

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.

5. LEASE DESIGNATION AND SERIAL NO.

Joint Venture

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Jicarilla Apache JV

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Jicarilla Apache JV 5

9. WELL NO.

E-3

10. FIELD AND POOL, OR WILDCAT

Chacon - Dakota

11. SEC., T., R., M., OR BLOCK AND SURVEY
OR AREA

5-23N-3W

12. COUNTY OR
PARISH

13. STATE

Rio Arriba New Mexico

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 Company3. ADDRESS OF OPERATOR Suite 501
1860 Lincoln St., Denver, Colorado 80295

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface 950' FNL & 1840' FWL Sec 5 (NE NW) (Unit C)

At top prod. interval reported below

At total depth

API # 30-039-22012

14. PERMIT NO. DATE ISSUED

Mr. Barrick 5-11-79

149.61 acre unit.

15. DATE SPUDDED 7-20-79 16. DATE T.D. REACHED 8-6-79 17. DATE COMPL. (Ready to prod.) 8-24-79 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 7242' GL; 7253' KB 19. ELEV. CASINGHEAD - - -

20. TOTAL DEPTH, MD & TVD 7666' TD 21. PLUG, BACK T.D., MD & TVD 7560' PBTD 22. IF MULTIPLE COMPL., HOW MANY* 1 23. INTERVALS DRILLED BY - - - 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 0 - 7666' 25. WAS DIRECTIONAL SURVEY MADE - - -

Dakota Perfs "A" 7317-31' & 7291-7307' ; "B" 7401-15'

26. TYPE ELECTRIC AND OTHER LOGS RUN

DIL, FDC & CNL-GR; CBL-VDL-CCL

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#	325'	12-1/4"	300 sks	NONE
5-1/2"	15.5# & 17#	7665'	7-7/8"	750 sks (2 stage)	NONE

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
NONE					2-3/8"	7286'	NONE

31. PERFORATION RECORD (Interval, size and number)

"A" 7317-7331' 14' 1SPF, 14 holes
"A" 7291-7307' 16' 1SPF, 16 holes
"B" 7401-7415' 14' 4SPF, 56 holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7430'	250 gals 15% MCA
7401-7415'	32M gals KCL wtr & 38.5M# SD
7291-7331'	500 gals 15% MCA
7291-7331'	62M gals KCL wtr & 80M# SD

33. PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
8-18-79		Flow				Producing	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
8-24-79	24 hours	Adj	→	28	676	15	24143:1
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
290#	580#	→	28	676	15	51.0 @ 60 F	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

To be sold

TEST WITNESSED BY

C R Thompson, Jr.

35. LIST OF ATTACHMENTS

2 each of #26 above and daily well history Will forward 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 ManagerDATE 9-10-79

*(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 Central": 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			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
No cores and No drill stem tests			
38. GEOLOGIC MARKERS			
NAME	MEAS. DEPTH	TOP	TRUE VERT. DEPTH
Picture Cliff	3111'		
Chacra	3922'		
Mesaverde	4658'		
Upper Mancos	5420'		
Gallup	6265'		
Greenhorn	7196'		
Graneros	7264'		
Dakota A	7274'		
Dakota B	7392'		
Dakota Silt	7449'		
Dakota C	7483'		
Burro Canyon	7554'		
Morrison	7645'		

7/24/79	330	NOC & RU, sd & sh. Spudded 12-1/4" hole @ 8:30 AM 7/20/79. Ran 8 jts surface csg 24#, K-55, ST6C, (353.62'). Landed at 324.94 RKB. Cntd w/300 sks Class "D", 2 1/2 CuCl ₂ , 1/2/sk Flo Seal; had 63 bbls slurry. Displaced w/20 bbls H ₂ O, Circ 12 bbls cmt to surface. Used GS&3 centralizers on the csg. Job complete @ 10 PM, 7/20/79. 4" @ 150, 3/4 @ 320', 100 RPM, 2-20, 000M, Mud: 8.8#, vis 50, Bf# 12 1/2, Sm., Retip DTJ, 330', 9-4 hrs. \$ 17,772
22	760 (430)	Drlg. sd & sh. 4" @ 668', 100 RPM, 20M#, Mud: 8.4#, vis 38, B#2). \$ 25,776
23	1690 (930)	Drlg. sd & sh. 4" @ 1138, 3/4" @ 1607'. 60 RPM, 20M#, Mud: 8.4#, vis 33, WL 7.8, FC 2/32, SD TR, PH 8.5, Oil 7, DV 6 YD 5, Gel 3/5, Solids 4, Ca 50 Cl 400. Bf#2, 7-7/8, Sm., DTJ, 808', 16-4 hrs. (B#3). \$ 41,100
24	2158	Drlg. sd & sh. 4" @ 1909', 60 RPM, 25 M#, Mud: 8.5#, vis 45, WL 6.6, FC 2/32, SD TR, Salt 450, PH 8.5, Oil 7 1/2, PV 7, YD 4, Gel 4/5, Solid 4, Ca 60. B#3, 7-7/8, Sm., DTJ, 771', 16-1/2hrs. (B#4). \$ 49,565.
25	2735	Drlg. sh & sd. 4" @ 2712', 3 RPM, 30M#, Mud: 8.8#, vis 42, WL 6.0, FC 2/32, SD - trace, Salt 400, PH 9.0, Oil 8.5#, PV 14, YP 8, Gels 4/18, Solids 4.5# Ca 80. B#4, 7-7/8, Reed, FP 51, 803', 28 hrs. \$ 59,445
26	3205	Drlg. sd & sh. 4" @ 3227', 50 RPM, 37M#, Mud 9.0#, vis 40, WL 6.2, FC 2/32, SD trace, Salt 450, PH 9.5, Oil 7.5, PV 30, YP 22, Gels 4/25, Solids 6.5#, Ca 20. (B#5). \$ 68,839
27	3755	Drlg. sd & sh. 1" @ 3657', 50 RPM, 45M#, Mud 9.1#, vis 36, WL 6.5, FC 2/32, SD TR, PH 9.5, Oil 7, PV 11, YP 9, Gels 3/7, Solids 6.5#. B#5, 7-7/8, Sm., F-2, 945', 35-3/4 hrs. (B#6). \$ 77,279
28	4255	Drlg sd & sh. 1-1/4" @ 4159'. 50 RPM, 45M#. Mud: 9.1#, vis 34, WL 7.0, FC 2/32, SD-tr, PH 9.5, PV 12, Yld 8, Gels 4/7, solids 6.5#, Ca 40, oil 5# (B#6). \$ 86,247
29	4496	TI w/magnet, sd & sh. POH w/B#6. - left 1 cone in hole. 50 RPM, 45M#. Mud: 9.0#, vis 35, WL 7.5, FC 2/32, sd-tr, salt 550, Ph 9.0, Pv 9, Yld 5, Gels 3/5, solids 5.5#, Ca 60, oil 6#. B#6, 7-7/8", Sec., S84F, made B43' in 40-4 hrs. \$ 92,060
30	4640	Drlg sd & sh. WIH w/Globe finger bskt. 1-1/2 hrs on btm, cut 2' core & rec'd cone in 1 piece. 1-1/2 hrs on btm, cut 2' core & rec'd cone in 1 piece. 1-1/2 @ 4496'. 50 RPM, 40M#. Mud: 9.1#, vis 36, WL 8.0, FC 2/32, SD-tr, salt 400 Ph 8.5, Pv 9, Yld 9, Gels 4/8, solids 6#, Ca 20, oil 6#. (B#7). \$ 90,411
31	5230	Drlg sd & sh. Hole is caving some. 50 RPM, 40M#. Mud: 9.2#, vis 48, WL 8.2, FC 2/32, SD-tr, salt 400, Ph 8, Pv 7, Yld 10, Gels 5/11, solids 7#, Ca tr, oil 5#. (B#7). \$ 110,656
8-01-79	5532	Drlg sd & sh, Mancos. 1" @ 5256'. 50 RPM, 40M#. Mud: 9.2#, vis 40, WL 7.2, FC 1/32, SD 1/24, salt 500, Ph 8.5, Pv 11, Yld 8, Gels 5/9, solids 6#, Ca 20, oil 6#. B#7, 7-7/8", Hughes, J-22, made 760' in 33 hrs. (B#8). \$ 110,656
8-02-79	6035	Drlg sd & sh. 1-1/4" @ 5833'. 50 RPM, 40M#. Mud: 9.1#, vis 39, WL 8, FC 1/32 SD-tr, salt 550, Ph 9, Pv 15, Yld 10, Gels 4/7, solids 6#, Ca 40, oil 4#. (B#8). \$ 119,965
3	6520	Drlg Gallup fm. Lost some mud (75-100 bbls). 50 RPM, 40M#. Mud: 9.0#, vis 43 WL 7.3, FC 2/32, SD-tr, salt 500, Ph 8.5, Pv 42, Yld 29, Gels 6/16, solids 6# Ca 40, oil 5#. (B#8). \$ 129,073
4	6880	Drlg Gallup fm. 1-3/4" @ 6350'. 50 RPM, 40M#. Mud: 9.1#, vis 43, WL 6.2, FC 1-1/2/32, SD-tr, salt 600, Ph 9.5, Pv 15, Yld 15, Gels 4/7, solids 6.5#, \$ 136,343.
8-4-79	Cont.	Ca 60, LCM 5#, oil 5# (B#8).
5	7336	Drlg. Dakota (?). 50 RPM, 40M#. Mud: 9.1#, vis 40, WL 6.2, FC 2/32, SD-tr, salt 550, Ph 9.5, Pv 12, Yld 14, Gels 4/8, solids 6.5#, Ca 80, LCM 4#, oil 5#. B#8, 7-7/8", Sm., F-2, made 2080' in 103 hrs. \$ 144,400.
6	7477	Drlg. Dakota. 1" @ 7136'. 50 RPM, 50M#. Mud: 9.1#, vis 49, WL 6, FC 1/32, SD-tr, Salt 600, Ph 9.5, Pv 20, Yld 20, Gels 6/9, solids 6#, Ca 40, oil 5#. (B#9). \$ 147,895
7	7666	Logging s/Schl, Burro Canyon & 20' of Morrison. Rng DIL f/TD to surf pipe. WLTD 7656' (10' fillup). 4" 7666'. 50 RPM, 50M#. Mud: 8.9#, vis 106, WL 4.5, FC 2/32, SD-tr, salt 500, Ph 8.5, Pv 26, Yld 48, Gels 10/15, solids 6.5#, Ca 80, Oil 9#. B#9, 7-7/8", Sm., F-5, made 330' in 25-4 hrs. \$ 154,963
8	7666	TD - LD DP, prep to run csg. Fin rng DIL f/TD to surf. Ran FDC & CNL w/GR w/caliper. Cut drlg line. WIH, no bridges, 10' fill. Circ'd 2 hrs. \$ 169,58
9	7666	TD - Prep to MORT (move to #5-4). Ran 187 jts 5-4" csg, GS & Auto fill cir & DV tool (7675.08'), set @ 7665' RKB; 34 jts 17# K-55 Rg 3 ST6C (1408.50'); 153 jts 15.5# K-55 Rg 3 ST6C (6260.28'), tools 6.30'. DV tool @ 4035' KB on top jt #88. 18Ctrizers on jts #1 thru #9 & 11, 13, 15, 17, 19, 27, 29, 31, 33, 35, 25 Scratchers spaced 20' apart f/TD-7165'. 2 cmt bskts on jts #5 & #6. Cntd 1st stage w/500 gals mud flush, 10 BW, 250 ex 50/50 Poz, 2# gel, 6-4# Gilsomite/sx, 3/4# CFR-2, tailed w/150 sx Cl "B". 2nd stage 500 gals mud flush, 10 BW, 250 ex 50/50 Poz, 2# gel, 6-4# Gilsomite/sx, tailed w/100 sx Cl "B". Closed DV tool w/2500#. RR 4:00 a.m. 8/9/79. \$ 236,047.
10	7666	TD - Prep to clean location. Fin MORT.
11-13	7666	TD - WO completion & cleaning loc. (prep to MI CU & frac tks 8/13/79).
14	7666	TD - Prep to drill to PETD. NO BOP. MI & RU Eiq "A" Well Serv. Set pipe rack, set pmp in pit. Move 11 frac tks to loc. Strtd filling w/wtr. Move & unload 2-3/8" tbg. SDON. \$ 243,311
15	7559	PE - Prep to perf & frac. POH to perf. 3 hrs NO BOP. PU & run 4-3/4" bit, bit sub, Bkr csg scraper on 2-3/8" tbg. Tag cmt @ 4033' KB. Drid cmt 4033-4125'. Drid stage tool 4125-27'. RIH w/tbg. Drl cmt 7542-59' PETD. Circ'd hole clean. Displ'd hole w/12 KCL wtr. POH w/tbg, scraper & bit. RU Go WL Serv. Ran CBL-VOL-CCL log, LTD 7563'. Gd cmt bend over all perf'g intervals. Loggers found stage tool @ 4120'. Press tst csg to 4000#, held steady f/15 min. Run tbg opn ended to 7430'. Spt 250 gals 15% HCA acid. POH w/tbg. \$ 249,394
16	7559	PE - Flwg well to pit to cleanup. POH w/ 2-3/8" tbg. Perf'd Dakota "B" w/ 3-3/8" cased hole gun f/7401-7415', 4 SPF, 14", 56 holes. GO WL CBL meas: Press csg to 2300#. Fr brk. PI 12 BPM @ 2000#. Frac truck stuck. WO Dozer to haul in Frac Dakota "B" w/47.5# gals 12 KCL wtr w/2# fric reducer/1000 gals, 15# fld loss add/1000 gals & 38,500# 2 1/4" sd. Trtd as foll: 8,000 gals pad @ 40 BPM, 2350#; 7,000 gals wtr, 1/2# sd/gal, 44 BPM, 1900#; 8,000 gals wtr, 1/2 sd/gal, 46 BPM, 1800#; 14,000 gals wtr, 1-1/2# sd/gal, 46 BPM, 1700#; 3,000 gals wtr, 2# sd/gal, 41 BPM, 1650#; 7,500 gals flush, 42 BPM, 1550#. Total frac 32,000 gals wtr & 38,500# sd. 15# 1200#, 15 min SIP 900#. Max press 2400#, min press 1500#, avg press 1700#. AIR 40 BPM. Ran HOWCO Speedy line drillable EP, set @ 7364'. Press tst EP to 4000#, held ON f/1 min. TIH w/ 2-3/8" tbg. Sptd 500 gals 15% HCA acid over Dakota "A" interval. POH. Perf'd Dakota "A" 7317-31', 1 SPF, 14", 11 holes. GO WL CBL meas. Perf'd 7291-7292'. 1 SPF, 16",

8/16/79	7559	PB - 16 holes, GO WL CBL meas. Pl to fm @ 16 BPM 900#. Frac'd Dakota "A" w/ 87,000 gals 1 1/2 KCl wtr, 2# fric reducer/1000 gals, 15# fld loss add/1000 gals. Trid as foll: 18,000 gals pad, 43 BPM, 1950#; 10,000 gals wtr, 1/2# sd/gal, 45 BPM, 2100#; 12,000 gals wtr, 1# sd/gal, 45 BPM, 2000#; 34,000 gals wtr, 1-1/2# sd/gal, 47 BPM, 1950#; 6,000 gals wtr, 2# sd/gal, 46 BPM, 2000#; 7400 gals flush, 47 BPM, 2000#. Total 62,000 gals wtr & 80,000# 20/40 sd. ISIP 1500#, 15 min SIP 1050#. Max press 2200#, min press 1550#, avg press 2000#. AIR 45 BPM. Opm choke on 24/64", CP 700#. In 1 hr, CP 150#. (This a.m. CP 20#).	\$293,735
8/17/79	7560	PB - Prep to pull bit & tbg. Circ'g @ 7560'PB. Flw well to pit to clean up. On 24/64" choke, CP 140-350#. On 3/4" choke, CP 350-125#. FU bit, sub & flt. Ran on 2-3/8" tbg, tagged sd @ 7331'. Circ out sd & CO to 7364' (BP). Drlg BP & circ'g hole clean. Wsh'd & circ'd on to 7523', drl on BP debris & CO to 7560'PB. Circ'd hole. Had gd show oil & gas to pit.	\$297,325
8/18/79	7560	PB - Flwg to frac tk. 1 hr circ @ 7560'PB. 4 hrs POH, LD 9 jts & bit, sub & flt. TIM w/234 jts 2-3/8" EUE 4.7# J-55 Brd R2 new tbg, btm 7286'. API SN @ 7254'. NU Xmas tree & pmpt out plug. Swbd to pit. FL initial @ surf, CP incr'd 0-150# w/FL @ 2000'. Well strt'd unloading. 11-1/2 hrs flwg to tk, CP steady incr f/150-575#. Rec'd 160 BFW. Last hr 95% wtr, 5% oil - gd gas show. Will cont flwg f/clean up.	\$300,775
8/19/79	7560	PB - Flwg into prod unit. On 5 hr tst into tst tk thru 3/4" chk, FTP 175#, CP 650#, 3 BPM, 95% wtr, 5% oil, gd gas show. Turned thru prod unit @ 1 pm 8/18 w/gas rate @ 1023 MCFD, FTP 350#, FCP 850#.	\$304,125
8/20/79	7560	PB - Prep to cont flwg f/tst. 1st 24 hrs flw tst thru prod equip. Adj chk, TP 375#, CP 800#, 25 BO, est 125 BW, 700 MCFD.	\$304,125
8/21/79	7560	PB - Cont to flw thru prod equip. On 24 hr tst, flwd 23 BO to prod equip.	\$304,125
8/22/79	7560	PB - Flwg well thru prod equip f/clean up. On 24 hr tst 28 BO, est 60 BW & 1064 MCF. CP 705#, TP 350#. Will cont to tst.	\$304,125
8/23/79	7560	PB - Cont to flw well. In 24 hrs flwd 28 BO & 893 MCF.	\$304,125
8/24/79	7560	PB - Cont to flw well. In 24 hrs flwd 26 BO & 1462 MCF, TP 300#, CP 700#, no meas on wtr.	\$304,125
8/25/79	7560	PB - COMPLETED OIL WELL, 8/24/79, Dakota fm. On 24 hr tst flwd 28 BO, 15 BW 676 MCF f/USHOLE perf's: "A" 7317-31' & 7291-7307'; "B" 7401-7415'. Adj choi: TP 290#, CP 580#, sep 290#. GOR 24,143:1. Oil gvty 51.0° API @ 60° F. LPP 7415'.	\$304,125