

-24-77 Shut-in oil well

FILE NOTATIONS

Entered in N I D File   
Entered On S R Sheet \_\_\_\_\_  
Location Map Pinned   
Card Indexed   
I W R for State or Fee Land \_\_\_\_\_

Checked by Chief \_\_\_\_\_  
Copy N I D to Field Office \_\_\_\_\_  
Approval Letter \_\_\_\_\_  
Disapproval Letter \_\_\_\_\_

COMPLETION DATA:

Date Well Completed 8-24-77  
SLOW  WW \_\_\_\_\_ TA \_\_\_\_\_  
GW \_\_\_\_\_ OS \_\_\_\_\_ PA \_\_\_\_\_

Location Inspected \_\_\_\_\_  
Bond released \_\_\_\_\_  
State of Fee Land \_\_\_\_\_

LOGS FILED

Driller's Log   
Electric Logs (No. )   
E \_\_\_\_\_ I \_\_\_\_\_ E-I \_\_\_\_\_ GR \_\_\_\_\_ GR-N \_\_\_\_\_ Micro \_\_\_\_\_  
Lat \_\_\_\_\_ Mi-L \_\_\_\_\_ Sonic \_\_\_\_\_ Others \_\_\_\_\_

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

5. Lease Designation and Serial No.

ML 33/32

6. If Indian, Allottee or Tribe Name

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

DRILL

DEEPEN

PLUG BACK

7. Unit Agreement Name

b. Type of Well

Oil Well

Gas Well

Other

Single Zone

Multiple Zone

8. Farm or Lease Name

2. Name of Operator

St. Croix Exploration

Utah State

3. Address of Operator

2471 Angell Road, St. Paul, Minnesota 55118

9. Well No.

4

10. Field and Pool, or Wildcat

Wildcat

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

2200' FWL & ~~2580' FNL~~ 1700' FSL

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

Sec. 36, T. 24 S., R. 11 E

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

21 miles north - Hanksville

12. County or Parrish

Emery

Utah

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

16. No. of acres in lease

640

17. No. of acres assigned to this well

20

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

875' (#5)

19. Proposed depth

250'

20. Rotary or cable tools

Rotary

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

5364' GR

22. Approx. date work will start\*

On receipt of permit

23. PROPOSED CASING AND CEMENTING PROGRAM

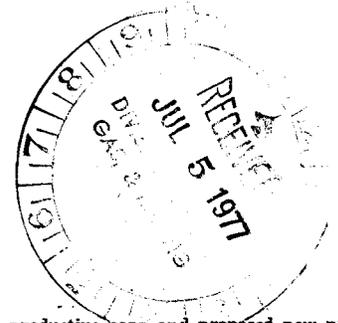
Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
7 7/8"	5 1/2"	17 lbs.	250'	100 sacks

Proposed program: Drill with air to total depth coring sections exhibiting oil shows, running logs, set 5 1/2" casing to total depth, circulating cement to surface.

Surface Formation: Triassic Shinarump  
Formation at T.D.: Triassic Moenkopi

Location Plat Attached

Telephone: (612) 854-1787



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 Stanley R. Tyler Title Vice President Date 6/30/77

(This space for Federal or State office use)

Permit No. 43-015-30052 Approval Date \_\_\_\_\_

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

Conditions of approval, if any:



NOTE: ELEVATIONS ADDED DEC. 29, 1976

S T. C R O I X E X P L O R A T I O N S

DRILL HOLE LOCATIONS

Job no. 1008

Scale: 1" = 1000'

Drawn by ADJ, TRC

Date: December, 1976

Approved by

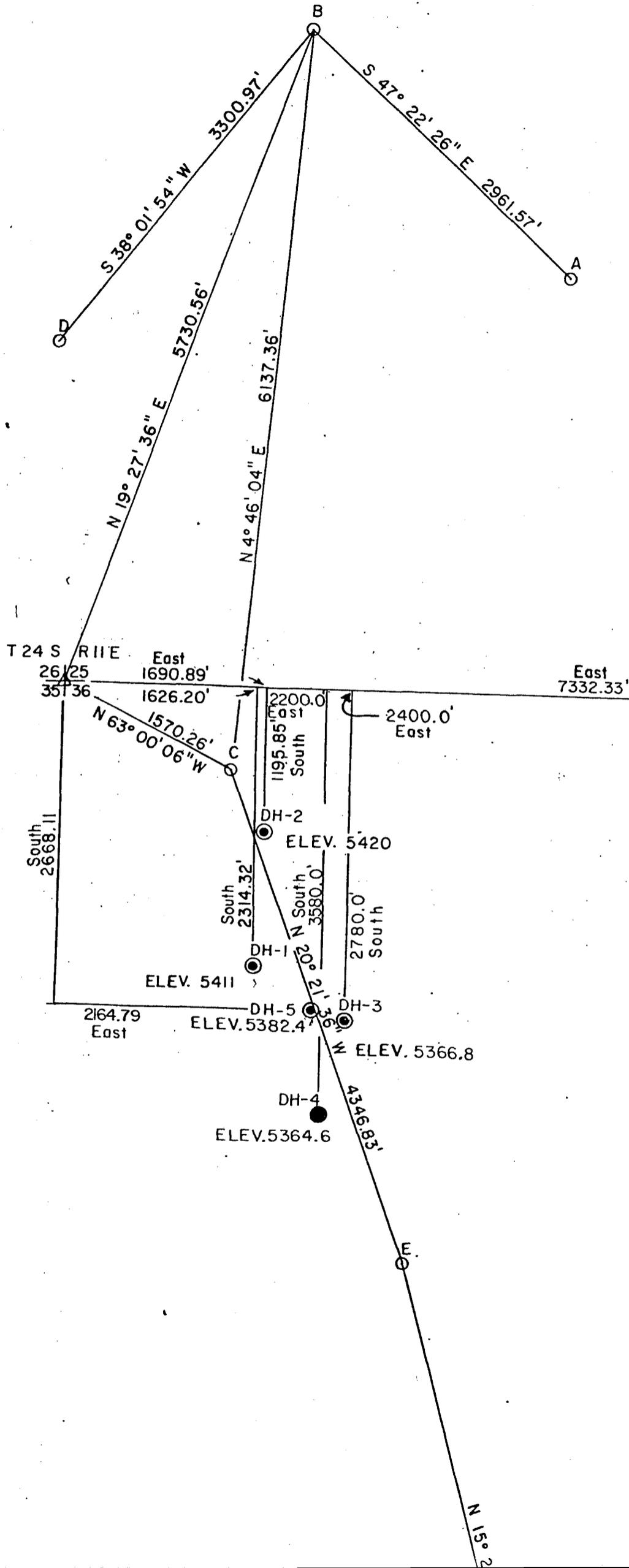
Date:

**Sanders Associates Inc.**

10 West Center Street

Kaysville, Utah

84037



STATUS REPORT  
FOR  
MONTH OF FEBRUARY  
1978

---

March 7, 1978

ST. CROIX EXPLORATION COMPANY - Operator

WELLS:

Utah State #1	Sec. 36, T 24S, R 11E, Emery County
<u>          #4</u>	Sec. 36, T 24S, R 11E, Emery County
#5	Sec. 36, T 24S, R 11E, Emery County
Utah State #1	Sec. 32, T 24S, R 12E, Emery County

Status: All wells are shut in pending further testing and clearing weather.

STATE OF UTAH  
DIVISION OF OIL, GAS, AND MINING

\*\* FILE NOTATIONS \*\*

Date: July 6-  
Operator: St. Croix Exploration  
Well No: Ut. State # 4  
Location: Sec. 36 T. 24S R. 11E County: Cuervo

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

CHECKED BY:

Administrative Assistant [Signature]

Remarks: No other wells in Sec. 35 - Unorthodox

Petroleum Engineer ok Po

Remarks:

Director [Signature]

Remarks:

*Need letter & map of Topo. Exception requirement.*

INCLUDE WITHIN APPROVAL LETTER:

Bond Required       Survey Plat Required

Order No.       Surface Casing Change to

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

O.K. Rule C-3       O.K. In \_\_\_\_\_ Unit

Other:

*Wildcat - w/in 2 mi. of well, appraised by ecc -*

Letter Written/Approved

July 11, 1977

St. Croix Exploration  
2471 Angell Road  
St. Paul, Minnesota 55118

Re: Well No. Utah State #4  
36 Sec. ~~35~~, T. 24 S, R. 11 E,  
Emery County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure. However, said approval shall be contingent upon filing all completion data required for the State #1 with this office as soon as possible.

In reference to your Utah State #5 location, this application approval shall be withheld until such time as the #4 well has been completed, or plugged and abandoned.

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

PATRICK L. DRISCOLL - Chief Petroleum Engineer  
HOME: 582-7247  
OFFICE: 533-5771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling.

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 43-015-30052.

Very truly yours,

CLEON B. FEIGHT  
Director

CIRCULATE TO:

DIRECTOR \_\_\_\_\_  P  
PETROLEUM ENGINEER \_\_\_\_\_   
MINE COMMISSIONER \_\_\_\_\_   
ADMINISTRATIVE ASSISTANT \_\_\_\_\_   
ALL \_\_\_\_\_

RETURN TO Kathy O  
FOR FILING

August 15, 1977

Memo To File:

Re: St. Croix Exploration  
#4 Utah State  
NE SW Sec. 35, T. 24 S., R. 11 E.  
Emery County, Utah

This office was notified August 14, 1977, that St. Croix Exploration intended on moving a rig into this location on August 15, 1977.



PATRICK L. DRISCOLL  
CHIEF PETROLEUM ENGINEER

PLD/ksw

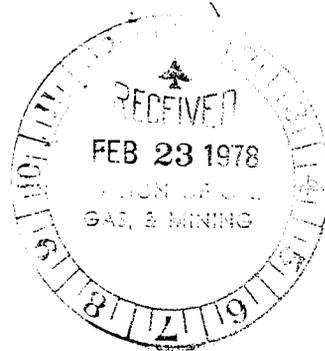


ST. CROIX EXPLORATION COMPANY

7850 Metro Parkway, Suite 102  
Bloomington, Minnesota 55420  
612 / 854-1787

406 WCCO Radio Building  
Minneapolis, Minnesota 55402  
612 / 336-9781

February 21, 1978



Mr. Patrick L. Driscoll  
Chief Petroleum Engineer  
State of Utah  
Division of Oil, Gas and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

Dear Mr. Driscoll:

As you requested we are summarizing the current status of the wells we have drilled in ~~Section 36, T 24S, R 11#~~ and Section 32, T 24S, ~~R 12E~~ *Ut. State #1*. At the present time, these wells are all shut-in pending completion of the evaluation of the geology and well performance.

We have attempted to use an electrical heater in the wells with inconclusive results. This activity has lead to intermittent work in each well, since they have been drilled on a month by month basis.

We have since drilled the Utah State #5 well to total depth. This well is currently shut-in. Within the near future, we will send the necessary State summary as required, to your attention.

Sincerely,

ST. CROIX EXPLORATION

*Stanley R. Tyler*  
Stanley R. Tyler  
Vice President

:mc

APPROVED BY THE DIVISION OF  
OIL, GAS, AND MINING  
DATE *Feb 23 1978*  
*P. W. Driscoll*

*UT ST.  
#4*



SCOTT M. MATHESON  
Governor

OIL, GAS, AND MINING BOARD

GORDON E. HARMSTON  
Executive Director,  
NATURAL RESOURCES

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

I. DANIEL STEWART  
Chairman

CHARLES R. HENDERSON  
JOHN L. BELL  
THADIS W. BOX  
C. RAY JUVELIN

CLEON B. FEIGHT  
Director

DIVISION OF OIL, GAS, AND MINING

1588 West North Temple

Salt Lake City, Utah 84116

(801) 533-5771

March 13, 1978

St. Croix Exploration Company  
7850 Metro Parkway, Suite 102  
Bloomington, Minnesota 54420

Re: Utah State #1  
Sec. 32, T. 24S, R. 12E  
✓ Utah State #4  
Sec. 36, T. 24S, R. 11E  
Utah State #5  
Sec. 36, T. 24S, R. 11E  
Emery County, Utah

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above referred to wells are due and have not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

*Kathy Avila*

KATHY AVILA  
RECORDS CLERK

Enclosures

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

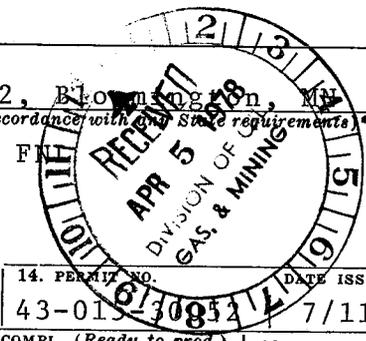
5. LEASE DESIGNATION AND SERIAL NO.  
ML 33432  
6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
7. UNIT AGREEMENT NAME  
8. FARM OR LEASE NAME  
Utah State  
9. WELL NO.  
4  
10. FIELD AND POOL, OR WILDCAT  
Wildcat  
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
Sec 36, T 24S, R 11E

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_  
b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.  Other Waiting on testing

2. NAME OF OPERATOR  
St. Croix Exploration Co.

3. ADDRESS OF OPERATOR  
7850 Metro Pkway; Suite 102, Blowing Rock, NC 55420

4. LOCATION OF WELL (Report location clearly and in accordance with State requirements)\*  
At surface 2,200' FWL, 3,580' FN  
At top prod. interval reported below  
At total depth



14. PERMIT NO. 43-01530852 DATE ISSUED 7/11/77

12. COUNTY OR PARISH Emery 13. STATE Utah

15. DATE SPUDDED 8/14/77 16. DATE T.D. REACHED 8/24/77 17. DATE COMPL. (Ready to prod.)  
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 5,364' Gr. 19. ELEV. CASINGHEAD 5,365'

20. TOTAL DEPTH, MD & TVD 380' 21. PLUG, BACK T.D., MD & TVD  
22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY Rotary Tools  
Rotary Air Tools to TD

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
276-285'  
289-304'  
25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN DIL, FDC, GR 27. WAS WELL CORRED 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"		18'	10 1/4"	5 sacks	
5 1/2"		309'	7 7/8"	75 sacks	

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)  
276-285, 2 shots/ft  
289-304, 5/8" diameter

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
276-285	Acidized w/100 gals
289-304	

33.\* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
	Continue Testing	Shut in					
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  
FBC, GR, DIL, Core Analysis

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  
SIGNED: Stanley Styles TITLE Vice President DATE 4/3/78

\*(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 38, 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 19:** 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.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES		38. GEOLOGIC MARKERS	
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
			NAME
			MEAS. DEPTH
			TOP TRUE VERT. DEPTH
			Mossback
			268
			314
			See Core Analysis

Jim  
Mike

WES  
KMP

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116

CIRCULATE TO:  
DIRECTOR  
PETROLEUM ENGINEER  
MINE COORDINATOR  
ADMINISTRATIVE ASSISTANT  
ALL

RETURN TO Kathy W  
FOR FILE

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number Utah State #4

Operator St. Croix Exploration Company

Address 7850 Metro Parkway; Suite 102; Bloomington, Minnesota 55420

Contractor Desert Drilling Company

Address c/o Howard Leach; Spanish Valley; La Sal Rte; Moab, Utah 84532

Location SW 1/4 NE 1/4; Sec. 36; T. 24 N; R. 11 E; S W Emery County

Water Sands:

	<u>Depth:</u> From - To -	<u>Volume:</u> Flow Rate or Head -	<u>Quality:</u> Fresh or Salty -
1.	<u>50' - 55'</u>	<u>20 BWPH</u>	<u>Brackish</u>
2.	<u>70' - 80'</u>	<u>5 BWPH</u>	<u>Brackish</u>
3.	<u>                    </u>	<u>                    </u>	<u>                    </u>
4.	<u>                    </u>	<u>                    </u>	<u>                    </u>
5.	<u>                    </u>	<u>                    </u>	<u>                    </u>

(Continue on Reverse Side if Necessary)

Formation Tops: Chimle - surface - 270'  
Moss Back - 27' - 314'  
Moenkopi - 314' - 380'

- NOTE:
- (a) Upon diminishing supply of forms, please inform this office.
  - (b) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.
  - (c) If a water quality analysis has been made of the above reported zone, please forward a copy along with this form.

CORE ANALYSIS RESULTS FOR  
ST. CROIX EXPLORATION COMPANY  
UTAH STATE NO. 4  
TEMPLE MOUNTAIN FIELD  
EMERY COUNTY, UTAH

ST. CROIX EXPLORATION COMPANY FORMATION : MOSS BACK  
 UTAH STATE NO. 4 DRLG. FLUID: AIR MIST  
 TEMPLE MOUNTAIN FIELD LOCATION : SEC. 36-T24S-R11E  
 EMERY COUNTY STATE : UTAH

DATE : 8-24-77  
 FILE NO. : RP-2-5417  
 ANALYSTS : GR:GO  
 ELEVATION: 5364' GL

CONVENTIONAL CORE ANALYSIS

SAMP. NO.	DEPTH	PERM. TO AIR (MD)		POR. FLD.	FLUID SATS.		OIL WT. %	DESCRIPTION
		HORZ.	VERTICAL		OIL	WATER		
1	113-14	0.03		8.6	18.2	59.1	0.58	SD TN-GY VFG SILIC LAM
2	114-15	0.06		10.9	35.7	41.0	1.44	SD TN-GY VFG SILIC LAM
3	115-16	0.03		8.6	10.4	67.1	0.32	SD TN-GY VFG SILIC LAM
4	116-17	0.06		7.8	17.3	49.4	0.50	SD TN-GY VFG SILIC LAM
5	117-18	0.06		7.6	11.5	48.5	0.32	SD TN-GY VFG SILIC LAM
6	118-19	0.01		9.6	28.5	44.7	1.01	SD TN-GY VFG SILIC LAM
	119-225							DRILLED
7	225-26	0.09		9.2	5.4	55.8	0.18	SD TN-GY VFG SILIC LAM
8	226-27	0.06		8.9	7.7	66.4	0.25	SD TN-GY VFG SILIC LAM
9	227-28	0.18		10.0	13.6	56.3	0.50	SD TN-GY VFG SILIC LAM
10	228-29	0.01		9.5	7.2	67.7	0.25	SD TN-GY VFG SILIC LAM CLY
11	229-30	0.01		7.4	6.8	70.3	0.18	SD TN-GY VFG SILIC LAM CLY
12	230-31	0.06		10.6	4.7	61.5	0.18	SD TN-GY VFG SILIC LAM CLY
13	231-32	0.18		11.9	3.9	53.7	0.18	SD TN-GY VFG SILIC LAM CLY
14	232-33	0.12		10.0	6.7	65.0	0.25	SD TN-GY VFG SILIC LAM CLY
15	233-34	0.06		8.3	8.3	49.9	0.25	SD TN-GY VFG SILIC LAM CLY
16	234-35	0.28		12.9	1.5	51.1	0.07	SD TN-GY VFG SILIC LAM CLY
17	235-36	4.2		15.8	8.2	50.2	0.50	SD TN-GY VFG SILIC LAM CLY
18	236-37	0.37		12.2	1.6	54.5	0.07	SD TN-GY VFG SILIC LAM CLY
19	237-38	0.37		13.4	8.4	50.5	0.43	SD TN-GY VFG SILIC LAM CLY
20	238-39	0.06		8.9	1.1	54.0	0.04	SD GY VFG SILIC CLY PYR
21	239-40	0.49		13.2	10.3	46.9	0.50	SD GY-TN VFG SILIC CLY PYR
22	240-41	2.3		15.3	15.1	37.3	0.90	SD GY-TN FG SILIC CLY
23	241-42	0.77		8.4	19.1	33.4	0.58	SD GY-TN FG SILIC CLY
24	242-43	0.34		9.0	23.2	39.8	0.76	SD GY-TN FG SILIC CLY

These analyses, opinions or interpretations are based on observations and materials 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 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 operations, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

ST. CROIX EXPLORATION COMPANY FORMATION : MOSS BACK  
 UTAH STATE NO. 4 DRLG. FLUID: AIR MIST  
 TEMPLE MOUNTAIN FIELD LOCATION : SEC. 36-T24S-R11E  
 EMERY COUNTY STATE : UTAH

DATE : 8-24-77  
 FILE NO. : RP-2-5417  
 ANALYSTS : GR:GO  
 ELEVATION: 5364' GL

CONVENTIONAL CORE ANALYSIS

SAMP. NO.	DEPTH	PERM. TO AIR (MD)		POR. FLD.	FLUID SATS.		OIL WT. %	DESCRIPTION
		HORZ.	VERTICAL		OIL	WATER		
25	243-44	0.31		9.7	11.8	47.1	0.43	SD GY-TN VFG SILIC CLY
26	244-45	5.7		12.5	19.0	28.8	0.90	SD GY-TN VFG SILIC CLY
27	245-46	4.4		13.0	14.0	39.9	0.68	SD GY-TN VFG SILIC CLY
28	246-47	0.34		10.6	11.0	46.0	0.43	SD GY-TN VFG SILIC CLY
29	247-48	0.15		8.3	19.3	50.6	0.58	SD GY-TN VFG SILIC CLY
30	248-49	0.01		5.7	0.0	72.1		SD GY VFG SILIC
31	249-50	0.83		11.2	13.7	42.8	0.58	SD GY FG SL/CONGL CLY
32	250-51	1.6		13.0	15.5	44.3	0.76	SD GY FG SL/CONGL CLY
33	251-52	0.83		11.5	15.8	43.4	0.68	SD GY FG SL/CONGL CLY
34	252-53	0.06		10.1	13.5	52.2	0.50	SD GY VFG SILIC CLY
35	253-54	1.5		11.8	26.6	40.0	1.15	SD GY-TN VFG SL/CONGL CLY
36	254-55	0.74		9.3	26.2	41.9	0.90	SD GY-TN VFG SL/CONGL CLY
37	255-56	0.12		8.2	21.7	38.6	0.65	SD GY-TN VFG SL/CONGL CLY
38	256-57	0.06		6.5	11.0	53.4	0.25	SD GY-TN VFG SILIC
39	257-58	0.01		3.9	32.0	37.4	0.43	SD GY-TN VFG SILIC
40	258-59	0.01		2.6	4.0	56.4	0.04	VF SD GY VFG SILIC
41	259-60	0.01		4.6	36.2	27.1	0.58	SD GY VFG SILIC CONGL
	260-265							LOST CORE
42	265-66	0.34		12.4	14.1	47.0	0.65	SD GY-TN VFG SILIC
43	266-67	0.34		11.4	13.8	41.4	0.58	SD GY-TN VFG SILIC
44	267-68	780		19.1	30.5	24.8	2.30	SD GY-TN MG
45	268-69	485		17.8	32.9	26.8	2.30	SD GY-TN MG
46	269-70	345		17.7	28.2	31.3	1.94	SD GY-TN MG
47	270-71	310		18.8	25.9	28.7	2.02	SD GY-TN MG
48	271-72	426		18.8	26.5	33.1	2.02	SD GY-TN MG

VF = VERTICAL FRACTURE

These analyses, opinions or interpretations are based on observations and materials 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 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 operations, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

ST. CROIX EXPLORATION COMPANY FORMATION : MOSS BACK  
 UTAH STATE NO. 4 DRLG. FLUID: AIR MIST  
 TEMPLE MOUNTAIN FIELD LOCATION : SEC. 36-T24S-R11E  
 EMERY COUNTY STATE : UTAH

DATE : 8-24-77  
 FILE NO. : RP-2-5417  
 ANALYSTS : GR:GO  
 ELEVATION: 5364' GL

CONVENTIONAL CORE ANALYSIS

SAMP.	DEPTH	PERM. TO AIR (MD)		POR. FLD.	FLUID SATS.		OIL WT. %	DESCRIPTION
		HORZ.	VERTICAL		OIL	WATER		
49	272-73	297		16.7	27.1	27.1	1.80	SD GY-TN MG
50	273-74	74		14.7	25.3	32.9	1.44	SD GY-TN MG
51	274-75	184		16.4	24.9	30.6	1.58	SD GY-TN MG
52	275-76	25		12.3	23.5	36.1	1.08	SD GY-TN FG
	276-279							LOST CORE
53	279-80	5.8		10.8	18.6	35.5	0.76	SD GY-TN FG
54	280-81	0.01		6.5	3.2	63.5	0.07	SD GY VFG SILIC CONGL
55	281-82	55		21.6	24.5	35.2	2.16	SD GY-TN FG
56	282-83	291		18.6	21.1	47.8	1.58	SD GY-TN FG
57	283-84	1050		23.4	20.1	50.2	1.87	SD GY-TN FG
58	284-85	885		21.3	20.7	41.4	1.80	SD GY-TN FG
59	285-86	172		22.3	20.1	36.4	1.87	SD GY-TN FG
60	286-87	295		20.4	25.4	36.7	2.09	SD GY-TN FG
61	287-88	1165		25.4	19.9	36.4	2.09	SD GY-TN FG
62	288-89	1135		19.6	24.6	26.3	2.02	SD GY-TN FG
63	289-90	760		20.6	25.5	18.7	2.16	SD GY-TN MG CLY
64	290-91	850		17.6	22.3	19.2	1.58	SD GY-TN MG CLY
65	291-92	530		19.4	25.7	34.3	1.94	SD GY-TN FG CLY
66	292-93	1.3		9.5	7.5	59.9	0.25	SD GY-TN VFG CONGL CARB CLY
67	293-94	465		21.3	21.2	31.3	1.80	SD GY-TN FG SL/CONGL CLY
68	294-95	388		19.8	20.3	31.4	1.58	SD GY-TN FG SL/CONGL CLY
69	295-96	750		18.7	21.7	17.9	1.66	SD GY-TN FG SL/CONGL CLY
70	296-97	0.44		9.1	35.5	28.9	1.15	SD GY-TN VFG CONGL CLY
71	297-98	15		14.6	19.6	30.0	1.08	SD GY-TN FG SL/CONGL CLY
72	298-99	28		14.6	19.5	31.2	1.08	SD GY-TN FG SL/CONGL CLY

ST. CROIX EXPLORATION COMPANY FORMATION : MOSS BACK  
 UTAH STATE NO. 4 DRLG. FLUID: AIR MIST  
 TEMPLE MOUNTAIN FIELD LOCATION : SEC. 36-T24S-R11E  
 EMERY COUNTY STATE : UTAH

DATE : 8-24-77  
 FILE NO. : RP-2-5417  
 ANALYSTS : GR:GO  
 ELEVATION: 5364' GL

CONVENTIONAL CORE ANALYSIS

SAMP. NO.	DEPTH	PERM. TO AIR (MD)		POR. FLD.	FLUID SATS.		OIL WT. %	DESCRIPTION
		HORZ.	VERTICAL		OIL	WATER		
	299-301							LOST CORE
73	301 -2	20		13.0	6.5	39.0	0.32	SD GY-TN FG CONGL CLY
74	302 -3	81		8.8	19.9	28.7	0.65	SD GY-TN FG CONGL CLY
75	303 -4	21		8.2	16.5	25.9	0.50	SD GY-TN FG SL/CONGL CLY
76	304 -5	2.2		8.2	19.2	31.1	0.58	SD GY-TN FG SL/CONGL CLY
77	305 -6	0.28		6.7	13.5	42.1	0.32	SD GY-TN FG CONGL

RETORTED OIL GRAVITY

DEPTH: 113-119 FEET = 21 DEG. API  
 DEPTH: 243-260 FEET = 33 DEG. API  
 DEPTH: 279-299 FEET = 27 DEG. API



CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

COMPANY ST. CROIX EXPLORATION COMPANY FIELD TEMPLE MOUNTAIN FILE RP-2-5117  
 WELL UTAH STATE NO. 4 COUNTY EMERY DATE 8-24-77  
 LOCATION SEC. 36-T24S-R11E STATE UTAH ELEV. 5364' GL

# CORE-GAMMA CORRELATION

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 and omissions excepted), but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representation 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'

CORE-GAMMA SURFACE LOG  
(PATENT APPLIED FOR)

COREGRAPH

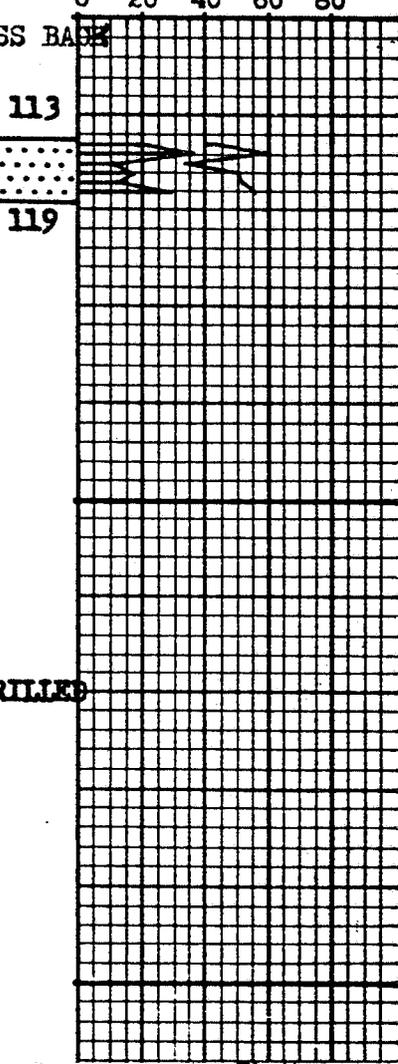
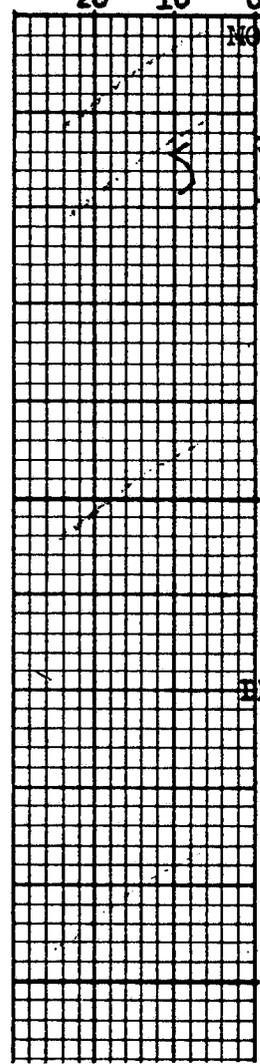
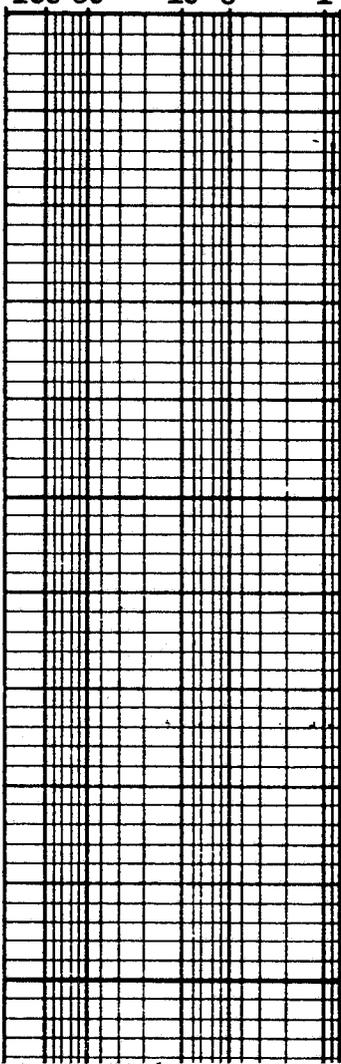
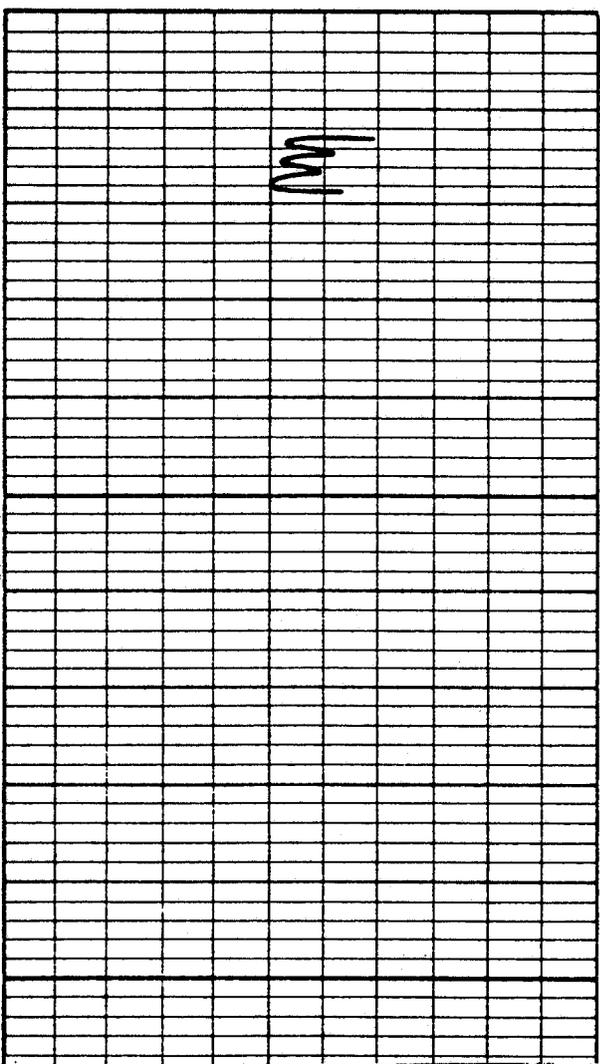
GAMMA RAY  
RADIATION INCREASE  
→

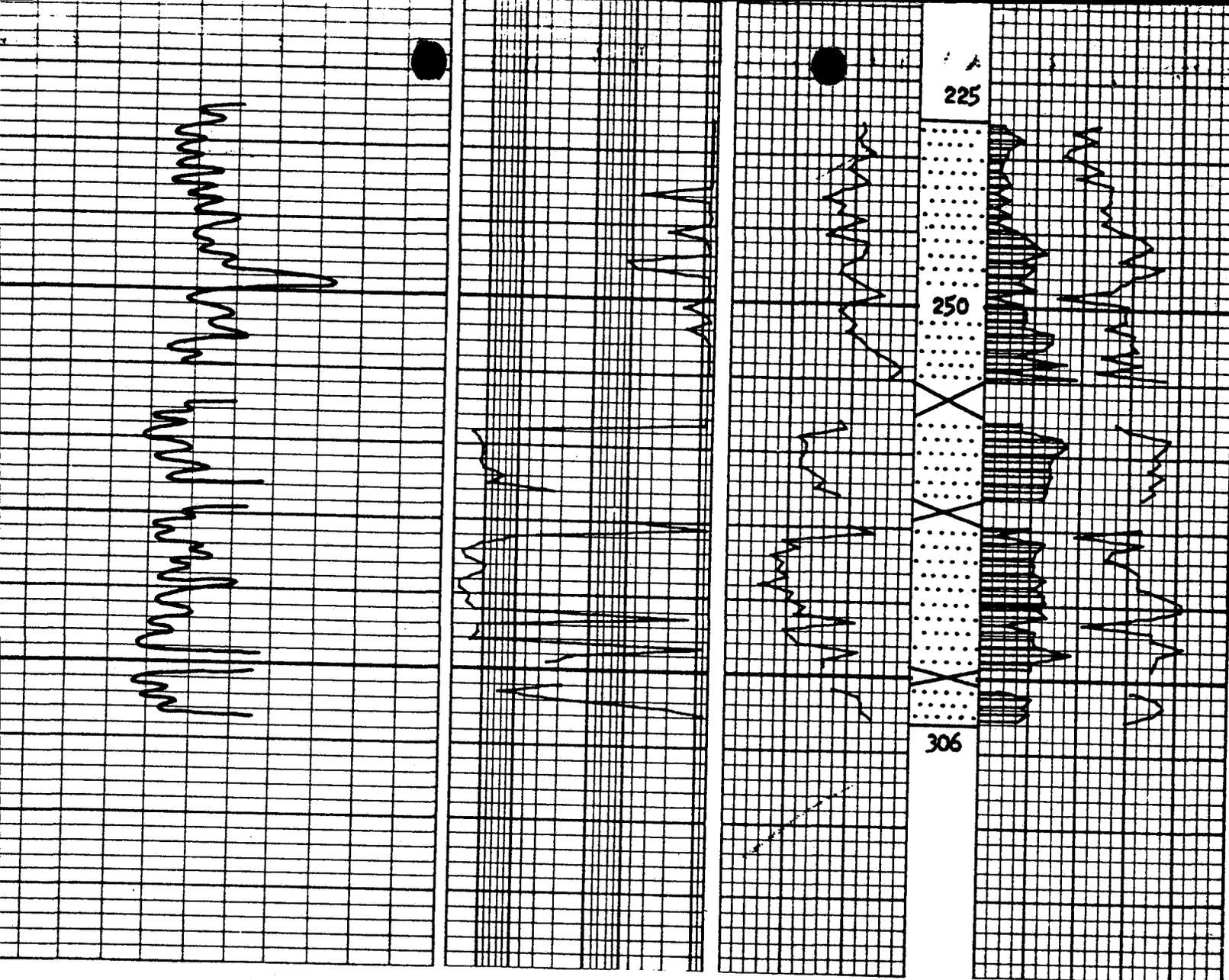
TOTAL WATER \_\_\_\_\_  
 PERCENT TOTAL WATER  
 80 60 40 20 0

PERMEABILITY \_\_\_\_\_  
 MILLIDARCVS  
 100 50 10 5 1

POROSITY \_\_\_\_\_  
 PERCENT  
 20 10 0

OIL SATURATION \_\_\_\_\_  
 PERCENT PORE SPACE  
 0 20 40 60 80





LL-529 **CORE SUMMARY AND CALCULATED RECOVERABLE OIL**

FORMATION NAME AND DEPTH INTERVAL: Moss Back - 239.0-260.0 Feet

FEET OF CORE RECOVERED FROM ABOVE INTERVAL	21	AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE	42.7
FEET OF CORE INCLUDED IN AVERAGES	19	AVERAGE CONNATE WATER SATURATION: PER CENT OF PORE SPACE	30 (e)
AVERAGE PERMEABILITY: MILLIDARCY'S	1.2	OIL GRAVITY: $\rho_{API}$	25 (e)
PRODUCTIVE CAPACITY: MILLIDARCY-FEET	20.54	ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	
AVERAGE POROSITY: PER CENT	10.7	ORIGINAL FORMATION VOLUME FACTOR: BARRELS SATURATED OIL PER BARREL STOCK-TANK OIL	1.05 (e)
AVERAGE RESIDUAL OIL SATURATION: PER CENT OF PORE SPACE	16.9	CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT	553

Calculated maximum solution gas drive recovery is \_\_\_\_\_ barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is \_\_\_\_\_ barrels per acre-foot, assuming full maintenance of original reservoir pressure, 100% areal and vertical coverage, and continuation of production to 100% water cut. (Please refer to footnotes for further discussion of recovery estimates.)

FORMATION NAME AND DEPTH INTERVAL: Moss Back - 265.0-276.0 Feet

FEET OF CORE RECOVERED FROM ABOVE INTERVAL	11	AVERAGE TOTAL WATER SATURATION: PER CENT	31.8
--	----	--	------

Calculated maximum solution gas drive recovery is \_\_\_\_\_ barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is \_\_\_\_\_ barrels per acre-foot, assuming full maintenance of original reservoir pressure, 100% areal and vertical coverage, and continuation of production to 100% water cut. (Please refer to footnotes for further discussion of recovery estimates.)

**FORMATION NAME AND DEPTH INTERVAL: Moss Back - 265.0-276.0 Feet**

FEET OF CORE RECOVERED FROM ABOVE INTERVAL	11	AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE	31.8
FEET OF CORE INCLUDED IN AVERAGES	11	AVERAGE CONNATE WATER SATURATION: PER CENT OF PORE SPACE	25 (e)
AVERAGE PERMEABILITY: MILLIDARCY	266	OIL GRAVITY: °API	20 (e)
PRODUCTIVE CAPACITY: MILLIDARCY-Feet	2927	ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	
AVERAGE POROSITY: PER CENT	16.0	ORIGINAL FORMATION VOLUME FACTOR: BARRELS SATURATED OIL PER BARREL STOCK-TANK OIL	1.05 (e)
AVERAGE RESIDUAL OIL SATURATION: PER CENT OF PORE SPACE	24.8	CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT	887

Calculated maximum solution gas drive recovery is \_\_\_\_\_ barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is \_\_\_\_\_ barrels per acre-foot, assuming full maintenance of original reservoir pressure, 100% areal and vertical coverage, and continuation of production to 100% water cut. (Please refer to footnotes for further discussion of recovery estimates.)

**FORMATION NAME AND DEPTH INTERVAL: Moss Back - 279.0-306.0 Feet**

FEET OF CORE RECOVERED FROM ABOVE INTERVAL	27	AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE	34.0
FEET OF CORE INCLUDED IN AVERAGES	24	AVERAGE CONNATE WATER SATURATION: PER CENT OF PORE SPACE	25 (e)
AVERAGE PERMEABILITY: MILLIDARCY	374	OIL GRAVITY: °API	20 (e)
PRODUCTIVE CAPACITY: MILLIDARCY-Feet	8966	ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	
AVERAGE POROSITY: PER CENT	16.4	ORIGINAL FORMATION VOLUME FACTOR: BARRELS SATURATED OIL PER BARREL STOCK-TANK OIL	1.05 (e)
AVERAGE RESIDUAL OIL SATURATION: PER CENT OF PORE SPACE	20.4	CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT	909

Calculated maximum solution gas drive recovery is \_\_\_\_\_ barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is \_\_\_\_\_ barrels per acre-foot, assuming full maintenance of original reservoir pressure, 100% areal and vertical coverage, and continuation of production to 100% water cut. (Please refer to footnotes for further discussion of recovery estimates.)

(c) Calculated (e) Estimated (m) Measured (\*) Refer to attached letter.

**INTERPRETATION OF DATA**

- 113.0-119.0 Feet - Non-productive due to low permeability.
- 225.0-239.0 Feet - Essentially non-productive due to low permeability.
- 239.0-260.0 Feet - Saturations indicate possibility of oil production, where permeable, after successful artificial stimulation.
- 265.0-276.0 Feet - Possibility of oil production, however, due to low gravity and apparent low gas in solution, production may be difficult by conventional means.
- 279.0-306.0 Feet - Possibility of oil production, however, it will probably be limited as above due to low gravity and gas in solution.

These recovery estimates represent theoretical maximum values for solution gas and water drive. They assume that production is started at original reservoir pressure; i.e., no account is taken of production to date or of prior drainage to other areas. The effects of factors tending to reduce actual ultimate recovery, such as economic limits on oil production rates, gas-oil ratios, or water-oil ratios, have not been taken into account. Neither have factors been considered which may result in actual recovery intermediate between solution gas and complete water drive recoveries, such as gas cap expansion, gravity drainage, or partial water drive. Detailed predictions of ultimate oil recovery to specific abandonment conditions may be made in an engineering study in which consideration is given to overall reservoir characteristics and economic factors.

These analyses, opinions or interpretations are based on observations and materials supplied by the \_\_\_\_\_

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 checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. ML 33432
2. NAME OF OPERATOR St. Croix Exploration		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR 1360 Shepard Tower, Minneapolis, Mn. 55426		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 1700 FSL, 2200 FWL		8. FARM OR LEASE NAME Utah state
14. PERMIT NO. API 43-05-30000-00	15. ELEVATIONS (Show whether OF, RT, OR, etc.) 5364 BR	9. WELL NO. 4
		10. FIELD AND POOL, OR WILDCAT Wildcat
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SEC 36, T24S, R11E
		12. COUNTY OR PARISH Emery
		13. STATE Utah

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF:

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.)\*

This well was drilled to a depth of 380 feet through the Nassback member of the Chinle formation in August of 1977. The well was cased with 5 1/2" casing to total depth. The well was perforated from 270-300 feet. There was no fluid entry into the well bore. Core analyses indicated <sup>there is</sup> substantial oil in place, but the reservoir requires stimulation in order to establish production from the Nassback member. The information derived from this and other wells is being reviewed for the shallow formations. Progress of this <sup>to your Department later.</sup> ~~review~~ will be reported.

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

SIGNED

*[Signature]*

TITLE

Vice Pres

DATE

5-17-82

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:



ST. CROIX EXPLORATION COMPANY

~~1360 Minnesota Parkway, Suite 102~~ 1360 Shelard Tower  
~~Bloomington, Minnesota 55420~~ Minneapolis, MN 55426  
~~612/864-1787~~ 612/546-3903

~~106 W. CCC Road, Building~~  
~~Minneapolis, Minnesota 55402~~  
~~612/336-9781~~

May 18, 1982

RECEIVED  
MAY 24 1982

Ms. Cari Furse  
State of Utah  
Natural Resources and Energy  
Oil, Gas & Mining  
4241 State Office Building  
Salt Lake City, Utah 84114

DIVISION OF  
OIL, GAS & MINING

Dear Ms. Cari Furst:

Enclosed are "Sundry Notices and Reports on Wells"  
Numbers 3 Sec. 32, T24S, A12E and Number  
4 Sec. 36, T24S, R11E, Emery County Utah

Additional reports will be sent to you later on this  
week.

Sincerely,

*Stanley R. Tyler*  
Stanley R. Tyler  
Vice President

Encl.  
SRT:jd

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

REMIT IN TRIPLICATE  
(other 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.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. ML 33432
2. NAME OF OPERATOR St-Croix Exploration		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR 1360 Shelard Tower, Minneapolis, MN 55426		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 1700' FSL, 2200' FWL		8. FARM OR LEASE NAME Utah state
14. PERMIT NO. API 43-015-30052-00	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 5364 Gr.	9. WELL NO. A
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		10. FIELD AND POOL, OR WILDCAT wildcat
NOTICE OF INTENTION TO: TEST WATER SHUT-OFF <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> MULTIPLE COMPLETE <input type="checkbox"/> SHOOT OR ACIDIZE <input type="checkbox"/> ABANDON* <input type="checkbox"/> REPAIR WELL <input type="checkbox"/> CHANGE PLANS <input checked="" type="checkbox"/> (Other) <input type="checkbox"/>		11. SEC. T., R., M., OR BLE. AND SURVEY OR AREA Sec 36, T24S, R11E
		12. COUNTY OR PARISH Emery
		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 type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <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 and date of completion of this work.)

This well was drilled to a depth of 380 feet in August of 1977. The Horseback member of the Chinle formation was cored and 5 1/2" casing set to total depth. The well was perforated w/ 1 shot per foot from 274-304. No fluid entered the well bore. Further work has been postponed until the Triassic formations are correlated between other wells and a regional study is completed.

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING  
DATE: 5/27/82

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

SIGNED: [Signature] TITLE: Vice Pres. DATE: 5-27-82

(This space for Federal or State office use)

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



ST. CROIX EXPLORATION COMPANY

~~7550 Minnetonka Parkway, Suite 102  
Bloomington, Minnesota 55426  
612/285-1787~~

1360 Shelard Tower  
Minneapolis, MN 55426  
612/546-3903

~~406 WCCO Radio Building  
Minneapolis, Minnesota 55402  
612/336-8787~~

May 28, 1982

**RECEIVED**  
JUN 01 1982

**DIVISION OF  
OIL, GAS & MINING**

Ms. Cari Furse  
State of Utah  
Natural Resources & Energy  
Oil, Gas & Mining  
4241 State Office Building  
Salt Lake City, Utah 84114

Dear Ms. Furse:

Enclosed are "Sundry Notices and Reports on Wells"  
Numbers 3 and 4 in Sec. 36, T24S, R11E and Number 1 (6)  
in Sec. 32, T24S, R12E, Emery County, Utah.

Also enclosed is an Electric Log for #2, Sec. 36, T24S,  
R11E, Emery County, Utah.

We will be sending you an update the middle of June.  
Meanwhile if there is any further information needed,  
please let us know. We appreciate your patience.

Sincerely yours,

Stanley R. Tyler  
Vice President

Encl.  
SRT:jd

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. <b>OIL WELL</b> <input checked="" type="checkbox"/> <b>GAS WELL</b> <input type="checkbox"/> <b>OTHER</b> <input type="checkbox"/> 2. <b>NAME OF OPERATOR</b> St. Croix Exploration 3. <b>ADDRESS OF OPERATOR</b> 1360 Shelard Tower, Minneapolis, MN 55426 4. <b>LOCATION OF WELL</b> (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  1700' FSL, 2200' FWL 14. <b>PERMIT NO.</b> API 43-015-30052-00 15. <b>ELEVATIONS</b> (Show whether OF, RT, GR, etc.) 5364 Gr		5. <b>LEASE DESIGNATION AND SERIAL NO.</b> ML 33432 6. <b>IF INDIAN, ALLOTTEE OR TRIBE NAME</b>  7. <b>UNIT AGREEMENT NAME</b>  8. <b>FARM OR LEASE NAME</b> Utah State 9. <b>WELL NO.</b> 4 10. <b>FIELD AND POOL, OR WILDCAT</b> Wildcat 11. <b>SEC., T., R., M., OR B.L.E. AND SURVEY OR AREA</b> Sec 36, T24S, R11E 12. <b>COUNTY OR PARISH</b> 13. <b>STATE</b> Emery 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 type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	(Other) <input type="checkbox"/>
(Other) <input type="checkbox"/>	<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.)\*

No further work is planned until Project Review is completed.

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

SIGNED *Stanley R. Pyles* TITLE Vice President DATE June 30, 1982

(This space for Federal or State office use)

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

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

SUBMIT IN TRIPPLICATE  
(Other 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.)

5. LEASE DESIGNATION AND SERIAL NO.	ML 33432
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
7. UNIT AGREEMENT NAME	
8. FARM OR LEASE NAME	Utah State
9. WELL NO.	4
10. FIELD AND POOL, OR WILDCAT	Wildcat
11. SEC., T., R., M., OR B.L.R. AND SUBST. OR ASSA	Sec 36, T24S, R11E
12. COUNTY OR PARISH	Emery
13. STATE	Utah

1. OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
St. Croix Exploration

3. ADDRESS OF OPERATOR  
1360 Shelard Tower, Minneapolis, MN 55426

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\* See also space 17 below.)  
At surface  
  
1700' FSL, 2200' FWL

14. PERMIT NO.  
API 43-015-30052-00

15. ELEVATIONS (Show whether OF, RT, OR, etc.)  
5364 Gr

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 PLANN <input type="checkbox"/>	(Other) <input type="checkbox"/>	(Other) <input type="checkbox"/>
(Other) <input type="checkbox"/>	<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 and 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.)\*

No further work is planned until Project Review is completed.

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

SIGNED *Stanley A. Pyles* TITLE Vice President DATE 7/30/82

(This space for Federal or State office use)

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

CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_

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

SUBMIT IN TRIPLICATE\*  
 (See 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.)

<b>1. OIL WELL</b> <input checked="" type="checkbox"/> <b>NAB WELL</b> <input type="checkbox"/> <b>OTHER</b> <input type="checkbox"/>		<b>5. LEASE DESIGNATION (AND SERIAL NO)</b> ML 33432
<b>2. NAME OF OPERATOR</b> St. Croix Exploration		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</b>
<b>3. ADDRESS OF OPERATOR</b> 1360 Shelard Tower, Minneapolis, MN 55426		<b>7. UNIT AGREEMENT NAME</b>
<b>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)</b> At surface  1700' FSL, 2200' FWL		<b>8. FARM OR LEASE NAME</b> Utah State
<b>14. PERMIT NO.</b> API 43-015-30052-00		<b>9. WELL NO.</b> 4
<b>15. ELEVATIONS (Show whether SP, RT, OR, etc.)</b> 5364 Gr		<b>10. FIELD AND POOL, OR WILDCAT</b> Wildcat
		<b>11. SEC., T., R., N., OR BLE. AND SUBST OR AREA</b> Sec 36, T24S, R11E
		<b>12. COUNTY OR PARISH</b> <b>13. STATE</b> Emery                      Utah

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

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
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"/>
(Other) <input type="checkbox"/>	<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 and completion of this work.)\***

No further work is planned until Project Review is completed.

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

SIGNED _____	TITLE <u>Vice President</u>	DATE <u>8-30-82</u>
<small>(This space for Federal or State office use)</small>		
APPROVED BY _____	TITLE _____	DATE _____
COND. OF APPROVAL, IF ANY:		

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

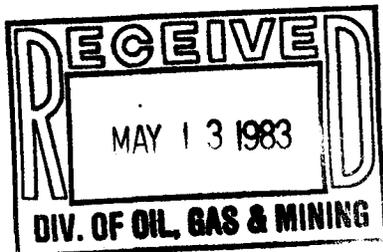
**SUNDRY NOTICES AND REPORTS ON WELLS**

(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. <b>OIL WELL</b> <input checked="" type="checkbox"/> <b>GAS WELL</b> <input type="checkbox"/> <b>OTHER</b> <input type="checkbox"/>		5. <b>LEASE DESIGNATION AND SERIAL NO.</b> ML 33432																								
2. <b>NAME OF OPERATOR</b> St. Croix Exploration		6. <b>IF INDIAN, ALLOTTEE OR TRIBE NAME</b>																								
3. <b>ADDRESS OF OPERATOR</b> 1360 Shelard Tower, Minneapolis, MN 55426		7. <b>UNIT AGREEMENT NAME</b>																								
4. <b>LOCATION OF WELL</b> (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  1700' FSL, 2200' FWL		8. <b>FARM OR LEASE NAME</b> Utah State																								
14. <b>PERMIT NO.</b> API 43-015-30052-00	15. <b>ELEVATIONS</b> (Show whether OF, RT, GR, etc.) 5364 Gr	9. <b>WELL NO.</b> 4																								
16. <b>Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data</b>		10. <b>FIELD AND POOL, OR WILDCAT</b> Wildcat																								
<table border="0"> <tr> <td colspan="2"><b>NOTICE OF INTENTION TO:</b></td> <td colspan="2"><b>SUBSEQUENT REPORT OF:</b></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></td> </tr> <tr> <td>(Other) <input type="checkbox"/></td> <td></td> <td></td> <td></td> </tr> </table>		<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>		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. <b>SEC., T., S., M., OR BLE. AND SURVEY OR AREA</b> Sec 36, T24S, R11E
<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>																								
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"/>																										
		12. <b>COUNTY OR PARISH</b> Emery																								
		13. <b>STATE</b> Utah																								

17. **DESCRIBE PROPOSED OR COMPLETED OPERATIONS** (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting on 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.)

No further work is planned until Project Review is completed.



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

SIGNED *Stanley A. Taylor* TITLE Vice President DATE 5/10/83

(This space for Federal or State office use)

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

CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_

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. <input checked="" type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER</p> <p>2. NAME OF OPERATOR St. Croix Exploration</p> <p>3. ADDRESS OF OPERATOR 1360 Shelard Tower, Minneapolis, MN 55426</p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1700' FSL, 2200' FWL</p>		<p>5. LEASE DESIGNATION AND SERIAL NO ML 33432</p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</p> <p>7. UNIT AGREEMENT NAME</p> <p>8. FARM OR LEASE NAME Utah State</p> <p>9. WELL NO. 4</p> <p>10. FIELD AND POOL, OR WILDCAT Wildcat</p> <p>11. SEC., T., R., M., OR B.L.K. AND SURVEY OR AREA Sec 36, T24S, R11E</p> <p>12. COUNTY OR PARISH Emery</p> <p>13. STATE Utah</p>
<p>14. PERMIT NO. API 43-015-30052-00</p>	<p>15. ELEVATIONS (Show whether OF, RT, GR, etc.) 5364 GR</p>	

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETE

FRACTURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON\*

SHOOTING OR ACIDIZING

ABANDONMENT\*

REPAIR WELL

CHANGE PLANS

(Other)

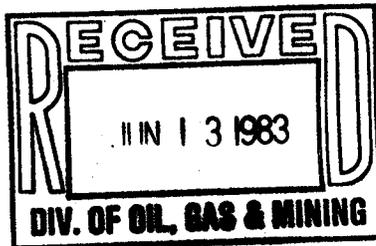
(Other)

XX

(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 and 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.)

No further work is planned until Project Review is completed.



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

SIGNED

*Stanley R. Hyde*

TITLE

Vice President

DATE

6/10/83

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

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

SUBMIT IN TRIPLICATE  
(See 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.)

1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER 2. NAME OF OPERATOR St. Croix Exploration 3. ADDRESS OF OPERATOR 1360 Shelard Tower, Minneapolis, MN 55426 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1700' FSL, 2200' FWL 14. PERMIT NO. API 43-015-30052-00		5. LEASE DESIGNATION AND SERIAL NO. ML 33432 6. IF INDIAN, ALLOTTEE OR TRIBE NAME 7. UNIT AGREEMENT NAME 8. FARM OR LEASE NAME Utah State 9. WELL NO. 4 10. FIELD AND POOL, OR WILDCAT Wildcat 11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA Sec 36, T24S, R11E 12. COUNTY OR PARISH Emery 13. STATE Utah
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 5364 Gr		

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"/>	FULL 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 checked="" type="checkbox"/>	(Other) <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 and 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.)

No further work is planned until Project Review is completed.

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

SIGNED *Stanley B. Taylor* TITLE Vice President DATE July 11, 1983

(This space for Federal or State office use)

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

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

SUBMIT IN TRIPPLICATE\*  
(See 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.)

<p>1. <input checked="" type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER</p> <p>2. NAME OF OPERATOR St. Croix Exploration</p> <p>3. ADDRESS OF OPERATOR 1360 Shelard Tower, Minneapolis, MN 55426</p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1700' FSL, 2200' FWL</p> <p>14. PERMIT NO. API 43-014-30052-00</p>	<p>5. LEASE DESIGNATION AND SERIAL NO. ML 33432</p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</p> <p>7. UNIT AGREEMENT NAME</p> <p>8. FARM OR LEASE NAME Utah State</p> <p>9. WELL NO. 4</p> <p>10. FIELD AND POOL, OR WILDCAT Wildcat</p> <p>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec 36, T24S, R11E</p> <p>12. COUNTY OR PARISH Emery</p> <p>13. STATE Utah</p>
<p>15. ELEVATIONS (Show whether DF, RT, GR, etc.) 5364' Gr</p>	

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"/>	FULL 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"/>	XXX <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 and 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.)

No further work is planned until Project Review is completed.

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

SIGNED Stanley A. Pyle TITLE Vice President DATE 8/10/83

(This space for Federal or State office use)

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

CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_

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

SUBMIT IN TRIPLICATE  
(See 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.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. ML 33432
2. NAME OF OPERATOR St. Croix Exploration		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR 1360 Shelard Tower, Minneapolis, MN 55426		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  1700' FSL, 2200' FWL		8. FARM OR LEASE NAME Utah State
14. PERMIT NO. API 43-015-30052-00		9. WELL NO. 4
15. ELEVATIONS (Show whether OF, RT, GR, etc.) 5364 Gr		10. FIELD AND POOL, OR WILDCAT Wildcat
		11. SEC., T., R., M., OR B.L.E. AND SURVEY OR AREA Sec 36, T24S, R11E
		12. COUNTY OR PARISH Emery
		13. STATE Utah

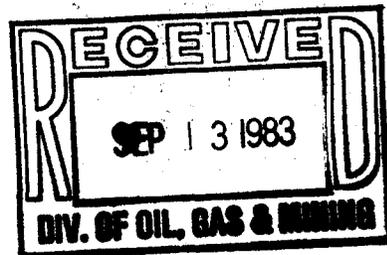
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

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 type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	
(Other) <input type="checkbox"/>	<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 and 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.)

No further work is planned until Project Review is completed.



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

SIGNED D. J. [Signature] TITLE Vice President DATE 9/09/83

(This space for Federal or State office use)

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

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

PERMIT IN TRIPLICATE\*  
(Other instructions on reverse side)

M

5. LEASE DESIGNATION AND SERIAL NO. ML 33432
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME
8. FARM OR LEASE NAME Utah State
9. WELL NO. 4
10. FIELD AND POOL, OR WILDCAT Wildcat
11. SEC., T., R., M., OR B.L.E. AND SURVEY OR ASSA Sec 36, T24S, R11E
12. COUNTY OR PARISH Emery
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

2. NAME OF OPERATOR  
St. Croix Exploration

3. ADDRESS OF OPERATOR  
1360 Shelard Tower, Minneapolis, MN 55426

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\* See also space 17 below.)  
At surface  
1700' FSL, 2200' FWL

14. PERMIT NO.  
API 43-015-300052-00

15. ELEVATIONS (Show whether DP, RT, GR, etc.)  
5364 Gr

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF	<input type="checkbox"/>	PULL OR ALTER CASING	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	MULTIPLE COMPLETE	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	ABANDON*	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	CHANGE PLANS	<input checked="" type="checkbox"/>
(Other)			

SUBSEQUENT REPORT OF:

WATER SHUT-OFF	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
FRACTURE TREATMENT	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
SHOOTING OR ACIDIZING	<input type="checkbox"/>	ABANDONMENT*	<input type="checkbox"/>
(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.)\*

No further work is planned until Project Review is completed.



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

SIGNED [Signature] TITLE Vice President DATE 10/10/83

(This space for Federal or State office use)

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

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

SUBMIT IN TRIPLICATE\*  
(See instructions on reverse side)

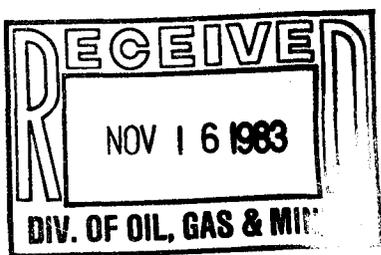
2 4

**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 checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. ML 33432																				
2. NAME OF OPERATOR St. Croix Exploration		6. IF INDIAN, ALLOTTEE OR TRIBE NAME																				
3. ADDRESS OF OPERATOR 1360 Shelard Tower, Minneapolis, MN 55426		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  1700' FSL, 2200' FWI		8. FARM OR LEASE NAME Utah State																				
14. PERMIT NO. API 43-014-300052-00	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 5364 Gr	9. WELL NO. 4																				
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		10. FIELD AND POOL, OR WILDCAT Wildcat																				
<table border="0"> <tr> <th colspan="2">NOTICE OF INTENTION TO:</th> <th colspan="2">SUBSEQUENT REPORT OF:</th> </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 checked="" type="checkbox"/></td> <td>(Other) <input type="checkbox"/></td> <td></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 checked="" type="checkbox"/>	(Other) <input type="checkbox"/>		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec 36, T24S, R11E
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 checked="" type="checkbox"/>	(Other) <input type="checkbox"/>																				
		12. COUNTY OR PARISH 13. STATE Emery Utah																				

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting and 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.)  
  
No further work is planned until Project Review is completed.



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

SIGNED [Signature] TITLE Vice President DATE 11/14/83

(This space for Federal or State office use)

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

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  
St. Croix Exploration

3. ADDRESS OF OPERATOR  
1360 Shelard Tower, Minneapolis, MN 55426

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface  
1700' FSL, 2200' FWL

14. PERMIT NO.  
API 43-015-30052-00

15. ELEVATIONS (Show whether OF, RT, GR, etc.)  
5364 Gr

5. LEASE DESIGNATION AND SERIAL NO.  
ML 33432

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Utah State

9. WELL NO.  
4

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR B.L. AND SURVEY OR AREA  
Sec 36, T24S, R11E

12. COUNTY OR PARISH  
Emery

13. STATE  
Utah

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

FULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETE

FRACTURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON\*

SHOOTING OR ACIDIZING

ABANDONMENT\*

REPAIR WELL

CHANGE PLANS

(Other)

(Other)

XX

(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 and 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.)

No further work is planned until Project Review is completed.

RECEIVED  
DEC 19 1983  
DIVISION OF  
OIL, GAS & MINING

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

SIGNED

*Stanley B. Taylor*

TITLE

Vice President

DATE

12/12/83

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

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

SUBMIT IN TRIPLICATE\*  
(See 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.)

<p>1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER</p> <p>2. NAME OF OPERATOR St. Croix Exploration</p> <p>3. ADDRESS OF OPERATOR 1360 Shelard Tower, Minneapolis, MN 55426</p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  1700' FSL, 2200' FWL</p> <p>14. PERMIT NO. API 43-015-30052-00</p>		<p>5. LEASE DESIGNATION AND SERIAL NO. ML 33432</p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</p> <p>7. UNIT AGREEMENT NAME</p> <p>8. FARM OR LEASE NAME Utah State</p> <p>9. WELL NO. 4</p> <p>10. FIELD AND POOL, OR WILDCAT Wildcat</p> <p>11. SEC., T., R., M., OR B.L.E. AND SUBST OR AREA Sec 36, T24S, R11E</p> <p>12. COUNTY OR PARISH Emery</p> <p>13. STATE Utah</p>
<p>15. ELEVATIONS (Show whether OF, RT, OR, etc.) 5364 Gr</p>		

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"/>	FULL 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) _____	<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 and 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.)\*

No further work is planned until Project Review is completed.

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

SIGNED *Shelard A. Hyle* TITLE Vice President DATE 1/12/84

(This space for Federal or State office use)

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

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

SUBMIT IN TRIPLICATE\*  
(0 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.)

<p>1. <input checked="" type="checkbox"/> OIL WELL    <input type="checkbox"/> GAS WELL    <input type="checkbox"/> OTHER</p> <p>2. NAME OF OPERATOR <u>St. Croix Exploration</u></p> <p>3. ADDRESS OF OPERATOR <u>1360 Shelard Tower, Minneapolis, MN 55426</u></p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface  <u>1700' FSL, 2200' FWL</u></p> <p>14. PERMIT NO. <u>API 43-015-30052-00</u></p>		<p>5. LEASE DESIGNATION AND SERIAL NO. <u>ML 33432</u></p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</p> <p>7. UNIT AGREEMENT NAME</p> <p>8. FARM OR LEASE NAME <u>Utah State</u></p> <p>9. WELL NO. <u>4</u></p> <p>10. FIELD AND POOL, OR WILDCAT <u>Wildcat</u></p> <p>11. SEC., T., R., M., OR B.L.K. AND SURVEY OR AREA <u>Sec 36, T24S, R11E</u></p> <p>12. COUNTY OR PARISH    13. STATE <u>Emery                      Utah</u></p>	
<p>15. ELEVATIONS (Show whether DF, RT, GR, etc.) <u>5364 Gr</u></p>			

**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) <input type="checkbox"/>	
(Other) <input type="checkbox"/>	<input checked="" type="checkbox"/>		

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting and 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.)\*

No further work is planned until Project Review is completed.



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

SIGNED *Stanley A. Taylor* TITLE V. Pres DATE 2-14-84

(This space for Federal or State office use)

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

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

<p><b>SUNDRY NOTICES AND REPORTS ON WELLS</b></p> <p>(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>		<p>5. LEASE DESIGNATION AND SERIAL NO <u>ML 33432</u></p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</p> <p>7. UNIT AGREEMENT NAME</p> <p>8. FARM OR LEASE NAME <u>Utah State</u></p> <p>9. WELL NO. <u>4</u></p> <p>10. FIELD AND POOL, OR WILDCAT <u>Wildcat</u></p> <p>11. SEC., T., R., M., OR BLK. AND SURVEY OR ABBA <u>Sec 36, T24S, R11E</u></p> <p>12. COUNTY OR PARISH   13. STATE <u>Emery   Utah</u></p>
<p>1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/></p> <p>2. NAME OF OPERATOR <u>St. Croix Exploration</u></p> <p>3. ADDRESS OF OPERATOR <u>1360 Shelard Tower, Minneapolis, MN 55426</u></p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  <u>1700' FSL, 2200' FWL</u></p>		
<p>14. PERMIT NO. <u>API 43-015-30052-00</u></p>	<p>15. ELEVATIONS (Show whether DF, RT, GR, etc.) <u>5364 Gr</u></p>	

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"/>	FULL 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) _____	<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 or 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.)\*

No further work is planned until Project Review is completed.

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

SIGNED D. J. Cusek TITLE VP DATE 3/13/84

(This space for Federal or State office use)

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

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

SUBMIT IN TRIPLICATE\*  
(Use 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.)

<p>1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER</p> <p>2. NAME OF OPERATOR <u>St. Croix Exploration</u></p> <p>3. ADDRESS OF OPERATOR <u>1360 Shelard Tower, Minneapolis, MN 55426</u></p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  <u>1700' FSL, 2200' FWL</u></p> <p>14. PERMIT NO. <u>API 43-015-30052-00</u></p>		<p>5. LEASE DESIGNATION AND SERIAL NO. <u>ML 33432</u></p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</p> <p>7. UNIT AGREEMENT NAME</p> <p>8. FARM OR LEASE NAME <u>Utah State</u></p> <p>9. WELL NO. <u>4</u></p> <p>10. FIELD AND POOL, OR WILDCAT <u>Wildcat</u></p> <p>11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA  <u>Sec 36, T24S, R11E</u></p> <p>12. COUNTY OR PARISH <u>Emery</u></p> <p>13. STATE <u>Utah</u></p>
<p>15. ELEVATIONS (Show whether DF, RT, OR, etc.) <u>5364 Gr</u></p>		

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) <input type="checkbox"/>	
(Other) <input type="checkbox"/>	<input checked="" type="checkbox"/> XX		

(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 or 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.)

No further work is planned until Project Review is completed.

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

SIGNED Stanley A. Styles TITLE Vice Pres. DATE 4-10-84

(This space for Federal or State office use)

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

CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_

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

SUBMIT IN TRIPLICATE\*  
(Other 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.)

1.  OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
St. Croix Exploration

3. ADDRESS OF OPERATOR  
430 First Avenue North, Suite #640, Minneapolis, MN 55401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\* See also space 17 below.)  
At surface  
  
1700' FSL, 2200' FWL

14. PERMIT NO.  
API 43-015-300052-00

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
5364 Gr

5. LEASE DESIGNATION AND SERIAL NO.  
ML 33432

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Utah State

9. WELL NO.  
4

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec 36, T24S, R11E

12. COUNTY OR PARISH  
Emery

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 ACIDISE <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"/>	<input checked="" type="checkbox"/> XX		

(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.)\*

No further work is planned until Project Review is completed

RECEIVED

MAY 4 1984

DIVISION OF OIL  
GAS & MINING

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

SIGNED Stanley A. Taylor TITLE Vice President DATE 5/11/84

(This space for Federal or State office use)

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

\*See Instructions on Reverse Side

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

**SUBMIT IN TRIPLICATE\***  
 (Other 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.)

**1. OIL WELL**  **GAS WELL**  **OTHER**

**2. NAME OF OPERATOR**  
 St. Croix Exploration

**3. ADDRESS OF OPERATOR**  
 430 First Avenue North, Suite #640, Minneapolis, MN 55401

**4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)**  
 At surface  
  
 1700' FSL, 2200' FWL

**14. PERMIT NO.**  
 API 43-015- 30052-00

**15. ELEVATIONS (Show whether SP, ST, OR, etc.)**  
 5364 Gr

**5. LEASE DESIGNATION AND SERIAL NO.**  
 ML 33432

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

**7. UNIT AGREEMENT NAME**

**8. FARM OR LEASE NAME**  
 Utah State

**9. WELL NO.**  
 4

**10. FIELD AND POOL, OR WILDCAT**  
 Wildcat

**11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA**  
 Sec 36, T24S, R11E

**12. COUNTY OR PARISH**  
 Emery

**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 COMPLETS <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDISE <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"/>	<input checked="" type="checkbox"/>		

(NOTE: Report results of multiple completion or 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.)\***

No further work is planned until Project Review is completed

**RECEIVED**

JUN 11 1984

DIVISION OF OIL  
 GAS & MINING

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

SIGNED Stanley A. Taylor TITLE Vice President DATE 6/8/84

(This space for Federal or State office use)

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

CONDITIONS OF APPROVAL, IF ANY:

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

SUBMIT IN DUPLICATE\*  
(Other 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.)

<b>1. OIL WELL</b> <input checked="" type="checkbox"/> <b>GAS WELL</b> <input type="checkbox"/> <b>OTHER</b> <input type="checkbox"/>		<b>5. LEASE DESIGNATION AND SERIAL NO.</b> ML 33432
<b>2. NAME OF OPERATOR</b> St. Croix Exploration		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</b>
<b>3. ADDRESS OF OPERATOR</b> 430 First Avenue North, Suite #640, Minneapolis, MN 55401		<b>7. UNIT AGREEMENT NAME</b>
<b>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)</b> At surface  1700' FSL, 2200' FWL		<b>8. FARM OR LEASE NAME</b> Utah State
<b>14. PERMIT NO.</b> API 43-015- 30052-00		<b>9. WELL NO.</b> 4
<b>15. ELEVATIONS (Show whether DF, RT, or, etc.)</b> 5364 Gr		<b>10. FIELD AND POOL, OR WILDCAT</b> Wildcat
		<b>11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA</b> Sec 36, T24S, R11E
		<b>12. COUNTY OR PARISH</b> <b>13. STATE</b> Emery 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"/>	FULL 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 ACIDISE <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 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.)\***

No further work is planned until Project Review is completed

**RECEIVED**  
JUL 13 1984  
DIVISION OF OIL  
GAS & MINING

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

SIGNED Stanley A. Taylor TITLE Vice President DATE 7/11/84

(This space for Federal or State office use)

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

\*See Instructions on Reverse Side

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

SUBMIT IN DUPLICATE\*  
(Other 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.)

1.  OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR  
St. Croix Exploration

3. ADDRESS OF OPERATOR  
430 First Avenue North, Suite #640, Minneapolis, MN 55401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\* See also space 17 below.)  
At surface  
  
1700' FSL, 2200' FWL

14. PERMIT NO.  
API 43-015- 30052-00

15. ELEVATIONS (Show whether DF, RT, CR, etc.)  
5364 Gr

5. LEASE DESIGNATION AND SERIAL NO.  
ML 33432

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Utah State

9. WELL NO.  
4

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA  
Sec 36, T24S, R11E

12. COUNTY OR PARISH  
Emery

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"/>	FULL 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"/>	<input checked="" type="checkbox"/> XX		

(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.)\*

No further work is planned until Project Review is completed

RECEIVED

AUG 13 1984

DIVISION OF OIL  
GAS & MINING

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

SIGNED Stanley A. Taylor TITLE Vice President DATE August 10, 1984

(This space for Federal or State office use)

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

# RAINY RIVER RESOURCES

430 1ST AVENUE NORTH, SUITE 640  
MINNEAPOLIS, MINNESOTA 55401  
612/343-0310

RECEIVED

September 20, 1984

SEP 24 1984

Ms. Vicki Carney  
Natural Resources & Energy  
Division of Oil, Gas & Mining  
4241 State Office Building  
Salt Lake City, Utah 84114

DIVISION OF OIL  
GAS & MINING

Dear Ms. Carney:

Enclosed please find a letter from Mr. Stanley R. Tyler, president of St. Croix Exploration, regarding the six wells in Emery County, Utah.

I hope this is satisfactory in answering your questions about the status of the wells. As always, please contact us with any questions that may arise.

Sincerely,

*Patrice Carlson*

Patrice M. Carlson

Enclosure

:pmc

# RAINY RIVER RESOURCES

430 1ST AVENUE NORTH, SUITE 640  
MINNEAPOLIS, MINNESOTA 55401  
612/343-0310

September 20, 1984

State of Utah  
Natural Resources & Energy  
Division of Oil, Gas & Mining  
4241 State Office Building  
Salt Lake City, Utah 84114

RE: Monthly Production Reports  
Emery County, Utah

Gentlemen:

During our drilling activities in Emery County (dba St. Croix Exploration) which began in 1977 and continues to the present time, we have encountered oil saturation in five (5) to seven (7) zones of interest ranging from the Mossback sandstone member of the Chinle formation, the Moenkopi sands and limestones and the Permian, Kaibab limestone.

Early drilling and core analyses gave significant figures for oil in place in the Mossback sand, ranging from 500 to 945 barrels of oil per acre foot in place. The gravity of this oil varied between 17° and 27° API.

Drilling to the deeper zones of interest confirmed additional oil accumulation in sands and limestones.

It became obvious there was a lack of reservoir energy in these formations. We drilled at varying depths and locations in an effort to prove reservoir continuity and possibly establish primary commercial oil production.

Pipe was set on several wells and they were perforated. Unfortunately this did not establish production through normal completion activities.

We became interested in determining what methods were available to the industry for recovering low gravity oil. This led to research into the many techniques available. This took time, but has helped in developing a microwave test program that is expected to start late this year.

September 20, 1984  
State of Utah  
Page Two

The wells previously drilled have been left in a condition to permit reentry in order to test the research tools.

We have not established commercial production from any of our wells and would prefer to list them as temporarily shut-in. Upon establishing production we will promptly file monthly production reports.

Sincerely,

A handwritten signature in cursive script that reads "Stanley R. Tyler".

Stanley R. Tyler  
President

SRT:pmc

# RAINY RIVER RESOURCES

430 1ST AVENUE NORTH, SUITE 640  
MINNEAPOLIS, MINNESOTA 55401  
612/343-0310

February 27, 1985

Mr. William Moore  
Oil and Gas Field Specialist  
State of Utah - Natural Resources  
355 West North Temple  
3 Triad Center, Suite #350  
Salt Lake City, Utah 84180-1203

RE: Utah State 1-5  
Sec 36, T24S, R11E  
Emery County, Utah  
Utah Lease No. ML-33432

Dear Mr. Moore:

We have caused the pits used in drilling these wells to be filled and the locations cleaned up as you requested.

Signs are being made and will be installed, probably within 45 days.

We intend to monitor the results of our futher drilling and testing activities in order to avoid these problems in the future.

Sincerely,



Stanley R. Tyler  
President

SRT:pmc

RECEIVED

MAR 01 1985

DIVISION OF OIL  
GAS & MINING

*file*

APR 12 1985

# RAINY RIVER RESOURCES

430 1ST AVENUE NORTH, SUITE 640  
MINNEAPOLIS, MINNESOTA 55401  
612/343-0310

## DESIGNATION OF OPERATOR

The undersigned is, on the records of the Department of Natural Resources, Division of State Lands, holder of Lease No. ML33432 and hereby designates:

Rainy River Resources, Inc.  
430 First Avenue North  
Suite #640  
Minneapolis, MN 55401

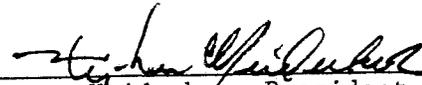
as his operator and local agent, with full authority to act in his behalf in complying with the terms of the leases and regulations applicable thereto and on whom the Director of the Division of State Lands or his representative may serve written or oral instructions in securing compliance with the Rules and Regulations Governing the Issuance of Mineral Leases with respect to:

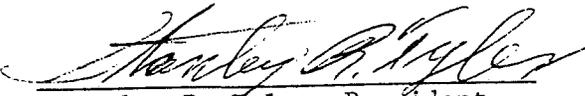
Section 36, T24S, R11E, Emery County, Utah, as part *Utah State #4*  
of Lease No. ML33432

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Rules and Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Director, Division of State Lands or his representative.

The lessee agrees promptly to notify the Division of State Lands of any change in the designated operator.

  
Steve Heidecker, President  
Nugget Oil Corporation  
7850 Metro Parkway, Suite #208  
Bloomington, MN 55420

  
Stanley R. Tyler, President  
St. Croix Exploration Company  
430 1st Avenue North, #640  
Minneapolis, MN 55401

Date 9/15/85

Date 4-11-85

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

PRINT IN TRIPLED AREA  
Other instructions on  
reverse side

111919

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.)

5. LEASE DESIGNATION AND SERIAL NO.  
ML 33432

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Utah State

9. WELL NO.  
4

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., S., M., OR BLK. AND SURVEY OR AREA  
Sec 36, T24S, R11E

12. COUNTY OR PARISH  
Emery

13. STATE  
Utah

1. OIL WELL  GAS WELL  OTHER  Permission to Plug & Abandon

2. NAME OF OPERATOR  
Rainy River Resources dba St. Croix Exploration

3. ADDRESS OF OPERATOR  
430 1st Ave. N., Suite 640, Minneapolis, MN 55401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)  
At surface  
1700 FSL, 2200 FWL

14. PERMIT NO.  
API-43-015-30052-00

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
5364 GR

NOV 10 1986  
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 checked="" 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"/>

(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.)

Plan for Plugging and Abandon Well #4  
Reason: No commercial production

Move in and rig up rig. RIH w bailer to TD and check for fluid. If hole filled or partially filled with water, proceed with P & A. If oil is recovered, check quantity of oil in wellbore and report to Rainy River Resources for further instructions.

Bottom plug across perforations - 20 sacks. Surface plug - 10 sacks.

Cut of surface casing 3 1/2 feet below ground level. Fill hole with drilling mud. Set 10 sack surface plug. Weld on plate and dry hole markers. Reclaim Location.

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

SIGNED Stanley A. Taylor TITLE Pres. DATE 11-6-86

(This space for Federal or State office use)

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

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

DATE: 11-18-86  
BY: John R. Base

\*See Instructions on Reverse Side

**Macdonald Resources, Inc.**

6662 East Long Avenue  
Englewood, CO 80112  
(303) 694-9447

February 21, 1987

**RECEIVED**  
MAR 02 1987

**DIVISION OF  
OIL, GAS & MINING**

Mr. John Baza, Petroleum Engineer  
State of Utah  
Division of Oil, Gas, & Mining  
3 Triad Center, Ste. 350  
Salt Lake City, Utah 84180-1203

re: Rainy River Resources dba St. Croix Exploration  
Sundry Notices & Reports on Well Abandonments  
in Emery County Utah

Dear Mr. Baza:

On behalf of Rainy River Resources, we have enclosed  
Sundry Notices & Reports for the nine wells which were  
recently abandoned.

Yours truly,



Bruce N. Gies

Encl.

cc: Mr. Stan Tyler  
Rainy River Resources

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

SUBMIT **TRIPPLICATE\***  
(Other instructions on reverse side)

5041

5. LEASE DESIGNATION AND SERIAL NO.	ML 33432
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	030408
7. UNIT AGREEMENT NAME	
8. FARM OR LEASE NAME	Utah State
9. WELL NO.	4
10. FIELD AND POOL, OR WILDCAT	Wildcat
11. SEC., T., E., M., OR B.LK. AND SURVEY OR AREA	Sec 36, T24S, R11E
12. COUNTY OR PARISH	Emery
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  Abandonment

2. NAME OF OPERATOR  
Rainy River Resources dba St. Croix Exploration

3. ADDRESS OF OPERATOR  
430 1st Ave. N., Suite 640, Minneapolis, MN 55401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)  
At surface  
1700 FSL, 2200 FWL

14. PERMIT NO.  
API-43-015-30052-00

15. ELEVATIONS (Show whether DF, RT, GR, etc.)  
5364 GR

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.)

Sec. 36 Well #4  
 Feb. 10, 1987 - Ran bailer test, fluid level was 170 ft. below surface, fluid was water. Trip in hole w drill pipe. Tag bottom @ 310 ft. Mix & pump 20 sack cement plug @ 300 ft. to plug across perforations. POOH.

Feb. 11, 1987 - TIH w drill pipe, tag plug @ 130 ft., mix heavy gel mud and displaced water from casing. Mix & pump 10 sack surface cement plug. Install dry hole marker.

RECEIVED  
MAR 02 1987

DIVISION OF  
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct  
SIGNED B.N. Gies *B.N. Gies* TITLE Consultant DATE 2/26/87

(This space for Federal or State office use)

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

TITLE \_\_\_\_\_

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

DATE 3-3-87  
BY: John R. Gies