

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 Atlantic Richfield Company						5. LEASE DESIGNATION AND SERIAL NO. SF-080472-A	
3. ADDRESS OF OPERATOR 501 Lincoln Tower Bldg., 1860 Lincoln St., Denver, Colo. 80295						6. IF INDIAN, ALLOTTEE OR TRIBE NAME -	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface SE SE 850' f/South & 850' f/East lines, Sec. 19 At top prod. interval reported below Approx. same At total depth Approx. same API #30-039-21588						7. UNIT AGREEMENT NAME -	
14. PERMIT NO. Mr. Barrick						DATE ISSUED 4-18-78	
15. DATE SPUDDED 7-13-78						18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 7041' GR, 7055' RKB	
16. DATE T.D. REACHED 7-28-78						19. ELEV. CASINGHEAD -	
17. DATE COMPL. (Ready to prod.) 10-24-78						20. TOTAL DEPTH, MD & TVD 7659'	
21. PLUG, BACK T.D., MD & TVD -						22. IF MULTIPLE COMPL., HOW MANY? -	
23. INTERVALS DRILLED BY -						ROTARY TOOLS 0 -7659'	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 7278' to 7332' Dakota "A" Zone 7396' to 7411' Dakota "B" Zone						25. WAS DIRECTIONAL SURVEY MADE No	
26. TYPE ELECTRIC AND OTHER LOGS RUN Dual Ind. Lat.; FDC/CNL; CBL-GR						27. WAS WELL CORED No	
28. CASING RECORD (Report all strings set in well)							
CASING SIZE		WEIGHT, LB./FT.		DEPTH SET (MD)		HOLE SIZE	
8-5/8" OD		24#		307' KB		12-1/4"	
5-1/2" OD		15.5 & 17#		7659' KB		7-7/8"	
29. LINER RECORD							
SIZE		TOP (MD)		BOTTOM (MD)		SACKS CEMENT*	
None							
30. TUBING RECORD							
SIZE		DEPTH SET (MD)		PACKER SET (MD)			
2-3/8"		7258'		7359'			
31. PERFORATION RECORD (Interval, size and number)							
7278-841', 7288-7310', 7320-7332' w/1 jet shot/ft (42 shots) - Dakota "A"							
7396-7403', 7407-7411' w/2 jet shots/ft (24 shots) - Dakota "B"							
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.							
DEPTH INTERVAL (MD)				AMOUNT AND KIND OF MATERIAL USED			
7150-7404' (OA)				250 gal 50% MCA			
7278-7332' (OA)				62,000 gal 1% CaCl w/80,000# sd.			
7396-7411' (OA)				32,000 gal 1% KCl w/38,500# sd.			
7493-7505' (OA)				Dakota "C" zone abandoned.			
33. PRODUCTION							
DATE FIRST PRODUCTION 10-18-78		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing				WELL STATUS (Producing or shut-in) Producing	
DATE OF TEST 10-21-78		HOURS TESTED 24 hrs.		CHOKE SIZE Adjustable		PROD'N. FOR TEST PERIOD	
FLOW. TUBING PRESS. 675#		CASING PRESSURE 1275#		CALCULATED 24-HOUR RATE 293		OIL—BBL. 293	
						GAS—MCF. 660 MCF/D	
						WATER—BBL. 240	
						OIL GRAVITY-API (CORR.) 45.0	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) To be sold.						TEST WITNESSED BY C. R. Thompson	
35. LIST OF ATTACHMENTS 2 each 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 <u>W. A. Walther, Jr.</u>				TITLE <u>Operations Manager</u>		DATE <u>11-6-78.</u>	

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

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.), formations, 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.

or Federal office for specific instructions. Consult local State or Federal 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 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 joint, each appropriate interval to be separately produced, showing the additional data pertinent to such interval.

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 Drill Stem Tests.				Pictured Cliffs	3078'	
				Mesaverde	4665'	
				Upper Mancos	5335'	
				Gallup	6231'	
				Greenhorn	7192'	
				Graneros	7262'	
				Dakota A	7276'	
				Dakota B	7393'	
				Dakota Silt	7447'	
				Dakota C	7492'	
				Burro Canyon	7553'	
				Morrison	7640'	
				(all measurements from RKB)		

10/14/78	7659	TD - Tearing dn compl rig. Pld out w/bit. Ran 234 jts 2-3/8" EUE 8R 4.7# J-55 tbg (7209.14') w/API 2-3/8" EUE SN 1 jt off btm, btm'd @ 7224'. Swbd to pit 11 hrs & KO. Flwd to pit 2-1/2 hrs, fld mostly wtr. SI 4:30 am 10/14/78. Rel rig 5 am 10/14/78. Prep to move to Chacon #6.
10/15/78	7659	TD - Well SI f/csg press bld up. Attempted to foll thru sep. Flwg by heads. TP 0#, CP 500#, unable to flw thru sep. SI f/add csg press bld up. Will attempt to flw today.
10/16/78	7659	TD - Flw f/tst. Left well SI over Sunday f/press bld up.
10/17/78	7659	TD - Prep to swb. TP & CP 825#. Opn tbg to atmosphere, would not flw. MI swbg unit.
10/18/78	7659	TD - MI swbg unit.
10/19/78	7659	TD - Cont to flw tst. MI & RU Drake Well Serv. CP 950#, TP 0#. FI @ 500' f/surf. Swbd approx 45 B/d to pit. Well KO. Flwd well to pit f/2 hrs. Turned thru prod unit. Flwd 0/H, 12 hrs. Produced 150 BO & est 200 BW, gas @ rate of 139 MCFPD. CP @ 7 am, 1300#, TP 150#.
10/20/78	7659	TD - Flwg f/tst. Well flwd 150 BO in 12 hrs, 200 BW, gas @ rate of 280 MCFPD. Rel swbg unit @ 9:30 am 10/19/78.
10/21/78	7659	TD - Well flwg thru separator to tks, 310 BOPD & 719 MCFPD.
10/22/78	7659	TD - Well flwg thru separator to tks, 293 BOPD & 658 MCFD.
10/23/78	7659	TD - Well flwg thru separator to tks, 246 BOPD & 672 MCFPD.
10/24/78	7659	TD - Well flwg thru separator to tks, 213 BO & 497 MCFD.
10/25/78	7659	TD - COMPLETED OIL WELL, Dakota Fm 10/24/78. 24 hr tst 10/21/78, flwd 293 BOPD 45.0° API g/vty @ 60°F; 210 BOPD, 650 MCFPD f/Dakota "A" perms 7278-7332'OA & Dakota "B" perms 7396-7411'OA. TP 675#, CP 1275#, adjustable ch. GOR 2253:1. LPP 7411'.

10/2/78	7659	TD - Prep to fin perf'g. WIH w/McCull & perf'd "C" zone, had some misfires. Making 2nd run to fin perf'g Dak "C" zone. Ran McCull CB correl log w/var dens bond log, looked gd above & below Dakota. Thru Dakota 20-100%. From 7440-TD, 95-100% bonding. From 7315-7440', 20-100% bonding. From 7056-7316', 90-100% bonding. Above 6842', 90-100% bonding. Top of cmt 6330'. Press tstd csg prior to perf'g, tstd OK. Spnd 250 gals 15% MCA acid prior to perf'g.
10/3/78	7659	TD - Prep to displ 250 gals 15% MCA acid into perfs. Perf'd McCull 7493-7505' 2 SPF, Dyna Jet. Ran into pack off w/2nd gun. Dropped gun into hole. Made 1 dry run w/overshot & tbq. Rec'd perf gun w/2nd overshot run. Rng HOWCO RTTS pkr on 2-3/8" tbq, will set @ approx 7000' to displ acid. Then set @ 7470' to swb tst "C" zone of Dak.
10/4/78	7659	TD - Cont to tst. Swbg. Swb tstg Dak "C" zone. Plg swb 1/hr f/btm (7470'), last run rec'd nothing. Last 6 hrs, 1/4 - 1/2 bbl/run brackish clear wtr. No show oil or gas.
10/5/78	7659	TD - Prep to POH & abandon "C" zone. PI 500 gals 15% MCA, press 1800-2000# @ 4 BPM. ISIP 900#. Displ'd w/30 bbls 1% KCl wtr. Strtd swbg 1:15 pm 10/4/78. At 3:30 swbg f/btm 7470' 2 pulls/hr, 200' fld ea pull, black brackish wtr. Sli acid gas @ 5:30 pm, 0 recovery. Waited 1 hr & pld to swb rec 3/4 bbl brackish acid wtr, no gas. 6:30 pm to 6:30 a.m. 1 swb/hr, 0 recovered on some swb pulls; avg rec 1/2 bbl/hr, brackish acid wtr, no gas or oil.
10/6/78	7659	TD - Prep to squeeze 2nd stage. POH w/RTTS pkr & tbq. Ran HOWCO Speedy Line BP, set @ 7480', tst. Dmp'd 1 sx cmt on top plug (7480-70'). Perf 4 holes w/ Dyna Jet 7365-66' (1'). Ran RTTS pkr, set @ 7245'. Brk fm dn @ 3500#. PI 4 BPM @ 3000#. Mix'd 100 sx Cl "B" neat cmt. Displ @ 1500#, strtd stag @ 1600#, brk bk to 800#. Several times. Cleared perfs w/2500# 1 BPM. WO 100 sx cmt (should arrive 10 am).
10/7/78	7659	TD - Prep to GIH w/bit & drl cmt. Est rate 4 BPM @ 1000#. Mixed 100 sx Cl "B" neat & strtd PI @ 1800#. Press incr to 4000# as cmt went thru perfs. After displ 5 bbls cmt into fm, annu us equalized. Rev out cmt. Press to 3000# & held 15 min. Bled bk 1 bbl & shut off. JC 3:30 am. POH w/pkr & tbq. Did not find leak in tbq. One slip gone f/pkr. WIH w/magnet & hydrotested tbq in hole. Found 1 sml collar leak & 1 split jt of tbq. Prep to run bit & drl out squeeze split jt was 21 jts f/btm.
10/8/78	7659	TD - Prep to frac Dak "B" zone. Pld out w/tbq & magnet, rec'd slip f/pkr. WIH w/bit & drld cmt 7260-7375' & WIH to 7470'. Spnd 250 gals 50% MCA @ 7404-7150'. POH. RU McCull & perf'd 2 jets/ft 7396-7403' & 7407-7411' opn hole log meas. Conn HOWCO & displ acid. FBDP 2000# & pmpd acid away @ 1500#. ISI 1000#. Ran RTTS pkr on 2" tbq & set @ 7373'. Strtd swbg. Made 5 runs & swbd dn. Sli blw gas, no oil. Waited 1 hr & swbd. Rec'd 1/4 BW sli acidic. Next 3 hrs made 3 pulls, rec'd no fld, gas sli blw. SI 2-1/2 hrs, no measurable press on tbq. Opn'd tbq - fair blw gas decr rapidly to sli blw gas.
10/9/78	7659	TD - Flwg well to pit. Dak "B" zone flwg to pit f/clean up. POH w/RTTS pkr & 2-3/8" tbq. Hook up Hallib. Sd wtr frac dn 5-1/2" csg using 1% KCl wtr w/2#/1000 gal FR-20, 15# Adomite Aqua/1000 gals & 40/60 mesh sd as foll: 8,000 gals pad; 7,000 gals, 1/2# sd/gal 3500#; 8,000 gal, 1# sd/gal 6000#; 14,000 gal, 1-1/2# sd/gal, 21,000#; 3,000 gal, 2# sd/gal 6000#; 7200 gal flush. Total 32,000 gals & 38,500# sd. PI @ avg press 3300#, avg rate 48 BPM, max press 3600#. ISIP 1250#, 5 min 1150#, 10 min 1050#, 15 min 1000#. Left SI 3-1/2 hrs, 700#. Bled dn to 650# in 1 hr. PI 7800 gals, 9.5#/gal CaCl. SI 30 min, 400#. Bled dn to sml stream. RIH w/ 5-1/2" pkr on 2-3/8" tbq. Set pkr @ 7359'. Strtd flwg to pit f/clean up.
10/10/78	7659	TD - Prep to frac "A" zone. Ran swb on "B" zone 3 times. Well KO flwg. 600 MCF gas, lots of frac wtr. At end of 5-1/2 hrs steady flw. Producing oil @ rate of 320 BPD, frac wtr @ 312 BPD, gas @ 563 MCFPD, TP 535#, 3/4" ch. Killed well. Pld pkr. Set HOWCO Speedy Line BP @ 7360'. Tstd csg & BP to 4000#, OK. McCull perf'd 1 shot/ft 7278-7284', 7288-7310', 7320-7332'. (gvty of oil 44.5° API @ 60°F).
10/11/78	7659	TD - Prep to kill well & GIH w/pkr to tst. Frac'd Dak "A" zone, perfs @ 7278-84', 7288-7310' & 7320-7332', 1 shot/ft. Pmpd 18,000 gals pad, 1% CaCl w/2#/1000 gal FR-20, 15#/1000 gal Adomite Aqua, 62,000 gal 1% CaCl, 80,000# 20/40 sd, flushed w/7200 gals treated wtr. PI @ 2200#. Avg treating press 2700#, max treating press 3300#, AIR 55 BPM (3640 hyd hp). ISIP 1550#, 5 min SIP 1270#, 10 min SIP 1200#, 15 min SIP 1150#. Left SI 3-1/2 hrs 750#. Strtd bleeding off to pit. Bled dn to 440# in 2 hrs. Pmpd 6820 gal 9.5# CaCl wtr. SI @ 750#. Left SI 1 hr (530#). Strtd bleeding off again. Bled dn to 200#. Mixed 430 sx CaCl, 9.5# wtr. PI 216 bbls. Strtg press 200#, fin press 600# hauling CaCl.
10/12/78	7659	TD - Prep to tst thru separator. Ran 2-3/8" tbq w/SH & pmp out plug. Landed @ 7258'. Swbd well 8 hrs, KO flwg. Flwd to pit 4 hrs. Turned thru separator @ 6 am 10/12/78. TP 200#, CP 110#.
10/13/78	7659	TD - Prep to POH w/tbq & bit. Flwg @ rate of 340 BOPD @ end of 4 hrs, 452 MCFD, 426 BOPD (frac wtr), TP 550#, CP 575#. Circ on btm @ 7460'. Well had 900# CP. Killed well w/160 bbls 10#/gal CaCl wtr. Drld BP @ 7360'. CO to 7460'. Fm taking considerable wtr.

7/14/78	309	WOC. SPUD 9:00 pm 7/13/78. Ran 7 jts 8-5/8" OD 24# K-55 8rd ST&C Rge 3, new csg (292') set @ 307'KB. (KB-GR 14'). Cmt'd w/275 sx Ty "B" w/2% CaCl & 1/4# per sx Flocele. PD @ 4:5 am 7/14. Gd circ thruout job. Circ'd 10 bbls cmt to pit. Ran GS & Cent @ 395' & top of 2nd & 5th jts. 3/4" @ 300'. 70 RPM, all wgt. Mud: 8.8#, vis 45. B#1, Hughes, OSC-1G, made 309' in 4-1/2 hrs. Elev. 7041' GL.
7/15/78	1190	Drlg sd & sh. Tstd EOP & equip 1000#, OK. Drld 45' cmt & plug & shoe. 80 RPM, 40M#. Mud: 8.8#, vis 43, WL 3.8, FC 2/32, Sd 0, salt 250 ppm, Ph 8.0, Pv 21, Yld 19, Gels 6/16, oil 8%, solids 2%. (B#2).
7/16/78	2424	Drlg sd & sh. 1-3/4" @ 624'. 80 RPM, 40M#. Mud: 8.9#, vis 46, WL 4.0, FC 2/32, Ph 8.0, Pv 20, Yld 15, Gels 2/13, oil 8%, solids 3%. B#2, 7-7/8", Sm., DTJ, made 1315' in 18-1/2 hrs. (B#3).
7/17/78	3182	Drlg sd & sh. 3" @ 2870'. 75 RPM, 40M#. Mud: 8.8#, vis 43, WL 2.4, FC 2/32, Sd 1.5, Ph 7.5, Pv 30, Yld 16, Gels 4/14, Cal 80, Chl 650, oil 7%, solids 11%. B#3, 7-7/8", HTC, OSC3, made 1252' in 22-1/4 hrs. (B#4).
7/18/78	3806	Drlg sd & sh. 65 RPM, 40M#. Mud: 8.9#, vis 44, WL 2, FC 2/32, Sd 1/2%, Ph 7, Pv 25, Yld 25, Gels 2/9, Cal 70, Chl 650, oil 7%, solids 12%. (B#4).
7/19/78	4223	Drlg sd & sh. Tite f/25 stnds. Two bridges @ 1928' & 3610'. 1/2" @ 3923'. 65 RPM, 40M#. Mud: 8.8#, vis 46, WL 3.8, FC 2/32, Sd 3/4%, Ph 7.6, Pv 17, Yld 9, Gels 1/8, Cal 160, Chl 650, oil 7%, solids 14%. B#4, 7-7/8", HTC, OSC1G, made 947' in 32-3/4 hrs. (B#5).
7/20/78	4542	Drlg sd & sh. 65 RPM, 40M#. Mud: 8.7#, vis 43, WL 6.8, FC 2/32, Sd 1/2%, Ph 7, Pv 17, Yld 9, Gels 1/5, Cal 80, Chl 600, oil 8%, solids 11%. (B#5).
7/21/78	4872	Drlg sd & sh. 1/2" @ 4552'. 65 RPM, 35M#. Mud: 8.8#, vis 46, WL 2.4, FC 2/32, Sd 3/4%, Ph 7.6, Pv 19, Yld 10, Gels 2/8, Cal 120, Chl 700, oil 7%, solids 4.2%. B#5, 7-7/8", Sm., F-2, made 729' in 43-1/4 hrs. (B#6).
7/22/78	5300	Drlg sd & sh. 50 RPM, 40M#. Mud: 8.7#, vis 46, WL 2.4, FC 2/32, Sd 1/2%, Cl 750 ppm, Ca 130, Ph 7, Pv 21, Yld 10, Gels 2/7, oil 7%, solids 3%. (B#6).
7/23/78	5750	Drlg sd & sh. 60 RPM, 40M#. Mud: 8.7, vis 47, WL 4, FC 2/32, Sd 1/2%, salt 600, Ca 80, Ph 7.6, Pv 33, Yld 15, Gels 2/7, oil 8%, solids 3.5%. (B#6).
7/24/78	6215	Drlg sd & sh. 60 RPM, 40M#. Mud: 8.8#, vis 48, WL 2.0, FC 2/32, Sd 1/2%, salt 700, Ca 80, Ph 7.5, Pv 25, Yld 15, Gels 2/8, solids 3.5%, oil 3%. (B#6).
7/25/78	6558	Drlg sd & sh. 1-1/4" @ 6420'. 55 RPM, 40M#. Mud: 8.8#, vis 48, WL 4.6, FC 2/32, Sd 1/2%, salt 650 ppm, Ph 7.0, Pv 15, Ca 40, Yld 2, Gels 1/6, oil 9%, solids 4%. B#6, 7-7/8", Sm., F-2, made 1868' in 98 hrs. (B#7).
7/26/78	7058	Drlg sd & sh. 65 RPM, 40M#. Mud: 8.7", vis 41, WL 4, FC 2/32, Sd 1/2%, salt 700 ppm, Ph 7.0, Pv 12, Ca 60, Yld 6, Gels 1/4, oil 9%. LCM 4%, solids 2.5%. (B#7).
7/27/78	7343	TI w/new bit. 1-1/4" @ 7340'. 55 RPM, 40M#. Mud: 8.8#, vis 42, WL 3.6, FC 2/32, Sd 1/4%, Ph 7.6, Pv 18, Yld 6, Gels 1/5, oil 9%, solids 4%. B#7. 7-7/8", Sm., F-2, made 923' in 48 hrs. (B#8).
7/28/78	7630	Drlg. 55 RPM, 40M#. Mud: 8.8#, vis 55, WL 3, FC 2/32, Sd 1/4%. (B#8)
7/29/78	7659	RU to LDDP - POH & strapped D.P. Corrected depth from 7650 to 7659'. RU Sch. & ran DIL, FDC-CHL-GR B#8 7-7/8" Smith FS made 316' in 26 hrs.
7/30/78	7659	R.D. Rotary Tools. Ran 184 jts (7671.59') 5-1/2" 15.5# & 17# K-55 8rd ST&C R3 csg. Set @7659' KB (KB-GL 14') CMTD. 1st stage w/140 sx 50/50 Poz & 4% gel, .2% HR4 & 2/4% CRF2, Foll. 2/ 125 sx, CLB P.D. 10:15 p.m. Circ. 3 hrs. thru D.V. tool @ 3263' @ cmt'd 2nd stage. 500 gal mud flush, 130 sh 50/50 Pos & 4% gel, 3/4% CRF2 & 6-1/2" Gillsonite/sk. Foll. by 120 sx CLB neat. P.D. 2:00 a.m. 7/30/78 F.C. @7650' Cent. on jts 2, 4, 6, 7, 8, 9, 11 and 13 and above DV on jts 105, 107, and 109 DV on top of 106th jt. Had good circulation during both stages. RIG RELEASED 6:00 a.m. 7/30/78.
7/31/78	7659	Clearing location - MORT
8/01/78	7659	Cleaning location
8/2/78 -	7659	TD - WO completion.
9/29/78		
3/30/78	7659	TD - Prep to MI compl rig.
10/1/78	7659	TD - Preo to POH & run bend logs. MI & RU Aztec Well Serv. WIH w/ 4-3/4" bit & 5-1/2" csg scraper, drld DV tool @ 3262' & cleaned out to 7600'. Displ'd fld w/1% KCl wtr + 1 gal/1000 gal de-emulsifier. Now POH to run cased hole logs.