

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-101
Revised 10-1-78

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DISTRIBUTION	
SANTA FE	1 ✓
FILE	1
U.S.G.S.	1
LAND OFFICE	1
OPERATOR	1

API # 30-059-20295

5A. Indicate Type of Lease	
STATE <input checked="" type="checkbox"/>	FEE <input type="checkbox"/>
5. State Oil & Gas Lease No. # 3449	

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

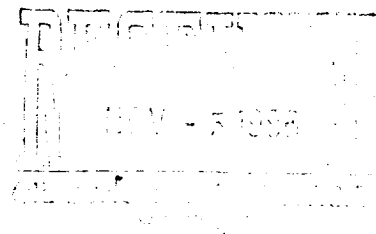
1a. Type of Work DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		7. Unit Agreement Name N/A	
b. Type of Well OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> (CO ₂) OTHER <input type="checkbox"/>		8. Form of Lease Name Roxana State	
2. Name of Operator Sofia Exploration Company		9. Well No. Roxana State #1	
3. Address of Operator 611 Mayo Building Tulsa, Oklahoma 74103		10. Field and Pool, or Wildcat Rank Wildcat	
4. Location of Well UNIT LETTER F LOCATED 1980 FEET FROM THE North LINE AND 1980 FEET FROM THE West LINE OF SEC. 36 TWP. 26N RGE. 29E NMPM		12. County Union	
19. Proposed Depth 3,000'		19A. Formation Granite (TD)	
20. Rotary or C.T. Rotary		21. Elevations (Show whether D.F., R.T., etc.) 6192.0' (GL)	
21A. Kind & Status Plug. Bond Security Cash Bond		21B. Drilling Contractor Yet to be determined	
22. Approx. Date Work will start 11/17/86			

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12-1/4"	8-5/8"	24 #	400'	160	Surface
7-7/8"	5-1/2"	15.5 #	3000'	225	1500'

Well is scheduled to be drilled to the basement (estimated @ 3000') to test Tubb, Glorieta, and Granite Wash. Full suite of electric logs and drill-stem tests are anticipated. Negotiations underway with local drilling contractors and B.O.P. program will be submitted upon final selection.

APPROVAL VALID FOR 90 DAYS
PERIOD EXPIRES 2-4-87
UNLESS DRILLING UNDERWAY



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. GIVE SLOWOUT PREVENTER PROGRAM, IF ANY.

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

Signed [Signature] Title President Date September 28, 1986

(This space for State Use)

APPROVED BY [Signature] TITLE DISTRICT SUPERVISOR DATE 11-4-86

CONDITIONS OF APPROVAL, IF ANY:

WELL LOCATION AND ACREAGE DEDICATION PLAT

SOFIA EXPLORATION CO.

State Lease # 3449

ROXANA STATE 1

F 36 T26N R29E UNION

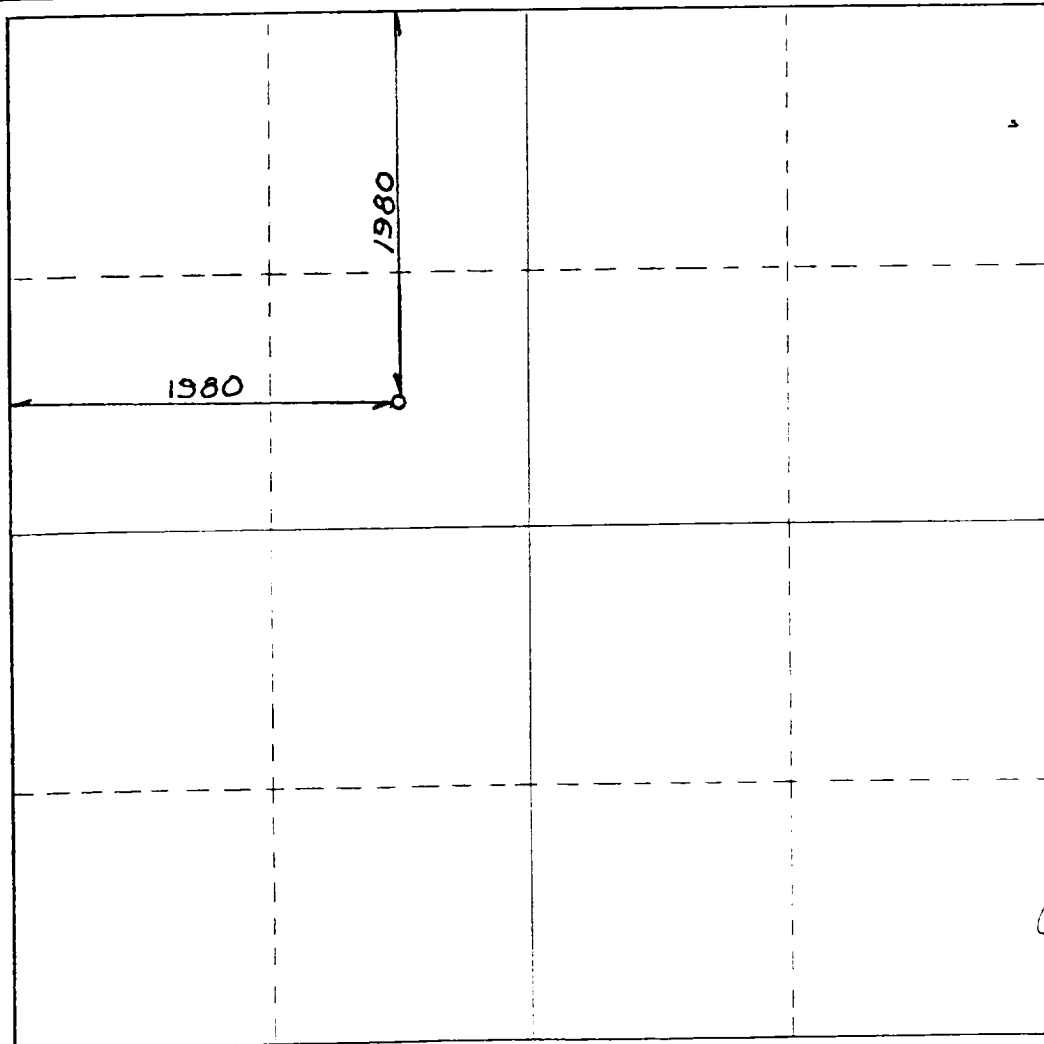
1980 feet from the NORTH line and 1980 feet from the WEST line
 6192.0 Producing Formation: Tubb & Glorieta
 Dedicated Acreage: 160 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes" type of consolidation _____

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name G. W. Shipman

Position President

Company Sofia Exploration Company

Date September 28, 1986

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

SEPTEMBER 22 1986

Date Surveyed [Signature]
 Registered Professional Engineer and/or Land Surveyor

N.M.L.S. NO. 5103

Certificate No.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

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LAND OFFICE	
OPERATOR	

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease
State <input checked="" type="checkbox"/> Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.
#3449

1a. TYPE OF WELL		OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> OTHER <u>CO₂</u>		7. Unit Agreement Name	
b. TYPE OF COMPLETION		NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER		8. Farm or Lease Name	
2. Name of Operator		Sofia Exploration Company		Roxana State	
3. Address of Operator		611 Mayo Building, Tulsa, OK 74103		9. Well No.	
4. Location of Well		UNIT LETTER <u>F</u> LOCATED <u>1980'</u> FEET FROM THE <u>North</u> LINE AND <u>1980'</u> FEET FROM <u>West</u> LINE OF SEC. <u>36</u> TWP. <u>26N</u> RGE. <u>29E</u> NMPM		10. Field and Pool, or Wildcat	
15. Date Spudded		12/8/86		Rank Wildcat	
16. Date T.D. Reached		2/12/87		12. County	
17. Date Compl. (Ready to Prod.)		6192' (GE) 6200.5 (KB)		Union	
18. Elevations (DF, RKB, RT, GR, etc.)		6191'		19. Elev. Casinghead	
20. Total Depth		3764'		21. Plug Back T.D.	
21. Plug Back T.D.		2700'		22. If Multiple Compl., How Many	
22. If Multiple Compl., How Many		23. Intervals Drilled By		Rotary Tools	
23. Intervals Drilled By		0 - 3764'		Cable Tools	
24. Producing Interval(s), of this completion - Top, Bottom, Name		Yeso sand 1871' - 1902'		25. Was Directional Survey Made Yes	
25. Was Directional Survey Made Yes		Glorieta sand 1644' - 1772'		3 at 3761'	
26. Type Electric and Other Logs Run		CNL/LDC, DIL, DLL/MSFL, Long-space Sonic		27. Was Well Cored	
27. Was Well Cored		NO			
28. CASING RECORD (Report all strings set in well)					
CASING SIZE		WEIGHT LB./FT.		DEPTH SET	
8-5/8"		24.0		500'	
5-1/2"		15.5		3728'	
HOLE SIZE		12-1/4"		CEMENTING RECORD	
12-1/4"		250-sx, circ. to surface		AMOUNT PULLED	
7-7/8"		1100 sx Class H		-0-	
Top @ 930'				-0-	
29. LINER RECORD					
SIZE		TOP		BOTTOM	
SACKS CEMENT		SCREEN		TUBING RECORD	
SIZE		DEPTH SET		PACKER SET	
31. Perforation Record (Interval, size and number)		1880' - 1892' 2 hpf, 1/2" holes		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
1652' - 1744' random intervals		54 net feet, 2 hpf, 1/2" holes		DEPTH INTERVAL	
				AMOUNT AND KIND MATERIAL USED	
				1880-1892 20 tons CO ₂ w/ balls	
				1880-1892 3,000 gals. HCl w/balls	
				1652-1744 6,000 gals. HCl/HF 12-3 acid w/balls	
33. PRODUCTION					
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)		Well Status (Prod. or Shut-in)	
2-5-87		Flowing		Shut-in	
Date of Test		Hours Tested		Choke Size	
2-5-87		24 hrs		1.5"	
Flow Tubing Press.		Casing Pressure		Prod'n. For Test Period	
NA		4 psi		Oil - Bbl. -0-	
Calculated 24-Hour Rate		Oil - Bbl. -0-		Gas - MCF 650	
Water - Bbl. -0-		Gas - MCF NA		Water - Bbl. -0-	
Oil Gravity - API (Corr.)		N/A			
34. Disposition of Gas (Sold, used for fuel, vented, etc.)		Vented		Test Witnessed By	
35. List of Attachments		Schematic diagram (2 pg.), electric logs, additional comments (1 pg.)		Roger Brown	
36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.		SIGNED <u>Steve J. Kelly</u>		Lowry Lease Management	
TITLE		Engineer		DATE	
3/2/87					

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1103.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Northwestern New Mexico

T. Anhy _____	T. Canyon _____	T. Ojo Alamo _____	T. Penn. "B" _____
T. Salt _____	T. Strawn _____	T. Kirtland-Fruitland _____	T. Penn. "C" _____
T. Salt _____	T. Atoka _____	T. Pictured Cliffs _____	T. Penn. "D" _____
T. Yates _____	T. Miss _____	T. Cliff House _____	T. Leadville _____
T. 7 Rivers _____	T. Devonian _____	T. Menefee _____	T. Madison _____
T. Queen _____	T. Silurian _____	T. Point Lookout _____	T. Elbert _____
T. Grayburg _____	T. Montoya _____	T. Mancos _____	T. McCracken _____
T. San Andres _____	T. Simpson _____	T. Gallup _____	T. Ignacio Qtzte _____
T. Glorieta _____	T. McKee _____	Base Greenhorn _____	T. Granite _____
T. Paddock _____	T. Ellenburger _____	T. Dakota _____	T. _____
T. Blinberry _____	T. Gr. Wash _____	T. Morrison _____	T. _____
T. Tubb _____	T. Granite _____	T. Todilto _____	T. _____
T. Drinkard _____	T. Delaware Sand _____	T. Entrada _____	T. _____
T. Abo _____	T. Bone Springs _____	T. Wingate _____	T. _____
T. Wolfcamp _____	T. _____	T. Chinle _____	T. _____
T. Penn. _____	T. _____	T. Permian _____	T. _____
T. Cisco (Bough C) _____	T. _____	T. Penn. "A" _____	T. _____

OIL OR GAS SANDS OR ZONES

No. 1, from _____ to _____	No. 4, from _____ to _____
No. 2, from _____ to _____	No. 5, from _____ to _____
No. 3, from _____ to _____	No. 6, from _____ to _____

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from _____ to _____	feet. _____
No. 2, from _____ to _____	feet. _____
No. 3, from _____ to _____	feet. _____
No. 4, from _____ to _____	feet. _____

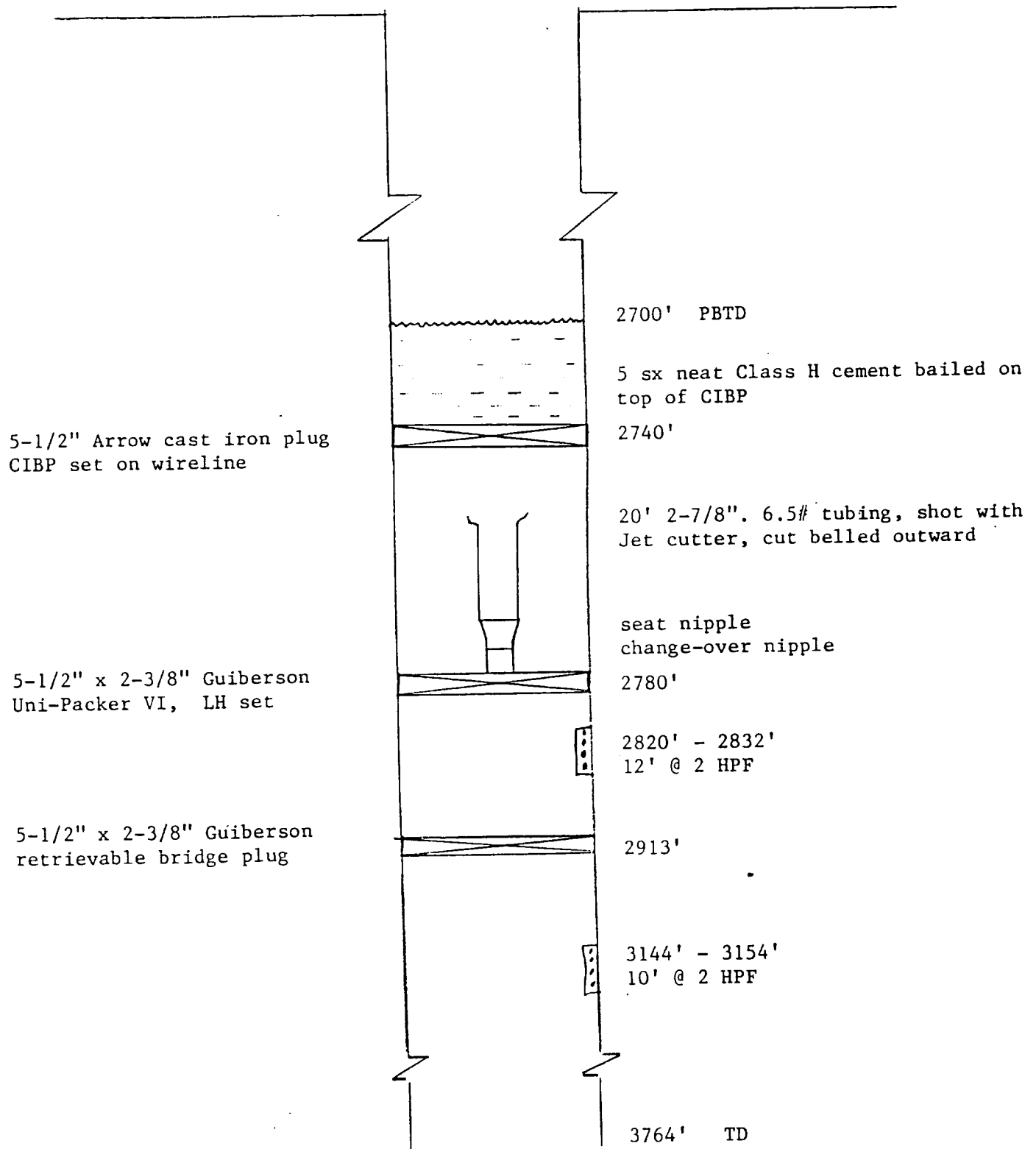
FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
1558	1584	26'	San Andres				
1644	1772	128'	Glorieta sand				
1871	1902	31'	Yeso sand				
(Tops picked from log, depths are from KB)							

**SOFIA
EXPLORATION
COMPANY**

611 MAYO BUILDING
TULSA, OKLAHOMA 74103
(918)587-7545

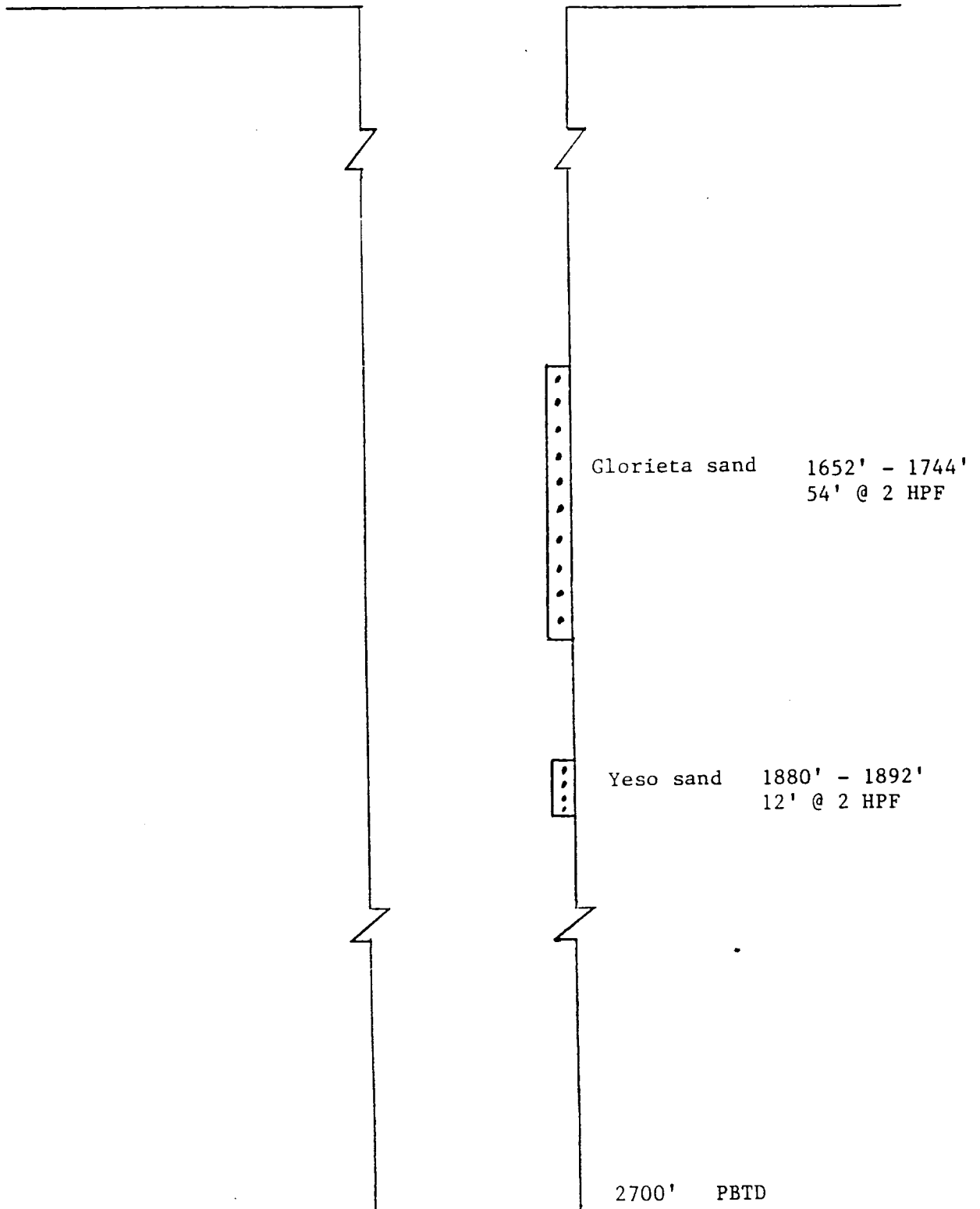
Wellbore Schematic p. 2 of 2



**SOFIA
EXPLORATION
COMPANY**

611 MAYO BUILDING
TULSA, OKLAHOMA 74103
(918)587-7545

Wellbore Schematic p. 1 of 2



PS Form 3800, April 1995

CERTIFIED - RETURN
RECEIPT REQUESTED

Sophia Exploration Co.
c/o Roxana Resources Inc.
PO Box 1186
Tulsa, Ok. 74101

Attention: Mr. Steven D. Stocking

Re: Sophia Exploration Co.
Roxana State Well No. 1
F-36-26N-29E, Union County, New Mexico


Dear Mr. Stocking:

A review of this well file has revealed that the above-referenced well has been idle for longer than five years. It has also come to the attention of this office that the State Lease (#3449) has also expired.

In lieu of this information, this office will require that Sophia Exploration plug and abandon this well as stipulated in the Division's Rules and Regulations. Failure to comply with this request will result in a forced plugging case before the next available examiner hearing and forfeiture of your plugging bond.

Should you have any questions pertaining to this matter, please contact me at (505) 827-8198.

Sincerely,


ROY E. JOHNSON
Sr. Petroleum Geologist

REJ/dr

US Postal Service Receipt for Certified Mail No Insurance Coverage Provided. Do not use for International Mail (See reverse)	
Sent to	SOPHIA EXPL. CO
ZIP	BOX 1186
Post Office	74101
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-73

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DISTRIBUTION	
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FILE	<input checked="" type="checkbox"/>
U.S.G.S.	
LAND OFFICE	
OPERATOR	

5a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No. #3449	

<p align="center">SUNDRY NOTICES AND REPORTS ON WELLS</p> <p align="center"><small>DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.</small></p>		
1. OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> (CO ₂) OTHER <input type="checkbox"/>	7. Unit Agreement Name N/A	
2. Name of Operator Sofia Exploration Company	8. Farm or Lease Name Roxana State	
3. Address of Operator 611 Mayo Building, Tulsa, OK 74103	9. Well No. #1	
4. Location of Well UNIT LETTER <u>F</u> <u>1980</u> FEET FROM THE <u>North</u> LINE AND <u>1980</u> FEET FROM <u>West</u> <u>36</u> TOWNSHIP <u>26N</u> RANGE <u>29E</u> NMPM.	10. Field and Pool, or wildcat Rank Wildcat	
15. Elevation (Show whether DF, RT, GR, etc.) 6192.0 (GL) 6200.5 (KB)	12. County Union	

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data			
NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input checked="" type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input checked="" type="checkbox"/>	

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Service Drilling spudded 12-1/4" hole at 6:00 a.m. on 11/25/86.

On 11/26/86, set 8-5/8" 24 lb/ft J-55 casing at 500' with 150 sx 65/35 lite, 2% CaCl, & 1/4# Cello-flake and 100 sx Class H w/ 2% CaCl & 1/4# Cello-flake. Circulated 27 sx of lead slurry to surface.

Wait on cement 33 hours. Test BOP and casing to 600 psi (surface pressure) for 30 mins. Test O.K.

Reduce hole size to 7-7/8" at 501' and continue drilling.

On 12/10/86, set 5-1/2" 15.5 lb/ft J-55 casing at 3728' w/ 1100 sx Class H, 3% KCl & 0.5% FL-19. Test casing to 2100 psi. Test O.K.

Suspend operations 12/10/86 pending analysis of samples, logs, etc. and determination of proposed completion procedures.

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

SIGNED <u>Steve Stebbins</u>	TITLE <u>Engineer</u>	DATE <u>12/19/86</u>
APPROVED BY <u>R. E. Johnson</u>	TITLE <u>DISTRICT SUPERVISOR</u>	DATE <u>12-22-86</u>

CONDITIONS OF APPROVAL, IF ANY:

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-78

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FILE	<input checked="" type="checkbox"/>
U.S.G.S.	
LAND OFFICE	
OPERATOR	

3a. Indicate Type of Lease	
State <input checked="" type="checkbox"/>	Fee <input type="checkbox"/>
3. State Oil & Gas Lease No.	
#3449	

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" (FORM C-101) FOR SUCH PROPOSALS.)

1. OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER- CO ₂		7. Unit Agreement Name
2. Name of Operator		N/A
Sofia Exploration Company		8. Farm or Lease Name
3. Address of Operator		Roxana State
611 Mayo Building, Tulsa, OK 74103		9. Well No.
4. Location of Well		#1
UNIT LETTER F 1980 FEET FROM THE North LINE AND 1980 FEET FROM		10. Field and Pool, or Wildcat
THE West LINE, SECTION 36 TOWNSHIP 26N RANGE 29E NMPM.		Rank Wildcat
15. Elevation (Show whether DF, RT, GR, etc.)		12. County
6192' (GL)		Union

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	COMMENCE DRILLING OPER. <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>
OTHER <input type="checkbox"/>	OTHER Perforation, stimulation, plug-back <input checked="" type="checkbox"/>
PLUG AND ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
CHANGE PLANS <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

1/21/87: Run CBL/GR/CCL on well, top of cement located @ 930'. Perforate 3144'-3154'
1/23/87: 2 HPF. Stimulate w/ 1500 gals. 12-3 HCl:HF acid w/ balls through 2-7/8" tubing
1/24/87: w/ packer. Swab test results indicate zone non-commercial.

1/25 to 1/28/87: Perforate 2820'-2832', 2 HPF. Stimulate w/ 1700 gals. 12-3 HCl:HF acid w/ balls. Swab test indicates non-commercial. Packer stuck in hole @ 2780' and retrievable bridge plug set @ 2913'. Receive verbal approval to cut tubing on 1/27/87. Cut tubing w/ jet cutter 21' above packer. Set CIBP @ 2740' and bailed 5 sx. neat Class-H on plug. Plug back depth 2700'. See completion report for schematic diagram.

1/29 to 1/31/87: Perforate 1880'-1892', 2 HPF. Stimulate w/ 20 tons CO₂ w/ balls. Flow test through tbg. & pkr. via critical flow prover (2") w/ 3/16" plate. Highest rate estimated at 27 MCFD.

2/1 to 2/2/87: Perforate 1652'-1744', random intervals, 54' net perms, 2 HPF. Treat w/ 6,000 gals. 12-3 HCl:HF w/ balls through tbg. & pkr. Flow test through tbg. w/ 2" prover on 1/4" plate, estimate flow @ 45 MCFD. (CONTINUED ON ATTACHED PAGE)

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

SIGNED Steve Stocking TITLE Engineer DATE 3/2/87
APPROVED BY [Signature] TITLE DISTRICT SUPERVISOR DATE 6-10-87
CONDITIONS OF APPROVAL, IF ANY:

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special					Test Date 3-10-87	
Company Sofia Exploration				Connection NA		
Pool NA				Formation Glorietta & Yeso		Unit
Completion Date 2-5-87		Total Depth 3764		Plug Back TD 2700		Elevation 6192 GL
Farm or Lease Name Roxana State						Well No. #1
Csq. Size 5 1/2	Wt. 15.5	d	Set At 3715	Perforations: From 1652/1880 To 1744/1892		Unit 36
Tsq. Size	Wt.	d	Set At	Perforations: From To		Sec. 26N
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Multiple				Packer Set At		County Union
Producing Thru casing		Reservoir Temp. °F 8		Mean Annual Temp. °F		State New Mexico
L 1772	H	Gg 1.500	% CO ₂	% N ₂	% H ₂ S	Prover 2"
FLOW DATA			TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F
1.	2 x 1.500			3.0		45
2.						
3.						
4.						
5.						
RATE OF FLOW CALCULATIONS						
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, F _{pv}
1	43.19		15.2	1.015	.8165	1.000
2						
3						
4						
5						
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.	
1	.02	505	1.41	1.000	A.P.I. Gravity of Liquid Hydrocarbons _____ Dqg.	
2					Specific Gravity Separator Gas 1.500 XXXXXXXXXX	
3					Specific Gravity Flowing Fluid XXXXX	
4					Critical Pressure 671 P.S.I.A. _____ P.S.I.A.	
5					Critical Temperature 358 °R _____ °R	
$P_c = 30.8$ $P_c^2 = 948.6$					$(1) \frac{P_c^2}{P_c^2 - R_w^2} = 1.6143635$ $(2) \left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 1.4452834$	
NO.	P _i	P _w	P _w ²	P _c ² - P _w ²		
1		19.0	361	587.6		
2						
3						
4						
5						
$AOF = Q \left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 786.2$						
calculated wellhead open flow 786 mcf/d @ 14.65 Mcf @ 15.025					Angle of Slope θ 52.44	
Absolute Open Flow					Slope, n 0.769	
Remarks: No friction at existing flow rate						
Approved by Division		Conducted By:		Calculated By:		Checked By:

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Form C-103
Revised 10-1-78

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LAND OFFICE	
OPERATOR	

5a. Indicate Type of Lease	
State <input type="checkbox"/>	Fee <input type="checkbox"/>
5. State Oil & Gas Lease No.	

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 - 1" (FORM C-101) FOR SUCH PROPOSALS.)

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER-		7. Unit Agreement Name
2. Name of Operator Sofia Exploration Company		8. Farm or Lease Name Roxana State
3. Address of Operator 611 Mayo Bldg., Tulsa, OK 74103		9. Well No. #1
4. Location of well UNIT LETTER _____ FEET FROM THE _____ LINE AND _____ FEET FROM THE _____ LINE, SECTION _____ TOWNSHIP _____ RANGE _____ NMPM.		10. Field and Pool, or Wildcat
15. Elevation (Show whether DF, RT, GR, etc.)		12. County

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	COMMENCE DRILLING OPS. <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	CASING TEST AND CEMENT JOBS <input type="checkbox"/>
PLUG AND ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
CHANGE PLANS <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
OTHER <input type="checkbox"/>	OTHER <input type="checkbox"/>

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

2/3 to 2/5/87: Re-treat zone from 1880'-1892' w/ 3,000 gals 15% HCl and HF acid, w/ balls, via tbg. & pkr. Pull pkr. & tbg., swab well down to PBTD, start flow test via casing w/2" prover on 2/5/87. Commingled production estimated @ 709 MCFD through 1-1/2" plate. Sample analysis of gas taken here. Purity indicated to be 97.3% CO₂. Correct flow rate for gas gravity indicates 650 MCFD.

Well currently shut-in, 4 point test and CAOF, BHP tests to be run as soon as weather permits.

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

SIGNED Steve Stokely TITLE Engineer DATE 3/2/87
APPROVED BY Ry Johnson TITLE DISTRICT SUPERVISOR DATE 6-10-87
CONDITIONS OF APPROVAL, IF ANY:

**SOFIA
EXPLORATION
COMPANY**

611 MAYO BUILDING
TULSA, OKLAHOMA 74103
(918)587-7545

ADDITIONAL NOTES TO LINE 33 OF FORM C-105:

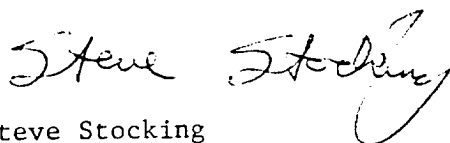
Flow test on 2/5/87 was taken via 5-1/2" casing through a 2" critical flow prover w/ 1-1/2" orifice plate.

Adjusting results for CO₂ gas gravity reduces estimated flow rate from 709 MCFD to 650 MCFD. No oil or water were recovered over the test period.

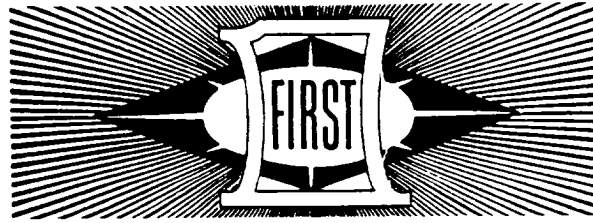
Both the Glorieta and the Yeso zone were commingled for this test.

CAOF, BHP and 4-pt. tests have been scheduled but are currently delayed due to weather conditions. When completed, results will be reported to be used in place of "NA" under "Calculated 24-hr. rate"

Formation record will be updated when final geological report is received.



Steve Stocking
for Sofia Exploration Co.



OIL CONSERVATION DIVISION
RECEIVED

'91 JUN 13 AM 9 08

FIRST NATIONAL BANK *in Clayton*

P. O. BOX 548 • PHONE (505) 374-8315 • CLAYTON, NEW MEXICO 88415

ROSIE DeHERRERA
Cashier & Head of Operations

June 11, 1991

State of New Mexico
Oil Conservation Division
of Energy & Minerals Department
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

RE: BOND HELD FOR SOFIA EXPLORATION COMPANY

Gentlemen:

We have contacted your office on two different occasions regarding a Certificate of Deposit #5086, our bank is holding in safekeeping for Sofia Exploration Company and the State of New Mexico Oil Conservation Division of Energy and Minerals Department.

This certificate is being held in safekeeping for a bond which was placed by Sofia Exploration Company. This certificate matured on October 20, 1990, and has not been taken care of. Several notices have been mailed to Sofia Exploration Company at 611 Mayo Bldg., Tulsa, Oklahoma 74103.

We would appreciate very much if your office would take the time to advise us on this matured certificate.

Sincerely yours,

Rosie DeHerrera
Cashier

RD



OIL CONSERVATION DIVISION
RECEIVED

'91 JUN 13 AM 9 08

FIRST NATIONAL BANK *in Clayton*

P. O. BOX 548 • PHONE (505) 374-8315 • CLAYTON, NEW MEXICO 88415

ROSIE DeHERRERA
Cashier & Head of Operations

June 11, 1991

State of New Mexico
Oil Conservation Division
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P. O. Box 2088
Santa Fe, New Mexico 87504-2088

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We would appreciate very much if your office would take the time to advise us on this matured certificate.

Sincerely yours,

Rosie DeHerrera
Cashier

RD



(505) 374-2587

POST OFFICE BOX 486 • CLAYTON, NEW MEXICO 88415

CD # 1731

Dated 3-20-92

Dur 3-20-96

#8,370. ⁴⁰ present Del.

10-4-95

Sophia Expl.

Bond File

Roxanne St. #1 well

9-27-95

Memo

From

ROY JOHNSON
Geologist

To Well File

Call Tulsa # - has been
disconnected

Call OK City Infor. - no #

Call Tulsa Infor - no # or listing

Appears to be no longer in existence

Start force plugging operations

Call Charles West - Clayton - he

may know their whereabouts

374-9789

Per Mr. West / Sophia & Roxana do not
exist any longer.

- ROEMER-SHERIDAN OPERATING** Expl. & Prod.
Denver, CO 80202—1675 Broadway, Suite 2310 (303) 592-4346
John F. Sheridan, President Fax (303) 592-4305
Victor Q. Phillips, Petroleum Engineer
Sharon Yost, Accountant
Also see Roemer Oil Company in this section.
- ROGERS, CHRISTINE** Oil & Gas History Research/Well Records
(see adv. on 2nd page of this section)
Casper, WY 82602—P.O. Box 842 (307) 237-3388
Also see McKee Well History in Sections 6 & 8.
- ROGERS, JAMES P.** Geologist
Denver, CO 80203—1776 Lincoln St., Suite 420 (303) 832-2328
Also see National Geological Services, Inc. in this section.
- ROGERS, KALE E.** Lease Acquisition/Brokerage
Billings, MT 59102-2072—2943 Boulder Ave. (406) 652-2166
- ROGERS, ROLLY** Geologist
Denver, CO 80202—518 17th St., Suite 689 (303) 623-6201
- ROHILL ENERGY INC.**—see Rohill Operating Co., Ltd. in this section.
- ROHILL OPERATING CO. LTD.** Oil & Gas Consulting/Operations
Midland, TX 79705—3100 N. A. #200, Rohill Bldg. (915) 686-0022
Ronald A. Britton, President Fax (915) 686-2034
Charles N. Wallace Jr., Vice President
- ROMAC EXPLORATION CO., INC.** Expl. & Prod./Producer
Littleton, CO 80121—4 Waring Lane (303) 292-9516
Robert C. Roehrs, President
- ROMANGO WELLSITE CONSULTING** Intl. Drilling/Completion Consultant
Cody, WY 82414—18 Heather Rd. (307) 587-3044
Dave Romango, Owner Fax (307) 587-3044
- RONAN INC.** Producer
Billings, MT 59101—550 N. 31st St., Suite 500 (406) 245-6248
Mail: P.O. Box 7168, Billings, MT 59103 Fax (406) 245-9106
Robert L. Nance, President
Also see Nance Petroleum Corp., Panterra Petroleum, Quanterra Energy Corporation and Terra Energy in this section.
- RONNING, GARY L., CPL.** Oil/Gas Exploration & Production
Incline Village, NV 89450-7336—P.O. Box 7336 (702) 831-7914
Bakersfield, CA 93301-1969—1717 28th St. (805) 327-4811
Fax (805) 327-2626
- Mobile (805) 393-9003
- ROOSEVELT, PETER K.** Producer
Denver, CO 80202—518 17th St., Suite 1140 (303) 825-8606
- ROSE EXPLORATION ASSOCIATES** Independent Petroleum Consultants
Ltd Liability Co.
Denver, CO 80202—518 17th St., Suite 1200 (303) 571-4450
Fax (303) 571-4304
Claude Berghorn, Geologist (303) 571-4450
Robert J. Coskey, Geologist/Member (303) 595-0664
John N. Edwards, Geophysicist/Member (303) 571-4311
Leo C. Gerard, Geologist/Member (303) 534-7427
Logan MacMillan, Geologist/Member (303) 592-1781
Brent A. Miller, Engineer/Member (303) 820-2147
M. E. Wynne, Geologist/Member (303) 595-0455
Dennis Yackim, Land Consultant (303) 571-4450
- ROSE EXPLORATION, INC.** Exploration
Denver, CO 80202—518 17th St., Suite 740 (303) 595-0664
R. J. Coskey, President/Geologist Fax (303) 534-7427
- ROSE, JOSEPH S., JR.** Petroleum Leases
Golden, CO 80401-5742—25958 Genesee Trail Rd. K-234(303) 526-2317
- ROSE, NORMA** Leasing Service
Cheyenne, WY 82003—P.O. Box 713 (307) 632-7755
or (307) 632-9897
- ROSEN, DARRELL** Landman/Attorney
Denver, CO 80202—999 18th St., Suite 3390 (303) 293-3033
Fax (303) 293-3044
- ROSENFELD, GEORGE A.** Consulting Geologist/Engineer
Billings, MT 59102—1925 Grand Ave. (406) 245-5991
- ROSENFELD, SIGMUND J.** Independent Producer
Denver, CO 80203—1401 17th St., Suite 1400 (303) 298-1722
Fax (303) 298-1958
- ROSS, DWIGHT M., JR.** Expl. & Prod.
Wichita Falls, TX 76301—900 8th St., Suite 525 (817) 723-0187
Wheat Ridge, CO 80033—10905 W. 32nd Ave. (303) 237-9065
Willis H. Alderman, Consulting Petroleum Geologist
Also see Alderman, Willis H., in this section.
- ROSSER, SUSAN M.** Geologic Consulting
Englewood, CO 80112—7606 S. Willow Way (303) 796-7643
- ROTH, K. W. "BILL"** Consulting Geologist
Lakewood, CO 80232—10144 W. Hawaii Place (303) 987-0352
[Kenisa Oil Co] (303) 825-7315
[Petrobank Op.] (303) 592-5320
- ROUNDUP RESOURCES, INC.**—see Unit Corp. in this section.
- ROUSE EXPLORATION** Exploration Consulting
Englewood, CO 80112—7251 E. Davies Pl. (303) 773-6740
Terrance S. Rouse
Also see listing in Sections 4 & 7.
- ROWELL & ASSOCIATES, INC.** Land Leasing
Salt Lake City, UT 84147—P.O. Box 11206 (801) 364-9000
Dean W. Rowell, President
Also see Petroleum Investment Co. and Trachyte Oil Co. in this section;
Standard Energy Corp. in this section and in Section 7.
- ROWLAND, JAMES** Consulting Petroleum Engineer
Littleton, CO 80161-2812—P.O. Box 2812 (303) 699-3566
Also see Gila Petroleum Corp. in this section.
- ROXANA RESOURCES INC.** Expl. & Prod./CO2 Exploration
Tulsa, OK 74135—3514 S. Yale (918) 743-1194
Mail: P.O. Box 1186, Tulsa, OK 74101 Fax (918) 743-9477
Gary D. Johnson, President
W. Rondell Corbin, Controller
Raymond G. Straw, Operations Manager
John Bailey, Chief Geologist
W. Richard Thixton, Land
Edward O. Fischer, Engineer
Steven D. Stocking, Engineer
William H. Peorn, Special Project Manager
Steven Butler, Petroleum Engineer
Max Reeves, Geophysicist
- ROYAL PROPERTIES, INC.**—A Sub. of Victoria Petroleum Expl. & Prod.
Denver, CO 80202—999 18th St., Suite 1100, (303) 295-1939
P.O. Box 1079
See complete personnel listing under Victoria Exploration, Inc. in this section.
- ROYAL RESOURCES EXPLORATION** Expl. & Prod.
A Sub. of Victoria Petroleum
Denver, CO 80202—999 18th St., Suite 1100, (303) 295-1939
P.O. Box 1079
See complete personnel listing under Victoria Exploration, Inc. in this section.
- RUBOW, JAMES J.** Oil/Gas Properties Operator
Denver, CO 80202—1645 Court Pl., Suite 324 (303) 572-3351
Fax (303) 572-3624
Also see Passport Energy, Inc. in this section.
- RUDKIN, GEORGE H.** Geologic/Gas Processing Consultant
Casper, WY 82609—2102 Linda Vista Dr. (307) 237-9003
- RUMMEL, WILLIAM "BILL"** Landman/Lease Acquisition/Brokerage
Billings, MT 59102—#4 Jackie Lane (406) 259-9335
- RUNGE, JOHN S.** Consulting Petroleum Geologist
Casper, WY 82604—2251 Mariposa Blvd. (307) 265-4433
Mail: P.O. Box 2595, Casper, WY 82602
- RUPP, JAMES D.** Independent Landman
Loveland, CO 80538-3564—1917 W. 15th Street #B No Phone # Available
- RUSH, BRUCE A.** Independent Landman
Littleton, CO 80122—536 E. Otero Ct. (303) 794-8951
- RUSH CREEK AGREEMENT SERVICES** Federal Units
Hot Springs, SD 57747—HC 52, Box 108-F (605) 745-6381
Elisabeth M. Hoffman, President Fax (605) 745-6386
Also see Rush Creek Resources Ltd. in this section.
- RUSH CREEK RESOURCES LTD.** Oil & Gas Brokers/Land Services
Hot Springs, SD 57747—HC 52, Box 108-F (605) 745-6381
Elisabeth M. Hoffmann, President Fax (605) 745-6386
Also see Rush Creek Agreement Services in this section.
- RUTLEDGE, ROBERT D.** Geologist/Producer
Lakewood, CO 80215—2615 Oak Dr., Suite 5 (303) 231-9484
- RYAN EXPLORATION** Exploration
Denver, CO 80202—216 16th St., Suite 1250 (303) 623-3877
Tim Ryan, Owner
- RYAN, JACK S.** Independent Geologist
Billings, MT 59102—2511 Downer Lane (406) 636-5789
- RYAN, JERRY, CO.**—see Ryan-Kennedy in this section.
- RYAN-KENNEDY** Producers
Denver, CO 80202—518 17th St., Suite 700 (303) 623-4472
Jarry Ryan, Partner
John L. Kennedy, Partner

*#has been
disconnected*

**SOFIA
EXPLORATION
COMPANY**

611 MAYO BUILDING
TULSA, OKLAHOMA 74103
(918)587-7545

March 2, 1987

Mr. Roy Johnson
Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87501

Dear Roy,

Enclosed please find copies of Form C-105 with attachments for the Roxana State #1 CO₂ well. I have also included copies of Form C-103 as subsequent report of completion work performed on the well. One copy of each log run on the well are also enclosed.

I would like to request that this information be held confidential, as provided for under Rule 1105, for a 90-day period.

Thank you for your assistance with this and if you need any further information, please feel free to contact me at (918) 582-4674.

Sincerely,

Steve Stocking

Steve Stocking
Petroleum Engineer

Roxana Res. Inc.

918-743-1194

Tulsa



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

November 10, 1986

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

Sofia Exploration Co.
611 Mayo Building
Tulsa, Ok. 74103

Attention: G. D. Shipman

Re: \$7,500 One-Well Cash Bond
Sofia Exploration Company, Principal
1980' FNL and 1980' FWL of Sec. 36,
T-26-N, R-29-E, Union County
Bond No. OCD-015

Dear Mr. Shipman:

The Oil Conservation Division hereby approves the above-referenced cash plugging bond effective November 3, 1986.

Sincerely,

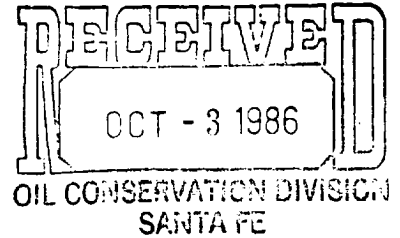

R. L. STAMETS,
Director

dr/

cc: Oil Conservation Division
Roy Johnson
Santa Fe, New Mexico

**SOFIA
EXPLORATION
COMPANY**

611 MAYO BUILDING
TULSA, OKLAHOMA 74103
(918)587-7545



September 28, 1986

Mr. Ron Johnson
Oil Conservation Division
Box 2088
Santa Fe, NM 87501

Re: Form C-101
Form C-102

Dear Mr. Johnson:

Enclosed for your review and further handling are copies of the above forms. Please send us some form C-103 for our future use.

Thank you for your help and cooperation.

Sincerely yours,


G. D. Shipman

*Reg
4-30-85*

State of New Mexico

ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

2040 South Pacheco
P.O. Box 6429
Santa Fe, New Mexico 87505-5472

CERTIFIED

P 614 928 433

MAIL

**CERTIFIED - RETURN
RECEIPT REQUESTED**

First Notice 10/23
Second Notice _____
Return 11-7

08-18

SOPHIA EXPLORATION CO.
C/O ROXANA RESOURCES INC.
PO BOX 1186
TULSA, OK. 74101

1007 03 1995
ATTENTION: MR. STEVEN D. STOCKING

74101-1186

|||||

