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CENTRAL
RESOURCES, INC.

217 U# 2 1377 GP 8/200

April 9, 1998

Mr. Frank Chavez
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

30-013-05582

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

RECEIVED
APR 13 1998
OIL CON. DIV.
DIST. 3

Dear Mr. Chavez:

Enclosed for your information is our Application for Authorization to Inject for the above referenced well. The original Application has been sent to the New Mexico Oil Conservation Division in Santa Fe for approval.

Sincerely,

Diane G. Jaramillo

Diane G. Jaramillo
Office Supervisor

DGJ/

Enclosure

CENTRAL

RESOURCES, INC.

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.

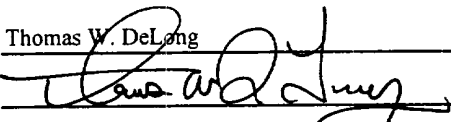
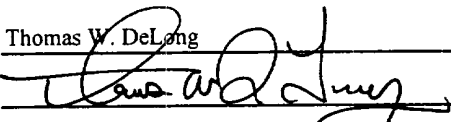
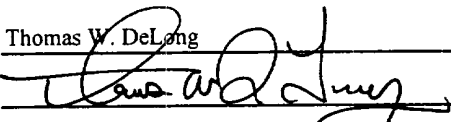
XI. No known sources of drinking water exist in this area.

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.

APPLICATION FOR AUTHORIZATION TO INJECT

- | | | | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------|---------------------------------------|-------------------------------------------------------------------------------------------------------|---------------------|
| I. | PURPOSE: <u> X </u> Secondary Recovery <u> </u> Pressure Maintenance <u> </u> Disposal <u> </u> Storage
Application qualifies for administrative approval? <u> X </u> Yes <u> </u> No | | | | | |
| II. | OPERATOR: <u>Central Resources, Inc.</u>
ADDRESS: <u>P.O. Box 2810, Farmington, New Mexico 87499</u>
CONTACT PARTY: <u>Thomas DeLong</u> PHONE: <u>(505) 326-3325</u> | | | | | |
| III. | WELL DATA: Complete the data required on the reverse side of this form for each well process for injection. Additional sheets may be attached if necessary. | | | | | |
| IV. | Is this an expansion of an existing project: <u> X </u> Yes <u> </u> No
If yes, give the Division order number authorizing the project <u>WFX-528</u> | | | | | |
| V. | Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circled drawn around each proposed injection well. This circle identifies the well's area of review. | | | | | |
| VI. | Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail. | | | | | |
| VII. | Attach data on the proposed operation, including: <ol style="list-style-type: none"> 1. Proposed average and maximum daily rate and volume of fluids to be injected; 2. Whether the system is open or closed; 3. Proposed average and maximum injection pressure; 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.) | | | | | |
| VIII. | Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing water with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval. | | | | | |
| IX. | Describe the proposed stimulation program, if any. | | | | | |
| * X | Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted.) | | | | | |
| * XI. | Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken. | | | | | |
| XII. | Applications for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water. | | | | | |
| XIII. | Applicants must complete the "Proof of Notice" section on the reverse side of this form. | | | | | |
| XIV. | Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief. | | | | | |
| <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">NAME: <u>Thomas W. DeLong</u></td> <td style="width: 50%;">TITLE: <u>Superintendent/Engineer</u></td> </tr> <tr> <td>SIGNATURE: <u></u></td> <td>DATE: <u>4-8-98</u></td> </tr> </table> | | | NAME: <u>Thomas W. DeLong</u> | TITLE: <u>Superintendent/Engineer</u> | SIGNATURE: <u></u> | DATE: <u>4-8-98</u> |
| NAME: <u>Thomas W. DeLong</u> | TITLE: <u>Superintendent/Engineer</u> | | | | | |
| SIGNATURE: <u></u> | DATE: <u>4-8-98</u> | | | | | |
| * If the information required under Sections VI, VII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstance of the earlier submittal. | | | | | | |

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

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

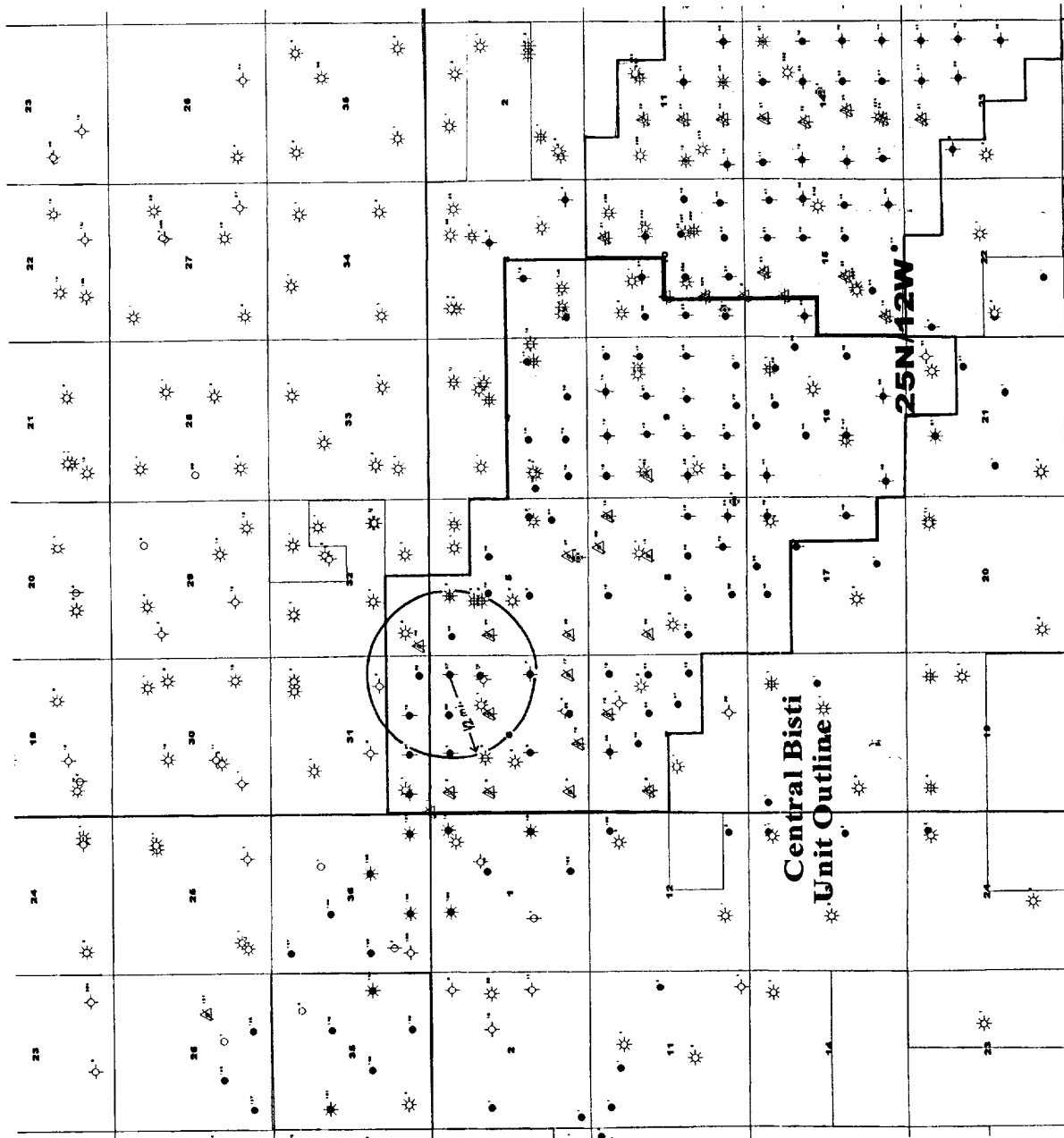
All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

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 RESOURCES, INCORPORATED

Central Bisti Unit
 San Juan County, New Mexico
 Base Map w/ CRI's Acreage

Mitch Meyer	1" = 10,000'	2/1/98
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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 DataSurface Casing

Size	8-5/8"	Cemented with	175	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	5-1/2"	Cemented with	200	sx.
TOC	3613'	feet determined by	temperature survey	
Hole size	7-7/8"			
Total depth	5000'			

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' ENL, 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'

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.

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.

Date Last Revised: 1/19/96

5000' TD

INJECTION WELL DATA SHEET

SIDE 1

Central Resources, Inc.

Central Bisti Unit

OPERATOR

LEASE

WI-4

1980' FNL, 1980' FEL

6

25N

12W

WELL NO.

FOOTAGE LOCATION

SECTION

TOWNSHIP

RANGE

San Juan County, New Mexico

Tabular DataSurface Casing

Size	8-5/8"	Cemented with	200	sx.
TOC	surface	feet determined by	cement to surface	
Hole size	13-3/4"			

Intermediate Casing

Size		Cemented with		sx.
TOC		feet determined by		
Hole size				

Long string

Size	5-1/2"	Cemented with	200	sx.
TOC	3900'	feet determined by	temperature survey	
Hole size	7-7/8"			
Total depth	5000'			

Perforated interval

4819' - 4839'

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 DataSurface 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' FSL, 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'

WELL HISTORY

Spud date: 5/28/56
Original owner: Sunray Mid-Cont.
IP 6/22/56 BOPD 374 BWPD -
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.

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).

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 DataSurface Casing

Size	8-5/8"	Cemented with	175	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	5-1/2"	Cemented with	200	sx.
TOC	3750'	feet determined by	temperature survey	
Hole size	7-7/8"			
Total depth	5002'			

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' ENL, 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

GLE _____

KBE 6168'

DF _____

FORMATION TOPS

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

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'

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.)

5003' TD

Date Last Revised: 3/11/92

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 DataSurface Casing

Size	8-5/8"	Cemented with	175	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	5-1/2"	Cemented with	200	sx.
TOC	3880'	feet determined by	temperature survey	
Hole size	7-7/8"			
Total depth	5003'			

Perforated interval

4810' - 4822'

Central Resources, Inc.

Well Bore Diagram

WELL NAME Central Bisti Unit Well No. 66 (WI)
LOCATION 330' ESL, 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.

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

FORMATION TOPS

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

Fruitland
Top

MesaVerde
Top

794'

1196'

1782'

1932'

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.

Gallup
Top

4395'

4880'

4925' TD

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 DataSurface Casing

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

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.

GLE 6205'

KBE 6218'

DF

FORMATION TOPS

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

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

CEMENT TOP 3120' (Primary Cmt)

PERFORATIONS

4829'-57' (2 JSPF)
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.

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 DataSurface Casing

Size	8-5/8"	Cemented with	130	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	525	sx.
TOC	3120'	feet determined by	calculation	
Hole size	7-7/8"			
Total depth	5120'			

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
skts Class B containing 2%
CaCl and 1/4 #/sk Flocele.

GLE 6171'

KBE 6184'

DF

FORMATION TOPS

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

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.

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" tbg 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 DataSurface Casing

Size	8-5/8"	Cemented with	130	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	525	sx.
TOC	3710'	feet determined by	cement bond log	
Hole size	7-7/8"			
Total depth	5090'			

Perforated interval

4817' - 4843'

Central Resources, Inc.

Well Bore Diagram

WELL NAME Central Bisti Unit Well No. 82
LOCATION 330' FSL, 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

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

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.

5040' TD

Date Last Revised: 7/16/96

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 DataSurface Casing

Size	8-5/8"	Cemented with	135	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	5-1/2"	Cemented with	600	sx.
TOC	500'	feet determined by	temperature survey	
Hole size	7-7/8"			
Total depth	5040'			

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.

GLE 6159'

KBE 6172'

DF

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 I and
200 sks (236 cu.ft.) Class B
w/2% CaCl.

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 perfs with
1000 gal 15% HCl.

5020' TD

Date Last Revised: 1/19/96

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 DataSurface Casing

Size	8-5/8"	Cemented with	150	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	5-1/2"	Cemented with	600	sx.
TOC	surface	feet determined by	circulated to surface	
Hole size	7-7/8"			
Total depth	5020'			

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>
<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>

Pictured
Cliffs
Top

CEMENT TOP 3600' (T.S.)

PERFORATIONS

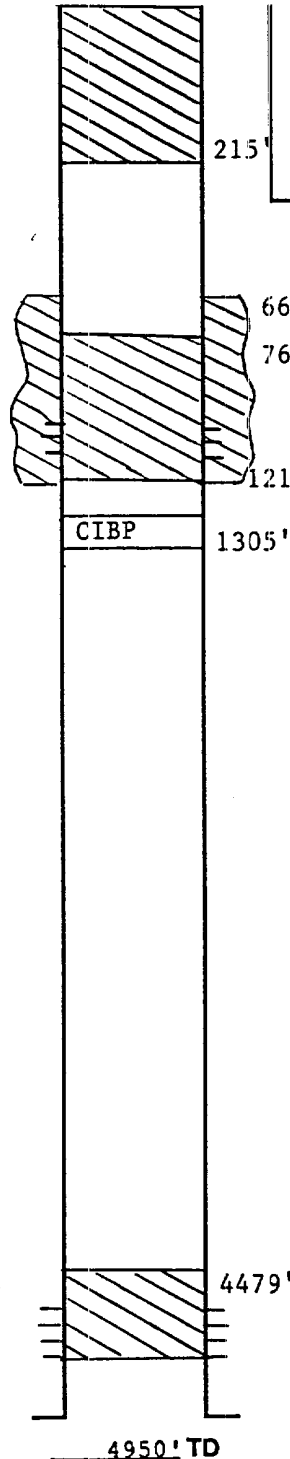
PC: 1125'-35'
1132'-42'
Gallup: 4796'-4804'

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

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 DataSurface Casing

Size	8-5/8"	Cemented with	175	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	5-1/2"	Cemented with	200	sx.
TOC	3600'	feet determined by	temperature survey	
Hole size	7-7/8"			
Total depth	4950'			

Perforated interval

PC: 1125' - 1142'

Gallup: 4796' - 4804'

BJ SERVICES COMPANY

WATER ANALYSIS #FW01W076

FARMINGTON LAB

GENERAL INFORMATION

OPERATOR: CENTRAL RESOURCES DEPTH:
WELL: C.B.U. WATER FLOOD STATION 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

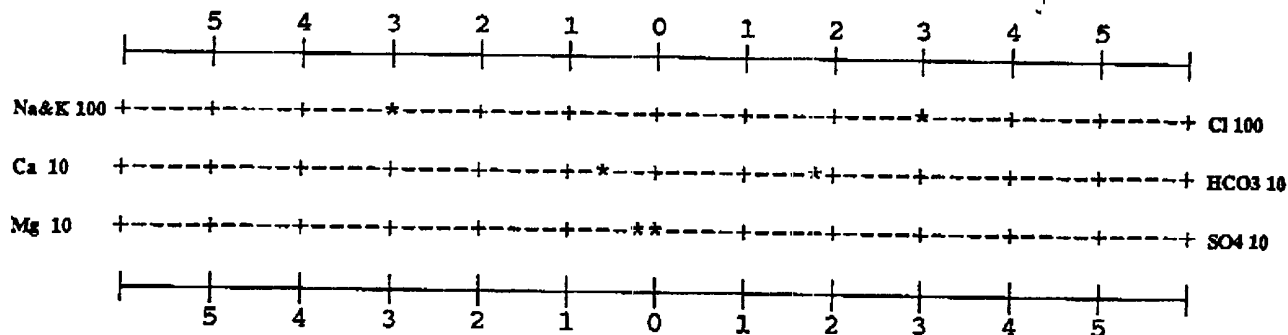
PHYSICAL AND CHEMICAL DETERMINATIONS

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