

VIA FEDERAL EXPRESS

January 28, 1993

Mr. David Catanach
Oil Conservation Division
310 Old Santa Fe Trail
Santa Fe, NM 87504



RE: Geronimo Federal SWD Well No. 1
Lea County, New Mexico

Dear Mr. Catanach:

Enclosed for your review you will find an original and one (1) copy of Form C-108, Application for Authorization to Inject., and various other information to aid you in processing our request for a permit to inject salt water in the subject well.

Should you require additional information or if I can be of any further help, kindly advise.

Very truly yours,

MITCHELL ENERGY CORPORATION

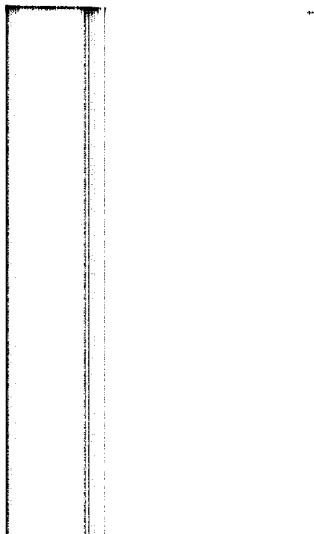
A handwritten signature in cursive script that reads "George Mullen".

George Mullen
Regulatory Affairs Specialist

GM:mw
OCDltr1.GM

cc: List of Interested Parties
OCD - Hobbs, NM

MITCHELL ENERGY CORPORATION 2001 TIMBERLOCH PLACE
P.O. BOX 4000, THE WOODLANDS, TEXAS 77387-4000 713/377-5500
A subsidiary of Mitchell Energy & Development Corp.



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FEB 01 1993

OCD HOPESS CT

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☐ no
- II. Operator: Mitchell Energy Corporation
Address: P.O. Box 4000, The Woodlands, Texas 77387-4000
Contact party: Dan Tuffly Phone: 915-682-5396
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? ☐ yes ☒ no
If yes, give the Division order number authorizing the project _____.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle 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:
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 waters 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. Applicants 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.
- Name: Dan Tuffly Title: District Engineer
Signature: Dan Tuffly Date: 1/12/93
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and 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 Division 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 schematics 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 requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

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FEB 01 1993

III. WELL DATA

A. (1) Geronimo Federal SWD #1
100' FNL & 2540' FWL
Sec 31, T19S, R33E
Tonto, South Field
Lea County, New Mexico

- (2) 8-5/8", 24#/ft, K-55 set at 500'
12-1/4" hole, cement circulated to surface
4-1/2", 10.5#/ft, K-55 set @ 3250'
7-7/8" hole, cement circulated to surface
- (3) 2-3/8", 4.7#/ft, J-55, fiberglass lined tubing
set at \pm 2900'
- (4) Guiberson nickel plated UNI-VI Packer
and on-off tool at \pm 2900'

- B. (1) Yates Sandstone
(2) 2950'-3000', cased hole
(3) Drilled for injection
(4) None
(5) Higher zone - Yates oil, 2962-3076'
Lower zone - Delaware oil, 5130-5237'

VII. Proposed Operation Data

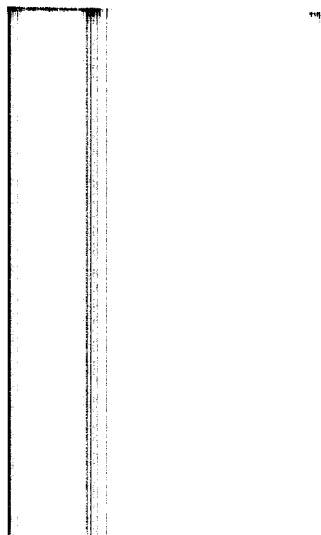
- (1) Average Rate - 1000 BPD
Average Volume - 400 BPD
Maximum Rate - 1500 BPD
Maximum Volume - 800 BPD
- (2) Closed system
- (3) Average Injection Pressure - 1000 psi
Maximum Injection Pressure - 2000 psi
- (4) Water Source - Yates, Delaware, Bone Spring, Morrow
(See attached compatibility analysis)
- (5) Disposal zone - Yates (See attached water analysis)

VIII. Yates Sandstone

50' Thick, 2950'-3000'
No known sources of drinking water.

IX. Propose to stimulate zone with 1500 gal 15% HCl and frac
with 150,000# of 16/30 Brady Sand.

X. Logs are not planned for this well. Logs from several
Mitchell Energy Geronimo wells on this same lease have
previously been submitted.



- XI. There are no known fresh water wells within one mile of the proposed injection well.
- XII. I have examined the 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.

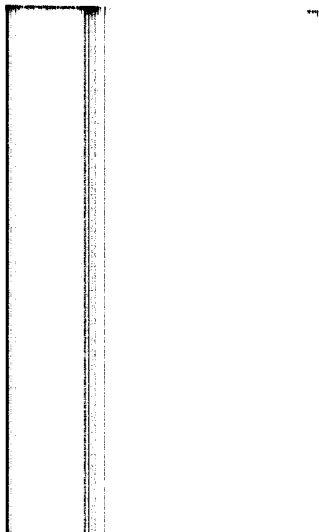
Dan L. Tuffy

SECTION VI

STATUS OF WELLS WITHIN ONE-HALF MILE RADIUS
AREA OF REVIEW
Geronimo Federal SWD #1
Section 31, T19S, R33E
Lea County, New Mexico

<u>Operator</u>	<u>Well Name</u>	<u>Location</u>	<u>Total Depth</u>	<u>Status</u>	<u>Spud Date</u>
<u>Sec 30, T19S, R33E</u>					
* Hudson	Signal Ross Federal #6	660'FSL & 1980' FEL	3127'	D&A	02/10/64
* Kaiser-Francis	Crazy Horse Federal "30" #1	660'FSL & 1980' FWL	9450'	Bone Spring Oil	06/07/92
* Kaiser-Francis	Federal "30" #2	2310'FSL & 1980' FWL	13800'	Morrow Gas	12/17/81
* Wallen Prod Co	Wallen Tonto #1	990'FSL & 2310' FWL	3082'	Yates Oil	10/15/76
* Wallen Prod Co	Wallen Tonto #3	1650'FSL & 1650' FWL	3073'	Yates Oil	08/31/77
* Wallen Prod Co	Wallen Tonto #4	990'FSL & 990' FWL	3130'	Yates Oil	11/13/77
* Wallen Prod Co	Wallen Tonto #5	1650'FSL & 2310' FEL	3099'	Yates Oil	06/30/77
* Wallen Prod Co	Wallen Tonto #6	990'FSL & 990' FEL	3096'	Yates Oil	02/04/78
* Wallen Prod Co	Wallen Tonto #7	1650'FSL & 990' FEL	3119'	D&A	05/17/78
* Wallen Prod Co	Wallen Tonto #8	1790'FSL & 1710' FEL	3120'	Yates Oil	10/16/81
Wallen Prod Co	Wallen Tonto #9	600'FSL & 2300'FWL	570'	D&A	09/20/80
* Wallen Prod Co	Wallen Tonto #9Y	600'FSL & 2300' FWL	3086'	Yates Oil	10/12/80
* Wallen Prod Co	Wallen Tonto #10	1980'FSL & 1650' FWL	3100'	Yates Oil	04/11/81
* Wallen Prod Co	Wallen Tonto #11	1700'FSL & 990' FWL	3088'	Yates Oil	07/08/81
<u>Sec 31, T19S, R33E</u>					
* Manzano	Federal "31G" #2	400' FNL & 2310' FEL	9400'/PB5530'	Delaware Oil	11/30/91
* Mitchell Energy	Geronimo Federal #1	660' FNL & 660' FWL	10564'	Delaware Oil	10/25/89
* Mitchell Energy	Geronimo Federal #2	1980'FNL & 660' FWL	13770'	Morrow Gas	09/27/90
* Mitchell Energy	Geronimo Federal #3	660'FNL & 585' FWL	3250'	Yates Oil	03/07/91
* Mitchell Energy	Geronimo Federal #4	1980'FNL & 1980' FEL	10500'	Bone Spring Oil	07/10/91
* Mitchell Energy	Geronimo Federal #5	660'FNL & 1650' FWL	10500'	Bone Spring Oil	08/09/91
* Mitchell Energy	Geronimo Federal #6	1725'FNL & 660' FWL	7900'	Delaware Oil	09/24/91
* Mitchell Energy	Geronimo Federal #7	1980'FNL & 585'FWL	3250'	Yates Oil	03/05/92
* Mitchell Energy	Geronimo Federal #8	1980'FNL & 1905' FWL	3150'	Yates Oil	03/12/92
* Mitchell Energy	Geronimo Federal #10	660'FNL & 1575' FWL	3250'	Yates Oil	03/17/92
Trigg	Federal "RB" 31 #1	330'FNL & 2310' FEL	710'	J&A	09/18/64
* Trigg	Federal "RB" 31 #1X	335'FNL & 2223' FEL	3175'	D&A	10/02/64

*Note: Wells penetrating the proposed injection interval of 2950-3000' are indicated with an *.
Please find attached well bore schematics for each of these wells.*



RTIN WATER LABORATORIES. II

P.O. Box 1468 Phone 943-3234 or 563-1040
Monahans, Texas 79756

RESULT OF WATER ANALYSES

709 W. Indiana Phone 683-4521
Midland, Texas 79701

TO: Mr. Jim Blount

LABORATORY NO. 692162

400 W. Illinois, Suite 1000, Midland, TX

SAMPLE RECEIVED 6-16-92

RESULTS REPORTED 6-26-92

API WATER ANALYSIS REPORT FORM

Company Mitchell Energy Corporation		Sample No.		Date Sampled	
Field North Pearl		Legal Description		County or Parish Lea State NM	
Lease or Unit Geronimo Federal		Well #7		Depth	
Type of Water (Produced, Supply, etc.) Produced		Formation Yates/Seven Rivers		Water, B/D	
Sampling Point		Sampled By			

DISSOLVED SOLIDS

CATIONS

	mg/l	me/l
Sodium, Na (calc.)	6,527	283.8
Calcium, Ca	1,350	67.5
Magnesium, Mg	443	36.5
Barium, Ba		

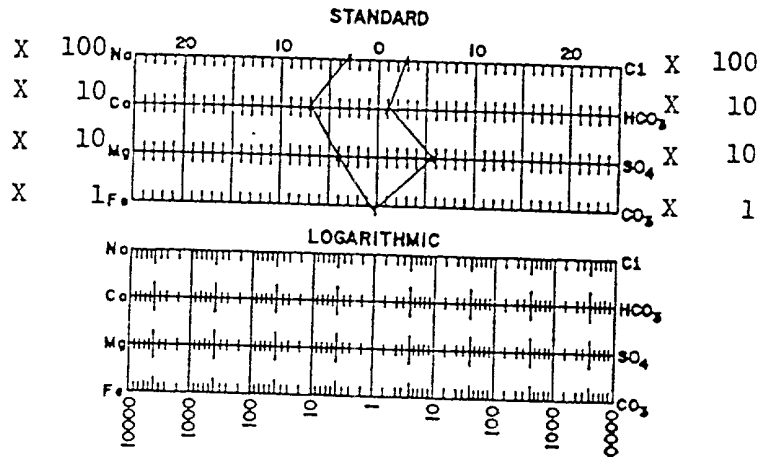
OTHER PROPERTIES

pH	7.57
Specific Gravity, 60/60 F.	1.0199
Resistivity (ohm-meters) 77°F.	0.350
Total Hardness, as CaCO ₃	5,200

ANIONS

Chloride, Cl	11,008	310.4
Sulfate, SO ₄	3,151	65.5
Carbonate, CO ₃	0	0.0
Bicarbonate, HCO ₃	720	11.8

WATER PATTERNS — me/l



Total Dissolved Solids (calc.)

23,199

Iron, Fe (total)	0.20	0.0
Sulfide, as H ₂ S	32.0	

REMARKS & RECOMMENDATIONS: We have no records of either Yates or Seven Rivers waters sufficiently near this field for use in comparing with the above. Our more distant records show wide variations in the characteristics of both Yates and Seven Rivers; therefore, we would not feel confident in using them to draw a conclusion regarding the origin of this water. However, we would basically consider the characteristics to be that of a natural subsurface water. We do note that the water from this well is similar to the water from well #10 except for a substantial difference in the sulfate level.

Yates/
RIVERS
RW = 0.214 @ 94°F @ 3000'
Production Sample

Waylan C. Martin

Waylan C. Martin, M.A.

MARTIN WATER LABORATORIES.

P.O. Box 1468 Phone 943-3234 or 563-1040
Monahans, Texas 79756

RESULT OF WATER ANALYSES

709 W. Indiana Phone 683-4521
Midland, Texas 79701

TO: Mr. Jim Blount

LABORATORY NO. 692164

400 W. Illinois, Suite 1000, Midland, TX

SAMPLE RECEIVED 6-16-92

RESULTS REPORTED 6-26-92

API WATER ANALYSIS REPORT FORM

Company Mitchell Energy Corporation		Sample No.		Date Sampled	
Field North Pearl		Legal Description		County or Parish Lea State NM	
Lease or Unit Geronimo Federal		Well #10		Depth	
Type of Water (Produced, Supply, etc.) Produced		Formation Yates/Seven Rivers		Water, B/D	
Sampling Point		Sampled By			

DISSOLVED SOLIDS

CATIONS

	mg/l	me/l
Sodium, Na (calc.)	7,391	321.3
Calcium, Ca	1,060	53.0
Magnesium, Mg	498	41.0
Barium, Ba		

ANIONS

Chloride, Cl	12,783	360.5
Sulfate, SO ₄	1,723	35.8
Carbonate, CO ₃	0	0.0
Bicarbonate, HCO ₃	1,159	19.0

Total Dissolved Solids (calc.)

24,615

Iron, Fe (total)

13.8

0.6

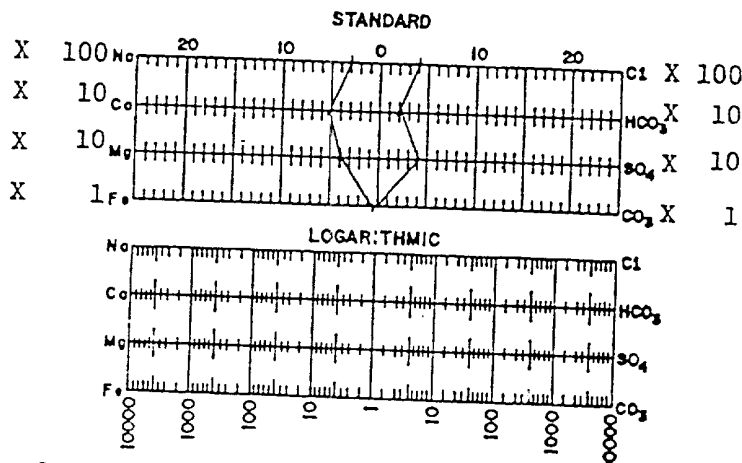
Sulfide, as H₂S

106

OTHER PROPERTIES

pH	7.56
Specific Gravity, 60/60 F.	1.0203
Resistivity (ohm-meters) 77°F.	0.320
Total Hardness, as CaCO ₃	4,700

WATER PATTERNS — me/l



REMARKS & RECOMMENDATIONS: We have no records of Yates or Seven Rivers waters sufficiently near this field for use in comparing with the above. Our more distant records show wide variations in the characteristics of both Yates and Seven Rivers; therefore, we would not feel confident in using them to draw a conclusion regarding the origin of this water. However, we would basically consider the characteristics to be that of a natural subsurface water. We do note that the water from this well is similar to the water from well #7 except for a substantial difference in the sulfate level.

Yates/
7 Rivers

Rw = 0.203 @ 94°F @ 3000'

Production Sample

Waylan C. Martin
Waylan C. Martin, M.A.

MARTIN WATER LABORATORIES.

P.O. Box 1468 Phone 943-3234 or 663-1040
Monahans, Texas 79756

RESULT OF WATER ANALYSES

709 W. Indiana Phone 683-4521
Midland, Texas 79701

to: Mr. Jim Blount

LABORATORY NO. 692163

400 W. Illinois, Suite 1000, Midland, TX

SAMPLE RECEIVED 6-16-92

RESULTS REPORTED 6-26-92

API WATER ANALYSIS REPORT FORM

Company Mitchell Energy Corporation		Sample No.		Date Sampled	
Field North Pearl		Legal Description		County or Parish Lea State NM	
Lease or Unit Geronimo Federal		Well #8	Depth	Formation Yates	Water, B/D
Type of Water (Produced, Supply, etc.) Produced		Sampling Point			Sampled By

DISSOLVED SOLIDS

CATIONS

	mg/l	me/l
Sodium, Na (calc.)	11,416	496.3
Calcium, Ca	1,920	96.0
Magnesium, Mg	765	63.0
Barium, Ba		

ANIONS

Chloride, Cl	20,596	580.8
Sulfate, SO ₄	2,511	52.2
Carbonate, CO ₃	0	0.0
Bicarbonate, HCO ₃	1,360	22.3

Total Dissolved Solids (calc.)

38,568

Iron, Fe (total)

9.4

0.4

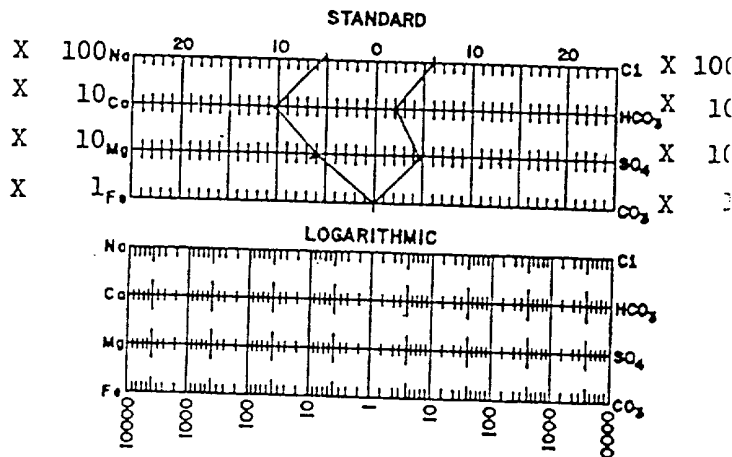
Sulfide, as H₂S

0.0

OTHER PROPERTIES

pH	7.29
Specific Gravity, 60/60 F.	1.0311
Resistivity (ohm-meters) 77° F.	0.215
Total Hardness, as CaCO ₃	7,950

WATER PATTERNS — me/l

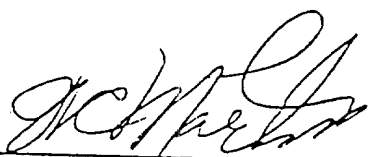


REMARKS & RECOMMENDATIONS: We are not familiar with the zone involved herein; but if we can be of any assistance with more information, please contact us.

Yates

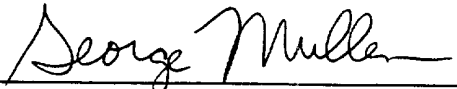
Rw = 0.137 @ 94°F @ 3000'

Production Sample

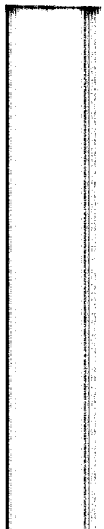

Waylan C. Martin, M.A.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of Mitchell Energy Corporation's Application for Authorization to Inject, for its Geronimo Federal SWD Well No. 1, was sent to each of the individuals and/or companies set out on the attached List of Interested Parties by Certified Mail on January 28, 1993.



George Mullen
Regulatory Affairs Specialist



LIST OF INTERESTED PARTIES
Geronimo Federal SWD Well No. 1
2540' FWL & 100' FNL, Sec., 31, T19S, R33E
Lea County, New Mexico

Offset Leasehold Operators

Grace Petroleum Corporation
6501 North Broadway
Oklahoma City, Oklahoma 73116

Meridian Oil Production, Inc.
21 Desta Drive
Midland, Texas 79705

Mr. William G. Ross
Box 86
Midland, Texas 79702

Mobil Producing Texas and New Mexico, Inc.
12450 Greenspoint Drive
Houston, Texas 77060

Phillips Petroleum Company
Box 7500
Bartlesville, Oklahoma 74005

David and Mary Louis Collier
804 Clayton
Artesia, New Mexico 88210

Bert M. and Eva Jones
407 Bullock
Artesia, New Mexico 88210

Mr. Timothy D. Collier
Collier Energy, Inc.
Box 798
Artesia, New Mexico 88210

G & P Exploration, Inc.
4800 San Felipe, Suite 620
Houston, Texas 77056

Mr. Walter Krug
Box 1960
Midland, Texas 79702

Manzano Oil Corporation
Box 2107
Roswell, New Mexico 88202

Union Oil Company of California
P.O. Box 3100
Midland, Texas 79701

Cities Service Company
P.O. Box 300
Tulsa, Oklahoma 74102

Oxy USA, Inc.
P.O. Box 300
Tulsa, Oklahoma 74102

Surface Owner

United States Department
of the Interior
Bureau of Land Management
101 E. Mermod
Carlsbad, New Mexico 88220

Federal Grazing Lease Owner

Mr. Kenneth Smith
P.O. Box 764
Carlsbad, New Mexico 88220

AFFIDAVIT OF PUBLICATION

State of New Mexico.
County of Lea.

I, Kathi Bearden

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period

of _____

one _____ weeks.

Beginning with the issue dated

January 10, 19 93

and ending with the issue dated

January 10, 19 93

Kathi Bearden
General Manager.

Sworn and subscribed to before

me this 11th day of

January, 19 93

Peggy J. Leary
Notary Public

My Commission expires _____

July 6, 19 94

(Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

LEGAL NOTICE
January 10, 1993
NOTICE OF INTENTION
TO INJECT
Mitchell Energy Corporation, P.O. Box 4000, The Woodlands, Texas 77387-4000, hereby gives notice of intention to drill the Geronimo Federal SWD #1 located 2,540' FWL and 100' FNL, Section 31, T19S, R33S, for a salt water disposal well. The disposal zone will be the Yates Formation from 2,950'-3,000' with a maximum injection pressure of 2,000 psi and maximum rate of 1,500 BPD. 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.

PROPOSED

Well Name : Geronimo Federal SWD #1
Operator : Mitchell Energy Corporation
Field : Tonto South
Location : 100' FNL & 2540' FWL
 Sec. 31, T19S R33E
Spud Date :
Completion Date :
Total Depth : 3250'
Status / Pool : Salt Water Disposal, Yates

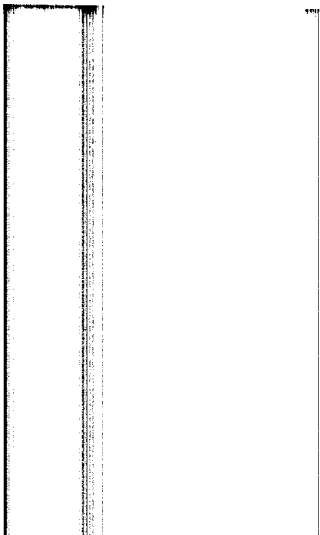
8 5/8" 24# K-55 set at 500',
cemented to surface

2 3/8" 4.7#/ft J-55 fiberglass lined
tubing, on-off tool and nickel plated
packer set at +/- 2900'

Perf 2950-3000'

4 1/2" 10.5# K-55 set at 3250',
cemented to surface

TD at 3250'



Well Name : Signal Ross Federal #6
Operator : Hudson, Will & Edward R
Field : Wildcat
Location : 660' FSL & 1980' FEL,
Sec. 30, T19S R33E
Spud Date : 02-10-64
Completion Date : 03-11-64
Total Depth : 3127'
Status / Pool : D & A

Set 4" pipe marker at surface and
a cement plug in top 12'

13 3/8" set at 66' w/ 100 sx cmt

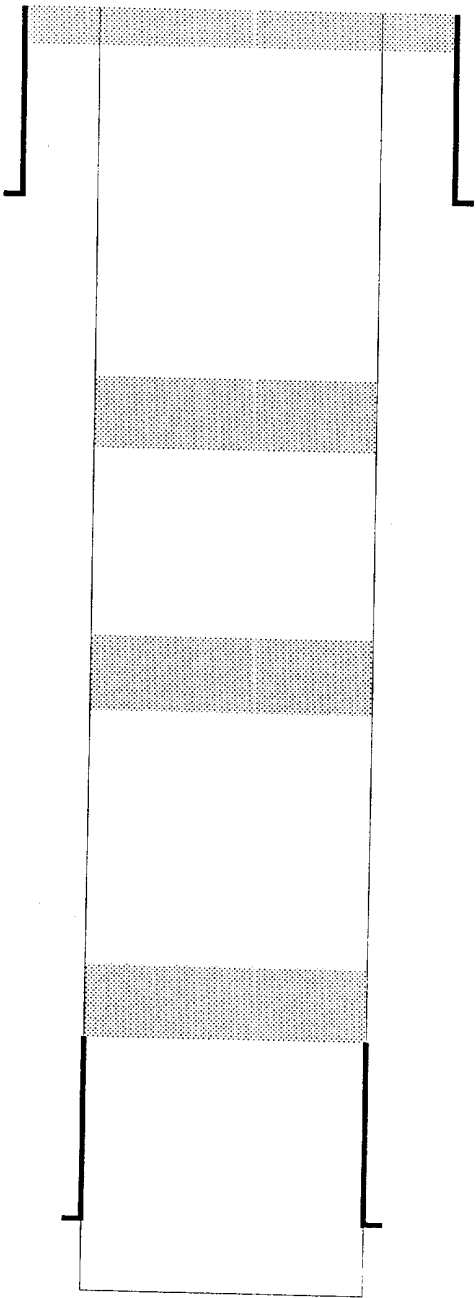
60 sx cmt from 575-675'

35 sx cmt from 1275-1375'

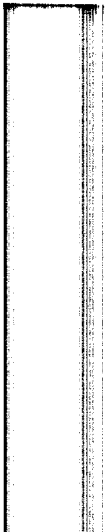
70 sx cmt from 2600-2810'
5 1/2" casing pulled from 2810'

5 1/2" set at 3115' w/50 sx cmt

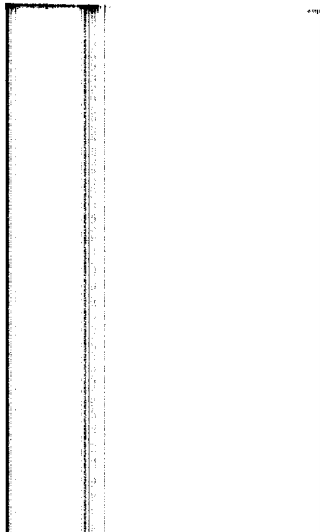
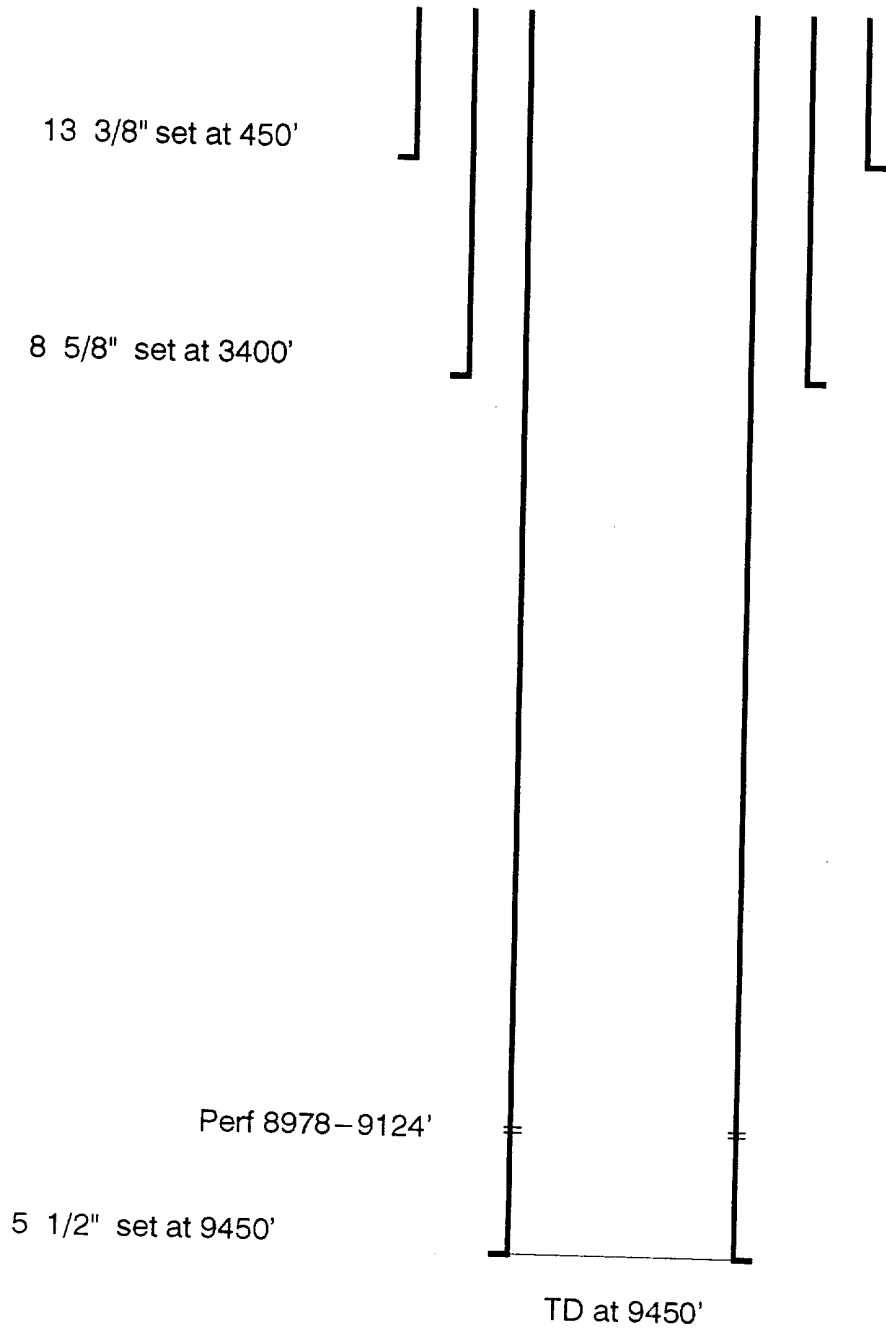
Open Hole 3115 - 3127



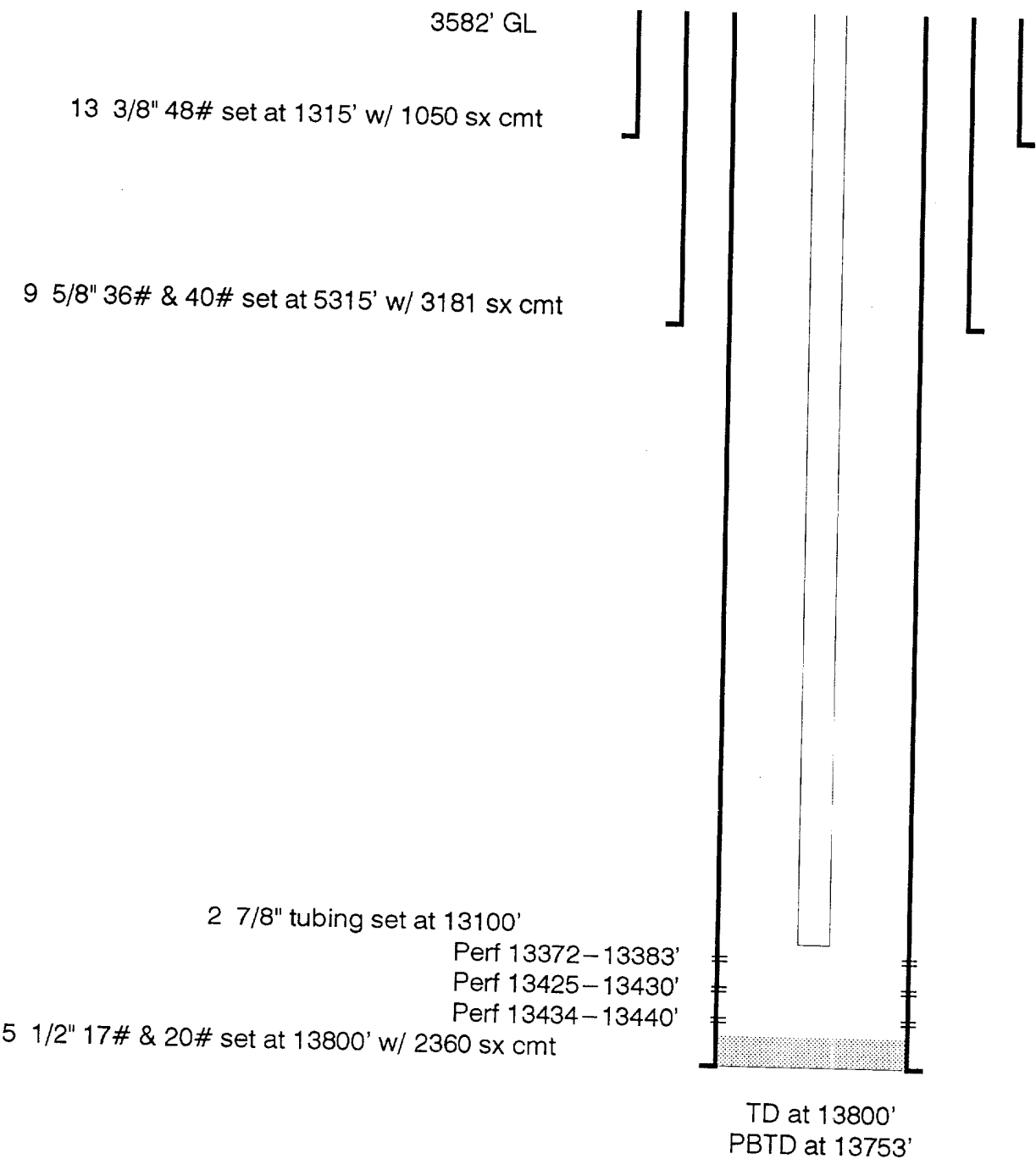
TD at 3127'



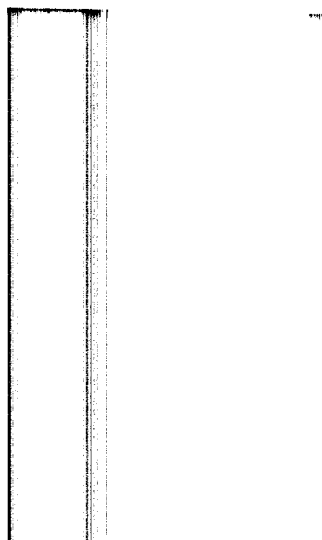
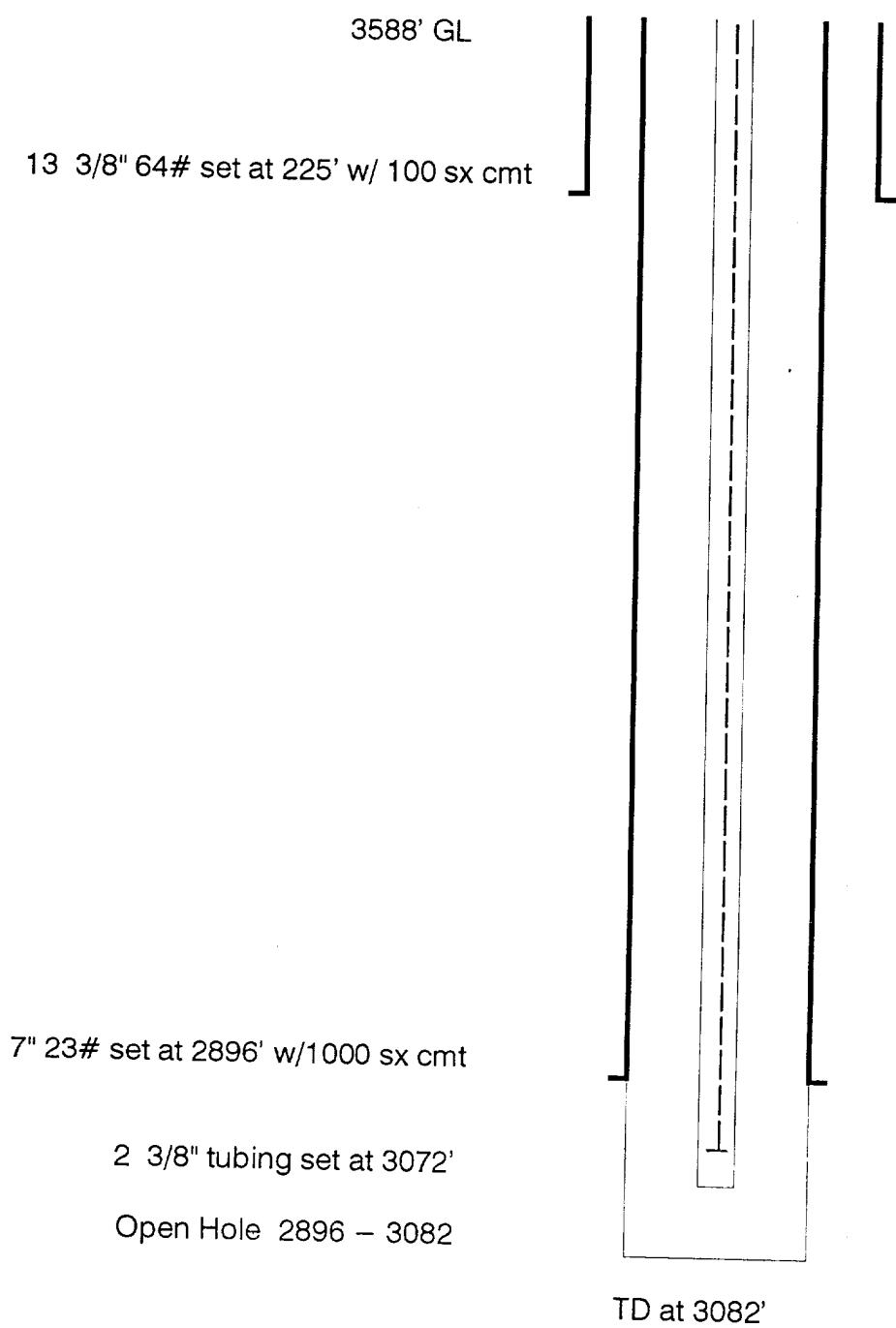
Well Name : Crazy Horse Federal "30" #1
Operator : Kaiser Francis Oil
Field : Gem
Location : 660' FSL & 1980' FWL,
Sec. 30, T19S R33E
Spud Date : 06-07-92
Completion Date :
Total Depth : 9450'
Status / Pool : Producing, Bone Springs Pool



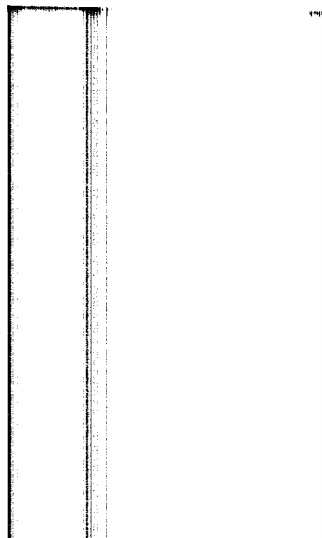
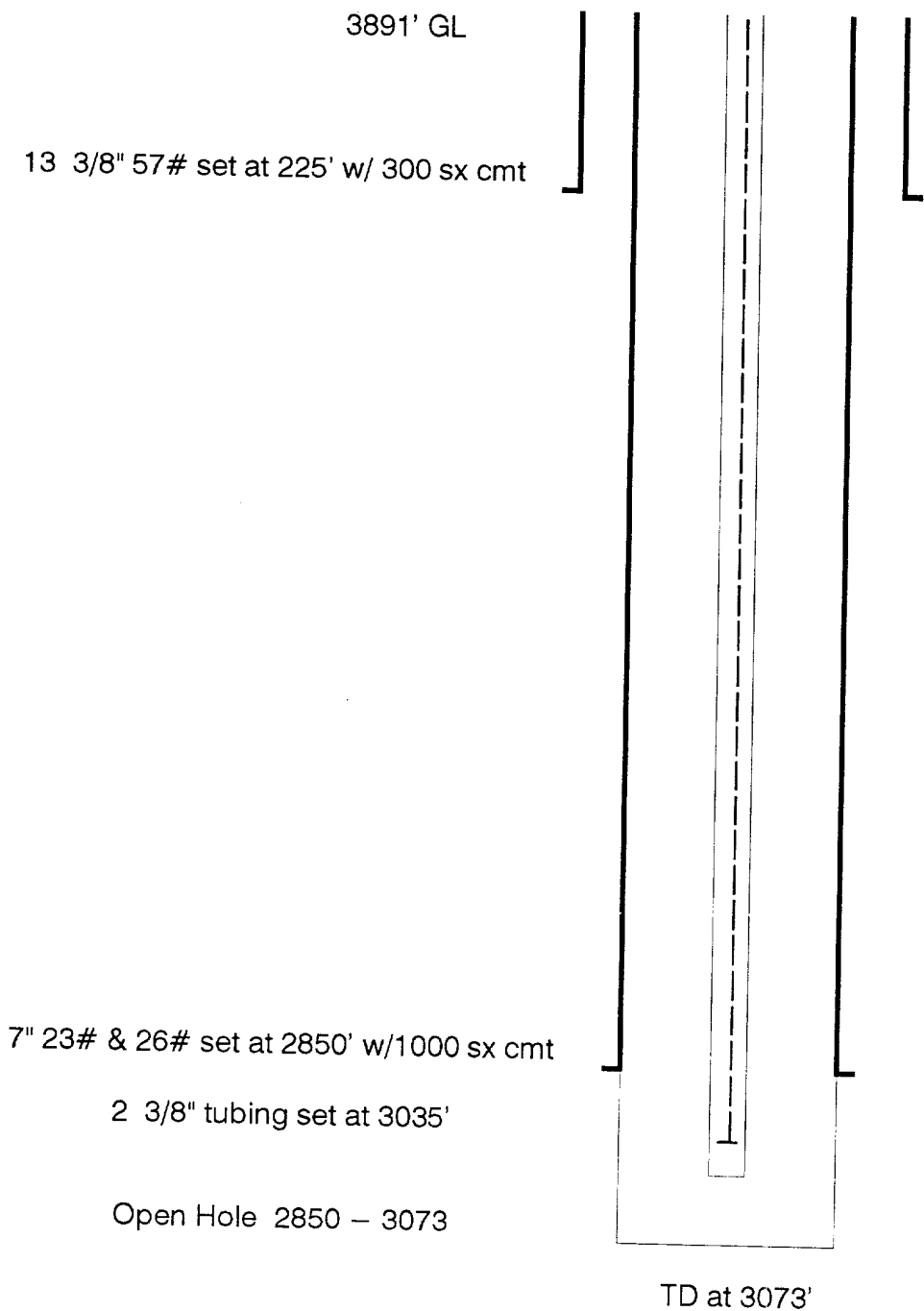
Well Name : Federal "30" #2
Operator : Kaiser Francis Oil
Field : Gem
Location : 2310' FSL & 1980' FWL,
Sec. 30, T19S R33E
Spud Date : 12-17-81
Completion Date : 10-05-82
Total Depth : 13800'
Status / Pool : Producing, Morrow Pool



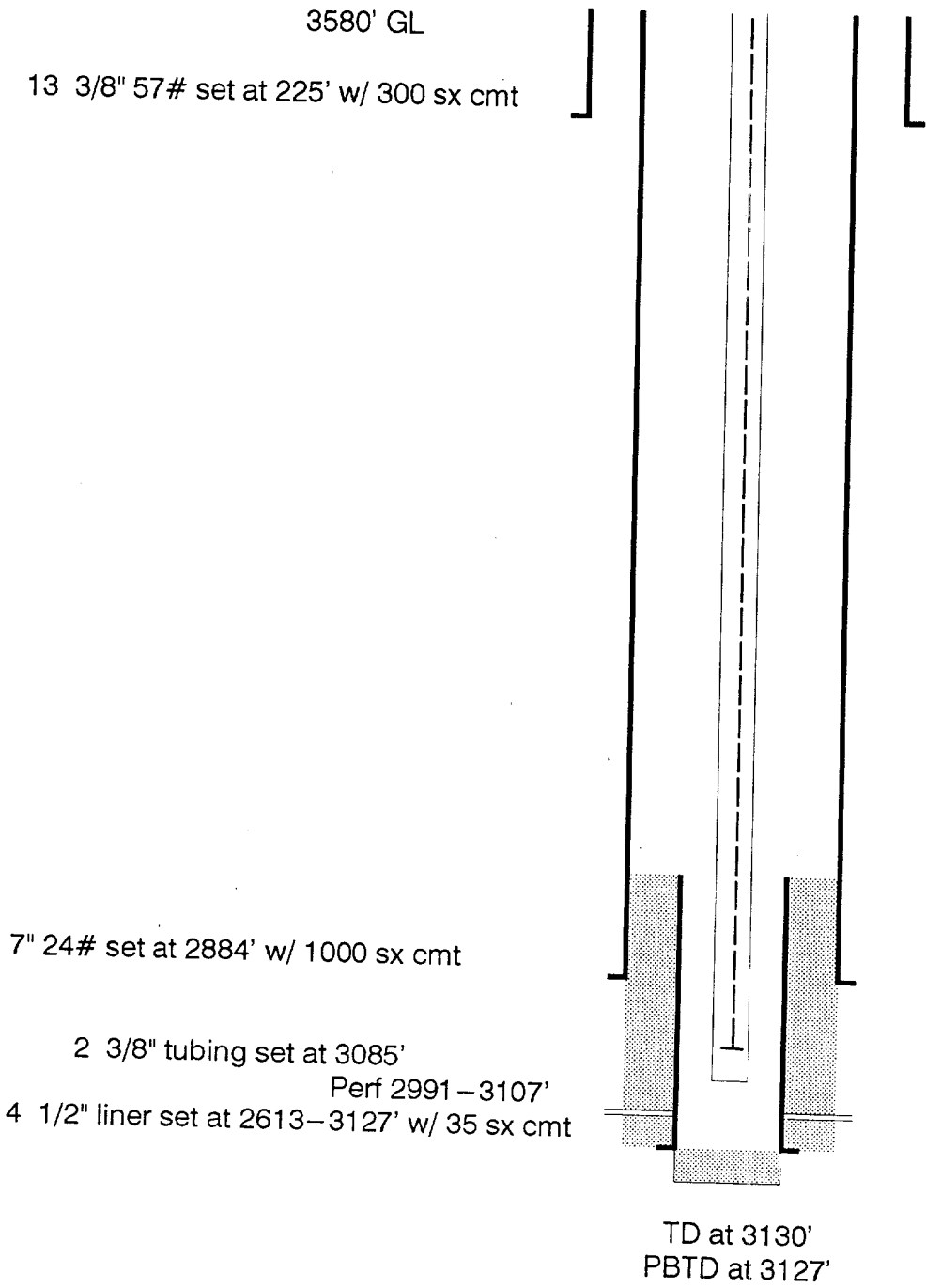
Well Name : Wallen Tonto #1
Operator : Wallen Production
Field : Tonto South
Location : 990' FSL & 2310' FWL,
Sec. 30, T19S R33E
Spud Date : 10-15-76
Completion Date : 12-05-76
Total Depth : 3082'
Status / Pool : Producing, Yates Pool



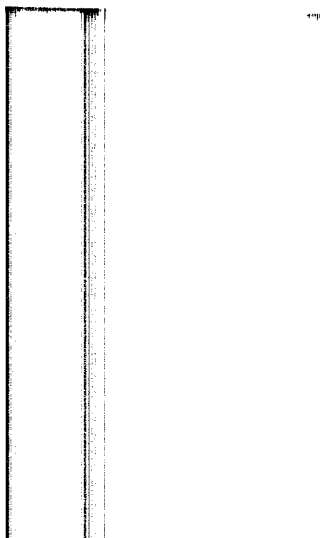
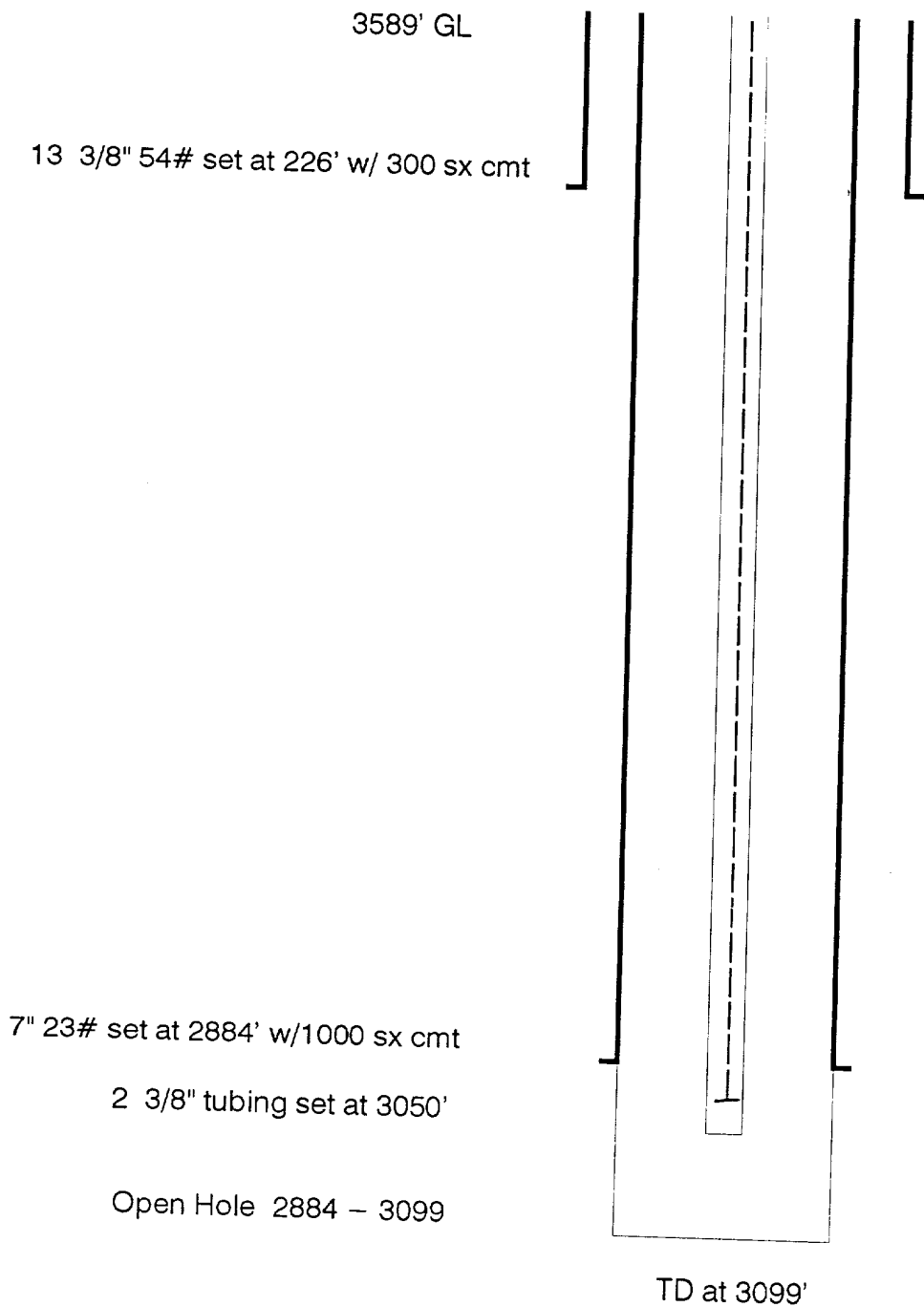
Well Name : Wallen Tonto #3
Operator : Wallen Production
Field : Tonto South
Location : 1650' FSL & 1650' FWL,
Sec. 30, T19S R33E
Spud Date : 08-31-77
Completion Date : 10-21-77
Total Depth : 3073'
Status / Pool : Producing, Yates Seven Rivers Pool



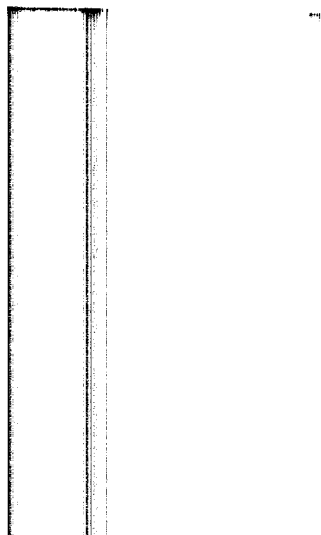
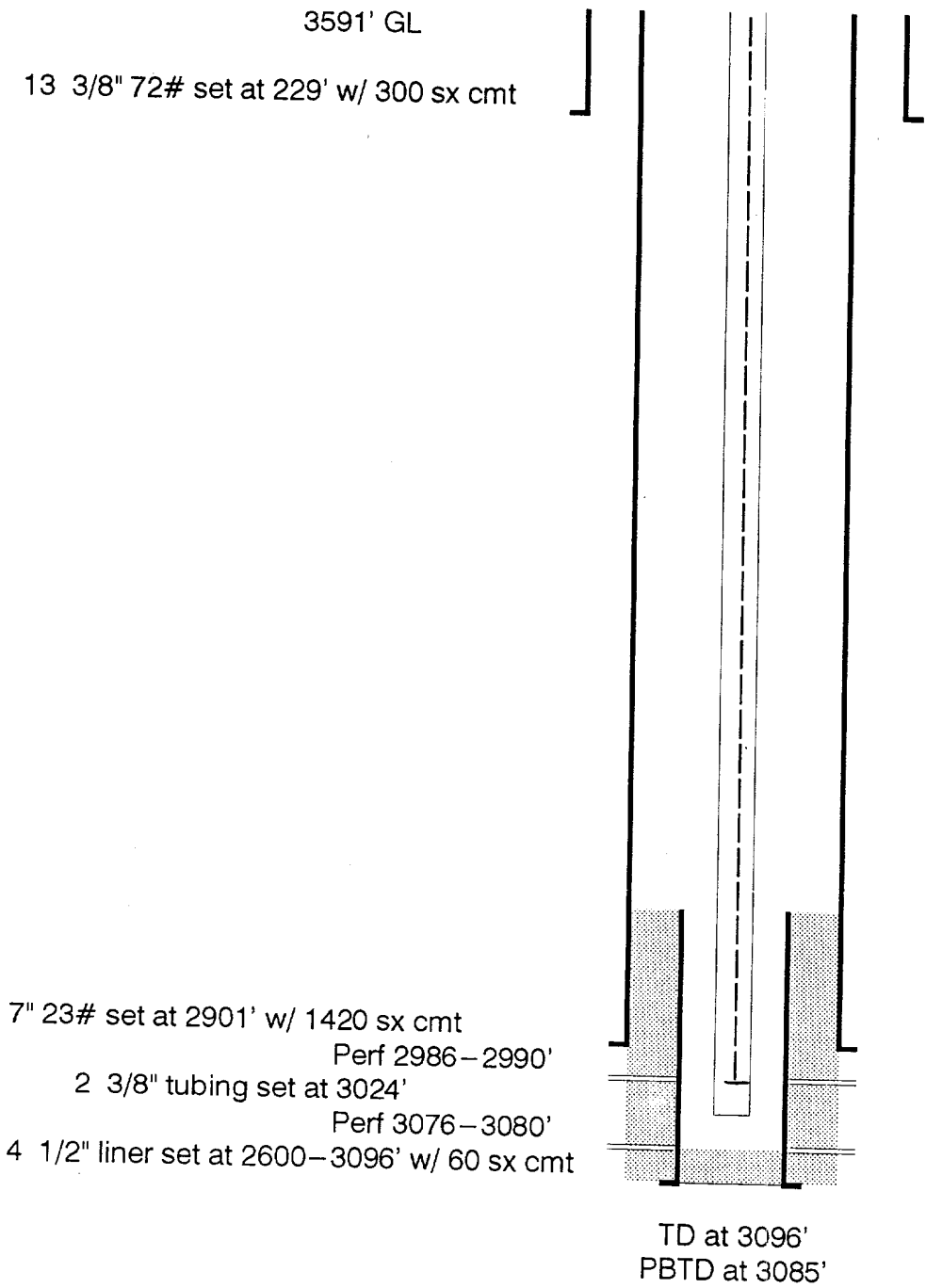
Well Name : Wallen Tonto #4
Operator : Wallen Production
Field : Tonto South
Location : 990' FSL & 990' FWL,
Sec. 30, T19S R33E
Spud Date : 11-13-77
Completion Date : 01-25-78
Total Depth : 3130'
Status / Pool : Producing, Yates Seven Rivers Pool



Well Name : Wallen Tonto #5
Operator : Wallen Production
Field : Tonto South
Location : 1650' FSL & 2310' FEL,
Sec. 30, T19S R33E
Spud Date : 06-30-77
Completion Date : 08-25-77
Total Depth : 3099'
Status / Pool : Producing, Yates Seven Rivers Pool



Well Name : Wallen Tonto #6
Operator : Wallen Production
Field : Tonto South
Location : 990' FSL & 990' FEL,
Sec. 30, T19S R33E
Spud Date : 02-04-78
Completion Date : 04-28-78
Total Depth : 3096'
Status / Pool : Producing, Yates Seven Rivers Pool



Well Name : Wallen Tonto #7
Operator : Wallen Production
Field : Tonto South
Location : 1650' FSL & 990' FEL,
Sec. 30, T19S R33E
Spud Date : 05-17-78
Completion Date : 07-15-78
Total Depth : 3119'
Status / Pool : D & A

Set 5' 4 1/2" casing marker at surface
along with a 10 sx cmt plug

13 3/8" 74# set at 225' w/ 300 sx cmt

Filled to surface with gel (25 sx / 100 bbl)

100 sx cmt at 1450' with the approx. top
of cmt at 1000'

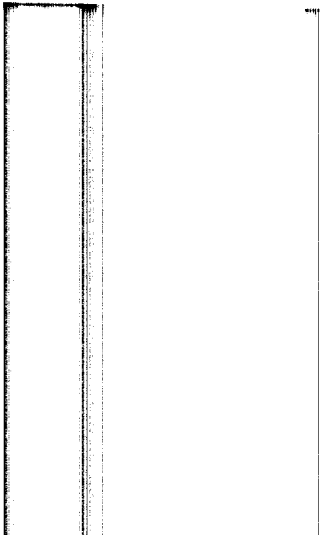
Filled to 1450' with gel (25 sx / 100 bbl)

100 sx cmt at bottom

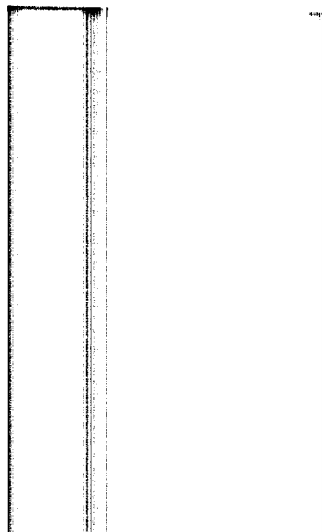
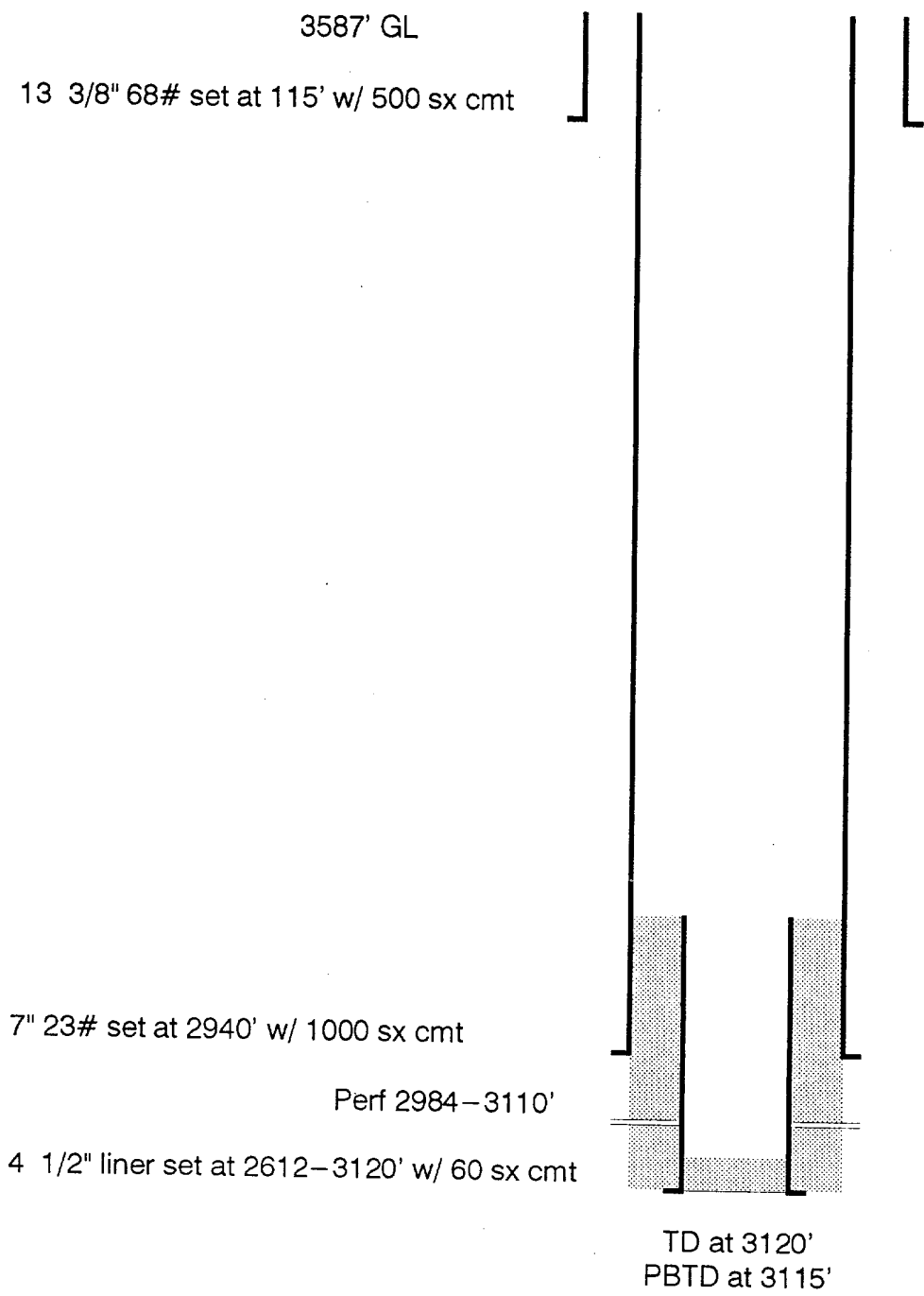
7" 23# set at 2900' w/1000 sx cmt

Open Hole 2900 - 3113

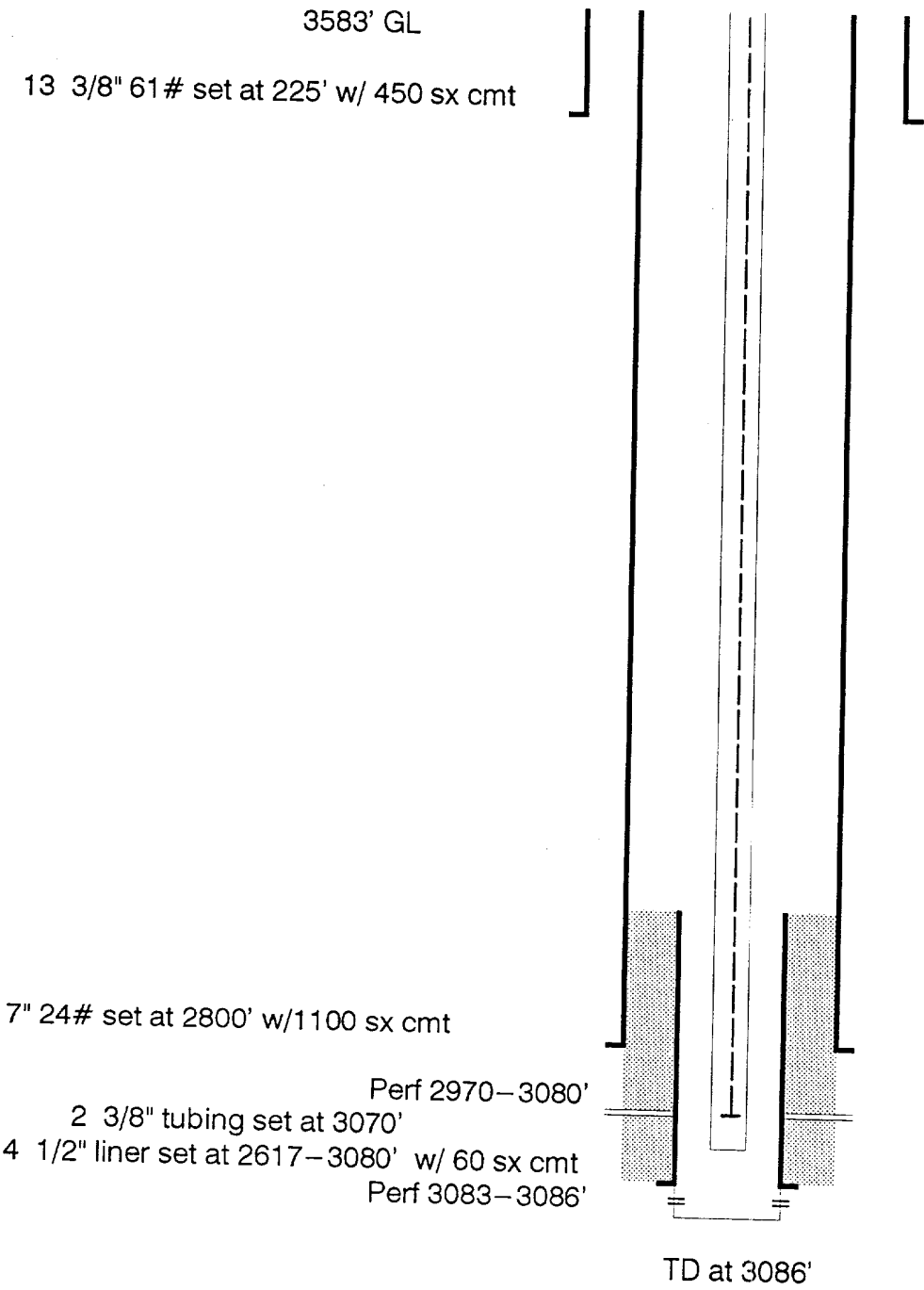
TD at 3119'



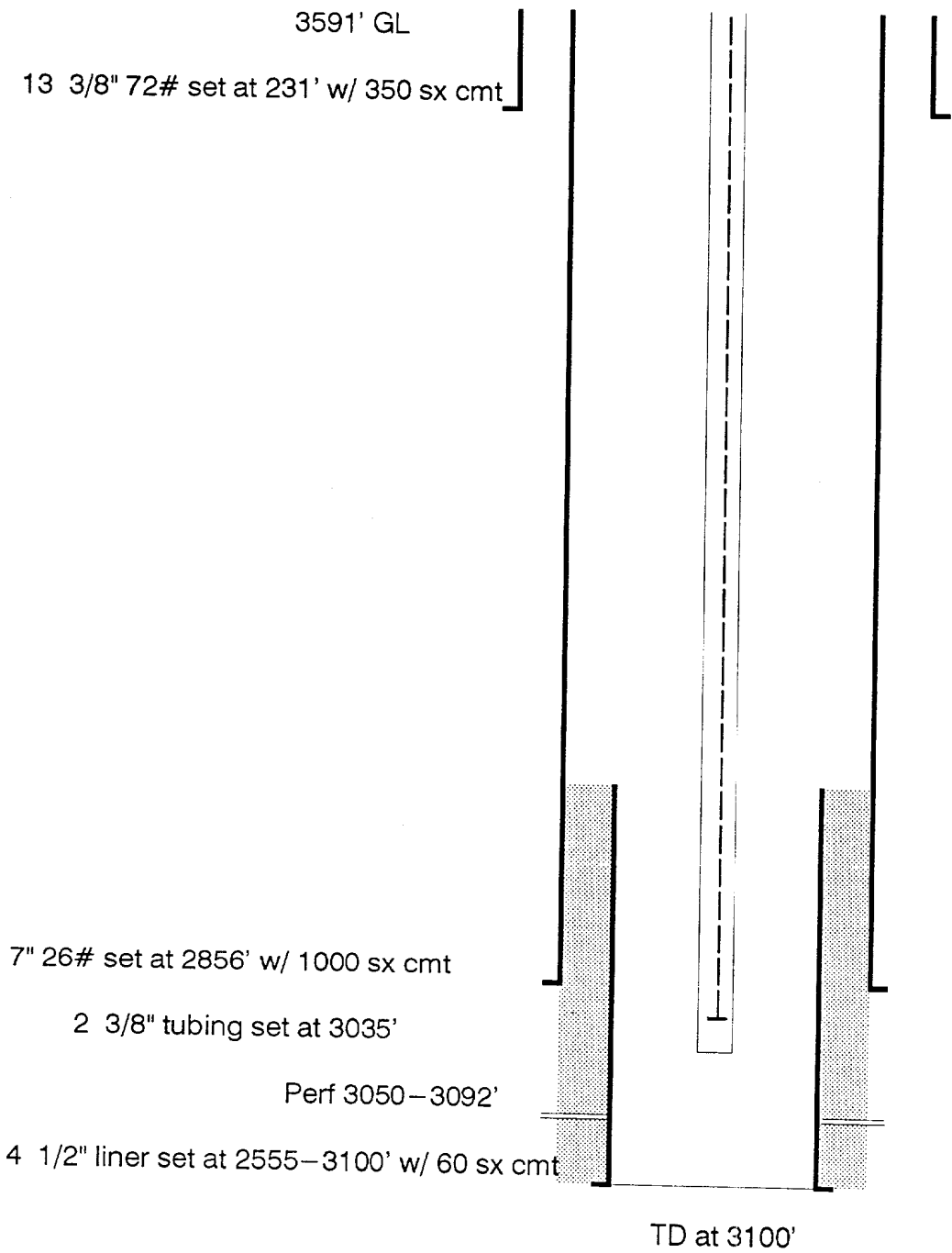
Well Name : Wallen Tonto #8
Operator : Wallen Production
Field : Tonto South
Location : 1790' FSL & 1710' FEL,
Sec. 30, T19S R33E
Spud Date : 10-16-81
Completion Date : 01-28-82
Total Depth : 3120'
Status / Pool : Producing, Yates Seven Rivers Pool



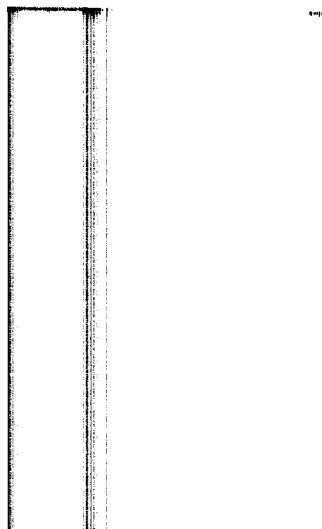
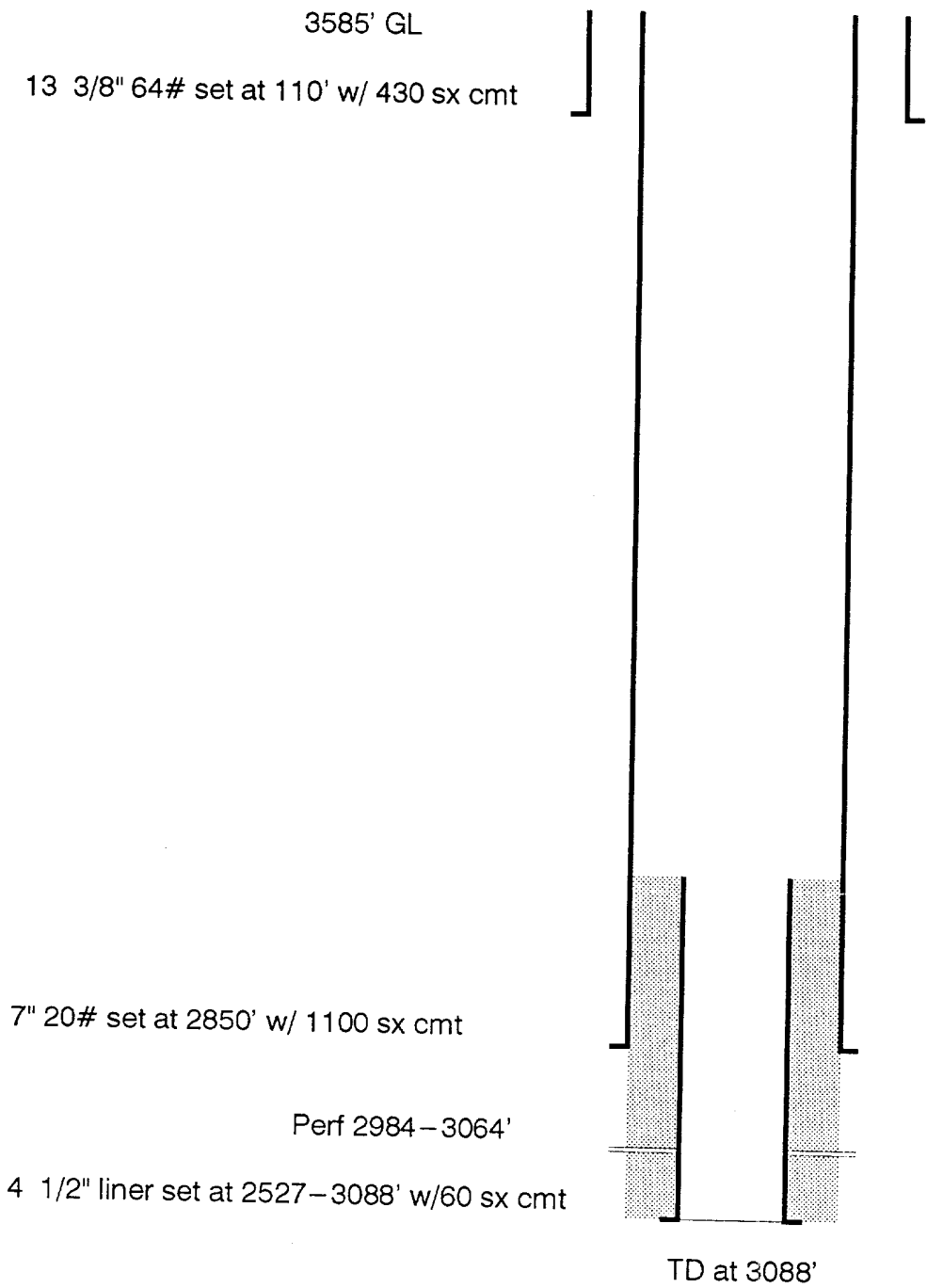
Well Name : Wallen Tonto #9-Y
Operator : Wallen Production
Field : Tonto South
Location : 600' FSL & 2300' FWL,
Sec. 30, T19S R33E
Spud Date : 10-12-80
Completion Date : 12-28-80
Total Depth : 3086'
Status / Pool : Producing, Yates Seven Rivers Pool



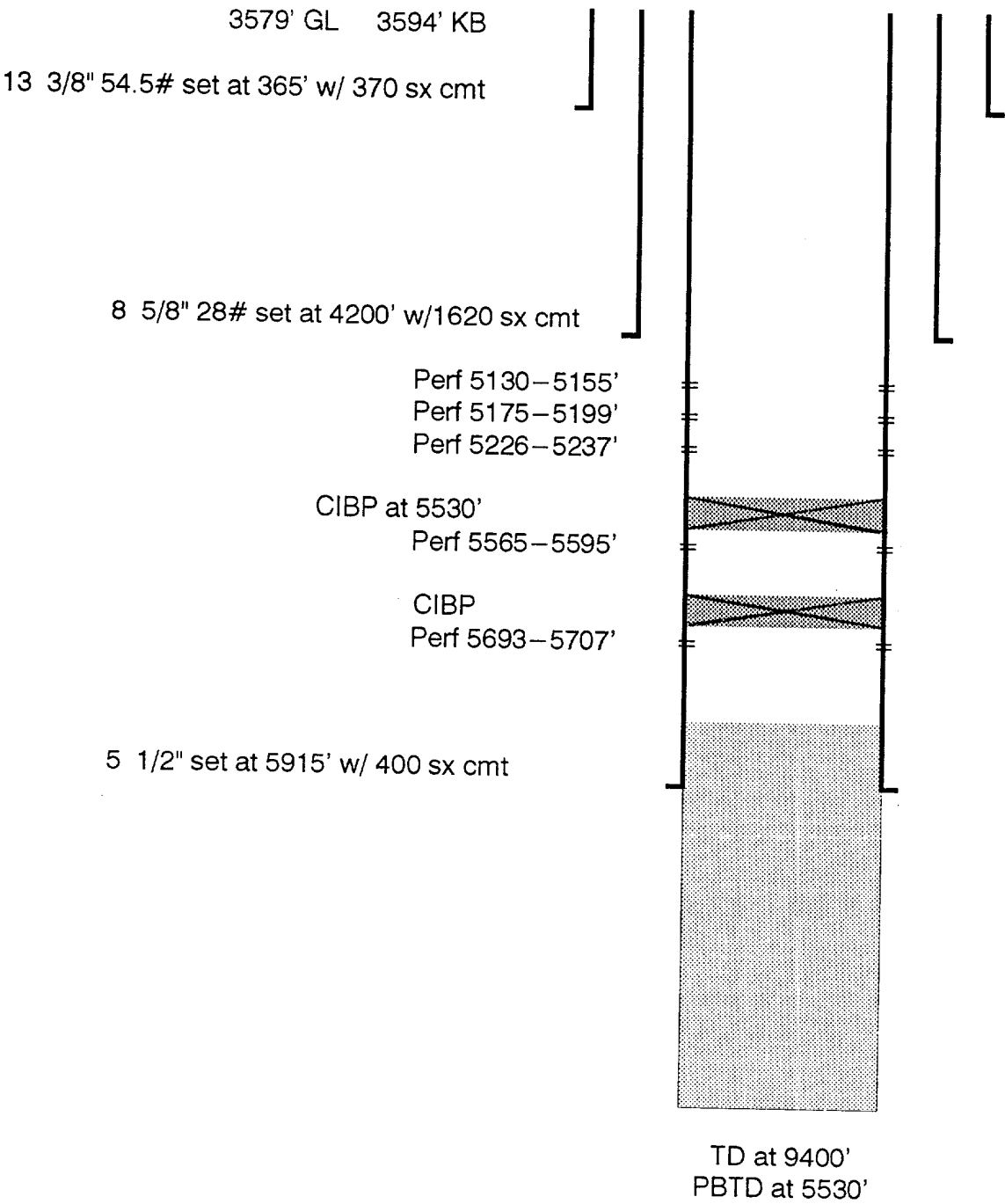
Well Name : Wallen Tonto #10
Operator : Wallen Production
Field : Tonto South
Location : 1980' FSL & 1650' FWL,
Sec. 30, T19S R33E
Spud Date : 04-11-81
Completion Date : 07-22-81
Total Depth : 3100'
Status / Pool : Producing, Yates Seven Rivers Pool



Well Name : Wallen Tonto #11
Operator : Wallen Production
Field : Tonto South
Location : 1700' FSL & 990' FWL,
Sec. 30, T19S R33E
Spud Date : 07-08-81
Completion Date : 10-21-81
Total Depth : 3088'
Status / Pool : Producing, Yates Pool



Well Name : Federal 31 G #2
Operator : Manzano Oil
Field : Geronimo
Location : 400' FNL & 2310' FEL,
Sec. 31, T19S R33E
Spud Date : 11-30-91
Completion Date : 02-13-92
Total Depth : 9400'
Status / Pool : Producing, Delaware Pool

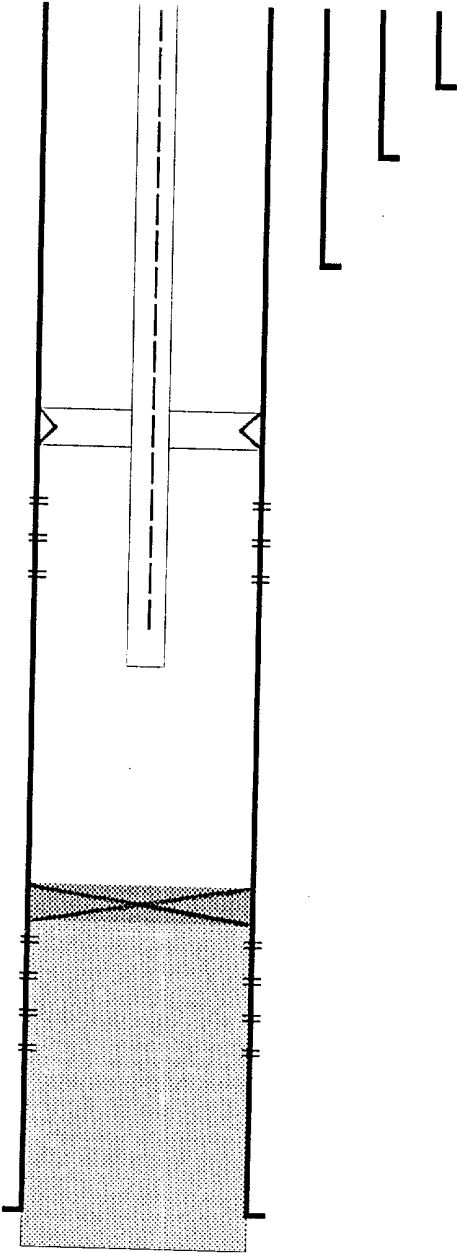


Well Name : Geronimo Federal #1
Operator : Mitchell Energy Corporation
Field : Geronimo
Location : 660' FNL & 660' FWL,
Sec. 31, T19S R33E
Spud Date : 10-25-89
Completion Date : 12-08-89
Total Depth : 10564'
Status / Pool : Producing, Delaware Pool

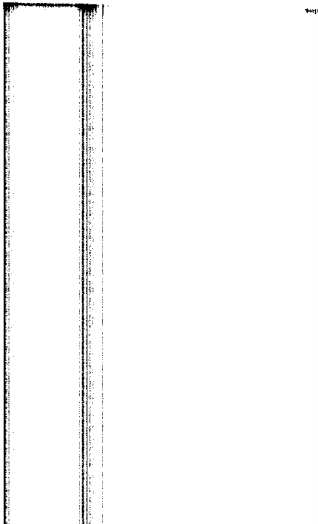
3576' GL 3595' KB
20" set at 40'
13 3/8" 54.5# set at 1298' w/ 1130 sx cmt
8 5/8" 32# set at 3355' w/ 1050 sx cmt

Tubing Anchor set at 7559'
Perf 7586-7597'
Perf 7610-7622'
Perf 7656-7666'
2 7/8" 6.5# tubing set at 7805'

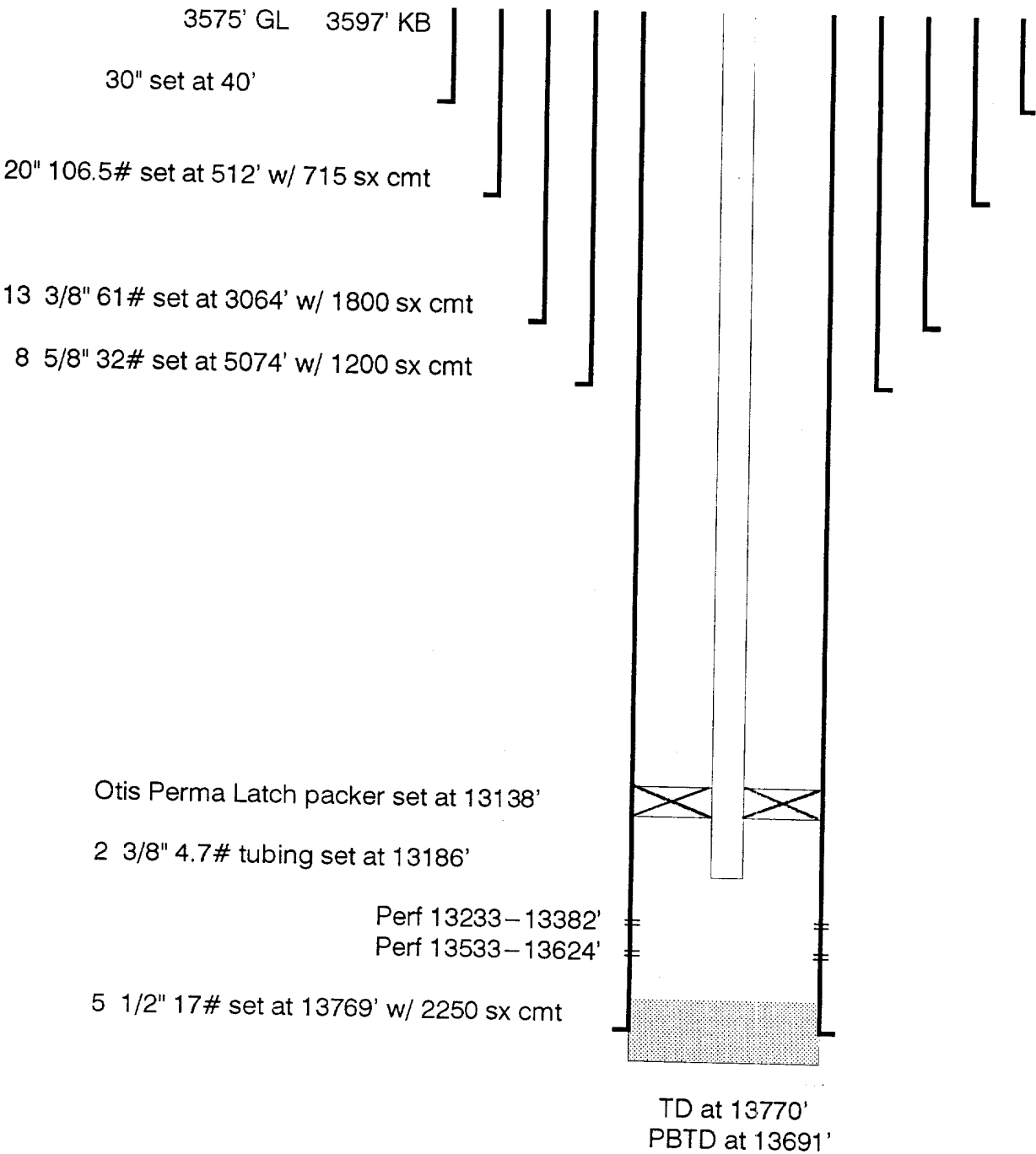
CIBP at 9230' w/ 20' cmt
Perf 9254-9277'
Perf 9617-9651'
Perf 9704-9750'
Perf 9852-10002'
5 1/2" set at 10562' w/ 1225 sx cmt



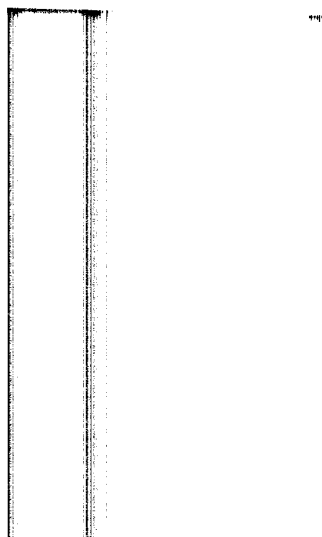
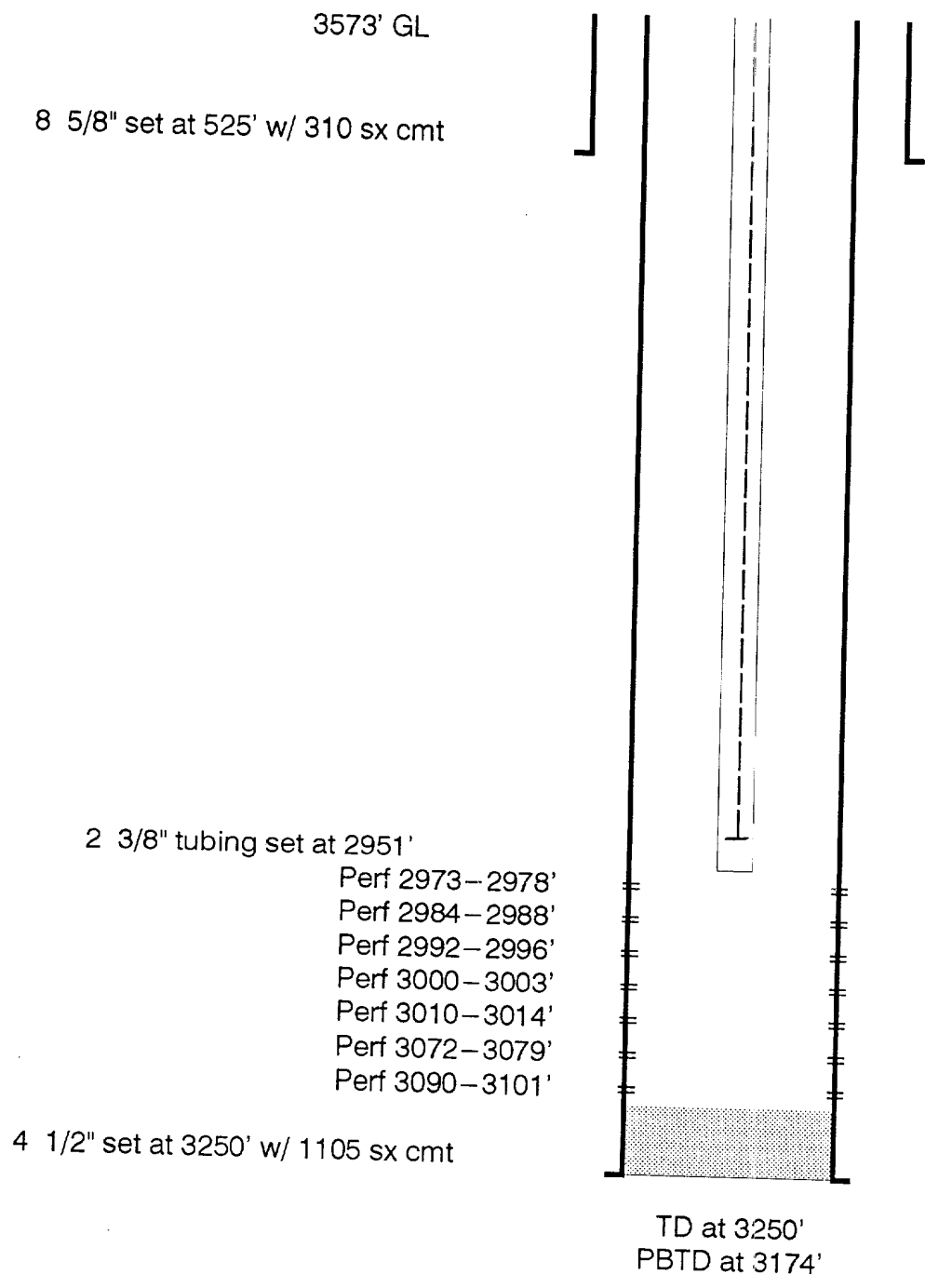
TD at 10564'
PBD at 9210'



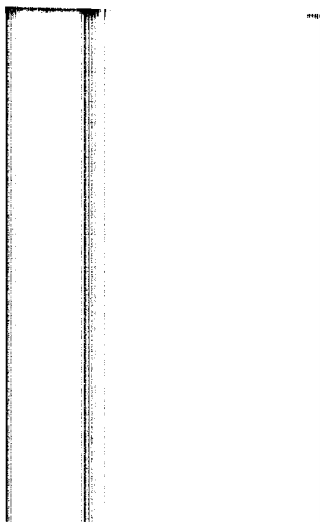
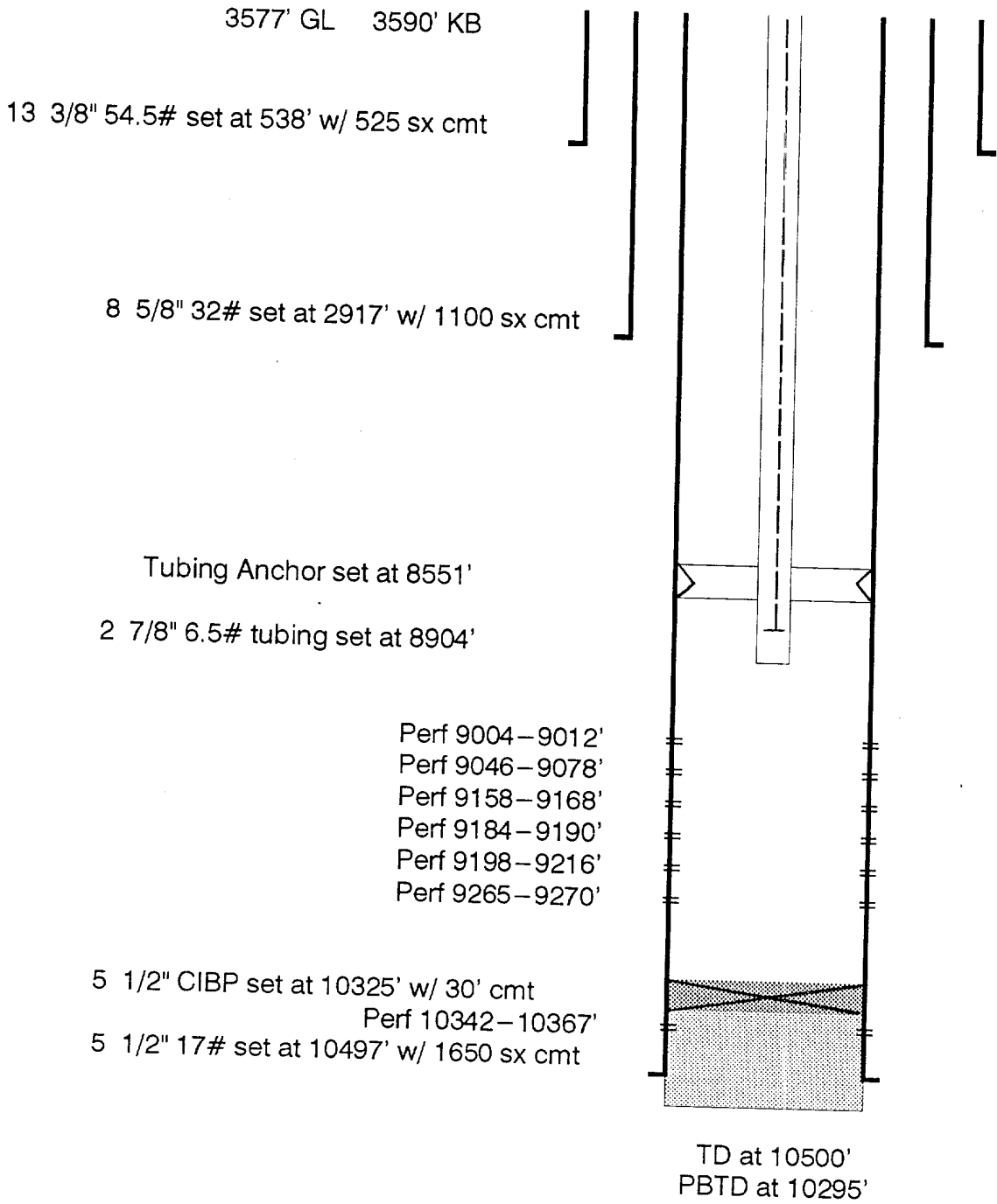
Well Name : Geronimo Federal #2
Operator : Mitchell Energy Corporation
Field : Gem
Location : 1980' FNL & 660' FWL,
Sec. 31, T19S R33E
Spud Date : 09-27-90
Completion Date : 12-11-90
Total Depth : 13770'
Status / Pool : Producing, Morrow Pool



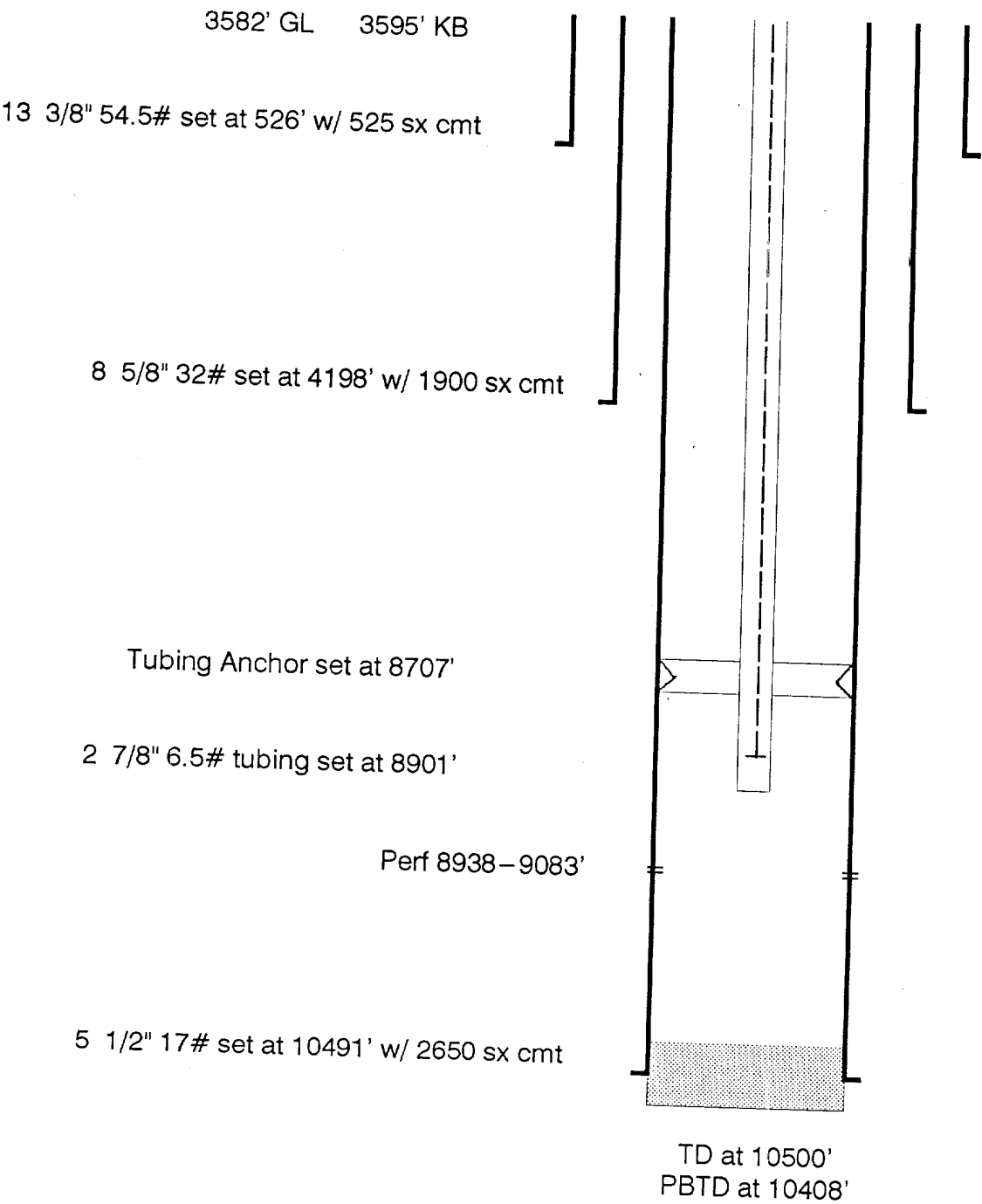
Well Name : Geronimo Federal #3
Operator : Mitchell Energy Corporation
Field : Tonto South
Location : 660' FNL & 585' FWL,
Sec. 31, T19S R33E
Spud Date : 03-07-91
Completion Date : 04-01-91
Total Depth : 3250'
Status / Pool : Producing, Yates Pool



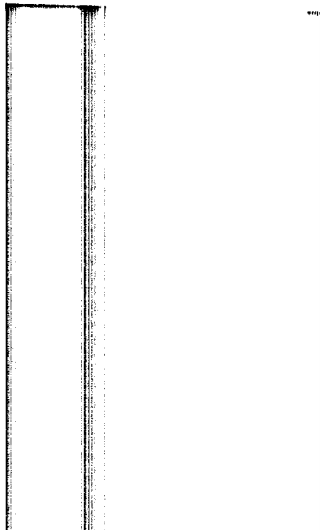
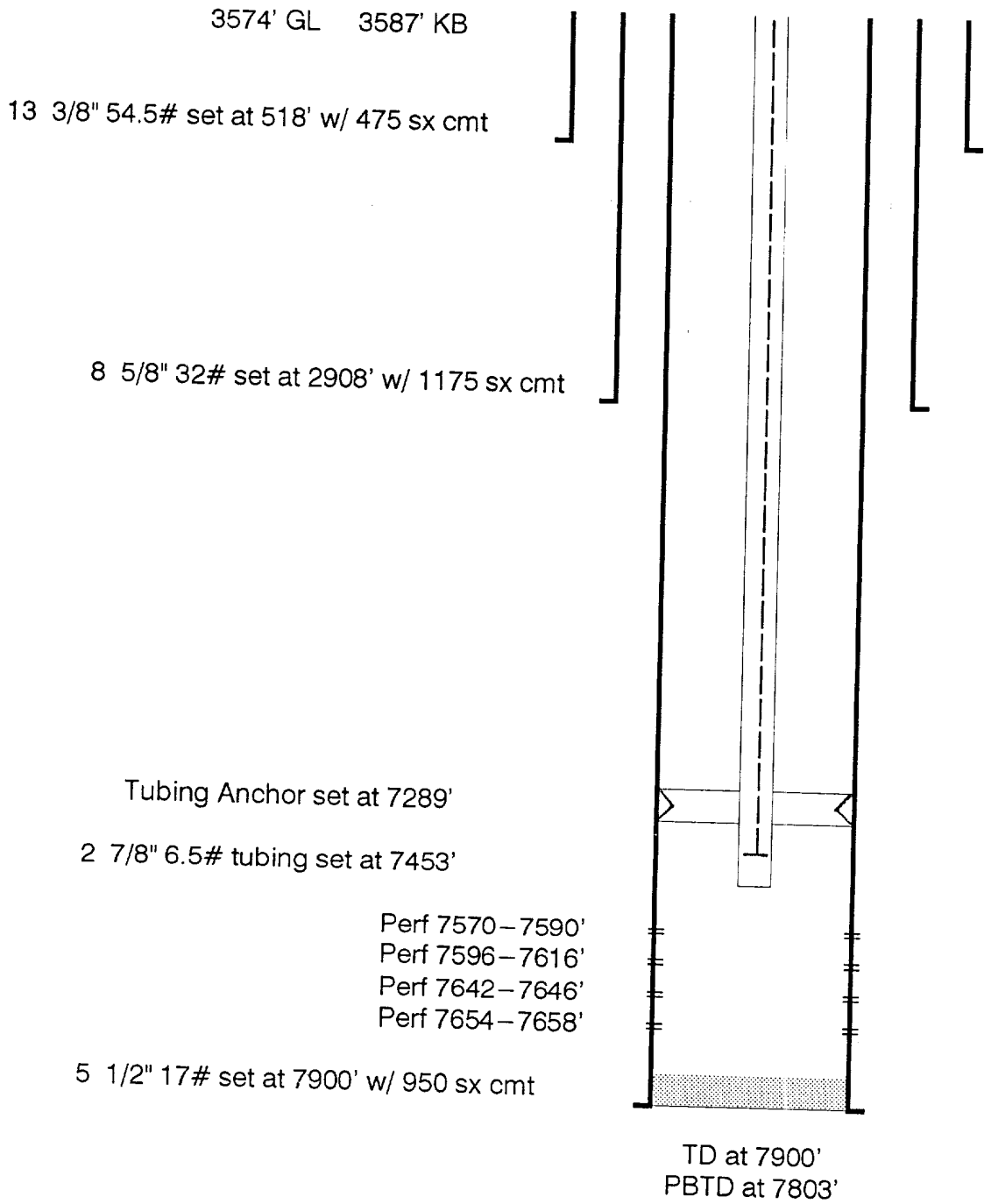
Well Name : Geronimo Federal #4
Operator : Mitchell Energy Corporation
Field : Gem
Location : 1980' FNL & 1980' FEL,
Sec. 31, T19S R33E
Spud Date : 07-10-91
Completion Date : 09-26-91
Total Depth : 10500'
Status / Pool : Producing, Bone Springs Pool



Well Name : Geronimo Federal #5
Operator : Mitchell Energy Corporation
Field : Gem
Location : 660' FNL & 1650' FWL,
Sec. 31, T19S R33E
Spud Date : 08-09-91
Completion Date : 11-07-91
Total Depth : 10500'
Status / Pool : Producing, Bone Springs Pool



Well Name : Geronimo Federal #6
Operator : Mitchell Energy Corporation
Field : Geronimo
Location : 1725' FNL & 660' FWL,
Sec. 31, T19S R33E
Spud Date : 09-24-91
Completion Date : 12-15-91
Total Depth : 7900'
Status / Pool : Producing, Delaware Pool



Well Name : Geronimo Federal #7
Operator : Mitchell Energy Corporation
Field : Tonto South
Location : 1980' FNL & 585' FWL,
Sec. 31, T19S R33E
Spud Date : 03-05-92
Completion Date : 03-31-92
Total Depth : 3250'
Status / Pool : Producing, Yates Pool

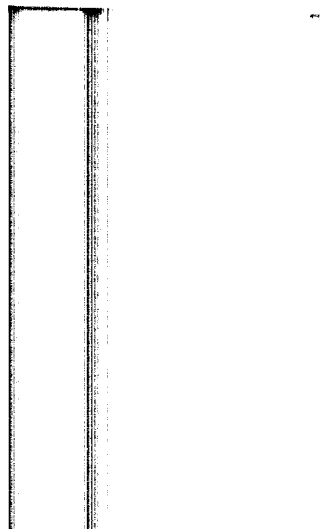
3575' GL 3584' KB
8 5/8" set at 525' w/ 150 sx cmt

2 3/8" tubing set at 2873'

Perf 2960-3024'
Perf 3100-3133'

4 1/2" set at 3249' w/ 910 sx cmt

TD at 3250'
PBSD at 3212'



Well Name : Geronimo Federal #8
Operator : Mitchell Energy Corporation
Field : Tonto South
Location : 1980' FNL & 1905' FWL,
Sec. 31, T19S R33E
Spud Date : 03-12-92
Completion Date : 04-04-92
Total Depth : 3150'
Status / Pool : Producing, Yates Pool

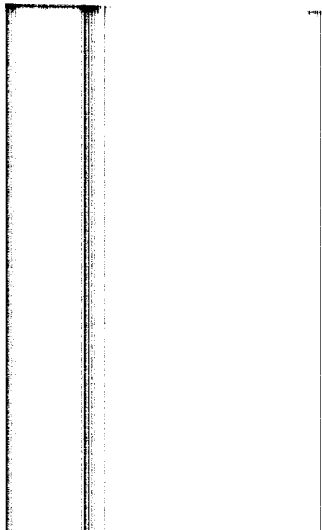
3570' GL 3579' KB
8 5/8" set at 534' w/ 275 sx cmt

2 3/8" tubing set at 2875'

Perf 2958-3003'

4 1/2" set at 3149' w/ 780 sx cmt

TD at 3150'
PBTD at 3080'



Well Name : Geronimo Federal #10
Operator : Mitchell Energy Corporation
Field : Tonto South
Location : 660' FNL & 1575' FWL,
Sec. 31, T19S R33E
Spud Date : 03-17-92
Completion Date : 04-10-92
Total Depth : 3250'
Status / Pool : Producing, Yates Pool

3577' GL 3586' KB

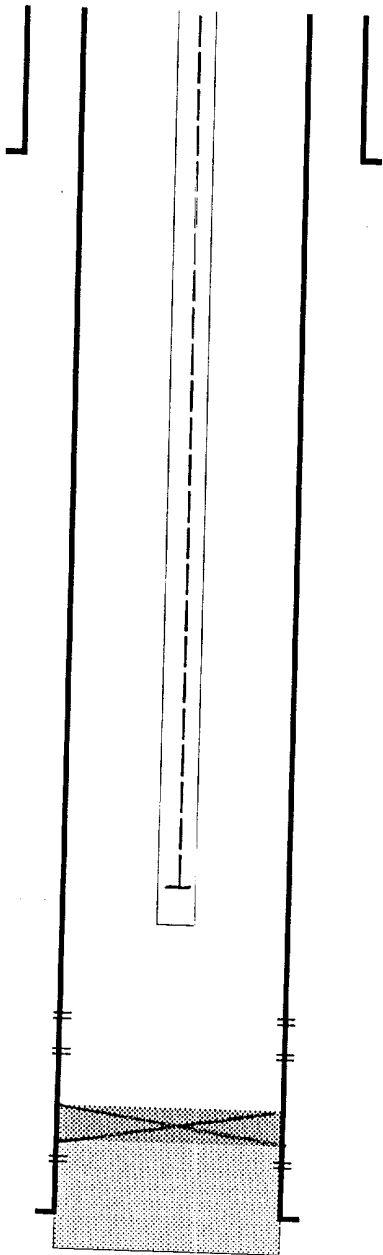
8 5/8" set at 507' w/ 275 sx cmt

2 3/8" tubing set at 2875'

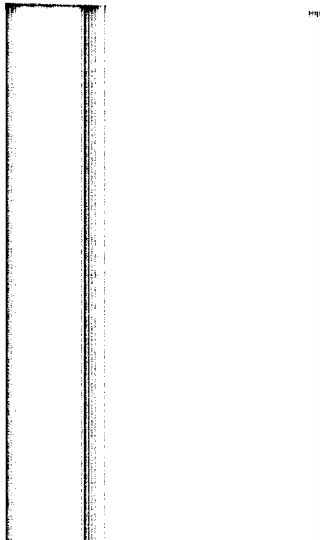
Perf 2962-2990'
Perf 3048-3076'

4 1/2" CIBP set at 3150'
Perf 3159-3190'

4 1/2" set at 3249' w/ 1050 sx cmt



TD at 3250'
PBD at 3150'



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Well Name : Federal RB-31 #1-X
Operator : Trigg, John H
Field : Wildcat
Location : 335' FNL & 2223' FEL,
Sec. 31, T19S R33E
Spud Date : 10-02-64
Completion Date : 10-28-64
Total Depth : 3175'
Status / Pool : D & A

20 sx cmt from surface to 25'

13 3/8" 48# set at 73' w/50 sx cmt

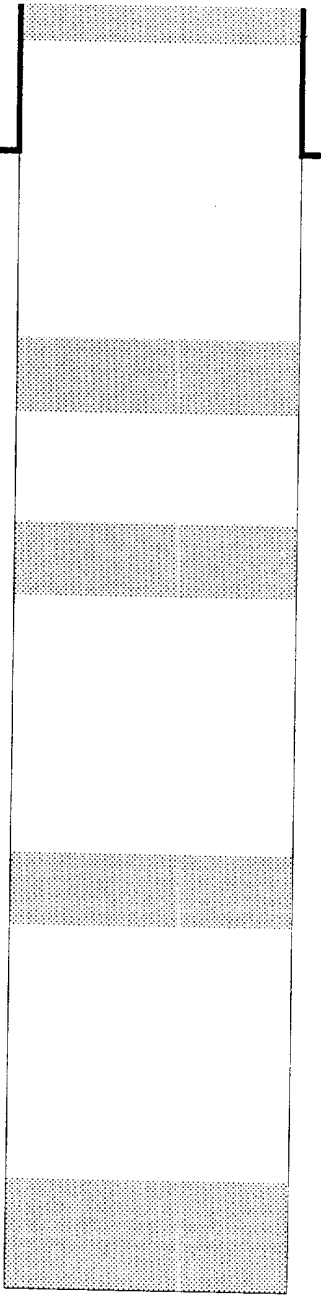
50 sx cmt from 550-650'

52 sx cmt from 1200-1350'

35 sx cmt from 2750-2850'

Filled with 200 bbls salt water jel mud

35 sx cmt from 3075-3175'



TD at 3175'

