

District I - (505) 393-6161

P.O. Box 1980

Hobbs, NM 88241-1980

District II - (505) 748-1283

811 S. First

Artesia, NM 88210

District III - (505) 334-6178

1000 Rio Brazos Road

Aztec, NM 87410

District IV - (505) 827-7131

New Mexico

Energy Minerals and Natural Resources Department

Oil Conservation Division

2040 South Pacheco Street

Santa Fe, New Mexico 87505

(505) 827-7131

Form C-139

Originated 11/1/95

Submit: Original

Plus 2 Copies

to appropriate

District Office

APPLICATION FOR
QUALIFICATION OF PRODUCTION RESTORATION PROJECT AND CERTIFICATION OF APPROVAL

THREE COPIES OF THIS APPLICATION MUST BE FILED WITH THE APPROPRIATE DISTRICT OFFICE OF THE OIL CONSERVATION DIVISION.

- I. Operator: Giant Exploration & Production OGRID #: 008987
Address: P.O. Box 2810, Farmington, New Mexico 87499
Contact Party: Diane Jaramillo Phone: (505) 326-3325
- II. Name of Well: Central Bisti Unit #40 API #: 30-045-05445
Location of Well:
Unit Letter C, 330 Feet from the North line and 2310 feet from the West line, Section 16
Township 25N, Range 12W, NMPM, San Juan County
- III. Previous Producing Pool Name: Bisti Lower Gallup
- IV. Describe the process used to return the Well to production. (Attach additional information if necessary):
See attachment.
- V. Date the Production Restoration Project was commenced: August 31, 1995
Date the Well was returned to production: September 14, 1995
- VI. Identify the Oil Conservation Division records which show the Well had thirty (30) days or less production between January 1, 1993 and December 31, 1994:
☐ Ongard inactive well list; or ☒ OCD Form C-115 (Operator's Monthly Report)

VII: AFFIDAVIT:

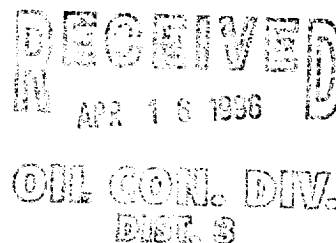
State of New Mexico)
County of San Juan) ss

Diane Jaramillo, being first duty sworn, upon oath states:

- I am the Operator or authorized representative of the Operator of the above referenced Well.
- I have personal knowledge of the facts contained in this Application for Qualification of a Production Restoration Project.
- The data utilized to prepare this application is complete and correct.

Diane G. Jaramillo
(Name) Diane G. Jaramillo

Production Regulatory Manager
(Title)



SUBSCRIBED AND SWORN TO before me this 15th day of April, 19 96.

Lawn M. Jato

Notary Public

My Commission Expires: 7/13/97

FOR OIL CONSERVATION DIVISION USE ONLY:

VIII. CERTIFICATION OF APPROVAL:

This Application for Qualification of a Production Restoration Project is hereby approved and the above referenced Well is designated as a Production Restoration Project pursuant to the "Natural Gas and Crude Oil Production Incentive Act" (Laws 1995, Chapter 15, Sections 1 through 8). By copy of the Application and Certification of Approval, the Division notifies the Secretary of the Taxation and Revenue Department of this Approval and certifies that production was restored in this Production Restoration Project on:

9/4, 19 95.

35.8
District Supervisor, District 3
Oil Conservation Division

Date: 4/26/96

IX. DATE OF NOTIFICATION OF THE SECRETARY OF THE TAXATION AND REVENUE DEPARTMENT.

DATE: _____

Giant Exploration & Production Company
Workover Procedure
Central Bisti Unit Well No. 40
330' FNL, 2310' FWL
Section 16, T25N, R12W
San Juan County, New Mexico

August 18, 1995

Purpose: To stimulate the Upper and Lower Gallup formations with a fracture treatment and return this well to production.

Pertinent Data: Please refer to the attached materials and services list, wellbore diagram, well pulling report, frac pumping schedule, and log sections.

Procedure:

1. Check location for anchors and replace if necessary. Deliver BOP and 210 bbl workover tank, mud pump, pit, and power swivel to location. Please load the workover tank with clean produced formation water. Deliver (2) extra joints of 2-3/8" tubing to location. Deliver 4500' of 2-7/8", 6.5# tubing to location to be used as a frac string. Deliver (3) 400 bbl frac tanks to location and load each with filtered coal water with some KCl mixed in to make a 1% KCl solution (the minimum volume required for the frac is 1,025 bbls). Inspect the tanks and arrange to have the frac tanks cleaned as necessary prior to loading. Move in workover unit and rig up on well.
2. Unseat the pump and trip out of the hole with the rod string consisting of (190) 3/4" rods and the RWAC rod pump. Nipple down the wellhead and nipple up the BOP. Pick up one joint of tubing and tag up PBD of 4839'. Trip out of the hole with the 2-3/8" tubing string consisting of (81) joints of 2-3/8" tubing, 2-3/8" x 5-1/2" anchor, (71) joints 2-3/8" tubing, seating nipple, perforated sub, and (1) joint of tailpipe. Inspect the tubing and replace as necessary. If significant fill was found, make arrangements to clean out prior to continuing.
3. Trip in the hole with the scab liner retrieving tool. Latch onto the liner and trip it out of the hole. (If required, have the scab liner packers redressed or rebuilt.) Pick up and trip in the hole with a full-bore retrievable packer (2-7/8" x 5-1/2") on the 2-7/8" work string. If necessary, hydrotest the tubing to 5000 psi to find any bad joints which could burst during the fracture stimulation (if the tubing has just been inspected, it will not require hydrotesting). Set the packer at approximately 4500'. Rig up to monitor the casing/tubing annulus throughout the fracture stimulation. Monitor for any fluid flow or gas blow which will be an indication that the packer has failed during the frac job.
4. Rig up BJ Services Company to fracture stimulate this well. The frac job will consist of an initial prepad of 2,000 gal of 1% KCl then a stimulation of 37,000 gal of Spectra Frac G-3000 carrying 80,000# of 20/40 Ottawa sand down the 2-7/8" tubing at a 20 BPM rate. After the prepad, shut down the pumps and evaluate for ISDP and closure. The anticipated surface treating pressure is 2749 psi based on a rate of 20 BPM and an ISIP of 1025 psi. The maximum surface treating pressure during the frac job is 4000 psi. The maximum internal yield of 2-7/8", 6.5#, J-55 tubing is 7,260 psi. Please note that the crush pressure of 20/40 Ottawa is approximately 6000 psi. Do not allow the Bottom Hole treating pressure to exceed 4,000 psi. The frac schedule is as follows (an additional copy is attached):

Giant Exploration & Production Company
 Workover Procedure
 Central Bisti Unit Well No. 40

Stage	Event	Fluid	Volume (gal)	Sand Conc (lb/gal)	Mesh Size	Stage Sand (lb)	Cum. Sand (lb)
1	Prepad	1% KCl	2,000	-	-	0	0
2	Pad	Spectra G	9,500	-	-	0	0
3	SLF	Spectra G	3,000	1.0	20/40	3,000	3,000
4	SLF	Spectra G	4,000	2.0	20/40	8,000	11,000
5	SLF	Spectra G	5,000	3.0	20/40	15,000	26,000
6	SLF	Spectra G	13,500	4.0	20/40	54,000	80,000
7	Flush	Spectra G	1,120	-	-	0	80,000

Once on flush, pump 50% of the flush volume and shut down the pumps. If the treatment goes on a vacuum, shut the well in and shut down for the night. However, if the well still has pressure on it, resume flushing to approximately 90% of the flush volume at a 3-5 BPM rate (clear the sand to a point below the packer). All frac tanks are to contain 0.38 lb/1000 Frac-Cide 20 (bactericide) and 2 gal/1000 Nine-40 (surfactant). The tanks containing the Spectra Frac G-3000 will also contain 30 lb/1000 J-4 (gelling agent), 5 lb/1000 sodium acetate (pH control), and 3.5 gal/1000 Buffer-5L (buffer). 1.5 gal/1000 GBW-12 (enzyme breaker) and 1 gal/1000 XLW-24 (cross-linker) will be added on the fly.

Wellhead Pressure Calculations:

$$P_w = \text{wellhead treating pressure} = \text{BHTP} - P_h + P_f + P_{pf}$$

where: BHTP = Bottom hole treating pressure = ISIP + P_h

$$\text{ISIP} = 1025 \text{ psi}$$

$$P_h = \text{Hydrostatic pressure of fluid}$$

$$= (8.33 \text{ \#/gal}) \times (0.052) \times (4727 \text{ ft}) = 2048 \text{ psi}$$

$$P_f = \text{Pipe friction pressure (at 20 BPM)}$$

$$= (383 \text{ psi/1000 ft}) \times (4500 \text{ ft}) = 1724 \text{ psi}$$

$$P_{pf} = \text{Perforation friction pressure}$$

$$= 0 \text{ psi @ .08 BPM/perforation}$$

$$\text{BHTP} = 1025 \text{ psi} + 2048 \text{ psi} = 3073 \text{ psi}$$

$$P_w = 3073 - 2048 + 1724 + 0 \approx 2749 \text{ psi}$$

9. Shut down and obtain ISIP, 5 min., 10 min., and 15 min shut-in pressures. Shut the well in overnight. This will allow the gel to break more completely and the formation to heal. If pressure remains on the well in the morning, rig up to flow the well back through a choke (3/4" should be sufficient). If the well is flowed to an earthen pit, an 8 mil or thicker plastic liner will be required per the BLM stipulations.
10. Once the well has died, release the packer and trip out of the hole laying down the 2-7/8" tubing. Trip in the hole with the 4-1/2" liner on the 2-3/8" tubing string. Set the liner and trip the tubing string out of the hole. (Setting the liner prior to cleaning out the sand will prevent debris from falling in from the leaking casing interval and plugging the perforations.) Trip back in the hole with the scab liner test tool and pressure test the top packer the upper casing section to 1000 psi. Please ensure the test lasts at least 15 minutes to check for leaks. Trip out of the hole with the test tool.

Giant Exploration & Production Company
Workover Procedure
Central Bisti Unit Well No. 40

11. Pick up a saw tooth collar and seating nipple on the 2-3/8" tubing and trip in the hole. Tag up sand fill and clean out to the PBD of 4839'. If the hole won't circulate, run a hydrostatic bailer. Due to the internal diameter of the scab liner packers, it may be necessary to run an undersized bailer. Trip out of the hole.
12. Once the hole has been cleaned out, place the tubing tail at the bottom perforation and begin swab testing the perforations. Report results of swab testing to Farmington office. Once swab testing is completed, trip in the hole to tag up fill. If any fill is found, make arrangements to clean out prior to continuing with the procedure. Trip out of the hole with the tubing.
13. Trip in the hole with the production string. The production string consists of (1) joint tailpipe set at or below 4828' (the bottom perforation), perfsu, seating nipple, 2-3/8" tubing to just above the top scab liner packer, 2-3/8" x 5-1/2" anchor, and remaining 2-3/8" tubing string. Set the anchor high enough above the top packer so that the well can be tagged up without hitting the top packer with the anchor. Set anchor and land tubing in the wellhead slips after nipping down the BOP.
14. Trip in the hole with a 2" x 1-1/2" x 16' rod pump on the 3/4" rod string. Seat the pump and hang the rod string. Check pump action. Obtain a well test or tank test once the well stabilizes. Shoot and monitor the fluid level to keep the well in a pumped off condition.
15. Clean and organize location. Return all unused materials to the CBU Yard.

Prepared by: Paul R. Williams
Paul R. Williams

Approved by: Jeffrey R. Vaughan
Jeffrey R. Vaughan

AFE Number: 506/0083

AFE Approval Date: 8/30/95

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

WELL API NO.

30-045-05445

5. Indicate Type of Lease

STATE



FEE



6. State Oil & Gas Lease No.

E-6297-2

7. Lease Name or Unit Agreement Name

Central Bisti Unit

8. Well No.

40

9. Pool name or Wildcat

Bisti Lower Gallup

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 "APPLICATION FOR PERMIT"
(FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well

OIL
WELL



GAS
WELL



OTHER:

2. Name of Operator

Giant Exploration & Production Company

3. Address of Operator

P.O. Box 2810, Farmington, New Mexico 87499

4. Well Location

Unit Letter

C

:

330

Feet from the

North

Line and

2310

Feet from The

West

Line

Section

16

Township

25N

Range

12W

NMPM

San Juan

County

10. Elevation

(Show whether DF, RKB, RT, GR, etc.)

6200' GR

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO :

PERFORM REMEDIAL WORK



PLUG AND ABANDON



TEMPORARILY ABANDON



CHANGE PLANS



PULL OR ALTER CASING



OTHER:



SUBSEQUENT REPORT OF :

REMEDIAL WORK



ALTERING CASING



COMMENCE DRILLING OPNS.



PLUG AND ABANDONMENT



CASING TEST AND CEMENT JOE



OTHER: Fracture Stimulation



12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

The subject well was fracture stimulated with a cross-linked gel carrying 88,000# 20/40 mesh sand. The well was put back on pump 09/14/95.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

Paul R. Williams

TITLE

Area Engineer

DATE

SEP 21 1995

TYPE OR PRINT NAME

Paul R. Williams

TELEPHONE NO.

(505)326-3325

(This space for State Use)

APPROVED BY

Johnny Robinson

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY: