Federal 11-90-7 P&A.
Gunnison Energy LLC
May 15, 2015
Rev 2

Status:

GELLC requests approval to abandon the Federal 11-90-7 well. The well may be replaced in the future with a deeper penetrating horizontal well following evaluation of other proposed wells in the newly formed Sheep Park II unit. This well has 10 ¾ surface pipe set at 160 ft. A 7 7/8 hole was drilled to 7150 ft. A 4 ½, 11.6 ppf production string was run to 7144 ft.

MIT results: A RBP was set at 6380 ft (top Perf is at 6467). The casing was pressure tested to 1500 psi with a tubing conveyed packer to 3497 ft. The pressure held. After several attempt s to find the leaks it was obvious that there was more than one leak. Testing on the way down a slow collar leak was found at 440 ft. A CBL and a 40 arm caliper log were run. Top of cement was logged at 3852 ft. That ties in well with the 3497 ft pressure test of the casing. The 40 arm Caliper found holes at the following depths:

1338
1476
1594
1979
2021
2894

There are potential holes indicated by log at:

540
3097
3221
3343
3509 this hole must be real as it leaks on the packer test but it might be very small.
6414

May 13, 2015. Update

The well was temporarily abandoned December 8, 2014. The RBP at 6380 was left to secure the well from any crossflow. The casing integrity was pressure tested from 6380 ft. to 3497 ft. and it is good. Gunnison was given 6 months to correct or abandon. See the attached email:

You forwarded this message on 5/13/2015 10:11 AM.

rom: Andrews - DNR, David <david.andrews@state.co.us> Sent: Tue 12/9/2014 3:53 P
o: Mike Cleary
c: Brad Robinson; Lee Fyock; Patty Johnson; Dan McWilliams; Courtney Ahuja; Jay Krabacher; Andrew Stone - DNR; Leigh Bradshaw - DNR; Stuart Ellsworth - DNR; Jeremy Ferrin - DNR; Peter Gowen - DNR; Steve Labowskie - DNR
ubject: Re: MIT issue. API # 05 051 06008

Mike,

We discussed this internally today. I understand that GEC currently has a downhole plug set above the producing zone with annular cement coverage across and above the plug to prevent flow of oil or gas up the well. Per Rule 326.e.(1), "If an operator has performed a mechanical integrity test within the two years required for shut-in wells or the 30 days required for temporarily abandoned wells by this Rule, they will have six months from the date of the unsuccessful test to make repairs or plug and abandon the well." Please submit a Form 4 Sundry Notice with your remediation procedure or a Form 6 Notice of Intent to Abandon with your plugging procedure. Either way, Jay Krabacher will be responsible for the approval, and the work must be completed within the six-month period specified in the rule.

Thanks,

Dave

David D. Andrews, P.E., P.G.
Engineering Supervisor - Western Region

COLORADO
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Department of Natural Resources

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In May of 2015, GEC received notice that the unit had been formed and that the unit was in suspense. Therefore, with the extensive and pervasive deterioration of the production casing, it was decided to Plug and abandon this well because the leases would no longer be lost if the well was taken out of service..

The following is our P and A Procedure:

Well status: plug set with 127 joints of 2 3/8 tubing at 3936.62 ft. 126 joints are in the hole EOT is at 3905.87

1. Rig up completion rig
2. Nipple up BOP and check wellhead pressure
3. Test BOP to 3,000 psi.
4. Attempt to circulate the well.
5. Latch the RBP at 3936 ft.
6. Release and allow the rubber to relax.
7. POOH
8. RIH to 7144 ft.
9. Rig up black frac.
10. Set a balanced plug from 7144 to 6650 feet. This is a 7 ¾ bbl cement job (38 sxs of cement)
11. Pick up to 6400 ft and reverse. (you may not be able to reverse then go the long way.
12. Wait 4 hours and tag cement.
13. POOH

14. RIH with a Cement retainer on tubing .
15. Set at 6300 ft.
16. Sting in Establish pump in rate.
17. Mix and pump 4 bbls of cement
18. Spot cement and pump until squeeze pressure is noted.
19. Squeeze to 500 psi and bleed off pressure.
20. Record estimated cement volume below perfs.
21. Sting out.
22. Dump the rest of the cement on the Cement retainer
23. POOH to 5,000 ft and attempt to circulate.
24. POOH and pick up a cement retainer.
25. Set the retainer at 3960 ft.
26. Sting in and verify pressure test to 500 psi.
27. Sting out and pump balanced plug (#3) of 7 ¾ bbls cement (38 sack) neat cement on the plug.
28. POOH to 3200 feet and attempt to reverse or pump the long way.
29. Attempt to catch pressure and hold 200 psi on the plug.
30. Wait 4 hours and tag.
31. Pick up off the plug 30 feet and pump 500 ft. cement plug (#4). This is 7 ¾ bbls .
32. Pull up to 2800 feet and attempt to reverse or circulate the long way.
33. POOH and pick up a cement retainer.
34. Set the retainer at 2800 ft. Establish pump in rates
35. The bottom hole will be much cooler now.
36. Mix and pump 8 bbls of cement for plug #5
37. Attempt to squeeze the cement to 500 psi
38. Sting out and lay in a balanced plug with the rest of the cement
39. Pull up to 2300 feet
40. Attempt to put 500 psi on the squeeze. (there are holes in the casing so this may not work
41. Pull up to 1600 ft and circulate or reverse.
42. Tag cement after 6 hrs.
43. Pump 16 bbls of cement (plug #6)
44. POOH and shut in for night.
45. Attempt to squeeze 250 psi under blind rams
46. RIH
47. Tag cement
48. Close pipe rams
49. open casing head
50. Attempt to establish a squeeze pressure at ½ --1 BPM
51. Note if the well circulates
52. POOH
53. Set retainer #4 at 1300 ft- open casing head and attempt to circ or squeeze
54. Mix and pump 16 bbls of cement plug #6 , if it squeezes to 250 psi, sting out and set the rest as a balanced plug.

55. Top up plug #6
56. Release rig.
57. Excavate cellar
58. Cut casing 5 ft. down
59. Weld a cap plate on both strings with the API number, operator etc.
60. Bury the well.
61. Return work string to yard.
62. Clear the location.