submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

1. **Type of Well**
GAS

5. **Lease Number**
SF-078120A

6. **If Indian, All. or Tribe Name**

7. **Unit Agreement Name**

2. **Name of Operator**
BURLINGTON RESOURCES OIL & GAS COMPANY

RECEIVED
SEP - 1 1999
OIL CON. DIV.
DIST. 3

8. **Well Name & Number**
Newberry #12M

3. **Address & Phone No. of Operator**
PO Box 4289, Farmington, NM 87499 (505) 326-9700

9. **API Well No.**
30-045-29568

4. **Location of Well, Footage, Sec., T, R, M**
970' FSL, 1125' FEL, Sec. 4, T-31-N, R-12-W, NMPM

10. **Field and Pool**
Blanco MV/Basin DK
31N12W4P Mancos

11. **County and State**
San Juan Co., NM

12. **CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA**

Type of Submission	Type of Action		
_X_ Notice of Intent	___ Abandonment	___ Change of Plans	
	___ Recompletion	___ New Construction	
___ Subsequent Report	___ Plugging Back	___ Non-Routine Fracturing	
	___ Casing Repair	___ Water Shut off	
___ Final Abandonment	___ Altering Casing	___ Conversion to Injection	
	_X_ Other - Pay Add		

13. **Describe Proposed or Completed Operations**

It is intended to add pay to the existing wildcat Mancos formation of the subject well per the attached procedure and wellbore diagram. Continue to produce the Mancos only for six to nine months to determine production rates and reservoir pressures. After the test period, the Mesaverde formation will be completed. The Dakota formation will remain isolated below the CIBP at this time. A trimingle application will be applied for when all formations have been completed successfully.

DHC 1855

14. **I ~~hereby certify~~ that the foregoing is true and correct.**

Signed _____ Title Regulatory Administrator Date 8/3/99

vkh

(This space for Federal or State Office use)
APPROVED BY _____ Title _____ Date AUG 3 1999
CONDITION OF APPROVAL, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NMOCD

Newberry # 12M
Mancos Shale Completion Procedure
Unit P, Sec 04, T31N R12W
San Juan County, NM
Latitude: 36 Deg., 55.4 Min
Longitude: 108 Deg., 5.7 Min.

Summary:
The subject well is a 1998 MV/DK PUD Team new drill. The Basin Opportunity Mancos Shale Team completed one interval in the Mancos in October. This work was done because of an oil/gas show while drilling through the Mancos. After completion, the well made 50-100 BCD. Currently the Mancos is producing 10-15 Bbls per day. After reprocessing the FMI log, it was found that there was potential pay that was bypassed. With agreement from the PUD Team and Drilling, we will move back on this well and perform further testing on the zones that were bypassed. The Mancos will be perforated and fracture stimulated in two (2) stages, both stages will be treated with 100K# of sand in Dowell's ClearFRAC. The well will then be cleaned-up, tubing landed in the Mancos and placed on production for 2-3 months to allow for analysis of the zones. Before turning the well over to the PUD Team, a build up test will be performed and production logs run.

Mancos Shale Data Gathering:
The subject well is one of four Mancos Shale data wells. Additional time will be spent to gather necessary data needed to quantify the significance of the Mancos Shale interval basin wide. Pre-frac injection and breakdown tests will be performed on each interval to characterize natural fracturing and measure fracture pressure throughout the Mancos interval. Each stage will be stimulated with 100K# sand in Dowell's ClearFRAC. The well will be flowed back and cleaned up and flow rates will be measured through a 3 phase separator. Separator samples will be taken for recombination and a buildup will be performed after each stage.

- Comply with all NMOCD, BLM and BR regulations. Conduct daily safety meetings for all personnel on location. Notify BR regulatory (Peggy Bradfield 326-9727) and the appropriate Regulatory Agency prior to pumping any cement job and after CBL is run. If an unplanned cement job is required, approval is required before the job can be pumped. If verbal approval is obtained, document the approval in Dims. Allow adequate notice prior to the pump time for the Agency to witness the cementing operation.
- Inspect location and wellhead and install rig anchors prior to rig move.
- Construct blow pit.
- Deliver to location the following equipment:
  - 8 – 400 Bbl frac tanks, **fill with 4% KCl**
  - 7000' – 2-7/8" 6.5# N80 buttress tubing
  - Rod basket and stops for ¾" rods, approx 60 ¾" rods
  - 10,000 psi Frac valve

1. MIRU. Record and report SI pressures on tubing, casing, and bradenhead. Blow down casing and tubing. Kill well. ND WH, NU BOP.

2. TOOH with 232 - ¾" rods, 1-4' pony, 22' polished rod, and pump. Lay down rods in rod basket. Have Energy Pump on location to service pump as needed.

3. TOOH with 2-3/8" 4.7# J-55 tubing and standback. Visually inspect tubing, replace any bad joints.

4. TIH with 4-1/2" cement retainer on 2-3/8" tbg. Set retainer at 5650'.

5. RU cement company. Establish rate into perfs (5728'-5812'). Pump sufficient volume of Class B neat cement with 2% CaCl (estimated volume 100 sxs) to obtain a walking squeeze to 2000 psi. Sting out of retainer. TOOH with 2 joints. Reverse out 2 tubing volumes. TOOH. WOC 12 hrs.

6. TIH with 3-7/8" bit on 2-3/8" tbg. Drill out cement and retainer to 5820'. Close pipe rams and pressure test casing and squeeze holes to 1000 psi. Open rams, release pressure, and continue drilling to CIBP at 6000'. Drill out CIBP and clean out to PBTD (7245'). TOOH.

***NOTE: Dakota will be open at this time and may be making gas, kill well as necessary.**

7. TIH with 4-1/2" mechanical set CIBP and packer combination. Set CIBP at 6950'. Set pkr at 6940'. Pressure test CIBP to 4300 psi. Spot 500 gal 15% Acetic acid. TOOH.

Pre-Frac Injection\Stress Testing - 1st Stage

8. RU wireline. RIH w/ CCL on top of perforating guns**. Perforate the Lower Mancos Shale interval with 3-1/8" Hollow Steel Carrier Select Fire guns w/ HSC-3125-306T charges. These are 12 gram charges with a 0.30" hole and 17.48" penetration. Shoot 20 holes top down in Acetic Acid at the following depths: **6584', 6592', 6614', 6624', 6654', 6664', 6674', 6694', 6704', 6714', 6788', 6796', 6814', 6822', 6844', 6852', 6860', 6892', 6902', 6912'** RD wireline company.

** **NOTE:** Tie into GR\Platform Express Open Hole Log Suite

9. TIH w/ 4-1/2" pkr on 2-3/8" tbg and set at **6400'**. RU stimulation company. Pressure test surface lines to **7100** psi. Breakdown perforations @ 6-8 BPM w/ 300 gal. of 10% Acetic Acid, dropping forty (40) 7/8" 1.1 SG RCN balls evenly displaced through acid. Displace acid w/ approximately 33 BBL of 4% KCL with friction reducer to bottom perforation. Balloff to maximum downhole pressure of **4300** psi (90% of burst in 4-1/2" 10.5# J-55 csg.). Maximum surface pressure is **6100** psi (80% of burst in 2-3/8" 4.7# J-55 tubing). Max out injection rate as pressure allows. Record breakdown pressure, ball action and ISIP. Release pkr and knock balls off of perforations.

10. Rest pkr to 6550'. Attempt to swab well in, with swab cups on slickline. If well is making oil, TOOH w/ workstring and standback, then proceed to step 11 and then 12. If no oil, blow well dry (approximately 4-8 hrs), TOOH w/ workstring and standback, then proceed to step 11 and then 13.

11. RU wireline company. RU and TIH with "Cased-Hole Test Assembly" on 2-3/8" 4.7# J-55 tbg. (See attached "Cased-Hole Test Configuration" assembly). Assembly consists of: pressure gauge, 10' perforated pup joint, bridge plug, packer, pressure gauge in carrier, XN seating nipple, and 2-3/8" 4.7# J-55 workstring. The following table lists pkr/bridge plug (injection test assembly) settings and perforation intervals that will be tested. Tie into OH log prior to setting pkr/bridge plug assembly. RU **5000** psi packoff w/ pump-in tee.

Pkr Depth	BP Depth	Perf Interval (Zone)
6740'	**6930'**	**6788', 6796', 6814', 6822', 6844', 6852', 6860', 6892', 6902', 6912'**
6500'	**6740'**	**6584', 6592', 6614', 6624', 6654', 6664', 6674', 6694', 6704', 6714'**

NOTE: THE STRESS TESTING WILL FOLLOW THE INJECTION TESTING PRIOR TO MOVING THE TEST ASSEMBLY TO NEXT APPROPRIATE SETTING DEPTH. THE SETTING DEPTHS FOR THE STRESS TEST ARE IDENTICAL TO THE INJECTION TEST.

12. If well flows, proceed to step 12a, if there is no flow, proceed to step 13.

12a. Flow well through a 3 phase separator and Merla Tester until rates and pressures stabilize on a constant choke setting. Measure and record all gas and liquid rates, wellhead pressures, and separator conditions at 30 minute intervals for approximately 4-24 hrs. Obtain samples of all produced fluids. Gather separator hydrocarbon samples for recombination (Southern Petroleum Laboratories will have a representative on site for the sampling). Shut well in at surface. Under lubricator, lower SRO gauge on wireline to shut well in downhole for a buildup (approximately 4-24 hrs). Once gauge is landed, fill tubing and hold a positive differential pressure across gauge. Once buildup is complete, raise SRO gauge 20' above XN seating nipple.

12b. **STRESS TEST** - Inject 4% KCl @ **0.25-0.50 GPM** (recirc manifold needed) @ **4300**** psi down 2-3/8" 4.7# J-55 workstring, or until pressure exceeds frac gradient. Injection time will be approximately 1-2 minutes per setting. Observe pressure break in wireline truck for 30 minutes and record results. Shut well in at surface. Under lubricator, lower SRO gauge on wireline to shut well in downhole for a buildup (approximately 4-24 hrs). Once gauge is landed, fill tubing and hold a positive differential pressure across gauge. Flowback to pit before each test. **Only move test assembly after each injection & stress test are completed.**

****NOTE: EXCEED FRAC GRADIENT OF AT LEAST .65 PSI/FT ON EACH INTERVAL TESTED. PUMP AT CONSTANT RATE.**

13. If well does not flow oil, proceed to step 13a.

13a. RU stimulation company to inject 4% KCl down frac valve. Hold pre-job safety meeting. Pressure test surface lines to **7100** psi. **INJECTION TEST** - Inject 4% KCl @ **0.25-1 GPM** (recirc manifold needed) @ **4000**** psi down 2-3/8" 4.7# J-55 workstring. Injection time will be approximately 2-4 hrs per setting. Under lubricator, lower SRO gauge on wireline to shut well in downhole for a buildup (approximately 2-4 hrs). Once gauge is landed, fill tubing and hold a positive differential pressure across gauge. Once buildup is complete, raise SRO gauge 20' above XN seating nipple. Flowback to pit before next test. Do not initiate injection test without Production or Reservoir Engineer present. Leave annulus open at all times and monitor w/ Merla Tester.

****NOTE: DO NOT EXCEED FRAC GRADIENT OF .65 PSI/FT ON ANY INTERVAL TESTED. PUMP AT CONSTANT RATE.**

13b. **STRESS TEST** - Inject 4% KCl @ **0.25-0.50 GPM** (recirc manifold needed) @ **4500**** psi down 2-3/8" 4.7# J-55 workstring, or until pressure exceeds frac gradient. Injection time will be approximately 1-2 minutes per setting. Observe pressure break in wireline truck for 30 minutes and record results. Under lubricator, lower SRO gauge on wireline to shut well in downhole for a buildup (approximately 4-24 hrs). Once gauge is landed, fill tubing and hold a positive differential pressure across gauge. Flowback to pit before each test. **Only move test assembly after each injection & stress test are completed.**

****NOTE: EXCEED FRAC GRADIENT OF AT LEAST .65 PSI/FT ON EACH INTERVAL TESTED. PUMP AT CONSTANT RATE.**

14. Follow same procedure listed in step #12 or #13 (depending on the flowing conditions of each interval) on each pkr/bridge plug setting (injection test assembly). Unseat injection test assembly on each setting depth listed in table and move uphole at new depth and reset pkr and plug. Flowback to pit before next test.

15. Unseat injection test assembly. TOOH with 2-3/8" 4.7# J-55 workstring and pkr/bridge plug combination. Lay down injection test assembly and stand back 2-3/8" 4.7# J-55 workstring. RD wireline company.

1st Stage – Lower Mancos Shale

16. RU wireline and RIH w/ Protechnics RTD tool. Wireline set top of tool @ +/- **6730'**. This tool will remain in the hole throughout the stimulation and flowback. RD wireline company.

17. TIH with 4-1/2" pkr on 2 jts 2-3/8" N80 tbg and 2-7/8" 6.5# N80 buttress frac string. Set pkr at 6400'.

18. RU stimulation company. Pressure test surface lines to **9500** psi prior to stimulation. With 4000 gal of the pad fluid, perform a minifrac and step down test. Then fracture stimulate in 1 to 4 ppg stages @ 20 BPM constant downhole rate with 10gal/1000gal ClearFRAC and 100,000# 20/40

Tempered LC sand. **Increase rate as pressure allows.** Flush to 1 Bbl short of the top perf @ +/- **6584'**. Refer to frac schedule enclosed. Maximum bottomhole treating pressure is **4300** psi (90% of burst). Estimated friction pressure is approximately **6700** psi @ 20 BPM. Maximum surface treating pressure is **8500** psi. Stimulation will be traced with 3 radioactive tracers by Protechnics.

19. Record ISIP, 5, 10 and 15 minute shut-in pressures. Gather and measure remaining tank fluid prior to flowback. Begin flowback when stimulation company is rigged down. Open well to rig tanks through separator, monitor and record fluid recovery. Do not shut well in during flowback. TOOH with 2-7/8" frac string and standback.

20. After well cleans up and pressures allow, RU wireline, RIH, and wireline retrieve RTD tool @ +/- **6730'**. POOH.

21. TIH w/ 150' of 2-3/8" tailpipe, 4-1/2" pkr (with MRO gauge in bundle carrier above pkr), and the remaining 2-3/8" tbg to set packer at 6550'. RU wireline unit. RIH with swab cups and swab well in to flow back and clean up. Carefully measure and record load recovery through the separator to the rig tanks.

22. If flow is established, proceed to step 23. If flow cannot be established, TOOH and proceed to step 24.

23. Flow well through a 3 phase separator and Merla Tester until rates and pressures stabilize on a constant choke setting. Measure and record all gas and liquid rates, wellhead pressures, and separator conditions at 15 minute intervals for approximately 2 hrs. Obtain samples of all produced fluids. Gather separator hydrocarbon samples for recombination (Southern Petroleum Laboratories will have a representative on site for the sampling). Lower SRO gauge on wireline to shut well in downhole for a buildup (approximately 4 hrs). Once gauge is landed, fill tubing and hold 500 psi at surface. Release SRO gauge, release pkr, TIH to retrieve RBP. TOOH.

24. TIH with 4-1/2" mechanical set CIBP and packer combination. Set CIBP @ +/- **6450'**. Set pkr at 6440'. Pressure test CIBP to 4300 psi. Spot 500 gal 15% Acetic Acid. TOOH.

Pre-Frac Injection\Stress Testing – 2nd Stage

25. RU wireline. RIH w/ CCL on top of perforating guns**. Perforate the Upper Mancos Shale interval with 3-1/8" Hollow Steel Carrier Select Fire guns w/ HSC-3125-306T charges. These are 12-gram charges with a 0.30" hole and 17.48" penetration. Shoot 32 holes top down in Acetic Acid at the following depths: **5812', 5822', 5834', 5846', 5858', 5896', 5908', 5920', 5946', 5958', 6036', 6048', 6060', 6084', 6096', 6117', 6124', 6143', 6152', 6173', 6182', 6234', 6246', 6257', 6263', 6272', 6317', 6327', 6342', 6348', 6358', 6366'** RD wireline company

** **NOTE:** Tie into GR\Platform Express Open Hole Log Suite

26. TIH w/ 4-1/2" pkr on 2-3/8" tbg and set at **5785'**. RU stimulation company. Pressure test surface lines to **7100** psi. Breakdown perforations @ 6-8 BPM w/ 300 gal. of 15% Acetic Acid, dropping sixty (60) 7/8" 1.1 SG RCN balls evenly displaced through acid. Displace acid w/ approximately 30 BBL of 4% KCL to bottom perforation. Balloff to maximum downhole pressure of **4300** psi (90% of burst in 4-1/2" 10.5# J-55 csg.). Maximum surface pressure is **6100** psi (80% of burst in 2-3/8" 4.7# J-55 tubing). Max out injection rate as pressure allows. Record breakdown pressure, ball action and ISIP. Release pkr and knock balls off of perforations.

27. Reset packer to 5785'. Attempt to swab well in, with swab cups on slickline. If well is making oil, TOOH w/ workstring and standback, then proceed to step 28 and then 29. If no oil, blow well dry (approximately 4-8 hrs), TOOH w/ workstring and standback, then proceed to step 28 and then 30.

28. RU wireline company. RU and TIH with "Cased-Hole Test Assembly" on 2-3/8" 4.7# J-55 tbg. (See attached "Cased-Hole Test Configuration" assembly). Assembly consists of: pressure gauge, 10' perforated pup joint, bridge plug, packer, pressure gauge in carrier, XN seating nipple, and 2-3/8" 4.7# J-55 workstring. The following table lists pkr/bridge plug (injection test assembly) settings and perforation intervals that will be tested. Tie into OH log prior to setting pkr/bridge plug assembly. RU **5000** psi packoff w/ pump-in tee.

Pkr Depth	BP Depth	Perf Interval (Zone)
6200'	**6390'**	**6234', 6246', 6257', 6263', 6272', 6317', 6327', 6342', 6348', 6358', 6366'**
6000'	**6200'**	**6036', 6048', 6060', 6084', 6096', 6117', 6124', 6143', 6152', 6173', 6182'**
5790'	**5980'**	**5812', 5822', 5834', 5846', 5858', 5896', 5908', 5920', 5946', 5958'**

NOTE: THE STRESS TESTING WILL FOLLOW THE INJECTION TESTING PRIOR TO MOVING THE TEST ASSEMBLY TO NEXT APPROPRIATE SETTING DEPTH. THE SETTING DEPTHS FOR THE STRESS TEST ARE IDENTICAL TO THE INJECTION TEST.

29. If well flows, proceed to step 29a, if there is no flow, proceed to step 30.

29a. Flow well through a 3 phase separator and Merla Tester until rates and pressures stabilize on a constant choke setting. Measure and record all gas and liquid rates, wellhead pressures, and separator conditions at 30 minute intervals for approximately 4-24 hrs. Obtain samples of all produced fluids. Gather separator hydrocarbon samples for recombination (Southern Petroleum Laboratories will have a representative on site for the sampling). Shut well in at surface. Under lubricator, lower SRO gauge on wireline to shut well in downhole for a buildup (approximately 4-24 hrs). Once gauge is landed, fill tubing and hold a positive differential pressure across gauge. Once buildup is complete, raise SRO gauge 20' above XN seating nipple.

29b. **STRESS TEST** - Inject 4% KCl @ **0.25-0.50 GPM** (recirc manifold needed) @ **4500**** psi down 2-3/8" 4.7# J-55 workstring, or until pressure exceeds frac gradient. Injection time will be approximately 1-2 minutes per setting. Observe pressure break in wireline truck for 30 minutes and record results. Shut well in at surface. Under lubricator, lower SRO gauge on wireline to shut well in downhole for a buildup (approximately 4-24 hrs). Once gauge is landed, fill tubing and hold a positive differential pressure across gauge. Flowback to pit before each test. **Only move test assembly after each injection & stress test are completed.**

****NOTE: EXCEED FRAC GRADIENT OF AT LEAST .65 PSI/FT ON EACH INTERVAL TESTED. PUMP AT CONSTANT RATE.**

30. If well does not flow oil, proceed to step 30a.

30a. RU stimulation company to inject 4% KCl down frac valve. Hold pre-job safety meeting. Pressure test surface lines to **7100** psi. **INJECTION TEST** - Inject 4% KCl @ **0.25-1 GPM** (recirc manifold needed) @ **4000**** psi down 2-3/8" 4.7# J-55 workstring. Injection time will be approximately 2-4 hrs per setting. Under lubricator, lower SRO gauge on wireline to shut well in downhole for a buildup (approximately 2-4 hrs). Once gauge is landed, fill tubing and hold a positive differential pressure across gauge. Once buildup is complete, raise SRO gauge 20' above XN seating nipple. Flowback to pit before next test. Do not initiate injection test without Production or Reservoir Engineer present. Leave annulus open at all times and monitor w/ Merla Tester.

****NOTE: DO NOT EXCEED FRAC GRADIENT OF .65 PSI/FT ON ANY INTERVAL TESTED. PUMP AT CONSTANT RATE.**

30b. **STRESS TEST** - Inject 4% KCl @ **0.25-0.50 GPM** (recirc manifold needed) @ **4500**** psi down 2-3/8" 4.7# J-55 workstring, or until pressure exceeds frac gradient. Injection time will be approximately 1-2 minutes per setting. Observe pressure break in wireline truck for 30 minutes and record results. Under lubricator, lower SRO gauge on wireline to shut well in downhole for a buildup (approximately 4-24 hrs). Once gauge is landed, fill tubing and hold a positive differential pressure across gauge. Flowback to pit before each test. **Only move test assembly after each injection & stress test are completed.**

****NOTE: EXCEED FRAC GRADIENT OF AT LEAST .65 PSI/FT ON EACH INTERVAL TESTED. PUMP AT CONSTANT RATE.**

31. Follow same procedure listed in step #29 and #30 on each pkr/bridge plug setting (injection test assembly). Unseat injection test assembly on each setting depth listed in table and move uphole at new depth and reset pkr and plug. Flowback to pit before next test.

32. Unseat injection test assembly. TOOH with 2-3/8" 4.7# J-55 workstring and pkr/bridge plug combination. Lay down injection test assembly and stand back 2-3/8" 4.7# J-55 workstring. RD wireline company.

2nd Stage – Upper Mancos Shale

33. RU wireline and RIH w/ Protechnics RTD tool. Wireline set top of tool @ +/- **5990'**. This tool will remain in the hole throughout the stimulation and flowback. RD wireline company.

34. TIH with 4-1/2" pkr on 2 jts 2-3/8" N80 tbg and 2-7/8" 6.5# N80 buttress frac string. Set pkr at 5700'.

35. RU stimulation company. Pressure test surface lines to **9500** psi prior to stimulation. With 4000 gal of the pad fluid, perform a minifrac and step down test. Then fracture stimulate in 1 to 4 ppg stages @ 20 BPM constant downhole rate with 10gal/1000gal ClearFRAC and 100,000# 20/40 **Tempered LC** sand. **Increase rate as pressure allows.** Flush to 1 Bbl short of the top perf @ +/- **5812'**. Refer to frac schedule enclosed. Maximum bottomhole treating pressure is **4300** psi (90% of burst). Estimated friction pressure is approximately **6300** psi @ 20 BPM. Maximum surface treating pressure is **8500** psi. Stimulation will be traced with 3 radioactive tracers by Protechnics.

36. Record ISIP, 5, 10 and 15 minute shut-in pressures. Gather and measure remaining tank fluid prior to flowback. Begin flowback when stimulation company is rigged down. Open well to rig tanks through separator, monitor and record fluid recovery. Do not shut well in during flowback. TOOH with 2-7/8" frac string and standback.

37. After well cleans up and pressures allow, RU wireline, RIH, and wireline retrieve RTD tool @ +/- **5990'**. POOH.

38. TIH w/ 400' of 2-3/8" tailpipe, 4-1/2" pkr (with MRO gauge in bundle carrier above pkr), and the remaining 2-3/8" tbg to set packer at 5700'. RU wireline unit. RIH with swab cups and swab well in to flow back and clean up. Carefully measure and record load recovery through the separator to the rig tanks.

39. Once flow is established up the tbg, shut well in. RU wireline unit under packoff. RIH with SRO gauge to +/- 5700'. Allow 30 min for gauge to equalize. If flow cannot be established, proceed to step 41.

40. Flow well through a 3 phase separator and Merla Tester until rates and pressures stabilize on a constant choke setting. Measure and record all gas and liquid rates, wellhead pressures, and

separator conditions at 15 minute intervals for approximately 2 hrs. Obtain samples of all produced fluids. Gather separator hydrocarbon samples for recombination (Southern Petroleum Laboratories will have a representative on site for the sampling). Lower SRO gauge on wireline to shut well in downhole for a buildup (approximately 4 hrs). Once gauge is landed, fill tubing and hold 500 psi at surface. Release gauge, release pkr, TIH to retrieve RBP. TOOH.

41. TIH w/ 3-7/8" bit and 2-3/8" 4.7# J-55 workstring and clean up to CIBP @ +/- **6450**' with foam/mist.

42. Drill up CIBP @ +/- **6450**' w/ foam/mist and CO to CIBP @ **6950'****.

**** NOTE: This is the CIBP that separates the Mancos interval from the Dakota.**

43. RU Protechnics to run after frac log.

44. Broach in tubing on sandline. TIH with one joint of 2-3/8", 4.7#, J-55 tubing with purge valve, 1 tail joint, 6' perforated sub, seating nipple, 8 joints of tubing, 2.375" x 4.5" tubing anchor, and the remaining 2-3/8" production tubing. Land tubing @ +/- **6912'**. Kill well.

45. ND BOP. Set tbg anchor. NU wellhead.

46. TIH with pump and rods. Configuration is as follows: 8' sand screen, insert pump 2" x 1.5" x 16' RWAC, max stroke 113", pin size ¾", approximately 273 ¾" rods, 1 4' pony, and 22' of polished rods with liner. Pump is a top hold down pump, supplied by Energy Pump and Supply.

47. RD and MOL.

48. RU construction crew to set up pump jack and space out rods.

Post-Frac Injection Testing – Entire Mancos Interval

NOTE: THE POST-FRAC INJECTION TESTING WILL BE PERFORMED AFTER THE WELL HAS BEEN ON PRODUCTION FOR APPROXIMATELY 90 DAYS. AT THAT TIME, A POST-FRAC INJECTION TESTING PROCEDURE WILL BE WRITTEN.

Approve: _____ 7/11/99
Team Leader

Approve: _____ 6/30/99
Drilling Superintendent

Recommend: _____
Production Engineer 6-24-99

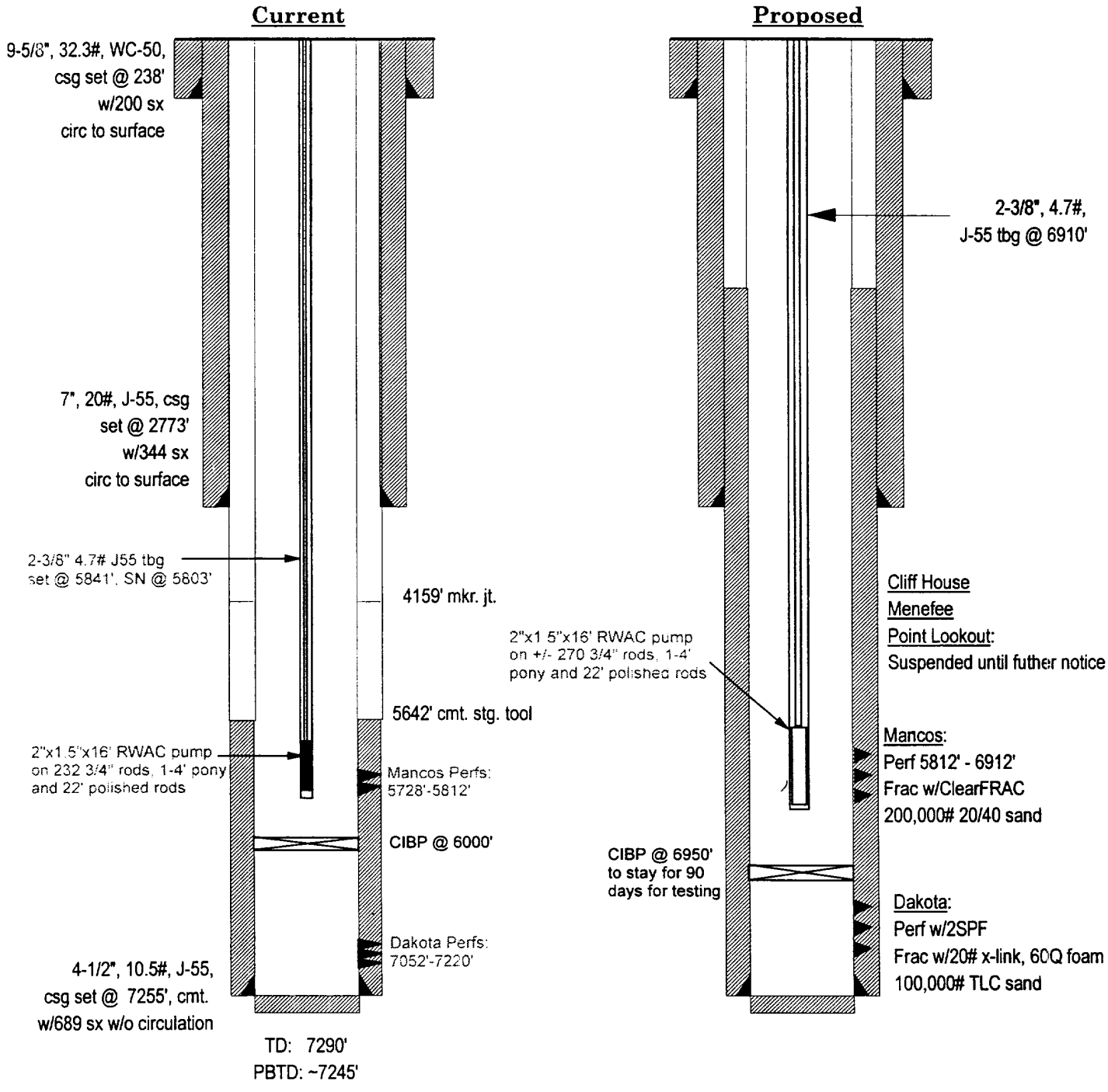
VENDORS:

Wireline (Injection, Stress & Perf):	Schlumberger	325-5006
Cased-hole Test Assembly:	Schlumberger	325-5006
Stimulation:	Dowell	325-5096
Chemical Cutting:	Wireline Specialties	327-7141
Flowback Service:	D.C. Production Services	1-800-551-3406
Pre-Frac Analysis:	S.A. Holditch & Assoc.	(412) 787-5403
PVT Sampling	Southern Petroleum Laboratories	326-2588

Bobby Goodwin Home 599-0992 Office 326-9713 Pager 564-7096

NEWBERRY #12M

Blanco Mesaverde / Basin Dakota
Unit P, Section 4, T31N, R12W
Rio Arriba County, NM
Elevation: 6107' GL, 6119' KB
LAT: 36° 55.4' / LONG: 108° 5.7'
date spud: 5/31/98



BURLINGTON RESOURCES
06/15/98: dla