

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

Form approved,  
Budget Bureau No. 42-R355.6.

## 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 1190' FSL & 215' FWL Unit M  
At top prod. interval reported below  
At total depth Approx the same

RECEIVED  
JUL 22 1983  
OIL CON. DIV.  
DIST. 3

RECEIVED  
JUL 15 1983

U. S. GEOLOGICAL SURVEY  
FARMINGTON, N. M.

14. PERMIT NO. J. Shelton DATE ISSUED 5-16-83  
15. DATE SPUDDED 6-3-83 16. DATE T.D. REACHED 6-6-83 17. DATE COMPL. (Ready to prod.) 6-27-83 18. ELEVATIONS (DF, REB, RT, GR, ETC.)\* 5340' GL; 5353.5' DF; 5355' KB 19. ELEV. CASINGHEAD 5340' GL  
20. TOTAL DEPTH, MD & TVD 1350' 21. PLUG, BACK T.D., MD & TVD 1326' 22. IF MULTIPLE COMPL., HOW MANY\* 1 23. INTERVALS DRILLED BY ROTARY TOOLS 0 - 1350' CABLE TOOLS ---  
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* Gallup 1128' - 1140'; 1149' - 1155'; 1238' - 1260'  
25. WAS DIRECTIONAL SURVEY MADE NO  
26. TYPE ELECTRIC AND OTHER LOGS RUN DIGL-GR; CDL-DSN-GR 27. WAS WELL CORED NO

CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	61#	24' GL	17 1/2"	SEE ATTACHED -PAGE 1	NONE
8-5/8"	24#	156' GL	12-1/4"	SEE ATTACHED -PAGE 1	NONE
5-1/2"	14#	1350' GL	7-7/8"	SEE ATTACHED -PAGE 1	NONE

LINER RECORD					TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
NONE					2-7/8"	1289'	NONE

31. PERFORATION RECORD (Interval, size and number)				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
Gallup	1128'-1140'	2	SPF	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
Gallup	1149'-1155'	2	SPF		
Gallup	1238'-1260'	2	SPF	SEE ATTACHED - PAGE 1	

33.* PRODUCTION							
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)					WELL STATUS (Producing or shut-in)
6-27-83		Pumping - 2" plunger, 10 SPM, 86" stroke					Producing
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
7-4-83	24 hrs	---	→	10	NA	146	NA
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
NA	NA	→	10	NA	146	NA	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) NA  
TEST WITNESSED BY P.E. Lantiser  
ACCEPTED FOR RECORD

35. LIST OF ATTACHMENTS  
2 of #26 above and 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

JUL 20 1983  
DATE

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

FARMINGTON RESOURCE AREA  
FARMINGTON, NEW MEXICO

NMOCC

BY

# 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 report 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: "Secks 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 DST'S					Upper Gallup	1113'
					Lower Gallup	1223'

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OCT. 22 1963  
OIL CON. DIV.  
DIST. 3

28. CASING CEMENTING RECORD:

13-3/8" casing cemented with 55 sx Class "B" + 3%  $\text{CaCl}_2$   
(yield 1.17 cu.ft./sx. - 64.35 cu.ft.). Approximately  
1 bbl. to surface.

8-5/8" casing cemented with 5 bbls. water, 125 sx Class "B"  
w/ 2%  $\text{CaCl}_2$  & 1/4#/sx flocele and displaced with 8 bbls.  
water (yield 1.18 cu.ft./sx. - 147.5 cu.ft.). Circled 9 bbls  
to surface.

5-1/2" casing cemented with 20 bbls mud sweep (4 stage) and  
followed with 85 sx Class "B" + 12-12#/sx gilsonite & 6% gel  
& 0.6% D-31 (yield 1.96 cu.ft./sx. - 166.6 cu.ft.); followed  
by tail of 125 sx Class "B" & 2%  $\text{CaCl}_2$  & 1/4#/sx flocele  
(1.17 cu.ft./sx. - 146.25 cu.ft.). Recovered all 20 bbls mud  
flush and 9 bbls lead cement slurry @ surface.

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

1238' - 1260'	Spotted 500 gals 15% HCL
1238' - 1260'	39 bbls pre-pad, 48 bbls pad, 100 bbls 2% KCL water and 12,200# 10/20 mesh sand
1238' - 1260'	48 bbls pad, 115 bbls 2% KCL water, 29 bbls flush and 21,200# 10/20 mesh sand
1128' - 1140'	Spotted 500 gals 15% HCL
1128' - 1140'	47 bbls pre-pad, 72 bbls pad, 144 bbls 2% KCL water and 18,250# 10/20 mesh sand

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6/3/83 Drld conductor hole w/auger, ran & cmtd 25-1/2' of 13-3/8", 61#/ft, K-55, cut-off conductor csg w/the btm @ 24' GL. Strtd MI RU Aztec Rig #56.

6/4-6/83 1350 Day-3 (1350') - Sht trip before logging. (8-5/8 @ 156)  
Fin RU Aztec #56. NU diverter. Drld rat & mouse hole. SPUD 12-1/4" hole @ 1815 hrs 6/3/83. Drld & surveyed to 160'. 1 BPM wtr flw f/35-60'. Flw died. Had tr oil. POH. Ran 4 jts 8-5/8", 24#, K-55, ST&C. Landed @ 156'. Cmtd w/5 BW, 125 sx Cl "B" w/2% CaCl<sub>2</sub>, 1/4#/sx Flocele. Circ 9 bbls slurry to surf. Flt held. CIP 0630 6/5/83. WOC. NU wellhd. Tst BOP to 1100 psi (held OK). Drld out cmt & shoe. Drld & surveyed to PD. Circ f/logs. Pull 10 std sht trip. Surveys: 1° @ 65', 1/2° @ 95', 3/4° @ 155 & 446', 0° @ 737', 1/4° @ 1046'.

6/7/83 1350 Day- 4 PBD: 1305' (FC) - WOC. (8-5/8 @ 156)  
Fin sht trip & hole in gd cond. Wellex ran DIL/GR/Calip & FDC/CNL. RIH w/bit, circ & cond hole & POH. Ran 23 jts 5-1/2", 14#, K-55, STC (1394' LF) w/shoe @ 1350' GL & FC @ 1305' GL. BJ cmtd csg w/85 sx Cl "B" d 12-1/2#/sx gilsonite + 6% gel + 0.6% D-31 mixed @ 12.9 ppg foll'd by 125 sx Cl "B" + 2% CaCl<sub>2</sub> + 1/4#/sx Flocele mixed @ 15.6 ppg. Full returns thruout cntg oprn & circ approx 9 bbls cmt slurry to surf.

6/8/83 1350 Day-5 PBD: 1305' (FC) - WO Completion. (5-1/2" @ 1350')  
Set slips, cut off csg @ 12" above 8-5/8" flange. NU ERC tbghd & press tstd to 1000 psi. RR 0945 hrs 6/7/83. (Drop f/report until completion commences.)

6/21/83 1350 Day-1 PBD: 1305' - Prep to perf & frac Gallup.  
MI RU CU 6/20/83. NU BOPs. PU 4-3/4" bit & csg scraper & RIH on 2-7/8" tbg. Tag btm @ 1311' GL. Displ'd csg w/30 BW w/2% KCl. POH. RU Wellex & run CBL 1306' to surf (poor quality). WOO. (Dropped f/report of 6/8/83.)

6/22/83 1350 Day-2 PBD: 1305' - Prep to CO frac fld.  
Tstd csg to 2000 psi & Wellex perf'd Lwr Gallup 1238-1260' @ 2 SPF w/4" csg gun. RIH w/2-7/8" tbg to 1275', sptd 500 gals 15% HCl & POH. Frac stimulated Lwr Gallup @ 20 BPM avg w/850 psi & 2300 psi max. Began screen out after 20 bbls of 4#/gal sd fld were pmpd.

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6/23/83	1350	<p>Day-3 PBD: 1305' - Prep to RIH &amp; CO after frac. RIH w/tbg. Tagged sd @ 1062'. CO to PBTD &amp; POH. RU Newsco to frac lwr Gallup (perfs 1238-1260') w/low residue cross-linked 30#/1000 gal gel &amp; 10/20 sd. Pmpd 30 bbl 2% KCl prepad foll'd by 192 bbl frac fld &amp; 21,200# sd @ avg 20 BPM w/1100 psi to 800 psi. Began screen out after pmpg 20 bbls of 5 ppg slurry - SD. Pmpg w/ISIP 350 psi. RD Newsco. SWIFN.</p>
6/24/83	1350	<p>Day-4 PBD: 1200' w/RBP - Prep to frac upper Gallup. RIH w/ 2-7/8" tbg &amp; tag sd @ 1070' GL. CO to PBTD @ 1311' GL. Set Bkr "C" RBP @ 1200' &amp; tstd to 2000 psi - OK. RU Welex &amp; perf'd 1128-1140' w/ SPF &amp; 4" guns (ref Welex Dualguard log on 6/6/83). RIH w/tbg to 1311' w/o tagging RBP. RIH w/retrieving hd &amp; Bkr FB pkr. Latched &amp; pld on RBP. POH to 1200' &amp; set pkr. Tstd to 2000 psi - OK. SWIFN.</p>
6/25-27/83	1350	<p>Day-6 PBD: 1326' - WO flwline, pmpg unit &amp; electricity f/pmp tst. With RBP @ 1200' &amp; pkr @ 1155', spt 1 bbl 15% HCl across Gallup perfs 1128-1140'. POH w/pkr &amp; set @ 1120'. Pmpd 2% KCl wtr f/brkdn @ 2800 psi, then pmpd KCl wtr @ 3 BPM w/900 psi. PI 500 gals 15% HCl, displ'd w/7 BW. Press csg &amp; tbg 2000 psi - OK - bld off. POH w/tbg. RU to frac dn csg. Frac upper Gallup perfs 1128-1140' w/lo-residue, X-link 30#/1000 gal gel &amp; 10/20 sd as foll: 47 bbls 2% KCl pre-pad, 72 bbls pad, 21 bbls w/1#/gal, 24 bbls w/2#/gal, 27 bbls w/3#/gal, 54 bbls w/4#/gal, 18 bbls w/5#/gal - to screenout. MP 2300 psi, avg press 830 psi, avg rate 20 BPM. RD Newsco. SI rams &amp; SWIFN. RIH w/RBP retr tool on tbg. Tag sd @ 375', CO to RBP @ 1200'. Latch &amp; POH w/RBP. RU Welex &amp; run GR tracer survey 1310-1021'. RIH &amp; perf 1149-1155' w/2 SPF w/4" csg gun. RD Welex. RIH w/2-7/8" tbg, rods &amp; pmp. SD &amp; WO pmpg equip.</p>
6/28/83	1350	<p>Day-6 PBD: 1326' - Instl'g surf prod equip. RR to HSG #299.</p>
6/29/83	1350	<p>Day-6 PBD: 1326' - WO production. (Drop f/report until production is established.)</p>
/7/83	1350	<p>FINAL REPORT - COMPLETED OIL WELL, 7/6/83. 3 days 24 hr tstd @ 10 BOPD avg &amp; 153 BWPD w/2" plunger, 10 SPM &amp; 86" stroke.</p>