

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

1820' FSL & 1185' FEL

At proposed prod. zone

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

40 miles south/southwest of Dulce, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED
TO THIS WELL

E/ 320.12

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

19. PROPOSED DEPTH

8303'

20. ROTARY OR CABLE TOOLS

Rotary

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

7139'

22. APPROX. DATE WORK WILL START*

August 1, 1978

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#	200'	130 cu. ft.
8-3/4"	7"	23#	4180'	486 cu. ft.
6-1/4"	4-1/2"	10.50#	4030'-7000'	666 cu. ft.
	4-1/2"	11.60#	7000'-8303'	

Surface formation is San Jose.

Top of Ojo Alamo is at 1997'.

Top of Pictured Cliffs is at 3880'.

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

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

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

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

It is expected that this well be drilled before December 31, 1978. This depends on time required for approvals, rig availability and the weather.

Gas is 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 subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

TITLE

District Production Manager

DATE

July 3, 1978

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

ok Frank

*See Instructions On Reverse Side

U. S. GEOLOGICAL SURVEY
DULCE, COLO.

30-039-21841

5. LEASE DESIGNATION AND SERIAL NO.

Jicarilla 101

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Jicarilla 101

9. WELL NO.

#6

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

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

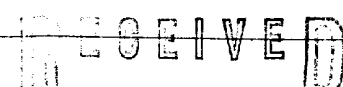
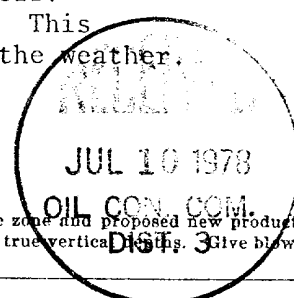
Section 1, T26N, R4W

12. COUNTY OR PARISH

13. STATE

Rio Arriba

New Mexico



JUL 7 1978

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.

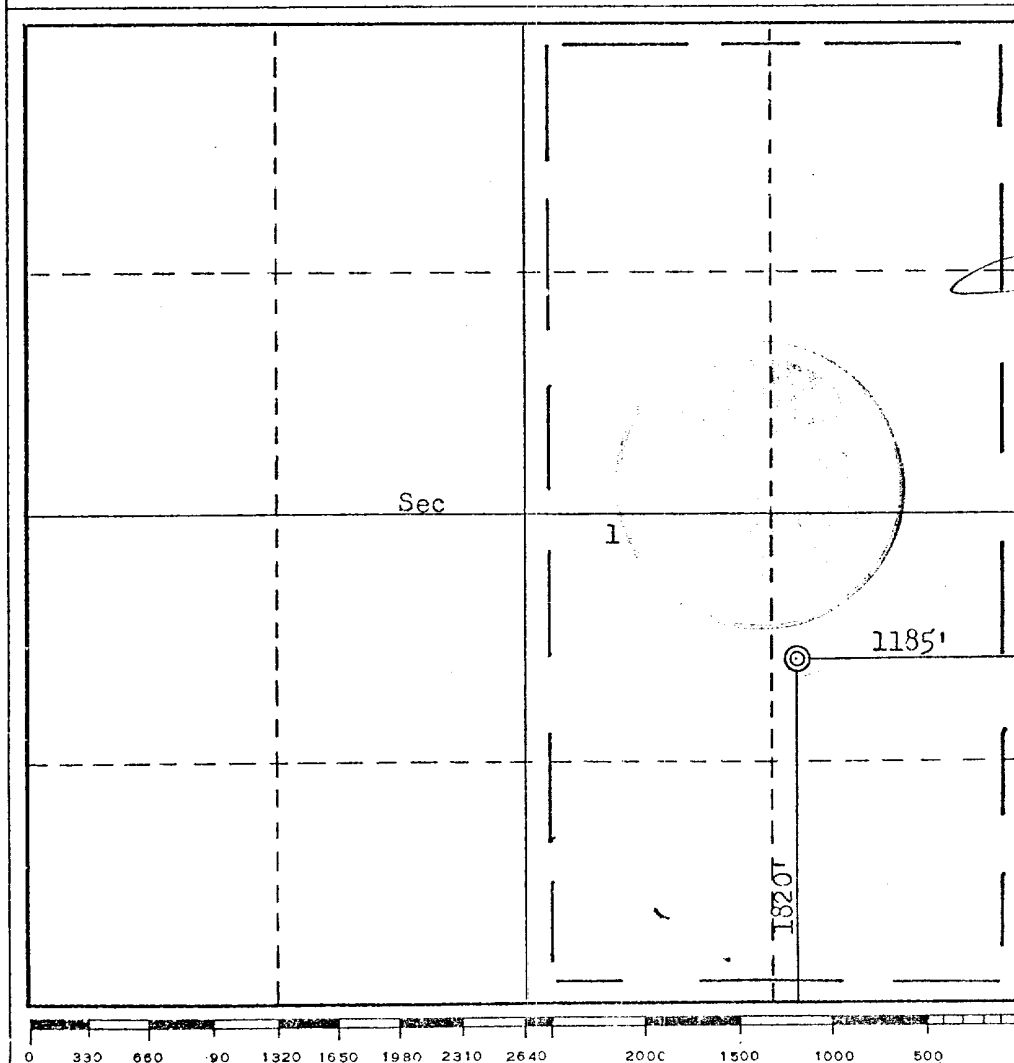
Operator SOUTHLAND ROYALTY COMPANY		Lease JICARILLA 101		Well No. 6	
Unit Letter I	Section 1	Township 26N	Range 4W	County Rio Arriba	
Actual Footage Location of Well: 1820 feet from the South line and 1185 feet from the East line					
Ground Level Elev. 7139	Producing Formation Dakota	Pool Basin	Dedicated Acreage: 320.12 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
July 3, 1978

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

June 22, 1978
Registered Professional Engineer
and/or Land Surveyor

Fred B. Kerr Jr.
Fred B. Kerr Jr.

Certificate No.
3950



Southland Royalty Company

June 3, 1978

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 Jicarilla 101 #6 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 water holes along Tapacitos Creek. 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. Max Larson will be Southland Royalty Company's field representative supervising these operations.

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: July 3, 1978

Name: CC Dawson

Title: District Engineer



Southland Royalty Company

July 3, 1978

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.

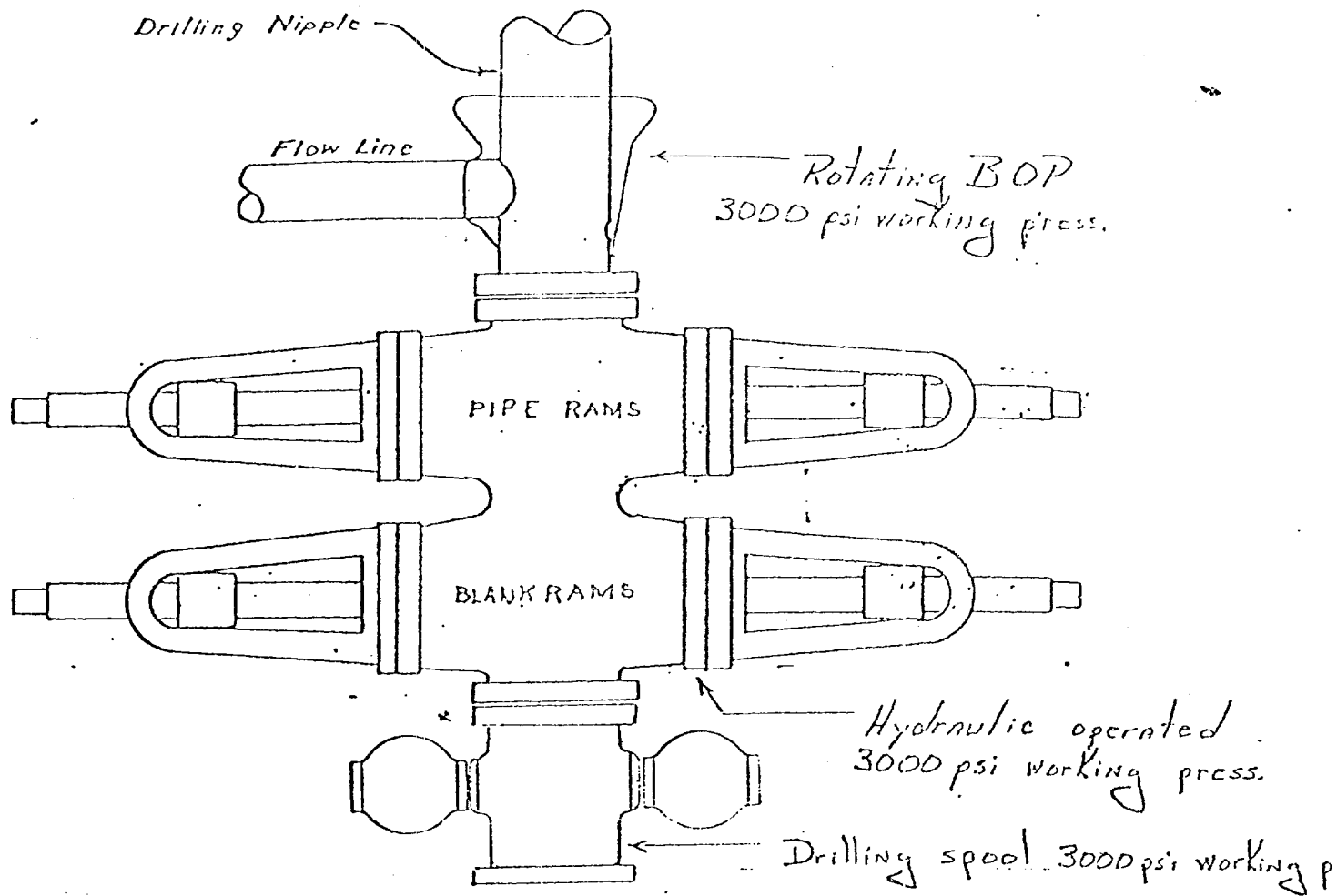
The preventer is 3000# working pressure and 6000# test.

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,

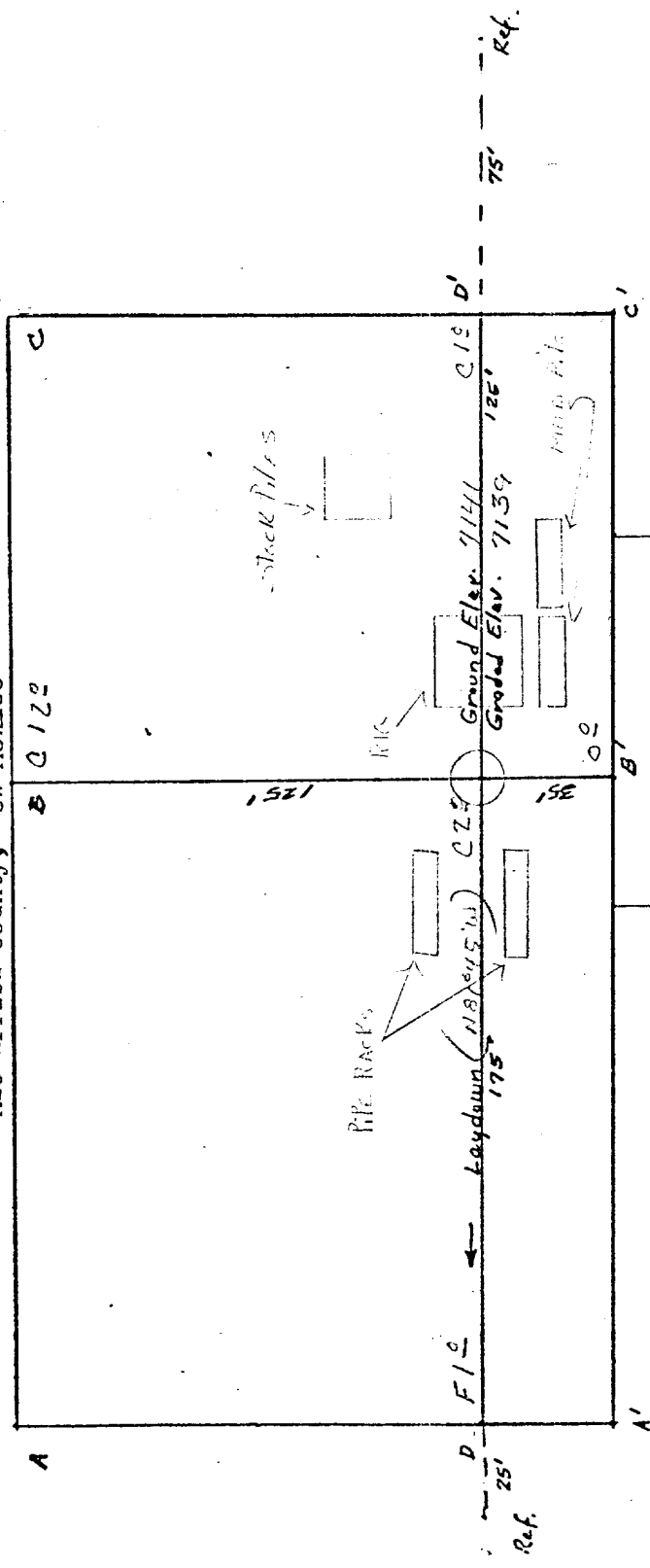
L. O. Van Ryan
District Production Manager

LOVR/dg



Preventers and spools are to have
through bore of 6" - 3000# PSI or larger.

Location Profile for
 SOUTHLAND ROYALTY CO. #6 JICARILLA 101
 1820' FSL 1185' FEL Sec 1-T26N-R1W
 Rio Arriba County, New Mexico



Vert. 1"=40' A-A' Horiz: 1"=100'

B-B'

7150				
7140				
7130				
7120				

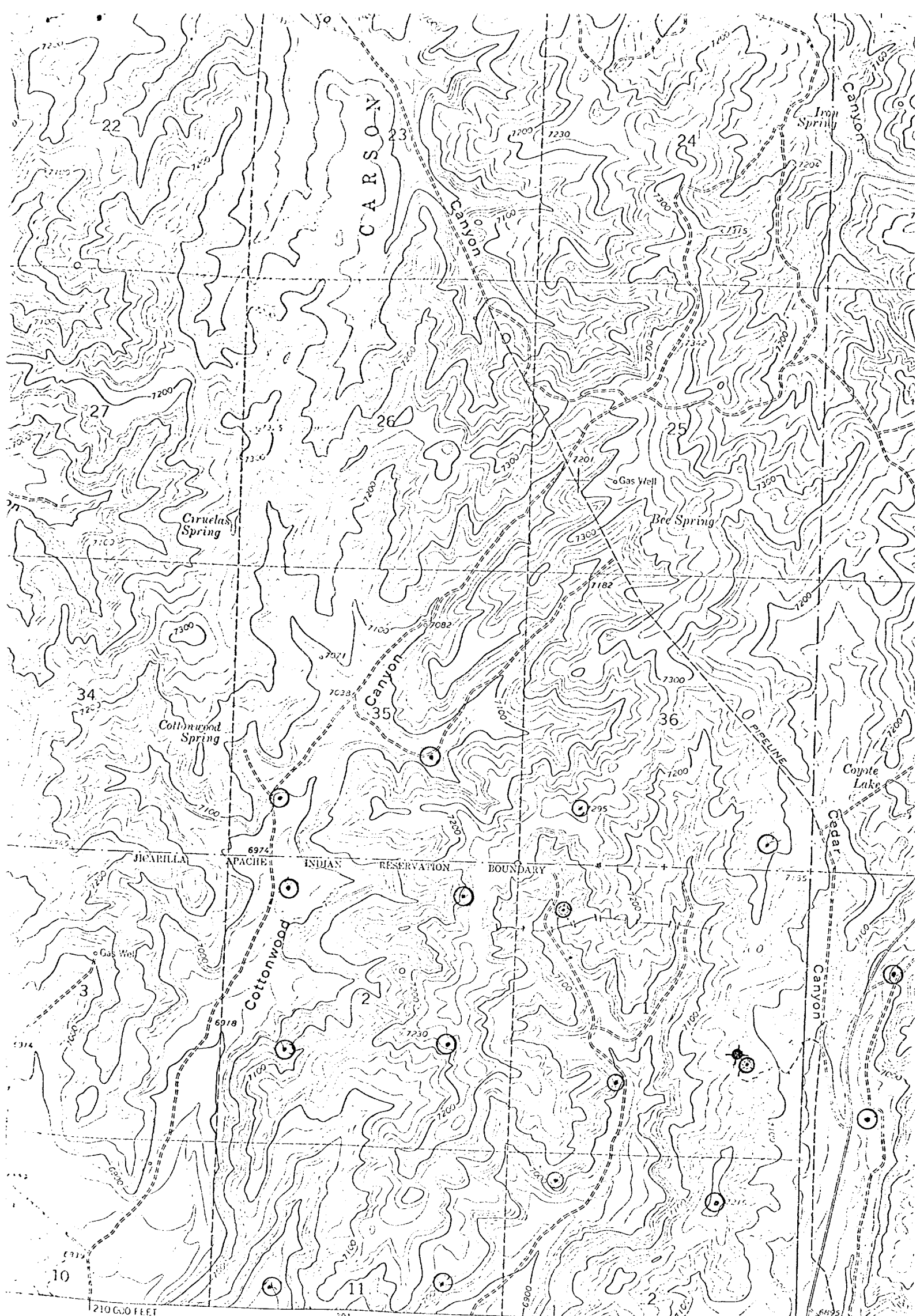
Vert: 1"=40' C-C' Horiz: 1"=100'

B-B'

7150				
7140				
7130				
7120				

KERR LAND SURVEYING
 Date: 6/12/75

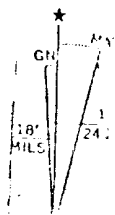
[Signature]



Published by the Geological Survey

Map made from aerial

- PROPOSED LOCATION ○
- EXISTING LOCATIONS ○
- PROPOSED ROADS - - -
- EXISTING ROADS ———



Vicinity Map for
 SOUTHLAND ROYALTY CO. #6 JICARILLA 101
 1829' FSL 1185' FEL Sec 1-T26N-R4W
 RIO ARriba COUNTY, NEW MEXICO

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DRILLING SCHEDULE - JICARILLA 101 #6

Location: 1820' FSL & 1185' FEL, Section 1, T26N, R4W, Rio Arriba, New Mexico

Field: Basin Dakota

Elevation: 7152' KB

Geology: Formation Tops

Ojo Alamo	1997'	Point Lookout	6035'
Fruitland	3742'	Gallup	7014'
Pictured Cliffs	3880'	Graneros	8081'
Intermediate	4180'	Dakota	8168'
Cliff House	5565'	Total Depth	8303'

Logging Program: Gamma Ray Density and Gamma Ray Induction at Total Depth.

Coring Program: None

Natural Gauges: Gauge at Total Depth. Also gauge any noticeable increases in gas. Record all gauges in tour book and turn in on morning report.

Drilling:

Contractor:

SRC Representative:

Tool Pusher:

SRC Answ. Service: 325-1841

Dispatch Number: 325-7391

Mud Program: Fresh water mud to intermediate. Pretreat with 5% LCM @ 3700'.
Air from intermediate to total depth.

Materials:

Casing Program:	Hole Size	Depth	Casing Size	Wt. & Grade
	12 1/4"	200'	9 5/8"	36# K-55
	8 3/4"	4180'	7"	23# K-55
	6 1/4"	4030' - 7000'	4 1/2"	10.5# K-55
		7000' - 8303'	4 1/2"	11.6# K-55

Float Equipment:

9 5/8" surface casing - Pathfinder type "A" guide shoe.

7" intermediate casing- Pathfinder type "A" guide shoe. Howco self-fill insert float valve. 5 Pathfinder rigid centralizers. Run float valve 2 jts. above shoe. Run centralizers every other joint above shoe.

4 1/2" liner - TIW liner hanger with PBR and neoprene pack-off. Pathfinder type AP guide shoe and type "A" float collar.

Tubing:

Wellhead Equipment: 9 5/8" X 10", 2000#, casing head.
10", 2000# X 6", 2000# tubing head with donut for 2 3/8" tubing.

- 9 5/8" surface casing - 120 sx. Class "B" with 3% CaCl_2 (130 cu. ft.)
WOC for 12 hours. Test to 600² psi before drilling out.
- 7" intermediate casing- 272 sx. 50/50 poz with 6% gel and .6% Halad 9
(12.8 PPG) followed by 70 sx. of Class "B" with
2% CaCl_2 and .6% Halad 9 (486 cu. ft.). Run
temp. survey after 8 hours. WOC for 12 hours
and test to 1000 psi before drilling out.
- 4 1/2" liner - Precede cement with 40 bbls. gelled water. Cement with
450 sx. 50/50 poz with 6% gel, .6% fluid loss additive
and .3% retarder (666 cu. ft. - 50% excess to circulate
liner).

7-3-78

L. O. Van Ryan
District Production Manager

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

Jicarilla 101

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

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

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.*

See also space 17 below.)
At surface

1820' FSL & 1185' FEL

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Jicarilla 101

9. WELL NO.

#6

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

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

Section 1, T26N, R4W

14. PERMIT NO.

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

7139'

12. COUNTY OR PARISH

Rio Arriba

13. STATE

New Mexico

16.

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 Recorecompletion 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 name will be changed to the Jicarilla 101 #1A due to a change in acreage dedication since we propose to drill a Mesa Verde/Dakota dual instead of previously proposed single Dakota.

Revised intent for Jicarilla 101 #1A is attached.

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

SIGNED

TITLE

District Production Manager

DATE

July 25, 1978

(This space for Federal or State office use)

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

RECEIVED
DATE

JUL 28 1978

*See Instructions on Reverse Side

U. S. GEOLOGICAL SURVEY
FARMINGTON, COLO.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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"/>		5. LEASE DESIGNATION AND SERIAL NO. Jicarilla 101
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Southland Royalty Company		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR P. O. Drawer 570, Farmington, New Mexico		8. FARM OR LEASE NAME Jicarilla 101
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1820' FSL & 1185' FEL At proposed prod. zone		9. WELL NO. #1A
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 40 miles south/southwest of Dulce, New Mexico		10. FIELD AND POOL, OR WILDCAT Blanco Mesa Verde Basin Dakota
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 1, T26N, R4W
16. NO. OF ACRES IN LEASE		12. COUNTY OR PARISH Rio Arriba
17. NO. OF ACRES ASSIGNED TO THIS WELL 320		13. STATE New Mexico
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 7139' GR		22. APPROX. DATE WORK WILL START* August 15, 1978

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13-3/4"	10-3/4"	32.75#	200'	165 cu. ft.
9-5/8"	7-5/8"	26.40#	4180'	615 cu. ft.
6-3/4"	5-1/2"	15.50#	4030'-7000'	606 cu. ft.
	5-1/2"	17.00#	7000'-8266'	

Surface formation is San Jose.

Top of Ojo Alamo sand is at 1997'.

Top of Pictured Cliffs sand is at 3880'.

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

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

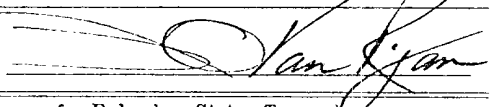
It is expected that a GR-Density and GR-Induction log be run at total depth.

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

It is expected that this well be drilled before December 31, 1978. This depends on time required for approvals, rig availability and the weather.

Gas is 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 subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.  District Production Manager July 25, 1978

SIGNED _____ TITLE _____ DATE _____

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

RECEIVED
JUL 28 1978

*See Instructions On Reverse Side

U. S. GEOLOGICAL SURVEY
DURANGO, COLO.

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 JICARILLA 101		Well No. 1A
Unit Letter I	Section 1	Township 26N	Range 1W	County Rio Arriba	
Actual Footage Location of Well: 1820 feet from the South line and 1185 feet from the East line					
Ground Level Elev. 7139	Producing Formation Dakota -Mesa Verde	Pool Basin -Blanco	Dedicated Acreage: 320 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 _____
 Position
District Production Manager
 Company
Southland Royalty Company
 Date
July 3, 1978

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
June 12, 1978
 Registered Professional Engineer and/or Land Surveyor
Fred B. Kerr Jr.
 Certificate No. _____



Southland Royalty Company

July 25, 1978

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,

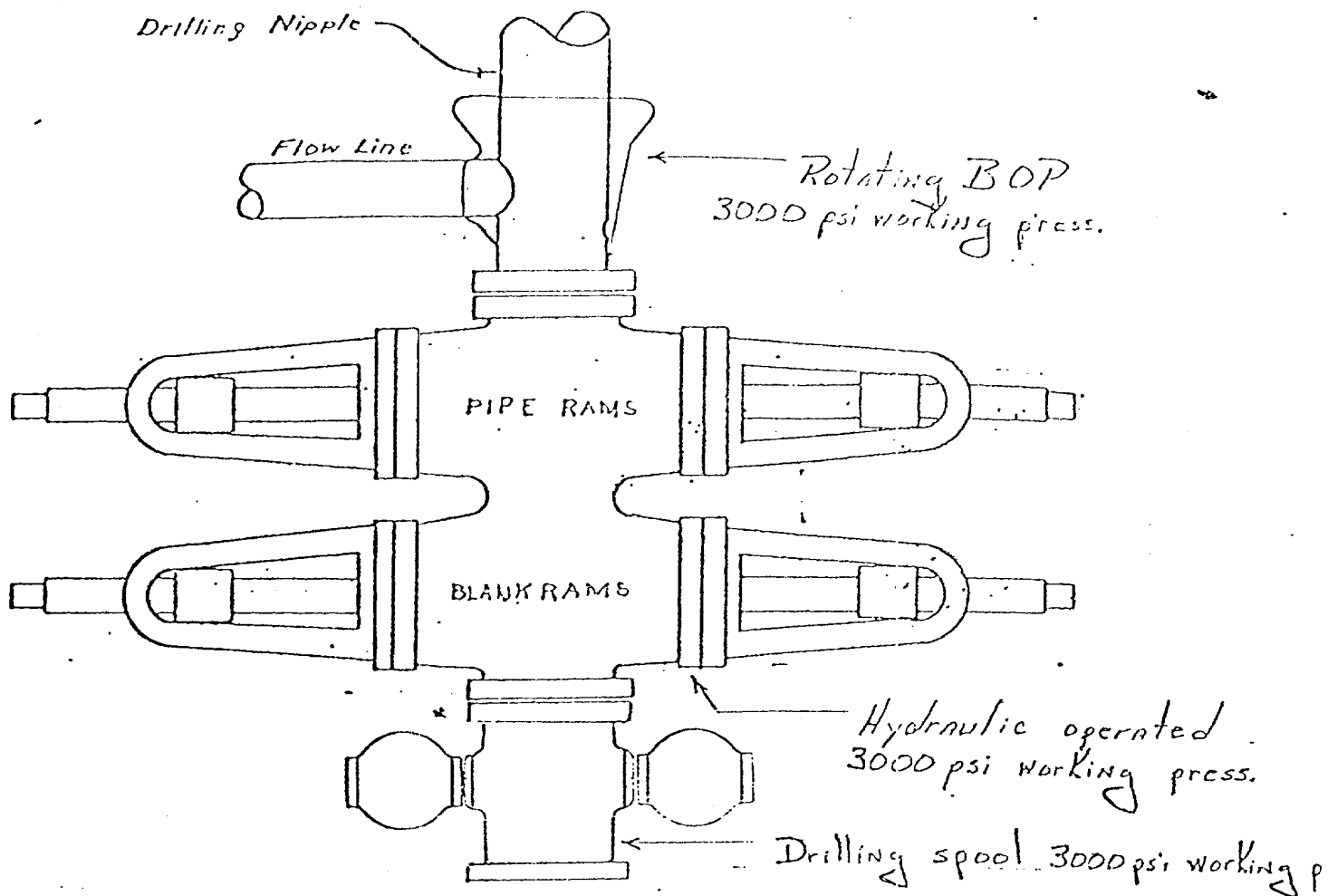
L. O. Van Ryan
District Production Manager

LOVR/dg

RECEIVED

JUL 28 1978

U. S. GEOLOGICAL SURVEY
DURANGO, COLO.



Preventers and spools are to have
through bore of 6" - 3000# PSI or larger.

RECEIVED

JUL 28 1978

U. S. GEOLOGICAL SURVEY
FIDRANGO, COLO.



Southland Royalty Company

July 25, 1978

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 Jicarilla 101 #1A well. The location 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 the 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 the water holes along Tapacitos Creek. All water will be transported by truck and stored on location.

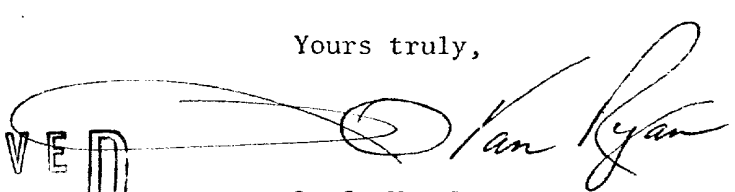
The location will be restored according to Bureau of Land Management standards. This work will begin when all related construction is finished.

Mr. Max Larson will be Southland Royalty Company's field representative supervising these operations.

Yours truly,

RECEIVED

JUL 28 1978


L. O. Van Ryan
District Production Manager

LOVR/dg

U. S. GEOLOGICAL SURVEY
DURANGO, COLO.



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: July 25, 1978

Name: CC Pearson

Title: District Engineer

RECEIVED

JUL 28 1978

U. S. GEOLOGICAL SURVEY
DURANGO, COLO.

DRILLING SCHEDULE - JICARILLA 101 #1A

Location: 1820' FSL & 1185' FEL, Section 1, T26N, R4W, Rio Arriba, New Mexico

Field: Basin Dakota/Blanco Mesa Verde

Elev. 7152' KB
7139' GR

Geology: Formation Tops

Ojo Alamo	1997'	Point Lookout	6035'
Fruitland	3742'	Gallup	7014'
Pictured Cliffs	3880'	Graneros	8081'
Intermediate	4180'	Dakota	8168'
Cliff House	5565'	Total Depth	8266'

RECEIVED

JUL 28 1978

U. S. GEOLOGICAL SURVEY
FARMINGTON, COLO.

Logging Program: Gamma Ray Density and Gamma Ray Induction at total depth.

Coring Program: None

Natural Gauges: Gauge at total depth. Also gauge any noticeable increases in gas. Record all gauges in tour book and turn in on morning report.

Drilling:

Contractor: Aztec Well Service
SRC Representative: Max Larson

Tool Pusher: Bob Young
SRC Answ. Service: 325-1841
SRC Dispatch Number: 325-7391

Mud Program: Fresh water mud to intermediate. Pretreat with 5% LCM at 3700'.
Air form intermediate to total depth.

Materials:

Casing Program:	Hole Size	Depth	Casing Size	Wt & Grade
	13-3/4"	200'	10-3/4"	32.75# H-40
	9-5/8"	4180'	7-5/8"	26.40# K-55
	6-3/4"	4030-7000'	5-1/2"	15.50# K-55
		7000-8266'	5-1/2"	17.00# K-55

Float Equipment:

10-3/4" surface casing - Pathfinder type "A" guide shoe

7-5/8" intermediate casing- Pathfinder type "A" guide shoe. Howco self-fill insert float valve. Five Pathfinder rigid centralizers. Run float valve 2 jts above shoe. Run centralizers every other joint above shoe.

5-1/2" liner - TIW liner hanger with PBR and neoprene pack-off.
Pathfinder type AP guide shoe and type "A" float collar.

Tubing: - 6000' of 1-1/2", 2.76#, J-55, IJ tubing.
8200' of 2-1/16", 3.25#, CW-55, IJ tubing.

Wellhead Equipment: - 10-3/4" X 10", 2000#, casing head.
10", 2000# X 6", 2000 tubing head with donut for 2-1/16" tubing.

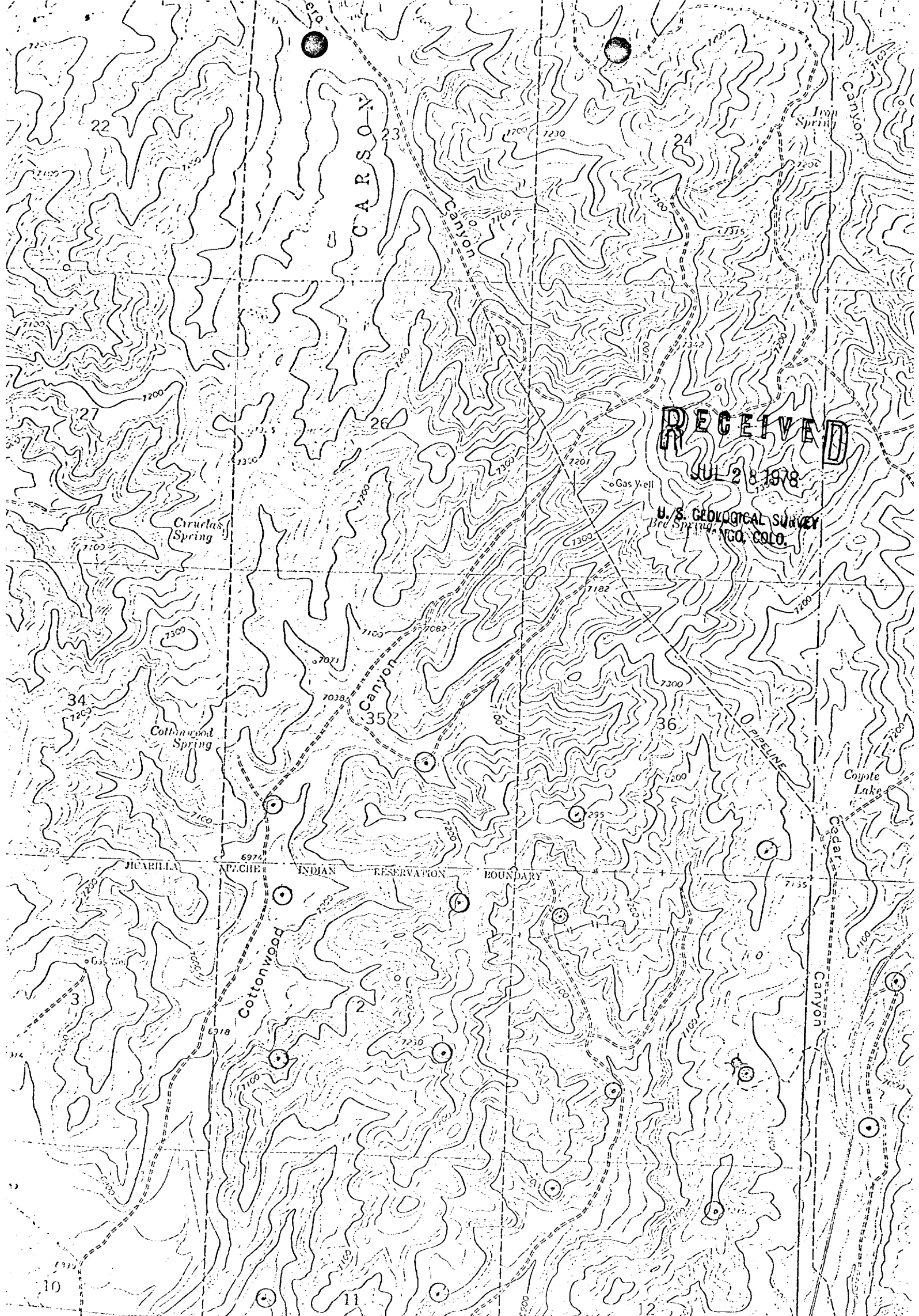
DRILLING SCHEMULE - JICARILLA 101 #1A

Page two

- 10-3/4" surface casing - 140 sxs Class "B" with 3% CaCl₂ (165 cu. ft.)
WOC for 12 hrs. Test to 600 psi before drilling out.
- 7-5/8" intermediate casing- 360 sxs 50/50 poz with 6% gel and .6% Halad 9 (12.8 PPG)
followed by 70 sxs Class "B" with 2% CaCl₂ and .6% Halad 9
(82.6 cu. ft.) Run temp. survey after 8 hrs. WOC 12 hrs.
Test to 1000 psi before drilling out.
- 5-1/2" liner - Precede cement with 40 bbls gelled water. Cement with
410 sxs 50/50 Poz with 6% gel, .6% fluid loss additive and
.3% retarder (606 cu. ft.) 50% excess to circulate liner.

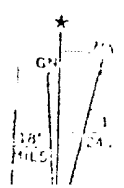
L. O. Van Ryan
District Production Manager

7-25-78



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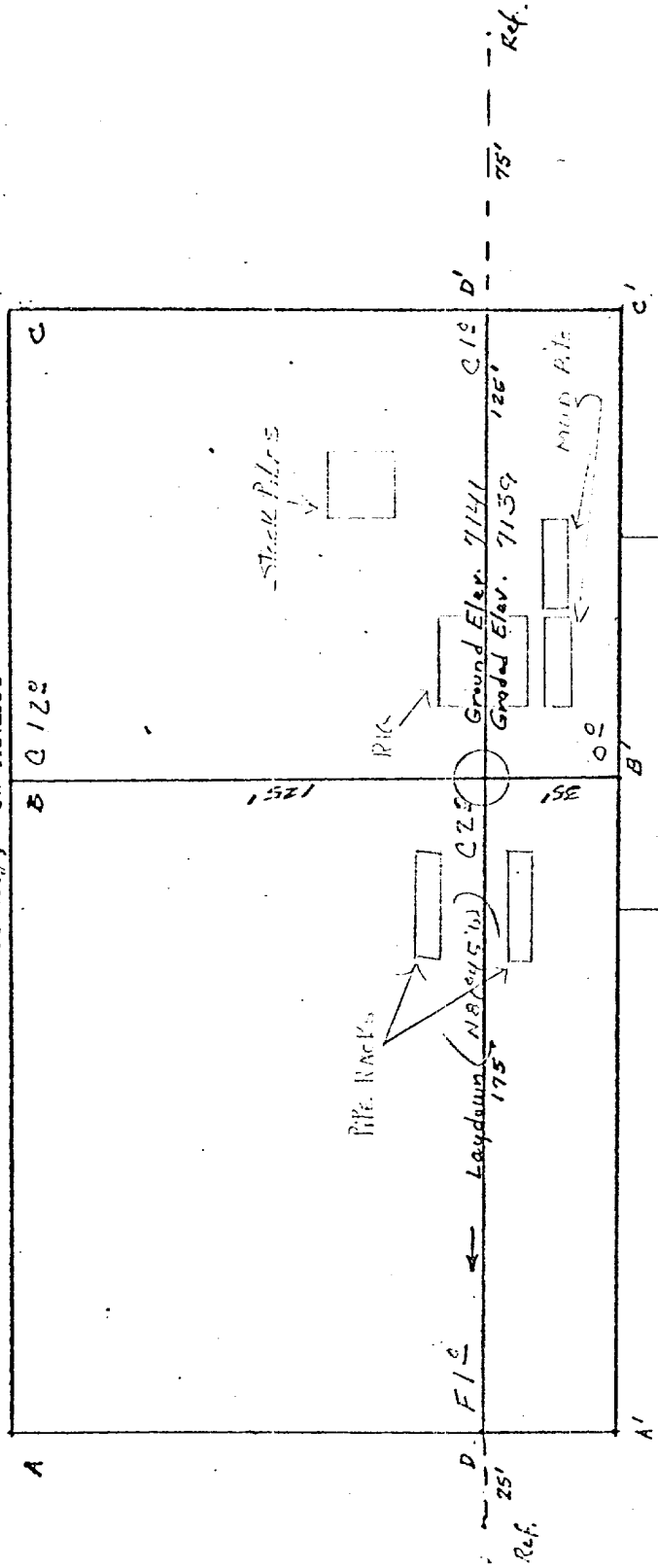
- PROPOSED LOCATION ○
- EXISTING LOCATIONS ⊙
- PROPOSED ROADS - - - -
- EXISTING ROADS ————



Vicinity Map for
 SOUTHLAND ROYALTY CO., JICARILLA 101 #1A
 1820' FSL 1185' FEL Sec 1-T26N-R1W
 RIO ARRIERA COUNTY, N. MEXICO

SCALE 1:50,000
 1" = 1 MILE
 1" = 1.609 KILOMETERS
 1" = 1.609 METERS
 1" = 1.609 DECA METERS
 1" = 1.609 HECTOMETERS
 1" = 1.609 KILOMETERS
 1" = 1.609 MEGAMETERS
 1" = 1.609 GIGAMETERS
 1" = 1.609 TERAMETERS
 1" = 1.609 PETAMETERS
 1" = 1.609 EXAMETERS
 1" = 1.609 ZETAMETERS
 1" = 1.609 YOTTAMETERS

Location Profile for
 SOUTHLAND ROYALTY CO. JICARILLA 101 #1A
 1820' FSL 1185' FEL Sec 1-T26N-R4W
 Rio Arriba County, New Mexico



1 Scale: 1" = 50'

Vert. 1" = 40' Horiz. 1" = 100'

B-B'

7150				
7140				
7130				
7120				

Reserve Pt

Vert. 1" = 40' Horiz. 1" = 100'

B-B'

7150				
7140				
7130				
7120				

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