

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 2130' FSL & 2000' FWL (NE SW) At top prod. interval reported below Approx the same At total depth API # 30-039-22036							
14. PERMIT NO. Mr. Barrick				DATE ISSUED 5-18-79			
15. DATE SPUDDED 7270'TD		16. DATE T.D. REACHED 7180'PB		17. DATE COMPL. (Ready to prod.) 5-12-80		18. ELEVATIONS (DF, REB, RT, GR, ETC.) * 6685'GL, 6698'DF, 6699'KB	
20. TOTAL DEPTH, MD & TVD 7270'TD		21. PLUG, BACK T.D., MD & TVD 7180'PB		22. IF MULTIPLE COMPL., HOW MANY * 1		23. INTERVALS DRILLED BY 0-7270'	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD) * Dakota 7051'-7112'; Gallup 6147'-6100' & 5952'-6042'						25. WAS DIRECTIONAL SURVEY MADE NO	
26. TYPE ELECTRIC AND OTHER LOGS RUN CDL/CDN/GR; DIFL; 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"	36#	324'	12-1/4"	300 SXS		NONE	
5-1/2"	17# & 15.5#	7265'	7-7/8"	700 SXS		NONE	
29. LINER RECORD							
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	30. TUBING RECORD		
NONE					SIZE 2-3/8"	DEPTH SET (MD) 7014'	PACKER SET (MD) NONE
31. PERFORATION RECORD (Interval, size and number)				32. ACID, SHOT, FRACTURE CEMENT SQUEEZES, ETC.			
Dakota 7051'-7112' 27 holes				DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED			
Gallup 6147'-6100' 23 holes				SEE ATTACHED			
Gallup 5952'-6042' 27 holes							
33. PRODUCTION							
DATE FIRST PRODUCTION 4-26-80		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Pumping				WELL STATUS (Producing or shut-in) Producing	
DATE OF TEST 5-12-80	HOURS TESTED 24hrs	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL. 57	GAS—MCF. 173	WATER—BBL. 50	GAS-OIL RATIO 3035 : 1
FLOW. TUBING PRESS. 130#	CASING PRESSURE 130#	CALCULATED 24-HOUR RATE	OIL—BBL. 57	GAS—MCF. 173	WATER—BBL. 50	OIL GRAVITY-API (CORR.) 44.6° API @ 60° F	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) To be sold						TEST WITNESSED BY C.R. Thompson	
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		DATE 5-22-80	

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

NMOCC

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS		
				NAME	MEAS. DEPTH	TRUE VERT. DEPTH
NO CORES AND NO DST'S				Pictured Cliffs	2672'	
				Lewis Shale	2713'	
				Chacra	3507'	
				Mesaverde	4287'	
				Upper Mancos	5029'	
				Gallup	5943'	
				Greenhorn	6833'	
				Dakota	6899'	
				Dakota	7051'	
				Burro Canyon	7151'	
				Morrison	7237'	

31. PERFORATION RECORD

7190'-7191'	4 holes
7020'-7021'	4 holes
6220'-6221'	4 holes
6224'-6225'	4 holes
6085'-6086'	4 holes
4930'-4931'	4 holes

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

7190'-7191'	Spotted 250 gals 15% HCL, 125 sxs C1 "B" w/.6% FLAC
7020'-7021'	Spotted 250 gals 15% HCL, 125 sxs C1 "B"
7110'	Spotted 350 gals 7-1/2% HCL
7051'-7112'	87,000 gals 1% KCL wtr, 80,000# 20/40 mesh sand
6220'-6221'	Spotted 250 gals 15% HCL
6224'-6225'	Spotted 150 gals 15% HCL
6224'-6225'	Spotted 150 gals 15% HCL, 125 sxs C1 "B" w/.6% FLAC
6095'	150 gals 15% HCL
6085'-6086'	Spotted 150 gals 15% HCL, 125 sxs C1 "B" w/.6% FLAC
4930'-4931'	Spotted 250 gals 15% HCL, 125 sxs C1 "B" w/.6% FLAC
6147'-6100'	Spotted 200 gals 7-1/2% HCL-MSR
" "	2000 gals 7-1/2% HCL-MSR & 46 ball sealers
" "	105,000 gals Dowell versagel, 25,000# 100 mesh sand & 205,000# 20/40 mesh sand
5952'-6043'	Spotted 200 gals 7-1/2% HCL-MSR
" "	2000 gals 7-1/2% HCL-MSR & 54 ball sealers
" "	119,800 gals Dowell Cross-link gel, 25,000# 100 mesh sand & 255,000# 20/40 mesh sand

1-27-80	324	WOC. Fin MIRU. Spudded @ 3:30 p.m. 1-26-80. Ran 9 jts 8-5/8 24# K-55, ST&C w/GS & baffle plate & 3 centralizers (324.20'). Cmt'd w/300 sx CL "B" & 2% CaCl ₂ & 1/4# sk Flocele. PD @ 12:30 a.m. 1-27-80. Shoe @ 320' RKB. Cifc 10 bbls cmt. 1/4 @ 320'. 150 RPM, 12M#. Mud: 8.8#, vis 50. Spud mud. Bit #1, 12-1/4" Smith, Retip DT, made 324' in 5-1/2 hours.
1-28-80	1471	Trip f/bit #3, WOC NU Press tstd blind & pipe rams to 1000#, held o.k. 1-3/4" @ 1471'. 65RPM, 30M#. Mud: 8.8, vis 40, WL 7.2, FC 2/32, Sd tr, Salt 450, Ph 8.5, Oil 6%, PV 6, Yld 2, Gels 0/1, Solids 5%, Ca 80. Bit #2, 7/8" Smith, DT, made 1147' in 14-1/2 hrs, (B#3).
1-30-80	3370	Drlg. 1-1/4" @ 3024'. 65 RPM, 40M#. Mud: 9.2#, vis 38, WL 4.2, FC 1/32, Sd tr, Salt 500, Ph 8.5, Oil 6%, PV 14, Yld 4, Gels 0/1, Solids 6%, Ca 80. (B#4.)
1-31-80	3948	Drlg. 1-1/2" @ 3495'. 70 RPM, 40M#. Mud: 9.3#, vis 38, WL 4.2, FC 2/32, Sd tr, Salt 400, Ph 8.5, Oil 6%, Pv 14, Yld 4, Gels 0/1, Solids 7%, Ca 80. (B#4.)
2-1-80	4500	Drlg. 3/4" @ 4052'. 70 RPM, 40M#. Mud: 9.1#, vis 43, WL 4.2, FC 2/32, Sd tr, Salt 600, Ph 8.5, Oil 6%, Pv 14, Yld 3, Gels 0/1, Solids 8%, Ca 40. (B#4.)
2-2-80	4640	Fishing for 2 cones fr bit #4. Left 2 cones fr bit #4 in hole. Made trip w/magnet. No recovery. Made trip w/Bowen Globe type basket, no recovery. WIH w/bit. Cones on btm. 70 RPM, 40M#. Mud: 9.4#, vis 38, WL 4.6, FC 2/32, Sd tr, Salt 500, Ph 8.5, Oil 6%, Pv 16, Yld 4, Gels 0/1, Solids 9%, Ca 120. Bit #4-7-7/8" HTC, J-22, made 2178' in 77-1/2 hrs.
2-3-80	4673	Trip for bit. Finish in w/bit. Ran on cones & POH. Made 2 trips w/magnet & appeared recovered most of two cones. Ran bit & worked by some junk & drilled to 4673' & bit torqued up after connection. Now POH. 1" @ 4620', 60 RPM, 30M#. Mud: 9.1#, vis 40, WL 7.2, FC 2/32, Sd tr, Salt 600, Ph 8.5, Oil 6%, Pv 14, Yld 3, Gels 0/0, Solids 5%, Ca 80. Bit #5, 7-7/8" HTC J-22, made 33' in 4-1/2 hrs. (RR).
2-4-80	4855	Drlg. Rec'd 2 fair size pieces of cone w/magnet. Did not appear to be anything else on btm. 60 RPM, 40M#. Mud: 9.0#, vis 38, WL 6.4, FC 2/32, Sd tr, Salt 600, Ph 8.5, Oil 6%, Pv 15, Yld 3, Gels 0/0, Solids 5%, Ca 80. (B#6).
2-5-80	5102	Trip f/bit #7. 1" @ 5100', 68 RPM, 40M#. Mud: 9.0#, vis 44, WL 5.2, FC 2/32, Sd tr, Salt 500, Ph 8.5, Oil 6%, Pv 14, Yld 3, Gels 0/2, Solids 6%, Ca 80. Bit #6, 7-7/8 Hughes J-22, made 429' in 31 hrs.
2-6-80	5367	Drlg. 1" @ 5293; 68 RPM, 40M#. Mud: 9.0# vis 42, WL 4.4, FC 2/32, Sd tr, Salt 600, Ph 8.5, Oil 6%, Pv 20, Yld 6, Gels 1/3. Solids 5%, Ca 80. Bit #7, 7-7/8 Hughes, J-22, made 191' in 12-1/2 hrs. (B#8).
2-7-80	5762	Drlg. 60 RPM, 42M#. Mud: 9.0#, vis 45, WL 5.4, FC 2/32, Sd tr, Salt 500, Ph 8.5, Oil 6%, Pv 22, Yld 8, Gels 3/5, Solids 6%, Ca 80. (B#8)
2-8-80	6150	Drlg. 68 RPM, 42M#, Mud: 9.2#, vis 48, WL 5.2, FC 2/32, Sd tr, Salt 550, Ph 8.5, Oil 6%, Pv 22, Yld 10, Gels 3/10, Solids 7%, Ca 100. (B#8).
2-9-80	6473	Drlg. 68 RPM, 42M#, Mud: 9.3#, vis 47, WL 6.0, FC 2/32, Sd 1/4, Salt 650, Ph 8.5, Oil 5%, Pv 18, Yld 6, Gels 3/6, Solids 7%, Ca 80. (B#8.)
2-10-80	6855	Trip f/bit. 68 RPM, 42M#. Mud: 9.3#, vis 44, WL 6, FC 2/32, Sd 1/4, Salt 600, Ph 8.5, Oil 6%, Pv 18, Yld 5, Gels 2/5, Solids 7%, Ca 40. Bit #8, 7-7/8 HTC, J-22, made 1562' in 96 hours.
2-11-80	7005	Drlg. 1-3/4" @ 6855, 60 RPM, 40M#. Mud: 9.2#, vis 57, WL 7, FC 2/32, SD 1/4, Salt 600, Ph 8.5, Oil 6%, Pv 14, Yld 4, Gels 1/2, Solids 5%, Ca 20. (B#9.)

-12-80 7250 Drlg. 60 RPM, 45M#. Mud: 9.4#, vis 68, WL 4.6, FC 2/32, Sd tr, Salt 450, Ph 8.5, Oil 6%, Pv 20, Yld 8, Gels 3/5, Solids 7%, Ca 60. (B#9).

-13-80 7262 TD - Circ & cond for 5-1/2" csg. Ran DIL: CNL-FDC GR w/caliper. No problems w/logging, 60 RPM, 45M#. Mud: 9.4#, vis 70, WL 5.8, FC 2/32, Sd 1/4%, Salt 500, Ph 8.5, Oil 6%, Pv 24, Yld 14, Gels 3/15, Solids 8%, Ca 40. Bit #9, 7-7/8 Smith F-5, made 407' in 41-1/2 hrs.

-14-80 7270 TD - Prep to move rig to Jicarilla #110. Ran 179 jts 5-1/2" csg; 38 jts 17# K-55 ST&C Rg 3 (1369.37') & 141 jts 15.5# K-55 ST&C Rg 3 (5921.67'); landed @ 7265' KB. GS, Diff fillup collar, DV tool (4.30') total of 7295.34'. 12 scratchers, 2 per jt, 7000-7182' across Dakota. 18 scratchers, 2 per jt, 5885-6212' across Gallup. 20 centralizers on jts 1, 3, 4, 5, 6, 7, 9, 11, 30, 32, 34, 36, 38, 40, 88, 90, 92, 94, 96. Cmt basket on jt 88. DV tool on top of jt #89 (3750'). Cmtd 1st stage w/1000 gals mud flush, 10 BW, 400 sx B. J. Hughes fixit cmt, 87 bbls slurry displ 172 BW. Over displ 2 bbls, did not bump plug but float held ok. Circ press 600# @ 5 BPM. Slowed down last 40 bbls to 2 BPM. Opened DV tool. Cmtd 2nd stage w/1000 gals mud flush & 10 BW, 300 sx B. J. Hughes fixit cmt, 70 bbls slurry, displ w/117 BW, (should have taken 90 BW) however, DV tool closed w/2000#, ok. Rig Released @1:00 a.m., 2-14-80.

2-15-80 7270 TD - WO Completion & MORT.

2-16-80 7270 TD - WO Completion.

2-17-80 7270 TD - WO Completion.

2-18-80 7270 TD - WO Completion.

2-19-80 7270 TD - WO Completion.

2-20-80 7270 TD - WO Completion
(Drop f/report until compl commences.)

3/18/80 7270 TD. Cont to log above DV tool. MI & RU Big Well Service. Unload & tally 180 jts 2-3/8" tbg. Transfer, unload & tally 89 jts tbg f/Jicarilla #109. TIH w/4-3/4" bit & csg scraper & 121 jts tbg. Tagged DV tool @ 3750'. No cmt on top tool. Drld DV tool. Ran 102 jts tbg. Tag up @ 6847'. Drld cmt 6847-7225' (7225' top of FC). Circ hole clean w/1% KCl wtr. RU Blue Jet perforators. Ran CBL & GR correl w/var dens. No indications of cmt f/7225-6200'. Some vy poor cmt f/6200-5950'.

3/19/80 7270 TD - Prep to spot 250 gals acid. Reran CBL var density correl log. RU Dowell. Press tst csg to 4000# - OK f/5 mins. Perf'd 4 holes 7190-7191'. Set cmt retainer @ 7175'. Ran tbg w/stinger.

3/20/80 7270 TD - Prep to squeeze. TIH w/stinger on tbg. Stung into cmt retainer. Press up on csg to 1500#. TP came up to 1500#. POH. Checked seal assembly - nothing appears to be wrong. TIH w/ 4-3/4" bit. Drld cmt retainer @ 7175'. CO to FC @ 7225'. POH. Set cmt retainer on WL @ 7180'. TIH w/tbg & seal assembly. Stung into retainer. Press'd csg to 1500#. Tbg came up to 1500#. Pld out of retainer. Press'd up to 3000# on both csg & tbg. Press held steady. POH to chk tbg & seal assembly. TIH w/SN & standing valve & 30 jts tbg. Press'd tbg to 1000# - would not hold. Pld 23 jts tbg. Found hole in 24th jt. LD bad jt tbg. TIH w/seal assembly & tbg. Stung into cmt retainer @ 7180'. Press'd csg to 1500# - held OK. PO of retainer. Spt 250 gals 15% HCl. Stung into retainer. Press'd csg to 1500# - press'd tbg to 3000# - fm brk @ 3000#. Establish pmpg rate of 2 BPM @ 3000#. Mix 125 sx C1 "B" cmt w/.6% FLAC. Displ 23 bbls cmt into fm. Left 1/3 bbls in csg below retainer. Rev'd out 2-2/3 bbls cmt. Max final squeeze press 2600#. JC 3 am 3/20/80. POH w/tbg. RU Blue Jet. Perf 4 holes @ 7020-21'. Set cmt retainer @ 7000'.

3/21/80 7270 TD - Prep to drl out cmt retainer & run CBL. Perf 4 holes @ 7020-21'. Set HOWCO cmt ret @ 7000'. Ran seal assembly on tbg. Stung into ret @ 7000'. Press'd up csg to 1500# - held OK. Pld out of ret. Spt 250 gals 15% HCl. Stung into ret. Brk dn perfs @ 4200#. Est pmp rate of 2 BPM @ 3200#. Mixed 125 sx Cl "B" cmt w/.6% FLAC. Displ 20 bbls cmt thru perfs. Left 1/2 bbl cmt in csg. Rev'd out 2 bbls cmt. Max & final sq press 2800#. JC 11:00 3/20. POH & WOC.

3/22/80 7270 TD - Prep to perf Dakota. WOC. TIH w/4-3/4" bit to 7000'. Drld retainer, CO to 7180'. Circ hole clean, POH. Ran CBL 7172-6800'. Made 2nd run w/1000# press, 65-75% bonding (7172-7130'), 10-15% bonding (7130-7050'), 85-95% bonding (7050-6930'). TIH w/tbg to spt acid.

3/23/80 7270 TD - Prep to squeeze. TIH to 7110', spt 350 gals 7-1/2% HCl. Perf'd Dakota 7051', 52', 53', 67', 68', 69', 78', 79', 80', 81', 90', 91', 92', 93', 94', 95', 96', 97', 98', 99', 7100', 02', 04', 06', 08', 10', 12'. (27 holes) CBL meas. correl to D-A CNL FDC log. RU Dowell, frac 7051-7112' w/87,000 gals 1% KCl wtr, 80,000# 20/40 mesh sd. Brk dn fm @ 3100#. Frac'd as foll: 18,000 gals pad, 35 BPM, 3600#; 16,000 gals, 1/2# sd/gal, 35 BPM, 3500#; 13,000 gals, 1# sd/gal, 35 BPM, 3400#; 14,000 gals, 1-1/2# sd/gal, 35 BPM, 3300#; 19,000 gals, 2# sd/gal, 35 BPM, 3300#; 7,000 gals flush, 32 BPM, 3600#. ISIP 2500#, 5 min SI 2400#, 10 min SI 2300#, 15 min SI 2300#. Set

(cont'd) BP 6494'; press tst BOP & csg to 4000#, held OK. Perf 4 holes @ 6220-6221', set Bkr cmt retainer @ 6200'. RIH w/tbg & stinger to cmt retainer.

3/24/80 7270 TD - TIH w/tbg & retriev pkr to squeeze. Stung into retainer @ 6200'. Press'd csg to 1500#, held steady. Pld out stinger. Sptd 250 gals 15% HCl dn tbg. Stung into retainer. Press'd csg to 1500#. Press'd tbg to 4200#. Fm wouldn't brk. Press'd csg to 2000#. Press'd tbg to 5000#. Fm wouldn't brk. POH. Ran 4-3/4" bit. Drl retainer @ 6200'. CO to 6483'. Reset tbg @ 6230'. Sptd 150 gal 15% HCl. POH. Perf'd 4 holes @ 6224-25'. Set cmt retainer @ 6195'. TIH w/tbg & stinger. Sptd 150 gals 15% HCl. Stung into retainer. Press'd csg to 1500#. Fm brk @ 3000#. Estb rate of 3 BPM @ 2600#. Mix 125 sx Cl "B" cmt w/.6% FLAC. Displ 23-1/2 bbls cmt into fm. Left 1/2 bbl in csg. Rev'd 2 bbls cmt. Max & final sq press 2000#. PU & reset tbg @ 6095'. Sptd 150 gals 15% HCl @ 6095'. POH. Perf'd 4 holes @ 6085-86'. Set cmt retainer @ 6068'. TIH w/tbg & stinger. Stung into retainer. Press'd csg to 1500#. Csg press held OK. Sptd 150 gals 15% HCl. Stung into retainer. Press'd csg to 1500#. Brk fm @ 3000#. Estb rate of 2 BPM @ 2900. Mix 125 sx Cl "B" cmt w/.6% FLAC. Displ 23 bbls cmt into fm. Left 1/2 bbl cmt in csg. Rev'd out 2-1/2 bbl cmt. Max & final press 1800#. PU & reset tbg @ 5948'. Sptd 250 gals 15% HCl. POH. Perf'd 4 holes @ 4930-31'.

3/25/80 7270 TD - Prep to drl out & run CBL. TIH w/Bkr retr pkr. Set pkr @ 5621'. Press'd csg to 1500#. Form. broke @ 4000#. Est rate of 2 BPM @ 2600#, Mix 125 sxs of Cl "B" w/.6% FLAC. Displ 23 bbls cmt into form. Left 3 bbls cmt in csg. Max and final squeeze press. 1800#. JC @ 2:00 pm 3-24-80. POH. WOC.

3/26/80 7270 TD - Prep to CO to 6195' & run CBL. WOC. TIH w/182 jts tbg. Tagged top cmt @ 5744'. Drld hard cmt to 5866'. Swivel locked up. Circ hole & chg out swivel. Drl to 5896', bit quit. Trip f/bit. Drl & wsh to 6130'. Hard btm. POH to check tbg tally. Tally OK - btm @ 6130'.

3/27/80 7270 TD - Prep to acidize & frac lower Gallup zone. TIH to 6130'. Drl on cmt ret & cmt 6130-6191'. Circ hole clean. POH. RU Blue Jet, ran CBL f/6137-5800'; f/6137-6060' - 8% bonding; 6060-6006' - 60% bonding; 6006-5916' - 95% bonding. TIH to 6191' & circ w/1% KCl wtr. POH. RU Blue Jet, couldn't get deeper than 6147' w/gun. TIH w/bit & tbg to 6191'. Circ 2 hrs. POH (never touched anything). Perf foll'g Gallup depths: 6147', 44', 42', 39', 37', 34', 31', 29', 27', 24', 23', 22', 20', 17', 15', 14', 13', 11', 07', 06', 05', 03', 6100' (23 holes). All meas Blue Jet, CBL dated 3/18/80 correl to D-A DNL 2/12/80. TIH w/tbg & Bkr retriev pkr to acidize Gallup perfs prior to frac.

3/28/80 7270 TD - Prep to frac Gallup stage 2. TIH w/pkr to 5977'. Attempt to brk dn perfs. Reset tbg @ 6166'. Sptd 200 gals 7-1/2% HCl-MSR. Reset pkr @ 5977'. Trtd perfs w/2000 gals 7-1/2% HCl-MSR & 46 ball sealers. Fm brk @ 4000#. Trtd @ 6 BPM 3800#. Had gd ball action. ISIP 1300#. POH. Frac Gallup perfs 6100-6147' w/105,000 gals Dowell Versagel, 25M# 100 mesh sd & 205 M# 20/40 mesh sd: 4,000 gals pre-pad, 30 BPM, 2300#; 15,000 gals pad, 30 BPM, 1900#; 10,000 gals, 2# sd/gal (100), 30 BPM, 2000#; 10,000 gals, 1# sd/gal (20/40), 25 BPM, 1700#; 10,000 gals, 2# sd/gal (20/40), 26 BPM, 2300#; 30,000 gals, 3# sd/gal (20/40), 25 BPM, 2200#; 15,000, 4# sd/gal (20/40) 25 BPM, 1500#; 5,000 gals, 5# sd/gal (20/40), 25 BPM, 1700#; 6,000 gals flush, 28 BPM, 1800#. ISIP 1300#, 5 min SIP 1300#, 10 min SIP 1300#, 15 min SIP 1300#. Set BP @ 6055'. Dump 1 sx sd on BP. Perf Gallup stage 2 as foll: 5952', 53', 55', 63', 78', 91', 99', 6000', 01', 03', 04', 05', 09', 11', 12', 15', 19', 21', 22', 28', 31', 33', 38', 39', 41', 42', 43' (27 shots). Mesas are Blue Jet CBL dated 3/18/80, correl to D-A DNL dated 2/12/80. TIH w/tbg & retriev pkr to 6043'. Sptd 200 gals 7-1/2% HCl-MSR. Reset pkr @ 5836'. Trtd w/2000 gals 7-1/2% HCl-MSR & 54 ball sealers. Fm brk @ 3700#. Trtd 5 BPM @ 2500#. No initial SI - completely balled off. Flwg tbg bk to let well die. POH.

3/29/80 7270 TD - Prep to GIH w/tbg. Frac trtd Gallup stage 2, 5952-6043' w/119,800 gals Dowell Cross-link gel (YF4PSD), 25M# 100 mesh sd, 255M# 20/40 sd: 4,000 gals pre-pad, 40 BPM, 2300#; 15,000 gals pad, 41 BPM, 2200#; 10,000 gals, 2-1/2# sd/gal, 40 BPM, 2200#; 10,000 gals, 1# sd/gal (20/40), 41 BPM, 2200#; 10,000 gals, 2# sd/gal (20/40), 41 BPM, 2200#; 40,000 gals, 3# sd/gal (20/40), 35 BPM, 1900#; 20,000 gals, 4# sd/gal (20/40), 35 BPM, 1600#; 5,000 gals, 5# sd/gal (20/40), 34 BPM, 1700#; 5800 gals flush, 34 BPM, 1600#. ISIP 1300#, 5 min 1300#, 10 min 1300#. SI 8 hrs. WO gel to brk. CP 750#. 3 hrs, 18/64" choke, CP 750-300#, rec'd 150 bbls frac fld; 5 hrs, 30/64" choke, CP 300-100#, rec'd 80 bbls frac fld; 2 hrs, 2" choke, CP 100-50#, rec'd 70 bbls frac fld. Total frac fld rec'd 300 bbls.

3/30/80 7270 TD - Cont to flw. TIH w/173 jts 2-3/8" tbg, flt & 4-3/4" bit. Tag BP @ 6055'. Drld BP @ 6055'. CO to cmt retainer @ 6195'. Drld cmt retainer @ 6195'. CO to BP @ 6494', drld BP @ 6494'. CO to PBTD 7180'. POH. TIH w/228 jts 2-3/8" tbg EUE 7000', set @ 7014'KB w/SN @ 6985'KB. ND BOP. NU tree. Pmpd out expendable plug. Flwg on 18/64" choke. CP 125#, TP 100#. Rec'd 25 bbls frac wtr load - 325 bbls left to recover - 7100 BLW.

3/31/80 7180 PB - Cont swbg. Flwg on 32/64" choke. Rec'd 321 BFW, CP 250#. Swbg f/SN. Flwd scattered f/1500' to SN. Rec'd 401 BFW w/tr oil. CP 350#. Total frac load rec'd last 24 hrs 722 bbls. Frac wtr yet to recover 6376 bbls.

4/1/80 7180 PB - To cont swbg. Swbg f/6900'. Flwd scattered f/1000-6900'. Rec'd 369 BLW, sli show oil & gas. CP 300#. RU f/repair-fuel pmp out of engine. Rec'd past 24 hrs 369 BFW. Accum load rec'd 1416 BFW. Load yet to recover 6007 BFW.

4/2/80 7180 PB - WO pmpg unit. Swbg f/SN, FL scattered f/1100' to SN. Rec'd 150 BLW. Gd show of emulsified oil, CP 425-500#. RD CU & moved to Jicarilla #109 to run pmp & rods. Load rec'd last 24 hrs - 150 BW; Accum load rec'd 1626 BW. Load yet to recover 6857 bbls. (Drop f/report until pmpg unit installed). 336

5-13-80 7180 PB - COMPLETED OIL WELL, 5/12/80, Gallup-Dakota fm. Tst date 5/12/80, 24 hr tst pmpd 57 B0, 50 BFW & 173 MCFD f/Dakota perfs 7051-7112' & Gallup perfs 5952-6147'. TP 130#, CP 130#. GOR 3035:1, Oil gvty 44.6° API @ 60°F. LPP 7112'.