

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☐MULTIPLE
ZONE ☒

2. NAME OF OPERATOR

Southland Royalty Company

3. ADDRESS OF OPERATOR

P. O. Drawer 570, Farmington, New Mexico

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

At surface

980' FNL & 955' FWL

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

5 miles northeast of Gobernador, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

16. NO. OF ACRES IN LEASE

19. PROPOSED DEPTH

6192'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

Rotary

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

6719' GR

22. APPROX. DATE WORK WILL START*

June 1, 1979

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36#	300'	189 cu. ft.
8-3/4"	7"	20#	3856'	238 cu. ft.
6-1/4"	4-1/2"	10.5#	3706'-6192'	440 cu. ft.
	2-3/8"	4.7#	6100'	
	1-1/4"	2.3#	3500'	

Surface formation is San Jose.

Top of Ojo Alamo sand is at 2807'.

Fresh water mud will be used to drill from surface to intermediate total depth.

An air system will be used to drill from intermediate to total depth.

It is anticipated that a GR-Density and an IES log will be run at intermediate depth.

It is anticipated that a GR-Density and a GR-Induction log will be run at total depth.

It is expected that this well will be drilled before September 1, 1979. This depends on time required for approvals, rig availability and the weather.

No abnormal pressures or poisonous gases are anticipated in this well.

Mesaverde gas is dedicated.Pictured Cliffs gas is not dedicated.

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 subunit location and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

(This space for Federal or State office use)

TITLE District Production Manager DATE April 30, 1979

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

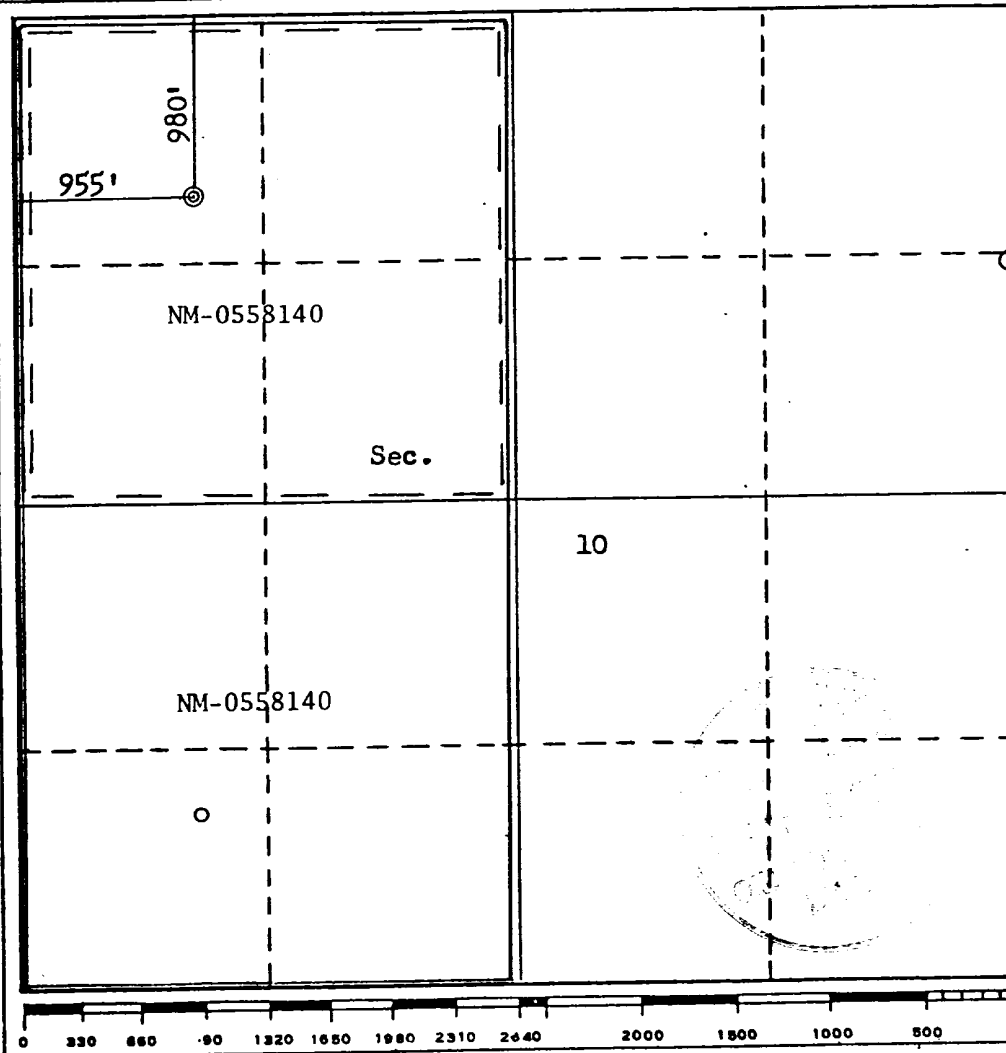
Operator SOUTHLAND ROYALTY COMPANY			Lease LA JARA CANYON		Well No. 1A
Unit Letter D	Section 10	Township 29N	Range 5W	County RIO ARriba	
Actual Footage Location of Well: 980 feet from the North line and 955 feet from the West line					
Ground Level Elev. 6719	Producing Formation MESA VERDE-Pictured Cliffs		Pool uv - PC - Blanco-Gobernador	Dedicated Acreage: 320/160 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 *Don Ryan*
Position
District Production Manager

Company
Southland Royalty Company

Date
April 30, 1979

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.

Date Surveyed
February 26, 1979
Registered Professional Engineer
and/or Land Surveyor
Frederick Kerr, Jr.
Certificate No. **3950**

DRILLING SCHEDULE - LA JARA CANYON #1A

Location: 980' FNL & 955' FWL, Section 10, T29N, R5W, Rio Arriba Co., New Mexico

Field: Blanco Mesaverde / Gobernador Pictured Cliffs

Elevation: 6719' GR

Geology:

Formation Tops:	Ojo Alamo	2807'	Cliff House	5553'
	Fruitland	3349'	Point Lookout	5842'
	Pictured Cliffs	3556'	Total depth	6192' (Add 50' if hole gets wet)
	Intermediate TD	3856'		

Logging Program: GR-Density and IES at intermediate total depth.
GR-Density and GR-Induction at total depth.

Coring Program: None

Natural Gauges: Gauge at last connection above Cliff House, Point Lookout and total depth.
Gauge any increase in gas flow.

Drilling:

Contractor:

Tool Pusher:

SRC Representative:

SRC Ans. Service: 325-1841

Dispatch Number: 325-7391

Mud Program:

Fresh water mud from surface to Intermediate total depth.
Air from intermediate to total depth.

Materials:

Casing Program:	Hole Size	Depth	Casing Size	Wt. & Grade
	12-1/4"	300'	9-5/8"	36# K-55
	8-3/4"	3856'	7"	20# K-55
	6-1/4"	3706'-6192'	4-1/2"	10.5# K-55

Float Equipment:

9-5/8" Surface Casing: Pathfinder, type "A", guide shoe.

4-1/2" Intermediate Casing: Pathfinder, type "A", guide shoe. Pathfinder self-fill

DRILLING SCHEDULE - LA JARA CANYON #1A

Location: 980' FNL & 955' FWL, Section 10, T29N, R5W, Rio Arriba Co., New Mexico

Field: Blanco Mesaverde/Gobernador Pictured Cliffs

Elevation: 6719' GR

Geology:

Formation Tops:	Ojo Alamo	2807'	Cliff House	5553'
	Fruitland	3349'	Point Lookout	5842'
	Pictured Cliffs	3556'	Total depth	6192' (Add 50' if hole gets wet)
	Intermediate TD	3856'		

Logging Program: GR-Density and IES at intermediate total depth.
GR-Density and GR-Induction at total depth.

Coring Program: None

Natural Gauges: Gauge at last connection above Cliff House, Point Lookout and total depth.
Gauge any increase in gas flow.

Drilling:

Contractor:

Tool Pusher:

SRC Representative:

SRC Ans. Service: 325-1841

Dispatch Number: 325-7391

Mud Program:

Fresh water mud from surface to Intermediate total depth.
Air from intermediate to total depth.

Materials:

Casing Program:	Hole Size	Depth	Casing Size	Wt. & Grade
	12-1/4"	300'	9-5/8"	36# K-55
	8-3/4"	3856'	7"	20# K-55
	6-1/4"	3706'-6192'	4-1/2"	10.5# K-55

Float Equipment:

9-5/8" Surface Casing: Pathfinder, type "A", guide shoe.

7" Intermediate Casing: Pathfinder, type "A", guide shoe. Pathfinder self-fill insert float valve. Five (5) Pathfinder rigid centralizers. Run float 2 joints above shoe. Run centralizers every other joint above shoe.

4-1/2" Liner: Pathfinder, type "AP", guide shoe. Pathfinder, type "A", flapper float collar. Liner hanger will have PBR.

Tubing:

Wellhead Equipment:

9 5/8" X 10", 2000# casing head.
10", 2000# X 6", 2000# tubing head.

Cementing:

9 5/8" surface casing: 189 cu. ft. 160 sx Class "B" with 1/4# gel flake per sack and 3% CaCl₂ (100% excess).

7" intermediate casing: 238 cu. ft. 120 sx 50/50, Class "B", Poz with 6% gel. Mix with 7.2 gals water per sack to weigh 12.85 ppg. Tail in with 50 sacks of Class "B" with 2% CaCl₂. If lost circulation occurs, add 1/4# cello flake per sack (50% excess to cover Ojo Alamo).

4 1/2" liner: 440 cu. ft. Precede cement with 20 bbls. gelled water. Cement with 295 sx of 50/50, Class "B", Poz with 6% gel, 1/4# cello flake and .6% Halad 9. Mix cement with 7.2 gals water per sack to weigh 12.85 ppg (70% excess). If hole gets wet and mist drilling is required, use 100% excess to circulate liner.
(350 sx)



Southland Royalty Company

April 30, 1979

United States Geological Survey
P. O. Box 1809
Durango, Colorado

Attention: Mr. Jerry Long

Dear Sir:

Enclosed please find map showing existing roads and planned access roads to Southland Royalty Company's La Jara #1A well. The locations of tank batteries and flow lines will be on location with well. A burn pit will be provided for disposal of trash. Cuttings, drilling fluid and produced fluids will be put into the reserve pit and properly disposed of depending on amount and type of fluids.

Contractor will furnish restroom facilities on location.

There will be no air strips or camps.

Also, enclosed is a location layout showing approximate location of rig, pits, pipe racks and cut required to build this location.

Water supply will be La Jara Wash. All water will be transported by truck and stored on location.

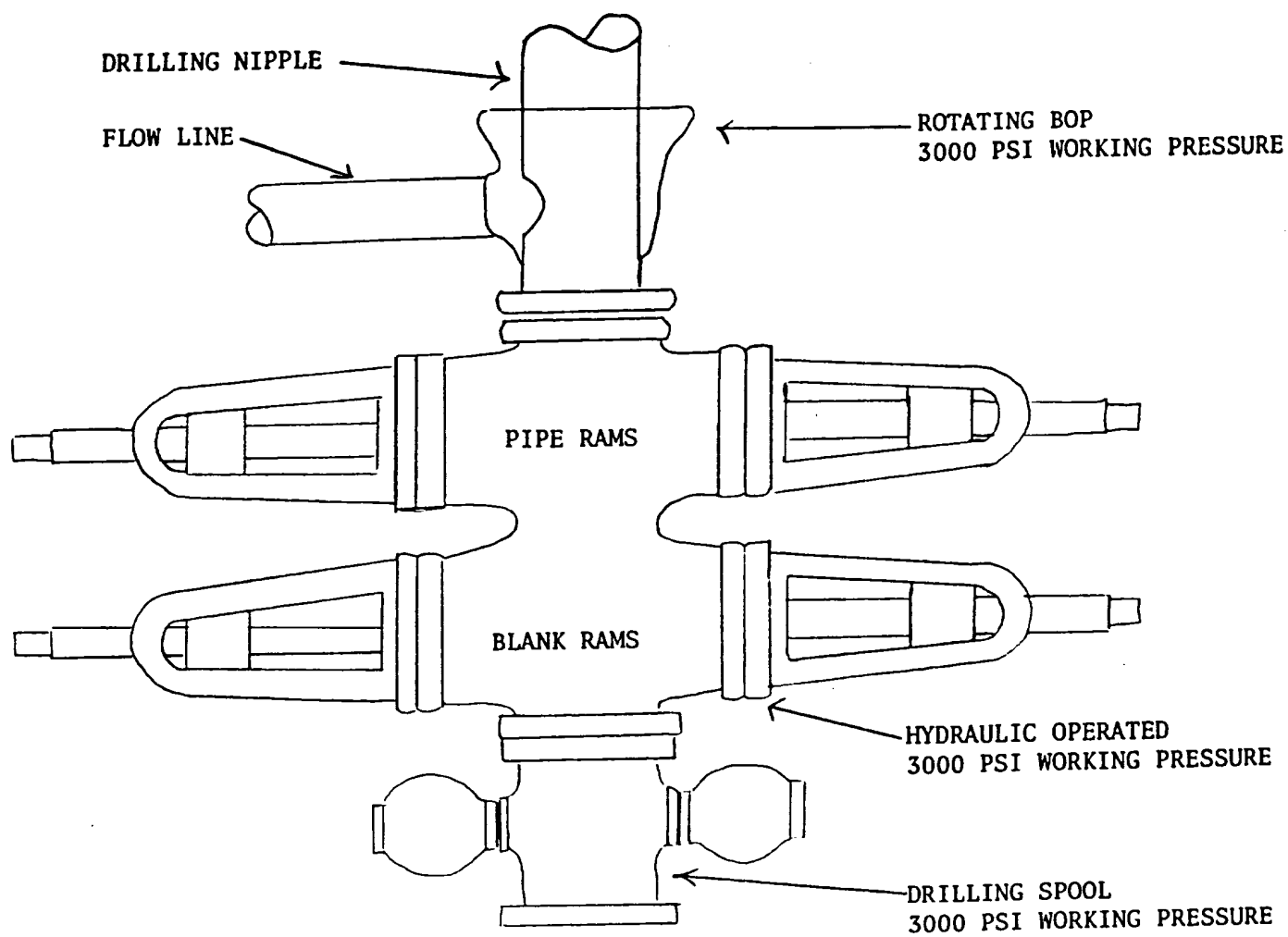
The location will be restored according to Bureau of Land Management standards. This work will begin when all related construction is finished.

Mr. Ross Lankford will be Southland Royalty Company's field representative supervising these operations.

Yours truly,

L. O. Van Ryan
District Production Manager

LOVR/dg



PREVENTERS AND SPOOLS ARE TO HAVE
THROUGH BORE OF 6" - 3000 PSI OR LARGER



Southland Royalty Company

United States Geological Survey
P. O. Box 1809
Durango, Colorado

Attention: Blowout Preventer Plan

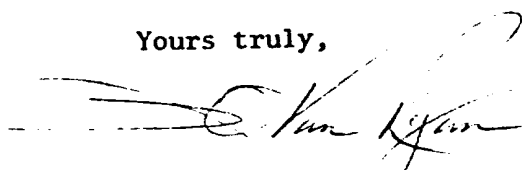
Dear Sir:

All drilling and completion rigs will be equipped with 6" or larger double gate hydraulic blowout preventers and a hydraulic operated closing unit with steel lines.

The preventer is 3000# working pressure and 6000# test.

All crews will be thoroughly trained in the operation of this preventer.
The preventer will be tested frequently enough to insure proper operation.

Yours truly,



L. O. Van Ryan
District Production Manager

LOVR/dg



Southland Royalty Company

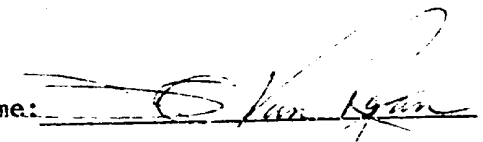
United States Geological Survey
P. O. Box 1809
Durango, Colorado

Attention: Mr. Jerry Long





Dear Sir:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein be performed by Southland Royalty Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date: April 30, 1979

Name: 

Title: District Production Manager

PROPOSED LOCATION 
 EXISTING LOCATIONS 
 PROPOSED ROAD 
 EXISTING ROADS 

Gobernador

Vicinity Map for
 SOUTHLAND ROYALTY CO. #1A LA JARA CANYON
 980'FNL 955'FWL Sec 10-T29N-R5W
 BTO ARBPA COMPANY NEW MEXICO

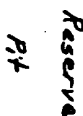


6



vert. 1"=40'

B-B.



Vert: 1'3.40"

D-D'

Date: 2-26-79

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☐ well gas ☒ well other

2. NAME OF OPERATOR

Southland Royalty Company

3. ADDRESS OF OPERATOR

P. O. Drawer 570, Farmington, NM 87401

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)

AT SURFACE: 980' FNL & 955' FWL

AT TOP PROD. INTERVAL:

AT TOTAL DEPTH:

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

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF ☐
FRACTURE TREAT ☐
SHOOT OR ACIDIZE ☐
REPAIR WELL ☐
PULL OR ALTER CASING ☐
MULTIPLE COMPLETE ☐
CHANGE ZONES ☐
ABANDON* ☐
(other) Extension ☒

SUBSEQUENT REPORT OF:

☐
☐
☐
☐
☐
☐
☐
☐
☐

5. LEASE
NM-0558140

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

La Jara Canyon

9. WELL NO.

#1A

10. FIELD OR WILDCAT NAME
Gobernador Pictured Cliffs
Blanco Mesa Verde

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

Section 10, T29N, R5W

12. COUNTY OR PARISH 13. STATE

Rio Arriba NM

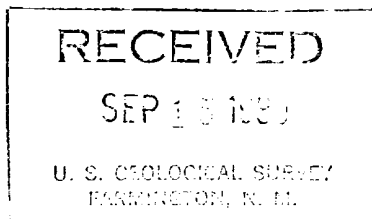
14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
6719' GR

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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.)*

Southland Royalty Company hereby requests an extension for the drilling of this well.



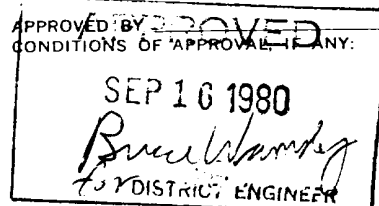
Extension approved
To 12/8/80

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED _____ TITLE District Engineer DATE 8-11-80

(This space for Federal or State office use)



*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☐ gas ☒ other ☐

2. NAME OF OPERATOR

Southland Royalty Company

3. ADDRESS OF OPERATOR

P.O. Drawer 570, Farmington, NM 87401

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)

AT SURFACE: 980' FNL & 955' FWL

AT TOP PROD. INTERVAL:

AT TOTAL DEPTH:

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

REQUEST FOR APPROVAL TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☐

REPAIR WELL ☐

PULL OR ALTER CASING ☐

MULTIPLE COMPLETE ☐

CHANGE ZONES ☐

ABANDON* ☐

(other) Spud and Casing Reports ☒

5. LEASE

NM-0558140

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

La Jara Canyon

9. WELL NO.

1-A

10. FIELD OR WILDCAT NAME

Gobernador Pictured Cliffs
Blanco Mesa Verde

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

Section 10, T29N, R5W

12. COUNTY OR PARISH

Rio Arriba

13. STATE

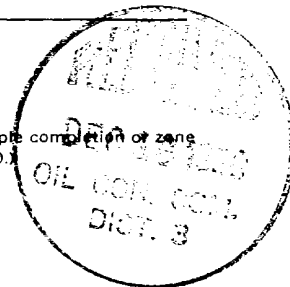
New Mexico

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)

6719' GR

(NOTE: Report results of multiple completion or zone change on Form 9-330.)



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.)*

12-05-80 Spudded 12-1/4" surface hole at 12:15 P.M. 12-05-80 and drilled to a total depth of 320'. Ran 7 joints (301.08') of 9-5/8", 32.30#, K-55 casing set at 314'. Cemented with 160 sacks of Class "B" with 1/4# flocele per sack and 3% CaCl₂. Plug down at 9:15 P.M. 12-05-80, lost returns did not circulate. Cemented down outside of casing with 70 sacks of Class "B" with 1/4# flocele per sack and 3% CaCl₂. Cement circulated at 4:15 A.M. 12-06-80.

Subsurface Safety Valve: Manu. and Type

Set @ _____ Ft.

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

SIGNED

TITLE Dist. Prod. Mgr. DATE 12-12-80

ACCEPTED FOR RECORD

(This space for Federal or State office use)

APPROVED BY

DEC 12 1980

TITLE

DATE

CONDITIONS OF APPROVAL

NMOCC

BY

FARMINGTON DISTRICT

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR

Southland Royalty Company

3. ADDRESS OF OPERATOR

P.O. Drawer 570, Farmington, N.M. 87401

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)

AT SURFACE: 980' FNL & 955' FWL

AT TOP PROD. INTERVAL:

AT TOTAL DEPTH:

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

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☐

REPAIR WELL ☐

PULL OR ALTER CASING ☐

MULTIPLE COMPLETE ☐

CHANGE ZONES ☐

ABANDON* ☐

(other) Casing Reports

SUBSEQUENT REPORT OF:

☐

☐

☐

☐

☐

☐

☐

☐

☒

5. LEASE

NM-0558140

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

La Jara Canyon

9. WELL NO.

1-A

10. FIELD OR WILDCAT NAME
Gobernador Pictured Cliffs
Blanco Mesa Verde

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

Section 10, T29N, R5W

12. COUNTY OR PARISH

Rio Arriba

13. STATE

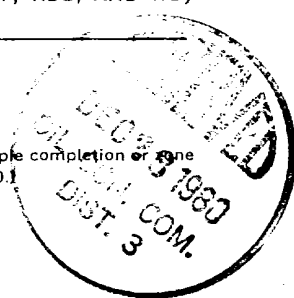
New Mexico

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)

6719' GR

(NOTE: Report results of multiple completion or zone change on Form 9-330.)



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.)*

12/10/80 Ran 90 joints (3893.80') of 7", 23#, K-55 casing set at 3890'. Cemented with 120 sacks of Class "B" 50/50 Poz with 1/4# flocele per sack and 6% gel followed by 50 sacks of Class "B" with 2% CaCl₂. Plug down at 10:00 A.M. 12-10-80. Top of Cement at 1750'.

12/14/80 Ran 64 joints (2512.01') of 4-1/2", 10.5#, K-55 casing set from 3699' to 6222'. Cemented with 350 sacks of Class "B" 50/50 Poz with 6% gel, 1/4# gel flake per sack and .6% Halad 9. Plug down at 2:30 P.M. 12/14/80.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Arthur Greaves TITLE Drilling Clerk DATE December 15, 1980

ACCEPTED FOR RECORD (This space for Federal or State office use)

APPROVED BY DEC 22 1980 TITLE _____ DATE _____

CONDITIONS OF APPROVAL: _____

BY BL FARMINGTON DISTRICT

*See Instructions on Reverse Side

NMCC

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☐ gas ☒ other ☐
well well

2. NAME OF OPERATOR
Southland Royalty Company

3. ADDRESS OF OPERATOR
P.O. Drawer 570, Farmington, N.M. 87401

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 980' FNL & 955' FWL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

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

REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF	<input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>	<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>	<input type="checkbox"/>
(other) Perforation & Stimulation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Production Tubing Report	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

5. LEASE

NM-0558140

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

La Jara Canyon

9. WELL NO.

1-A

10. FIELD OR WILDCAT NAME

Gobernador Pictured Cliffs
Blanco Mesa Verde

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

Section 10, T29N, R5W

12. COUNTY OR PARISH

Rio Arriba

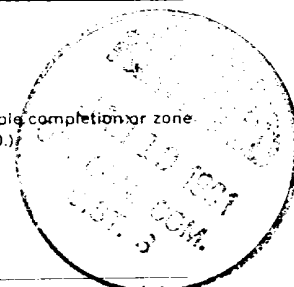
13. STATE

New Mexico

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
6719' GR

(NOTE: Report results of multiple completion or zone change on Form 9-330.)



17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

1/5/81 Perforated Mesa Verde at 5706', 5721', 5779', 5861', 5866', 5872', 5878', 5894', 5900', 5909', 5923', 5929', 5935', 5941', 5949', 5957'. 16 holes.

1/6/81 Frac'd Mesa Verde with 100,200 gallons fresh water and 89,000# of 20/40 sand. AIR 32 BPM, ATP 1600 psi, ISIP 120 psi.
Perforated Pictured Cliffs at 3709', 3718', 3726', 3734', 3556', 3564', 3574', 3580', 3588', 3596', 3656', 3664', 3672', 3680', 3688', 3695'.
Total of 16 holes. Frac'd Pictured Cliffs with 172,000 gallons water and 162,000# of 20/40 sand. AIR 37 BPM, ATP 1200 psi, ISIP 570 psi.

1/11/81 Landed 185 joints (5761') of 2-3/8", 4.7#, J-55 tubing at 5956'.
Model "R" packer set at 3926'.
Landed 75 joints (3653') of 1-1/2", 2.76#, V-55 tubing at 3653'.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Arthur V. Hughes TITLE Drilling Clerk DATE January 12, 1981

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

BW

NMOCC



Southland Royalty Company

February 24, 1981

Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

Gentlemen:

The following is the deviation record for Southland Royalty Company's La Jara Canyon #1A well located in Section 10, T29N, R5W, Rio Arriba County, New Mexico.

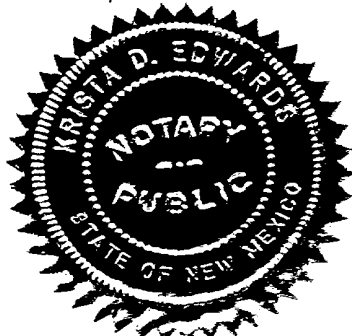
<u>Depth</u>	<u>Deviation</u>	<u>Depth</u>	<u>Deviation</u>
320'	1 1/2	3175'	1
794'	1 1/4	3646'	1 1/4
1295'	1 1/4	3856'	2
1890'	1 1/4	4397'	2
1991'	1	4801'	1 3/4
2487'	1	5000'	1
		5527'	1

Sincerely,

SOUTHLAND ROYALTY COMPANY

L. O. Van Ryan
District Production Manager

LOVR/ke



State of New Mexico
County of San Juan



The foregoing instrument was acknowledged before me this 27th day of February, 1981, by L. O. Van Ryan of Southland Royalty Company on behalf of said Company.

NOTARY BOND FILED WITH SECRETARY OF STATE

My Commission Expires: 7-29-84

Krista D. Edwards
Notary Public - NM

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test <input type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date 1-21-81	
Company Southland Royalty Company				Connection Northwest Pipeline Corporation	
Pool Blanco				Formation Mesa Verde	
Completion Date 1-2-81		Total Depth 6242'		Plug Back TD 6179'	
				Elevation 6719' GR	
Farm or Lease Name La Jara Canyon				Well No. #1A	
Csg. Size 7.000 4.500	Wt. 23# 10.5#	d 6.366 4.052	Set At 3890' 3698-6222'	Perforations: From To	
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 5956'	Perforations: From 5706' To 5957'	
Type Well - Single - Fractured - G.G. or G.O. Multiple Multiple - GG				Packer Set At 3926'	
Producing Thru Tbg		Reservoir Temp. °F #		Baro. Press. - P _a 12.2	
L		H		Prover	
		Gg .700		Meter Run	
		% CO ₂		% N ₂	
		% H ₂ S		Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
SI							998			
1.	2" x 3/4"						173			1 hr.
2.							144			2 hrs.
3.							132			3 hrs.
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, Fpv	Rate of Flow Q, Mcfd
1	12.365		144.2	1.0000	.9258	1.0000	1651
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons	Deq.
2.					Specific Gravity Separator Gas	X X X X X
3.					Specific Gravity Flowing Fluid	X X X X X
4.					Critical Pressure P.S.I.A.	P.S.I.A.
5.					Critical Temperature °R	°R

P _c 1010.2 P _c ² 10205040				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		144.2	20793.6	999710.4
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0208$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1677$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0156$

Absolute Open Flow	1677	Mcf/d @ 15.025	Angle of Slope @	Slope, n .75
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Remarks:

Approved By Division	Conducted By: Don Thompson	Calculated By: James Smith	Checked By: L.O. Van Ryan
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OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78

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 1-28-81			
Company Southland Royalty Company				Connection Northwest Pipeline Corporation					
Pool Gobernador				Formation Pictured Cliffs				Unit	
Completion Date 1-2-81		Total Depth 6242		Plug Back TD 6179		Elevation 6719' GR		Farm or Lease Name LaJara Canyon	
Csq. Size 7.000 4.500	Wt. 23# 10.5#	d 6.366 4.052	Set At 3890' 3698'-6222'	Perforations: From To				Well No. #1A	
Tbg. Size 1.900	Wt. 2.76#	d 1.610	Set At 3653'	Perforations: From 3556' To 3734'				Unit Sec. Twp. Rge. D 10 29N 5W	
Type Well - Single - Drdhead - G.G. or G.O. Multiple Multiple - GG						Packer Set At 3926'		County Rio Arriba	
Producing Thru Tbg		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _a 12.2		State New Mexico	
L	H	Gg .700	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
SI							1110		1110	
1.	2" x 3/4"						236		790	1 hr.
2.							177		684	2 hrs.
3.							152		629	3 hrs.
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 _{sp}	Rate of Flow Mcf/D
1	12.365		164.2	1.0000	.9258	1.0000	1.0000
2.							
3.							
4.							
5.							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	Mcf/pbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons	Deq.
2.					Specific Gravity Separator Gas	X X X X X X X X
3.					Specific Gravity Flowing Fluid	X X X X X
4.					Critical Pressure P.S.I.A.	P.S.I.A.
5.					Critical Temperature °R	°R

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1		641.2	411137.4	848195.4
2				
3				
4				
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.4847$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.3992$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2631$$

Absolute Open Flow	2631	Mcf/d @ 15.025	Angle of Slope @	Slope, n .85
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Remarks:

Approved By Division	Conducted By: Don Thompson	Calculated By: James Smith	Checked By: L.O. Van Ryan
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