



CALPINE

CALPINE NATURAL GAS L.P.  
TABOR CENTER  
1200 17TH STREET, SUITE 770  
DENVER, COLORADO 80202  
720.359.9144  
720.359.9140 (FAX)

DRE

August 20, 2003

AUG 22 2003

State of New Mexico  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

State of New Mexico  
Oil Conservation Division  
1000 Rio Brazos Drive  
Aztec, New Mexico 87410

Bureau of Land Management  
1235 La Plata Highway  
Suite A  
Farmington, New Mexico 87401

Dear Sir or Madam:

Enclosed please find an amended application for downhole commingle for the Tiger #1 well (API No. 30-045-29495). Previously, Administrative Order DHC-3162 approved the assignment of allowable subject to modification with permission of the Aztec District Office and BLM approval. After further discussions with the BLM and Aztec District Office, we agreed that a change in the allocation percentages was necessary. Calpine also agrees to review the allocation percentages using decline curve analysis and gas analysis data and change the allocation percentages if warranted. All other previously submitted factual data remains the same.

The well is presently completed in the Fulcher Kutz Pictured Cliffs formation. Calpine Natural Gas Company, L.P. wishes to recomplete the well into the Basin Fruitland Coal and commingle both formations. Working, royalty and overriding royalty interests are identical in both formations. Enclosed please find documentation supporting that the production be amended to allocate 99% to the Basin Fruitland Coal and 1% to the Fulcher Kutz Pictured Cliffs formation.

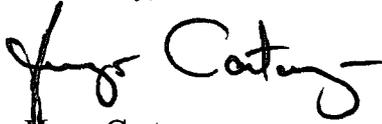
Enclosed please find:

- 1.) Administrative Application Checklist
- 2.) Form C-107A
- 3.) C-102 for the acreage dedication of the Basin Fruitland Coal
- 4.) C-102 for the acreage dedication of Fulcher Kutz - PC
- 5.) Statement for the proposed allocation formula

6.) Copy of submitted sundry notices to the BLM for recompletion and commingling approval

Please let me know if you need anything else.

Sincerely,

A handwritten signature in black ink, appearing to read "Hugo Cartaya". The signature is fluid and cursive, with a long horizontal stroke at the end.

Hugo Cartaya  
Operations Manager

ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
 - Engineering Bureau -  
 1220 South St. Francis Drive, Santa Fe, NM 87505



**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Application Acronyms:**

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]  
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]  
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]  
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]  
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]  
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]  
 [A] Location - Spacing Unit - Simultaneous Dedication  
 NSL  NSP  SD
- Check One Only for [B] or [C]  
 [B] Commingling - Storage - Measurement  
 DHC  CTB  PLC  PC  OLS  OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
 WFX  PMX  SWD  IPI  EOR  PPR
- [D] Other: Specify \_\_\_\_\_
- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or  Does Not Apply  
 [A]  Working, Royalty or Overriding Royalty Interest Owners  
 [B]  Offset Operators, Leaseholders or Surface Owner  
 [C]  Application is One Which Requires Published Legal Notice  
 [D]  Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office  
 [E]  For all of the above, Proof of Notification or Publication is Attached, and/or,  
 [F]  Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

**Note: Statement must be completed by an individual with managerial and/or supervisory capacity.**

Hugo Cartaya

Print or Type Name

*Hugo Cartaya*  
 Signature

Production Manager

Title

8-20-03

Date

hcartaya@calpine.com  
 e-mail Address

District I  
1625 N. French Drive, Hobbs, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107A  
Revised May 15, 2000

District II  
1301 W. Grand Avenue, Artesia, NM 88210

**Oil Conservation Division**

1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

APPLICATION TYPE

Single Well  
 Establish Pre-Approved Pools  
EXISTING WELLBORE  
 Yes  No

District III  
1000 Rio Brazos Road, Aztec, NM 87410

District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

**APPLICATION FOR DOWNHOLE COMMINGLING**

Calpine Natural Gas Company, L.P.

1200 17<sup>th</sup> Street, Suite 770, Denver, Colorado 80202

Operator <b>Tiger</b>	#1	Address <b>J-35-30N-13W</b>	<b>San Juan</b>
Lease	Well No.	Unit Letter-Section-Township-Range	County
OGRID No. <u>214274</u> Property Code <u>22189</u> API No. <u>30-045-29495</u> Lease Type: <input checked="" type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Fee			

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	<b>Basin Fruitland Coal</b>		<b>Fulcher Kutz PC</b>
Pool Code	<b>71629</b>		<b>77200</b>
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	Perforated <b>1508-1538</b>		Perforated <b>1544-1556</b>
Method of Production (Flowing or Artificial Lift)	<b>Flowing</b>		<b>Flowing</b>
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)			
Oil Gravity or Gas BTU (Degree API or Gas BTU)			
Producing, Shut-In or New Zone	<b>New Zone</b>		<b>Producing</b>
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: Rates:	Date: Rates:	Date: Rates:
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil      Gas %      99 %	Oil      Gas %      %	Oil      Gas 0 %      1 %

**ADDITIONAL DATA**

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes  No   
 If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes  No   
 Are all produced fluids from all commingled zones compatible with each other? Yes  No   
 Will commingling decrease the value of production? Yes  No   
 If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes  No   
 NMOCD Reference Case No. applicable to this well: \_\_\_\_\_

Attachments:

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

**PRE-APPROVED POOLS**

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

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

SIGNATURE Hugo Cartaya TITLE Operations Manager DATE 8/20/03  
 TYPE OR PRINT NAME Hugo Cartaya TELEPHONE NO. ( 720 ) 946-1302

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 15, 2000  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number <b>30-045-29495</b>		<sup>2</sup> Pool Code <b>71629</b>		<sup>3</sup> Pool Name <b>Basin Fruitland Coal</b>	
<sup>4</sup> Property Code <b>22189</b>	<sup>5</sup> Property Name <b>Tiger</b>				<sup>6</sup> Well Number <b>#1</b>
<sup>7</sup> OGRID No. <b>214274</b>	<sup>8</sup> Operator Name <b>CALPINE NATURAL GAS COMPANY, L.P.</b>				<sup>9</sup> Elevation <b>5580' RKB</b>

<sup>10</sup> Surface Location

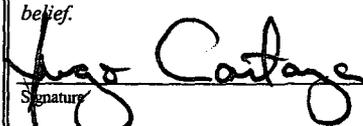
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>J</b>	<b>35</b>	<b>30N</b>	<b>13W</b>		<b>1325'</b>	<b>South</b>	<b>1635'</b>	<b>East</b>	<b>San Juan</b>

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres <b>320</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<sup>16</sup>					<sup>17</sup> <b>OPERATOR CERTIFICATION</b> <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i>  Signature <b>Hugo Cartaya</b> Printed Name Production Manager Title 8/20/03 Date
	<sup>18</sup> <b>SURVEYOR CERTIFICATION</b> <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> Date of Survey Signature and Seal of Professional Surveyor: Certificate Number				

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 15, 2000  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number <b>30-045-29495</b>		<sup>2</sup> Pool Code <b>77200</b>		<sup>3</sup> Pool Name <b>Fulcher Kutz Pictured Cliffs</b>	
<sup>4</sup> Property Code <b>22189</b>	<sup>5</sup> Property Name <b>Tiger</b>			<sup>6</sup> Well Number <b>#1</b>	
<sup>7</sup> OGRID No. <b>214274</b>	<sup>8</sup> Operator Name <b>CALPINE NATURAL GAS COMPANY, L.P.</b>			<sup>9</sup> Elevation <b>5580' RKB</b>	

<sup>10</sup> Surface Location

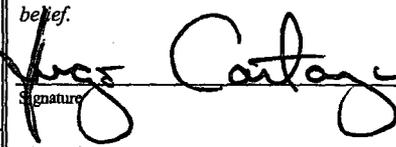
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>J</b>	<b>35</b>	<b>30N</b>	<b>13W</b>		<b>1325'</b>	<b>South</b>	<b>1635'</b>	<b>East</b>	<b>San Juan</b>

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres <b>160</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<sup>16</sup>					<sup>17</sup> OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i>	
					Signature 	
					Printed Name <b>Hugo Cartaya</b> Title Production Manager Date 8/20/03	
					<sup>18</sup> SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i>	
					Date of Survey Signature and Seal of Professional Surveyor:	
					Certificate Number	

## Discussion and Statement of Allocation Percentages

- 1.) Attached please find the daily production history for the Tiger #1 from the Fulcher Kutz Pictured Cliff formation. The well has not produced since May 14<sup>th</sup>, 2003. Several unsuccessful attempts have been made to swab and clean out the well and return the well to production. Swabbing efforts have recovered small amounts of water and there appears to be insufficient bottom hole pressure.
- 2.) Based on this information and discussions with BLM's Farmington office engineers we agreed that based on this information a more appropriate allocation percentage would be 99% Basin Fruitland Coal and 1% Fulcher Kutz Pictured Cliffs.
- 3.) After recompletion and downhole commingling, Calpine will examine the previous decline curve on the existing well and surrounding wells as well as evaluate changes in gas analysis and propose changes to the percentage allocation as warranted.

### Tiger #1 Daily Production

Day :	January-03	February-03	March-03	April-03	May-03	June-03	July-03
1	258	84	248	116	104	0	0
2	265	21	235	104	4	0	0
3	267	94	64	119	154	0	0
4	215	154	112	75	75	0	0
5	241	35	113	0	66	0	0
6	241	0	189	0	2	0	0
7	226	109	192	0	146	0	0
8	206	70	179	0	25	0	0
9	198	12	108	0	0	0	0
10	202	0	8	0	136	0	0
11	205	0	0	0	25	0	0
12	214	0	139	0	137	0	0
13	233	0	205	0	58	0	0
14	211	106	176	0	0	0	0
15	185	64	141	115	0	0	0
16	173	4	100	150	0	0	0
17	118	160	9	137	0	0	0
18	145	83	143	127	0	0	0
19	177	8	130	123	0	0	0
20	180	185	151	127	0	0	0
21	144	224	115	97	0	0	0
22	161	225	106	81	0	0	0
23	172	221	52	0	0	0	0
24	138	216	165	130	0	0	0
25	127	213	140	46	0	0	0
26	148	233	130	5	0	0	0
27	44	243	123	0	0	0	0
28	98	246	113	0	0	0	0
29	123	0	94	96	0	0	0
30	118	0	12	148	0	0	0
31	133	0	128	0	0	0	0
<b>TOTALS</b>	<b>5,564</b>	<b>3,012</b>	<b>3,817</b>	<b>1,797</b>	<b>932</b>	<b>0</b>	<b>0</b>

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reenter a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

5. Lease Designation and Serial No.  
**SF-078213**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

**Tiger #1**

9. API Well No.

**30- 045-29495**

10. Field and Pool, or Exploratory Area

**FULCHER KUTZ-PICTURED CLIFFS**

11. County or Parish, State

**San Juan County, New Mexico**

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Gas  
 Well  Well  Other

2. Name of Operator

**Calpine Natural Gas**

3. Address and Telephone No.

**1200 17th Street, Suite 770, Denver, CO 80202**

**720-359-9144**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**1325' FSL&1635' FEL  
Section 35-30N-13W**

12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

Notice of Intent  
 Subsequent Report  
 Final Abandonment Notice

TYPE OF ACTION

Abandonment  
 Recompletion  
 Plugging Back  
 Casing Repair  
 Altering Casing  
 Other Downhole Commingle  
 Change of Plans  
 New Construction  
 Non-Routine Fracturing  
 Water Shut-Off  
 Conversion to Injection  
 Dispose Water

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

13. Describe Proposed or Completed Operations (Clearly state pertinent details, and give pertinent dates including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

**Calpine proposes to downhole commingle the Fulcher Kutz Pictured Cliffs with the Basin Fruitland Coal.**

**Attached are the supporting documents for the allocation between the two zones.**

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

Signed Hugo Cartaya **Hugo Cartaya**

Title **Production Manager**

Date **08/20/03**

(This space for Federal or State office use)

Approved by \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**\*See Instructions on Reverse Side**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

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5. Lease Designation and Serial No.  
**SF-078213**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.  
**Tiger #1**

9. API Well No.  
**30-045-29495**

10. Field and Pool, or Exploratory Area  
**FULCHER KUTZ-PICTURED CLIFFS**

11. County or Parish, State  
**San Juan County, New Mexico**

**SUBMIT IN TRIPLICATE**

1. Type of Well  
Oil  Well Gas  Well  Other

2. Name of Operator  
**Calpine Natural Gas**

3. Address and Telephone No. **1200 17th Street, Suite 770, Denver, CO 80202** **720-359-9144**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**1325' FSL&1635' FEL**  
**Section 35-30N-13W**

12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input checked="" type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>Downhole Commingle</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

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

13. Describe Proposed or Completed Operations (Clearly state pertinent details, and give pertinent dates including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

**Calpine proposes to recomplete the well into the Basin Fruitland Coal formation.**

**Attached is the proposed recompletion procedure**

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

Signed Hugo Cartaya Title Production Manager Date 08/20/03

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instructions on Reverse Side

Recompletion Procedure for  
Calpine Natural Gas Company  
Tiger #1

Location: Sec 35 T30N R13W  
San Juan County, NM

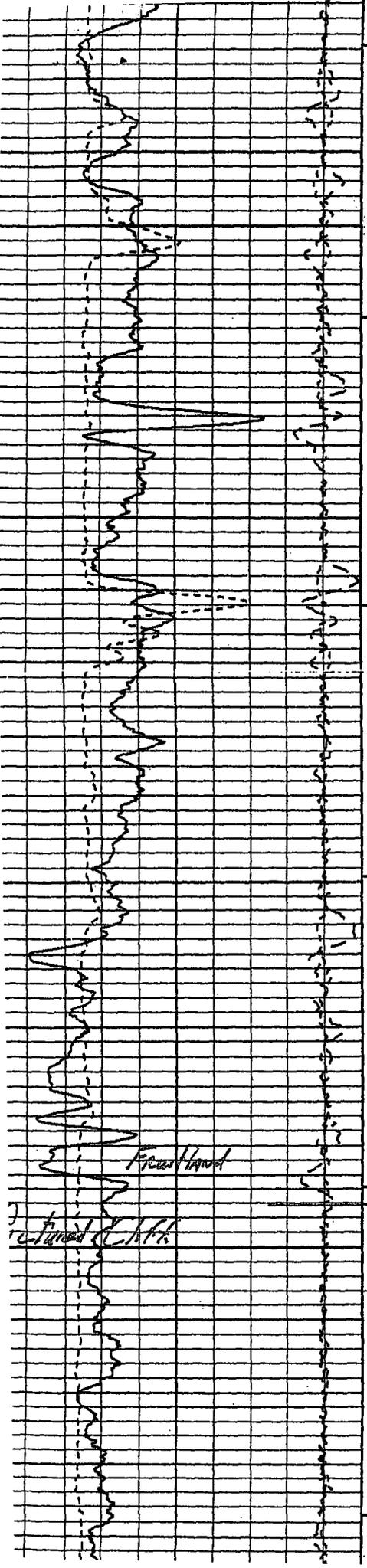
Date: August 20, 2003

Field: Fulcher Kutz Pictured Cliffs and Basin Fruitland Coal

Elev: GL 5575' KB 5580'

Existing Perforations: 1544-1556

1. Set and fill 4 frac tanks with city water and heat to 80 degrees. Check anchors. MOL and RU completion rig. Hold safety meeting.
2. POOH with 48 jts 2 3/8" tubing. RIH and set RBP at 1542'.
3. NU 2-3/8" relief line. RU wireline. Check PBTB.
4. Perforate 4 SPF (0.38" holes) from 1508-1518 and 1522-1538'. Total of 104 holes.
5. Rig up frac equipment and pressure test surface lines. Fracture with 50,000# of 20/40 sand and 5000# 40/70 sand in a 25#/1000 gal cross-linked gel fluid.
6. Close BOPs. RD frac company and install flowline with 1/4" ceramic choke. Flow well back to pit overnight.
7. When well dies, TIH with bailer on 2-3/8" EUE tubing and clean out to RBP at 1542. Clean out to PBTB. POOH with tubing and RBP.
8. TIH with 48 jts 2 3/8" tubing. Land tubing. Swab well in and put well on production. RD and release rig.



T1

1400

1500

11'

20'

Free hand

continued on p. 6

1584

1586

