

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

SE 078067

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

Carson

8. FARM OR LEASE NAME

Unit

9. WELL NO.

34-11

10. FIELD AND POOL, OR WILDCAT

Bisti - Pictured Cliffs

11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA

Section 11-T25N-R12W

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

6389 KB

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON*

REPAIR WELL

CHANGE PLANS

(Other) Recomplete as gas producer

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREATMENT

ALTERING CASING

SHOOTING OR ACIDIZING

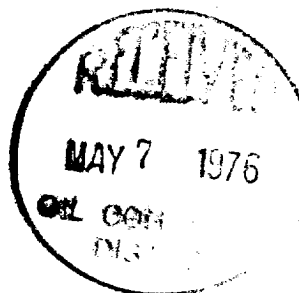
ABANDONMENT*

(Other)

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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 Recompletion Prognosis



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

SIGNED

J. W. Linnell

TITLE

Div. Opers. Engr.

DATE 5/5/76

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

cc: O&G Conservation Commission w/attachment

*See Instructions on Reverse Side

24# 8 5/8"
J-55 109'

C 100' SX

RECOMPLETION PROGNOSIS
CARSON UNIT 34-11
660' FSL & 1980' FEL
SECTION 11, T25N, R12W, NMPM
BISTI FIELD
SAN JUAN CO., NEW MEXICO

PERTINANT DATA:

ELEV; 6389' KB
KB-GL: 9'
TD: 5030'

Existing Perfs.

Proposed Perfs:

Completion date: 9-25-59

AFE (P&A Gallup):
EST. COST (P&A Gallup): \$12,200
AFE (Recompl. in Pictured Cliffs):
Shell's Share: 100%

Pictured Cliffs

Note: All depths refer to Welex's SP-Contact
caliper log dated 9-7-59(1"=100').

CURRENT STATUS:

Producing 4 BDO + 27 BDW.

PROPOSED WORK:

P&A the Gallup prod. interval. Perforate, frac.
treat and test the Pictured Cliffs gas interval
for productivity.

PROCEDURE:

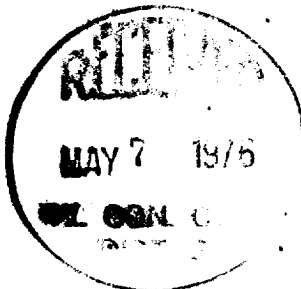
1. Move in WOR.
2. Install and test BOP and safety equipment.
3. Pull production equipment.
4. Run casing scraper on tubing to 4890'.
5. Run CICR on tubing. Set CICR at 4800'.
Pressure test tubing to 2000 psi. Test
casing to 1400 psi.

4884
4888
4893
4904
4911
4913
4921
4927
4969
4978
4987
4997

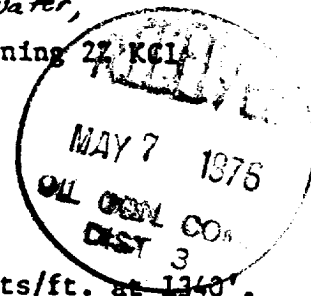
CICR @4800'
for Gallup
sqz.

9.5# 4 1/2"
J-55 5027'

C. 150 SX TD 5030'



6. Pump 150 sx. Class A cement with 4% gel below retainer to squeeze Gallup perfs. Pump cement at minimum pumping pressure and rate required, preferably 1-1 1/2 BPM not to exceed 1200 psi with tubing full of cement or 1500 psi while displacing cement.
7. Unsting from retainer, ^{reverse circulate one tubing volume with water,} circulate hole clean with water containing 2% KCl and 12#/1000 gal. CaCl. Pull tubing.
8. Run GR-Neutron-PDC log from 1500' to 100' (scale 1"=100').
9. Run BP on wireline and set at 1350'. Fill casing with water.
10. Run 3 3/8" hollow carrier Hyper-Jet II gun and perforate 4 jets/ft. at 1340'. Check fluid level before and after perforating.
11. Run tubing open ended to 1340'. Fill casing with water while going in hole. Establish pump-in rate with water. ^{if unable to pump in, spot 200 gal 12% HCl and work down per} If able to pump-in with water spot 40 cubic feet class A cement (cement containing 2% CaCl). Pump cement at low rate (1-1 1/2 BPM). Do not exceed 200 psi while pumping cement, pumping time for cement is 1 hour and 59 minutes. Pull tubing to 700 feet and reverse circulate clean. Shut tubing in and bradenhead sqz. down csg.-tbg. annulus with 100 psi for 1 hour. Pull tubing.
12. Run 3 3/8" hollow carrier Hyper-Jet II gun and perforate 4 jets/ft. at 1265'.
13. Run CICR on tubing and set at 1265'. Attempt to circulate to surface outside 4 1/2" casing. Start with a flush slug of KCl & CaCl water follow with 500 gals 7 1/2% HCl follow by KCl & CaCl water (inhibit acid as required).
14. Follow water with 200 sx. reg. Class A cement containing 1% CaCl. Cement at minimum pumping pressure required. Displace cement to tubing tail and unsting from retainer. ^{Reverse Circulate} Circulate hole clean and pull tubing. WOC 12 hours.
15. Run a CBL from +1265' to 8 5/8" casing shoe at 109' at 0 psi. Rerun at 1,000 psi if bonding across proposed recompletion interval (1216-1236') is doubtful. Contact Houston Engineering if bonding appears doubtful.
16. Bail fluid to 1,000'+. Run a 3 3/8" hollow carrier Hyper-Jet II gun loaded with 27 evenly spaced charges and perforate the Pictured Cliffs interval 1216' to 1236' (20). See attachment for perforation pattern.
17. Run packer on tubing and set at 1210'+ and swab test well until gas flow is established (if any). Obtain natural flow test if possible not to exceed 3 hours.
18. Pull packer and tubing. Rerun tubing open ended to 1180'. Use blast joint of tubing at top of string. ~~if tubing is old~~
19. Rig up Dowell (et al) an Foam-Frac^R treat the Pictured Cliffs down the tubing and the casing simultaneously as follows:



- 1.) Pump 2,200 gal. of foam pad.
- 2.) Pump 1,470 gal. of foam with .57 PPG 20-40 sd. (2 lb/gal. @ blender)
- 3.) Pump 1,470 gal. of foam with 1.14 PPG 20-40 sd. (4 lb/gal @ blender)
- 4.) Pump 16,170 gal. of foam with 1.57 PPG 20-40 sd. (5.5 lb/gal @ blender)
- 5.) Pump 1,470 gal. of foam with .57 PPG 10-20 sd. (2 lb/gal @ blender)
- 6.) Pump 1,470 gal. of foam with 1.14 PPG 10-20 sd. (4 lb/gal. @ blender)
- 7.) Pump 16,170 gal. of foam with 1.57 PPG 10-20 sd. (5.5 lb/gal. @ blender)
- 8.) Pump 600 gal. of foam to flush treatment to perms.

Note: Foam should be 70 quality at BHFP conditions. Foam should contain surfactant (F52B), and water should contain 2% KCl and 12#/1000 gal. CaCl.

Total calc. water for frac. treatment is 293 bbls.
 Total frac. treatment is 41,000 gal. foam with 28,000#
 20-40 sd. and 28,000 #10-20 sd.
 Est. pumping rate: 17.5 BPM.
 Est. wellhead treating pressure: 1,250 psig.

20. Pull tubing. Rerun packer on tubing and set at 1200'±.
21. Swab and/or flow test to clean up to pit and establish flowing rate and FP at various choke sizes. Obtain gas sample for analysis.
22. Dependent on productivity, either hook up to gas line or shut-in pending further work.

Note: Contact C. O. Collins at the Houston Office (Ph 713-220-1309) or J. T. Brown (Ph. 713-220-2711) for changes which may be required in the Recompletion procedure.

Frac. treatment arrangements have been arranged with Dowell (Farmington, N. M.), Nowsco and Minerals Management Inc. (Ph. 303-571-1111 in Denver... Mr. Bill Abbott, Mr. Roland Blaurer or Mr. Herschel Vaughn). Notify Dowell (Farmington) and Minerals Managements Inc. (Denver) one week in advance of recompletion as to date, timing, etc. An Engineer from Minerals Management Inc. will go on job location.

The approval of the District Engineer, State of New Mexico is required prior to plugging back, recompleting, etc. Approval from the State is also required to test to pit and flare prod. gas.

COC:MG

CC

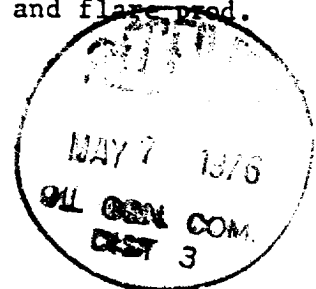
Attachments

Div. O.E.

John Kincaid
 4/29/76

Approved: _____

Production Superintendent



RP
 4/23