



*Ranger Oil Company*

TELEPHONE  
(303)773-0550

TELEX  
45-698

P. O. BOX 22004 DENVER, COLORADO 80222

May 2, 1983

District Supervisor  
Bureau of Land Management  
P. O. Box 3768  
Grand Junction, CO 81502

Attn: Mr. Paul Bodenberger

RE: Filing Sundry Notice Form 9-331  
Ranger Oil Company  
Ranger Federal 12-17 -- *W. fl File*  
NW SW Sec. 17 T39N R19W  
1450 FSL & 990 FWL  
Dolores County, Colorado

Dear Mr. Bodenberger:

Enclosed are five copies of Sundry Notice Form 9-331 for the above-referenced well location. Three copies of Form 9-1123, Designation of Operator, has previously been furnished to your office. The signed copy of the Rehabilitation Plan by the surface owner will be submitted in the immediate future.

Yours truly,

Ranger Oil Company

Donald P. Canada  
Exploration Manager

DPC:aut  
Enclosures

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. C-27913
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
2. NAME OF OPERATOR Ranger Oil Company			7. UNIT AGREEMENT NAME N/A
3. ADDRESS OF OPERATOR 9301 Southwest Freeway #400, Houston, Texas 77074			8. FARM OR LEASE NAME Federal
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1450' FSL & 990' FWL (NWSW) At proposed prod. zone Same			9. WELL NO. 12-17
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* Location is 13.0 miles southwest of Dove Creek, Colorado			10. FIELD AND POOL, OR WILDCAT Papoose Canyon Field
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 990'		16. NO. OF ACRES IN LEASE 160	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 17 T39N R19W
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. ---		19. PROPOSED DEPTH 6300'	12. COUNTY OR PARISH 13. STATE Dolores CO
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6645' GR			17. NO. OF ACRES ASSIGNED TO THIS WELL 160
			20. ROTARY OR CABLE TOOLS Rotary
			22. APPROX. DATE WORK WILL START* May 25, 1983

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	54.5# K-55 ST&C	200'	125 sxs. Class "B" cmt. to surf.
12 1/4"	8 5/8" New	24# K-55 ST&C	2100'	750 sxs. lite & 250 sxs. *
7 7/8"	5 1/2" New	15.5# K-55 ST&C	6300'	400 sxs. 50-50 poz-mix + additive

1. Drill 17 1/2" hole and set 13 3/8" surface casing to 200' with good returns.
  2. Drill 12 1/4" hole and set 8 5/8" intermediate casing to 2100' with good returns.
  3. Log B.O.P. checks in daily drill reports and drill 7 7/8" hole to 6300'.
  4. Run tests if warranted and run 5 1/2" casing if productive.
  5. Run logs, as needed, and perforate and stimulate as needed.
- \*Class "B" with 2% CaCl<sub>2</sub>

EXHIBITS ATTACHED:

- "A" & "A<sub>1</sub>" Location and Elevation Plat with reference stakes and elevations
- "B" The Ten-Point Compliance Program
- "C" The Blowout Preventer Diagram
- "D" The Multi-Point Requirements for A.P.D.
- "E" & "E<sub>1</sub>" Access Road Maps to Location
- "F" Radius Map of Field
- "G" & "G<sub>1</sub>" Drill Pad Layout, Production Facilities & Cut-Fill Cross Sections
- "H" Drill Rig Layout
- "I" Cultural Resources Survey Report

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 Donald R. Canale TITLE Exploration Manager DATE 5-3-83

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

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

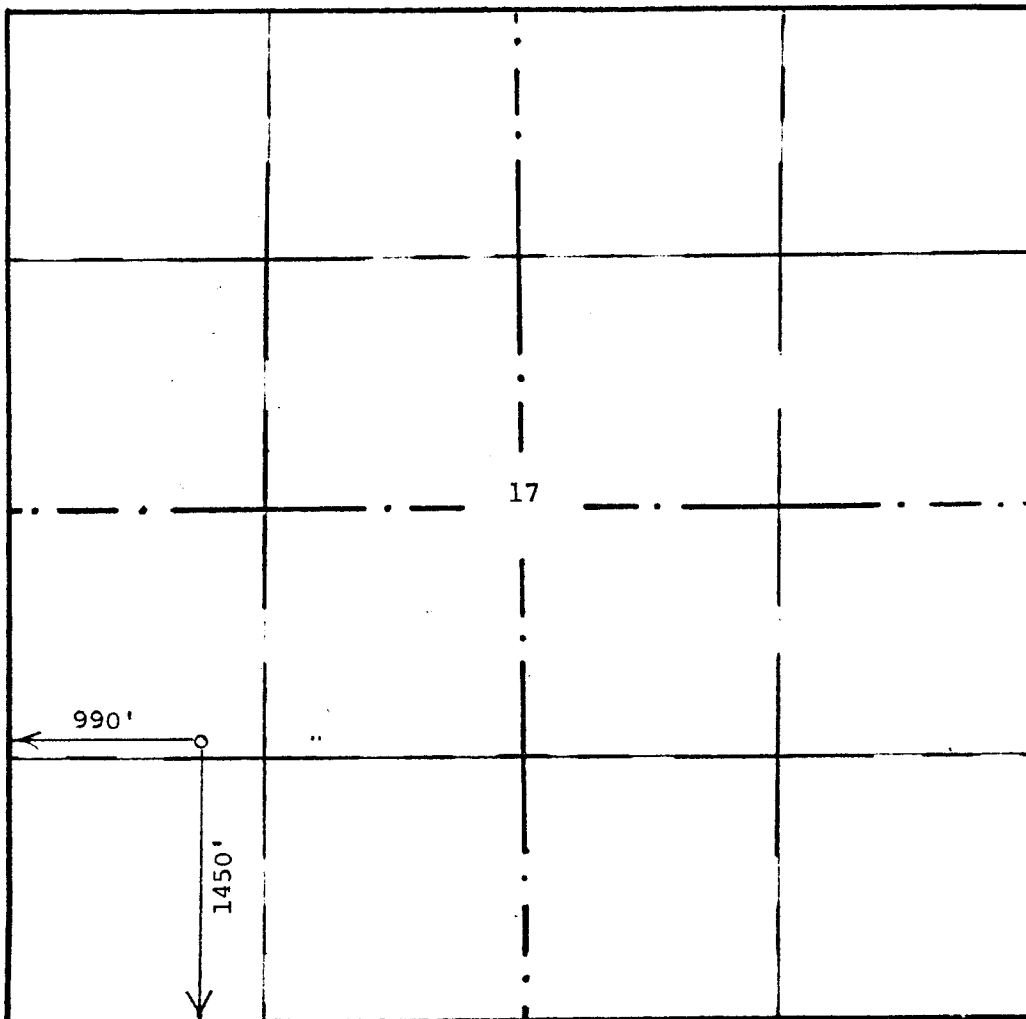
CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side



POWERS ELEVATION

Well Location Plat



1"=1000'

Operator Ranger Oil Co.		Well name Ranger Federal 12-17	
Section 17	Township 39 North	Range 19 West	Meridian NMPM
Footages 1450' FSL & 990' FWL			County/State Dolores, CO
Elevation 6645'	Requested by Joe White		
<p>The above plat is true and correct to the best of my knowledge and belief.</p> <p>27 April 1983</p> <p><i>Gerald G. Huddleston</i> Gerald G. Huddleston, L.S.</p> <p>17490</p> <p>GERALD G. HUDDLESTON REGISTERED LAND SURVEYOR STATE OF COLORADO</p>			

EXHIBIT "A1"  
Reference Stakes and Elevations



POWERS ELEVATION

12-17 Federal

N



1" = 50'

6695'

6650'

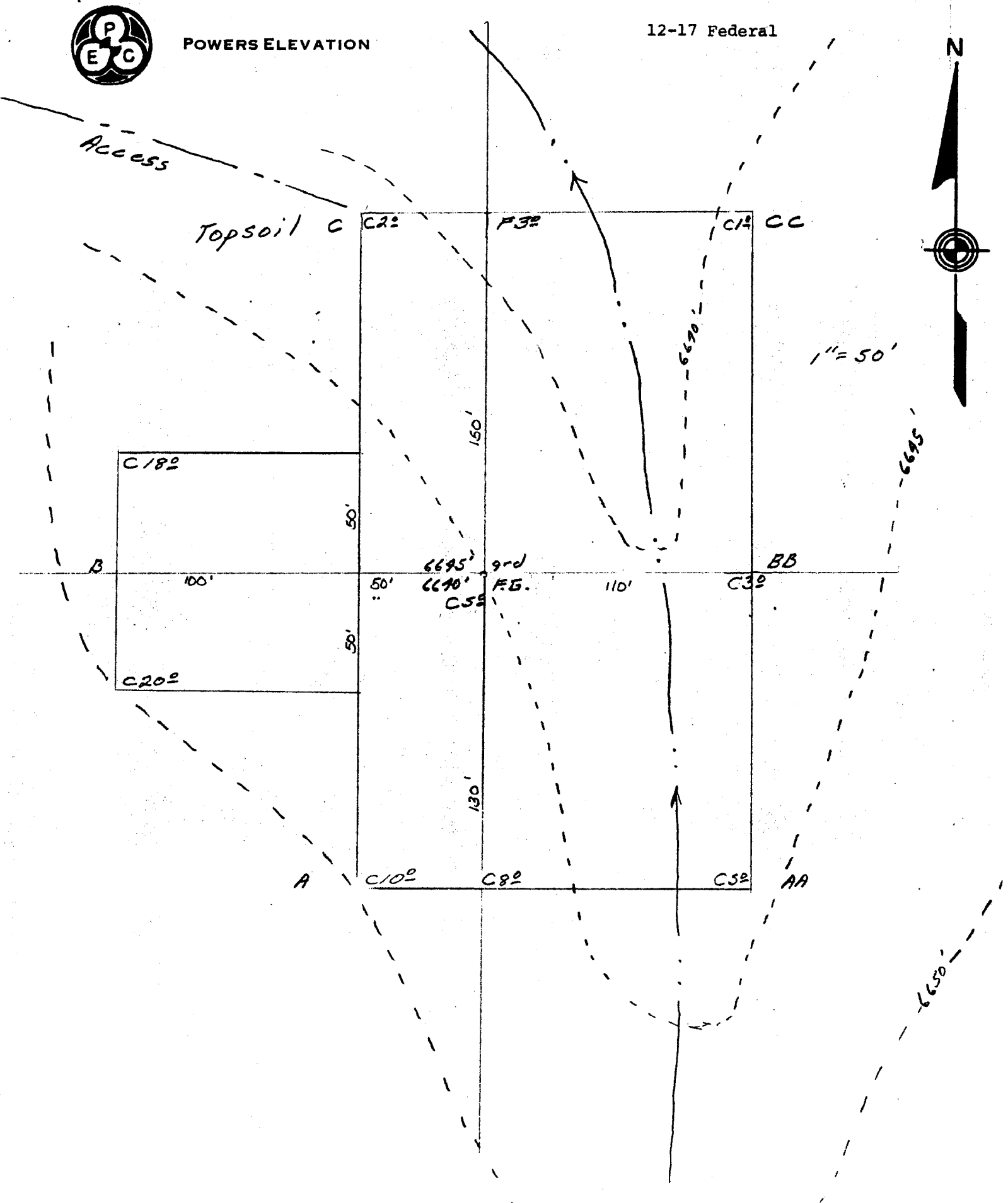


EXHIBIT "B"

TEN-POINT COMPLIANCE PROGRAM

OF NTL-6 APPROVAL OF OPERATIONS

Attached to Form 9-331C  
Ranger Oil Company  
Ranger Federal 12-17  
NW SW Sec. 17 T39N-R19W  
1450 FSL 990 FWL  
Dolores County, Colorado

1. The Geologic Surface Formation

The surface formation is the Dakota.

2. Estimated Tops of Important Geologic Markers

Navajo	1035'
Chinle	1935'
Hemosa	4625'
Ismay	5915'
Gothic Shale	6100'
Desert Creek	6160'
Chimney Rock Shale	6255'
Total Depth	6300'

3. Estimated Depths of Anticipated Water, Oil, Gas or Minerals

Navajo	1035'	Water
Desert Creek	6160'-6255'	Oil

4. The Proposed Casing Program

<u>HOLE SIZE</u>	<u>INTERVAL</u>	<u>SECTION LENGTH</u>	<u>SIZE (OD)</u>	<u>WEIGHT, GRADE &amp; JOINT</u>	<u>NEW OR USED</u>
17 1/2	0-200'	200'	13 3/8"	54.5# K-55 ST&C	New
12 1/4"	0-2100'	2100'	8 5/8"	24# K-55 ST&C	New
7 7/8"	0-6300'	6300'	5 1/2"	15.5# K-55 ST&C	New

Cement Program:

Surface Casing: 125 sacks, class "B", cement to surface

Intermediate Casing: 750 sacks Lite, plus additives followed by 250 sacks Class B 2%  $\text{CaCl}_2$

Production Casing: 400 sacks, 50-50 pox mix plus additives

5. The Operator's Minimum Specifications for Pressure Control

EXHIBIT "C" is a schematic diagram of the blowout preventer equipment. The BOP's will be hydraulically tested to half of working pressure after nipping up and after any use under pressure. Pipe rams will be operationally checked each 24-hour period, as will blind rams and annular preventer each time pipe is pulled out of the hole. Such checks of BOP will be noted on daily drilling reports.

Accessories to BOP will include an upper and lower kelly cock, floor safety valve, drill string BOP and choke manifold with pressure rating equivalent to the BOP stack.

6. The Type and Characteristics of the Proposed Circulating Muds

Mud system will be gel-chemical with adequate stocks of sorptive agents on site to handle possible spills of fuel and oil on the surface. Heavier muds will be on location to be added if pressure requires. Increase mud weight to 10.5-11.0# through Desert Creek. Have enough weight material on location to build 12.0# if necessary.

<u>DEPTH</u>	<u>TYPE</u>	<u>WEIGHT #/gal.</u>	<u>VISCOSITY sec./qt.</u>	<u>FLUID LOSS cc.</u>
0-200'	Water	8.3	---	---
200'-2100'	Water & gel+ Barite LCM as needed	9.5	---	---
2100'-6300'	Water, gel, soda ash, caustic soda and barite and LCM as needed	10.0	40	Less than 10

7. The Auxiliary Equipment to be Used

- (a) A upper and lower kelly cock will be kept in the string.
- (b) A float will be used at the bit.
- (c) Both a mud logging unit and detecting devices will be monitoring the system from 5000' to TD. Mud will also be monitored visually.
- (d) A stabbing valve will be on the floor to be stabbed into the drill pipe when kelly is not in the string.

8. The Testing, Logging and Coring Programs to be Followed

- (a) One DST will be run in the Desert Creek formation.
- (b) The logging program will consist of the following:

Dual Induction	2100' - T.D.
BHC Density / CNL	2100' - T.D.
Dipmeter	5900' - T.D.
- (c) Depending on conditions, a 60' core will be cut in the Desert Creek.
- (d) Completion program will be small acid treatment. Appropriate Sundry Notice will be submitted for approval.

9. Any Anticipated Abnormal Pressures or Temperatures

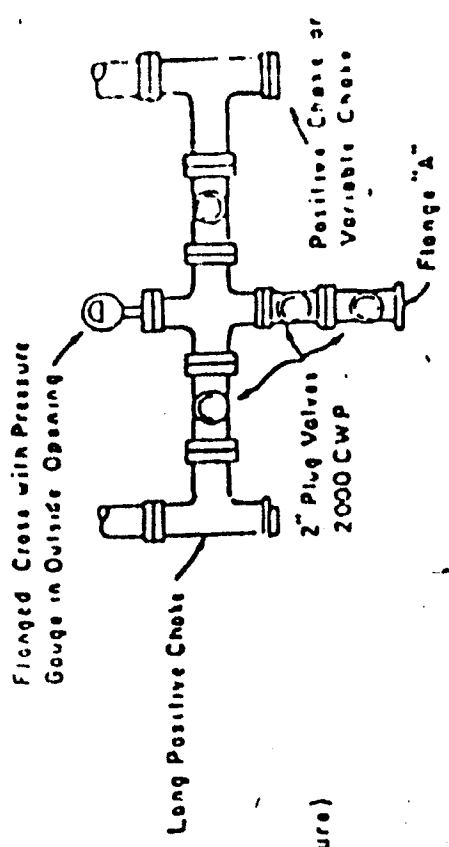
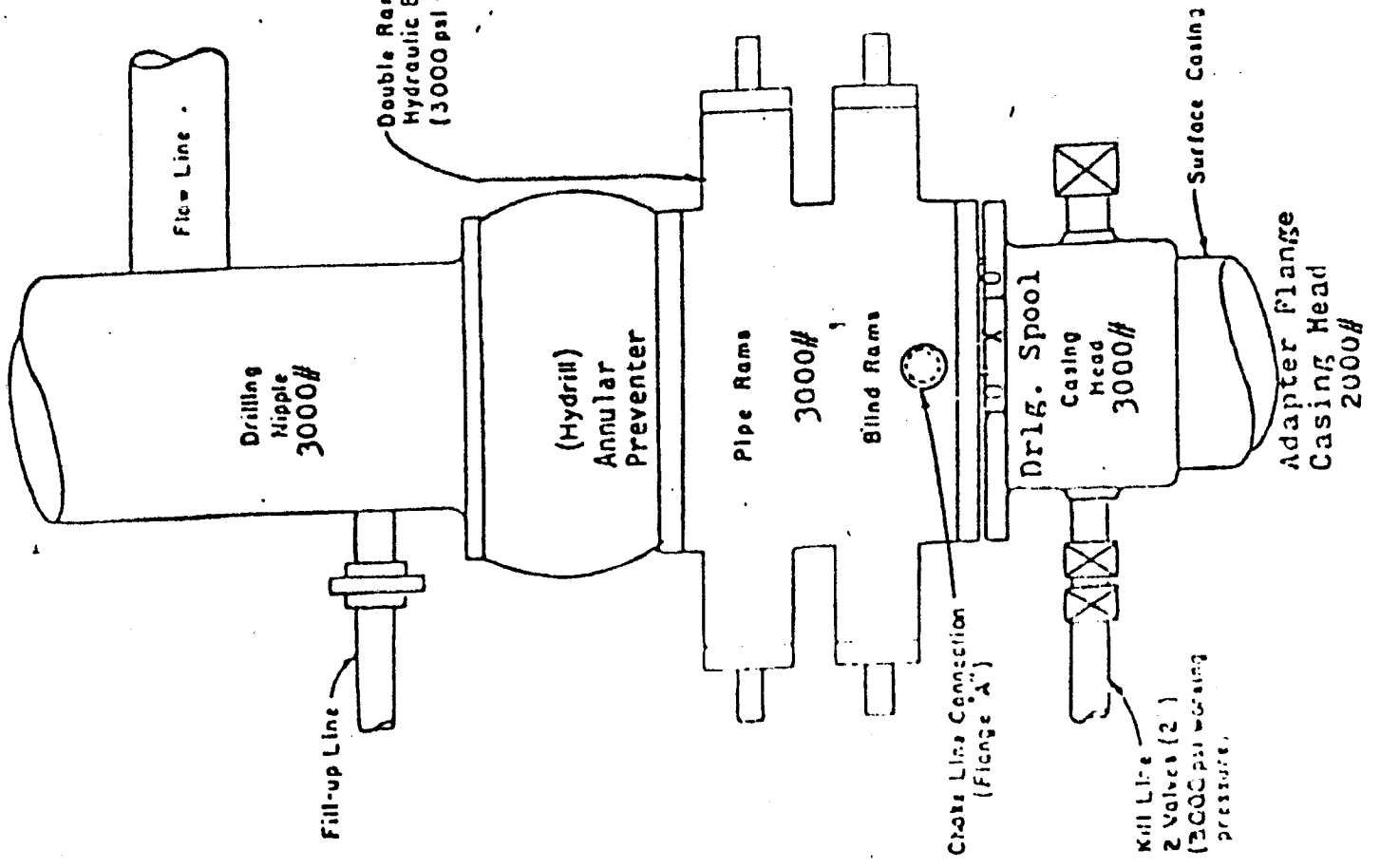
No abnormal pressures or temperatures have been noted or reported in wells drilled in the area nor at the depths anticipated in this well. Bottom hole pressure expected is 3700 psi  $\pm$ .

No hydrogen sulfide or other hazardous fluids or gases have been found, reported or known to exist at these depths in the area.

10. Anticipated Starting Date and Duration of the Operations

The anticipated starting date is set for May 25, 1983, or as soon as possible after examination and approval of drilling requirements. Operations should be completed within 30 days after spudding the well to casing point.

EXHIBIT "C"  
BLOWOUT PREVENTER  
DIAGRAM



PLAN VIEW-CHOKE MANIFOLD



EXHIBIT "D"  
MULTI-POINT REQUIREMENTS TO ACCOMPANY A.P.D.

Attached to Form 9-331C  
Ranger Oil Company  
Ranger Federal 12-17  
NW SW Sec. 17 T39N R19W  
1450' FSL & 990' FWL  
Dolores County, Colorado

1. Existing Roads

- A. The proposed well site and elevation plat is shown as EXHIBIT "A". Staking included two directional reference stakes and elevations, also show on EXHIBIT "A<sub>1</sub>".
- B. The distance from Dove Dreek, Colorado, is 13.0 miles. From behind the Shell station, go West 0.8 miles; South 6.7; West 0.3 to the intersection of county roads P & 6; go South on 6, 1.9 miles; West 0.6 miles; South 0.4 miles; West 0.5 miles; South 1.0 miles; West 1.0 miles, North 1,650 feet then east 1000' to north-west corner of location on existing farmer's road, as shown on EXHIBITS "E" & "E<sub>1</sub>".
- C. All roads to location are coded on EXHIBITS "E" & "E<sub>1</sub>". No new access road will be required, as shown on EXHIBITS "E" & "E<sub>1</sub>".
- D. N/A.
- E. This is a development well. All existing roads within a one-mile radius are shown on EXHIBIT "E".
- F. The existing roads need no improvement. Maintenance will be performed as required. The grade is 1-5% or less.
- G. Ranger Oil Company is requesting a grant for a new Right-of-Way 45 feet wide and 2650 feet long for that portion of the access road in SW Sec. 17 T39N R19W as shown on EXHIBIT "E<sub>1</sub>" from the surface owner or the BLM. Use of this road will cover approximately 60 days for drilling operations and up to 30 or more years if the well is productive. Therefore, a 30-year term is requested, with right of renewal.

2. Planned Access Roads

There will be approximately 2650' of access roads required. Existing access roads are shown on EXHIBIT "E<sub>1</sub>". The proposed 2650' of access roads is currently being used by the surface owner.

3. Location of Existing Wells

For all existing wells within a one-mile radius of development well, see EXHIBIT "F".

- (1) There are no water wells within a one-mile radius of this location.
- (2) There are no abandoned wells in this one-mile radius.
- (3) There are no temporarily abandoned wells.
- (4) There are no disposal wells.
- (5) There are no wells presently being drilled. (One well is being completed).
- (6) There are two producing wells within this one-mile radius.
- (7) There are no shut-in wells.
- (8) There are no injection wells.
- (9) There are no monitoring or observation wells for other uses.

4. Location of Existing and/or Proposed Facilities

- A. If production is obtained, new facilities will be as follows:
- (1) Production facilities will be located on solid ground of cut area of drill pad, as shown on EXHIBIT "G".
  - (2) All well flow lines will be buried and will be on the well site and battery site.
  - (3) Production facilities will be 300 feet long and 100 feet wide. Areas of drill pad not required for production facilities will be rehabilitated. All dirt work will attempt to conform with the natural topography of the area. Cut and fill areas will be kept to a minimum.
  - (4) All construction materials for battery site and pad will be obtained from site. No additional material from outside sources is anticipated.
  - (5) Any necessary pits will be fenced and flagged to protect livestock and wildlife. The location, access road, and vicinity will be kept clean and free of trash at all times.
- C. Rehabilitation, whether well is productive or dry, will be made on all unused areas in accordance with B.L.M. stipulations.

5. Location and Type of Water Source

- A. The source of water will be a stream in Squaw Creek Canyon or purchased from surface owner.
- B. Water will be transported by truck over existing roadways, as shown on EXHIBIT "E".
- C. No water well is to be drilled on this lease.

6. Construction Materials

- A. No construction materials are needed for drilling well or constructing access roads into the location during drilling. The surface soil materials will be sufficient. No surfacing materials will be placed on the access road or location without prior BLM or surface owner approval.
- B. No construction materials will be taken off Federal land.
- C. All surface soil materials for construction of access roads for drilling are sufficient. If well is productive, and material from road and pad is not sufficient, surfacing materials will be provided by local construction contractors.
- D. All major access roads presently exist as shown on EXHIBIT "E".

7. Handling of Waste Materials and Disposal

- (1) Drill cuttings will be buried in the reserve pit.
- (2) Drilling fluids will be handled in the reserve pit.
- (3) Any fluids produced during drilling test or while making production test will be collected in a test tank. If a test tank is not available during drilling, fluids will be handled in reserve pit. Any spills of oil, gas, salt waters, or other noxious fluids will be cleaned up and removed. If well is productive, produced water will be disposed of on-site for 30 days only, or 90 days with permission of District Engineer. After that time application will be made for approval of permanent disposal method in compliance with NTL-2b.
- (4) Portable chemical facilities will be provided for human waste.
- (5) Garbage and non-flammable waste and salt and other chemicals produced during drilling or testing will be handled in trash pit. The pit will be dug deep enough to allow the contents to be buried at least 3' below natural ground level. Drill fluids, water, drilling mud and tailings will be kept in reserve pit, as shown on EXHIBIT "H". The trash pit will be totally enclosed with small mesh wire and fine mesh wire will be placed over the top to prevent wind scattering trash before being buried or

removed. Reserve pit will be fenced on three sides with a four-strand barbed wire fence before drilling starts. The fourth side will be fenced upon removal of the rig. The fence will be kept in good repair while the pit is drying.

- (6) After the rig moves out, all materials and oil will be cleaned up and no adverse materials will be left on location. All dangerous open pits will be fenced during drilling and kept closed until such time as the pit is leveled. As soon as the rig is removed, soil berms or ditches will be constructed to prevent run off from entering the pit.
- (7) When drilling is completed, the contents of the reserve pit, including both the liquids and settled solids, will be analyzed by the mudloggers and the results of the analysis will be sent to the Durango BLM office. The analysis will include tests for pH, the presence of petroleum products, concentrations of chlorides and sulfates, and concentrations of any other constituents which may be harmful to plant or animal life.

8. Ancillary Facilities

No air strip, camp or other facilities will be built during drilling of this well.

9. Well Site Layout

- (1) EXHIBIT "G" is the Drill Pad Layout as staked, with elevations, by Powers Elevation of Durango, Colorado. Cuts and fills have been drafted to visualize the planned cut across the locations spot and to the deepest part of the pad. Topsoil will be stockpiled, as shown on EXHIBIT "G".
- (2) EXHIBIT "H" is a plan diagram of the prospected rig and equipment, reserve pit, trash pit, pipe racks and mud tanks, access road, parking and turnaround. No permanent living facilities are planned. There will be a trailer on site.
- (3) EXHIBIT "G" is a diagram showing the proposed production facilities layout.
- (4) The reserve pits will not be lined. The pit will be dug deep enough to allow contents to be buried at least 3' below the natural ground level.

10. Plans for Restoration

- (1) The site is in a bean field and it is planned to restore the site to original condition as nearly as possible. The area is considered to be satisfactorily reclaimed when all disturbed areas have been recontoured to blend with the natural topography, all soil erosion associated with the operation has been stabilized. Backfilling,

leveling and contouring are planned as soon as all pits have dried. Both the trash pit and reserve pit will be backfilled. Waste disposal and spoils materials will be buried or hauled away to an approved sanitary landfill immediately after drilling is completed. If production is obtained, the unused area will be restored as soon as possible.

- (2) The soil banked material will be spread over the area and recontoured to blend as nearly as possible with the natural topography. The stockpiled topsoil will be evenly distributed over the pad and reserve pit area. All disturbed areas will be scarified with the contour to a depth of 18 inches. All disturbed areas will be contour cultivated 4 to 8" deep for seed bed preparation.
- (3) Three sides of the reserve pit will be fenced during drilling operations. Prior to rig release, the reserve pit will be fenced on the fourth side to prevent livestock or wildlife from entering; and the fencing will be maintained until leveling and cleanup are accomplished.
- (4) If any oil is on the pits and is not immediately removed after operations cease, the pit containing the oil or other adverse substances will be flagged overhead or covered with wire mesh.
- (5) The rehabilitation operations will begin immediately after the drilling rig is removed. Removal of oil or other adverse substances will begin immediately or area will be flagged and fenced. Other cleanup will be done as needed.

11. Other Information

- (1) The location lies in the northeast of the Navajo Section, within the Colorado Plateau Province. To the northwest lies Monument Canyon. Cross Canyon lies to the southwest.

Specifically, the location lies in a rolling bean field. The location is relatively flat.

Soil is a sandy loam.

- (2) The closest occupied dwelling is located 3/4 mile northwest of the proposed site, as shown on EXHIBIT "E".

The closest live water is Squaw Creek Canyon, 1.0 mile west of the location, as shown on EXHIBIT "E".

There were no archaeological, historical, or other cultural artifacts apparent to Powers' surveyors during their staking of this location. However, a complete, standard cultural resource (including archaeological) survey was conducted by a qualified archaeologist, and a report submitted to the B.L.M., prior to any surface disturbance. This report is attached as Exhibit I.

- (3) There are no reported restrictions or reservations noted on the oil and gas lease.
- (4) Drilling is planned for on or about May 25, 1983. It is anticipated that the casing point will be reached within 30 days after commencement of drilling.

12. Lessee's or Operator's Representative

Donald P. Canada  
Ranger Oil Company  
P. O. Box 22004  
Denver, CO 80222

13. Certification





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 will be performed by Ranger Oil Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

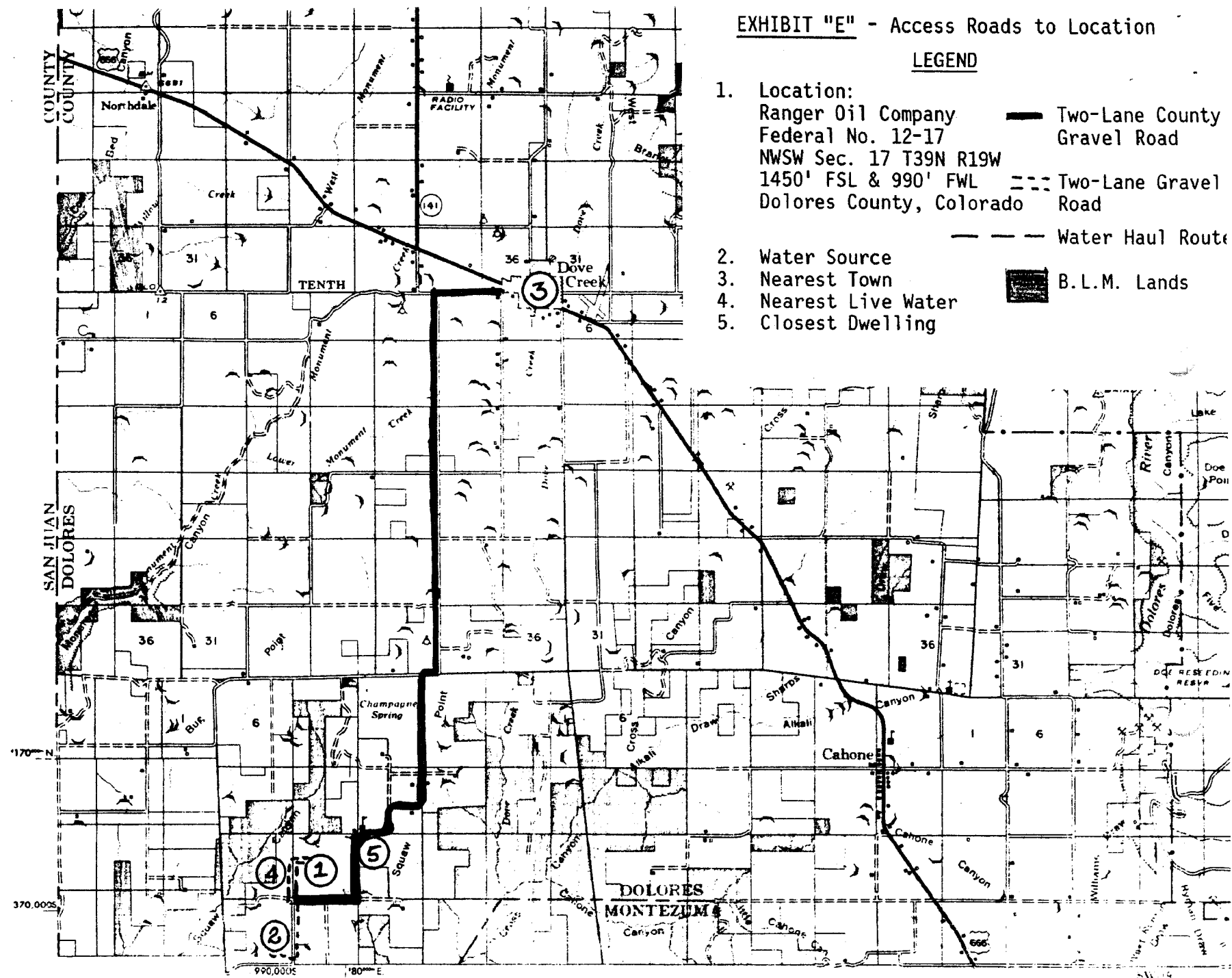
May 3, 1983  
Date

Donald P. Canada  
Ranger Oil Company  
Donald P. Canada  
Exploration Manager

# EXHIBIT "E" - Access Roads to Location

## LEGEND

1. Location:  
Ranger Oil Company  
Federal No. 12-17  
NWSW Sec. 17 T39N R19W  
1450' FSL & 990' FWL  
Dolores County, Colorado
  2. Water Source
  3. Nearest Town
  4. Nearest Live Water
  5. Closest Dwelling
-  Two-Lane County Gravel Road  
 Two-Lane Gravel Road  
 Water Haul Route  
 B.L.M. Lands



SCALE 1:126,720  
1/2 INCH = 1 MILE SERIES

APRIL 1975

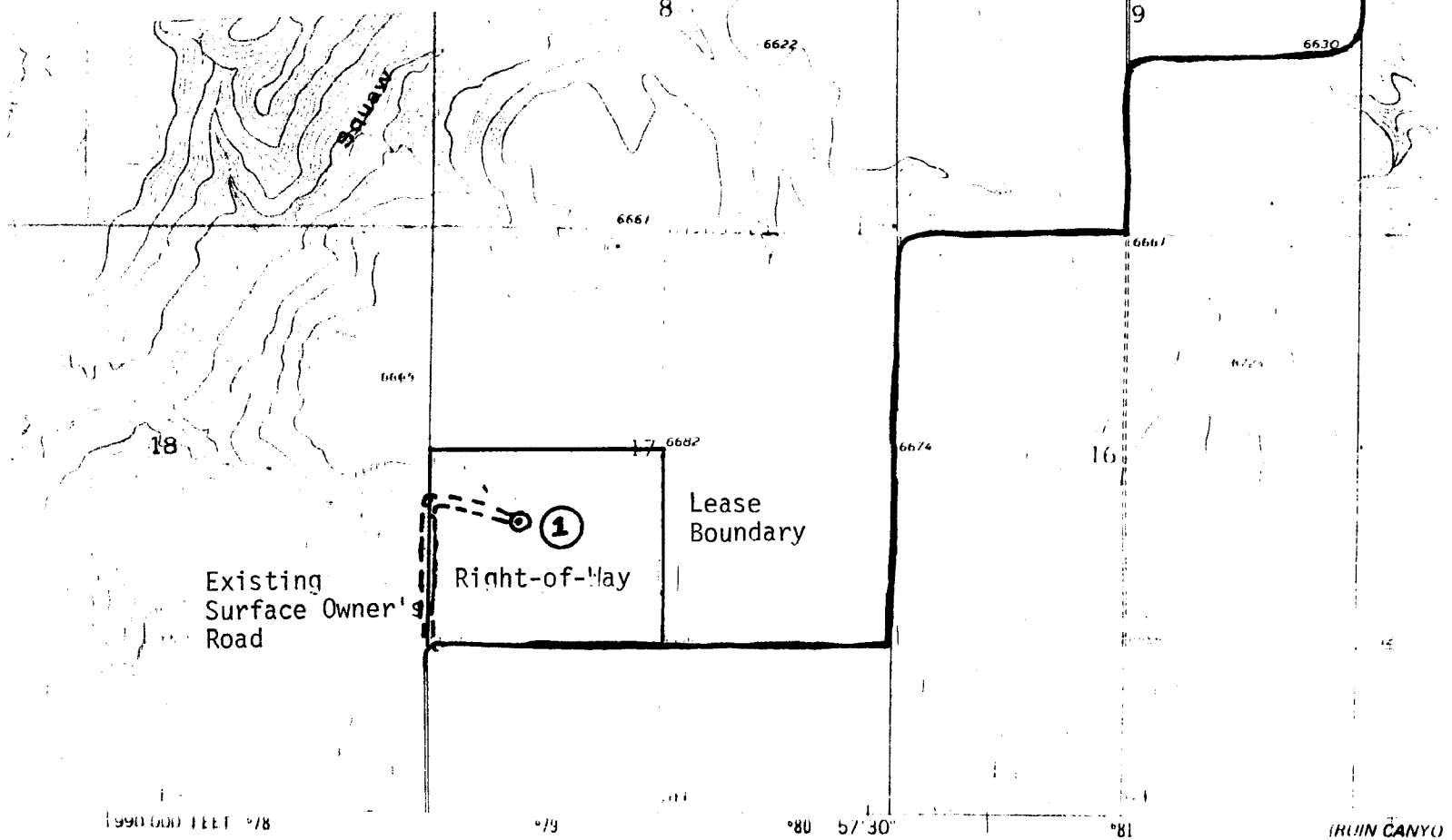
Revision Completed APR. 1975

# EXHIBIT "E<sub>1</sub>"

## Detail of Access Road

1. Location:  
Ranger Oil Company  
Federal No. 12-17  
NWSW Sec. 17 T39N R19W  
1450' FSL & 990' FWL  
Dolores County, Colorado

— Two-Lane County Gravel Road  
=== Two-Lane Gravel Road



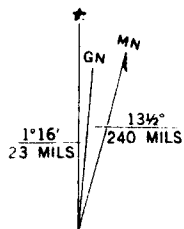
Published by the Geological Survey

US/NOAA

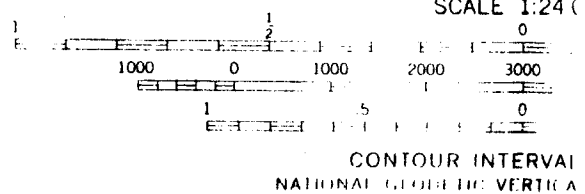
Photometric methods from aerial photographs  
dated 1975. Map edited 1978

Foot grid ticks: Colorado  
Zone (Lambert conformal conic)  
Transverse Mercator grid ticks,  
1927 North American datum

Indicate selected fence lines



UTM GRID AND 1978 MAGNETIC NORTH  
DECLINATION AT CENTER OF SHEET



CONTOUR INTERVAL  
NATIONAL GEOGRAPHIC VERTICAL

THIS MAP COMPLIES WITH NATIONAL M  
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, CO  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND



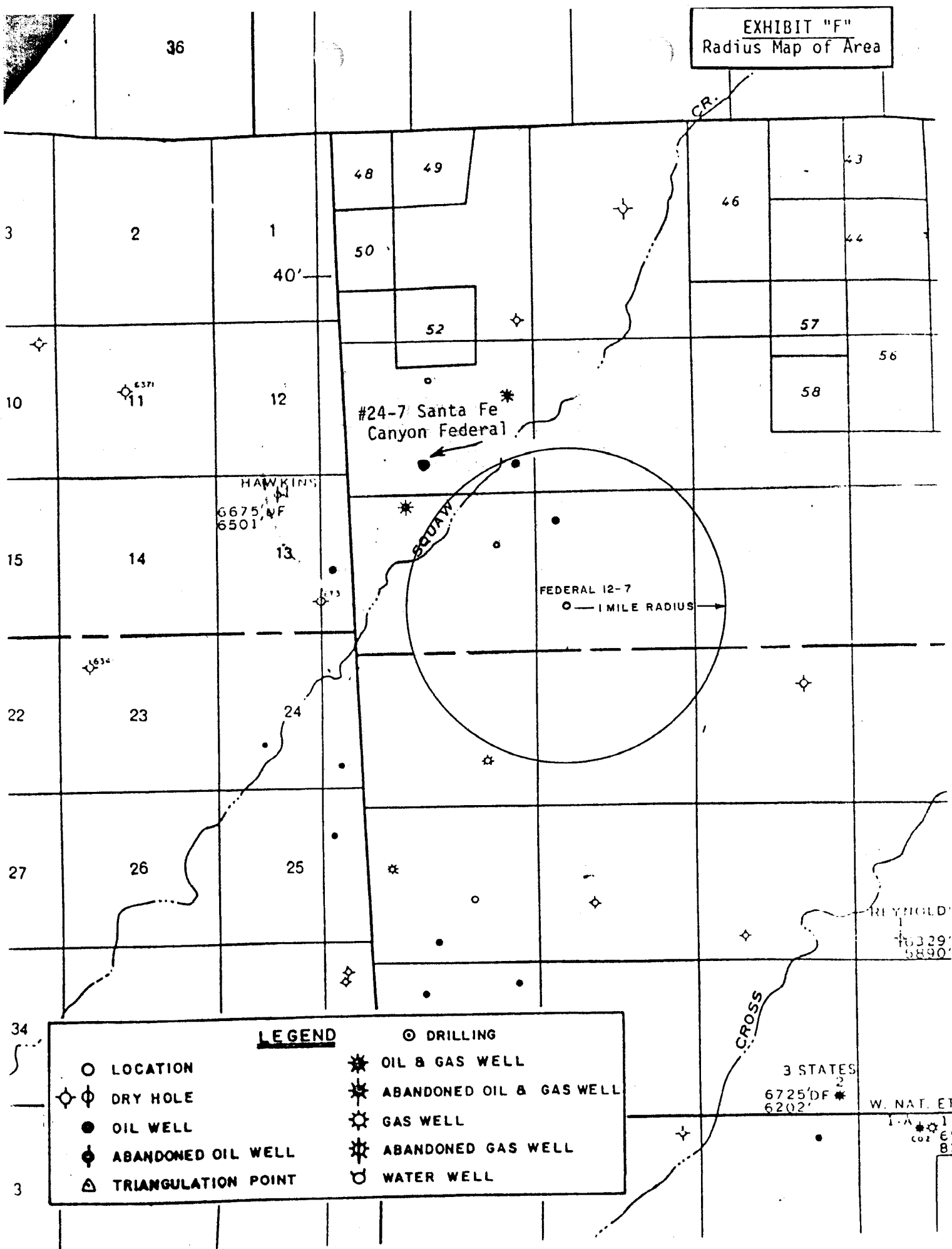


EXHIBIT "G"  
Drill Pad Layout and  
Production Facilities

12-17 Federal



## POWERS ELEVATION



Scale - 1" = 50'  
5' Contours



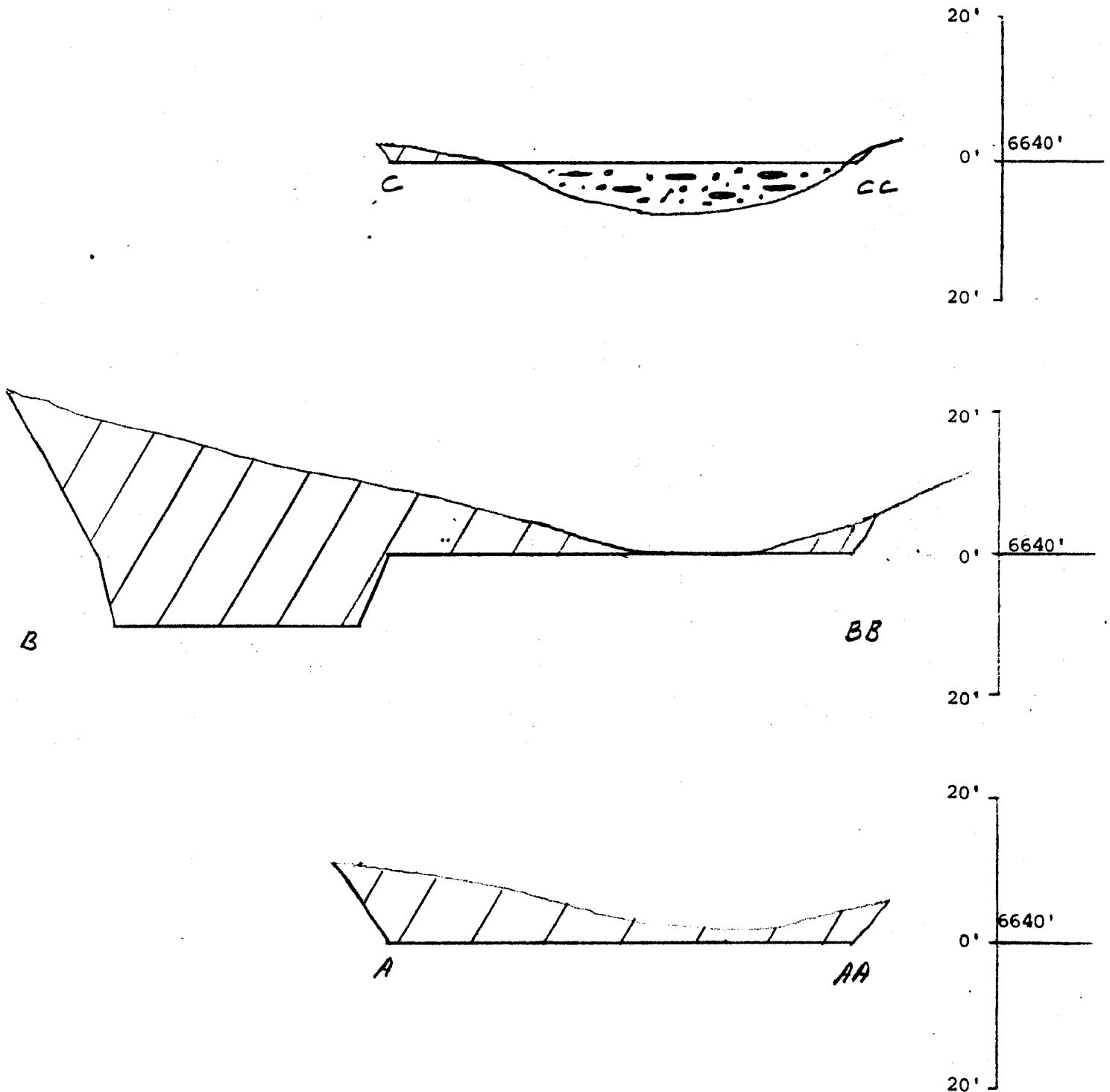
POWERS ELEVATION

EXHIBIT "G1"  
Cut and Fill Cross Section Well 12-17 Federal

OIL WELL ELEVATIONS - LOCATIONS  
ENVIRONMENTAL - ARCHAEOLOGICAL SERVICES  
600 SOUTH CHERRY STREET, SUITE 1201  
DENVER, COLORADO 80222  
PHONE NO. 303/321-2217

Cut ///////////////  
Fill:~~~~~

Scales: 1"=50'H.  
1'=20'V.





SCALE: 1" = 50'

Exhibit "H"  
Drill Rig Layout  
Ranger Oil Company  
Federal No. 12-17  
NW/4 SW/4, Sec. 17, T39N, R19W  
1450' FSL and 990' FWL  
Dolores County, Colorado

Scale 1" = 50'

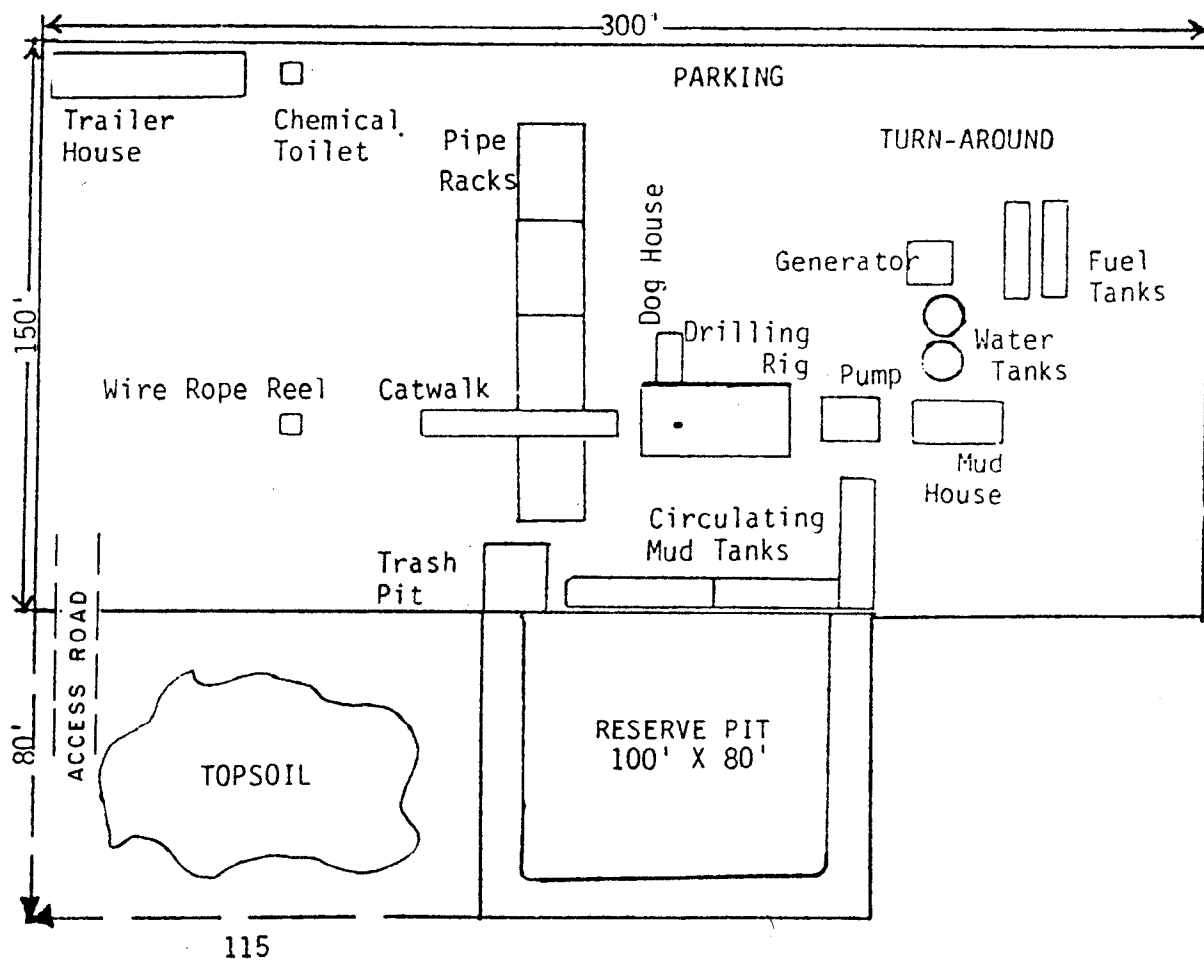


EXHIBIT I

# Cultural Resource Management Report

S & W PETROLEUM CONSULTANTS

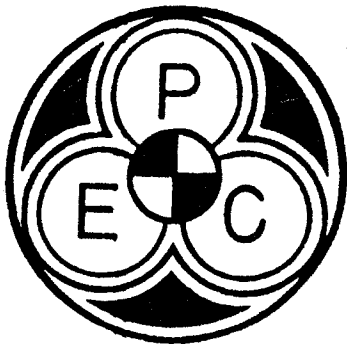
Ranger Oil Federal 12-17

Dolores County, Colorado

Lead Field Investigator Douglas D. Dykeman

Principal Investigator Bruce E. Rippeteau, Ph.D.  
and Marcia J. Tate

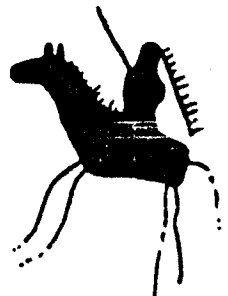
Date April 15, 1983 For S & W Petroleum Consultants



**POWERS ELEVATION**

CHERRY CREEK PLAZA, SUITE 1201  
600 SOUTH CHERRY ST., DENVER, COLORADO 80222  
(303) 321-2217

**Archæology Division**



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

DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
COLORADO  
REPORT OF EXAMINATION FOR CULTURAL RESOURCES

2. Case File # \_\_\_\_\_  
Oil & Gas Lease \_\_\_\_\_  
Coal: \_\_\_\_\_ Explor.: \_\_\_\_\_  
Lease: \_\_\_\_\_ Right-of-way \_\_\_\_\_  
Other \_\_\_\_\_

1. Abstract: Ranger Oil plans to construct a well pad and access road in the SW $\frac{1}{4}$  of Section 17. The well pad will be about 2 acres and the access road right-of-way is 1700' by 50'. No significant cultural materials were observed, and we recommend that the project proceed as planned.
  - 2.a. Resource Area: San Juan Planning Unit:  
Location: T 39N R19W Sec. 17 USGS Quad: Champagne Spring 7.5', 1978
  3. Project Description: Well pad & access Size: well pad - 2 acres  
access - 1700' by 50'  
area of disturbance: 4 acres  
Topography: The physiography of the area is characterized by broad, flat mesas and steep-sided canyons. The well location is on the northwest side of a flat-topped interfluvium, Squaw Point. Land surface is characterized by gently rolling hills to the steep edges of Squaw and Cross Canyons.  
Vegetation: Vegetation cover is zero and visibility is excellent. The area is presently cultivated in beans and winter wheat. An open pinyon-juniper forest probably represents the natural plant community.
  4. Examination Procedure: A ten-acre area surrounding the three alternate well locations was surveyed for cultural resources in a series of transects oriented north and south, spaced 15 meters apart. Standing water in the draws and stock ponds prevented survey coverage in drainage bottoms. Access road right-of-way was surveyed in a single zig-zag transect. The first 50' of access north of the county road was not surveyed due to snow drift.
  5. Findings: Two isolated sherds were found in the wash on the north edge of the survey area. These were clearly situated in disturbed contexts. One flake was on the slope at the eastern edge of the project area. Its situation in the plowzone suggests disturbed context.
  6. Recommendations: There is no potential for buried cultural material because the location is disturbed by 50 years of cultivation and lies on 2-3 feet of fill. File search on April 8, 1983, with the Office of the State Archaeologist revealed two previous surveys and three recorded in the NW $\frac{1}{4}$  of the section. After consultation with the BLM, San Juan Resource Area (4/15/83) and considering the low site potential, we recommend that the project proceed as planned.
- Permit: 83-CO-232  
(BLM work-job code)

I certify that this examination complies with EO 11593.

April 12, 1983  
Date(s) of Examination

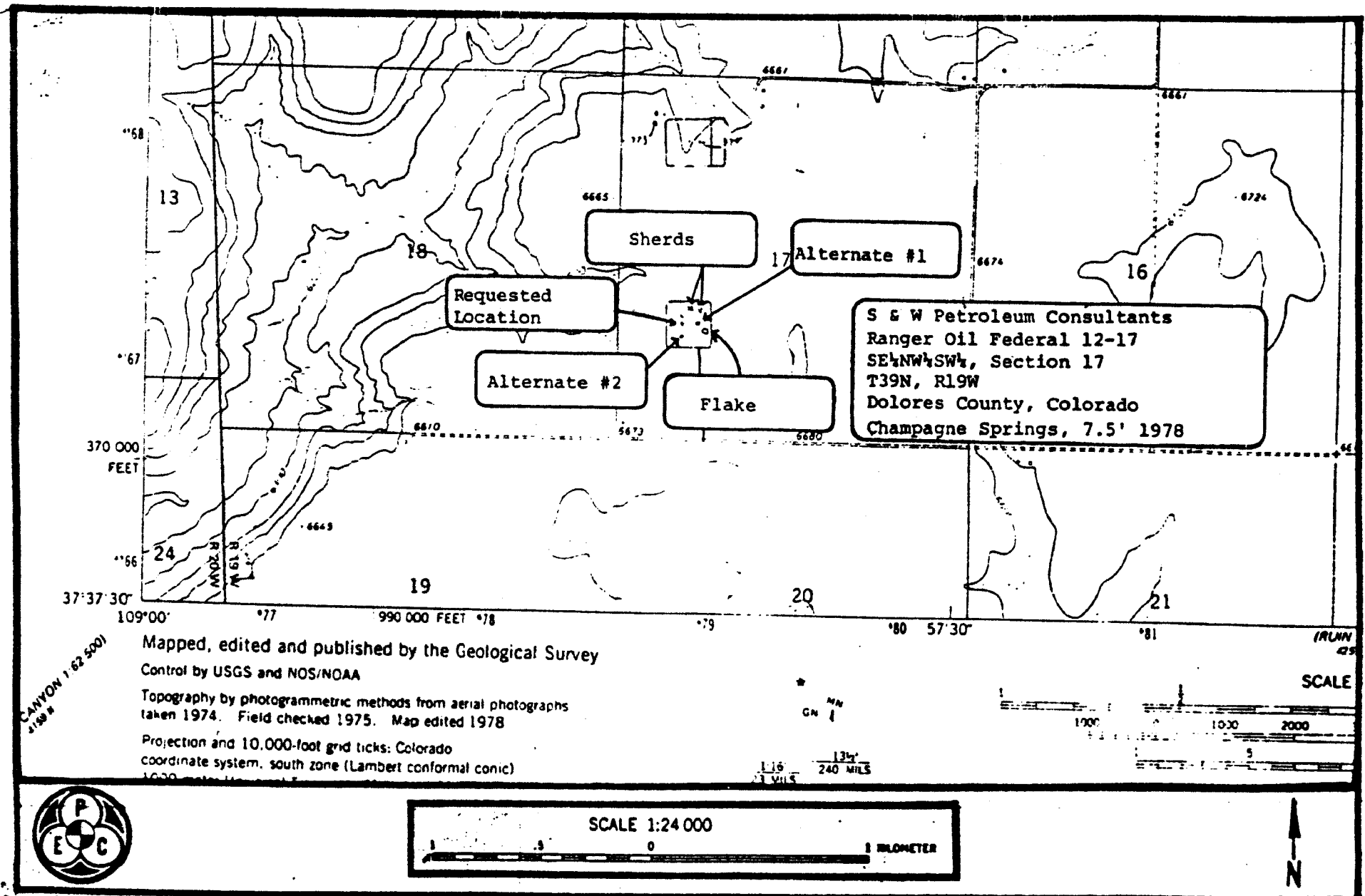
  
Archaeologist/Historian

This report meets (does not meet) applicable standards of acceptability.  
A 106 statement \_\_\_\_\_ is \_\_\_\_\_ is not required for this project.

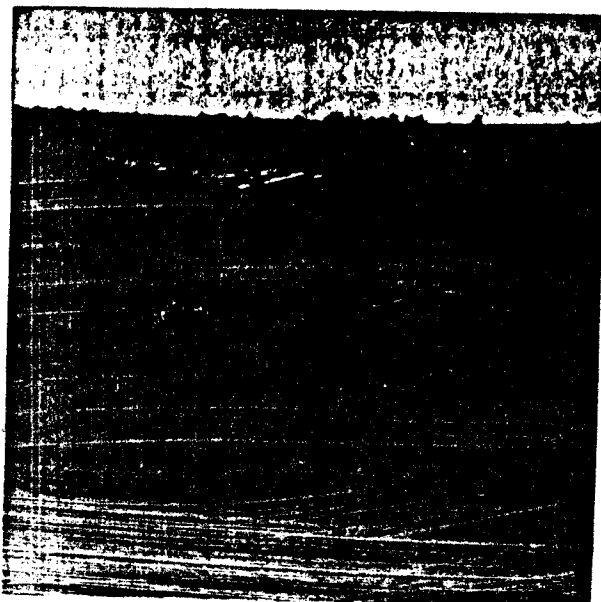
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Date

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BLM Reviewing Archaeologist/Historian

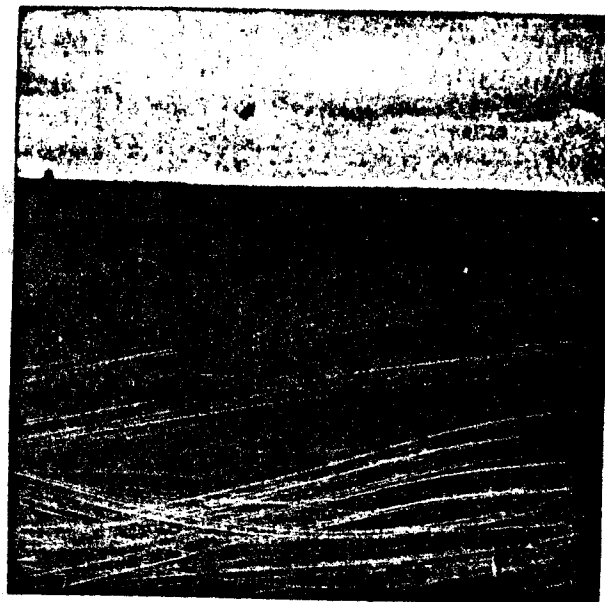
A clear copy of (or an original of) the USGS Topographic Map of the project and the area surveyed must be attached.



S & W Petroleum Consultants  
Ranger Oil Federal 12-17  
SE $\frac{1}{4}$ BW $\frac{1}{4}$ SW $\frac{1}{4}$ , Section 17  
T39N, R19W  
Dolores County, Colorado



Looking northeast at  
requested well location  
(in stock pond)



Looking north at Alternate #1  
well location