

STEEDLEY AND ASSOCIATES  
ENGINEERING & ARCHEOLOGICAL CONSULTANTS  
P.O. BOX 885  
WORLAND, WYOMING 82401  
(307) 347-8848

RECEIVED

*called will send to  
copy directly to  
Hydrogeology Survey*

DIVISION OF  
OIL, GAS & MINING

September 18, 1981

United State Geological Survey  
Division of Oil, Gas, & Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

Re: Permission to Stake  
Location

Dear Sirs:

Santa Fe Energy Company requests permission to stake the  
following well location:

Lake Canyon Federal #1-22  
Sec. 22, T36S, R25E  
San Juan County, Utah  
Lease #U-36492

Please advise if additional information is required.

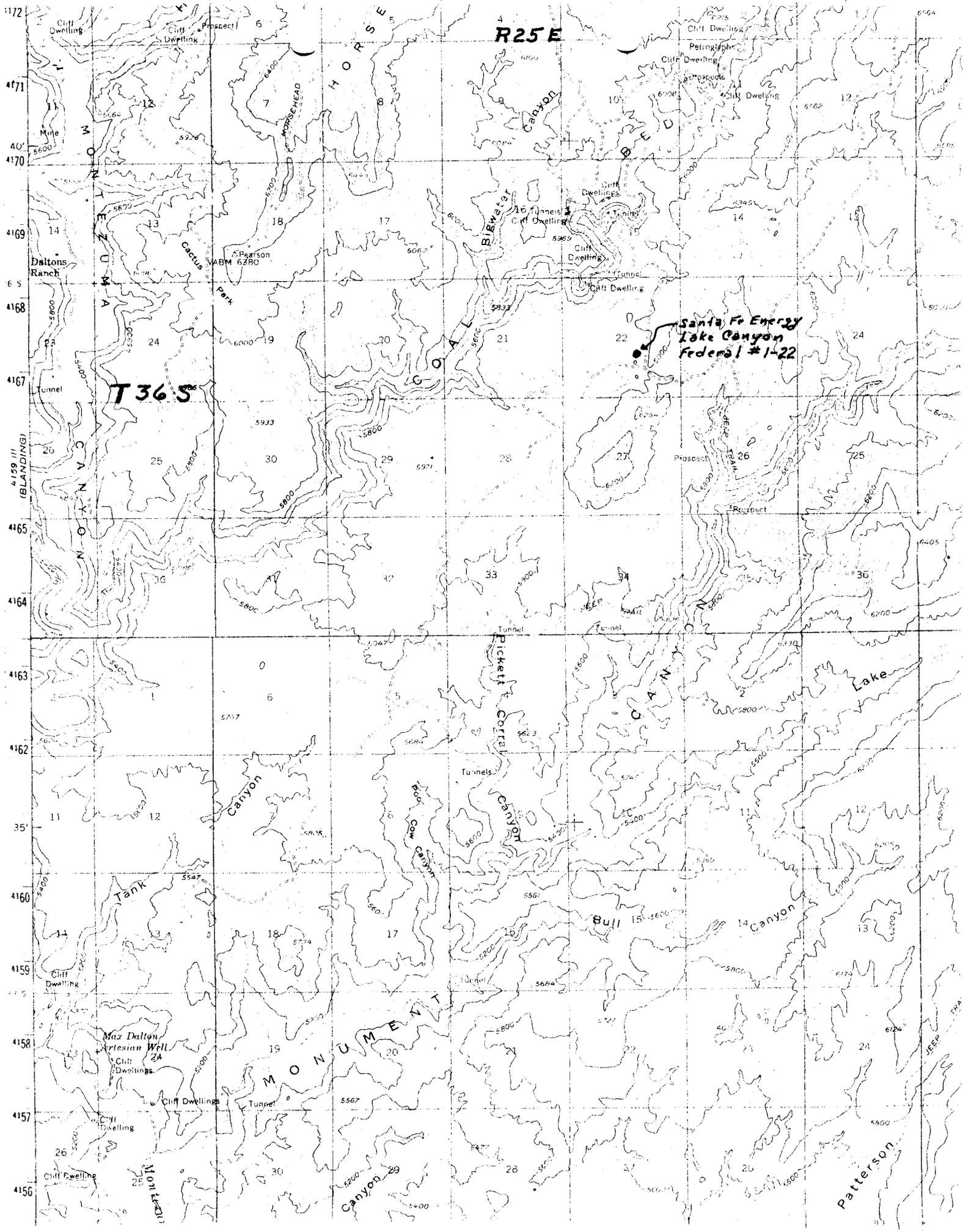
Sincerely,

*Dick Steedley*

Dick Steedley,  
Agent for Santa Fe Energy Company

DS/dlh

cc: Bureau of Land Management, Monticello, Utah, Attn: Bob Turri



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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  
 Santa Fe Energy Company

3. ADDRESS OF OPERATOR  
 c/o Steedley & Associates  
 P.O. Box 885, Worland, WY 82401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface  
 1880' FEL & 2130' FSL  
 At proposed prod. zone  
 Same NW 1/4 SE 1/4

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 17 miles from Dove Creek, CO

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1880'

16. NO. OF ACRES IN LEASE  
 640

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 40

18. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
 6500'

19. PROPOSED DEPTH  
 6500'

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 GR 5986'

22. APPROX. DATE WORK WILL START\*  
 As soon as possible

5. LEASE DESIGNATION AND SERIAL NO.  
 U-36492

6. IS INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
 Laker Canyon Prospect

9. WELL NO.  
 Federal #1-22

10. FIELD AND POOL, OR WILDCAT  
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 NW SE Sec. 22  
 T36S, R25E

12. COUNTY OR PARISH  
 San Juan

13. STATE  
 Utah

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24# K-55 STC	1,600'	1000 sacks
7 7/8"	5 1/2"	15.5# K-55 STC	6,500'	250 sacks

- Propose to drill 12 1/4" hole to 1050', set 8 5/8" casing and cement to surface.
- Drill 7 7/8" hole to 6500' or T.D.; if productive set 5 1/2" casing at T.D. and cement with 250 sacks. This will be a Desert Creek test.

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 Jack H. White TITLE Drilling Superintendent DATE Oct. 8, 1981

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
 APPROVED BY W.P. Martin FOR E. W. GUYNN  
 CONDITIONS OF \_\_\_\_\_ TITLE DISTRICT OIL & GAS SUPERVISOR DATE NOV 03 1981

NOTICE OF APPROVAL CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A DATED 1/1/80

*J. State O & G*

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

SUBMIT IN DUPLICATE\*  
(Other instructions on reverse side)

5. Lease Designation and Serial No.

U-36492

6. If Indian, Allottee or Tribe Name

NA

7. Unit Agreement Name

NA

8. Farm or Lease Name

Lake Canyon Prospect

9. Well No.

Federal #1-22

10. Field and Pool, or Wildcat

Wildcat

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

NW SE Sec. 22,  
T36S, R25E

12. County or Parrish 13. State

San Juan *Utah*

1a. Type of Work

DRILL

DEEPEN

PLUG BACK

b. Type of Well

Oil Well

Gas Well

Other

Multiple Zone

2. Name of Operator

Santa Fe Energy Company

3. Address of Operator

c/o Steedley & Associates 1981

P.O. Box 885, Worland, WY 82401

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

At surface

1880' FEL & 2130' FSL

At proposed prod. zone

Same NW 1/4 SE 1/4

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

17 miles from Dove Creek Colorado

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

1880'

16. No. of acres in lease

640

17. No. of acres assigned to this well

40

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

NA

19. Proposed depth

6500'

20. Rotary or cable tools

Rotary

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

GR 5986'

22. Approx. date work will start\*

As soon as possible

23.

PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12 1/4"	8 5/8"	24# K-55 STC	1,600'	1000 sacks to surf.
7 7/8"	5 1/2"	15.5# K-55 STC	6,500'	250 sacks

- Propose to drill 12 1/4" hole to 1,050', set 8 5/8" casing and cement to surface.
- Drill 7 7/8" hole to 6,500' or T.D.; if productive, set 5 1/2" casing at T.D. and cement with 250 sacks. This will be a Desert Creek test.

APPROVED BY THE ENGINEER  
OF OIL, GAS, AND MINING  
DATE 10-28-81  
BY *M. J. [Signature]*

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

*Dick Steedley*

Title

Agent for Santa Fe Energy

Date

Oct. 6, 1981

(This space for Federal or State office use)

Permit No.

Approval Date

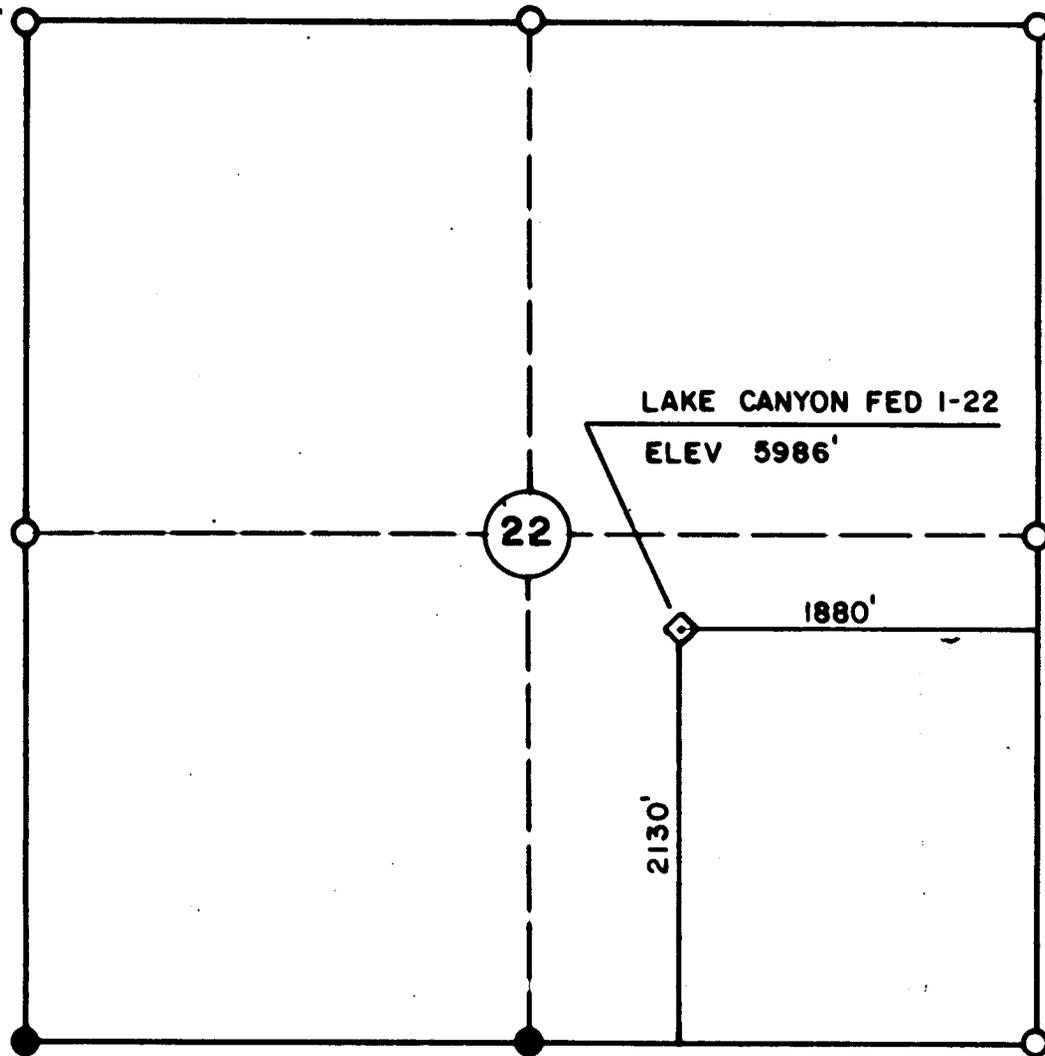
Approved by

Title

Date

Conditions of approval, if any:

R. 25 E.



SCALE 1"=1000'

T. 36 S.

-NOTES-

- FOUND CORNER
- ⊙ PROPORTIONED CORNER
- ◇ WELL LOCATION

STATE OF WYOMING )  
 COUNTY OF SWEETWATER ) ss CERTIFICATE OF SURVEYOR

I, DICK R. GRIFFIN of Rock Springs, Wyoming, hereby certify that this map was made from notes taken during an actual survey under my supervision on SEPTEMBER 30, 1981, and that it shows correctly the drilling location of LAKE CANYON FED 1-22 for SANTA FE ENERGY as staked on the ground during said survey.

*Dick R. Griffin*

UTAH R. L. S. NO. 5120

MAP SHOWING DRILLING  
 LOCATION OF THE  
 LAKE CANYON FED 1-22  
 for  
 SANTA FE ENERGY

SE 1/4 SEC 22  
 T. 36 S., R. 25 E., S.L.P.M.  
 SAN JUAN CO., UTAH

D.R. GRIFFIN AND ASSOCIATES, INC.  
 P.O. BOX 1089  
 ROCK SPRINGS, WY. 82901  
 (307) 388-8088





# United States Department of the Interior

IN REPLY REFER TO

T36SR25E Sec. 22  
(U-069)

BUREAU OF LAND MANAGEMENT

Moab District

San Juan Resource Area

P.O. Box 7

Monticello, Utah 84535

October 27, 1981

## Memorandum

To: USGS, Durango, CO

From: Area Manager, San Juan

Subject: Santa Fe Energy Company's Application for Permit to Drill,  
Lake Canyon Prospect Federal #1-22

We approve Santa Fe Energy's Application for Permit to Drill subject to the following stipulations:

1. If production results, the access will be upgraded to BLM specifications.
2. Water bars will be constructed as directed by BLM to control erosion during rehabilitation.
3. The area is a winter deer range. Deer will not be harassed.

The archaeological requirement has been fulfilled. No threatened or endangered species are indicated in the area.

*Edward L. Schum*

RECEIVED

OCT 28 1981

U. S. GEOLOGICAL SURVEY  
DURANGO, COLO.

Identification No. 027-82

United States Department of the Interior  
Geological Survey  
2000 Administration Building  
1745 West 1700 South  
Salt Lake City, Utah 84104

NEPA CATEGORICAL EXCLUSION REVIEW

PROJECT IDENTIFICATION

Operator SANTA FE ENERGY COMPANY

Project Type single zone explorational oil well

Project Location 2130' FSL/1880' FEL, Sec. 22, T. 36 S., R. 25 E., San Juan County, Utah

Well No. 1-22 Lake Canyon Prospect Lease No. U-36492

Date Project Submitted October 15, 1981

FIELD INSPECTION

Date September 30, 1981

Field Inspection Participants

Dick Steedley - agent for Santa Fe

Howard Hughes - Hughes Construction Co.

Russell Ebel - Archaeologist, Fort Lewis College

Brian Wood - Bureau of Land Management

Dick & Claudia Griffin - surveyors, D.R. Griffin & Assoc.

Dan Englishman - U.S. Geological Survey

I have reviewed the proposal in accordance with the categorical exclusion review guidelines. This proposal would not involve any significant effects and, therefore, does not represent an exception to the categorical exclusions.

October 22, 1981  
Date Prepared

Donald Englishman  
Environmental Scientist

I concur

NOV 02 1981  
Date

W. Martin  
District Supervisor

FOR E. W. GUYNN  
DISTRICT OIL & GAS SUPERVISOR

CATEGORICAL EXCLUSION REVIEW INFORMATION SOURCE

Criteria 516 DM 2.3.A	Federal/State Agency			Local and private corre- spondence (date)	Previous NEPA	Other studies and reports	Staff expertise	Onsite inspection (date)	Other
	Corre- spondence (date)	Phone check (date)	Meeting (date)						
1. Public health and safety						✓ 4	✓		
2. Unique charac- teristics							✓		
3. Environmentally controversial							✓		
4. Uncertain and unknown risks							✓		
5. Establishes precedents							✓		
6. Cumulatively significant							✓		
7. National Register historic places	✓ 1								
8. Endangered/ threatened species	✓ 1								
9. Violate Federal, State, local, tribal law						✓ 4	✓		

CATEGORICAL EXCLUSION REVIEW COMMON REFERENCE LEGEND

1. Surface Management Agency Input, *Concurrence letter, October 28, 1981*
2. Reviews Reports, or information received from Geological Survey  
(Conservation Division, Geological Division, Water Resource Division,  
Topographic Division)
3. Lease Stipulations/Terms
4. Application for Permit to Drill
5. Operator Correspondence
6. Field Observation
7. Private Rehabilitation Agreement

\*\* FILE NOTATIONS \*\*

DATE: Oct. 26, 1981  
OPERATOR: Santa Fe Energy ~~Corp.~~ Company  
WELL NO: Lake Canyon Prospect - Federal # 1-22  
Location: Sec. 22 T. 36S R. 25S County: San Juan

File Prepared:  Entered on N.I.D:   
Card Indexed:  Completion Sheet:

API Number 43-037-30734

CHECKED BY:

Petroleum Engineer: M. J. Minder 10-28-81

Director: \_\_\_\_\_

Administrative Aide: As Per Rule C-3,

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  Plotted on Map

Approval Letter Written

Hot Line  P.I.

October 28, 1981

Santa Fe Energy Company  
P. O. Box 885  
Worland, Wyoming 82401  
c/o Steedley & Associates

RE: Well No. Lake Canyon Prospect-Federal #1-22,  
Sec. 22, T. 36S, R. 25E,  
San Juan County, Utah

Insofar as this office is concerned, approval to drill the above referred to oil well is hereby granted in accordance with Rule C-3, General Rules and Regulations and Rules of Practice and Procedure.

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 43-037-30734.

Sincerely,

DIVISION OF OIL, GAS AND MINING

  
Michael T. Minder  
Petroleum Engineer

MTM/db  
CC: USGS

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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  
 Santa Fe Energy Company

3. ADDRESS OF OPERATOR  
 One Security Park, 7200 I-40 West, Amarillo, TX 79106

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)  
 At surface  
 1880' FEL & 2130' FSL  
 At proposed prod. zone  
 Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 17 miles from Dove Creek, CO

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
 1880'

16. NO. OF ACRES IN LEASE  
 640

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 40

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH  
 6500'

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 GR 5986'

22. APPROX. DATE WORK WILL START\*

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	36# K-55 ST&C	1656'	800 sacks

Well was drilled to a total depth of 5910', propose to plug back & test as follows:

1. Set 60 sx cement plug 5710-5910' (Desert Creek).
2. Set 50 sx cement plug 4700-4900' (Upper Ismay).
3. Wait on cement for 12 hours.
4. Plan to drill stem test the Lower Hermosa from 4540-4646'.

APPROVED BY THE STATE  
 OF UTAH DIVISION OF  
 OIL, GAS, AND MINING  
 DATE: 12/31/81  
 BY: [Signature]

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 [Signature] TITLE District Production Manager DATE Dec. 22, 1981

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

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

CONDITIONS OF APPROVAL, IF ANY:



**SANTA FE ENERGY COMPANY**

ONE SECURITY PARK, 7200 I-40 WEST, AMARILLO, TX 79106, TELEPHONE: (806) 355-9681

**RECEIVED**

December 23, 1981

DEC 28 1981

Mr. Scott Ellis  
U. S. Geological Survey  
P. O. Box 3768  
Grand Junction, CO 81502

**DIVISION OF  
OIL, GAS & MINING**

RE: Lake Canyon Federal #1-22  
San Juan County, Utah

Dear Sir:

Enclosed for your approval is Form 9-331-C, Application to Plug Back, the captioned well. It is then planned to drill stem test the Lower Hermosa formation.

If there are any further questions, please advise.

Sincerely yours,

D. D. Oswald, Jr.  
District Production Manager

/dm  
Encl.

cc: State of Utah ✓

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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 Form 9-331-C for such proposals.)

1. oil well  gas well  other

2. NAME OF OPERATOR  
Santa Fe Energy Co.

3. ADDRESS OF OPERATOR  
2600 Security Life Bldg Denver, CO

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 2130' FSL 1880' FEL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

- TEST WATER SHUT-OFF
- FRACTURE TREAT
- SHOOT OR ACIDIZE
- REPAIR WELL
- PULL OR ALTER CASING
- MULTIPLE COMPLETE
- CHANGE ZONES
- ABANDON\*
- (other) Spud/set csg.

SUBSEQUENT REPORT OF:

- 
- 
- 
- 
- 
- 
- 
- 
- 

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JAN 08 1982

DIVISION OF  
OIL, GAS & MINING

5. LEASE U-12023-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Lake Canyon Federal

9. WELL NO. #1-22

10. FIELD OR WILDCAT NAME

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 22-T36S-R25E

12. COUNTY OR PARISH San Juan 13. STATE Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)  
5960' GL 5972' KB

Report results of multiple completion or zone change on Form 9-330J

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.)\*

11/27/81 Spud 7:00 p.m. 40' 16" conductor pipe set & cmt'd. Rig KB is 14'. Dev 1/2° @ 98'. Spud mud.

12/2/81 Ran 39 jts (1642') 9 5/8", 36#, K-55 ST&C csg, set @ 1656' KB. Cmt'd w/600 sx 65/35 Poz, 6% gel, 1/4# Flocele & 200 sx class 'B' neat, 1/4# Flocele, 2% CaCl<sub>2</sub>.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

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

SIGNED Dan Oswald TITLE District Engineer DATE 12-21-81

(This space for Federal or State office use)

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLIC.

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R455.5.

10

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other

1b. TYPE OF COMPLETION:

NEW WELL  WORK OVER  DEEP EN  PLUG BACK  DIFF. RESVR.  Other

2. NAME OF OPERATOR  
Santa Fe Energy Company

3. ADDRESS OF OPERATOR  
2600 Security Life Bldg, Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with State requirements)

At surface 2130' FSL & 1880' FEL

At top prod. interval reported below

At total depth

**RECEIVED**  
JAN 20 1982  
DIVISION OF OIL GAS & MINING

14. PERMIT NO. DATE ISSUED  
43-087-30934

5. LEASE DESIGNATION AND SERIAL NO.

U-36492

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Lake Canyon Federal

9. WELL NO.

#1-22

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC. T. R. M., OR BLOCK AND SURVEY OR AREA

Sec. 22  
T36S R25E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

15. DATE SPUDDED 11/27/81 16. DATE T.D. REACHED 12/21/81 17. DATE COMPL. (Ready to prod.) P & A 18. ELEVATIONS (DF, RRB, RT, GR, ETC.)\* 5960' GL 5972' KB 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 5910' 21. PLUG, BACK T.D., MD & TVD 4848' 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* P & A 25. WAS DIRECTIONAL SURVEY MADE NO 26. TYPE ELECTRIC AND OTHER LOGS RUN DIL/BHC/CNL 27. WAS WELL CORED YES

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	36#	1656' KB		60 sx 65/35 Poz, 6% gel. 1/2# Flocele & 200 sx class 'B' neat, 1/2# Flocele, 2% CaCl <sub>2</sub>	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)

N/A

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
N/A	N/A	P & A					
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API. (CORR.)	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY

35. LIST OF ATTACHMENTS  
DST #1

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Dan Oswald TITLE District Engineer DATE 1-20-82

\*(See Instructions and Spaces for Additional Data on Reverse Side)

# 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 report 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 23: "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.)

RECEIVED  
DIVISION OF  
OIL, GAS & MINING

FORMATION	TOP	BOTTOM	DEPTH	TRUE VERT. DEPTH	LOG
Entrada	592'		592'		
Carmel	752'		752'		
Navajo	792'		792'		
Kayenta	1162'		1162'		
Wingate	1362'		1362'		
Chinle	1542'		1542'		
Shinarump	2292'		2292'		
Moenkopi	2382'		2382'		
Cutler	2442'		2442'		
Hermosa	4422'		4422'		
Upper Ismay	5492'		5492'		
Lower Ismay	5642'		5642'		
Gothic Shale	5717'		5717'		
Desert Creek	5742'		5742'		
Total Depth	5900'		5900'		

DRILL STEM TEST

Lake Canyon Federal #1-22  
Sec. 22- T36S-R25E  
San Juan County, Utah

12/19/81: Run DST #1 frm 5816'-5830'. (Straddle Test).

<u>TIME</u>	<u>STATUS</u>	<u>PRESSURES</u>	<u>RESULTS</u>
	IHP	4198	Good blw. Blw
15 min	IFP	524	off immed.
60 min	ISIP	3595	Mud to surf in
60 min	FFP	3250	10 mins.
120 min	FSIP	3546	
	FHP	4197	

¼ bbl yellow oil - oil cut. SW 40-45 bbls total. ¼"  
chk 150# surf press. ½" chk died off to 85#. 3/8" chk  
built back to 100#.



P&T

**SANTA FE ENERGY COMPANY**

ROCKY MT. REGION, 2600 SECURITY LIFE BLDG., DENVER, CO. 80202, TELEPHONE: (303) 825-5101

February 26, 1982

State of Utah  
Natural Resources & Energy  
4241 State Office Bldg.  
Salt Lake City, Utah 84114

Attention: Cari Furse

Dear Ms. Furse:

Per your letter of February 29, 1982 please find enclosed the DIL/BHC/CNL logs run on the Lake Canyon Federal #1-22, San Juan County, Utah.

If I can be of further assistance please advise.

Sincerely,

T. S. Parker  
District Geologist

/ld

Enclosure



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

February 29, 1982

Santa Fe Energy Company  
 2600 Security Life Bldg.  
 Denver, Colorado 80202

Re: Well No. Lake Canyon Fed. #1-22  
 Sec. 22, T. 36S, R. 25E  
 San Juan County, Utah

Gentlemen:

According to our records, a " Well Completion Report" filed with this office January 20, 1982, from above referred to well, indicates the following electric logs were run: DIL/BHC/CNL. As of todays 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 elctric and radioactivity logs.

Your prompt attention to the above will be greatly appreciated.

Sincerely,

DIVISION OF OIL, GAS AND MINING

*Cari Furse*

Cari Furse  
 Clerk Typist

*Will send core test  
 that were ran 2/25/82*

CORE ANALYSIS RESULTS

for

SANTA FE ENERGY

LAKE CANYON FEDERAL 1-22  
WILDCAT  
SAN JUAN COUNTY, UTAH

**RECEIVED**

MAR 05 1982

DIVISION OF  
OIL, GAS & MINING

SANTA FE ENERGY  
 LAKE CANYON FED. 1-22  
 WILDCAT  
 SAN JUAN COUNTY

FORMATION : DESERT CREEK  
 ORIG. FLUID: N.B.M.  
 LOCATION : NW, SE SEC. 22-365-25E  
 STATE : UTAH

DATE : 12-17-81  
 FILE NO. : 30-3-3175  
 ANALYSTS : GGIDS  
 ELEVATION: 5972 KB

FULL DIAMETER CORE ANALYSIS

SAMP. NO.	DEPTH	PERM. TO AIR (MD) MAX.	POR. 90 DEG.	POR. HEL.	FLUID OIL	SATS. WATER	GR. DNS.	DESCRIPTION
	5810-5815							LM/SHL/DOL
	5815-5820							ANHYDRITE
	5820-5823							LM/SHL/DOL
1	5823-24	1.1	1.1	16.4	1.4	63.5	2.80	DOL-BRN, VF XLN-RTHY, LM
2	5824-25	8.3	7.6	19.1	2.6	56.6	2.80	DOL-BRN, VF XLN-RTHY, LM
3	5825-26	7.7	6.9	20.4	2.5	50.4	2.80	DOL-BRN, VF XLN-RTHY, LM
4	5826-27	11	10	23.8	2.6	39.7	2.79	DOL-BRN, VF XLN-RTHY, LM
5	5827-28	125	62	19.8	4.5	49.8	2.81	DOL-BRN, VF XLN, V JG, LM, SALT
6	5828-29	300	132	13.6	5.5	42.7	2.82	DOL-BRN, VF XLN, V JG, LM, SALT
7	5829-30	*		(8.9)	5.9	42.7		DOL-BRN, VF XLN, V JG, LM, SALT
8	5830-31	170	98	12.5	3.9	58.5	2.83	DOL-BRN, VF XLN, V JG, LM, SALT
9	5831-32	4.6	0.34	10.2	1.6	60.5	2.80	DOL-BRN, VF XLN, V JG, LM, SALT
10	5832-33	23	15	7.0	0.0	18.4	2.84	DOL-BRN, VF XLN, V JG, LM, SALT
11	5833-34	16	1.0	11.2	2.2	45.3	2.85	DOL-BRN, VF XLN, V JG, LM, SALT
12	5834-35p	108		7.2	0.0	51.9	2.84	DOL-BRN, VF XLN, V JG, LM, SALT
13	5835-36	156	15	11.2	0.0	42.8	2.84	DOL-BRN, VF XLN, V JG, LM, SALT
14	5836-37p	1040		10.7	0.0	55.2	2.83	DOL-BRN, VF XLN, V JG, LM, SALT
15	5837-38	98	5.6	16.3	1.9	58.2	2.84	DOL-BRN, VF XLN, V JG, LM, SALT
16	5838-39p	19		5.7	0.0	71.8	2.83	DOL-BRN, VF XLN, V JG, LM, SALT
17	5839-40p	0.01		4.0	0.0	68.0	2.79	DOL-BRN, VF XLN, V JG, LM, SALT
18	5840-41	19	0.05	11.0	0.0	37.7	2.81	DOL-BRN, VF XLN, LM
	5841-5869							SHL/DOL/LM

P Unsuitable for full diameter analysis, conventional plug used.

() Unsuitable for B.L. helium porosity, summation of fluids porosity.

\* Sample unsuitable for analysis.

5823 -5841 Water productive



CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

COMPANY SANTA FE ENERGY FIELD WILDCAT FILE RP-3-3175  
 WELL LAKE CANYON FED. 1-22 COUNTY SAN JUAN DATE 12-17-81  
 LOCATION NW, SE SEC. 22-36S-25E STATE NTAH ELEV. 5972 KB

# CORE-GAMMA CORRELATION

These analyses, estimates 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 of operations expressed represent the best judgment of Core Laboratories, Inc. (all errors and 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 performance 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'

## CORE-GAMMA SURFACE LOG

(PATENT APPLIED FOR)

GAMMA RAY

RADIATION INCREASE →

## COREGRAPH

TOTAL WATER

PERCENT TOTAL WATER

80 60 40 20 0

DESERT CREEK FORMATION

1500

PERMEABILITY

MILLIDARCS

100 50 10 5 1

POROSITY

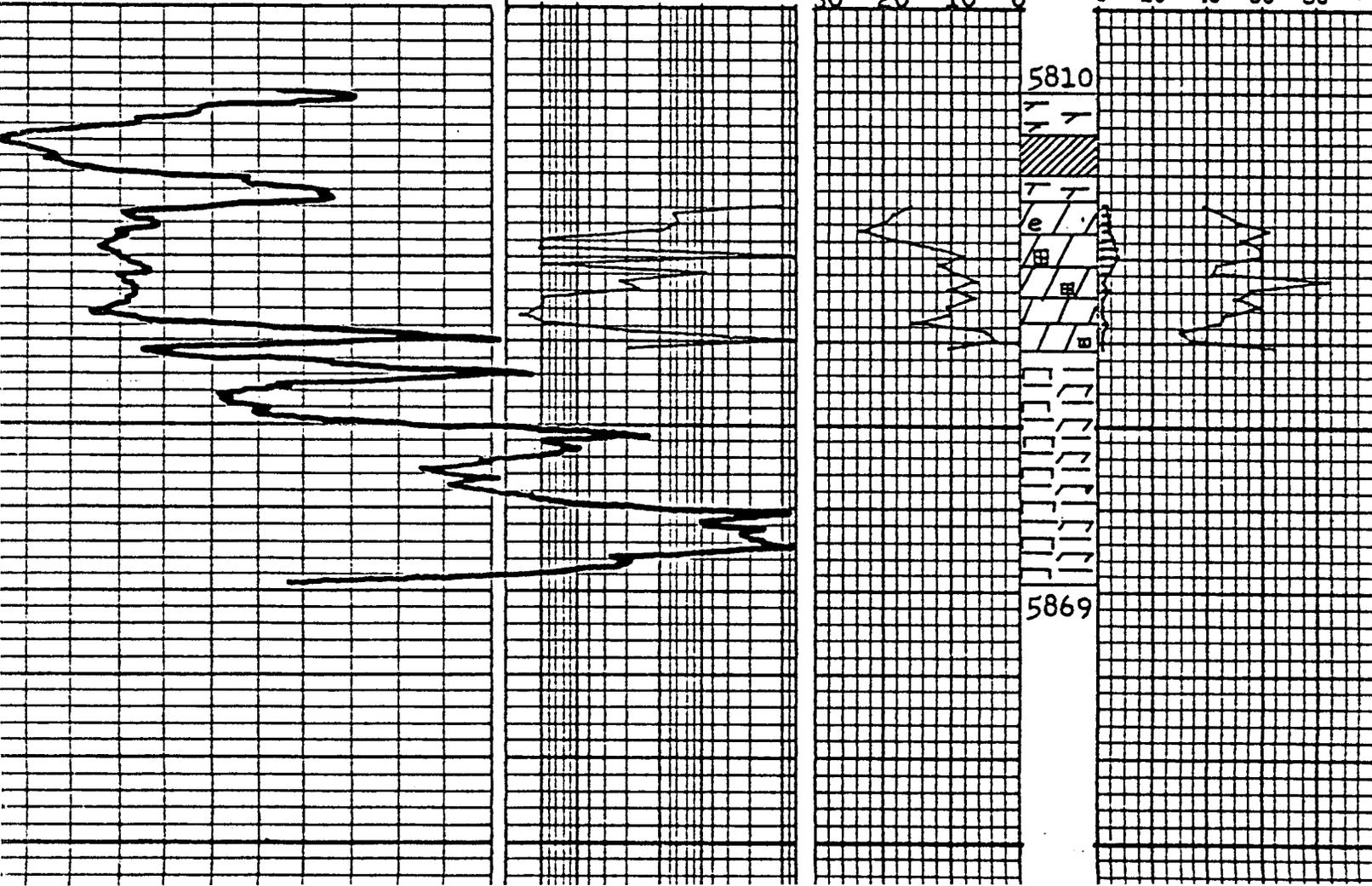
PERCENT

30 20 10 0

OIL SATURATION

PERCENT PORE SPACE

0 20 40 60 80



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE  
(Other instructions  
verse side)

Form approved.  
Budget Bureau No. 1004-0135  
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO  
U-36492

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

7. UNIT AGREEMENT NAME  
---

8. FARM OR LEASE NAME  
Lake Canyon Fed.

9. WELL NO.  
1-22

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA  
Sec. 22, T36S, R25E

12. COUNTY OR PARISH | 13. STATE  
San Juan | Utah

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 Fresh Water Well

2. NAME OF OPERATOR  
Celsius Energy Company

3. ADDRESS OF OPERATOR  
P. O. Box 458, Rock Springs, Wyoming 82902

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)  
At surface

2130' FSL, 1880' FEL, NW SE

14. PERMIT NO. | 15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
| 5986' GL, 6000' KB

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF   
FRACTURE TREAT   
SHOOT OR ACIDIZE   
REPAIR WELL   
(Other)   
PULL OR ALTER CASING   
MULTIPLE COMPLETE   
ABANDON\*   
CHANGE PLANS

WATER SHUT-OFF   
FRACTURE TREATMENT   
SHOOTING OR ACIDIZING   
(Other)   
REPAIRING WELL   
ALTERING CASING   
ABANDONMENT\*

(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.)\*

The above-captioned well was tested as a fresh water supply well in 1983. The well was not produced because of the availability of fresh water from Bug Well No. 3. Since there was no need to produce Lake Canyon Fed. 1-22, the well should be plugged and abandoned. As per the telephone conversation with Steve Jones of the Moab, BLM office, the well will be plugged in the following manner:

- 1) Tubing will be run to plug back depth to tag the plug at 1530 feet.
- 2) Set a bridge plug above the perforations at 980 feet KBM.
- 3) Spot a 20 sack cement plug on the bridge plug.
- 4) Spot a 40 sack plug at surface (100 feet).
- 5) Install a regulation dry hole marker.
- 6) Reclaim location. (Please send Reclamation Orders).

RECEIVED  
JUL 01 1987

DIVISION OF  
OIL, GAS & MINING

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

SIGNED Thomas P. Galt TITLE Dir. of Pet. Engineering DATE 4-24-87

(This space for Federal or State office use)

ACCEPTED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:  
Federal approval of this action  
is required before commencing  
operations.

\*See Instructions on Reverse Side

DATE: 7-6-87  
BY: [Signature]

copied 7/9/87

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

5. LEASE DESIGNATION AND SERIAL NO. U-36492
6. IF INDIAN, ALLOTTEE OR TRIBE NAME ---
7. UNIT AGREEMENT NAME ---
8. FARM OR LEASE NAME Lake Canyon Fed.
9. WELL NO. 1-22
10. FIELD AND POOL, OR WILDCAT Wildcat
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 22-36S-25E
12. COUNTY OR PARISH San Juan
13. STATE Utah

**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 Fresh Water Well

2. NAME OF OPERATOR  
Celsius Energy Company

3. ADDRESS OF OPERATOR  
P. O. Box 458, Rock Springs, Wyoming 82902

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\* See also space 17 below.)  
 At surface  
2130' FSL, 1880' FEL, NW SE

14. PERMIT NO. \_\_\_\_\_

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
GL 5986', KB 6000'

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) _____	(Other) _____

(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.)\*

On 7-15-87 the above captioned well was plugged in accordance with the approved sundry notice of 4-24-87. The well was plugged in the following manner:

1. Tagged the cement plug at 1530'.
2. Set a cast iron bridge plug at 954' KBM.
3. Spotted 20 sacks of cement on the bridge plug.
4. Spotted a 40 sack plug of cement at surface (pulled tubing out of well).
5. Installed a dry hole marker and cut off anchors.
6. Reclamation will take place when possible.

**RECEIVED**  
 JUL 27 1987

DIVISION OF  
 OIL, GAS & MINING

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

SIGNED Thomas Adams TITLE Director Pet. Eng. DATE 7-21-87

(This space for Federal or State office use)

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