

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR  
J. Gregory Merrion & Robert L. Bayless

3. ADDRESS OF OPERATOR  
P. O. Box 507, Farmington, NM

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 1685' FSL & 3335' FEL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:	SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF <input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	<input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	<input checked="" type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE <input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES <input type="checkbox"/>	<input type="checkbox"/>
ABANDON* <input type="checkbox"/>	<input type="checkbox"/>
(other) Re-entry <input type="checkbox"/>	X <input type="checkbox"/>

5. LEASE  
MOO-C-1420-1706

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Ute Mountain

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Ute

9. WELL NO.  
7

10. FIELD OR WILDCAT NAME  
Barker Dome Paradox

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Section 19, T32N, R14W

12. COUNTY OR PARISH  
San Juan

13. STATE  
New Mexico

14. API NO.

15. ELEVATIONS (SHOW DE KDB AND WD)  
6526 GL

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

SEE ATTACHED PAGES 1 - 5

Subsurface Safety Valve: Manu. and Type

18. I hereby certify that the foregoing is true and correct

SIGNED Steven J. Shuman TITLE Engineer

DATE October 23, 1979

(This space for Federal or State office use)

APPROVED BY  
CONDITIONS OF APPROVAL, IF ANY:

TITLE DATE

## Well History

- 09-01-79 Drill out surface plug. Run in with 2-7/8" tag fill @ 2980 ft. KB. Pressure to 3000 PSIG. Held okay. Drill down through fill to 3010 ft. KB. Returns - heavy drilling mud oil base, cuttings shale, coal, sandstone, wood, and very little cement. Slow drilling. Lose circulation with over 3000 lbs. on bit. Probably wood under bit. Pull 5 stands. Shut in and SDOWE. (SSD)
- 09-04-79 Run in and tag fill. Establish circulation; continue drilling inside 9-5/8" casing. Fell through cement at 3040 ft. KB. Ran down and tagged 7" production string at 3090 ft. KB. Circulated hole clean. Pressure tested 9-5/8" to 1750 PSIG; pressure broke back. Continued pumping in at lower pressure with fresh water. Trip out with 2-7/8" and 8-3/4" bit; rig up 6-1/8" drill bit casing scrapper and run in with 2-7/8" tubing. Entered 7" casing at 3090 ft. KB picking up singles of 2-7/8". SDON at 4000 ft. (SSD)
- 09-05-79 Continue running 2-7/8". Tagged fill at 8740 ft. KB. Circulated hole clean. Making small amount of sweet gas while circulating; when shut down no gas apparent. SDON. (SSD)
- 09-06-79 Pulled tubing and bit; ran Schlumberger Thermal Decay Time log from 8726-7100, 5400-2800, 2450-2100. Ran Schlumberger Cement Bond log from 4300-2800. (JGM)
- 09-07-79 Run 2-7/8" and 7" mod. 'R' packer to 3160'. Set packer and pressured to 3000 PSIG on 7". Held okay. Pumped in backside @ 3 BPM and 1500 PSIG. Trip out w/ packer. Rig up McCullough and perforated 4 - .500" squeeze holes @ 4080' K.B. Re-run mod. 'R' packer to 4014' K.B. (SSD)
- 09-08-79 Move 2 stands and set mod. 'R' packer @ 3887' K.B. Mixed 35 sacks class 'B' with .3% filtration control (7.8 bbls. of slurry) and displaced with 28 bbls. Shut down. Slurry too thin so pumped away and mixed new 35 sacks slurry, displaced, shut down. By calculations left 4.3 bbls. slurry in casing. Staging @ 15 minute intervals and obtained a squeeze @ 1350 PSIG. Flowed back and squeeze held. Shut in additional 20 minutes. Released mod. 'R' and trip out of hole. Rig up McCullough and tagged cement @ 3914' K.B. Possible flow back because expected top was 3980' K.B. Perforated hole @ 3700' K.B. Ran 2-7/8" w/ retainer and set @ 3675' K.B. Pumped 40 bbls. water trying to circulate through squeeze hole, unable to. Mixed 75 sx batch class 'B' and displaced leaving 4 bbls. to squeeze with. Staged in 5 to 15 minute intervals until held pressure @ 1000 PSIG in 1 hour 45 minutes. Pulled out of retainer and reversed tubing clean. Pulled up to top of 7" casing. Mixed 150 sx and spotted in casing. Pulled up above slurry. Reversed 2-7/8" tubing clean and bradenhead squeezed top of 7" to 1600 PSIG. Moved slurry 3 bbls., unable to move after that, just pressuring up. Flowed back and squeeze held after 20 minutes. Pulled additional 10 stands and SDON. (SSD)
- 09-10-79 Rig up, trip in with 8-3/4" bit. Tag cement @ 2752 - 338 ft. of cement, started with 432 ft. Put away 7.3 bbls. by calculations. Drill out 9-5/8" to 2900 ft. Circulate clean. SDON (SSD)
- 09-11-79 Drilling cement; bit locked up. Trip for new bit. SDON (SSD)

- 09-12-79 Drill out to 3090' with 8-3/4" bit. Pressured squeeze at top of 7", stub to 3000 PSIG. Bled to 1750 PSIG in 40 minutes. Holding @ 1750 PSIG. Trip out with 8-3/4" bit. (SSD)
- 09-13-79 Trip in with 6-1/8" bit and scrapper. Drill cement plug in top of 7" stub. Ran down and tagged retainer @ 3675' K.B. Drilling on retainer. (SSD)
- 09-14-79 Drill out retainer and dropped 10 ft. Tagged hard cement. Drilling hard cement and retainer pieces. Trip for drill bit. Finished drilling cement on squeeze @ 4080' K.B. (SSD)
- 09-15-79 Pulled tubing and bit. Perforated Shinarump 5308-5313 with 2 shot/ft. Ran 2-7/8" tubing and Baker Model R packer. Set packer @ 5280'. (JGM)
- 09-17-79 Swabbed down tubing and swabbed 1 bbl. fresh water per hour. Rigged up Western Co. and acidized with 500 gal MCA. Broke from 3000 PSI to 1800 at 3 bbls./min. Increased rate to 5 BPM and had 2 breaks - 2500-2400 and 2400-2100. SIP - 1300. Swabbed down tubing. (JGM)
- 09-18-79 Swabbed 4 bbls/hour fresh acid cut water, no show oil or gas. Reset packer at 5157. Rigged up National Cementers and squeezed with 35 sacks cement with Fluid Loss Additive and 2% CACL<sub>2</sub>. With 900 PSI standing pressure, squeezed away 4.9 bbls. cement slurry and got squeeze pressure of 1600 PSI leaving 2.8 bbls cement in casing (70'). Held pressure 35 minutes, no drop. Tested for flowback, ok. Raised packer 3 stands to 4972 and reversed clean. Re-set packer and pressured up to 1500 PSI. Shut in for night. (JGM)
- 09-21-79 Rig up drill out squeeze. Trip in w/ 8-3/4" bit tag cement @ 2960' K.B. Drilled out 130 ft. of cement. Trip out w/ 8-3/4" bit. Pick up 6-1/8" bit and casing scraper. Ran part way in. SDON. (SSD)
- 09-22-79 Drilling inside 7" casing to 3410 ft. K.B. SDON. (SSD)
- 09-24-79 Drilled cement inside 7" casing to 3680 ft. Pressured up to 1500 PSIG to test cement. Bled to 1375 PSIG in 3 min., and held at that pressure. Continued drilling and fell through cement @ 3708 ft. K.B. Circulated hole clean. Pressure tested to 1500 PSIG. Bled to 1310 PSIG in 5 minutes. Trip out w/ bit & scraper. Rig up Go International, ran cement bond log from 4150 - 3090 ft. Change in bond indicated @ 3700 ft. across 8 ft. interval. Bond tool and collar locator dampened @ 4000 ft - 4150 ft. (deepest point bond tool run). Perforated 4067-72' K.B. w/ 2 PF 10 holes .40". SDON. (SSD)
- 09-25-79 Ran bit & scraper. Found cement crust @ 4045' K.B. Drilled down & fell through @ 4085' K.B. Ran to 4510'. Circulated hole clean. Tripped out. Rig up mod 'R' packer; trip in and set 4017 ft. K.B. (swabbed entrada perfs 4067-72 K.B.) Unable to swab. Cement in tubing @ 300 ft. Pull 7 stands, still unable to swab. Pulled three stands, still unable to swab. Shut down. (SSD)
- 09-26-79 Trip out w/ packer. Run from other side of derrick and trip in with:

- 09-26-79 (con't) different 2-7/8" tubing. Set packer @ 4020 ft. K.B. and swabbed tubing down. Rig up Western and acidized Entrada with 250 gal. 15% HCL avg. injection rate 5 BPM @ 2350 PSIG. ISDP 1700 PSIG. Swabbed load back with no indication of fluid entry. SDON. (SSD)
- 09-27-79 Swabbed down tubing with no indication of fluid entry and no show of hydrocarbons. Re-set Model 'R' packer @ 3896'. Rig up National Cementers and squeezed Entrada perms with 35 sacks class 'A' low fluid loss cement. Released model "R" packer, trip out of hole. Rig up Blue Jet; perforated Morrison 3558-68 with 2 PF, 20 holes; 3448-55 2 PF, 14 holes; 3201-11 2 PF, 20 holes. SDON. (SSD)
- 09-28-79 Rig up Model 'R' packer and Baker Model 'C' retrievable bridge plug. Released bridge plug @ 3650 ft. Set Model 'R' @ 3524 ft. Swabbed down lower set of perforations. (SSD)
- 10-02-79 Swab back load from zone 3201-11 ft. Holding fluid level @ 700 ft. while pulling from packer @ 3100+. Fluid is estimated 70% salt water, 30% gas. Well gassing steady between runs making estimated 30 MCF/day. Released packer and retrieved bridge plug. Released plug @ 3650 ft. K.B. Set model 'R' @ 3470 ft. K.B. Rig up Dowell and pumped into 2-7/8" to frac zone @ 3558-68 ft. Communicated to surface on backside. Moved model 'R' to 3502 ft. K.B. and communicated again. Moved model 'R' to 3534 ft. K.B. and communicated again. Tripped out with packer. SDON. (SSD)
- 10-03-79 Trip in with retrieving head, retrieved bridge plug and trip out of hole. Rig up model 'R'; run in, set model 'R' @ 3470 K.B. Rig up National Cementers. Mix 15 sacks class 'A' low fluid loss cement. Displace cement with 1 bbl. in perforations 3558-68 ft. Pull model 'R' packer and re-set @ 3337 ft. Mix 20 sacks class 'A' cement and displace with 1 bbl. inside perms 3448-55 K.B. Squeeze both lower set perforations. SDON. (SSD)
- 10-04-79 Re-set model 'R' packer 3123 ft. K.B. Mix 35 sacks class 'A' low fluid loss cement. Displaced to 3153 ft. Released model 'R' packer and pulled to 2900 ft. Reversed tubing clean and bradenhead squeezed upper set of perforations to 1500 lbs. WOC. Shut in over night. (SSD)
- 10-05-79 Trip out w/ Mod. 'R' packer. Ran sinker bar found PBTD @ 3100 ft. K.B. Ran 6-1/8" bit with casing scraper. Tagged cement @ 3111 ft. K.B. Drilled cement to 3220 ft. K.B. and fell through. Circulated hole clean. Pressured to 1500 PSIG. Bled to 1350 in 1 minute to 1300 in 2 minutes to 1275 in 4 minutes to 1270 in 10 minutes. Tagged next cement @ 3385 ft. K.B. (SSD)

- 10-06-79 Drilling on 2nd and 3rd squeeze. Poor cement, washing down through stringers. Fell through @ 3467 ft. K.B. Washed to 3580 ft. K.B. Pressure test pump in 2 BPM @ 700 PSIG. Trip out w/ bit; run in open ended to 3575 ft. K.B. Rig up National Cementers and mix 85 sx class 'A' low fluid loss and spot from 3575' to 3100'. Squeezed Morrison perfs @ 1500 PSIG. Moved 4 bbls cement away. Left cement from 3200' to 3575' K.B. Shut in. (SSD)
- 10-08-79 Tagged cement @ 3210 ft. K.B. Drilled hard cement to 3390. Shut down to train crew on H<sub>2</sub>S. (SSD)
- 10-09-79 Drilled out hard cement to 3513 ft. Pressure tested upper two perforated intervals to 1500 PSIG. Pressure held steady. Raised pressure to 2000 PSIG and pipe rams started leaking badly, so test inconclusive. Drilled out to 3580 ft. K.B. Pressured Morrison squeeze to 1500 PSIG. Held good. Tagged Entrada squeeze; drilling fairly soft cement. Bit balled up. Trip out of hole. SDON. (SSD)
- 10-10-79 Changed out pipe rams and rigged up H<sub>2</sub>S Detection equipment. Pressured under blind rams to 1500 PSIG. Bled off downhole to 800 PSIG in 10 min. Had drilled out to 3950 ft. K.B. Probably squeeze hole from 3775 to 3652 leaking. Tagged cement on Entrada squeeze @ 3940 ft. K.B. Drilled out Entrada squeeze and pressure tested. Pumped into perfs 3 BPM @ 1100 PSIG. Shut down and pressure bled to 300 PSIG in one min., falling to nothing in 4 minutes. Tagged Shinarump squeeze and drilled out 45 ft. of cement, estimate 25 ft. left. SDON. (SSD)
- 10-11-79 Drilled out remainder of Shinarump cement. Ran into Penn cement plug and drilled to 8950 ft. (JGM)
- 10-12-79 Come out of hole with bit. Rigged up Blue Jet and perforated 8874 - 8904 ft. with one 3-1/2" glass jet per foot. (One shot failed to fire leaving 29 net holes.) Ran in hole with tubing and model 'R' packer. Set at 8600 ft. (JGM)
- 10-13-79 Swab Penn. perfs down; making estimated 70 MCF/day sour gas. Solid fluid level @ 7300 ft. with pocketed column up to surface. Bad spot in pipe @ around 7200 ft. that tears up swab cuts. Unable to swab deeper. Shut in over weekend. (SSD)
- 10-15-79 Found 500 PSIG shut in on tubing. Blew well down and found fluid @ 1200 ft. Made several swab runs and well had no indication of kicking off. Rigged up Dowell and loaded backside w/ 78.5 bbls. fluid level @ 1130 ft. below surface. Tied on to 2-7/8" tubing. Loaded tubing, pressured up, broke down. Pumping in @ 8.5 BPM @ 4000 PSIG. Start acid, pumped 2500 gal. 15% HCL w/ inhibitor and 1 gal/1000 surfactant. Dumped 500 lbs. unibeads and pumped 2500 more gallons 15% HCL. Over flushed with ten bbls. water. Started slow communication on backside with 35 bbls of flush to go. ISDP 1300 PSIG. Down to 1000 PSIG in 15 minutes. Blow tubing down. Swab 215 bbls back load. Rec. estimated 160 bbls. SDON. (SSD)

- 10-16-79 SIP 500 PSIG. Fluid level @ 1400 ft. Swabbed all day. Well making estimated 1 MMCF behind swab dieing to 100 MCF in 10-15 minutes where holds steady. Last two runs gas and water both decreased. Shut in. (See swab report) (SSD)
- 10-17-79 Found 400 PSIG on tubing. Slight pressure on casing. Filled casing w/ 105 bbls water. Fluid level @ 1515 ft. Released mod 'R' packer and trip out of hole; packer ok. Rig up Blue Jet and perforated 8374-88 per TDT-K Log w/ 2 PF 3-1/2" glass jets .500" hole 28 holes. Rig up Baker mod 'R' packer and mod 'C' bridge plug. Run in hole 30 stands. Drop standing valve and pressure up to 3500 PSIG. Held ok, ran 30 more stands pressured to 3500 PSIG. Bled to 3000 in 5 minutes. SDON. (SSD)
- 10-18-79 Found 600 PSIG on tubing. Unable to blow down. Pumped 215 bbls H<sub>2</sub>O down backside and finally blew down. Making sweet gas. Trip out to remove standing valve, unable to fish. Start in hole w/ packer and bridge plug. Left backside open over night. (SSD)
- 10-19-79 Well making 70 MCF/day sweet gas, no water. Install tubing disc and ran tubing to 90.5 stands in. Disc broke and tubing started flowing. Made up stabbing valve, shut in. Set bridge plug @ 5590' K.B. Blew tubing and casing down immediately. Set mod 'R' packer @ 5558' K.B. Tubing dead, casing making slight blow sweet gas. Rig up Dowell and pumped into tubing 5.5 BPM @ 1000 PSIG for 25 bbls. Shut down and loaded backside. Reset bridge plug @ 5560 ft. and packer @ 5530 ft. Pressure to 5500 PSIG; held okay. Still gassing out of casing. Move bridge plug to 8830 ft. packer to 8430 ft. Pressure to 5500 PSIG. Lost 2500 lbs in one minute. Reset bridge plug to 8468 ft. and packer to 8430 ft. Pumped in and communicated @ 2000 PSIG and 3 BPM. Reset packer to 8460 ft. Pressured to 5500 PSIG bled 2000 lbs in 1 minute. Comm. to surface. Reset bridge plug @ 132 stands and packer @ 131.5 stands. Pressured to 5500. Lost 2500 PSIG in one minute. Drop standing valve. Pressure to 5500 PSIG; lost 2500 PSIG in one min. Pressure to 5800 PSIG and opened hole in tubing. SDON. (SSD)
- 10-20-79 Slight blow on casing. Tubing dead. Pull tubing and found hole in 45 stand (2777 ft.) Body split. Trip out, prepare to hydrotest. SDOWE.(SSD)