

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

5. Lease Designation and Serial No.

Patented Lands

6. If Indian, Allottee or Tribe Name

7. Unit Agreement Name

8. Farm or Lease Name

Howells Livestock

9. Well No. (NCT-1)

1

10. Field and Pool, or Wildcat

Wildcat

11. Sec., T., R., S., or Blk. and Survey or Area

Sec. 12, T1N-R8E

12. County or Parrish 13. State

Summit Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

DRILL

DEEPEN

PLUG BACK

b. Type of Well

Oil Well

Gas Well

Other

Single Zone

Multiple Zone

2. Name of Operator

Texaco Inc., Producing Dept. Attn: H. M. Meduna

3. Address of Operator

P.O. Box 1629, Rock Springs, WY 82901

4. Location of Well (Report location clearly and in accordance with any State requirements.\*)

At surface

SE 1/4 NW 1/4 Section 12 SLB&M  
1909' FNL & 1570' FWL

At proposed prod. zone

14. Distance in miles and direction from nearest town or post office\*

16 miles south to Coalville, Utah

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any)

589' N

16. No. of acres in lease

10,569.27

17. No. of acres assigned to this well

80

18. Distance from proposed location\* to nearest well, drilling, completed, or applied for, on this lease, ft.

6 miles

19. Proposed depth

18,700'

20. Rotary or cable tools

Rotary

21. Elevations (Show whether DF, RT, GR, etc.)

9897' Ungraded Ground

22. Approx. date work will start\*

August 15, 1981

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
17-1/4"	13-3/8"	68#, 72#	4700'	Cmt. to surface
12-1/4"	9-5/8"	43.5#, 47#, 53.5#	14000'	800' above shoe or as required.
8-1/2"	7"	32#, 29#	18700'	Cmt. 600' above topmost pay zone.
Tie back may be run.				Cmt. 600' above tie back.
	7"	29#, 32#		

We propose to drill this wildcat well to test the Nugget formation. The tops of important geologic markers are estimated to be:

Formation	Est. Top Depth	Subsea Depth	Potential Minerals
Wasatch	Surface	Surface	None
Adavaille	3170'	6727'	None

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. Signed: H. M. Meduna Title: Field Superintendent Date: 7-20-81

(This space for Federal or State office use)

Permit No. \_\_\_\_\_ Approval Date \_\_\_\_\_

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

Conditions of approval, if any \_\_\_\_\_

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING  
DATE: 7/16/81  
BY: [Signature]

RECEIVED  
JUL 23 1981

DIVISION OF  
OIL, GAS & MINING

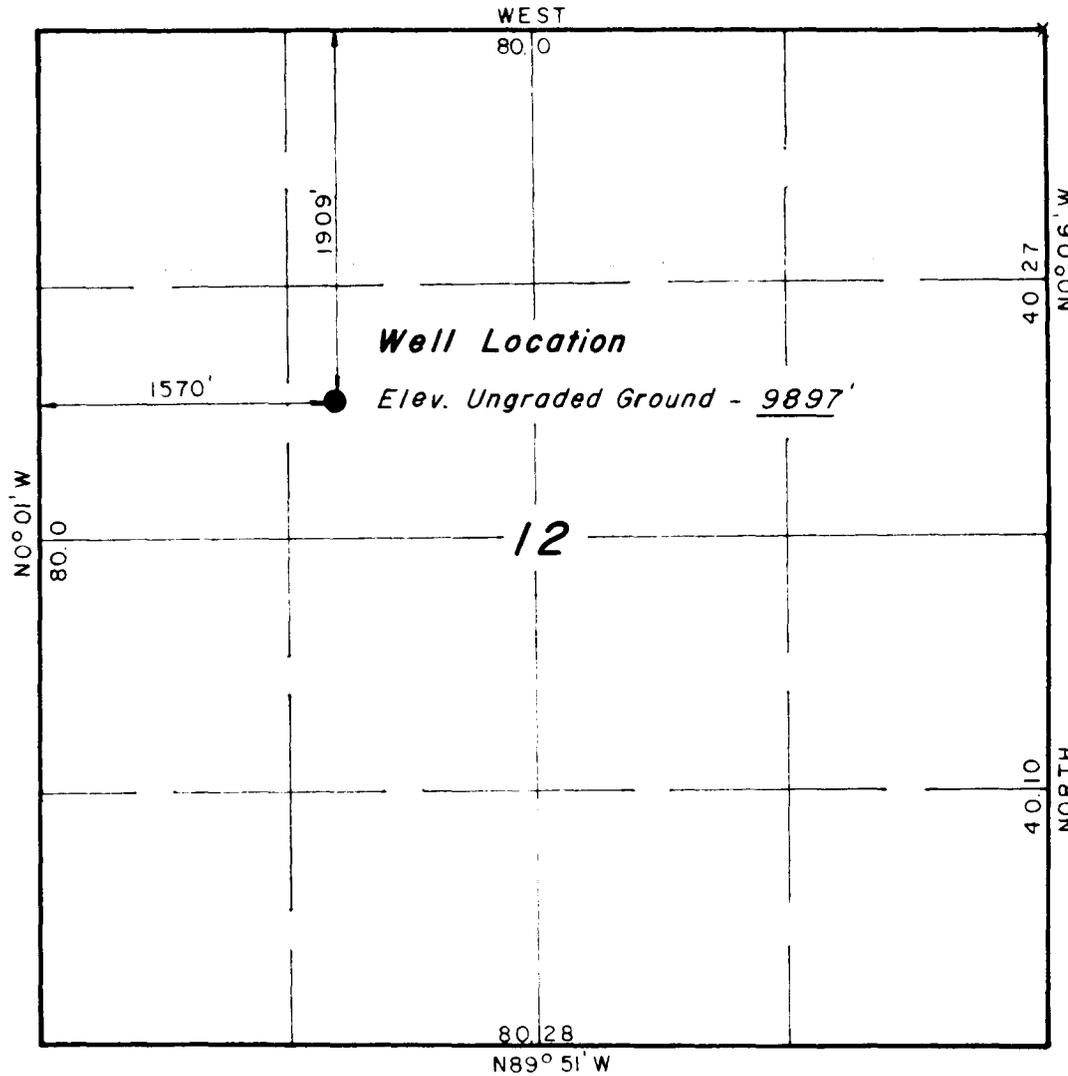
\*See Instructions On Reverse Side \*

T1N, R8E, S.L.B.&M.

PROJECT

TEXACO INC.

Well location, located as shown  
in the SE1/4 NW1/4 Section 12,  
T1N, R8E, S.L.B.&M. Summit  
County, Utah



X = Section Corners Located



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM  
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY  
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE  
BEST OF MY KNOWLEDGE AND BELIEF.

*Lawrence G. Baker*

REGISTERED LAND SURVEYOR  
REGISTRATION NO 3137  
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING  
P.O. BOX Q - 85 SOUTH - 200 EAST  
VERNAL, UTAH - 84078

SCALE 1" = 1000'	DATE 6/8/81
PARTY RK DB RDR	REFERENCES GLO PLAT
WEATHER FAIR / WARM	FILE TEXACO INC.

Howells Livestock NCT-1 Well No. 1

<u>Formation</u>	<u>Est. Top Depth</u>	<u>Subsea Depth</u>	<u>Potential Minerals</u>
Hilliard	7330'	2567'	None
* Frontier	9500'	397'	Potential Pay
Aspen	12550'	2603' -	None
Bear River	13070'	3173' -	Potential Pay
Kelvin	13850'	3953' -	None
Stump	15450'	5553' -	None
Preuss	15700'	5803' -	None
Twin Creek	16700'	6803' -	Potential Pay
Nugget	17900'	8003' -	Potential Pay

Total Depth 18700'

New casing will be run as follows:

<u>From</u>	<u>To</u>	<u>Casing Diameter</u>	<u>Weight</u>	<u>Grade</u>
-0-	4700'	13-3/8"	68# 72#	K-55 N-80
-0-	14000'	9-5/8"	43.5# 43.5# 47# 53.5#	S-95 P-110 P-110 P-110
-0-	18700'	7"	32# 32# 29# 29#	S-105 P-110 S-105 S-95

Tie back may be run from:

-0-	13600'	7"	29# 29# 29# 32#	S-95 P-110 L-80 L-80
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Howells Livestock NCT-1 Well No. 1

Blowout preventer equipment will be rated at 5000 PSI. BOP's will be tested when installed, when drilling out each casing shoe, and at least every 30 days. In addition, the pipe and blind rams will be activated at the mid-point of the round trip. Ram-type preventers and related equipment shall be tested at the rated working pressure of the stack assembly, or at least 70 percent of the minimum internal yield pressure of the casing, whichever is less. Annular-type preventers shall be tested at 50 percent of the rated working pressure. Exhibit No. 3, attached is the schematic of the BOP's to be used with additional specifications shown that are required by Texaco.

The water based mud program will be as follows:

- 0- to 4700' Spud mud.
- 0- to 18700' Low solids non dispersed water base system.

A mud logger will be used. As stated on the BOP schematic, a kelly cock will be used at all times and will be checked daily, a stabbing valve will be kept on hand and used as required.

Samples will be collected every 30' from surface to 5000', and every 10' from 5000' to TD. Cores will be taken from the Twin Creek and Nugget formations. Drill stem tests will be run in the Bear River, Twin Creek, and Nugget formations. We will run DIL-GR-SP, Sonic-GR Caliper, CNL-FDC-GR-Caliper, ND F log, Core bond and syber look from surface casing to TD. The casing will be set through pay zone and will be perforated and stimulated as required, however, we do not have a completion program at this time, it is anticipated that we will perforate the Nugget formation and frac if necessary. Prior approval will be secured before we frac.

There are no abnormal temperatures or pressures or hazards anticipated on this well. The bottom hole pressure is approximately 8400 PSI. There will be no H<sub>2</sub>S gas in the Nugget formation.

We would like to start work on this location by August 15, 1981. Drilling time is expected to be 250 days, and any gas produced during the drilling operations will be flared.

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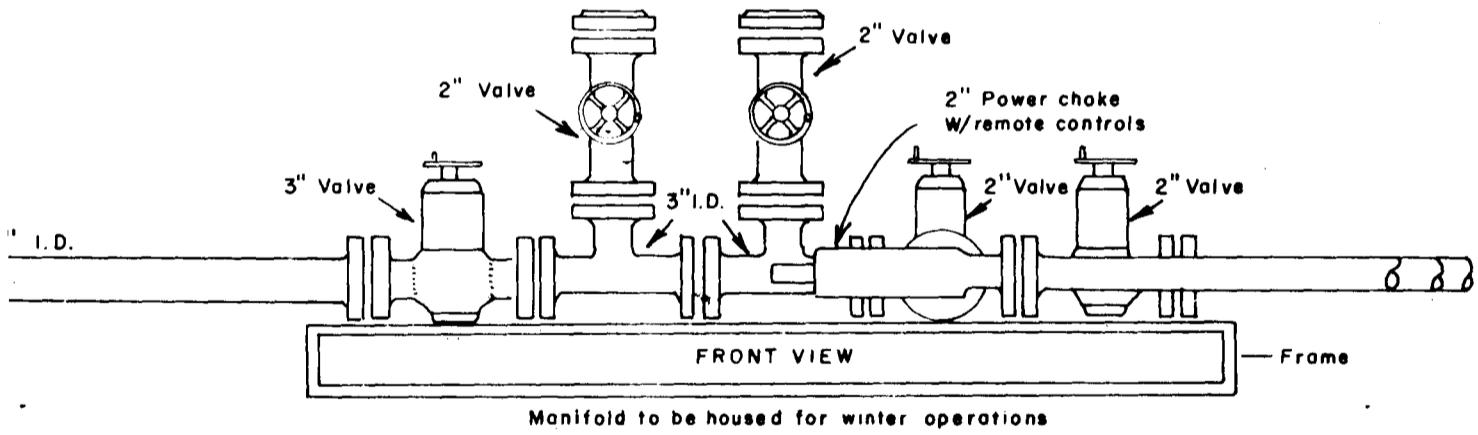
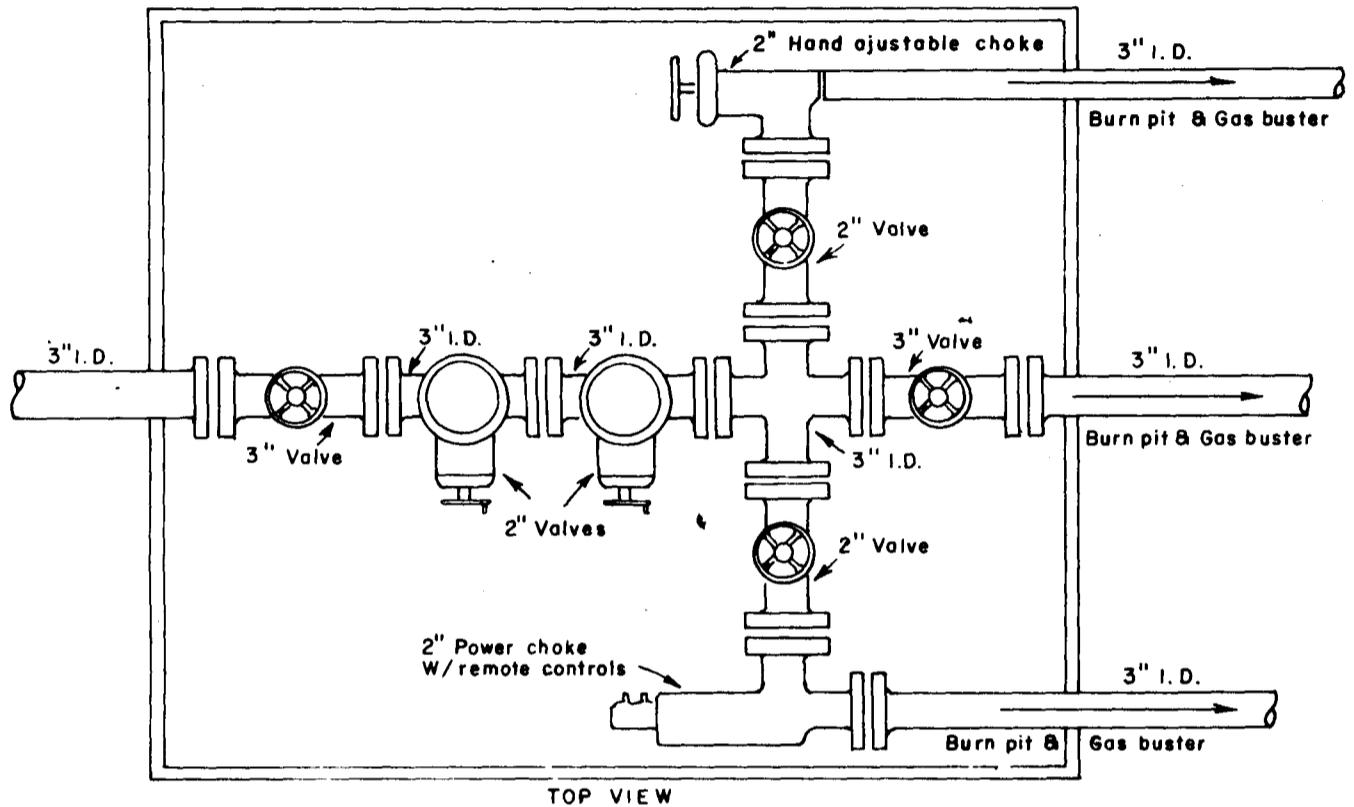


EXHIBIT "B"

nts for the equipment are:

preventers are to be mechanically and hydraulically operated. It must be complete with dual hydraulic controls—one on the rig or one for operating the preventers from a distance of at least 500 feet. All tubing and connections must be used between the hydraulic blowout preventer. One extra set of pipe rams to be on location.

and ram type preventers are to be served by accumulator type

check must be used at all times and checked daily, upper and lower. Blowout preventers, Hydril, valves and lines to be rated for

will furnish casing head and related valves. Blowout preventer for drill pipe with minimum 5,000 psi WP to be in working condition at all times.

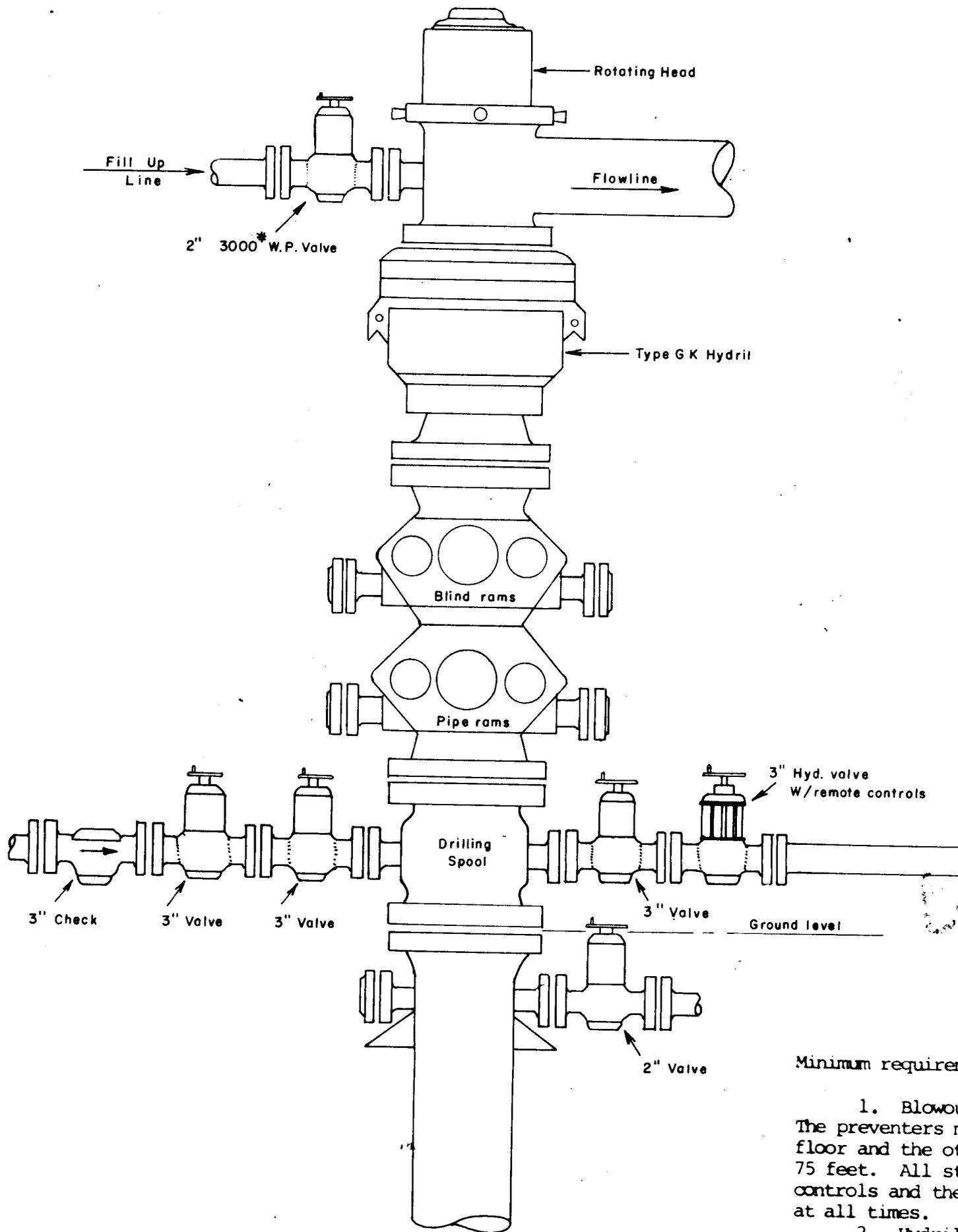
**REC**  
JUL  
DIVIS  
OIL, GAS

APPROVED BY

*[Handwritten signature]*

5000 PSI WP WITHOUT H<sub>2</sub>S TRIM

<b>TEXACO INC.</b>	
<b>BLOWOUT PREVENTER ASSEMBLY STANDARD NO. 5</b>	
DRAWN BY <u>H.B.D.</u>	CHKD. BY _____
DATE <u>11-5-58</u>	FILE <u>448.000</u>
REVISED <u>6-1-79</u>	SERIAL <u>X-142-5</u>



Minimum requirements

1. Blowout preventers must be installed on the rig floor and the other floor and the other floor 75 feet. All shut-in valves, controls and the other floor at all times.
  2. Hydril closing device.
  3. Kelly
  4. All blowout preventers must be 5,000 psi WP.
  5. Company
  6. Inside
- be on rig floor

\*\* FILE NOTATIONS \*\*

DATE: July 8, 1981

OPERATOR: T. Exaro, Inc.

WELL NO: ~~Howells Livestock #1~~ 7 thousand Peaks Ranch NCT #1

Location: Sec. 12 T. 1N R. 8E County: Summit

File Prepared:

Entered on N.I.D.:

Card Indexed:

Completion Sheet:

API Number 43-043-30175

CHECKED BY:

Petroleum Engineer: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Director: OK per 10,000 acres in lease - provided that they file a submit request for topog. & geologic data

Administrative Aide: as per Rule C-3(c) needs topog. ok on any other oil or gas well.

APPROVAL LETTER:

Bond Required:

Survey Plat Required:

Order No. \_\_\_\_\_

O.K. Rule C-3

Rule C-3(c), Topographic Exception - company owns or controls acreage within a 660' radius of proposed site

Lease Designation Fee

Plotted on Map

Approval Letter Written

Hot Line

P.I.

July 17, 1981

Texaco, Inc.  
P. O. Box 1629  
Rock Springs, Wyoming 82901

RE: Well No. Howells Livestock #1,  
Sec. 12, T. 1N, R. 8E,  
Summit, County, Utah

Insofar as this office is concerned, approval to drill the above referred to gas well on said unorthodox location is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure. However, this is conditional upon this office receiving a statement that ~~your~~ company owns or controls the acreage within a 660' radius of the proposed site.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER - Petroleum Engineer  
Office: 533-5771  
Home: 876-3001

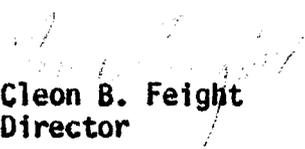
Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-043-30175.

Sincerely,

DIVISION OF OIL, GAS, AND MINING

  
Cleon B. Feight  
Director

CBF/db  
CC: OGM

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

SUBM. IN TRIPPLICATE\*  
(01 instructions on  
reverse side)

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

DIVISION OF  
OIL, GAS & MINING

5. LEASE DESIGNATION AND SERIAL NO.  
Patented Land

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
-----

7. UNIT AGREEMENT NAME  
-----

8. FARM OR LEASE NAME  
Howells Livestock NCT-1

9. WELL NO.  
1

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 12, TIN-R8E

12. COUNTY OR PARISH  
Summit

13. STATE  
Utah

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
Texaco Inc., Producing Dept. Attn: H. M. Meduna

3. ADDRESS OF OPERATOR  
P. O. Box 1629, Rock Springs, Wyo. 82901

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface  
SE 1/4 NW 1/4, Section 12 SLB&M  
1909' FNL & 1570 FWL

14. PERMIT NO.  
Applied For

15. ELEVATIONS (Show whether DP, RT, OR, etc.)  
9897' Ungraded Ground

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	(Other) _____

(Other) Change Well Name

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

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all 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.)\*

Please be advised that the Howells Livestock NCT-1 Well #1 has been redesignated as The Thousand Peaks Ranch NCT-1 Well #1.

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

SIGNATURE A.M. Meduna TITLE Field Superintendent DATE July 21, 1981

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:   
Utah Oil, Gas, & mining (3)-USGS-JNH-CDF-HMM

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: Texaco, Inc

WELL NAME: Thousand Peaks Ranch NCT #1  
SE NW

SECTION 12 TOWNSHIP 1N RANGE 8E COUNTY Summit

DRILLING CONTRACTOR Bawden Drilling Co.

RIG # 14-E

SPUDDED: DATE 9-10-81

TIME 12:00 noon

How Rotary

DRILLING WILL COMMENCE May 10, 1981

REPORTED BY Larry Johnson

TELEPHONE # 307-382-6540

DATE 9-10-81 SIGNED Sandy Bates



PETROLEUM PRODUCTS

PRODUCING DEPARTMENT  
WEST UNITED STATES  
DENVER DIVISION

TEXACO  
U.S.A.  
A DIVISION OF TEXACO INC.  
P. O. BOX 2100  
DENVER, COLORADO 80201

September 15, 1981

U-2421 - HOWELLS LIVESTOCK COMPANY LEASE  
SUMMIT COUNTY, UTAH

State of Utah  
Department of Natural Resources  
Division of Oil, Gas and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

Attention: Mr. Cleon B. Feight, Director

Gentlemen:

Reference is made to your letter dated July 17, 1981 concerning a well Texaco has located 1909' FNL, 1570' FWL Section 12, T1N-R8E, SLM, and which is now named the Thousand Peaks Ranch NCT #1 Well #1.

You asked that Texaco furnish a statement that it owns or controls the acreage within a 660' radius of the drillsite. Texaco has under the captioned oil and gas lease the S/2NW/4 Section 12, among other lands. The location of the well is more than 660' from each boundary of this 80-acre tract of land, except the northern boundary, the well being located 589' therefrom. As to the NE/4NW/4, which lies directly north of the drillsite, Texaco has a farmin agreement with the lessee of a Federal Oil and Gas lease covering that 40-acre parcel and other lands. Consequently, Texaco does own or control the acreage within a 660' radius of the wellsight.

Very truly yours,

Richard W. Stanton  
Land Manager

By   
G. L. Barton  
Supervisor (Land Records)

GLB:JE

**RECEIVED**  
SEP 18 1981

DIVISION OF  
OIL, GAS & MINING

DIVISION OF OIL, GAS AND MINING

*BOP test*  
SPUDDING INFORMATION

NAME OF COMPANY: Texas Inc

WELL NAME: Y thousand P 1st Parcel NCC-1#1

SECTION 12 TOWNSHIP 1N RANGE 8E COUNTY Summit

DRILLING CONTRACTOR \_\_\_\_\_

RIG # \_\_\_\_\_

SPUDED: DATE \_\_\_\_\_

TIME \_\_\_\_\_

HOW \_\_\_\_\_

*Testing to  
5000#*

DRILLING WILL COMMENCE \_\_\_\_\_

REPORTED BY Eddie Archbeck

TELEPHONE # 307-382-6540

DATE 11-3-81 SIGNED DB

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
Texaco Inc., Producing Dept. Attn: H. M. Meduna

3. ADDRESS OF OPERATOR  
P.O. Box 1629, Rock Springs, WY 82901

4. LOCATION OF WELL (Report location clearly and in accordance with any State regulations. See also space 17 below.)  
At surface  
SE 1/4 NW 1/4, Section 12 SLB&M  
1909' FNL & 1570' FWL

14. PERMIT NO.  
43-0430-30175

15. ELEVATIONS (Show whether DF, RT, OR, etc.)  
9897' Ungraded ground

5. LEASE DESIGNATION AND SERIAL NO.  
Patented Lands

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
-

7. UNIT AGREEMENT NAME  
-

8. FARM OR LEASE NAME  
Thousand Peaks Ranch

9. WELL NO.  
NCT-1 #1

10. WILD AND POOL, OR WILDCAT  
Wildcat

11. T., E., M., OR BLK. AND SURVEY OR AREA  
Sec. 12, T1N-R8E

12. COUNTY OR PARISH  
Summit

13. STATE  
Utah

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NOV 24 1981  
DIVISION OF OIL, GAS & MINING

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Set surface casing</u> <input checked="" type="checkbox"/>	

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

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all 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.)\*

9-10-81 Spud @ 8:15 AM.

10-27-81 Reached depth of 4700'.

10-28-81 Rig up loggers, run following logs: DIL-GR-SP-RXO/RT-Sonic-GR; Caliper. Rig down loggers.

10-29-81 Rig up casing crew, run 13 3/8" OD casing as follows:  
Guide shoe, 1.98'; 2 joints 13 3/8", 72#, N-80, ST&C 79.75'; float collar, 1.46'; 59 joints, 13 3/8" 72# N-80, ST&C, 2380.40'; DV Tool, 3.00'; 53 joints, 13 3/8", 72# N-80, ST&C, 2139.71'; 3 joints, 13 3/8" 68#, K-55, ST&C, 118.40'. Landed casing at 4700'.

10-30-81 Cement first stage; 50 barrels fresh water, 1800 sacks lite & 300 sacks Class "G" cement; displaced with 697 barrels mud; bumped plug at 697 barrels mud. Maximum pressure 1200; maximum rate 10.5 barrels per minute, average 5 barrels per minute; flowed back 5 barrels mud, float held okay; dropped bomb; opened DV at 2233' with 900 psi; broke circulation.

10-31-81 Cement second stage; ran 50 barrels fresh water, 3600 sacks lite, 150 sacks class "G" followed with 20 barrels water; closed DV with 3000 psi; held okay; displaced with 348 barrels mud;

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

SIGNED H.M. Meduna/H.M. TITLE Field Supt. DATE Nov. 18, 1981

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

maximum rate 8.5 barrels per minute, average 5.5 barrels per minute, maximum pressure 650, average 500; bled back 4 barrels; complete @ 3:30 PM, 10-31-81. Good circulation throughout job; approximately 30 barrels cement to surface.

11-1-81 Weld on casing flange; pressure test to 2000 psi; held okay; nipple up; continue drilling.

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STATE OF UTAH  
NATURAL RESOURCES & ENERGY  
Oil, Gas & Mining

Scott M. Matheson, Governor  
Temple A. Reynolds, Executive Director  
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

January 10, 1982

Texaco, Inc.  
Producing Department  
Att: H.M. Medina  
P. O. Box 1629  
Rock Springs, Wyoming 82901

Re: Well No. Thousand Peaks Ranch  
NCT #1  
Sec. 12, T. 1N, R. 8E.  
Summit County, Utah

Gentlemen:

According to our records, a "Well Completion Report" filed with this office October 25, 1982, from above referred to well, indicates the following electric logs were run: BHS, DIL-SFL, FDC-CNL, DLL, DIL. As of today's date, this office has not received these logs.

Rule C-5, General Rules and Regulations and Rules of Practice and Procedure, requires that a well log shall be filed with the Commission together with a copy of the electric and radioactivity logs.

Your prompt attention to the above will be greatly appreciated.

Respectfully,

DIVISION OF OIL, GAS AND MINING

Cari Furse  
Well Records Specialist

CF/cf

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

<p>1. <b>OIL WELL</b> <input type="checkbox"/> <b>GAS WELL</b> <input checked="" type="checkbox"/> <b>OTHER</b> <input type="checkbox"/></p> <p>2. <b>NAME OF OPERATOR</b> Texaco Inc., Producing Dept. At [unclear] [unclear]</p> <p>3. <b>ADDRESS OF OPERATOR</b> P.O. Box 1629, Rock Springs, WY 82901</p> <p>4. <b>LOCATION OF WELL</b> (Report location clearly and in accordance with any State requirements* See also space 17 below.) At surface  SE 1/4, NW 1/4, Section 12 SLB&amp;M 1909' FNL &amp; 1570' FWL</p> <p>14. <b>PERMIT NO.</b> 43-0430-30175</p>		<p>5. <b>LEASE DESIGNATION AND SERIAL NO.</b> Patented Lands</p> <p>6. <b>IF INDIAN, ALLOTTEE OR TRIBE NAME</b> ---</p> <p>7. <b>UNIT AGREEMENT NAME</b> ---</p> <p>8. <b>FARM OR LEASE NAME</b> Thousand Peaks Ranch</p> <p>9. <b>WELL NO.</b> NCT-1 #1 1</p> <p>10. <b>FIELD AND POOL, OR WILDCAT</b> Wildcat</p> <p>11. <b>SEC., T., R., M., OR BLM. AND SURVEY OR AREA</b> Sec. 12, T1N-R8E</p> <p>12. <b>COUNTY OR PARISH</b> Summit</p> <p>13. <b>STATE</b> Utah</p>
<p>15. <b>ELEVATIONS</b> (Show whether DF, RT, GR, etc.) 9897' Ungraded ground</p>		

RECEIVED

APR 12 1982

DIVISION OF  
OIL, GAS & MINING

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
<p>TEST WATER SHUT-OFF <input type="checkbox"/></p> <p>FRACTURE TREAT <input type="checkbox"/></p> <p>SHOOT OR ACIDIZE <input type="checkbox"/></p> <p>REPAIR WELL <input type="checkbox"/></p> <p>(Other) <input type="checkbox"/></p>	<p>PULL OR ALTER CASING <input type="checkbox"/></p> <p>MULTIPLE COMPLETE <input type="checkbox"/></p> <p>ABANDON* <input type="checkbox"/></p> <p>CHANGE PLANS <input type="checkbox"/></p>	<p>WATER SHUT-OFF <input type="checkbox"/></p> <p>FRACTURE TREATMENT <input type="checkbox"/></p> <p>SHOOTING OR ACIDIZING <input type="checkbox"/></p> <p>(Other) <u>Set intermediate casing</u> <input checked="" type="checkbox"/></p>	<p>REPAIRING WELL <input type="checkbox"/></p> <p>ALTERING CASING <input type="checkbox"/></p> <p>ABANDONMENT* <input type="checkbox"/></p>

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

17. **DESCRIBE PROPOSED OR COMPLETED OPERATIONS** (Clearly state all 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.)\*

1-29-82 Reached depth of 15043'. TOOH, rigged up loggers. Logging run #1; DIL-Sonic-GR-CAL; reached depth of 15001'. Strap line measurement of 15052'.

1-30-82 Logging Run #2. TIH to condition for casing.

2-2-82 Rigged up casing crew. Ran 9-5/8" OD casing as follows: 1 Float Shoe (2.74'); 2 jts. 53.5#, P-110, LT&C (80.08'); 1 Float Collar (2.20'); 54 jts. 53.5#, P-110, LT&C (2164.66'); 19 jts. 47#, P-110, LT&C (713.80'); DV tool (3.24'); 34 jts. 47#, P-110, LT&C (1338.99'); 130 jts. 43.5#, P-110, LT&C (5075.38'); 105 jts. 43.5#, S-95, LT&C (4547.22'); 26 jts. 53.5#, S-105, LT&C (1152.13'). Landed casing at 15050'; DV at 12114'; Float Collar at 14970'. Cemented first stage as follows: 50 bbls fresh water pumped ahead, followed w/1425 sacks Class "G" cement w/35% Silica flour, 3% KCL, 1% CFR-2, 1% Halad-24; displaced w/20 bbls. fresh water & 1081 bbls. mud; bump plug w/2300 psi at 12:15 AM, 2-3-82; floats held okay; good circulation thruout; dropped bomb at 12:35 AM; opened DV tool, established circulation at 2:15 AM; circulated 45 mins w/rig pump at 10 BPM;

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

SIGNED [Signature] TITLE Field Supt. DATE April 5, 1982

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

OGCC (3) - USGS - JNH - CDF - HMM

switched to Howco pumps at 3:00 AM, circulated 1-1/2 to 3 barrels per minute for 1 hr. w/slight loss; lost circulation; lost 300-400 bbls.; pressure 1100 psi; shut down casing pressure 600 psi w/slight bleed off.

- 2-3-82 Cemented 2nd stage as follows: pumped ahead 70 bbls. fresh water at 8 barrels per minute at 2200 psi; 708 sacks Howco Lite cement w/10# Gilsonite, 4% HCR-4 followed by 100 sacks Class "G" cement w/35% SSA-1, 3% KCL, 1% CFR-2, 1% Halad-24; pumping 7 barrels per minute at 1200-1400 psi; dropped plug; displaced at 12 barrels per minute at maximum of 1400 psi; bump plug at 4-1/2 bbls. per minute at maximum of 2000 psi; closed DV tool at 8:00 PM; bled off; DV held okay
- 2-4-82 Nippled down BOP's; set casing slips; landed casing w/625,000# hook load; ran temp survey; cemented top at 10240'; hanging at 650,000#; working on casing hanger.
- 2-5-82 Nippled up 9 5/8" head BOP's; changed at pipe rams; installed wear bushing.
- 2-6-82 TIH to 12080'; Drilling 4' cement & DV; tested to a maximum of 1000 psi for 15 mins.; held okay; Drilling 7' cement & Float Collar at 14967'; Drilled cement to 14980'; tested to a maximum of 1000 psi; held okay.
- 2-8-82 TOOH; tested blind rams to 5000 psi; tested top & bottom pipe rams to 5000 psi; hydril to 2500 psi; manifold to 5000 psi; upper & lower valve cock to 5000 for 15 mins. each; held okay. Continued drilling.

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. <b>Patented Lands</b>																				
2. NAME OF OPERATOR <b>Texaco Inc., Producing Dept. ATTN: H. M. Meduna</b>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME - - - -																				
3. ADDRESS OF OPERATOR <b>P.O. Box 1629, Rock Springs, WY 82901</b>		7. UNIT AGREEMENT NAME - - - -																				
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface <b>SE<math>\frac{1}{4}</math> NW<math>\frac{1}{4}</math>, Section 12 SLB&amp;M 1909' FNL &amp; 1570' FWL</b>		8. FARM OR LEASE NAME <b>Thousand Peaks Ranch</b>																				
14. PERMIT NO. <b>43-0430-30175</b>	15. ELEVATIONS (Show whether DF, RT, GR, etc.) <b>9897' Ungraded Ground</b>	9. WELL NO. <b>NCT-1 1</b>																				
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		10. FIELD AND POOL, OR WILDCAT <b>Wildcat</b>																				
<table border="0"> <tr> <td colspan="2">NOTICE OF INTENTION TO:</td> <td colspan="2">SUBSEQUENT REPORT OF:</td> </tr> <tr> <td>TEST WATER SHUT-OFF <input type="checkbox"/></td> <td>PULL OR ALTER CASING <input type="checkbox"/></td> <td>WATER SHUT-OFF <input type="checkbox"/></td> <td>REPAIRING WELL <input type="checkbox"/></td> </tr> <tr> <td>FRACTURE TREAT <input type="checkbox"/></td> <td>MULTIPLE COMPLETE <input type="checkbox"/></td> <td>FRACTURE TREATMENT <input type="checkbox"/></td> <td>ALTERING CASING <input type="checkbox"/></td> </tr> <tr> <td>SHOOT OR ACIDIZE <input type="checkbox"/></td> <td>ABANDON* <input type="checkbox"/></td> <td>SHOOTING OR ACIDIZING <input type="checkbox"/></td> <td>ABANDONMENT* <input type="checkbox"/></td> </tr> <tr> <td>REPAIR WELL <input type="checkbox"/></td> <td>CHANGE PLANS <input type="checkbox"/></td> <td>(Other) _____ <input type="checkbox"/></td> <td>(Other) _____ <input type="checkbox"/></td> </tr> </table>		NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:		TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>	FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>	SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>	REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____ <input type="checkbox"/>	(Other) _____ <input type="checkbox"/>	11. SEC., T., R., M., OR BLM. AND SUBVY OR AREA <b>Sec. 12, T1N-R8E</b>
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TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>																			
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REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____ <input type="checkbox"/>	(Other) _____ <input type="checkbox"/>																			
		12. COUNTY OR PARISH <b>Summit</b>																				
		13. STATE <b>Utah</b>																				

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all 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.)\*

Permission is requested to change the proposed total depth on The Thousand Peaks Ranch NCT-1 well number 1 from 18,700' to 22,600'.

**RECEIVED**  
APR 12 1982

DIVISION OF  
OIL, GAS & MINING

*Handwritten:* - 100 WY 82901  
2-7-82 - 6570  
7-16-82

18. I hereby certify that the foregoing is true and correct  
SIGNED H. M. Meduna TITLE Field Superintendent DATE April 6, 1982

(This space for Federal or State office use)  
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

OGCC Utah (3) - USGS - JNH - CDF - HMM

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. <u>Patented Lands</u>
2. NAME OF OPERATOR <u>Texaco Inc., Producing Dept. Attn: H.M. Medina</u>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME -----
3. ADDRESS OF OPERATOR <u>P.O. Box 1629, Rock Springs, WY 82901</u>		7. UNIT AGREEMENT NAME -----
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface <u>SE 1/4 NW 1/4, Section 12 SLB&amp;M 1909' FNL &amp; 1570' FWL</u>		8. FARM OR LEASE NAME <u>NCT-1 Thousand Peaks Ranch</u>
14. PERMIT NO. <u>43-0430-30175</u>	15. ELEVATIONS (Show whether DF, RT, OR, etc.) <u>9897' Ungraded ground</u>	9. WELL NO. <u>1</u>
		10. FIELD AND POOL, OR WILDCAT <u>Wildcat</u>
		11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA <u>Sec. 12, T1N-R8E</u>
		12. COUNTY OR PARISH 18. STATE <u>Summit Utah</u>

RECEIVED  
SEP 07 1982  
DIVISION OF OIL, GAS & MINING

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	(Other) _____
(Other) <u>Plug back</u>	<input checked="" type="checkbox"/>	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all 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.)\*

It is proposed to plug back the Thousand Peaks Ranch NCT-1 #1 well from a present depth of 21,874' in the Nugget formation to a depth of 16,190' to test the Frontier formation. The proposed procedure is as follows:

- Spot 50 sacks of Class "G" cement containing 35% silica flour, 0.5% FLA, and 0.5% retarder in 5-7/8" open hole from 21,150' to 21,500'. Nugget top is at 21,462'.
- Spot 50 sacks Class "G" cement containing 35% silica flour, 0.5% FLA, and 0.5% retarder from 20,350' to 20,650'. The 7" casing shoe is set at 20,500'. Twin Creek top is at 20,374'.
- Perforate at 16,200' with 4 jet shots per foot using hollow carrier casing gun.
- Set cement retainer at 16,190', squeeze Frontier formation with 100 sacks LFL Cement.
- Perforate at 15,943' with 4 jet shots per foot using hollow carrier

18. I hereby certify that the foregoing is true and correct  
SIGNED H.M. Medina TITLE Field Superintendent DATE 9-1-82

(This space for Federal or State office use)  
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING  
DATE: 9/7/82  
BY: [Signature]

5. casing gun.
6. Set cement retainer at 15,933', squeeze Frontier formation with 100 sacks IFL Cement.
7. Drill out retainer to 16,190'.
8. Test Frontier formation at the following depths: 15,962', 15,966', 16,103', 16,110', 16,118', 16,134', 16,144', 16,166', 16,178'.

The above proposed plug back procedure is approved as per telephone conversation of **Ron Firth**/John Baltz, 8/30/82. Work commenced on 8/30/82.

---

PLUG BACK & TEST  
ORAL APPROVAL TO PLUG AND ABANDON WELL

Operator TEXACO, INC. Representative John Baltz

Well No. Thousand Peaks Ranch #1 Location SE 1/4 NW 1/4 Section 12 Township 1N Range 8E

County Summit Field \_\_\_\_\_ State Utah

Unit Name and Required Depth \_\_\_\_\_ Base of fresh water sands \_\_\_\_\_

T.D. 21,857' Size hole and Fill per sack 5 7/8" Mud Weight ' and Top \_\_\_\_\_ #/gal. \_\_\_\_\_

Casing Size	Set At	Top of Cement	To Be Pulled	Plugging Requirements		
				From	To	Sacks Cement
13 3/8"	4700'	Surface		1. 21,500	21,150	50 saks
9 5/8"	15,050'	10,240'		2. 20,600'	20,350'	50 saks
7" Formation Nugget	20,500 Top 21,462'	Base	Shows	3. Perforate @ retainer @	16,200' 16,190' & squeeze with 100 sax cmt.	Set cement
				4. Perforate @ @ 15,933' & squeeze with 100 saks cement.	15,943'. 15,943'	Set cement retainer
				Propose to drill out cement sufficiently to perforate and test Frontier @ 16,103' - 16,178' & 15,962' - 15,966.		

REMARKS

DST's, lost circulation zones, water zones, etc., \_\_\_\_\_  
 Proposed perforations 16,103', 110', 118', 134', 144', 162', 166' and 178' and  
 15,962' and 15,966'

Approved by F. J. Firth Date 8-30-82 Time 11:00 AM a.m.  
 p.m.

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back a surface reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
Texaco Inc., Producing Dept.

3. ADDRESS OF OPERATOR  
P.O. Box 1629, Rock Springs, WY 82901

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface  
SE 1/4 NW 1/4, Section 12 SLB&M  
1909' FNL & 1570' FWL

14. PERMIT NO.  
43-0430-30175

15. ELEVATIONS (Show whether DF, RT, OR, etc.)  
9897' Ungraded ground

5. LEASE DESIGNATION AND SERIAL NO.  
Patented Lands

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
-----

7. UNIT AGREEMENT NAME  
-----

8. FARM OR LEASE NAME  
NCT-1  
Thousand Peaks Ranch

9. WELL NO.  
1

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 12, T1N-R8E

12. COUNTY OR PARISH  
Summit

13. STATE  
Utah

RECEIVED  
 OCT 6 1982  
 DIVISION OF  
 OIL, GAS & MINING

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Run 7" liner</u> <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all 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.)\*

7-2-82 Reached depth of 20,500'. Drilling, circulating and conditioning hole to log. TOOH to log.

7-3-82 Rig up loggers; ran DIL-GR-Sonic Caliper; rigged down loggers. TIH checking for rabbit-lost, broke circulation at 10,000'.

7-4-82 Circulating on bottom to run liner.

7-5-82 Circulating and conditioning mud; circulated and built mud volume; pumped pill & TOOH at 6000'.

7-6-82 Rig up casing crews. TOOH slipped drilling line; installed 7" rams; ran 4105' of 7" casing with float equipment. Waiting on cross over from 32# to 29# pipe.

7-7-82 Waiting on crossover. Ran 7" liner as follows: 1 float shoe (2,40'), 1 shoe joint (46.1'), 1 float collar (2.05'), 1 collar joint (41.3'), shear collar (1.81'), 46 joints S-105, 32#, ABC

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

SIGNED H.M. Medina TITLE Field Superintendent DATE 9-28-82

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

OGCC (3) -MMS-JNH-CDF-HMM

FL4S (2074'); 47 joints P-110 32#, ABC FL4S (1943.81'), 32# P-110 ABC FL4S x 29# S-105 ABC FL4S crossover (.80'); 44 joints S-105 29# ABC FL4S (1907.51'), crossover (1.04'); tie back (9.70'), hanger (2.49'), running tool (16.08'); total footage run 6048.92'. TIH, slick line measure of 154 stands drill pipe 14407.13' plus single of 31.85', landed at 20,500'. Set hanger at 14467', slick line measurement 20487'. Circulate bottoms up at 15000', also at TD. Rig down casing crews, rig up cementers, filled tanks for displacement, sheared collar at 4800 PSI.

- 7-8-82 Backed off hanger, set down 20,000' drill pipe, cemented as follows: pumped ahead 10 bbls. fresh water, followed with 585 sacks 50/50 poz with 2% Bentonite, 3% AZ, 1% D19, 2% CaCl, followed by 145 sacks class "G" 35% Silica, .5% 911, 1% D19; pumping 4 bbls. per minute initially to 1 bbl. per minute at end of job. Pressure 1700 to 3750 PSI at end of job; dropped wiper followed by 20 bbls water displaced with 435 bbls of mud (18 bbls. short). Cementer count 6 bbls. over displacement. Pulled out of hanger, TOOH. Changed out BOP's. Had circulation on all but last 120 bbls. of displacement.
- 7-9-82 Pressure tested manifold to 5000 PSI & tested BOP's; all held okay.
- 7-10-82 Pressure tested BOP's, 5" rams, drilling spool split at 8500 PSI. Nippled down drilling spool. Waiting on spool.
- 7-11-82 Nippled up drilling spool. Pressure tested 3½" & 5" rams to 10000 PSI, blind rams, choke; killed manifold; upper & lower valves & safety valve to 5000 PSI; all held okay. Strapped in hole, slipped & cut drilling line, broke circulation at 10000 lbs.
- 7-12-82 TIH with 3½" drill pipe, tagged cement at 14215', drilled 252' cement, tagged liner top 14467'.
- 7-13-82 Nothing at top of liner. Tagged cement at 19670'; drilled out cement. Continued drilling.
-

ORAL APPROVAL TO PLUG AND ABANDON WELL

Operator TEXACO INC. Representative Jim McKinsey (307-382-6540)

Well No. Thousand Peaks Ranch #1 Location SE 1/4 NW 1/4 Section 12 Township 1 N. Range 8 E

County Summit Field \_\_\_\_\_ State Utah

Unit Name and Required Depth \_\_\_\_\_ Base of fresh water sands \_\_\_\_\_

T.D. 21,857' Size hole and Fill per sack \_\_\_\_\_ " \_\_\_\_\_ ' and Top \_\_\_\_\_ #/gal. \_\_\_\_\_

Casing Size	Set At	Top of Cement	To Be Pulled	Plugging Requirements		
				From	To	Sacks Cement

<u>13 3/8"</u>	<u>4,700'</u>	<u>surface</u>		<u>Presently</u>	<u>PBTD @ 14,387'</u>	<u>w/9 5/8" Bridge plug</u>
<u>9 5/8"</u>	<u>15,050</u>	<u>10,240</u>				
<u>7"</u>	<u>20,500</u>			<u>w/ 5 sks cement on top.</u>		

Formation	Top	Base	Shows
<u>Nuggett</u>	<u>21,462</u>		<u>1. Set cement retainer @ 14,200' &amp; squeeze perfs w/150 sks cement (100' cement left inside 9 5/8" csg.)</u>
<u>Frontier</u>	<u>13,838'</u>		<u>2. Spot 100' cement plugs above &amp; below shoe of 13 3/8" between 9 5/8" and 13 3/8" annulus.</u>
			<u>3. 100' plug @ 4700' inside 9 5/8" csg.</u>
			<u>4. 50' to surface inside 9 5/8" X 13 3/8" annulus.</u>
			<u>5. 10 Skes @ surface 2/ marker. Heavy mud between plugs.</u>

REMARKS

DST's, lost circulation zones, water zones, etc., \_\_\_\_\_

Approved by R. J. Firth Date 9-20-82 Time \_\_\_\_\_ a.m.  
p.m.

ORAL APPROVAL TO PLUG AND ABANDON WELL

Operator TEXACO INC. Representative Lee Howe (307-382-6540)

Well No. Thousand Peaks Ranch #1 Location SE 1/4 NW 1/4 Section 12 Township 1 N Range 8 E

County Summit Field \_\_\_\_\_ State Utah

Unit Name and Required Depth \_\_\_\_\_ Base of fresh water sands \_\_\_\_\_

T.D. 21,857' Size hole and Fill per sack \_\_\_\_\_ " \_\_\_\_\_ Mud Weight ' and Top \_\_\_\_\_ #/gal. \_\_\_\_\_

Casing Size	Set At	Top of Cement	To Be Pulled	Plugging Requirements		
				From	To	Sacks Cement
<u>13 3/8"</u>	<u>4700'</u>	<u>Surface</u>	_____	<u>Presently plugged off with retainer &amp; cement @16,190'</u>		
<u>9 5/8"</u>	<u>15,050'</u>	<u>10,240'</u>	_____	<u>1. Place plug in packer @ above 15,962 2/ 2 sks.</u>		
<u>7"</u>	<u>20,500</u>	<u>--</u>	_____	<u>cement on top.</u>		
<u>Formation</u>	<u>Top</u>	<u>Base</u>	<u>Shows</u>	_____		
<u>Nuggett</u>	<u>21,462'</u>	_____	_____	<u>2. Set 9 5/8" bridge plug @ about 14,500' (50'±</u>		
_____	_____	_____	_____	<u>above liner top) w/5 sks. cement on top.</u>		
_____	_____	_____	_____	<u>Pressure test 9 5/8" to 2500#</u>		
_____	_____	_____	_____	<u>Mud to be left between plugs</u>		
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

REMARKS

DST's, lost circulation zones, water zones, etc., \_\_\_\_\_

Will perforate & test intervals in 9 5/8" casing.

Approved by R. J. Firth Date 9-14-82 Time 3:45 a.m.  
p.m.



# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See Instructions on Items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see Item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in Item 22, and in Item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in Item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29: "Sacks Cement"** Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for Items 22 and 24 above.)

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	38.	GEOLOGIC MARKERS	TOP		
						HEAD	DEPTH	TRUE VERT. DEPTH
					Wasatch	Surface		
					Adaville	3,400		
					Hilliard	11,195		
					Frontier	13,838		
					Aspen	16,396		
					Bear River	17,060		
					Kelvin	17,820		
					Stump	19,000		
					Preuss	19,402		
					Twin Creek	20,330		
					Nugget	21,462		

Thousand Peaks Ranch NCT-1 #1

28. CASING RECORD

<u>Casing size</u>	<u>Weight, Lb./Ft.</u>	<u>Depth Set(MD)</u>	<u>Hole size</u>	<u>Cementing record</u>
9-5/8"	43.5# P-110	10792'	12-1/4"	1425 Sacks Class
9-5/8"	47# P-110	12823'	12-1/4"	"G"
9-5/8"	53.5# P-110	15050'	12-1/4"	" " " " " " " "

29. LINER RECORD

<u>Size</u>	<u>Top(MD)</u>	<u>Bottom(MD)</u>	<u>Sacks of Cement</u>	<u>Screen</u>
7", 29#, S-105	14473'	16395'	730 Sacks	
7", 32#, P-110	16395'	18339'	" " " "	
7", 32#, S-105	18339'	20500'	" " " "	

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. Patented Lands
2. NAME OF OPERATOR Texaco Inc., Producing Dept. Attn: H.M. Medina		6. IF INDIAN, ALLOTTEE OR TRIBE NAME -----
3. ADDRESS OF OPERATOR P.O. Box 1629, Rock Springs, WY 82901		7. UNIT AGREEMENT NAME -----
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  SE $\frac{1}{4}$ NW $\frac{1}{4}$ , Section 12 SLB&M 1909' FNL & 1570' FWL, Section 12		8. FARM OR LEASE NAME NCT-1 Thousand Peaks Ranch
14. PERMIT NO. 43-0430-30175	15. ELEVATIONS (Show whether DF, RT, OR, etc.) 9897' Ungraded ground	9. WELL NO. 1
		10. FIELD AND POOL, OR WILDCAT Wildcat
		11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA Sec. 12, T1N-R8E
		12. COUNTY OR PARISH Summit
		13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

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

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all 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.)\*

Verbal approval was given from Ron J. Firth of the Utah Oil & Gas Conservation Commission on September 14, 1982 to plug and abandon Thousand Peaks Ranch NCT-1 #1. Plug and abandonment procedure is as follows:

Total depth of well was 21,874.

10-4-82 Pumped 75 sacks of Class "H" cement down 13-3/8" x 9-5/8" annulus from 7000' to 7200'. TOOH lay down 4544' of tubing. Pump 140 sacks Class "H" cement w/1% CaCl<sub>2</sub>. Squeeze out perms leaving 150' cement in casing. TOOH lay down tubing. Pump 35 sacks Class "H" cement with 2% CaCl<sub>2</sub> down 9-5/8" returns in 13-3/8" casing.

10-5-82 Rig released at 8:00 A.M.

RECEIVED  
NOV 01 1982

DIVISION OF  
OIL GAS & MINING

18. I hereby certify that the foregoing is true and correct  
SIGNED H.M. Medina TITLE Field Superintendent DATE 10-25-82

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:



PETROLEUM PRODUCTS

PRODUCING DEPARTMENT  
WEST UNITED STATES  
DENVER DIVISION

TEXACO  
U.S.A.  
A DIVISION OF TEXACO INC.  
P. O. BOX 2100  
DENVER, COLORADO 80201

*P&A*

TO: State of Utah  
Dept. of Natural Resources & Energy  
Division of Oil, Gas, and Mining  
4241 State Office Bldg.  
Salt Lake City, UT 84114  
Attn: Cari Furse

DATE: 1-20-83

RE: Thousand Peaks Ranch #1  
Logs

*IN 8E 12*

Dear Sir:

Enclosed please find the data as described below:

WELL

Company: Texaco  
Well: Thousand Peaks Ranch #1  
Field: Wildcat  
County, State: Summit, Utah

Please acknowledge receipt of the information by signing and returning the attached copy of this letter. (See attached log list)

Very truly yours,

Janell R. Powell

RECEIVED BY:

*Cari Furse*



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

Norman H. Bangerter, Governor  
Dee C. Hansen, Executive Director  
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

July 29, 1985

Texaco U.S.A.  
P.O. Box 2100  
Denver, Colorado 80201

Gentlemen:

Re: Well No. Thousand Peaks Ranch 1 - Sec. 12, T. 1N., R. 8E.,  
Summit County, Utah - API #43-043-30175

This letter is to advise you that Sec. 38, Geologic Markers, on the back side of the "Well Completion or Recompletion Report and Log" for the above referenced well was not filled in when this report was submitted.

We are sure this was an oversight on your part and we request that you complete the enclosed Form OGC-3 and forward it to this office as soon as possible, but not later than August 12, 1985.

Also, according to the well completion report, this well was cored. Please include a copy of the core analysis report.

Sincerely,

A handwritten signature in cursive script that reads "Pam Kenna".

Pam Kenna  
Well Records Specialist

Enclosure  
cc: Dianne R. Nielson  
Ronald J. Firth  
John R. Baza  
File

0170S/4



Texaco USA

PO Box 2100  
Denver CO 80201  
4601 DTC Boulevard  
Denver CO 80237

RECEIVED

AUG 07 1985

DIVISION OF OIL  
& GAS & MINING

August 5, 1985

Ms. Pam Kenna  
State of Utah Natural Resources  
Oil, Gas & Mining  
355 W. North Temple, 3 Triad Center  
Suite 350  
Salt Lake City, Utah 84180-1203

Dear Ms. Kenna:

Regarding your letter of July 29, concerning our Thousand Peaks Ranch 1 (Sec. 12-T1N-R8E, Summit County, Utah - API #43-043-30175): I have enclosed the completed geologic markers section which you advised us was lacking on the original. Since I do not have access to the original it would be appreciated if you could add this information to it.

Sincerely,

William R. Cook

WRC:rlw

Enclosure

LOG LIST

Dual Induction - SFL	507' - 20,461
Dual Laterolog	20,500' - 21,844'
FDC - CNL	8742' - 21,854'
Sonic	507' - 21,572'
Caliper	507' - 4690'
Frac. Ident. Log	20,500' - 21,862'
Dipmeter	20,500' - 21,860'
Dipmeter Arrow Plot	20,566' - 21,824'
Density/Caliper	8342' - 14,992'
Directional Survey	20,500' - 21,852'
Radioactivity Log	7150' - 8220'

CORE LABORATORIES, INC.  
*Petroleum Reservoir Engineering*  
DALLAS, TEXAS

CORE ANALYSIS REPORT

FOR

TEXACO, INC.

THOUSAND PEAKS NCT-1  
THOUSAND PEAKS RANCH FIELD  
SUMMIT COUNTY, UTAH

CORE LABORATORIES, INC.  
 Petroleum Reservoir Engineering  
 DALLAS, TEXAS

PAGE 1

TEXACO, INC.  
 THOUSAND PEAKS NCT-1  
 THOUSAND PEAKS RANCH FIELD  
 SUMMIT COUNTY, UTAH

DATE : 8-13-82  
 FORMATION : NUGGET  
 DRLG. FLUID: WBM  
 LOCATION : SE SW SEC. 12 T1N R8E

FILE NO : 3807-0011  
 ANALYSTS : R. MOHL  
 ELEVATION:

CONVENTIONAL ANALYSIS

SAMPLE NUMBER	DEPTH	PERM K <sub>a</sub> MAXIMUM	POR. FLD	FLUID OIL	SATS. WTR	DESCRIPTION	
1	21741.0-42.0	0.01	1.0	0.0	43.6	CVF	SD FN QTZ
2	21742.0-43.0	0.01	1.7	0.0	47.9	CVF	SD FN-MED QTZ
3	21743.0-44.0	<0.01	1.5	0.0	41.8		SD FN-MED QTZ
4	21744.0-45.0	0.01	1.4	0.0	29.6		SD FN-MED QTZ
5	21745.0-46.0	0.01	0.8	0.0	26.7	OVF	SD FN-MED QTZ
6	21746.0-47.0	<0.01	1.6	0.0	38.4	OVF	SD FN-MED QTZ
7	21747.0-48.0	<0.01	1.6	0.0	39.1	OVF	SD FN-MED QTZ
8	21748.0-49.0	<0.01	2.1	0.0	39.5	OVF	SD FN-MED QTZ
9	21749.0-50.0	<0.01	1.4	0.0	61.5	OVF	SD FN QTZ
10	21750.0-51.0	<0.01	1.5	0.0	55.9	OVF	SD FN QTZ
11	21751.0-52.0	0.01	1.5	0.0	41.4	CVF	SD FN QTZ
12	21752.0-53.0	0.01	1.1	0.0	39.4	OVF	SD FN QTZ
13	21753.0-54.0	0.01	2.1	0.0	40.7		SD FN QTZ
14	21754.0-55.0	0.01	2.3	0.0	35.5		SD FN QTZ
15	21755.0-56.0	0.02	1.7	0.0	24.8		SD FN-MED QTZ
16	21756.0-57.0	0.01	1.3	0.0	49.4	OVF	SD FN-MED QTZ
17	21757.0-58.0	0.01	1.3	0.0	33.1	OVF	SD FN-MED QTZ
18	21758.0-59.0	0.01	2.4	0.0	25.5	OVF	SD FN QTZ
19	21759.0-60.0	0.01	2.0	0.0	30.6	CVF	SD FN QTZ
20	21760.0-61.0	0.01	1.1	0.0	57.8	CVF	SD FN-MED QTZ
	21761.0-71.0						LOST CORE

CVF=CLOSED VERTICAL FRACTURE

OVF=OPEN VERTICAL FRACTURE

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CORE LABORATORIES, INC.  
Petroleum Reservoir Engineering  
DALLAS, TEXAS

TEXACO, INC.  
THOUSAND PEAKS NCT-1

DATE : 8-13-82  
FORMATION : NUGGET

FILE NO. : 3807-0011  
ANALYSTS : R. MOHL

\*\*\* CORE SUMMARY AVERAGES FOR 1 ZONE \*\*\*

DEPTH INTERVAL: 21741.0 TO 21761.0

FEET OF CORE ANALYZED : 20.0 FEET OF CORE INCLUDED IN AVERAGES: 20.0

-- SAMPLES FAILING WITHIN THE FOLLOWING RANGES WERE AVERAGED --

PERMEABILITY HORIZONTAL RANGE (MD.) : 0.00 TO 0.03 (UNCORRECTED FOR SLIPPAGE)  
FLUID POROSITY RANGE (%) : 0.0 TO 100.0  
OIL SATURATION RANGE (%) : 0.0 TO 100.0  
WATER SATURATION RANGE (%) : 0.0 TO 100.0

SHALE SAMPLES EXCLUDED FROM AVERAGES.

AVERAGES FOR DEPTH INTERVAL: 21741.0 TO 21761.0

AVERAGE PERMEABILITY (MILLIDARCIES)		PRODUCTIVE CAPACITY (MILLIDARCY-FEET)	
ARITHMETIC PERMEABILITY	: 0.01	ARITHMETIC CAPACITY	: 0.17
GEOMETRIC PERMEABILITY	: 0.01	GEOMETRIC CAPACITY	: 0.14
HARMONIC PERMEABILITY	: 0.01	HARMONIC CAPACITY	: 0.11
AVERAGE POROSITY (PERCENT)	: 1.6	AVERAGE TOTAL WATER SATURATION (PERCENT OF PORE SPACE)	: 39.3
AVERAGE RESIDUAL OIL SATURATION (PERCENT OF PORE SPACE)	: 0.0	AVERAGE CONNATE WATER SATURATION ** (PERCENT OF PORE SPACE)	: 37.9

\*\* ESTIMATED FROM TOTAL  
WATER SATURATION.

10

NUGGET Fm.

PERMEABILITY: MILLIDARCIES

1

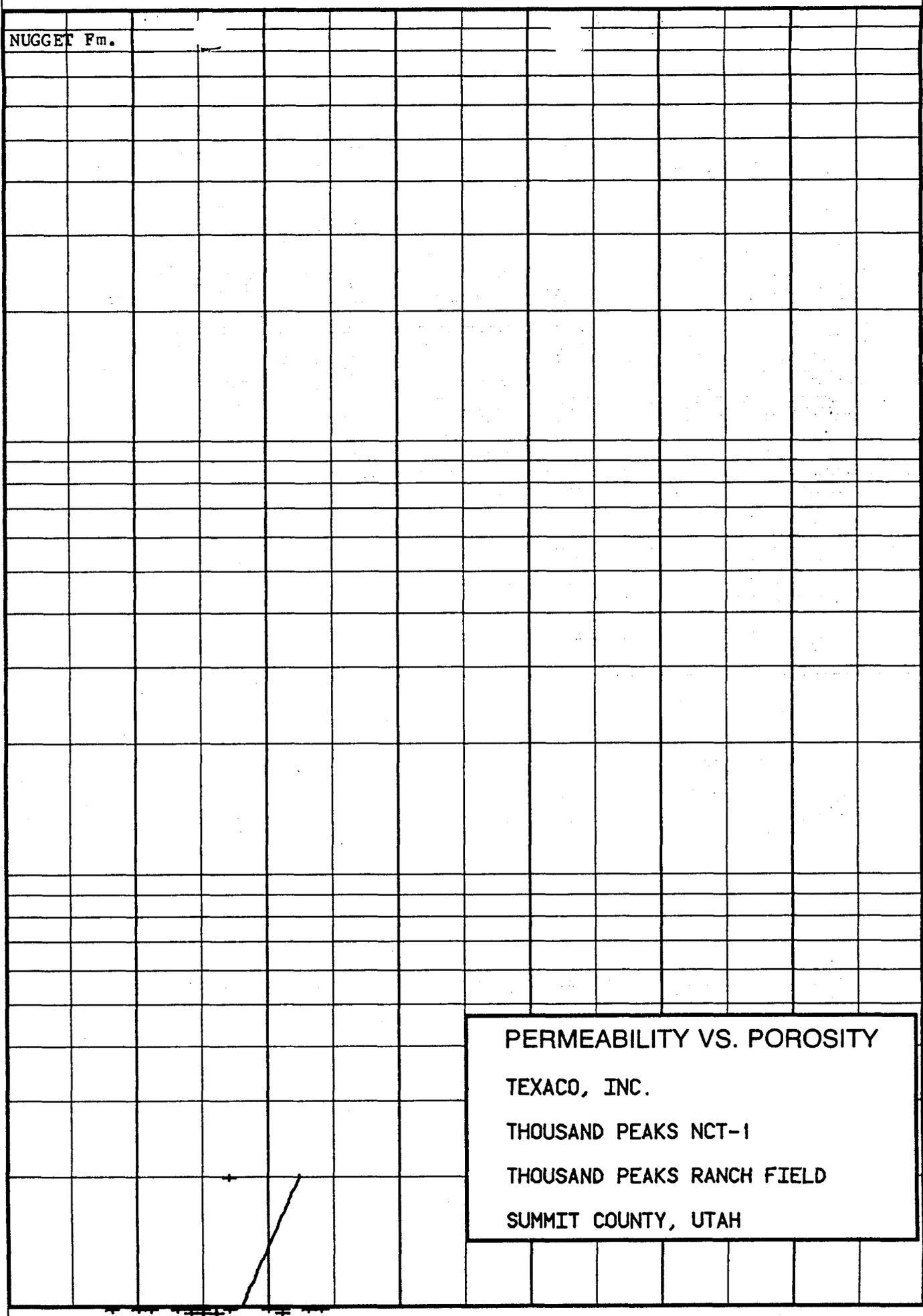
0.1

0.01

0.0 1.0 2.0 3.0 4.0 5.0 6.0

POROSITY: PERCENT

PERMEABILITY VS. POROSITY  
 TEXACO, INC.  
 THOUSAND PEAKS NCT-1  
 THOUSAND PEAKS RANCH FIELD  
 SUMMIT COUNTY, UTAH



PERMEABILITY VS POROSITY

COMPANY: TEXACO, INC.  
 FIELD : THOUSAND PEAKS RANCH FIELD

WELL : THOUSAND PEAKS NCT-1  
 COUNTY, STATE: SUMMIT COUNTY, UTAH

AIR PERMEABILITY : MD - HORIZONTAL ( UNCORRECTED FOR SLIPPAGE )  
 POROSITY : PERCENT ( FLUID SUMMATION )

DEPTH INTERVAL	RANGE & SYMBOL	PERMEABILITY		POROSITY		POROSITY AVERAGE	PERMEABILITY AVERAGES		
		MINIMUM	MAXIMUM	MIN.	MAX.		ARITHMETIC	HARMONIC	GEOMETRIC
21741.0 - 21761.0	1 (+)	0.001	0.02	0.8	2.4	1.6	0.01	0.01	0.01

EQUATION OF REDUCED LINE RELATING PERMEABILITY(K) TO POROSITY :  
 $\text{LOG}(K) = (\text{SLOPE})(\text{POROSITY}) + \text{LOG OF INTERCEPT}$   
 $K = \text{ANTILOG}((\text{SLOPE})(\text{POROSITY}) + \text{LOG OF INTERCEPT})$

RANGE	EQUATION OF THE LINE
1	PERM = ANTILOG(( 0.6810)(POROSITY) + -3.2250)

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: TEXACO, INC.  
FIELD : THOUSAND PEAKS RANCH FIELD

WELL : THOUSAND PEAKS NCT-1  
COUNTY, STATE: SUMMIT COUNTY, UTAH

AIR PERMEABILITY : MD. ( HORIZONTAL ) RANGE USED 0.000 TO 1.  
POROSITY : PERCENT (FLUID SUMMATION) RANGE USED 0.0 TO 46.0

(PERMEABILITY UNCORRECTED FOR SLIPPAGE)

DEPTH LIMITS : 21741.0 - 21761.0 INTERVAL LENGTH : 20.0  
FEET ANALYZED IN-ZONE : 20.0 LITHOLOGY EXCLUDED : NONE

DATA SUMMARY

POROSITY AVERAGE	PERMEABILITY AVERAGES		
	ARITHMETIC	HARMONIC	GEOMETRIC
1.6	0.01	0.01	0.01

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: TEXACO, INC.  
 FIELD : THOUSAND PEAKS RANCH FIELD

WELL : THOUSAND PEAKS NCT-1  
 COUNTY, STATE: SUMMIT COUNTY, UTAH

GROUPING BY POROSITY RANGES

POROSITY RANGE	FEET IN RANGE	AVERAGE POROSITY	AVERAGE FERM. (GEOM.)	AVERAGE FERM. (ARITH)	FREQUENCY (PERCENT)	CUMULATIVE FREQUENCY (%)
0.0 - 2.0	15.0	1.4	0.008	0.009	75.0	75.0
2.0 - 4.0	5.0	2.2	0.009	0.009	25.0	100.0

TOTAL NUMBER OF FEET = 20.0

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: TEXACO, INC.  
 FIELD : THOUSAND PEAKS RANCH FIELD

WELL : THOUSAND PEAKS NCT-1  
 COUNTY, STATE: SUMMIT COUNTY, UTAH

GROUPING BY PERMEABILITY RANGES

PERMEABILITY RANGE	FEET IN RANGE	AVERAGE PERM. (GEOM.)	AVERAGE PERM. (ARITH)	AVERAGE POROSITY	FRFQUENCY (PERCENT)	CUMULATIVE FREQUENCY (%)
-----	-----	-----	-----	-----	-----	-----
0.005 - 0.010	6.0	0.005	0.005	1.6	30.0	30.0
0.010 - 0.020	13.0	0.010	0.010	1.5	65.0	95.0
0.020 - 0.039	1.0	0.020	0.020	1.7	5.0	100.0

TOTAL NUMBER OF FEET = 20.0

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: TEXACO, INC.  
 FIELD : THOUSAND PEAKS RANCH FIELD

WELL : THOUSAND PEAKS NCT-1  
 COUNTY, STATE: SUMMIT COUNTY, UTAH

POROSITY-FEET OF STORAGE CAPACITY LOST FOR SELECTED POROSITY CUT OFF

POROSITY CUT OFF	FEET LOST	CAPACITY LOST (%)	FEET REMAINING	CAPACITY REMAINING (%)	ARITH MEAN	MEDIAN
-----	-----	-----	-----	-----	-----	-----
0.0	0.0	0.0	20.0	100.0	1.6	
2.0	15.0	65.3	5.0	34.7	2.2	
4.0	20.0	100.0	0.0	0.0		

TOTAL STORAGE CAPACITY IN POROSITY-FEET = 31.4

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STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: TEXACO, INC.  
 FIELD : THOUSAND PEAKS RANCH FIELD

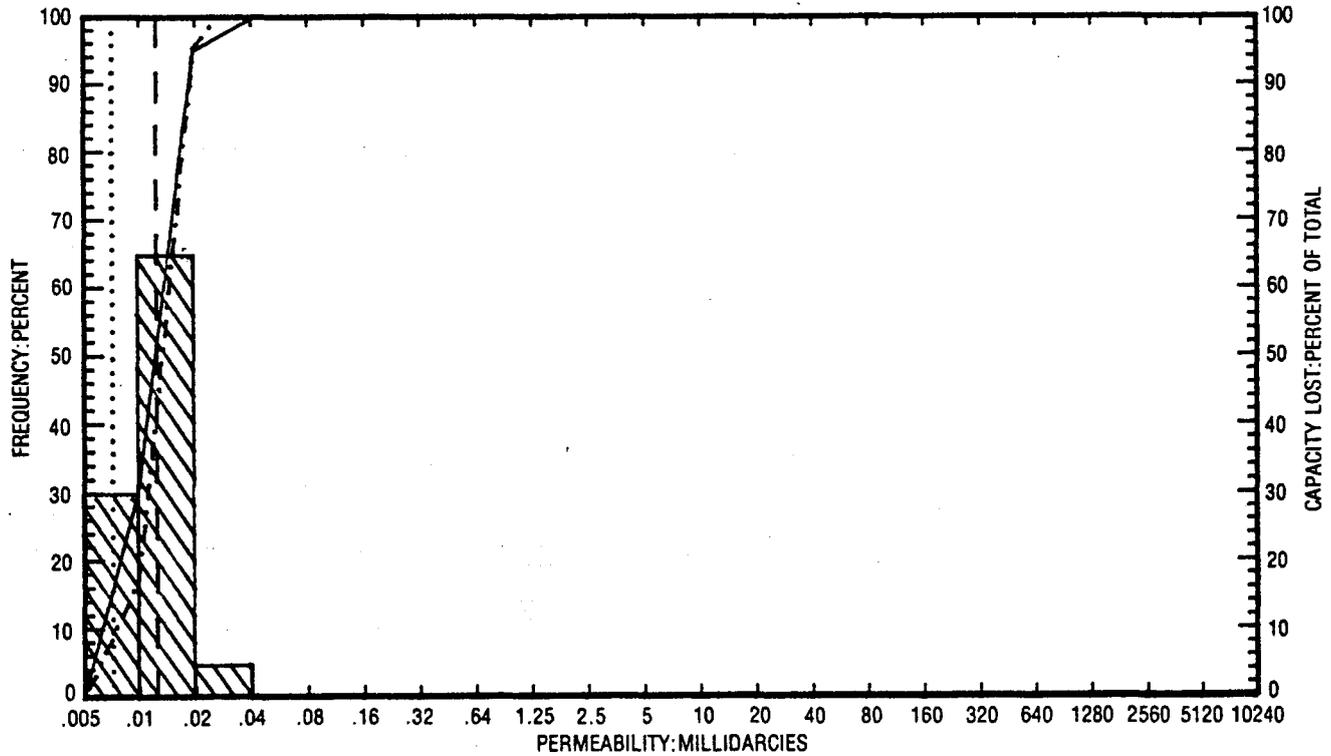
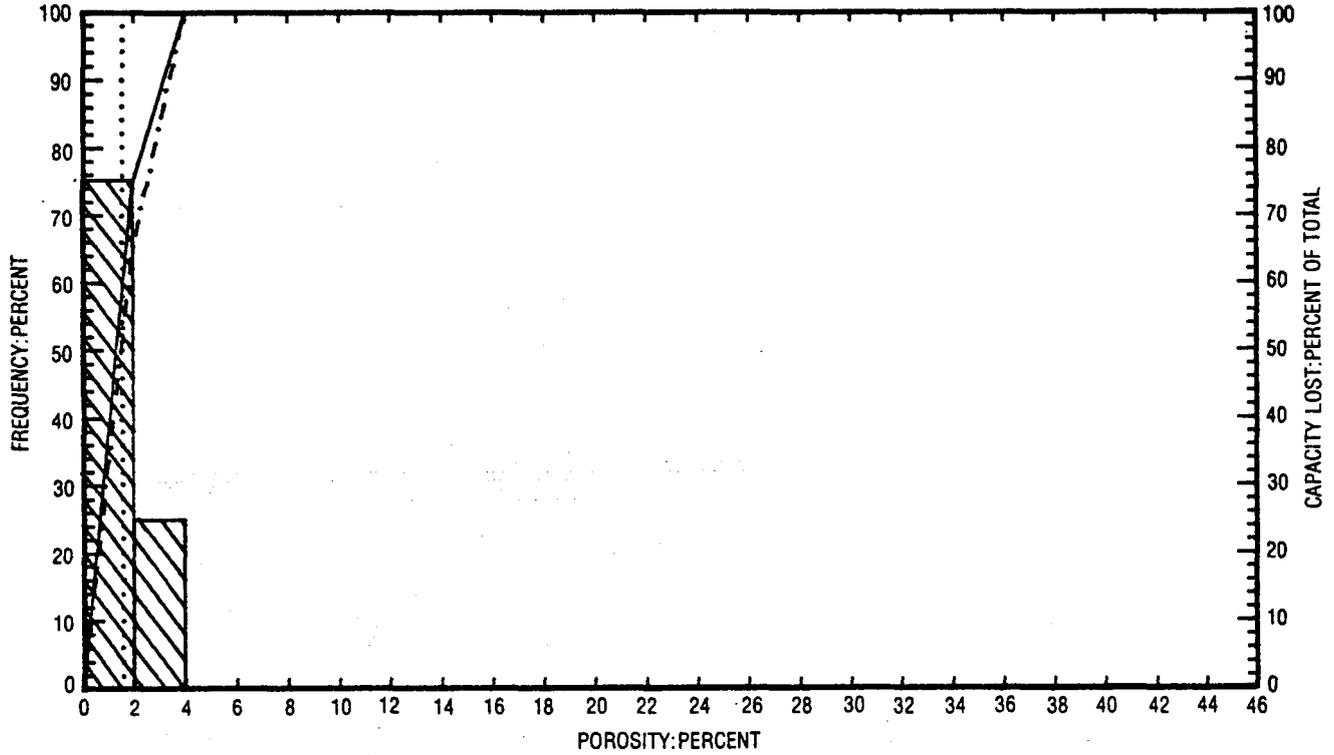
WELL : THOUSAND PEAKS NCT-1  
 COUNTY, STATE: SUMMIT COUNTY, UTAH

MILLIDARCY-FEET OF FLOW CAPACITY LOST FOR SELECTED PERMEABILITY CUT OFF

PERMEABILITY CUT OFF	FEET LOST	CAPACITY LOST (%)	FEET REMAINING	CAPACITY REMAINING (%)	GEOM MEAN	MEDIAN
0.005	0.0	0.0	20.0	100.0	0.01	0.01
0.010	6.0	17.5	14.0	82.5	0.01	
0.020	19.0	95.4	1.0	4.6	0.02	
0.	20.0	100.0	0.0	0.0		

TOTAL FLOW CAPACITY IN MILLIDARCY-FEET (ARITHMETIC) = 0.17

NUGGET Fm.



PERMEABILITY AND POROSITY HISTOGRAMS

TEXACO, INC.  
 THOUSAND PEAKS NCT-1  
 THOUSAND PEAKS RANCH FIELD  
 SUMMIT COUNTY, UTAH

LEGEND

- ARITHMETIC MEAN POROSITY ..... (dotted line)
- GEOMETRIC MEAN PERMEABILITY ..... (dotted line)
- MEDIAN VALUE ..... (dashed line)
- CUMULATIVE FREQUENCY ..... (solid line)
- CUMULATIVE CAPACITY LOST ..... (dash-dot line)



**CORE LABORATORIES, INC.**

*Petroleum Reservoir Engineering*

COMPANY TEXACO, INC. FILE NO. 3807-0011  
 WELL THOUSAND PEAKS NCT-1 DATE 8-13-82 ENGRS. R. MOHL  
 FIELD THOUSAND PEAKS RANCH FORMATION NUGGET ELEV. \_\_\_\_\_  
 COUNTY SUMMIT STATE UTAH DRLG. FLD. WBM CORES \_\_\_\_\_

# CoRes Log

## CORE and RESISTIVITY EVALUATION

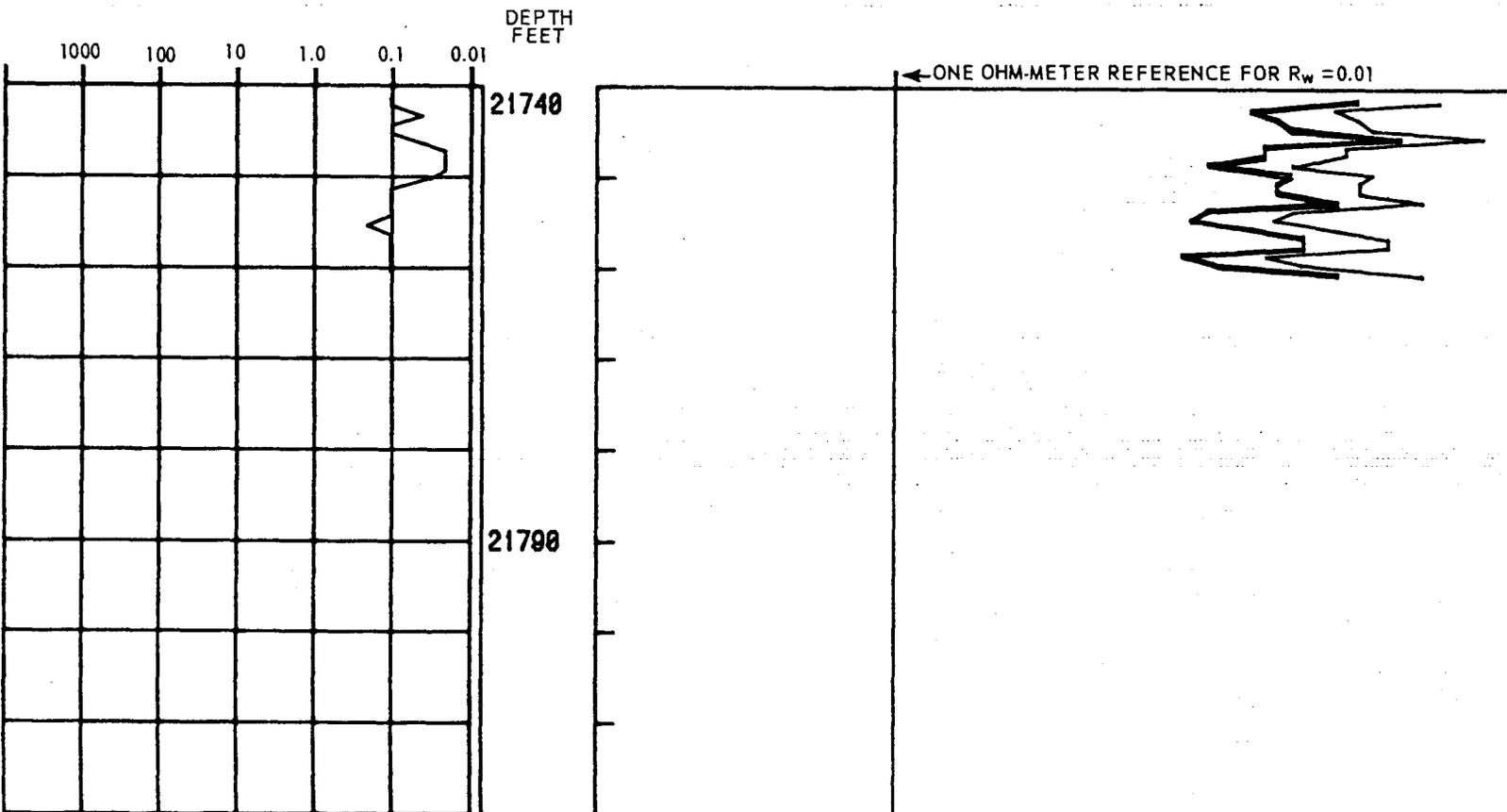
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RESISTIVITY PARAMETERS:  $a = 1.00$   $m = 2.00$   $n = 2.00$  . Depths 21741 to 21761  
 $a =$  \_\_\_\_\_  $m =$  \_\_\_\_\_  $n =$  \_\_\_\_\_ . Depths \_\_\_\_\_ to \_\_\_\_\_

PERMEABILITY  
MILLIDARCIES

**CORE ANALYSIS CALCULATED RESISTIVITY**

$R_0$  = OHM-METERS AT 100%  $S_w$  \_\_\_\_\_  
 $R_{mp}$  = OHM-METERS AT CRITICAL  $S_w$  \_\_\_\_\_



**CORE LABORATORIES, INC.***Petroleum Reservoir Engineering*

COMPANY TEXACO, INC. FILE NO. 3807-0011  
 WELL THOUSAND PEAKS NCT-1 DATE 8-13-82  
 FIELD THOUSAND PEAKS RANCH FORMATION NUGGET ELEV. 9897 GR  
 COUNTY SUMMIT STATE UTAH DRLG. FLD. WBM CORES \_\_\_\_\_  
 LOCATION SE SW SEC. 12 T1N R8E

## CORRELATION COREGRAPH

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc., (all errors or omissions excepted); but Core Laboratories, Inc., and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

VERTICAL SCALE: 5" = 100'

