

CENTRAL

RESOURCES, INC.

WEX 4/28/98

April 9, 1998

New Mexico Oil Conservation Division
State Land Office Building
P.O. Box 2088
Santa Fe, New Mexico 87504

Subject: Central Bisti Unit Well No. 67
660' FNL, 660' FEL
NE/4, NE/4, Sec. 6, T25N, R12W
San Juan County, New Mexico

Dear Sirs:

Enclosed for your approval is our Application for Authorization to Inject for the above referenced well. Central Resources is requesting administrative approval of this application. Upon receipt, an Affidavit of Publication will be forwarded to you.

If you have any questions please call me at (505) 326-3325.

Sincerely,



Diane G. Jaramillo
Office Supervisor

DGJ/

Enclosure

cc: Bureau of Land Management
Farmington District Office

Central Resources, Inc.
Application for Authorization to Inject
Form C-108 Supplemental Information

Central Bisti Unit Well No. 67
660' FNL, 660' FEL
NE/4, NE/4, Sec. 6, T25N, R12W
San Juan County, New Mexico

- I. Shown on Application
- II. Shown on Application
- III. Well data attached
- IV. Shown on Application
- V. Area of review is shown on attached map
- VI. Information for wells located in area of review are as follows:

Central Bisti Unit Well No. WI-4
Central Bisti Unit Well No. 4
Central Bisti Unit Well No. 52
Central Bisti Unit Well No. WI-54
Central Bisti Unit Well No. 66
Central Bisti Unit Well No. 76
Central Bisti Unit Well No. 80
Central Bisti Unit Well No. 82
Central Bisti Unit Well No. 83
Federal "C" Well No. 3 (renamed CBU 2)

Wells in area of review but not penetrating injection zone:

Federal "C" Well No. 6 - P&A	TD - 711'
Federal "C" Well No. 7 - P&A	TD - 870'
Federal "C" Well No. 9 - P&A	TD - 1330'
North Bisti Coal 32 Well No. 2 - Prod.	TD - 1300'

- VII. 1. Proposed average injection rate is 600 bwpd, expected maximum injection rate is 1200 bwpd.

2. This system will be closed.
 3. Average injection pressures are expected to be in the 700 - 965 psi range. Maximum injection pressure will be 965 psi.
 4. Refer to the attached water analysis reports. Since the formation water to be encountered is primarily previously injected water, no problems are expected in mixing the two waters.
 5. This well is part of an extensive waterflood project active in the Central Bisti Unit since 1959. All produced water is reinjected into the oil productive Lower Gallup sand to maintain pressure. Injection into the Lower Gallup sand is for waterflooding, not disposal
- VIII. The injection zone is the Lower Gallup sandstone. This zone is to be 74' in thickness with a top of 4810' as shown on the SP log previously submitted. No known sources of drinking water exist in this area. Water well drilling in this area has shown the Ojo Alamo to be dry.
- IX. The well will be acidized if required to maintain injection rate and pressure.
- X. Logs were previously submitted.
- XI. No known sources of drinking water exist in this area.
- XII. This well is part of the existing approved waterflood operation for the Central Bisti Unit. It is not a disposal well.
- XIII. Proof of notification is attached.
- XIV. Certification shown on Application.

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematic need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

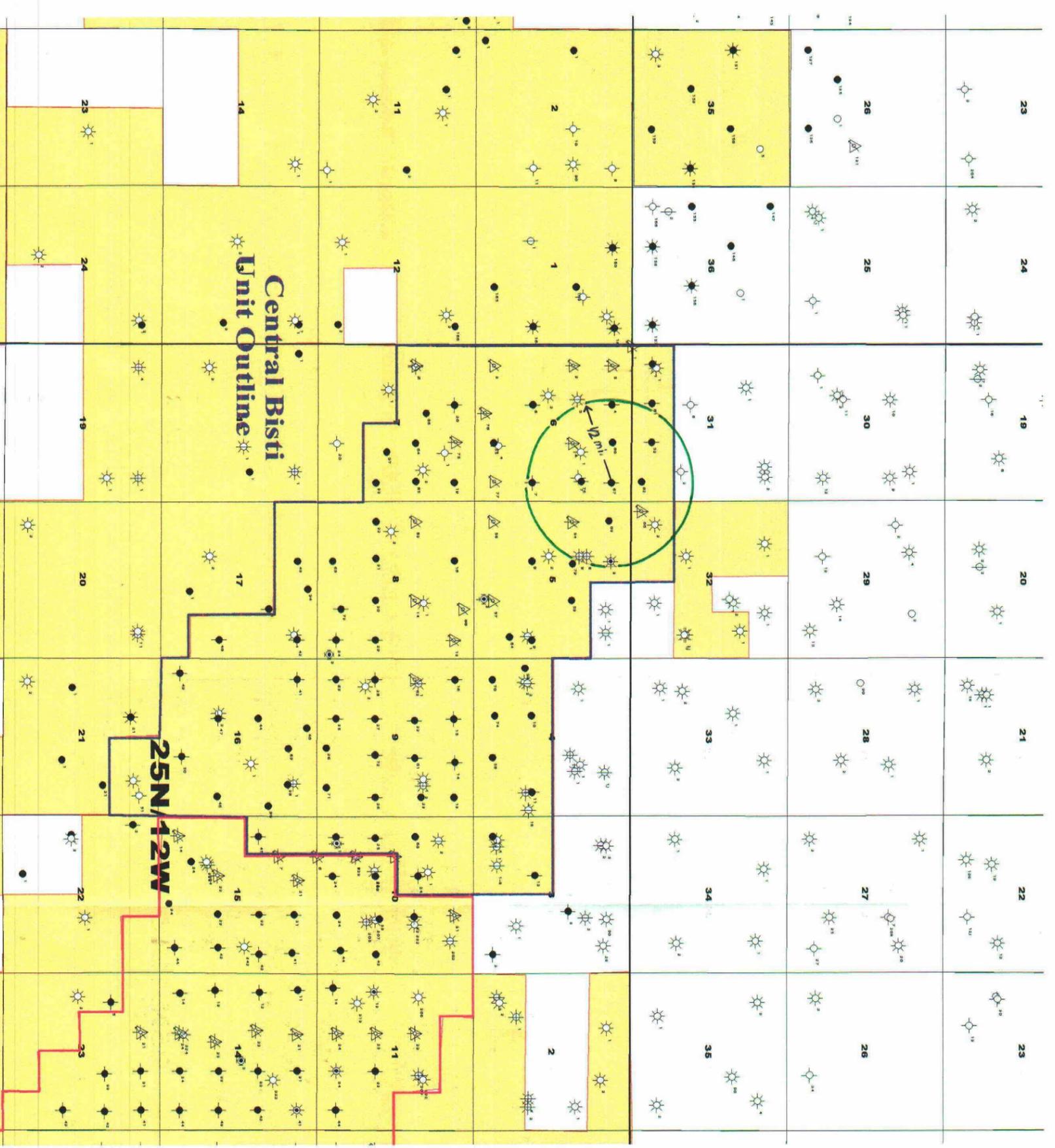
All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or request for hearing of administrative applications within 15 days from the date this application was mailed to them.



Central Bisti
Unit Outline

25N
12W

CENTRAL RESOURCES, INCORPORATED		
Central Bisti Unit		
San Juan County, New Mexico		
Base Map w/ CRI's Acreage		
Michal Meyer	1" = 4,000'	2/11/88

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2-3/8" lined with Fiberglass/plastic set in a
(material)
Baker Model AD-1 or equivalent packer at 4741 feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Lower Gallup
2. Name of field or Pool (if applicable) Central Bisti Unit
3. Is this a new well drilled for injection? Yes No
If no, for what purpose was the well originally drilled? Oil Well
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) N/A
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. Pictured Cliffs 1114'

Central Resources, Inc.

Well Bore Diagram

WELL NAME Central Bisti Unit Well No. 67
LOCATION 660' FNL, 660' FEL SECTION 6 T 25 N R 12 W
COUNTY San Juan STATE New Mexico

SURFACE CASING

Hole Size: 12-1/4"
Casing: 8-5/8", 24#, J-55
Casing Set @ 200.33' with 175
sks cement containing 2%
gel and 2% CaCl.

FORMATION TOPS

Pictured Cliffs 1114'
Point Lookout 3715'
Mancos 3800'
Upper Gallup 4690'
Lower Gallup 4810'

CEMENT TOP 3613' (by T.S.)

PERFORATIONS

4816'-32'
4873'-80'
4885'-90'
(6 JSPF)

PBD 4952' (orig.), 4940' (tag)

PRODUCTION CASING

Hole Size: 7-7/8"
Casing: 5-1/2", 14#, J-55
Casing Set @ 4998' with 100
sks
pozmix and 2% gel; tailed in
with 100 sks neat cement.

GLE 6158'

KBE 6170'

DF 6169'

WELL HISTORY

Spud date: 6/13/56
Original owner: Sunray Mid-Cont.
IP 7/2/56 BOPD 408 BWPD _____
MCFD _____ GOR _____
Completion Treatment: _____
2 stage frac with 30,000 gal
crude and 30,000# 20/40 sand.

CURRENT DATA

Pumping Unit _____
Tubing 2-3/8" (157 jts.)
Pump Size (no-go)
Rod string (192) 3/4"
Remarks _____
Formerly N.M. Federal C #9
7/59 - Renamed CBU #3
3/63 - Converted to WI. Re-
named CBU #WI-10.
7/65 - Plugged back to 4848'.
12/66 - Acidized w/1000 gal.
10/75 - Converted to prod.
1/78 - Acidized w/2000 gal.
10/85 - CO to PBD. Acidized w/
1500 gal.
4/90 - Squeezed leaks 2787'-
2847'. Acidized w/1000 gal.
7/93 - Shut well in

5000' TD

Date Last Revised: 7/11/96

INJECTION WELL DATA SHEET

SIDE 1

Central Resources, Inc.	Central Bisti Unit			
OPERATOR	LEASE			
67	660' FSL, 660' FEL	6	25N	12W
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
San Juan County, New Mexico				

Tabular Data

Surface Casing

Size	<u>8-5/8"</u>	Cemented with	<u>175</u>	sx.
TOC	<u>surface</u>	feet determined by	<u>cement to surface</u>	
Hole size	<u>12-1/4"</u>			

Intermediate Casing

Size	<u> </u>	Cemented with	<u> </u>	sx.
TOC	<u> </u>	feet determined by	<u> </u>	
Hole size	<u> </u>			

Long string

Size	<u>5-1/2"</u>	Cemented with	<u>200</u>	sx.
TOC	<u>3613'</u>	feet determined by	<u>temperature survey</u>	
Hole size	<u>7-7/8"</u>			
Total depth	<u>5000'</u>			

Perforated interval

4816' - 4832'
 4873' - 4880'
 4885' - 4890'

Central Resources, Inc.

Well Bore Diagram

WELL NAME Central Bisti Unit Well No. WI-4
LOCATION 1980' FNL, 1980' FEL SECTION 6 T 25 N R 12 W
COUNTY San Juan STATE New Mexico

SURFACE CASING

Hole Size: 13-3/4"
Casing: 8-5/8", 24#, J-55
Casing Set @ 194' with 200 sks
cement containing 2% CaCl.

GLE 6178'

KBE _____

DF 6189'

FORMATION TOPS

Pictured Cliffs 1188'
Point Lookout 3640'
Mancos 3800'
Gallup 4710'
Lower Gallup 4805'

WELL HISTORY

Spud date: 5/12/56
Original owner: Sunray Mid-Cont.
IP 6/9/56 BOPD 480 BWPD -
MCFD _____ GOR _____
Completion Treatment: _____
2 stage frac w/35,000 gal oil
and 35,000# sand

CURRENT DATA

Pumping Unit _____
Tubing 2-3/8" plastic coated
Pump Size [pkr @ 4788']
Rod string _____
Remarks _____
Formerly New Mexico Federal
"C" #4 and CBU #GI-4.
10/82 Cleaned out to 4920'.
Set plug w/ 1 sk of cement
at 4870'. Model AD-1
packer set at 4703'.
8/93 - Squeezed csg leak
3567'-98'. Cemented
broken head. Acidized
perfs. Installed inj.
tbg string.

CEMENT TOP 3900' (by T.S.)

PERFORATIONS

4819'-39'
(4882'-88' and 4897'-4900'
plugged back)

PBD [4962' origl, 4866' (new)]

PRODUCTION CASING

Hole Size: 7-7/8"
Casing: 5-1/2", 14#, J-55
Casing Set @ 4999' with 200 sks
1-1 pozmix.

5000' TD

Date Last Revised: 1/19/96

Central Resources, Inc.

Well Bore Diagram

WELL NAME Central Bisti Unit Well No. 4
LOCATION 660' FNL, 1980' FWL SECTION 6 T 25 N R 12 W
COUNTY San Juan STATE New Mexico

SURFACE CASING

Hole Size: 12-1/4"
Casing: 8-5/8", 24#, J-55, ST&C
Casing Set @ 311' with 200 sks
cement containing 2% CaCl.

GLE 6164'

KBE 6175'

DF

FORMATION TOPS

Mancos 3806'
Upper Gallup 4552'
Lower Gallup 4814'

CEMENT TOP 3500' (T.S.)

PERFORATIONS

4818'-20', 4827'-44'
4852'-56', 4861'-68'
4882'-92', 4896'-4908'
4916'-24'
(4 JSPF)

PBD 4968' (orig.), 4948' (new)

PRODUCTION CASING

Hole Size: 7-7/8"
Casing: 4-1/2", 9.5#, J-55
Casing Set @ 5000' with 300 sks
Pozmix cement containing 2% gel.

WELL HISTORY

Spud date: 7/28/59
Original owner: Sunray Mid-Cont.
IP 8/17/59 BOPD 216 BWPD
MCFD GOR
Completion Treatment: _____
Frac'd w/20,000 gal oil and
1 #/gal sand with balls.

CURRENT DATA

Pumping Unit _____
Tubing 2-3/8" (160 jts.)
Pump Size 2" x 1-1/2" x 16' RWAC
Rod string (54) 7/8", (139) 3/4"
Remarks _____
10/62 - Refrac'd w/40,000 gal
oil, 30,000# 20/40, & 20,000
10/20 sand.
6/71 - Tagged fill at 4800',
bailed to 4820'.
5/74 - Acidized w/500 gal.
3/79 - Squeezed casing leaks
3466'-3589', CO to 4930'.
Acidized w/2000 gal.
1/81 - Acidized w/1000 gal.
2/84 - CO to 4948'
2/86 - Acidized w/1500 gal.
9/91 - Acidized w/1000 gal.

5000' TD

Date Last Revised: 7/3/96

INJECTION WELL DATA SHEET

SIDE 1

Central Resources, Inc.	Central Bisti Unit			
OPERATOR	LEASE			
4	660' FNL, 1980' FWL	6	25N	12W
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
San Juan County, New Mexico				

Tabular Data

Surface Casing

Size	8-5/8"	Cemented with	200	sx.
TOC	surface	feet determined by	cement to surface	
Hole size	12-1/4"			

Intermediate Casing

Size		Cemented with		sx.
TOC		feet determined by		
Hole size				

Long string

Size	4-1/2"	Cemented with	300	sx.
TOC	3500'	feet determined by	temperature survey	
Hole size	7-7/8"			
Total depth	5000'			

Perforated interval

4818' - 4820'
 4827' - 4844'
 4852' - 4856'
 4861' - 4868'
 4882' - 4892'
 4896' - 4908'
 4916' - 4824'

Central Resources, Inc.

Well Bore Diagram

WELL NAME Central Bisti Unit Well No. 52
LOCATION 660' ESL, 1980' FEL SECTION 31 T 26 N R 12 W
COUNTY San Juan STATE New Mexico

SURFACE CASING

Hole Size: 12-1/4"
Casing: 8-5/8", 24#, J-55
Casing Set @ 196' with 175 sks
cement containing 2% gel.

GLE 6150'

KBE _____

DF 6162'

FORMATION TOPS

Pictured Cliffs 1112'
Point Lookout 3640'
Mancos 3832'
Upper Gallup 4722'
Lower Gallup 4820'

CEMENT TOP 3750' (T.S.)

PERFORATIONS

4829'-46'
4846'-50'
4886'-91'
4896'-4907'

PBD 4912' (tag)

PRODUCTION CASING

Hole Size: 7-7/8"
Casing: 5-1/2", 14#, J-55, 8rd
Casing Set @ 5002' with 200 sks
1:1 Pozmix (14.3 ppg).

WELL HISTORY

Spud date: 5/28/56
Original owner: Sunray Mid-Cont.
IP 6/22/56 BOPD 374BWPD -
MCFD _____ GOR _____
Completion Treatment: _____
Frac'd w/35,000 gal oil and
35,000# sand (2 stages).

CURRENT DATA

Pumping Unit _____
Tubing 2-3/8"
Pump Size _____
Rod string _____
Remarks _____
Formerly N.M. Fed. C #7
6/59 - Perf'd 4846'-50'. Set
Model D @4800'. Converted to
GI (named CBU #GI-1).
1963? - Converted to WI.
12/63 - Converted from WI to
production.
8/79 - CO to 4898'. Frac'd
well w/900 bbl gelled oil &
40,000# 20/40 sand.
10/86 - Squeezed casing leaks.
1/90 - CO to 4912'. Squeezed
casing leaks. Acidized
perfs.

5002' TD

Date Last Revised: 1/22/96

INJECTION WELL DATA SHEET

SIDE 1

Central Resources, Inc.	Central Bisti Unit			
OPERATOR	LEASE			
52	660' FSL, 1980' FEL	31	26N	12W
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
San Juan County, New Mexico				

Tabular Data

Surface Casing

Size	<u>8-5/8"</u>	Cemented with	<u>175</u>	sx.
TOC	<u>surface</u>	feet determined by	<u>cement to surface</u>	
Hole size	<u>12-1/4"</u>			

Intermediate Casing

Size	<u> </u>	Cemented with	<u> </u>	sx.
TOC	<u> </u>	feet determined by	<u> </u>	
Hole size	<u> </u>			

Long string

Size	<u>5-1/2"</u>	Cemented with	<u>200</u>	sx.
TOC	<u>3750'</u>	feet determined by	<u>temperature survey</u>	
Hole size	<u>7-7/8"</u>			
Total depth	<u>5002'</u>			

Perforated interval

- 4829' - 4846'
- 4846' - 4850'
- 4886' - 4891'
- 4896' - 4907'

Central Resources, Inc.

Well Bore Diagram

WELL NAME Central Bisti Unit Well No. WI-54
LOCATION 1980' FNL, 660' FWL SECTION 5 T 25 N R 12 W
COUNTY San Juan STATE New Mexico

SURFACE CASING

Hole Size: 12-1/4"
Casing: 8-5/8", 24#, J-55
Casing Set @ 192' with 175 sks
cement containing 2% gel

FORMATION TOPS

Pictured Cliffs 1102'
Point Lookout 3607'
Mancos 3800'
Upper Gallup 4676'
Lower Gallup 4788'

CEMENT TOP 3880' (by T.S.)

PERFORATIONS

4810'-22'
(4862'-70' and 4876'-82'
squeezed off)

PBD 4969' (old), 4844' (new)

PRODUCTION CASING

Hole Size: 7-7/8"
Casing: 5-1/2", 14#, J-55
Casing Set @ 5000' with 100 sks
50/50 pozmix with 2% gel and 100
sks regular cement.

(Well has 17# welding nipple on
top of 14# casing.)

GLE _____

KBE 6168'

DF _____

WELL HISTORY

Spud date: 6/26/56

Original owner: Sunray Mid-Cont.

IP 7/27/56 BOPD 225 BWPD -

MCFD _____ GOR _____

Completion Treatment: _____

2 stage frac w/35,000 gal oil
and 35,000# 20-40 mesh sand

CURRENT DATA

Pumping Unit _____

Tubing 2-7/8" @4751'

Pump Size _____

Rod string _____

Remarks _____

12/63 Model D packer driven
to 4893'.

10/82 Perfs squeezed with 175
sks cement. Reperforated
4810'-22'

Current packer Model AD-1

J-slot at 4751'

INJECTION WELL DATA SHEET

SIDE 1

Central Resources, Inc.	Central Bisti Unit			
OPERATOR	LEASE			
WI-54	1980' FNL, 660' FWL	5	25N	12W
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
San Juan County, New Mexico				

Tabular Data

Surface Casing

Size	<u>8-5/8"</u>	Cemented with	<u>175</u>	sx.
TOC	<u>surface</u>	feet determined by	<u>cement to surface</u>	
Hole size	<u>12-1/4"</u>			

Intermediate Casing

Size	<u> </u>	Cemented with	<u> </u>	sx.
TOC	<u> </u>	feet determined by	<u> </u>	
Hole size	<u> </u>			

Long string

Size	<u>5-1/2"</u>	Cemented with	<u>200</u>	sx.
TOC	<u>3880'</u>	feet determined by	<u>temperature survey</u>	
Hole size	<u>7-7/8"</u>			
Total depth	<u>5003'</u>			

Perforated interval

4810' - 4822'

Central Resources, Inc.

Well Bore Diagram

WELL NAME Central Bisti Unit Well No. 66 (WI)
 LOCATION 330' FSL, 330' FWL SECTION 32 T 26 N R 12 W
 COUNTY San Juan STATE New Mexico

SURFACE CASING

Hole Size: 12-1/4"
 Casing: 8-5/8", 24#, J-55, ST&C
 Casing Set @ 155' with 150 sks
cement containing 2% CaCl.

FORMATION TOPS

Pictured Cliffs 1146'
Lewis 1315'
Mesaverde 1882'
Point Lookout 3615'
Mancos 3768'
Upper Gallup 4700'
Lower Gallup 4807'

CEMENT TOP 4150' (Calc.)

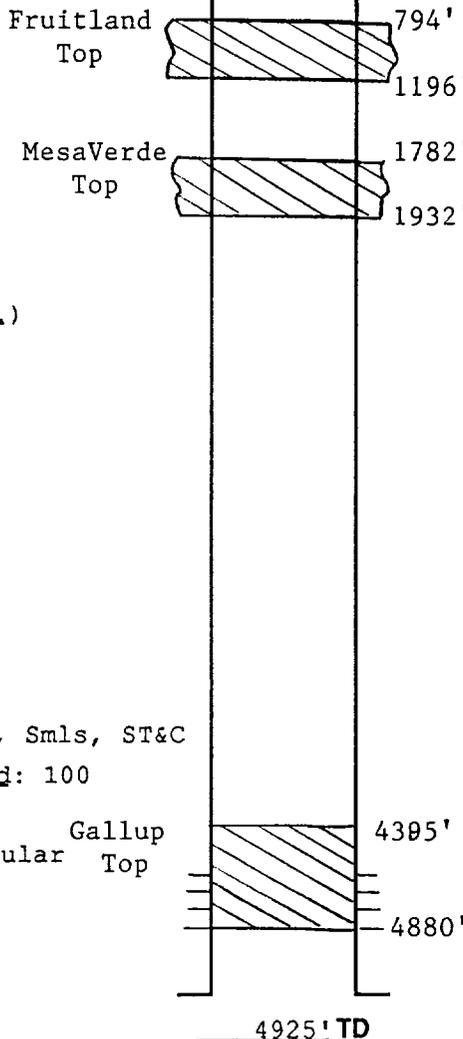
PERFORATIONS

4804'-26'
4864'-68'
4874'-84'
(4 JSPF)

PBD 4924'

PRODUCTION CASING

Hole Size: 7-5/8" (?)
 Casing: 4-1/2", 9.5#, J-55, Smls, ST&C
 Casing Set @ 4925' with Lead: 100
sks cement containing 8%
gel and Tail: 50 sks regular
cement.



GLE 6149'
KBE 6158'
DF 6156'

WELL HISTORY

Spud date: 12/12/57
 Original owner: Val R. Reese, Assoc.
 IP 1/7/58 BOPD 192 BWPD -
 MCFD GOR
 Completion Treatment:
Frac'd w/28,560 gal crude and
20,000# sand.

CURRENT DATA

Pumping Unit
 Tubing
 Pump Size
 Rod string
 Remarks
Formerly Hickman #1
Purchased by Sunray 7/1/59.
9/60 - Converted to gas inj.
Set Model D pkr @4757'.
Renamed CBU #GI-20.
7/72 - Converted to flowing
producer.
12/76 - Hung on pump. (7/77-
FL @372', 5% oil cut)
5/80 - Pulled rods and tubing.
4/84 - Applied for approval
to water inject. No evidence
of this work taking place in
the wellfiles. (Ranamed CBU
#WI-66).

Date Last Revised: 6/19/96

INJECTION WELL DATA SHEET

SIDE 1

Central Resources, Inc.	Central Bisti Unit	(Plugged & Abandoned 11/5/97)		
OPERATOR	LEASE			
WI-66	330' FSL, 330' FWL	32	26N	12W
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
San Juan County, New Mexico				

Tabular Data

Surface Casing

Size	<u>8-5/8"</u>	Cemented with	<u>150</u>	sx.
TOC	<u>surface</u>	feet determined by	<u>cement to surface</u>	
Hole size	<u>12-1/4"</u>			

Intermediate Casing

Size	<u> </u>	Cemented with	<u> </u>	sx.
TOC	<u> </u>	feet determined by	<u> </u>	
Hole size	<u> </u>			

Long string

Size	<u>4-1/2"</u>	Cemented with	<u>150</u>	sx.
TOC	<u>4150'</u>	feet determined by	<u>calculation</u>	
Hole size	<u>7-5/8"</u>			
Total depth	<u>4925'</u>			

Perforated interval

4804' - 4826'
 4864' - 4868'
 4874' - 4884'

Central Resources, Inc.

Well Bore Diagram

WELL NAME Central Bisti Unit Well No. 76
LOCATION 1700' FNL, 660' FEL, SECTION 6 T 25 N R 12 W
COUNTY San Juan STATE New Mexico

SURFACE CASING

Hole Size: 12-1/4"
Casing: 8-5/8", 24#, K-55, 8rd
Casing Set @ 217.12' with 130 sx
Class B cement containing
2% CaCl and 1/4 #/sk cello-
phane flakes.

FORMATION TOPS

Fruitland 1127'
Pictured Cliffs 1167'
Lewis 1369'
Cliffhouse 1523'
Menefee 2581'
Point Lookout 3673'
Mancos 3813'
Upper Gallup 4727'
Lower Gallup 4812'

CEMENT TOP 3120' (Primary Cmt)

PERFORATIONS

4829'-57' (2 JSPE)
4892'-4900'
4904'-12'

PBD 5042' (Tag)

PRODUCTION CASING

Hole Size: 7-7/8"
Casing: 4-1/2", 10.5#, K-55, 8rd
Casing Set @ 5081.96' with 75 sks
65:35 Litepoz 6 with 12%
Bentonite and 1/4 #/sk celloflake,
300 sks 50:50 Litepoz 6 with 2%
CaCl and 6% Bentonite, tail in
with 150 sks Class B cement with
1/4 #/sk cellophane flakes.

GLE 6205'

KBE 6218'

DF

WELL HISTORY

Spud date: 5/19/82
Original owner: Hixon Development
IP 6/23/82 BOPD 33 BWPD 34
MCFD 8 GOR 246
Completion Treatment:
Frac with 50,000# 20-40 sand
1310 bbl slick water

CURRENT DATA

Pumping Unit Lufkin 160D
Tubing 2-3/8" w/ packer @ 4779'
Pump Size 2" x 1-1/2" x 16' RWAC
Rod string (141) 3/4", (48) 7/8"
Remarks
6/82 - Original completion.
11/82 - Cleaned out fill.
10/83 - Perf'd 4892' to 4912'.
Acidized and balled off,
hung on pump.
3/90 - Squeezed casing leaks
2120'-2148', 2688'-2722'.
Acidized with 2000 gal.
6/92 - Tested for a casing
leak, held pressure. Acid-
ized perfs with 500 gal.
10/97 - RTP

5120' TD

Date Last Revised: 1/19/98

INJECTION WELL DATA SHEET

SIDE 1

Central Resources, Inc.	Central Bisti Unit			
OPERATOR	LEASE			
76	1700' FNL, 660' FEL	6	25N	12W
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
San Juan County, New Mexico				

Tabular Data

Surface Casing

Size	<u>8-5/8"</u>	Cemented with	<u>130</u>	sq.
TOC	<u>surface</u>	feet determined by	<u>cement to surface</u>	
Hole size	<u>12-1/4"</u>			

Intermediate Casing

Size	<u> </u>	Cemented with	<u> </u>	sq.
TOC	<u> </u>	feet determined by	<u> </u>	
Hole size	<u> </u>			

Long string

Size	<u>4-1/2"</u>	Cemented with	<u>525</u>	sq.
TOC	<u>3120'</u>	feet determined by	<u>calculation</u>	
Hole size	<u>7-7/8"</u>			
Total depth	<u>5120'</u>			

Perforated interval

- 4829' - 4857'
- 4892' - 4900'
- 4904' - 4912'

Central Resources, Inc.

Well Bore Diagram

WELL NAME Central Bisti Unit Well No. 80
LOCATION 660' FNL, 1980' FEL SECTION 6 T 25 N R 12 W
COUNTY San Juan STATE New Mexico

SURFACE CASING

Hole Size: 12-1/4"
Casing: 8-5/8", 24#, K-55, 8rd
Casing Set @ 216.36' with 130
sks Class B containing 2%
CaCl and 1/4 #/sk Flocele.

FORMATION TOPS

<u>Fruitland Coal</u>	<u>1119'</u>
<u>Pictured Cliffs</u>	<u>1181'</u>
<u>Lewis</u>	<u>1331'</u>
<u>Cliffhouse</u>	<u>1503'</u>
<u>Menefee</u>	<u>2584'</u>
<u>Point Lookout</u>	<u>3624'</u>
<u>Mancos</u>	<u>3789'</u>
<u>Upper Gallup</u>	<u>4720'</u>
<u>Lower Gallup</u>	<u>4802'</u>

CEMENT TOP 3710' (by CBL)

PERFORATIONS

4817'-43' (2 JSPF)

PBD 5006' (tag w/CBL)

PRODUCTION CASING

Hole Size: 7-7/8"
Casing: 4-1/2", 10.5#, K-55
Casing Set @ 5067.74' w/ 75 sks
65:35 Litepoz 6 w/12% gel, 1/4
#/sk Flocele; 109 bbl mud; 20 bbl
CW 100; 300 sks 50:50 Litepoz 6
w/2% CaCl, 1/4#/sk Flocele; and
150 sks Class B w/2% CaCl and
1/4 #/sk Flocele.

GLE 6171'

KBE 6184'

DF

WELL HISTORY

Spud date: 5/26/82
Original owner: Hixon Development
IP 6/29/82 BOPD 27, BWPD 10.1
MCFD 8 GOR 291
Completion Treatment:
Frac w/54,967 gal 2% KCl and
50,000# 20-40 sand.

CURRENT DATA

Pumping Unit 2-3/8" x 2-1/16"
Tubing
Pump Size 1-1/2" tbq pump
Rod string (193) 3/4"
Remarks
9/84 - Acidized with 1000 gal

4/87 - Ran casing insp log;
 bad casing 2650'- 3000'.
 Returned well to prod.
 under packer.
8/90 - Tested csg leaks
 2682'-3526'. Well returned
 prod. under packer.
12/90 - Well shut in.
5/95 - Ran 3-1/2" scab liner
 2054'-3610'. Acidized
 perfs. RTP.

Date Last Revised: 1/19/96

5090' TD

INJECTION WELL DATA SHEET

SIDE 1

Central Resources, Inc.		Central Bisti Unit		
OPERATOR	LEASE			
80	660' FNL, 1980' FEL	6	25N	12W
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
San Juan County, New Mexico				

Tabular Data

Surface Casing

Size	<u>8-5/8"</u>	Cemented with	<u>130</u>	sx.
TOC	<u>surface</u>	feet determined by	<u>cement to surface</u>	
Hole size	<u>12-1/4"</u>			

Intermediate Casing

Size	<u> </u>	Cemented with	<u> </u>	sx.
TOC	<u> </u>	feet determined by	<u> </u>	
Hole size	<u> </u>			

Long string

Size	<u>4-1/2"</u>	Cemented with	<u>525</u>	sx.
TOC	<u>3710'</u>	feet determined by	<u>cement bond log</u>	
Hole size	<u>7-7/8"</u>			
Total depth	<u>5090'</u>			

Perforated interval

4817' - 4843'

Central Resources, Inc.

Well Bore Diagram

WELL NAME Central Bisti Unit Well No. 82
LOCATION 330' ESL, 660' FEL SECTION 31 T 25 N R 12 W
COUNTY San Juan STATE New Mexico

SURFACE CASING

Hole Size: 12-1/4"
Casing: 8-5/8", 24#
Casing Set @ 214.85' w/135 sks
Class B containing 2% CaCl.
(159 cu.ft.)

FORMATION TOPS

Fruitland 708'
Pictured Cliffs 1142'
Lewis 1350'
Cliffhouse 1510'
Menefee 2596'
Point Lookout 3629'
Mancos 3792'
Upper Gallup 4720'
Lower Gallup 4816'

CEMENT TOP 500' by TS

PERFORATIONS

4828'-48'
4878'-84'
4890'-4904'
(2 JSPF)

PBD 5011' (tag)

PRODUCTION CASING

Hole Size: 7-7/8"
Casing: 5-1/2", 15.5#, K-55, ST&C
Casing Set @ 5038.97' w/Lead:
400 sks (1500 cu.ft.) Highlift
I; Tail: 200 sks (236 cu.ft.)
Class B w/2% CaCl.

GLE 6165'

KBE 6178'

DF _____

WELL HISTORY

Spud date: 9/25/83
Original owner: Hixon Development
IP 11/4/83 BOPD 94 BWPD 0
MCFD 43 GOR 462
Completion Treatment: _____
Frac w/2,048 bbl 2% KCl slick-
water & 100,000# 20/40 sand.

CURRENT DATA

Pumping Unit _____
Tubing 2-3/8" (156 jts.)
Pump Size 2" x 1-1/2" x 16' RWAC
Rod string (194) 3/4"
Remarks _____

7/84 - Paraffin plugging, pump
change.

2/94 - Tagged fill @4942'.
Hydrotest tubing, pump
change.

INJECTION WELL DATA SHEET

SIDE 1

Central Resources, Inc.	Central Bisti Unit			
OPERATOR	LEASE			
82	330' FSL, 660' FEL	31	25N	12W
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
San Juan County, New Mexico				

Tabular Data

Surface Casing

Size	<u>8-5/8"</u>	Cemented with	<u>135</u>	sx.
TOC	<u>surface</u>	feet determined by	<u>cement to surface</u>	
Hole size	<u>12-1/4"</u>			

Intermediate Casing

Size	<u> </u>	Cemented with	<u> </u>	sx.
TOC	<u> </u>	feet determined by	<u> </u>	
Hole size	<u> </u>			

Long string

Size	<u>5-1/2"</u>	Cemented with	<u>600</u>	sx.
TOC	<u>500'</u>	feet determined by	<u>temperature survey</u>	
Hole size	<u>7-7/8"</u>			
Total depth	<u>5040'</u>			

Perforated interval

4828' - 4848'
 4878' - 4884'
 4890' - 4904'

Central Resources, Inc.

Well Bore Diagram

WELL NAME Central Bisti Unit Well No. 83
LOCATION 760' FNL, 660' FWL SECTION 5 T 25 N R 12 W
COUNTY San Juan STATE New Mexico

SURFACE CASING

Hole Size: 12-1/4"
Casing: 8-5/8", 24#, J-55, ST&C
Casing Set @ 216.2' with 150
sks Class B containing 2%
CaCl.

FORMATION TOPS

Fruitland 638'
Pictured Cliffs 1125'
Lewis 1320'
Cliffhouse 1500'
Menefee 2561'
Point Lookout 3613'
Mancos 3785'
Upper Gallup 4700'
Lower Gallup 4795'

CEMENT TOP (Circ. to surf.)

PERFORATIONS

4788'-92'
4810'-30'
4862'-68'
4872'-86'
(2 JSPE)

PBD 4981' (tag)

PRODUCTION CASING

Hole Size: 7-7/8"
Casing: 5-1/2", 15.5#, K-55, ST&C
Casing Set @ 5018.97' with 400 sks
(1500 cu.ft.) Highlift J and
200 sks (236 cu.ft.) Class B
w/2% CaCl.

GLE 6159'

KBE 6172'

DF

WELL HISTORY

Spud date: 10/1/83
Original owner: Hixon Development
IP 11/7/83 BOPD 66 BWPD 1.4
MCFD 25.2 GOR 382
Completion Treatment:
Frac w/2,123 bbl 2% KCl slick-
water and 79,000# 20/40 sand.

CURRENT DATA

Pumping Unit
Tubing 2-3/8" (156 jts.)
Pump Size 2" x 1-1/2" x 16'
Rod string (188) 3/4" rods
Remarks
8/95 - Acidized perms with
1000 gal 15% HCl.

INJECTION WELL DATA SHEET

SIDE 1

Central Resources, Inc.	Central Bisti Unit			
OPERATOR	LEASE			
83	760' FNL, 660' FWL	5	25N	12W
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
San Juan County, New Mexico				

Tabular Data

Surface Casing

Size	<u>8-5/8"</u>	Cemented with	<u>150</u>	sx.
TOC	<u>surface</u>	feet determined by	<u>cement to surface</u>	
Hole size	<u>12-1/4"</u>			

Intermediate Casing

Size	<u> </u>	Cemented with	<u> </u>	sx.
TOC	<u> </u>	feet determined by	<u> </u>	
Hole size	<u> </u>			

Long string

Size	<u>5-1/2"</u>	Cemented with	<u>600</u>	sx.
TOC	<u>surface</u>	feet determined by	<u>circulated to surface</u>	
Hole size	<u>7-7/8"</u>			
Total depth	<u>5020'</u>			

Perforated interval

- 4788' - 4792'
- 4810' - 4830'
- 4862' - 4868'
- 4872' - 4886'

Giant Exploration & Production Company Well Bore Diagram

WELL NAME Central Bisti Unit Well No. 2 a.k.a Federal #C-3
 LOCATION 660' FNL, 1980' FWL SECTION 5 T 25 N R 12 W
 COUNTY San Juan STATE New Mexico

SURFACE CASING

Hole Size: 12-1/4"
 Casing: 8-5/8", 24#, J-55, ST&C
 Casing Set @ 298.63' with 175
sks cement.

FORMATION TOPS

<u>Pictured Cliffs</u>	<u>1040'</u>	Pictured Cliffs Top
<u>Lewis</u>	<u>1300'</u>	
<u>Point Lookout</u>	<u>3580'</u>	
<u>Mancos</u>	<u>3772'</u>	
<u>Gallup</u>	<u>4786'</u>	
<u>Lower Gallup</u>	<u>4796'</u>	

CEMENT TOP 3600' (T.S.)

PERFORATIONS

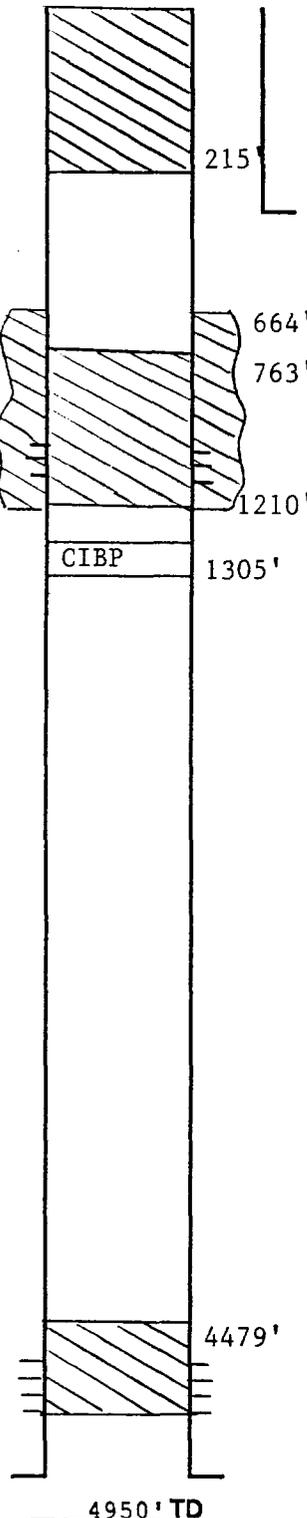
PC: 1125'-35'
1132'-42'
Gallup: 4796'-4804'

PBD _____

PRODUCTION CASING

Hole Size: 7-7/8"
 Casing: 5-1/2", 14#, J-55, ST&C
 Casing Set @ 4947' with 200 sks
50/50 Pozmix containing 2% gel.

Gallup
Top



GLE 6145'
 KBE 6154'
 DF _____

WELL HISTORY

Spud date: 7/5/58
 Original owner: Sunray Mid-Cont.
 IP 8/3/58 BOPD 35 BWPD 0
 MCFD _____ GOR 474
 Completion Treatment: _____
Frac'd w/15,000 gal crude
and 15,000# sand.

CURRENT DATA

Pumping Unit _____
 Tubing _____
 Pump Size _____
 Rod string _____
 Remarks _____
Formerly N.M. Fed. C #22
7/76 - Set 220' cmt plug
above Gallup (4479'-4701').
Set CIBP @1305'. Perf'd
@1210', cmt w/160 sks (TOC
@664' by CBL). Perf'd 1125'
to 1135' w/2 JSPF. Acidized
and swabbed dry. Perf'd
1132'-42', swabbed dry.
Renamed 'Federal #C-3'
7/79 - Spotted cmt 763'-1200'
and squeezed into perfs.
Spotted 25 sks from surface
to 215'. Installed P&A
marker. Well abandoned.
 Date Last Revised: 1/22/96

4950' TD

INJECTION WELL DATA SHEET

SIDE 1

Hixon Development Company		Federal "C" (Plugged & Abandoned 7/16/79)		
OPERATOR	LEASE			
3	660' FNL, 1980' FWL	5	25N	12W
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
San Juan County, New Mexico				

Tabular Data

Surface Casing

Size	<u>8-5/8"</u>	Cemented with	<u>175</u> sx.
TOC	<u>surface</u>	feet determined by	<u>cement to surface</u>
Hole size	<u>12-1/4"</u>		

Intermediate Casing

Size	<u> </u>	Cemented with	<u> </u> sx.
TOC	<u> </u>	feet determined by	<u> </u>
Hole size	<u> </u>		

Long string

Size	<u>5-1/2"</u>	Cemented with	<u>200</u> sx.
TOC	<u>3600'</u>	feet determined by	<u>temperature survey</u>
Hole size	<u>7-7/8"</u>		
Total depth	<u>4950'</u>		

Perforated interval

PC: 1125' - 1142'

Gallup: 4796' - 4804'

FW01W076

BJ SERVICES COMPANY
WATER ANALYSIS #FW01W076
FARMINGTON LAB

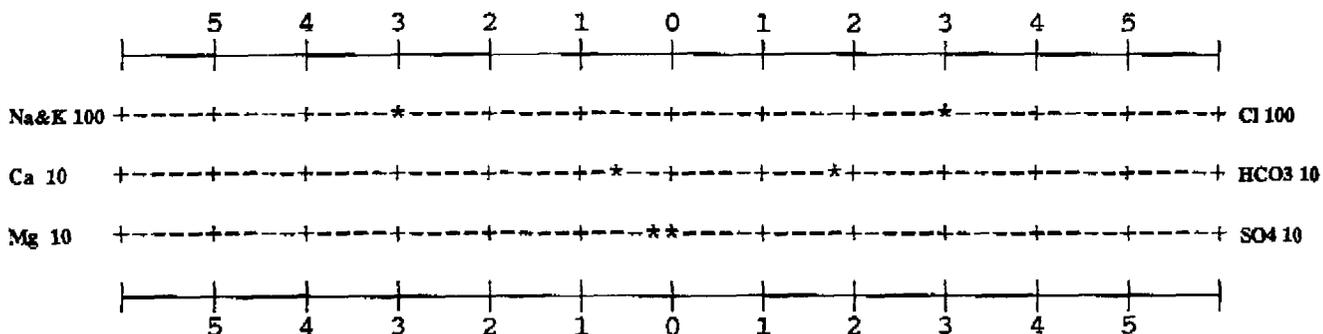
GENERAL INFORMATION			
OPERATOR:	CENTRAL RESOURCES	DEPTH:	
WELL:	C.B.U. WATER FLOOD STATI	DATE SAMPLED:	03/05/98
FIELD:		DATE RECEIVED:	03/05/98
SUBMITTED BY:	GREG MCINTOSH	COUNTY:	SAN JUAN STATE: NM
WORKED BY:	D. SHEPHERD	FORMATION:	
PHONE NUMBER:			

SAMPLE DESCRIPTION
sample for analysis

PHYSICAL AND CHEMICAL DETERMINATIONS			
SPECIFIC GRAVITY:	1.007	@ 74°F	PH: 6.97
RESISTIVITY (MEASURED):	0.300	ohms @ 75°F	
IRON (FE++) :	0 ppm	SULFATE:	20 ppm
CALCIUM:	135 ppm	TOTAL HARDNESS	447 ppm
MAGNESIUM:	27 ppm	BICARBONATE:	1,090 ppm
CHLORIDE:	10,562 ppm	SODIUM CHLORIDE (Calc)	17,374 ppm
SODIUM+POTASS:	7,063 ppm	TOT. DISSOLVED SOLIDS:	19,182 ppm
H2S: STRONG TRACE		POTASSIUM CHLORIDE:	28 (PPM)

REMARKS
TANK LEVEL 7.5' @ 3:40 PM.

STIFF TYPE PLOT (IN MEQ/L)



ANALYST D. SHEPHERD

CENTRAL

RESOURCES, INC.

April 9, 1998

Farmington Daily Times
P.O. Box 450
Farmington, New Mexico 87499

Subject: Legal Notice

Gentlemen/Madam:

Central Resources, Inc. requests that the attached legal notices be published in the Farmington Daily Times. Please forward an Affidavit of Publication, along with an invoice, to me at the letterhead address.

If you have any questions please call me at (505) 326-3325.

Sincerely,



Diane G. Jaramillo
Office Supervisor

DGJ/

Enclosure

Central Resources, Inc., P.O. Box 2810, Farmington, New Mexico 87499, (505) 326-3325, whose agent is Thomas DeLong hereby notifies interested parties that the following well is to be converted to a water injection well. Injection will be into the Lower Gallup perforated interval from 4816' to 4890'. Maximum rate will be 1200 BWPD at less than 965 psi. Any request for information or objections should be filed with the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504 within 15 days.

Central Bisti Unit Well No. 67
660' FNL, 660' FEL
NE/4, NE/4, Sec. 6, T25N, R12W
San Juan County, New Mexico

CENTRAL

RESOURCES, INC.

April 23, 1998

New Mexico Oil Conservation Division
State Land Office Building
2040 South Pacheco
Santa Fe, New Mexico 87504

Subject: Central Bisti Unit Well No. 67
660' FNL, 660' FEL
NE/4, NE/4, Sec. 6, T25N, R12W
San Juan County, New Mexico

Dear Sirs:

Enclosed please find the a copy of the Affidavit of Publication for the above referenced well. A copy of the Application for Authorization for Inject was forwarded to your office on April 9, 1998.

If you have any question please do not hesitate to call.

Sincerely,



Diane G. Jaramillo
Office Supervisor

Enclosure

AFFIDAVIT OF PUBLICATION

No. 39370

COPY OF PUBLICATION

STATE OF NEW MEXICO

County of San Juan:

CONNIE PRUITT being duly sworn says:
That she is the acting Classified Manager
of THE DAILY TIMES, a daily newspaper
of general circulation published in English
at Farmington, said county and state, and
that the hereto attached Legal Notice was
published in a regular and entire issue of
the said DAILY TIMES, a daily newspaper
duly qualified for the purpose within the
meaning of Chapter 167 of the 1937
Session Laws of the State of New Mexico
for publication on the following day(s)

Tuesday, April 14, 1998

and the cost of publication is: \$18.91

Connie Pruitt

On 4-15-98 CONNIE PRUITT

appeared before me, whom I know
personally to be the person who signed the
above document.

Boese Nelson

My Commission Expires November 1, 2000

Legals



NOTICE

Central Resources, Inc., P.O.
Box 2810, Farmington, New
Mexico 87499, (505) 326-
3325, whose agent is Thomas
DeLong hereby notifies inter-
ested parties that the following
well is to be converted to a wa-
ter injection well. Injection will
be into the Lower Gallup per-
forated interval from 4816' to
4890'. Maximum rate will be
1200 BWPD at less than 965
psi. Any request for informa-
tion or objections should be
filed with the Oil Conservation
Division, State Land Office
Building, P.O. Box 2088, San-
ta Fe, New Mexico 87504
within 15 days.

Central Bisti Unit Well No. 67
660' FNL, 660' FEL
NE/4, NE/4, Sec. 6, T25N,
R12W
San Juan County, New Mexico

Legal No. 39370, published in
The Daily Times, Farmington,
New Mexico on Tuesday, April
14, 1998.