

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 WILDCAT SINGLE ZONE MULTIPLE ZONE

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 and in accordance with any State requirements.*)
 At surface
 760' FSL & 600' FEL SE SE
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 13 miles SE of Monticello, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 600'

16. NO. OF ACRES IN LEASE 640

17. NO. OF ACRES ASSIGNED TO THIS WELL 80

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

19. PROPOSED DEPTH 6135'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6015' GR

22. APPROX. DATE WORK WILL START* September 10, 1980

5. LEASE DESIGNATION AND SERIAL NO.
 ML28424

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 Federal, Horsehead

9. WELL NO.
 #1-36

10. FIELD AND POOL, OR WILDCAT
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Sec. 36, T35S, R24E

12. COUNTY OR PARISH San Juan

13. STATE Utah

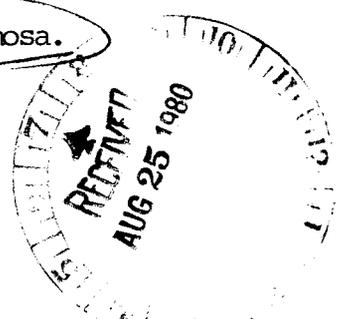
23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8" New	48#, H-40, ST&C	100'	116 sx (137' ³) Cl B & 3% CaCl ₂
12 1/4"	9 5/8" New	36#, K-55, ST&C	1750'	325 sx (466' ³) Cl B & add
8 3/4"	5 1/2" New	15.5#, K-55, ST&C	6135'	420 sx (600' ³) Cl B & add

1. Drill 17 1/2" surface hole and set 13 3/8" casing @ 100', cement to surface.
2. Drill 12 1/4" hole to 1750'. Log BOP checks in daily drilling reports.
3. Run 9 5/8" casing to 1750', cement to cover top of Navajo.
4. Drill 8 3/4" hole to 6135'. Log BOP checks in daily drilling reports.
5. Run electric logs.
6. Run 5 1/2" casing to 6135', cement to cover top of Hermosa.
7. Run cased hole logs, perforate and stimulate as needed.

Exhibits Attached

- A - Location and Elevation Plat
- B - Blowout Preventer Diagram
- C - Cut-Fill Section, Drilling Layout, Production Layout
- D - Vicinity and Proposed Access Map



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 R. E. Field TITLE District Engineer DATE 8-19-80

(This space for Federal or State office use)

PERMIT NO. 43-037-30593

APPROVED BY [Signature] DATE 9/5/80

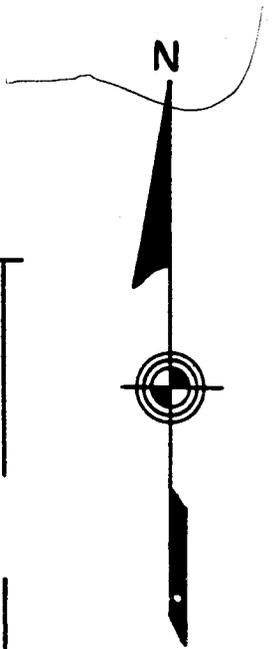
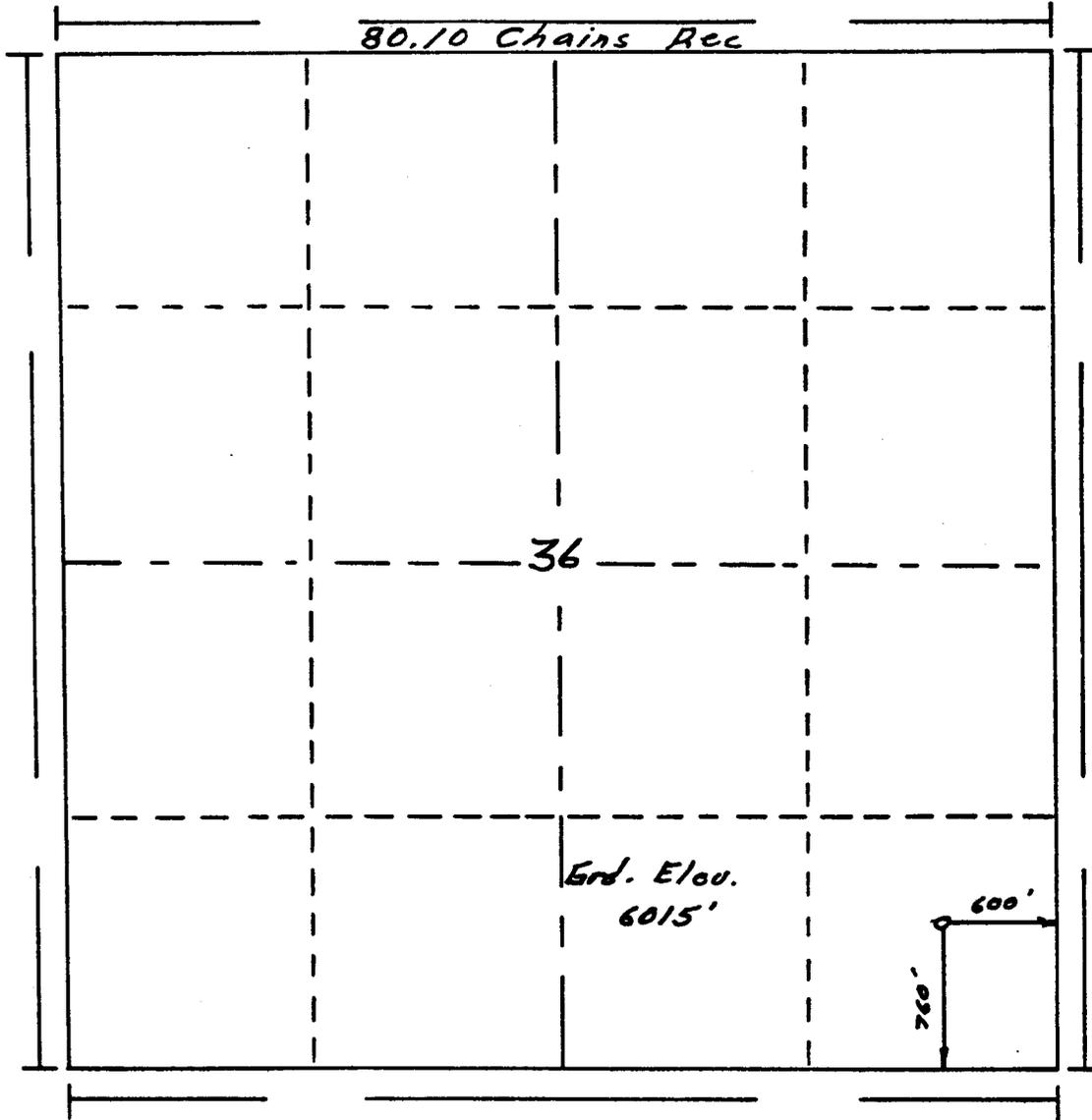
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY THE DIVISION OF OIL, GAS AND MINING
 DATE: 1/5/80
 BY: [Signature]



EXHIBIT "A"
LOCATION AND ELEVATION PLAT

R. 24 E.



T. 35 S.

Scale... 1" = 1000'

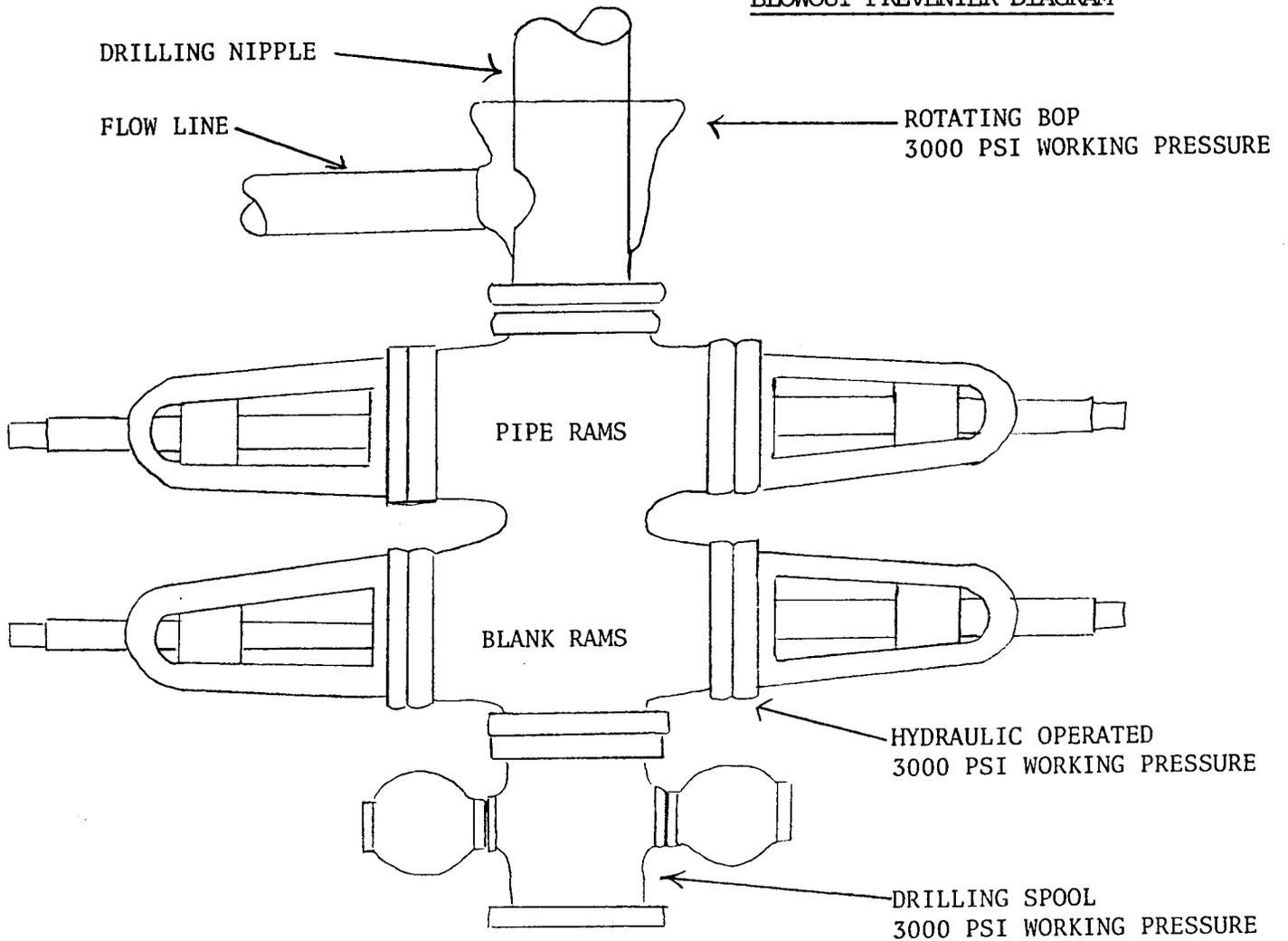
Powers Elevation of Denver, Colorado
 has in accordance with a request from *John Erum*
 for *Southland Royalty*
 determined the location of *#1-36 Horschead Federal*
 to be *760' FSL & 600' FEL* Section 36 Township 35 South
 Range 24 East Salt Lake Meridian
 San Juan County, Utah

I hereby certify that this plat is an
 accurate representation of a correct
 survey showing the location of
#1-36 Horschead Federal

Date: 5 Aug. 1980

J. Nelson
 Licensed Land Surveyor No. 2711
 State of Utah

EXHIB "B"
BLOWOUT PREVENTER DIAGRAM



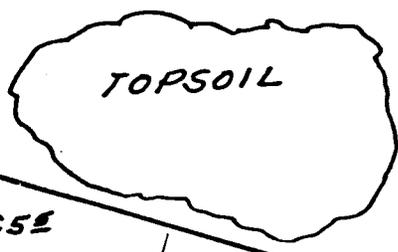
PREVENTERS AND SPOOLS ARE TO HAVE
THROUGH BORE OF 6" - 3000 PSI OR LARGER

SOUTHLAND ROYALTY COMPANY
FEDERAL HORSEHEAD #1-36

SOUTHLAND ROYALTY COMP.



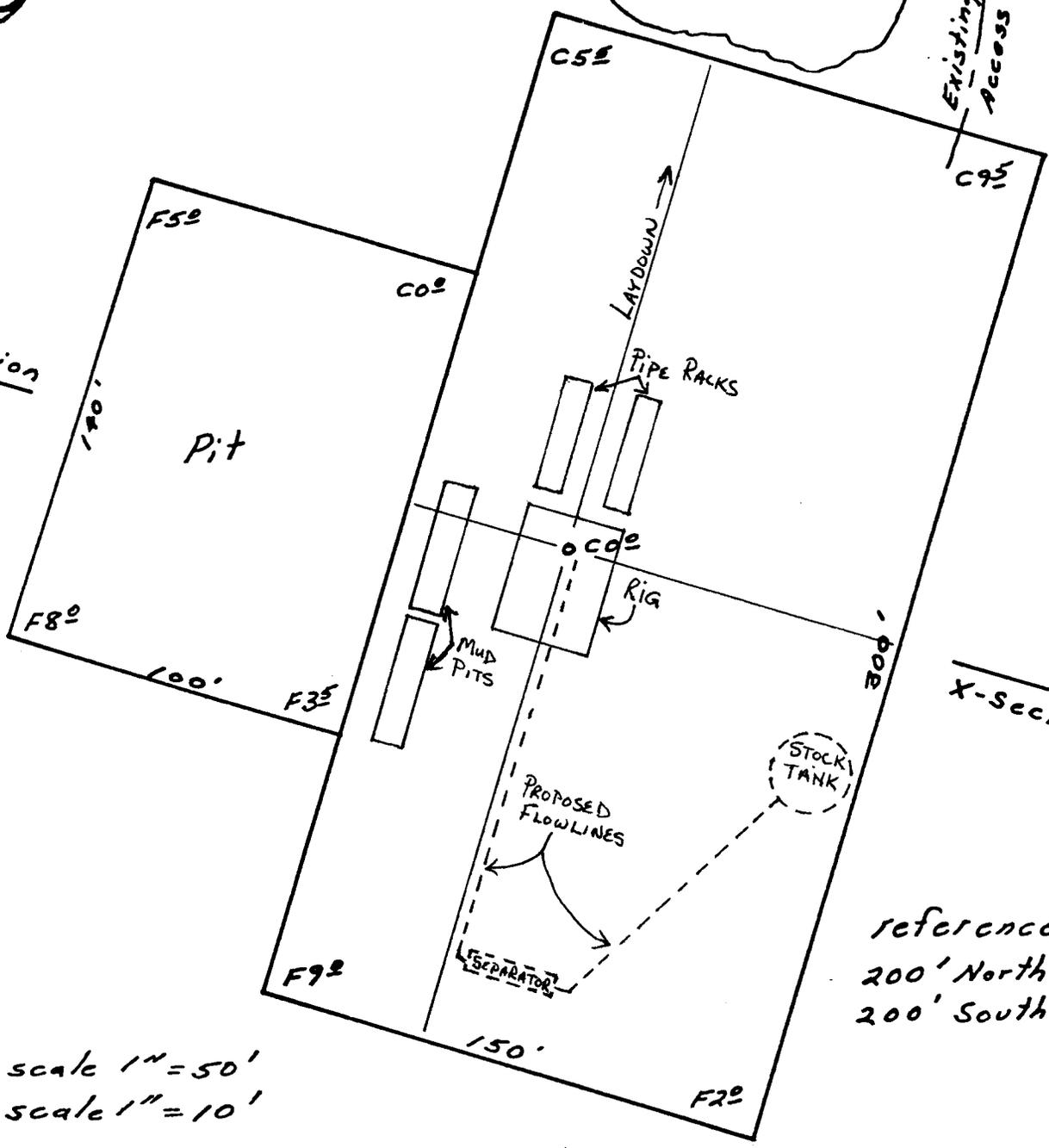
POWERS ELEVATION



Existing trail
Access



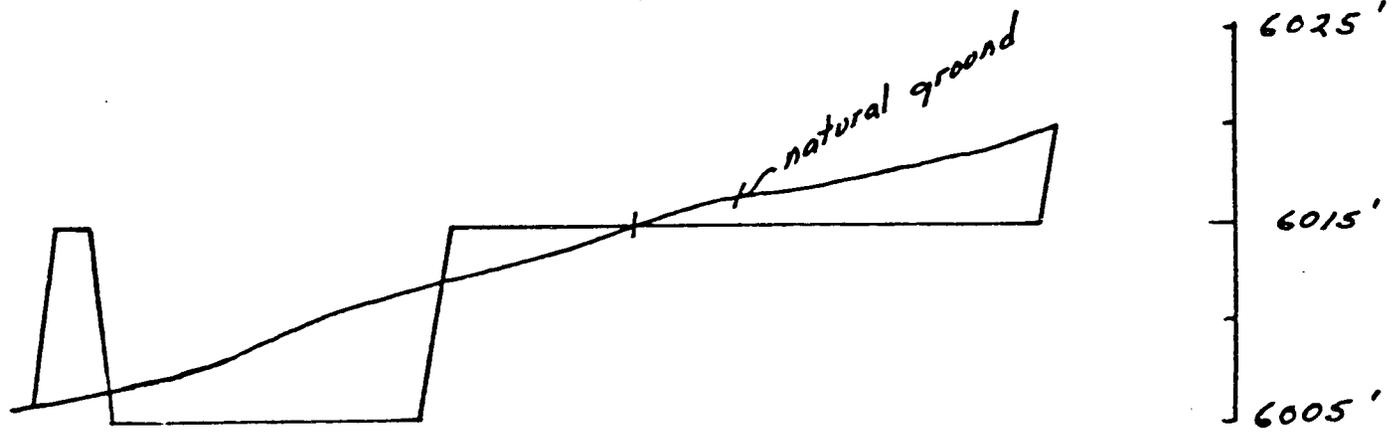
X-Section



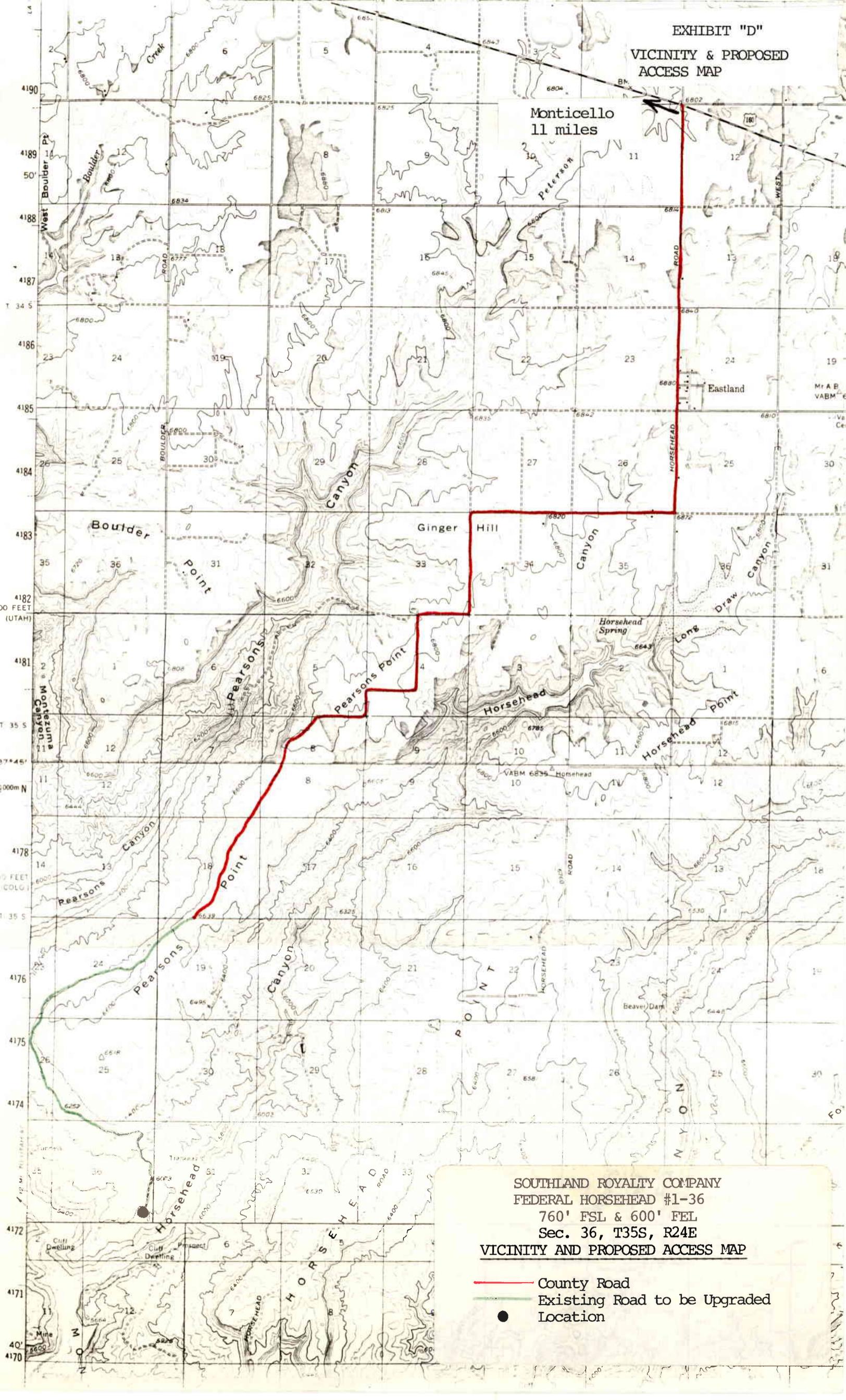
X-Section

reference stakes:
200' North - 6022' E1.
200' South - 6005' E1.

Horz scale 1" = 50'
Vert scale 1" = 10'

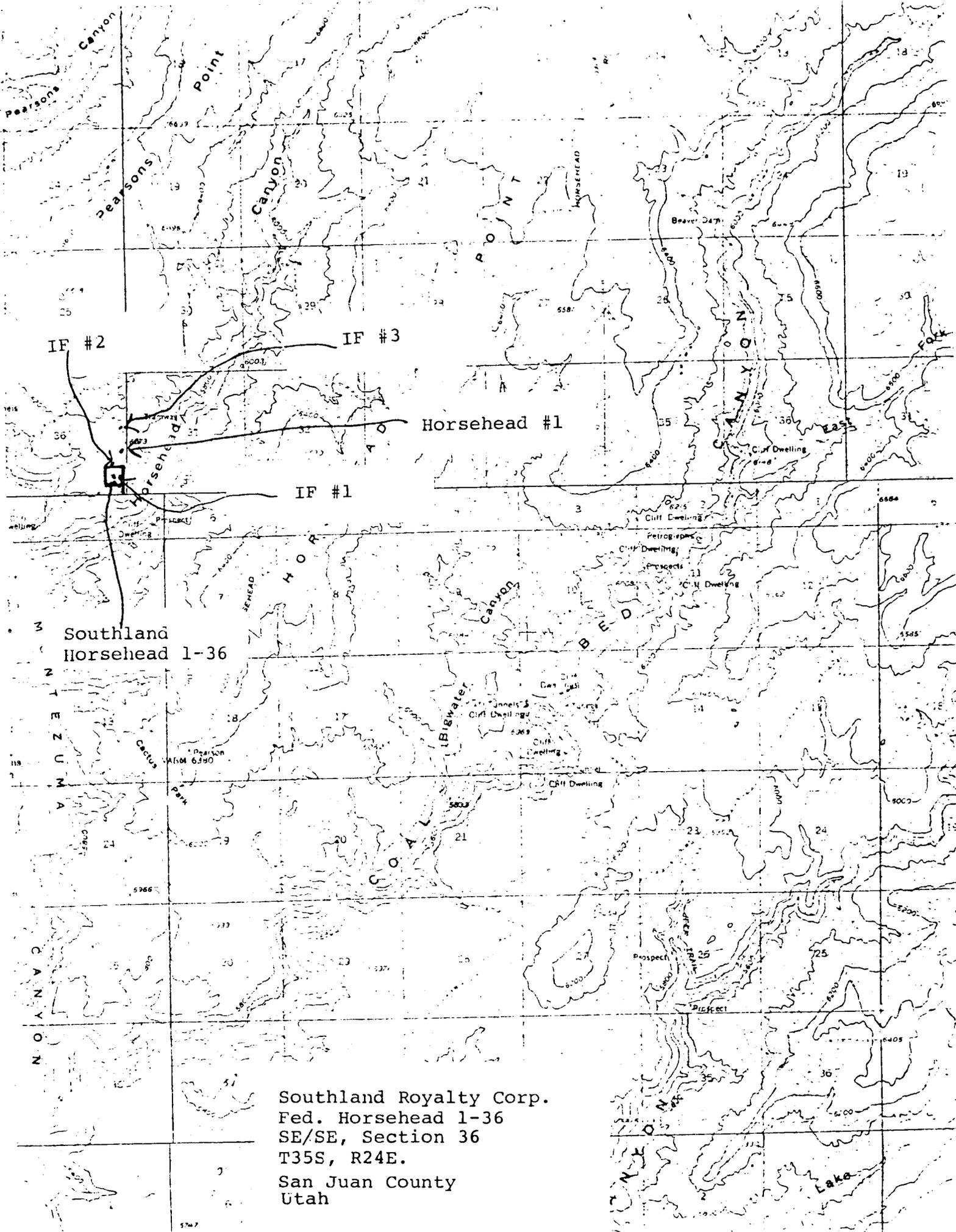


Monticello
11 miles



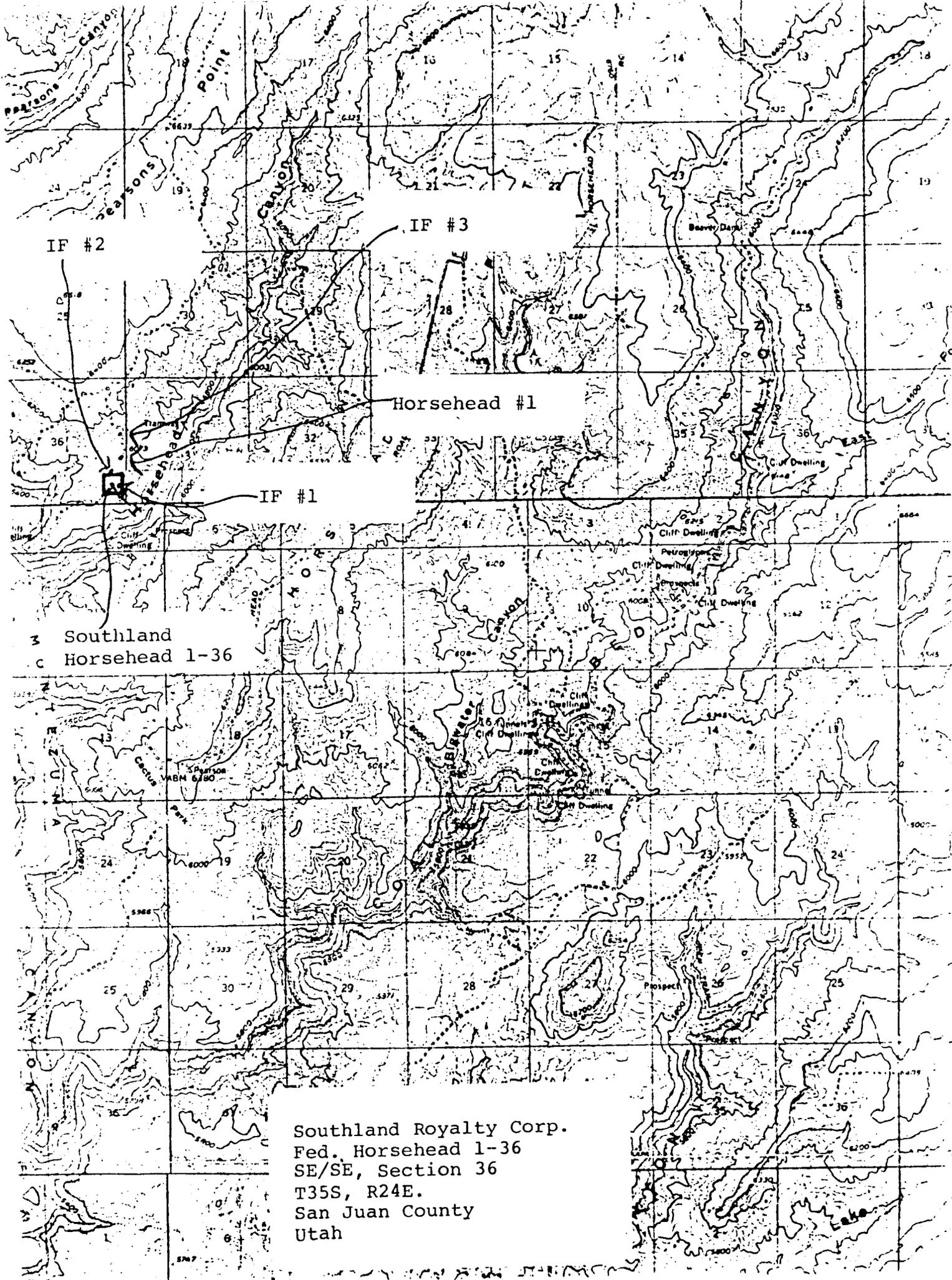
SOUTHLAND ROYALTY COMPANY
 FEDERAL HORSEHEAD #1-36
 760' FSL & 600' FEL
 Sec. 36, T35S, R24E
 VICINITY AND PROPOSED ACCESS MAP

- County Road
- Existing Road to be Upgraded
- Location



Southland
Horsehead 1-36

Southland Royalty Corp.
Fed. Horsehead 1-36
SE/SE, Section 36
T35S, R24E.
San Juan County
Utah



IF #2

IF #3

Horsehead #1

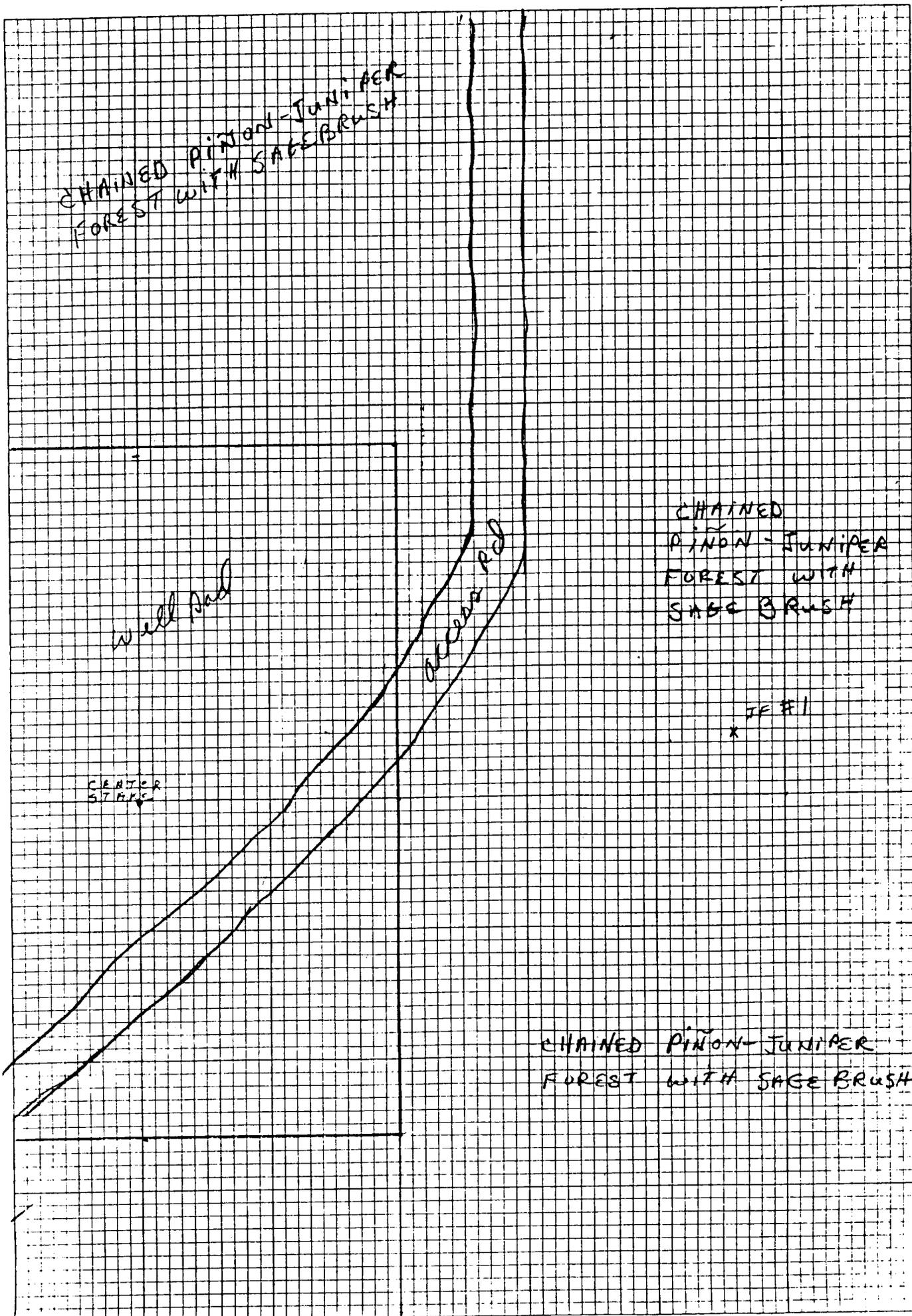
IF #1

3 Southland
c Horsehead 1-36

Southland Royalty Corp.
Fed. Horsehead 1-36
SE/SE, Section 36
T35S, R24E.
San Juan County
Utah

SKETCH MAP

1" = 20 M N ↑



CHAINED PINON-JUNIPER FOREST WITH SAGE BRUSH

WELL PAD

CENTER STRIPS

WELLS RD

CHAINED PINON-JUNIPER FOREST WITH SAGE BRUSH

IF #1

CHAINED PINON-JUNIPER FOREST WITH SAGE BRUSH

U.S.
Department of the Interior
Bureau of Land Management
Utah State Office

Summary Report of
Inspection for Cultural Resources

BLM Report ID No. -
Report Acceptable Yes No
Mitigation Acceptable Yes No
Comments: _____

1. Cultural Report or Project Federal Horsehead 1-36

2. Development Company Southland Royalty

3. BLM Mini Permit No. 4. BLM Antiquities Permit No. 80-UT-033

5. Report Date August 22 1980 6. Field Work Dates August 13, 1980

7. Responsible Institution Powers Elevation

8. Fieldwork Location: TWN 35S Range 14E Section(s) 36
TWN Range Section(s)

9. Resource Area Other: Monticello San Juan
County

BO = Bonneville, WA = Wasatch, HR = House Range, WS = Warm Springs,
SE = Sevier River, HM = Henry Mtns., BR = Beaver River, DY = Dixie,
KA = Kanab, ES = Escalante, SJ = San Juan, GR = Grand, PR = Price River,
SR = San Rafael, DM = Diamond Mountain, BC = Book Cliffs.

10. Description of Examination Procedures: A 400 foot radius area (10 acres) from the centerstake was surveyed by walking a series of parallel east/west transects at intervals of 20 meters. The access road was surveyed 25 feet on either side of the center for 9/10 of a mile from its junction with an existing bladed road running roughly east/west near the northern section line of Section 36 in the NE/NE.

11. Linear Miles Surveyed
and/or
Definable Acres Surveyed 10 acres
and/or
*Legally Undefinable Acres Surveyed
(*A parcel hard to cadastrally locate i.e., center of section)

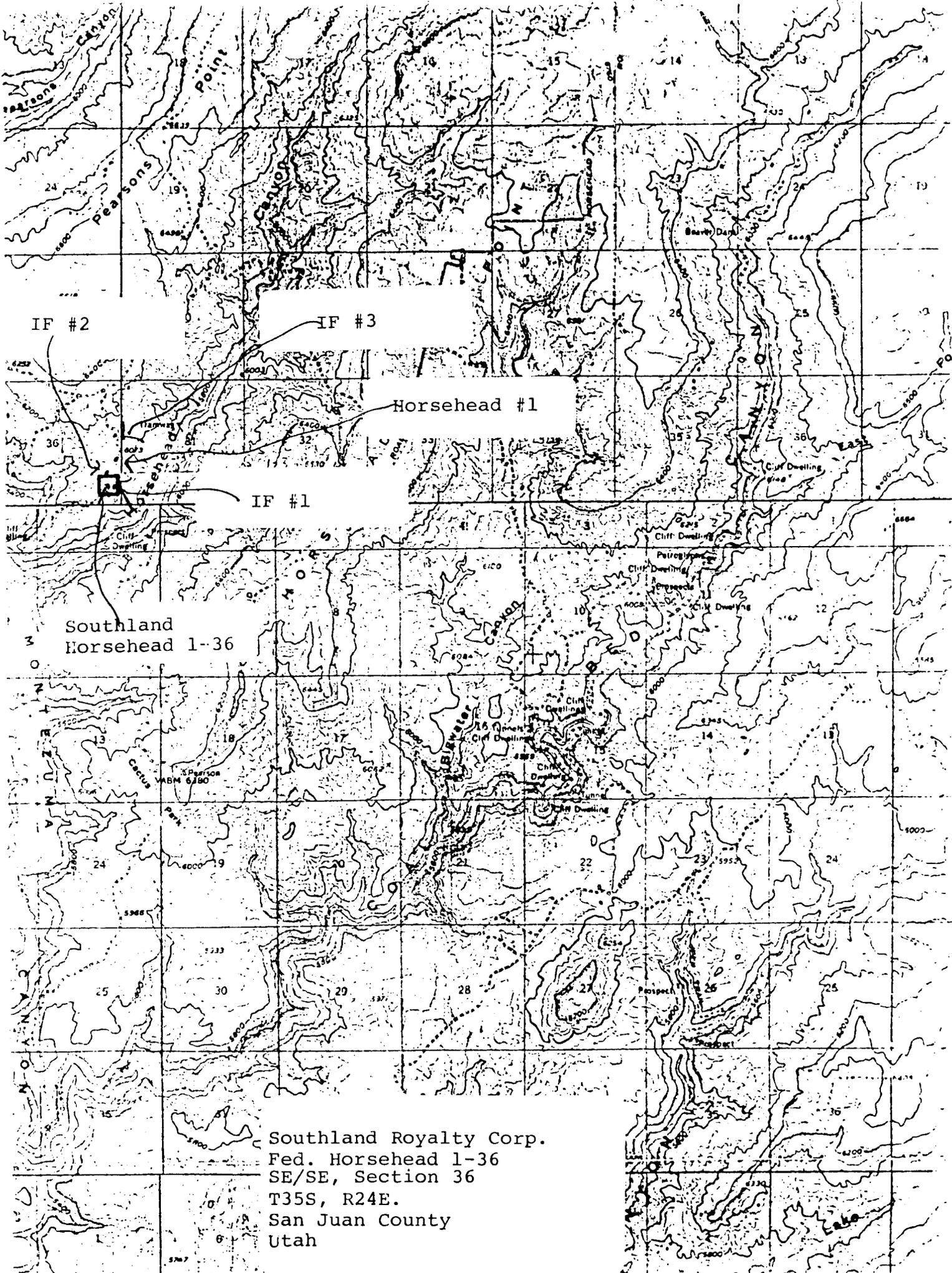
12. Inventory Type T
R = Reconnaissance
I = Intensive
S = Statistical Sample

13. Description of Findings (attach appendices, if appropriate): 3 isolated artifacts and 1 site were located in the project area. (see attached forms)
14. Number Sites Found: 3
No sites = 0
15. Collection: Y Y = Yes, N = No

16. Actual/Potential National Register Properties Affected:

17. Conclusion/Recommendations:
An alternate access road of approximately a quarter of a mile in length was flagged around the site to the west. However, because of the high density of sites in the area and the extremely high probability for buried cultural deposits we are recommending monitoring of the well ar

18. Signature of person in direct charge of field work: Brian O'Neil
19. Signature and Title of Institutional Officer Responsible: Marcia J. Tate
Aug 24, 1980
Principal Surveyor
UT 8100-3 (4/79)



IF #2

IF #3

Horsehead #1

IF #1

Southland
Horsehead 1-36

Southland Royalty Corp.
Fed. Horsehead 1-36
SE/SE, Section 36
T35S, R24E.
San Juan County
Utah

9 CULTURAL PERIOD/AFFILIATION

89 90 91 92 93 94 95 96

PA - Paleo Indian
AR - Arc
FR - Fro
BM - Basketmaker
OT - Other

PU - Pueblo/Anasazi
EA - Euro-American
UP - Ute-Plata
NA - Navaho
UN - Unknown

OT=Other

1 SUB PERIOD =

97 113

ARTIFACTS OBSERVED: Lithic X Ceramic X Bone Metal Charcoal Glass

DESCRIPTION diagnostic pottery and projectile point

2 SURFACE COLLECTED X Y=Yes, N=No, U=Unknown

3 DESCRIPTION OF ARTIFACTS COLLECTED: diagnostic pottery and projectile point

34 CURATORIAL DISPOSITION Southern Utah St. College

5 AVERAGE ARTIFACT DENSITY: Per

6 ENVIRONMENTAL - TOPOGRAPHIC SITUATION

Level Terrain Cave Mesa edge X Talus
Broken Terrain Slope Cliff Edge Other
Canyon Bottom Ridge X Overhang
Bench/Terrace Ledge Rim

7 DIRECTION SITE FACES: south Flat 38 GROUND SLOPE 1 degree south

9 ELEVATION OF SITE: 5400 feet 40 ORIGIN OF SOILS: sand clay mixed with sandstone talus, cobbles and slabs

1 WATER RESOURCES: Stream Spring Seep Other None Perm. Inter. X

2 NAME OF WATER SOURCE Horsehead Canyon

3 VEGETATION ON SITE: Pinon Juniper, sagebrush, porman tea, mountain mahogany, snakeweed, grass

4 VEGETATION SURROUNDING SITE: same

5 DESCRIPTION/REMARKS:

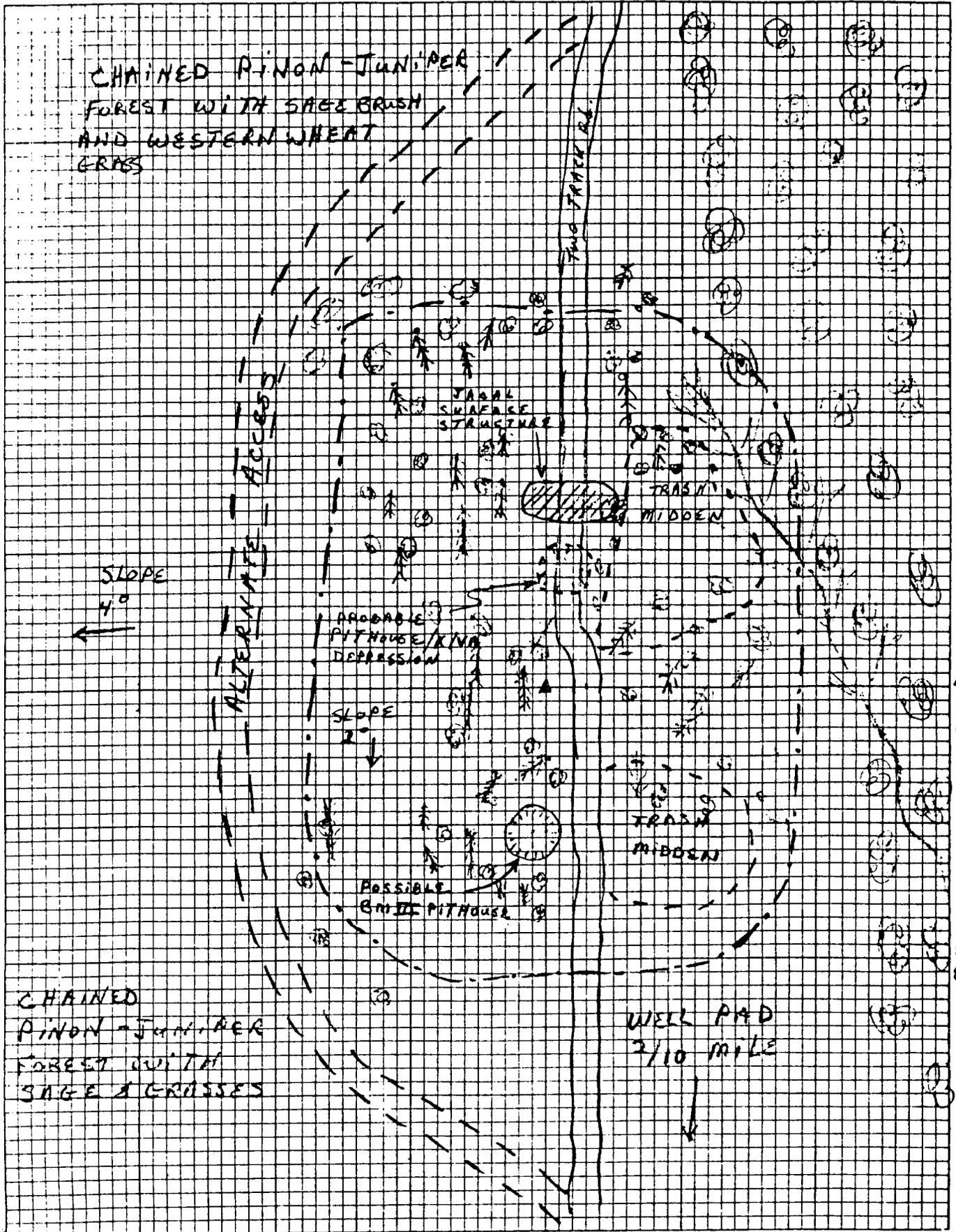
(Attach sketch map, photos, and xerox of topographic map with T., R., Scale, Quad. name, marked project & survey areas.)

SITE SKETCH MAP

Indicate site boundaries and features and all major topographic features, permanent modern features, and vegetation zones. Give distances and directional data and include north arrow and scale.

1" = 20 m

N ↑



Δ = DRT
 ⊙ = TR
 ↗ = CHAIN P-J TREES
 --- VISIBL SURFAC EXTEN

ISOLATED FIND RECORD

Site No. _____ Temp. No. Isolated Find Horsehead #1

State Utah County San Juan

LOCATION: 1/4, NE 1/4, SE 1/4, SE 1/4, Sec. 36, T 35S, R 24E

PM Salt Lake UTM 1 2; 6 5 6 2 5 0 mE 4 1 7 2 3 0 0mN

100 ft. F E L, 900 ft. F S L

USGS quad Monument Canyon 7.5'//15'

Date 1957

Attach copy of portion of USGS quad. Show location clearly.

ARCHAEOLOGICAL DATA: IF dimensions 1m x 1m Artifacts: Mano and

Metate fragment. Mano appears to be of the two hundred type, the

fragment measuring 15cm X 10cm X 2.3cm. Grinding evident on the

ventral side only. Metate fragment is a slab type measuring 43cm X 18cm -
X 8cm

Inferred function/description: Probably a Pinon nut gathering and pro-

cessing station. No other artifacts associated. No evidence of any

surface or subsurface features or structures.

Cultural affiliation San Juan Anasayi Time period Unknown

ENVIRONMENTAL DATA: Elevation 6020 ft. 1834.896 m.

Soil Light reddish brown fine loamy sand. Depth variable 50cm to 4m.

Topography 1st Bench above Horsehead Slope & direction: Site 2° SE

surrounding 2-5° SE
Canyon

Water sources (names, elevs. distances, directions, perm. or not) Horsehead

Canyon, 5400ft, 1600ft, SW, intermittent

Vegetation on site Pinon-juniper forest with mountain mahogany, mormon tea,

sagebrush, grasses, cactus and snakeweed
Surrounding vegetation Same

I.F. located 300ft at 84° from center stake.

ADDITIONAL INFORMATION:

This area has been chained, resulting in a great deal of surface disturbance by the dragging of the trees. Consequently, artifact relationships and surface integrity are unreliable. Horticulture would be possible in selected areas along the top of the bench, specifically next to the washes. However, the canyon bottoms would provide the most reliable water sources. This isolated find is probably related to the nearby site.

Collection yes _____ no describe _____
Repository _____ Landowner Utah State land
Report title _____ Recorder B. O'Neil Date 8/12/80

ISOLATED FIND RECORD

Site No. _____ Temp. No. Isolated Find Horsehead #2

State Utah County San Juan

LOCATION: _____ $\frac{1}{4}$, NW $\frac{1}{4}$, SE $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 36, T35S, R 24E

PM Salt Lake UTM 1 2; 6 5 6 1 5 0mE 4 1 7 2 4 5 0mN

700 ft. F E L, 1100 ft. F S L

USGS quad Monument Canyon 7.5' (15')

Date 1957

Attach copy of portion of USGS quad. Show location clearly.

ARCHAEOLOGICAL DATA: IF dimensions 1m x 1m Artifacts: Slab lined
roasting or storage pit composed of 4 visible upright slabs arranged
in an arc which is open to the south and east. High probability that
the missing slabs were damaged during chaining operation.

Inferred function/description: Storage or roasting pit. No associated
pottery or lithic visible on surface.

Cultural affiliation San Juan Anasazi Time period Unknown

ENVIRONMENTAL DATA: Elevation 6010 ft. 1831.848 m.

Soil Lt reddish brown fine loamy sand mixed with sandstone talus

Topography 1st bench above Horsehead Slope & direction: Site 2° south
Canyon.
surrounding variable 2-5° south.

Water sources (names, elevs. distances, directions, perm. or not) Horsehead
Canyon, 5400ft. $\frac{1}{2}$ mile, SW, intermittant

Vegetation on site Pinon-juniper, mountain mahogany, mormon tea, sagebrush,
snakeweed, grasses and cacti.
Surrounding vegetation Same

IF #2 located 149.04m at 348° from center stake

ADDITIONAL INFORMATION:

This area has been chained and reseeded with western wheat grass. Consequently, surface integrity of artifacts is disturbed. This slab lined pit is probably associated with site "Horsehead #1" located on the road to the west.

Collection yes _____ no describe _____

Repository _____ Landowner Utah State land

Report title _____ Recorder B. O'Neil Date 8/12/80

SKETCH MAP

1" = 20m



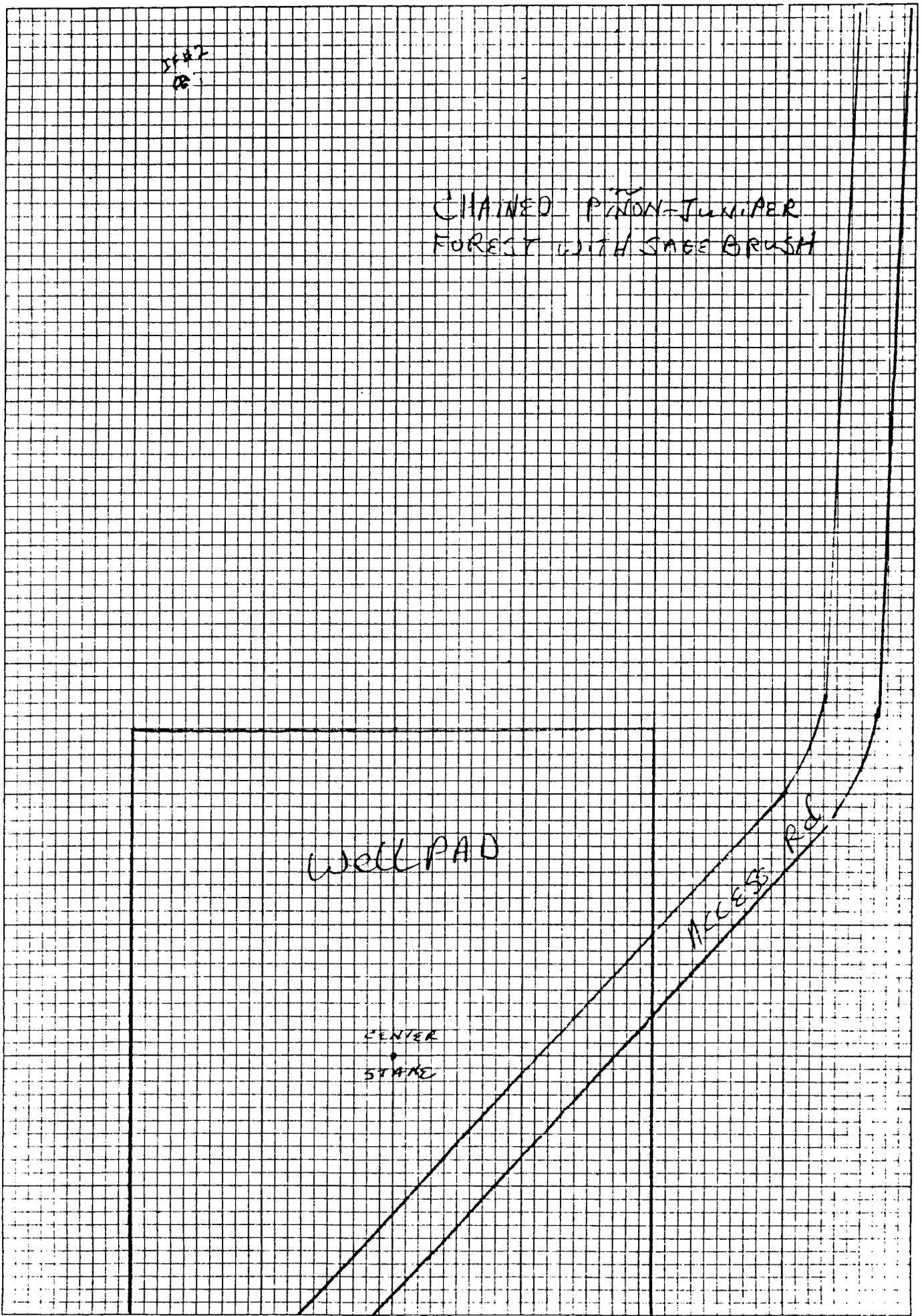
SF#2
R

CHAINED PINON-JUNIPER
FOREST WITH SAGE BRUSH

Well PAD

ACCESS RD

CENTER
STAKE



ISOLATED FIND RECORD

Site No. _____ Temp. No. Isolated find, Horsehead #3

State Utah County San Juan

LOCATION: _____ $\frac{1}{4}$, SE $\frac{1}{4}$, SE $\frac{1}{4}$, NE $\frac{1}{4}$, Sec. 36, T 35S, R 24E

PM Salt Lake UTM 1 2; 6 5 6 2 0 0 mE 4 1 7 2 9 5 0mN

200 ft. F E L, 2300 ft. F N L

USGS quad Monument Canyon 7.5' 15'

Date 1957

Attach copy of portion of USGS quad. Show location clearly.

ARCHAEOLOGICAL DATA: IF dimensions 10m x 6m Artifacts: Pot sherds

composed of plain gray, and a few white sherds. Temper varies from
coarse, crushed igneous and sand, to crushed sherds and sand with the
grey wares to fine sand in the white ware. In all, fragment of 3
different pots.

Inferred function/description: No diagnostic rims or designs. They were
probably ollas. Looks like a standard pot break. No evidence of
surface or subsurface features. Probably associated with site to south.

Cultural affiliation San Juan Anasazi Time period PI to PII

ENVIRONMENTAL DATA: Elevation 6040 ft. 1840.99 m.

Soil Light reddish brown fine sandy loamy clay.

Topography Ridge on 1st bench above Slope & direction: Site 2° south
Horsehead Canyon
surrounding 5-8° west

Water sources (names, elevs. distances, directions, perm. or not) Horsehead Canyon
5400ft., $\frac{1}{2}$ mile SE, intermittent

Vegetation on site Chained pinon-juniper, sagebrush, mountain mahogany,
mormon tea, snakeweed, grasses and cacti.
Surrounding vegetation Same

ADDITIONAL INFORMATION:

This area has been chained and reseeded with western wheat grass. As a result of the chaining activities the upper soils are heavily disturbed and surface artifact integrity is questionable.

Pot break is composed of 10 sherds from at least 3 different pots. No diagnostics visible. No evidence of surface or subsurface structures in arroyo walls. Area is very rocky from sandstone outcrops to north and east.

Collection yes _____ no describe _____
Repository _____ Landowner Utah State land
Report title _____ Recorder B. O'Neil Date 8/13/80

SKETCH MAP

1" = 10m

N ↑



Southland Royalty Corp.
Federal Horsehead 1-36
SE/SE of Section 36
T35S, R24E, San Juan County, UT



Looking west across the site at
the Abajo Mountains



Looking north at site Horsehead #1

Southland Royalty Corp.
Fed. Horsehead 1-36
SE/SE of Section 36
T35S, R24E, San Juan County, UT



Looking south at site
Horsehead #1

**CONFIRMATION - CONTACT US IMMEDIATELY IF
THIS DOES NOT AGREE WITH YOUR ORDER**

Inv. No. _____
Date _____
P.O. No. _____
AFE No. _____

Telephone order to stake location and determine
ground elevation on the following location; received from:

Southland - John P. ... (504) 328-1447

On July 31, 1980 at 8 ^{am}/_{pm} at our Bayou Office

OPERATOR Southland

WELL NO. 1-30 WELL NAME Federal Horseshoe

LOCATION SE SEC. 30 T. 35 R. 24

COUNTY San Juan STATE MT GR. ELEV. _____

REMARKS (OIL/GAS; TD _____)

Staked and Elevation _____

Archaeology _____

The above order and location description were read back to the above named party
by: G. Fratley/cc

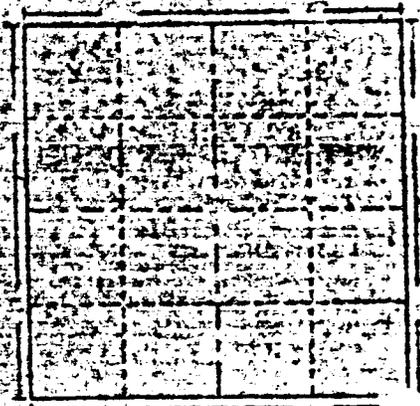
No. PLATS TO: Mr. John P. ... - Southland
P.O. Box 670, Farmington, WI 27401

No. INVOICES TO: Same

BILLING INFORMATION SUBSCRIBER NON-SUBSCRIBER

HOURS	RATE	CHARGE	MISCELLANEOUS

MINIMUM CHARGE COMPLETED BY: _____



Date work required: Ready to stake

Date work completed: _____

Approved by District Engineer: _____

Phone: _____

Office: _____

Area: CO 8130

Phone: 752-5752

Phone: (903) 752-3217

Engineer's Remarks: _____

OFFICE USE ONLY

STAKE LOCATION _____

ELEVATION _____

TOTAL _____

white - client • yellow - engineer • pink - file

POOR COPY



POWERS ELEVATION

OIL WELL ELEVATIONS AND LOCATIONS
CHERRY CREEK PLAZA, SUITE 1201
800 SOUTH CHERRY STREET
DENVER, COLORADO 80222
PHONE NO. 303/321-2217

August 27, 1980



✓Mr. John Krum
Southland Royalty
P.O. Box 570
Farmington, NM 87401

Dear Mr. Krum:

Enclosed is the cultural resource survey report for the following location:

Southland

Federal Horsehead 1-36

A BLM Class-III pedestrian survey and inspection of existing records were performed for this location. No cultural resources were found either in the literature or pertinent site files.

One site and three isolated artifacts were located in the project area, along the access road. An alternate access of approximately a quarter of a mile was flagged around the site to the west. However, because of the high density of sites in the area and the extremely high probability for buried cultural resources we are recommending that the construction of the well pad and access be monitored.

If you have any questions regarding this report please contact Eva Bailey at this office.

Sincerely,

Marcia J. Tate

Marica J. Tate
Principal Investigator
Assistant Manager, Heritage

cc: State Archaeologist, UT
BLM, Richard Fike
BLM, San Juan Resource area
BLM, Moab District, Bruce Lauthan
Brian O'Neil, District Archaeologist

MJT/eb

A DIVISION OF PETROLEUM INFORMATION CORPORATION/A SUBSIDIARY OF A.C. NIELSEN COMPANY

305-325-1841
John ~~Crane~~

**** FILE NOTATIONS ****

DATE: Sept 2, 1980
OPERATOR: Southland Royalty Co.
WELL NO: Horsehead ~~206~~ ^{stab} #1-36
Location: Sec. 36 T. 35S R. 24E County: San Juan

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

API Number 43-037-30593

CHECKED BY:

Petroleum Engineer: _____

Director: OK ~~in accordance with~~ Rule C-3 ~~and~~
provided bond filed with State Land Board.

Administrative Aide: _____

APPROVAL LETTER:

Bond Required: Survey Plat Required:
Order No. _____ O.K. Rule C-3

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

Lease Designation State Plotted on Map

Approval Letter Written

Hot Line P.I.

#1
Contract
upon bond

September 10, 1980

Southland Royalty Company
P.O. Drawer 570
Farmington, New Mexico 87401

Re: Well No. Horsehead State #1-36
Sec. 36, T. 35S, R. 24E.,
San Juan County, Utah

Insofar as this office is concerned, approval to drill the above referred to g/o is hereby granted in accordance with Rule C-3, General Rules and Regulations and Rules of Practice and Procedure. However, said approval is contingent upon a drilling and plugging bond being filed with Utah Division of State Lands prior to the spudding of this well.

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

MICHAEL T. MINDER - Petroleum Engineer
Office: 533-5771
Home: 876-3001

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-037-30593.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Cleon B. Feight
Director

btm

cc: Donald Prince

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

5. LEASE DESIGNATION AND SERIAL NO.

ML28424

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.)

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Horsehead State

9. WELL NO.

1-36

10. FIELD AND POOL, OR WILDCAT

Unnamed Field

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

Section 36-T35S-R24E

12. COUNTY OR PARISH 13. STATE

San Juan

Utah

1. OIL WELL GAS WELL OTHER Wildcat

2. NAME OF OPERATOR
Southland Royalty Company

3. ADDRESS OF OPERATOR
P.O. Drawer 570, Farmington, New Mexico 87401

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

760' FSL & 600' FEL

14. PERMIT NO.

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

6015' GR

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

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) Spud and Casing Report

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

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.)*

9/30/80 Spudded 6-3/4" pilot hole at 11:00 A.M. 9-30-80 and drilled to total depth of 130'. Reamed to 7-7/8". Reamed to 17-1/2" hole.

10/4/80 Ran 3 joints (129') of 13-3/8", 48#, H-40 casing set at 133'. Cemented with 140 sacks of Class "B" with 1/4# gel flake per sack and 3% CaCl₂. Plug down at 9:00 P.M. 10-04-80. Cement circulated to surface.

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

SIGNED R. E. Field

TITLE District Engineer

DATE October 7, 1980

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

DATE _____

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

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, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
760' FSL & 600' FEL

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, OR, etc.)
6015' GR

5. LEASE DESIGNATION AND SERIAL NO.
ML-28424

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Horsehead State

9. WELL NO.
#1-36

10. FIELD AND POOL, OR WILDCAT
Unnamed Field

11. SEC., T., R., M., OR BLK. AND SURVEY OR ABBA
Section 36, T35S, R24E

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input checked="" type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	(Other) _____

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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

Southland Royalty Company proposes to plug and abandon this well as follows:

- 60 sack Class "B" cement plug from 5975' - 5765'.
- 30 sack Class "B" cement plug from 4600' - 4495'.
- 60 sack Class "B" cement plug from 1685' - 1605'.
- 10 sack Class "B" cement plug from 33' - surface.

APPROVED BY THE DIVISION
OF OIL, GAS, AND MINING
DATE: 11/6/80
BY: [Signature]

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

SIGNED [Signature] TITLE District Engineer DATE 10-29-80

(This space for Federal or State office use)

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

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS CONSERVATION

1588 WEST NORTH TEMPLE
 SALT LAKE CITY, UTAH 84116
 328-5771

State Lease No. ML28424
 Federal Lease No. _____
 Indian Lease No. _____
 Fee & Pat. _____

REPORT OF OPERATIONS AND WELL STATUS REPORT

STATE Utah COUNTY San Juan FIELD/LEASE Wildcat/Horsehead Stat

The following is a correct report of operations and production (including drilling and producing wells) for the month of:
October, 1980.

Agent's Address P. O. Drawer 570
Farmington, New Mexico 87401
 Phone No. 505-325-1841

Company Southland Royalty Company
 Signed [Signature]
 Title District Production Manager

Sec. and ¼ of ¼	Twp.	Range	Well No.	Days Produced	Barrels of Oil	Gravity	Cu. Ft. of Gas (In thousands)	Gallons of Gasoline Recovered	Barrels of Water (if none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
36 SE/SE	35S	24E	1-36							Spudded Well 10/04/80. Drilled. TD 5975'. Installed Dry Hole Marker 10/28/80.

GAS: (MCF)
 Sold _____
 Flared/Vented _____
 Used On/Off Lease _____

OIL or CONDENSATE: (To be reported in Barrels)
 On hand at beginning of month _____
 Produced during month _____
 Sold during month _____
 Unavoidably lost _____
 Reason: _____
 On hand at end of month _____

DRILLING/PRODUCING WELLS: This report must be filed on or before the sixteenth day of the succeeding month following production for each well. Where a well is temporarily shut-in, a negative report must be filed. **THIS REPORT MUST BE FILED IN DUPLICATE.**

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

5. LEASE DESIGNATION AND SERIAL NO.

ML-28424

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Horsehead State

9. WELL NO.

#1-36

10. FIELD AND POOL, OR WILDCAT

Unnamed Field-Wildcat

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

Section 36, T35S, R24E

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

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

b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RESVR. Other Abandoned

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 and in accordance with any State requirements)*

At surface
760' FSL & 600' FEL SE SE
At top prod. interval reported below

At total depth

14. PERMIT NO. 43-037-30593 DATE ISSUED 9-5-80

15. DATE SPUDDED 9-30-80 16. DATE T.D. REACHED 10-28-80 17. DATE COMPL. (Ready to prod.) 10-29-80 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 6015' GR 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 5975' 21. PLUG, BACK T.D., MD & TVD ----- 22. IF MULTIPLE COMPL., HOW MANY* ----- 23. INTERVALS DRILLED BY ----- ROTARY TOOLS 0'-5975' CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* ----- 25. WAS DIRECTIONAL SURVEY MADE Deviation

26. TYPE ELECTRIC AND OTHER LOGS RUN GR-SP/DILL, GR/CNL-FDC w/Caliper 27. WAS WELL CORED Yes

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	48#	133'	17 1/2"	140 SX	
9 5/8"	36#	1688'	12 1/4"	360 SX	

29. LINER RECORD

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

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

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

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
		Producing or shut-in <u>P&A</u>

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

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

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records
SIGNED R.E. Fielder TITLE District Engineer DATE 10-30-80

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

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

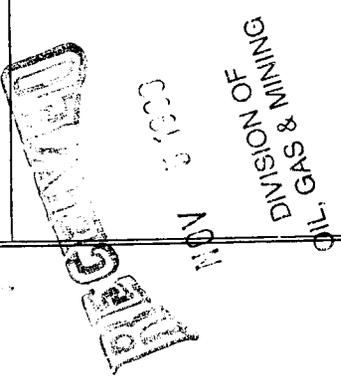
Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS
Mossback	2250'			
Moenkopi	2348'			
Cutler	2784'			
Hermosa	4558'			
Ismay	5597'			
Desert Creek	5826'			
Salt	5964'			
TD	5975'			
Cored	5925'	5975'	Shale, anhydrite, salt	

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

38. GEOLOGIC MARKERS

NAME	MEAS. DEPTH	TOP
		

FILE IN TRIPLICATE
FORM OGC-8-X

RECEIVED

SEP 15 1980

FARMINGTON DISTRICT

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

RECEIVED

NOV 5 1980

DIVISION OF
OIL, GAS & MINING

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number Horsehead State #1-36 (API# 43-037-30593)

Operator Southland Royalty Company Address P. O. Drawer 570, Farmington, NM 87401

Contractor Veco Drilling Company Address P. O. Box 1705, Grand Junction, CO 81501

Location NE 1/4 SE 1/4 Sec. 36 T. 35S R. 24E County San Juan

Water Sands

	<u>Depth</u>		<u>Volume</u>	<u>Quality</u>
	From	To	Flow Rate or Head	Fresh or Salty
1.	<u>NO flowing water sands were encountered while drilling this well.</u>			
2.	<u></u>			
3.	<u></u>			
4.	<u></u>			
5.	<u></u>			

(Continue of reverse side if necessary)

<u>Formation Tops</u>	Mossback	2250'	Ismay	5597'
	Moenkopi	2348'	Desert Creek	5826'
	Cutler	2784'	Salt	5964'
<u>Remarks</u>	Hermosa	4558'	TD	5975'

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

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

5. LEASE DESIGNATION AND SERIAL NO.
ML-28424

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Horsehead State

9. WELL NO.
#1-36

10. FIELD AND POOL, OR WILDCAT
Unnamed Field

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 36, T35S, R24E

12. COUNTY OR PARISH 18. STATE
San Juan Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL GAS WELL OTHER

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 and in accordance with any State requirements.* See also space 17 below.)
At surface
760' FSL & 600' FEL

14. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, OR, etc.)
6015' GR

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	(Other) _____

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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

Plugged well as follows:
10-29-80 Cemented 60 sack Class "B" plug from 5975' - 5765'.
Cemented 30 sack Class "B" plug from 4600' - 4495'.
Cemented 60 sack Class "B" plug from 1685' - 1605'.
Cemented 10 sack Class "B" plug from 33' - surface.
Released rig @ 11:55 PM, 10-29-80.



NOV 3 1980

DIVISION OF OIL, GAS & MINING

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

SIGNED R. E. Felder TITLE District Engineer DATE 10-30-80

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

<p>1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER</p> <p>2. NAME OF OPERATOR <u>Southland Royalty Company</u></p> <p>3. ADDRESS OF OPERATOR <u>P. O. Drawer 570, Farmington, New Mexico 87401</u></p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17, below.) At surface <u>760' FSL & 600' FEL</u></p>		<p>5. LEASE DESIGNATION AND SERIAL NO. <u>ML28424</u></p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</p> <p>7. UNIT AGREEMENT NAME</p> <p>8. FARM OR LEASE NAME <u>Horsehead State</u></p> <p>9. WELL NO. <u>1-36</u></p> <p>10. FIELD AND POOL, OR WILDCAT <u>Wildcat</u></p> <p>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <u>Section 36, T35S, R24E</u></p>
<p>14. PERMIT NO.</p>	<p>15. ELEVATIONS (Show whether DF, RT, GR, etc.) <u>6015' GR</u></p>	<p>12. COUNTY OR PARISH <u>San Juan</u></p> <p>13. STATE <u>Utah</u></p>

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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

10-28-80 Spotted plugs as follows:

Plug #1 from 5975' to 5765', cemented with 60 sacks of Class "B".
 Plug #2 from 4600' to 4495', cemented with 30 sacks of Class "B".
 Plug #3 from 1785' to 1605', cemented with 60 sacks of Class "B".
 Plug #4 from 33' to surface, cemented with 10 sacks of Class "B".
 Installed dry hole marker.

10-28-80 VERBAL APPROVAL FROM CLEON FEIGHT TO JOHN CRUM.

RECEIVED

NOV 14 1980

DIVISION OF
OIL, GAS & MINING

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

SIGNED R. E. Field TITLE District Engineer DATE November 6, 1980

(This space for Federal or State office use)

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

November 19, 1980

Southland Royalty Company
P.O. Drawer 570
Farmington, New Mexico 87401

RE: Well No. Horsehead State #1-36
Sec. 36, T. 35S, R. 24E.,
San Juan County, Utah

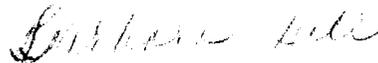
Gentlemen:

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

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

Thank you for your cooperation relative to the above.

Very truly yours,



Barbara Hill
Clerk-Typist

/bjh