences.