

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  
 Tenneco Oil Company

3. ADDRESS OF OPERATOR  
 P.O. Box 3249, Englewood, CO 80155

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface  
 1885.4 FSL, 1206.3 FWL  
 At proposed prod. zone  
 same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 Approx. 11 miles NE of Green River, Utah

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) to unit boundary  
 Approx. 1 1/2 miles

16. NO. OF ACRES IN LEASE  
 1920.00

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 approx. 343 acres

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

19. PROPOSED DEPTH  
 ±5650'

20. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 ground 5079'

21. ROTARY OR CABLE TOOLS  
 rotary

22. APPROX. DATE WORK WILL START\*

5. LEASE DESIGNATION AND SERIAL NO.  
 USA U 16339

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
 Butler Canyon

8. FARM OR LEASE NAME  
 Butler Canyon Unit USA

9. WELL NO.  
 33-12

10. FIELD AND POOL, OR WILDCAT  
 Entrada Test, Wildcat

11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA  
 Sec 33, T19S, R17E

12. COUNTY OR PARISH      13. STATE  
 Grand      Utah

*NWSU*

*Entrada*

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8 3/4"	7" new	23#	±1100'	Circulate to surface
6 1/2"	4 1/2" new	10.5#	±5650'	Sufficient to cover all productive zones

Set 1-3 joints of 9 5/8" casing to be used as conductor pipe.  
 Pre-stake clearance attached.  
 An archaeological survey has been ordered.

**RECEIVED**

MAY 12 1981

DIVISION OF  
OIL, GAS & MINING

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.

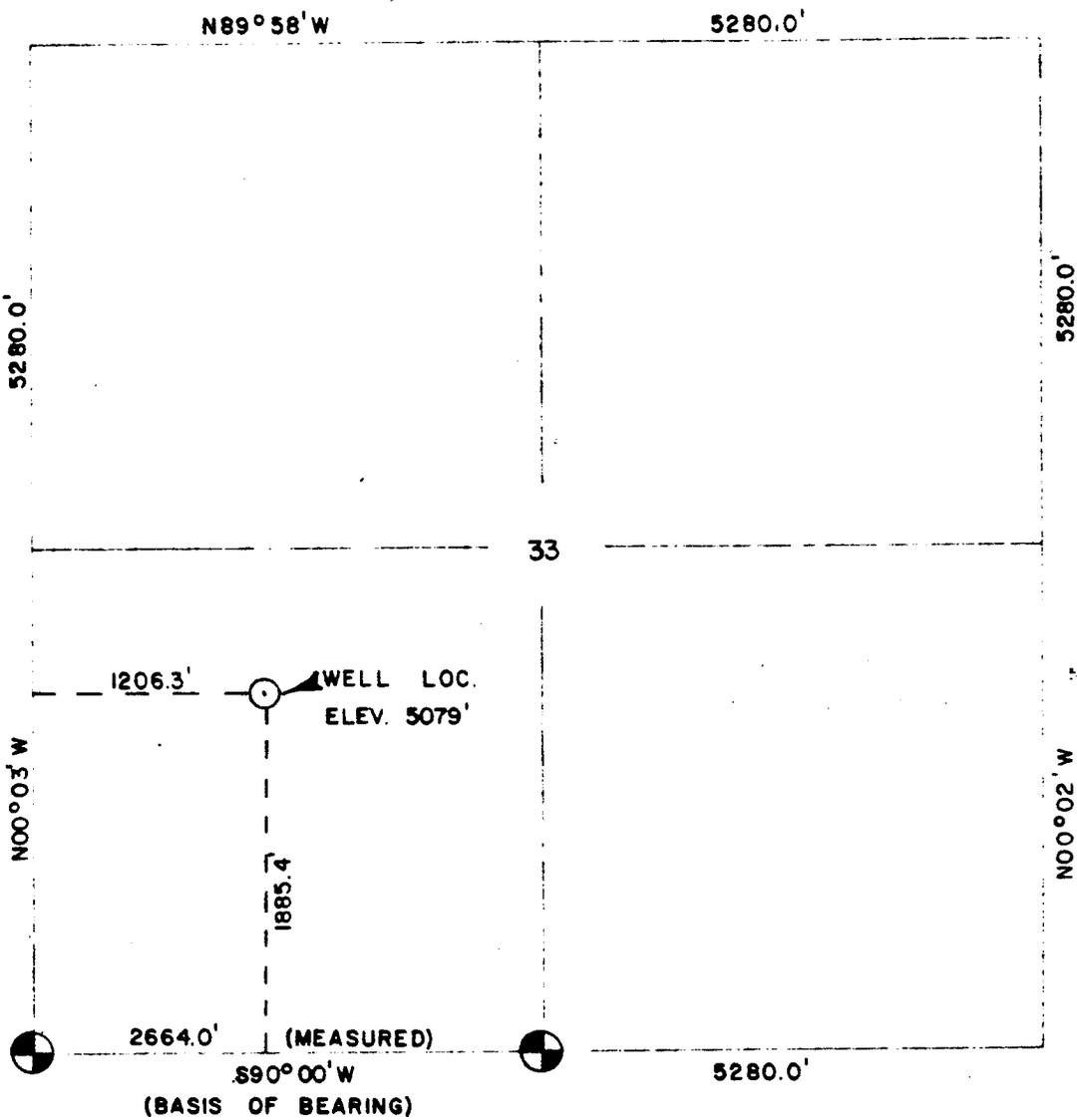
24. SIGNED R. A. Mishler TITLE Sr. Prod. Analyst DATE May 7, 1981

(This space for Federal or State office use)

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

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_  
 CONDITIONS OF APPROVAL, IF ANY:

**APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING**  
 DATE: 8-11-81  
 BY: M. J. Mishler

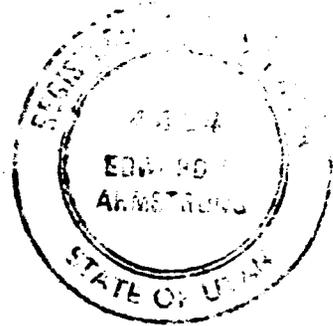


**LEGEND**  
 FD U.S. B.L.M.  
 CADASTRAL  
 BRASS CAP

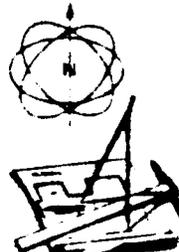
WELL LOCATION  
 1885.4 FT N. S. L. - 1205.3 FT. E. W. L.  
 SECTION 33, T19S., R. 17E., SLB&M  
 GRAND COUNTY, UTAH

**SURVEYOR'S CERTIFICATE**

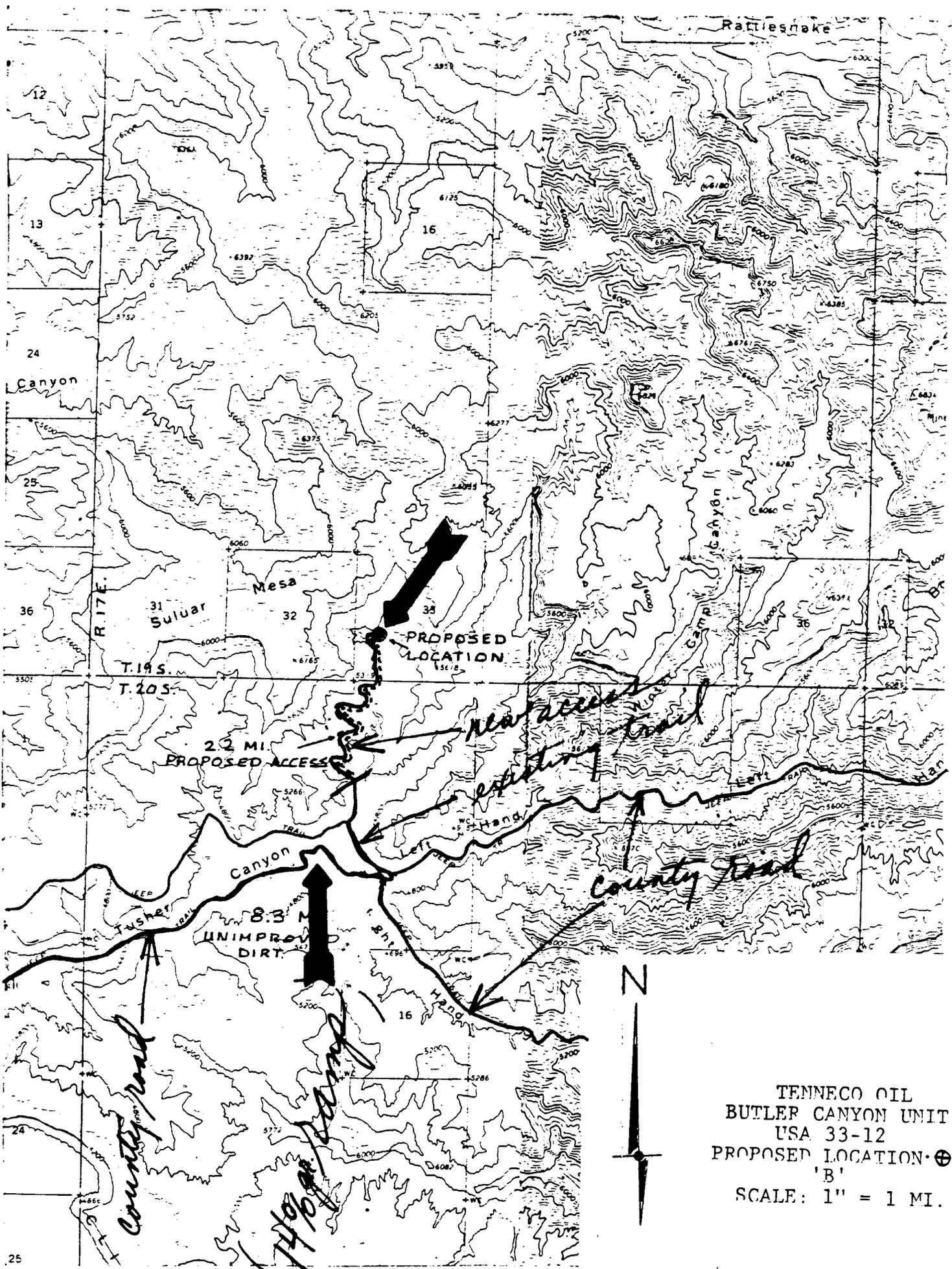
I, Edward A. Armstrong, a registered land surveyor in the State of Utah, do hereby certify that this survey was made under my direct supervision and that this plat represents said survey.



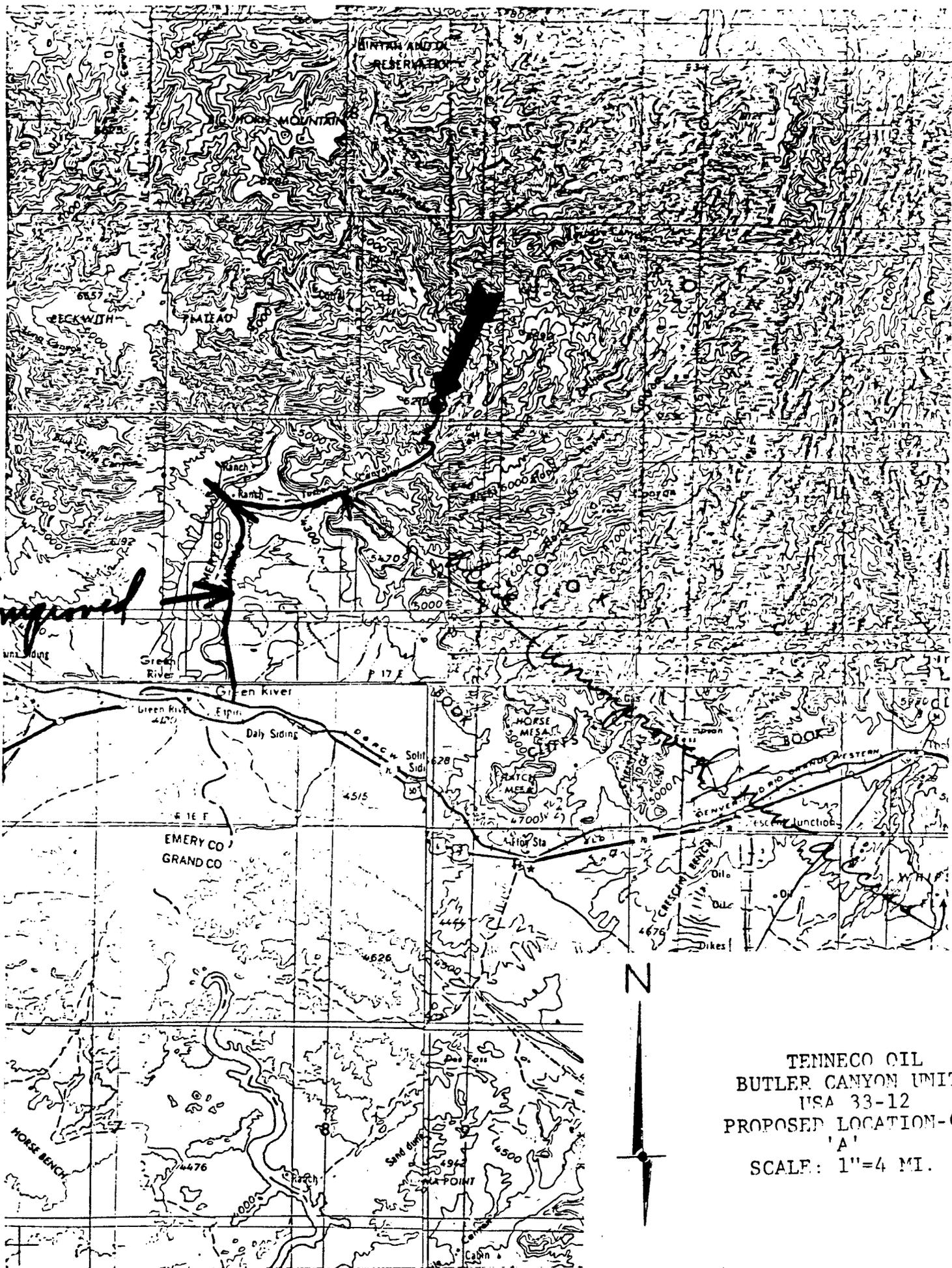
*Edward A. Armstrong*  
 EDWARD A. ARMSTRONG P.L.S. 4464

	ARMSTRONG ENGINEERS and ASSOCIATES, INC. ENGINEERING • SURVEYING • SOILS AND CONCRETE TESTING 561 ROOD AVENUE • GRAND JUNCTION, COLORADO 81505	
	SCALE 1" = 100'	TENNECO OIL BUTLER CANYON UNIT USA 33-12
	DATE 4/28/81	
	BY MWD	
	CHECKED BY EAA	
	DATE OF SURVEY 4/2/81	
SHEET 1 of 6		JOB NUMBER 813281





TENNECO OIL  
 BUTLER CANYON UNIT  
 USA 33-12  
 PROPOSED LOCATION ⊕  
 'B'  
 SCALE: 1" = 1 MI.



*Proposed*

TENNECO OIL  
 BUTLER CANYON UNIT  
 USA 33-12  
 PROPOSED LOCATION - ⊕  
 'A'  
 SCALE: 1"=4 MI.

\*\* FILE NOTATIONS \*\*

DATE: June 12, 1981  
OPERATOR: Tenneco Oil Company  
WELL NO: Butler Cyn. Unit USA #33-12  
Location: Sec. 33 T. 19S R. 19E County: Grand

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

API Number 43-019-30835

CHECKED BY:

Petroleum Engineer: M.S. Munder 8-11-81  
Held for Fed Unit designation

Director: \_\_\_\_\_

Administrative Aide: Unit Well, OK on boundaries 870-81

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 Fed. Plotted on Map

Approval Letter Written

Hot Line  P.I.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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12. COUNTY OR PARISH, 13. STATE  
 Grand Utah

RECEIVED  
 DIVISION OF OIL, GAS & MINING  
 JUL 23 1981

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24. SIGNED R. A. Mishler TITLE Sr. Prod. Analyst DATE May 7, 1981  
 (This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE JUL 23 1981  
 APPROVED BY E. W. GUYNN TITLE DISTRICT ENGINEER DATE \_\_\_\_\_  
 CONDITIONS OF APPROVAL, IF ANY:

NOTICE OF APPROVAL  
 CONDITIONS OF APPROVAL ATTACHED  
 TO OPERATOR'S COPY  
 \*See Instructions On Reverse Side

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A DATED 1/1/80

*of state of CO.*

United States Department of the Interior  
Geological Survey  
2000 Administration Bldg.  
1745 West 1700 South  
Salt Lake City, Utah 84104

NEPA CATEGORICAL EXCLUSION REVIEW

PROJECT IDENTIFICATION

Operator Tenneco Oil Company  
Project Type Gas Well  
Project Location 1885' FSL & 1206' FWL - Section 33, T. 19S, R. 17E-  
Well No. Butler Canyon 33-12 Lease No. U-16339  
Date Project Submitted May 12, 1981

FIELD INSPECTION

Date May 28, 1981

Field Inspection  
Participants

Greg Darlington - USGS, Vernal  
Elmer Duncan, Bob Dalla, Micol Walker - BLM, Moab  
Jim Poag - Grand County Highway Department  
Bob Mishler - Tenneco Oil Company  
Bill Buniger - Buniger Construction  
Leonard Lewis - Galley Construction

Related Environmental Documents: Unit Resource Analysis, Book Mountain  
Planning Area, BLM, Moab

I have reviewed the proposal in accordance with the categorical exclusion review guidelines. This proposal would not involve any significant effects and, therefore, does not represent an exception to the categorical exclusions.

July 16, 1981  
Date Prepared

Glenn M. Doyle for Greg Darlington  
Environmental Scientist

I concur

JUL 20 1981

Date

W. W. Martin FOR E. W. GUYNN  
District Supervisor DISTRICT ENGINEER

Typing In July 7, 1981 Typing Out July 7, 1981

Proposed Actions:

Tenneco Oil Company plans to drill the Butler Canyon 33-12 well, a 5650' gas test of various formations. About 2.5 miles of new access road will be required. Numerous improvements to other existing roads are also planned. An area of operations, 190' x 250', is planned for the pad and reserve pits at this location. The BLM decision to drop this area from their Wilderness Area Inventory Studies is presently under appeal, hence it is subject to their Interim Management Policy as a pre-FLPMA lease.

Recommended Approval Conditions:

The operator agrees to accept and adhere to the following conditions in addition to the plans outlined in the APD.

1. BLM Stipulations
2. Lease Stipulations
3. Provide adequate logs for the identification of other minerals as requested in the Mineral Evaluation Report and Mining Report



Northeast Corner  
Blacie Pit Butler 33-12



Southeast View  
From Northwest Corner of Pad  
33-12

FIELD NOTES SHEET

Date of Field Inspection: May 28, 1981

Well No.: Butler Canyon 33-12

Lease No.: U-16339

Approve Location:  passable in a difficult area

Approve Access Road:  See Glenn's CER 460-81

Modify Location or Access Road: Bob Dalla of the Moab BLM plans to meet within a few days, tomorrow weather permitting to further study access roads. The new access road looked OK. Didn't take the time to assess existing roads since the weather was bad and they will be revised per Bob Dalla's meeting with Bob Michler.

Evaluation of Criteria for Categorical Exclusion

1. Public Health and Safety
2. Unique Characteristics
3. Environmentally Controversial Items
4. Uncertain and Unknown Risks
5. Establishes Precedents
6. Cumulatively Significant
7. National Register Historic Places
8. Endangered/Threatened Species
9. Violate Federal, State, Local, or Tribal Laws

If this project is not eligible for Categorical Exclusion circle the numbers of the above criteria requiring the preparation of an EA.

Comments and special conditions of approval discussed at onsite: (include local topography) Glenn Doyle has another invite to schedule in the area soon at which time the existing roads will be more fully inspected. Our helicopter trip just about got rained out this afternoon. (CER 460-81)

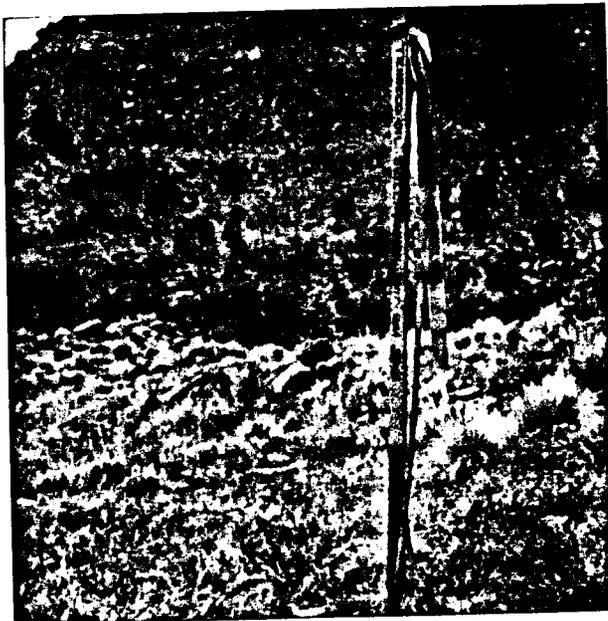
Per FLPMA lease - Under Intermittent Management Policy guidelines. Rugged rocky areas and objectionable washes preclude finding of a better location in this difficult terrain.

CATEGORICAL EXCLUSION REVIEW INFORMATION SOURCE

Criteria 16 DM 2.3.A	Federal/State Agency			Local and private correspondence (date)	Previous NEPA	Other studies and reports	Staff expertise	Onsite inspection (date)	Other
	Corre- spondence (date)	Phone check (date)	Meeting (date)						
Public health and safety							1, 2, 4, 6	May 28, 1981	
Unique charac- teristics							1, 2, 4, 6		
Environmentally controversial							1, 2, 4, 6		
Uncertain and unknown risks							1, 2, 4, 6		
Establishes precedents							1, 2, 4, 6		
Cumulatively significant							1, 2, 4, 6		
National Register historic places							1, 6		
Endangered/ threatened species							1, 6		
Violate Federal, State, local, tribal law							1, 2, 4, 6		

CATEGORICAL EXCLUSION REVIEW COMMON REFERENCE LEGEND

1. Surface Management Agency Input
2. Reviews Reports, or information received from Geological Survey (Conservation Division, Geological Division, Water Resource Division, Topographic Division)
3. Lease Stipulations/Terms
4. Application Permit to Drill
5. Operator Correspondence
6. Field Observation
7. Private Rehabilitation Agreement
8. *USGS conditions of approval.*



West View Tennessee  
Butler Canyon 33-12



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Moab District  
Grand Resource Area  
P. O. Box M  
Moab, Utah 84532

IN REPLY REFER TO

3109  
(U-068)  
U-16339

JUL 01 1981

## Memorandum

To: Oil & Gas Office  
USGS Conservation Division  
P. O. Box 3768  
Grand Junction, CO. 81501

From: Area Manager, Grand

Subject: Tenneco Oil Company (APD)  
Butler Canyon, Unit USA 33-12  
Lease # U-16339  
NW/SW Section 33, T. 19 S., R. 17 E., SLB&M  
Grand County, Utah

On May 28, 1981 a representative from this office met with Glenn Doyle, USGS, and Bob Mishler, agent of the Tenneco Oil Company for an inspection of the above referenced location. Subject to the attached conditions and written approval from USGS, I am approving the surface management portion of the Application for Permit to Drill.

The archaeological requirement has been fulfilled on this location. No threatened or endangered flora or fauna are indicated in the area.

Please forward the enclosed information to Tenneco Oil Company.

Enclosures: (4)  
1-Reclamation Procedures  
2-Seed Mixture  
3-Suggested Colors - Production Facilities  
4-Construction & Maintenance Requirements Appendix I

U. S. GEOLOGICAL SURVEY  
OIL AND GAS OPERATIONS  
RECEIVED

JUL 6 - 1981

GRAND JUNCTION, COLORADO

## STANDARD STIPULATIONS FOR OIL & GAS EXPLORATION

Contact this office at least 48 hours prior to beginning construction of access road and pad.

Stockpile the surface 6 inches of topsoil in a wind-row on the north east quadrant of the location.

The upper banks (uphill side) of all cuts will be rounded during construction of the access road and pad.

Notify the BLM District Archaeologist if cultural material from sub-surface deposits is exposed during the operation.

The trash cage will be at the location and fenced with fine mesh wire during drilling operations.

The "blooey" line will be centered and directed into the pit.

If production is obtained, the access road will be upgraded to BLM specifications for long-term roads as outlined in the surface use standards section of the "Oil and Gas" pamphlet (joint BLM, USGS and USFS publication).

If production is obtained, all production facilities will be painted. (See enclosed suggested colors - for facilities).

Rehabilitation of the site and access road will be accomplished in accordance with the enclosed restoration procedures.

Production facilities and pipeline route are approved on this location under lease rights.

As agreed upon at the Pre-drill field examination -

Access -

- 1) The 2.5 miles of access, as shown on exhibit 5 will be approved as shown, pending the final approval of the Butler Canyon Unit. Approximately 0.3 tenths of the proposed access exists as a jeep trail from the Grand County road in Tusher Canyon through the NW $\frac{1}{4}$  Sec. 9, T. 20 S., R. 19 E., SLB&M.
- 2) New road construction will be along the west side of the canyon, northerly through Sections 4 & 5 T. 20 S., R. 21 E., and W $\frac{1}{2}$ W $\frac{1}{2}$  Section 33, T. 19 S., R. 17 E., to the well #33-12 in the NW/SW Section T. 19 S., R. 17 E., staying out of the wash.
- 3) Surface disturbance will be kept to a minimum in the area of new construction until well production is determined.
- 4) Vegetation and soils removed from the road during construction will be windrowed along the up-slope side.
- 5) Low water crossings will be installed in each drainage.

- 6) If the well is a Producer, the road will be up-graded to BLM Standards per the Yellow Pamphlet - Surface Operating Standards for Oil & Gas Exploration and Development (USGS - BLM - USFS) and the enclosed engineering standards.

Location -

- 1) Pit(s) will be in the cut portion of the pad, fenced with 5 strands barbed wire on three sides prior to drilling and on the 4th side prior to rig removal.
- 2) Restoration plans will be in accordance with Part 10 of your Surface Use Plan.

Be aware that this location and access road are outside a wilderness study area but in an area under an appeal. The status of this wilderness inventory unit may change without notice and is subject to IMP restrictions.

- 3) Pad site will be no larger than 190 feet wide x 250 feet long, as shown on exhibit 3. No surface area will be disturbed beyond this footage.

## RECLAMATION PROCEDURES IN GRAND RESOURCE AREA

1. Disk or rip pads and access roads.
  - a. Overlap passes in order to insure complete treatment.
2. Contour pads and access roads.
  - a. Lay berms into centers.
  - b. Use cut material for fill areas.
  - c. Lay stockpiled surface soil over top of pads and spread evenly.
  - d. On highly erosive soils, it may be more beneficial to grade slopes to reduce steepness.
  - e. Do not smooth pads out, leave a roughened surface. On steeper slopes and slopes with clayey soils scarify or serrate the ground in order to increase water infiltration and reduce erosion.
3. Water bar roads where required by this office.

* 2 percent	Grade	-	200 ft. intervals
2-4 percent	Grade	-	100 ft. intervals
4-5 percent	Grade	-	75 ft. intervals
5 percent	Grade	-	50 ft. intervals

\* Actual spacing may vary according to soil stability. Lighter textured soils will require more frequent water bars. When natural drainage ways are present, water bars are to be constructed to make maximum use of them. Plan operations so that natural drainage ways do not become blocked.
4. Seed roads and pads in the fall (Oct. through mid-Dec.).

SEED MIXTURE

<u>Species</u>		<u>lbs/ac</u>
<u>Grasses</u>		
Oryzopsis hymenoides	Indian rice grass	1
Stipa comata	Needleandthread	1
<u>Forbs</u>		
Sphaeralcea coccinea	Globemallow	1
<u>Shrubs</u>		
Atriplex canescens	Four-wing	1
Atriplex confertifolia	Shadscale	<u>1</u>
	Total	5



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT

## SUGGESTED COLORS TO PAINT OIL & GAS PRODUCTION FACILITIES

### Cisco Desert and Flats below the Bookcliffs:

Dynasty Green	(Sears)
Tumbleweed	(Pratt & Lambert)
Desert Tan	-----
Sage Gray	(Pratt & Lambert)

### Bookcliffs Region:

Sage Gray	(Pratt & Lambert)
Sea Life	(Pratt & Lambert)
Dynasty Green	(Sears)

Similar hues other than the ones mentioned above must be approved by the Grand Resource Area Manager.

The lessee is advised that this lease lies within a wilderness inventory unit under appeal and as such is subject to certain regulation under the Federal Land Policy and Management Act of 1976 (FLPMA). These regulations are set forth in the Interior Management & Policy (IMP). Because this unit is under appeal its status may change without prior notice to the Usee. This WSA is subject to IMP until such time as Congress determines it shall be designated as Wilderness or drops the area from further consideration.

U. S. GEOLOGICAL SURVEY - CONSERVATION DIVISION

*Greg*

FROM: DISTRICT GEOLOGIST, ~~W~~E, SALT LAKE CITY, UTAH

TO: DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. USA U 16339

OPERATOR: Tenneco WELL NO. 33-12

LOCATION: SE 1/4 NW 1/4 SW 1/4 sec. 33, T. 19S, R. 17E., SLM

Grand County, Utah

1. Stratigraphy:

Mesaverde surface			
Mancos	780'	Morrison	5110'
Castlegate	895'	Entrada	5630'
Dakota Silt	4730'	<u>TD</u>	<u>5650'</u>
Dakota	4865'		

2. Fresh Water:

Fresh water may be present in the Mesaverde & in the Castlegate.

3. Leasable Minerals:

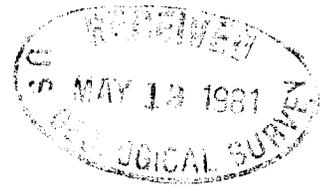
Coal: Mesaverde (~300' to ~700'), Location is within the Sege Coal Field.

Oil/Gas: Dakota Silt to TD

4. Additional Logs Needed:

Gamma Ray log should be included with suite through the coal zone for coal identification behind surface casing

5. Potential Geologic Hazards: None expected



6. References and Remarks:

Signature: Gregory W. Wood Date: 5-14-81

Pre FLPMA

lease

undue + unnecessary  
degradation

Dale Lewis - pilot

Bob Misdler

Elmer Duncan

Rocky Hillside above  
The pad.

Micol Walker

Bill Paniger

Leonard Lewis

Jim Poag - County

Bob Dallas - BLM

259-5308

TENNECO OIL COMPANY - 10 POINT PLAN

1. The geological name of the surface formation: Mesaverde
- 2 & 3. Estimated Formation Tops:  
  
(See Attached Drilling Procedure)
4. Proposed Casing Program:  
  
(See Attached Drilling Procedure)
5. Blowout Preventors:  
Hydraulic double ram. One set of rams will be provided each size drill pipe in the hole. One set of blind rams at all times. Fill line will be 2", kill line will be 2", choke relief line will be 2". BOP's, drills and tests will be recorded in the driller's log. BOP will be tested every 24 hours and recorded in IADC Log. ✓
6. Mud Program: (Sufficient quantity of mud and weight material will be available on location).  
  
(See Attached Drilling Procedure.)
7. Auxiliary Equipment:
  - a. Kelly cock will be in use at all times.
  - b. Stabbing valve to fit drill pipe will be present on floor at all times.
  - c. Mud monitoring will be visual. No abnormal pressures are anticipated.
  - d. Floats at bits.
  - e. Drill string safety valve(s) to fit all pipe in drill string will be maintained on the rig floor while drilling operations are in progress.
8. Coring, Logging, and Testing Program:  
  
(See Attached Drilling Procedure)
9. No abnormal pressures, temperatures or potential hazards such as H<sub>2</sub>S are expected to be encountered.
10. The drilling of this well will start approximately ( June/July 81) and continue for 10 to 12 days.

Your office will be notified of spudding in sufficient time to witness cementing operations. Immediate notice will be given on blowouts, fires, spills, and accidents involving life threatening injuries or loss of life. Prior approval will be obtained before appreciably changing drilling program or commencing plugging operations, plug back work, casing repair work or corrective cementing operations.

TENNECO OIL COMPANY  
ROCKY MOUNTAIN DIVISION  
PENTHOUSE, 720 SOUTH COLORADO BOULEVARD  
DENVER, COLORADO 80222

DRILLING PROCEDURE

DATE: March 6, 1981

LEASE: Butler Canyon Unit USA

WELL NO.: 33-12

LOCATION: 1650' FSL, 990' FWL  
Section 33, T19S, R17E  
Grand County, Utah

FIELD: Wildcat

ELEVATION: 5080' (Est. G.L.)

TOTAL DEPTH: 5650

PROJECTED HORIZON: Entrada

SUBMITTED BY: Bruce Ladd

DATE: 03/06/81

APPROVED BY: Tom Dunning

DATE: 5/5/81

CC: Administration  
DSB Well File  
Field File

ESTIMATED FORMATION TOPS

Mesaverde	Surface
Mancos	780'
Castlegate	895' (Water)
Dakota Silt	4730' (Gas)
Dakota	4865' (Gas)
Morrison	5110' (Gas)
Entrada	5630' (Gas)
T.D.	5650'

DRILLING, CASING, AND CEMENT PROGRAM

1. MIRURT.
2. Set 1-3 joints of 9 5/8" casing as needed to be used as conductor pipe.
3. Install casing head and nipple up rotating head and blooie line.
4. Drill 8 3/4" hole to 1100' or 200 feet into the Castlegate Formation.
5. Log well as per G.E. department recommendations.
6. Run 7", 23#, K-55, ST&C surface casing to T.D. Cement with sufficient volume to circulate cement to the surface.
7. WOC. Nipple up casing spool, BOP's rotating head, choke manifold, etc. Pressure test BOP's, manifold, etc. to 1000 psi for 15 minutes.
8. TIH and displace water in casing with air. Drill out shoe and dry up hole.
9. Drill 6 1/4" hole to T.D.
10. Log well as per G.E. department recommendations.
11. If well is productive, run 4 1/2", 10.5#, K-55, ST&C casing to T.D. Cement with sufficient volume to cover all possible productive zones.
12. If the well is non-productive, P & A as per Regulatory Agency Specifications.

CASING PROGRAM

CONDUCTOR:	30' to 125' as needed	9 5/8", 36#, K-55, ST&C.
SURFACE:	0-1100 1100'	7", 23#, K-55, ST&C.
PRODUCTION:	0-5650 5650'	4 1/2", 10.5#, K-55, ST&C.

## MUD PROGRAM

- 0-125 Spud mud. Viscosity as needed to clean hole.
- 125-1100 Air or Air/Mist.
- 1100-5650 Air or Air/Mist.

NOTE: Should the hole become wet or encounter large gas flows which require mud up, keep the weight as low as possible, vis as needed, and W.L.  $\pm$  6 cc.

## EVALUATION

### Cores and DST's:

None.

### Deviation Surveys:

- 0-125 Every 100' unless hole conditions prohibit running the surveys. Maximum deviation at T.D.  $1^{\circ}$ .
- 125-1100 Every 500' or on trips. Maximum deviation  $1^{\circ}$  per 100' or  $1^{\circ}$  at TD.
- 1100-5650 Every 500' or on trips. Maximum deviation  $1^{\circ}$  per 100' or  $5\frac{1}{2}^{\circ}$  at TD.

### Samples:

None, if drilled after the Butler Canyon Unit USA 3-16. Otherwise samples every 10' and 2-man mud logging unit.

### Logs:

- Surface Hole - as specified by G.E. Department.
- Production Hole - as specified by G.E. Department.

## BLOWOUT EQUIPMENT

1. Double ram hydraulic with pipe and blind rams operated by an accumulator.
2. Rotating head on air or air/mist holes.
3. Preventors must be checked for operation every 24 hours. This check must be recorded on the IADC Drilling Report Sheet.

## REPORTS

Drilling Reports for the past 24 hours will include depth, footage, time distribution, activity breakdown, mud properties, bit record, bottom hole assembly, daily and cumulative mud cost, deviation surveys, and other pertinent information to be called into Division Office by 7:30 A.M. Monday thru Friday.

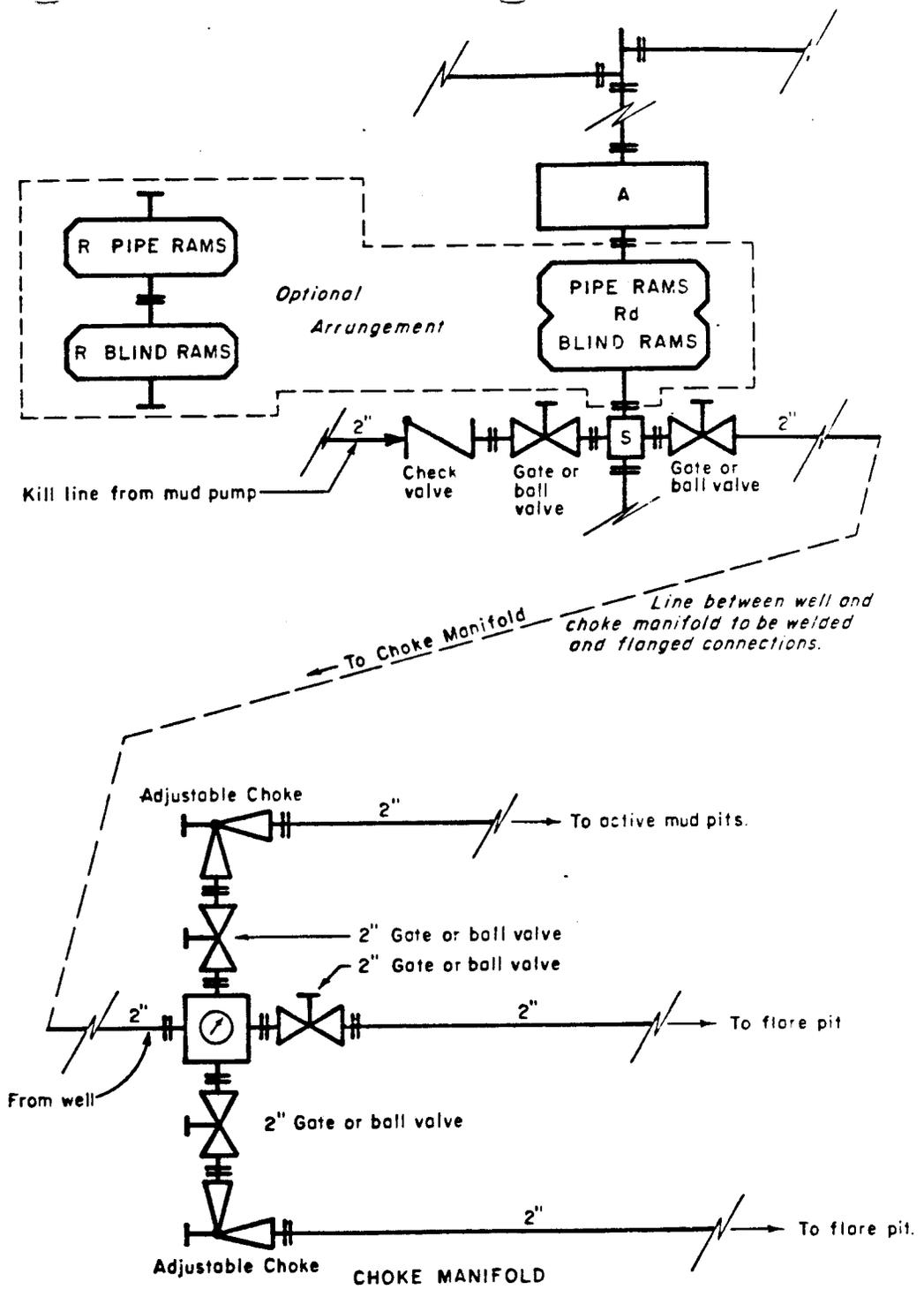
TENNECO OIL COMPANY  
P.O. BOX 3249  
ENGLEWOOD, COLORADO 80155  
PHONE: 303-740-4800

### Office Directory

Don S. Barnes	740-4814
John W. Owen	740-4810
Tom Dunning	740-4813
Dale Kardash	740-4809

In case of emergency or after hours call the following in the preferred order.

- |  |          |        |
|--|----------|--------|
| (1) Don S. Barnes                      | 740-4814 | Office |
| Division Drilling Engineer             | 936-0704 | Home   |
| (2) John W. Owen                       | 740-4810 | Office |
| Senior Drilling Engineering Specialist | 795-0221 | Home   |
| (3) Mike Lacey                         | 797-2651 | Home   |
| Division Production Manager            |          |        |



- All equipment to be 3,000 psi working pressure except as noted.
- Rd Double ram type preventer with two sets of rams.
  - R Single ram type preventer with one set of rams.
  - S Drilling spool with side outlet connections for choke and kill lines.
  - A Annular type blowout preventer.

**ARRANGEMENT B**

**TENNECO OIL COMPANY**  
**ROCKY MOUNTAIN DIVISION**  
**REQUIRED MINIMUM**  
**BLOWOUT PREVENTER AND**  
**CHOKES MANIFOLD**

J. MAGILL 10-26-79 EVI

I. EXISTING ROADS

- A. Proposed Well Site Location: The proposed site was surveyed by a registered land surveyor and is located 1885.4 FSL, 1206.3 FWL, Sec 33, T19S, R17E, Grand County, Utah. (See exhibit 1)
- B. Planned Access Route: Access to the subject location is had via U.S. Highway 6 and 50 East of the bridge across the Green River at Green River, Utah, 0.5 miles to an asphalt surfaced road to the North. Proceed North 5.3 miles to an unimproved dirt road to the right. Proceed on this unimproved dirt road keeping to the right at any minor intersections for 1.4 miles and proceed downhill into the floor of Tusher Canyon, continue along this unimproved dirt road for 0.6 miles into the dry stream bed of Tusher Canyon. Proceed Northeasterly up the dry wash bed 6.3 miles to a gate in the fence across the wash bottom. Proceed through gate and continue up wash bottom 0.1 mile to the intersection of the roads to left hand of Tusher Canyon and right hand of Tusher Canyon. Turn left and proceed up the left hand fork of Tusher Canyon for approximately 300 feet. Turn left and cross the wash bed and proceed 1.0 miles along this unimproved dirt road to the intersection with the proposed access to Butler Canyon Unit USA 33-12. This proposed access is flagged fluorescent orange and yellow and is approximately 2.5 miles long.
- C Access Road Labelled:
- Color Code: Red - Improved surfaced roads  
Blue - New access road to be constructed
- D. All roads within a 3 mile radius are marked on exhibit 5. All roads are unimproved dirt.
- E. The existing roads are shown in exhibit 5.
- F. Existing Road Maintenance or Improvement: The existing road will be improved as needed and per the requirements of the Grand County Road Supervisor. This road, along with the new access road, may require occasional grading to return the road surface to a cross section necessary for proper drainage.

II. PLANNED ACCESS ROUTE

- A. Route Location - (See exhibits 4 and 5.)  
The planned access route was selected to provide the shortest distance to the well site with acceptable grades from the main connector road. Temporary access will be built initially. If the facility is productive, the temporary road will be improved as follows:
1. Width:  
The average dirt width will be 24 feet. The average traveled surface width will be 18 feet. New road will be 18' crown road, 9' either side of the centerline with drain ditches along either side of the proposed road where it is determined necessary in order to assure satisfactory drainage.

2. Maximum Grades: The grade of the road will vary from 0 to 8% but will not exceed 8% with one exception. A ramp will be constructed at a point marked on exhibit 5, approx. 200' in length and at a grade of 14%.
3. Turnouts: Turnouts will be constructed in accordance with the request of the Grand County Road Supervisor on County roads. No other turnouts are anticipated.
4. Drainage Design:  
Prior to construction of the new access road, the brush and topsoil will be windrowed to each side of the alignment outside construction limits. The subgrade surface will be a minimum elevation of one foot above ditch grade. The road surface will be center crowned and the inslopes will have a maximum slope of 3:1 and fill slopes will be a maximum of 2:1.
5. Culverts Use, Major Cuts and Fills: Culverts will be placed as needed and suggested by the BJM and Grand County Road Supervisor.  
  
Max: cut - 5'  
Max: fill - 13' at ramp
6. Surfacing Material:  
The proposed permanent access road will be constructed with native material.
7. Gates, Cattleguards, Fence Cuts: ~~Not needed~~. One gate will be constructed at the 14% grade ramp.
8. New portion of road will be center flagged.

III. LOCATION OF EXISTING WELLS

No wells exist within a 3 mile radius.

~~The proposed well is a development well. Exhibit shows existing wells within a one mile radius.~~

- ~~A. Water Wells:~~
- ~~B. Abandoned Wells:~~
- ~~C. Temporarily Abandoned Wells:~~
- ~~D. Disposal Wells:~~
- ~~E. Drilling Wells:~~
- ~~F. Producing Wells: See Exhibit~~
- ~~G. Shut In Wells:~~
- ~~H. Injection Wells:~~
- ~~I. Monitoring or Observation Wells: None~~

IV. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- A. Existing facilities within one mile owned or controlled by Lessee/  
Operator:                   None

- ~~1. Tank batteries~~
- ~~2. Production facilities -~~
- ~~3. Oil gathering lines -~~
- ~~4. Gas gathering lines -~~
- ~~5. Injection lines -~~
- ~~6. Disposal lines~~

- B. New facilities in the event of production:

- 1. New facilities: May consist of a well head, condensate tank, production unit, meter house, all of which would remain within the disturbed area. Exhibit 6 shows our most typical arrangement for this area.
- 2. Dimensions of the facilities are shown in Exhibits 2 and 3 .
- 3. Construction will be to strip the topsoil, level drilling pad. Dehydrator pits will be constructed with soil materials native to the site. Construction methods will be employed to assure that no drainage flows are impounded to prevent the loss of any hydrocarbon from the site. This is to be done in a manner to facilitate rapid recovery and clean up.
- 4. Protective measures to protect wildlife and livestock:  
Dehydrator pits shall be overhead flagged should any hydrocarbon material be present on the surface. The dehydrator pits shall be fenced to prevent entry of livestock or wildlife.

- C. Plan for rehabilitation of disturbed areas no longer needed for operations after construction completed:

Upon completion of well, areas required for continued use will be graded to provide drainage and minimize erosion. Those areas not required for continued usage will be graded to provide drainage and minimize erosion. Those areas unnecessary for use will be graded to blend with the surrounding topography. Topsoil will be replaced on those areas and seeded according to BLM specifications.

V. LOCATION AND TYPE OF WATER SUPPLY

- A. The water source is the State of Utah.

- B. Water transportation system: Water to be hauled in trucks from an undetermined pick up point in Tusher Canyon. This point will be determined by the State of Utah. No roads other than those being used for access to drill sites will be required for purposes of hauling water.

- C. Water wells: None

VI. SOURCE OF CONSTRUCTION MATERIALS

A. Materials:

Construction materials will consist of soil encountered with the boundaries of the proposed site. Topsoil will be stripped to a depth of six inches and stockpiled in an area that does not interfere with operations.

B. Land Ownership:

The planned site and access roads lie on Federal land administered by the United States Department of Interior, U.S. Bureau of Land Management.

C. Materials foreign to site: N/A

D. Access road shown under Exhibits 4 and 5.

VII. METHODS OF HANDLING WASTE MATERIALS

A. Cuttings:

Will be contained within the limits of the reserve pit.

B. Drilling fluids:

Will be retained in the reserve pit.

C. Produced fluids:

No substantial amount of water is expected. The amount of hydrocarbon that may be produced while treating will be retained in the reserve pit. Prior to clean up operations the hydrocarbon materials will be skimmed or removed as the situation would dictate.

D. Sewage:

Sanitary facilities will consist of at least one chemical toilet and after the completion of operations the sewage will be removed and disposed of at a legal location.

E. Garbage:

A burn cage will be used to burn all flammable material. The small amount of refuse will be removed from the site and disposed of at a legal and environmentally acceptable location.

F. Clean up of well site:

After drilling, the surface of the drill pad will be cleaned and graded to accommodate a completion rig. The "mouse hole" and "rat hole" will be backfilled to prevent injury and hazard for livestock. Reserve pit will be fenced until dry and it can be backfilled and restored to natural terrain.

VIII. ANCILLARY FACILITIES

None required.

IX. WELL SITE LAYOUT

A. See Exhibits - 2 and 3.

1. Location of pits: exhibits 2 and 3.
2. Rig Orientation: exhibits 2 and 3.

B. Pits will be unlined, unless otherwise required.

X. PLANS FOR RESTORATION OF SURFACE

A. Reserve Pit Cleanup:

The pit will be fenced prior to rig release and shall be maintained until cleanup. Prior to backfill operation, any hydrocarbon material on the pit surface will be removed. The fluids and solids contained in the pit shall be backfilled with soil excavated from the site and with soil adjacent to the reserve pit. The restored surface of the reserve pit will be contoured to prevent impoundment of any drainage flows. The gradient of the surface will be maintained to prevent sudden acceleration of drainage flows which could cause continued erosion of the surface. Following backfill completion, topsoil removed from the disturbed areas will be replaced in a uniform layer. The reserve pit will be seeded per Bureau of Land Management recommendation during the appropriate season following final restoration of the site.

B. Restoration Plans - Production Developed:

The reserve pit will be backfilled and restored as described under Item A. In addition, those disturbed areas not required for production will be graded to blend with the surrounding topography. Topsoil will be placed on these areas and seeded. The portion of the drill pad required for production and turning areas will be graded to minimize erosion and provide access to production facilities under inclement conditions. Following final improvement and surfacing of that portion of new access road, the topsoil windrowed to each side of the alignment will be placed on the cut slopes. Following depletion and abandonment of the site, restoration procedures will be those that follow under Item C.

C. Restoration Plans - No Production Developed:

Of course the reserve pit will be restored as described above. With no production developed, the entire surface disturbed by construction of the drilling pad will be restored to its natural terrain and reseeded per Bureau of Land Management requirements.

XI. OTHER INFORMATION

A. Surface Description: The topography of the area is the arid canyonland variety typical of the "Book Cliffs" in E central Utah. The major drainage flows SWesterly to the Green River. Rocky types are typically stratified sandstone with some layers of shale conglomerates. The soil is generally poor & quite rocky with some outcrops of bentonite clays. Vegetation is sparse pinon and juniper on slopes and sagebrush in lower areas and canyon bottomlands.

B. Other Surface-use Activities: The surface is federally owned and managed by the BLM/USGS. The predominant surface use is mineral exploration and production with minimal grazing activity.

C. Proximity of Water, Dwelling, Historical Sites:

1. Water: Tusher Canyon approx. 1½ miles south carries an intermittent to low flow of water.
2. Occupied Dwellings: Not existing.
3. Historical Sites: An archaeological reconnissane has been performed for this location and report is on file with the appropriate USGS/BLM offices.

XII. OPERATOR'S REPRESENTATIVE

Field personnel who can be contacted concerning compliance of this Surface Use Plan are as follows:

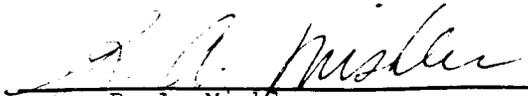
Donald Barnes  
P.O. Box 3249  
Englewood, Colorado 80155  
Phone: (303) 740-4814

Rober A. Mishler  
P.O. Box 3249  
Englewood, Colorado 80155  
Phone: (303) 740- 4825

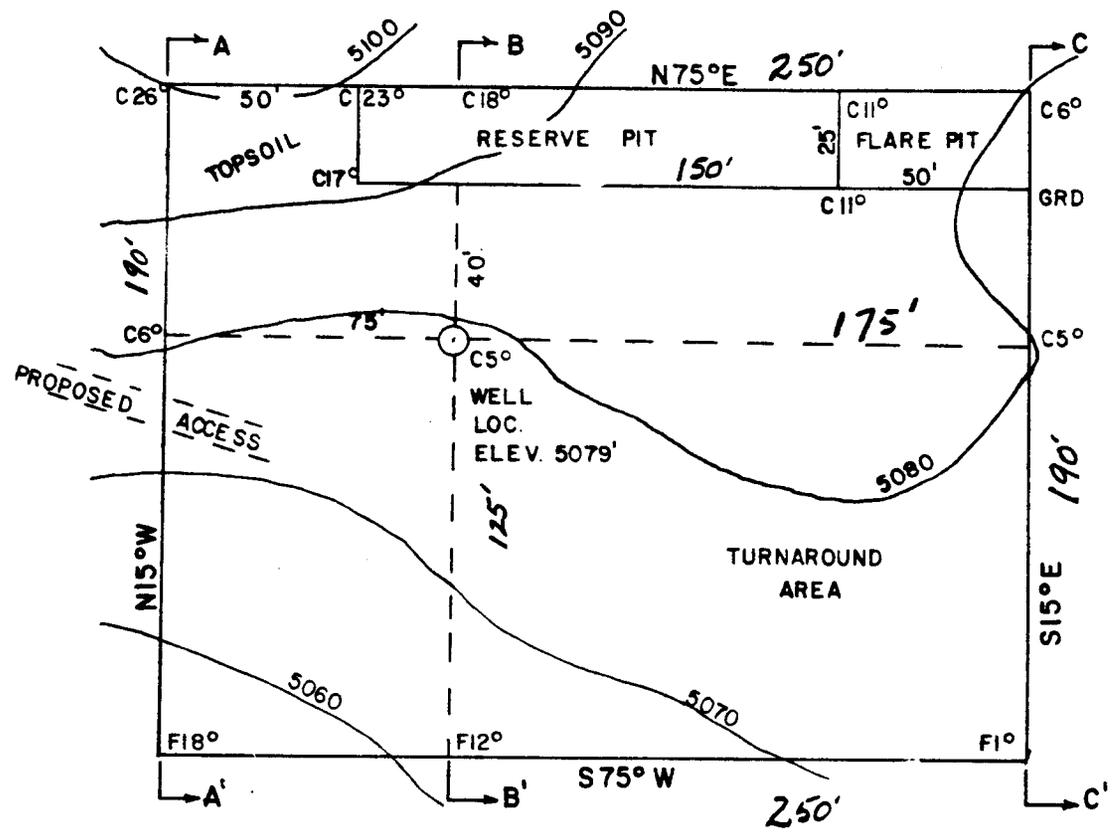
XIII. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions as they actually exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the proposed work performed by Tenneco Oil Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

DATE: May 7, 1981

  
R. A. Mishler  
Senior Production Analyst

PAD LAYOUT

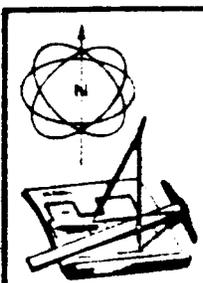
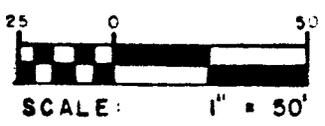


REF. PT. 200' NORTH  
ELEV. 5120'

REF. PT. 200' WEST  
ELEV. 5085'

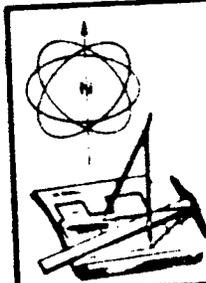
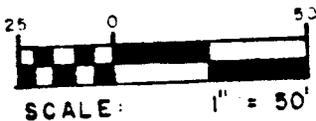
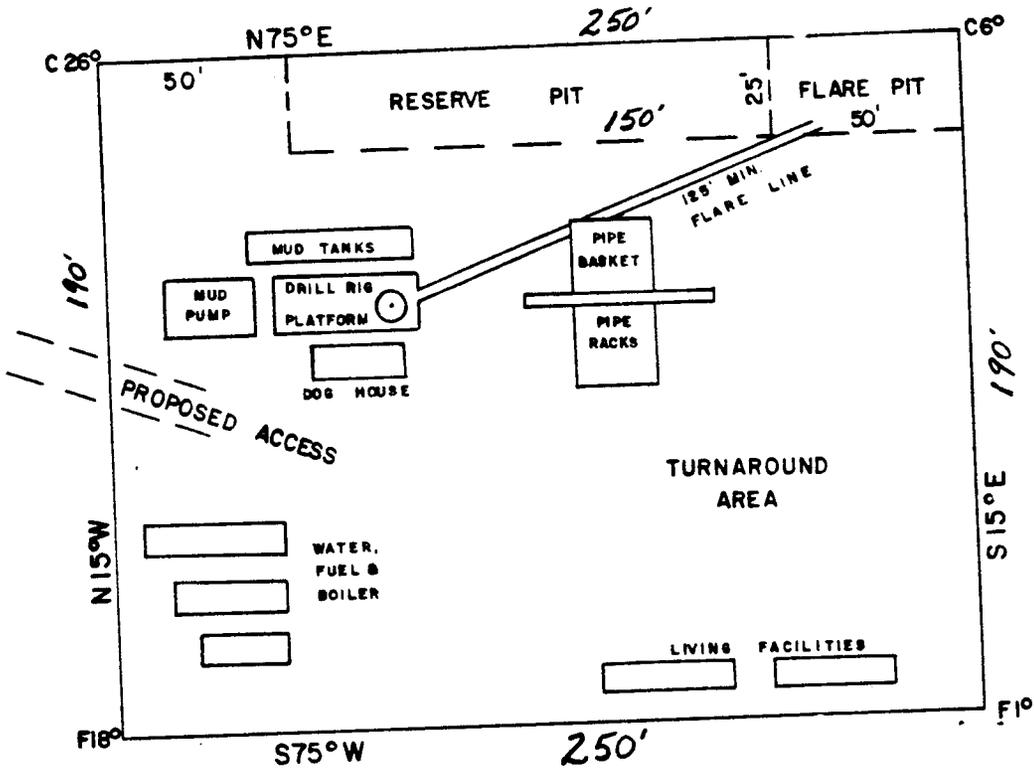
VEG: SALT BRUSH

SOIL: SANDY CLAY



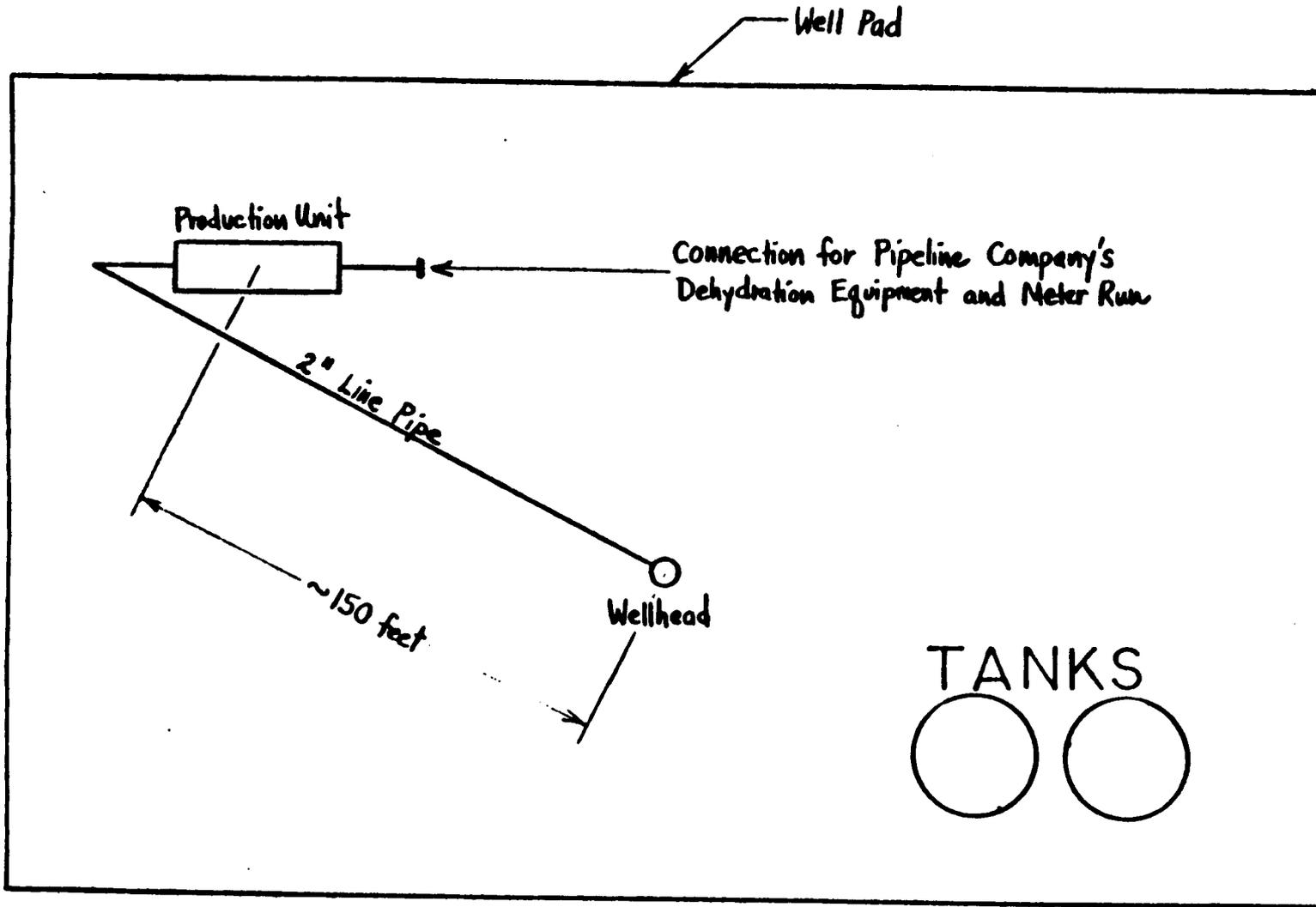
ARMSTRONG ENGINEERS and ASSOCIATES, INC. ENGINEERING • SURVEYING • SOILS AND CONCRETE TESTING 861 ROOSEVELT AVENUE - GRAND JUNCTION, COLORADO 81501 - (303) 245-3861	
SCALE: 1" = 50' DATE: 4/28/81 DRAWN BY: MWD CHECKED BY: JPA DATE: 4/2/81	TENNECO OIL BUTLER CANYON UNIT USA 33-12
SHEET 2 of 6	
JOB NUMBER: 813281	

RIG LAYOUT



ARMSTRONG ENGINEERS and ASSOCIATES, INC. ENGINEERING • SURVEYING • SOILS AND CONCRETE TESTING 867 ROOF - WILSON - GRAND JUNCTION, COLORADO 81501 - (303) 245-3861	
SCALE: 1" = 50' DATE: 4/22/81	TENNECO OIL BUTLER CANYON UNIT USA 33-12
PROJECT: MWD DRAWN BY: JEA DATE: 4/2/81	SHEET 3 of 6 JOB NUMBER: 813281

# PROBABLE EQUIPMENT INSTALLATION



NOT TO SCALE



# United States Department of the Interior

IN REPLY REFER TO

3109  
(U-603)

BUREAU OF LAND MANAGEMENT  
Moab District  
Grand Resource Area  
P. O. Box M  
Moab, Utah 84532

Mr. Lee Freeman  
Tenneco Oil Co.  
P. O. Box 3249  
Englewood, CO. 80155

Subject: Staking Request (PER)  
Well: Butler Canyon Unit USA 33-12  
Section 33, T. 19 S., R. 17 E.  
Grand County, Ut.

Dear Mr. Freeman:

This office has no objections to staking the above subject location.

Would you include your bond number when submitting your application to drill. In addition you should be knowledgeable that Grand County requires a permit if you plan to use a county road as a portion of your access road. You should contact the County Road Supervisor. An archaeological clearance must be obtained after staking the site(s).

Furthermore, you should be aware that this location is out of the Desolation Canyon WSA (UT-060-068A) but is subject to Interim Management Policy (IMP) until the expiration of the appeals timeframe following resolution of a public protest. The protest was amended February 26, 1981 but is subject to appeal by affected parties until April 6, 1981. If no appeal is received the location will no longer be subject to IMP.

Sincerely yours,

Colin P. Christensen  
Area Manager

cc:  
Grand County Road Supervisor

RECEIVED

MAR 24 1981

TENNECO OIL CO.  
DENVER

August 13, 1981

Tenneco Oil Company  
P. O. Box 3249  
Englewood, Colo. 80155

RE: Well No. Butler Canyon Unit #33-12,  
Sec. 33, T. 19S, R. 17E,  
Grand County, Utah

Insofar as this office is concerned, approval to drill the above referred to gas well is hereby granted in accordance with Section 40-6-11, Utah Code Annotated 1953; and predicated on Rule A-3, General Rules and Regulations and Rules of Practice and Procedure.

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 43-019-30835.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder  
Petroleum Engineer

MTM/db  
CC: USGS

**RECEIVED**  
UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. oil well  gas well  other

2. NAME OF OPERATOR  
Tenneco Oil Company

3. ADDRESS OF OPERATOR  
P.O. Box 3249, Englewood, CO 80155

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 1885.4'FSL, 1206.3'FWL  
AT TOP PROD. INTERVAL: same  
AT TOTAL DEPTH: same

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

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	<input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>	<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>	<input type="checkbox"/>
(other) <u>change drilling procedure</u>		

5. LEASE U-16339
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME Butler Canyon
8. FARM OR LEASE NAME Butler Canyon Unit USA
9. WELL NO. 33-12
10. FIELD OR WILDCAT NAME Entrada Test, Wildcat
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec 33, T19S, R17E
12. COUNTY OR PARISH Grand
13. STATE Utah
14. API NO. 43-019-30835
15. ELEVATIONS (SHOW DF, KDB, AND WD) 5079' ground

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

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

Lease U-16339 Expiration date 9/30/81.

Tenneco Oil proposes to change the drilling procedure to the Butler Canyon Unit USA 33-12 as per the attached revised drilling procedure. We request permission to drill 17 1/2" hole to 125' and cement to surface 13 3/8", 54.5#, K-55 St&C utilizing a small rig not capable of T.D., estimated spud date 9/15/81. After release of the small rig, within 60 days, move on a larger rig capable of T.D. and resume dilligent operations to completion.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

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

SIGNED M. L. Freeman TITLE Admn. Supervisor DATE September 1, 1981

(This space for Federal or State office use)

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

CONDITIONS OF APPROVAL, IF ANY:

**APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING**  
DATE: 10-2-81  
BY: M. J. Kinley

TENNECO OIL COMPANY  
ROCKY MOUNTAIN DIVISION  
P.O. BOX 3249  
ENGLEWOOD, CO 80155

REVISED

DRILLING PROCEDURE

DATE: June 23, 1981

LEASE: Butler Canyon Unit USA

WELL NO: 33-12

LOCATION: 1885' FSL, 1206' FWL  
Section 33, T19S, R17E  
Grand County, Utah

FIELD Wildcat

ELEVATION: 5079 (Surveyed G.L.)

TOTAL DEPTH: 6000'

PROJECTED HORIZON: Entrada

SUBMITTED BY: Mark Kangas DATE: June 23, 1981

APPROVED BY: Tom Running DATE: 6/23/81

CC: Administration  
DSB Well File  
Field File

ESTIMATE FORMATION TOPS

Mesaverde	Surface
Mancos (Buck Tongue)	780'
Castlegate	895' (water)
Mancos B Top/Base	1845/2695'
Frontier	4430'
Dakota Silt	4730' (Gas)
Dakota	4955' (Gas)
Morrison	5190' (Gas)
Entrada	5900' (Gas)
T.D.	6000'

1. No abnormal pressures, temperatures or H<sub>2</sub>S is anticipated on this hole.
2. Reserve pit shall be fenced on 3 sides during drilling operations in order to comply with BLM and USGS regulations.

## DRILLING, CASING, AND CEMENTING PROGRAM

1. MIRURT. Set conductor pipe as needed.
2. Drill 17 1/2" hole to 125' with mud. Run 13 3/8", 54.5#, K-55, ST&C, casing to TD and cement with sufficient volume to circulate cement to the surface.
3. WOC. Nipple up casing head, BOP's, rotating head, blooie line, and choke manifold. Pressure test BOP's, manifold, etc. to 1000 psi for 15 minutes. Drill out shoe and dry up hole.
4. Drill an 12 1/4" hole to 1200' or 300 feet into the Castlegate Formation.
5. Log well as per G.E. Department recommendations.
6. Run 9 5/8", 36#, K-55, ST&C casing to T.D. Cement with sufficient volume to circulate cement to the surface.
7. WOC, Nipple up casing spool, BOP's, rotating head, blooie line, and choke manifold. Pressure test BOP's, manifold, etc. to 1000 psi for 15 minutes. Drill out shoe and dry up hole.
8. Drill 8 3/4" hole to TD.
9. Log well as per G.E. Department recommendations.
10. If well is productive, run 4 1/2", 11.6#, K-55, LT&C casing to TD. Cement with sufficient volume to cover all possible productive zones.
11. If the well is non-productive, P & A as per Regulatory Agency specifications.

### CASING PROGRAM

CONDUCTOR:			As needed.
SURFACE:	0-125	125'	13 3/8", 54.5#, K-55, ST&C.
INTERMEDIATE:	0-1200	1200'	9 5/8, 36# K-55, ST&C.
PRODUCTION:	0-6000	6000'	4 1/2", 11.6#, K-55, LT&C.

### MUD PROGRAM

0-125' Spud mud. Viscosity as needed to clean hole.  
125-1200' Air or Air/Mist.  
1200-6000' Air or Air/Mist.

NOTE: Should the hole become wet or encounter large gas flows which require mud up, keep the weight as low as possible, vis as needed, and W.L. + 6 cc.

### EVALUATION

#### Cores and DST's:

None. Sidewall coring if conditions permit.

#### Deviation Surveys:

0-125' Every 100' unless hole conditions prohibit running the surveys. Maximum deviation at T.D. 1°.  
125-1200' Every 500' or on trips. Maximum deviation 1° per 100' or 1 1/2° at T.D.  
1200-6000' Every 500' or on trips. Maximum deviation 1° per 100' or 6° at T.D.

#### Samples:

At 10' intervals in all potential objectives and through remainder of section as possible. Two man logging unit will be used.

#### Logs:

Surface Hole - as specified by G.E. Department.

Production Hole - as specified by G.E. Department.

### BLOWOUT EQUIPMENT

1. Double rams hydraulic with pipe and blind rams operated by an accumulator.
2. Rotating head on air or air/mist holes.
3. Preventors must be checked for operation every 24 hours. This check must be recorded on the IADC Drilling Report Sheet.

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TENNECO OIL COMPANY  
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ENGLEWOOD, COLORADO 80155  
PHONE: 303-740-4800

### Office Directory

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John W. Owen	740-4810
Tom Dunning	740-4813
Dale Kardash	740-4809

In case of emergency or after hours, call the following in the preferred order.

- |   |                                  |
|---|----------------------------------|
| (1) Donald S. Barnes<br>Division Drilling Engineer        | Office 740-4814<br>Home 936-0404 |
| (2) John W. Owen<br>Senior Driling Engineering Specialist | Office 740-4810<br>Home 795-0221 |
| (3) Mike Lacey<br>Division Production Manager             | Home 797-2651                    |

ok

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. oil well  gas well  other

2. NAME OF OPERATOR  
Tenneco Oil Company

3. ADDRESS OF OPERATOR  
P. O. Box 3249, Englewood, CO 80155

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 1885.4' FSL 1206.3' FWL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

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

5. LEASE  
USA 016339

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
Butler Canyon

8. FARM OR LEASE NAME  
Butler Canyon Unit USA

9. WELL NO.  
33-12

10. FIELD OR WILDCAT NAME  
Entrada Test, Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 33, T19S R17E

12. COUNTY OR PARISH  
Grand

13. STATE  
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)  
5079' gr.

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

PULL OR ALTER CASING

MULTIPLE COMPLETE

CHANGE ZONES

ABANDON\*

(other)

SUBSEQUENT REPORT OF:

RECEIVED

OCT 05 1981

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

DIVISION OF  
OIL, GAS & MINING

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.)\*

In order to fulfill lease extension requirements, Tenneco achieved a technical spud on the above captioned well on 9/25/81. Within 60 days after rig release, Tenneco will move a rig on site with the objective of drilling to proposed TD.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

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

SIGNED [Signature] TITLE Production Analyst DATE 9/29/81

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: Tennaco

WELL NAME: Butter Canyon Unit 33-12

SECTION NWSW 33 TOWNSHIP 19S RANGE 17E COUNTY Grand

DRILLING CONTRACTOR Brinkerhoff Signal

RIG # 9 TD 6000'

SPUDDED: DATE 10-28-81

TIME 9:00 AM

How Rotary

DRILLING WILL COMMENCE Immediately

REPORTED BY Rocke Wattenberg

TELEPHONE # (801) 353-4117  
(303) 858-9826 Gary Clark

DATE October 28, 1981 SIGNED MTM

NOTICE OF SPUD

*Leoneco*

OCT 29 1981

DEPARTMENT OF  
ENERGY, OIL & GAS & MINING

Caller: Rocky Wattenberg  
Phone: \_\_\_\_\_  
Well Number: Butler Canyon #33-12  
Location: 188' FSL 1262' FWL 33-19S-17E  
County: Grand State: Utah  
Lease Number: U-16339

Lease Expiration Date: \_\_\_\_\_  
Unit Name (If Applicable): Butler Canyon Unit  
Date & Time Spudded: 10-28-81 9:30 A.M.  
Dry Hole Spudded  Rotary: \_\_\_\_\_  
Details of Spud (Hole, Casing, Cement, etc.) 12 1/4" to 1200'

Rotary Rig Name & Number: Brinkerhoff Signal Rig 9  
Approximate Date Rotary Moves In: \_\_\_\_\_

FOLLOW WITH SUNDRY NOTICE

Call Received By: KE  
Date: 10-28-81

DIVISION OF OIL, GAS AND MINING

PLUGGING PROGRAM

NAME OF COMPANY: Tennaco Ted McAdam- Res. 303-740-4800  
(Bus.) 303-564-3401  
WELL NAME: Butter Canyon Unit USA 33-12 ext. 68  
SECTION 33 TOWNSHIP 19S RANGE 17E COUNTY Grand

VERBAL APPROVAL GIVEN TO PLUG AND ABOVE REFERRED TO WELL IN THE FOLLOWING MANNER:

TOTAL DEPTH: 5730'

CASING PROGRAM:

13 3/8 @ 125' cmnt to surface  
9 5/8" @ 1647'  
7" @ 5143 (TOC 4400)  
6 1/8" openhole TD

FORMATION TOPS:

Castlegate	943'
Dakota Silt	4495'
Dakota Sand	4669
Morrison	4890'
Entrada	5630' - TD

PLUGS SET AS FOLLOWS:

1. 5050' - 5250'
2. 4400' + 100 plug across casing stub
3. 1722' - 1572'
4. 50' - surface

Place 9.2#, 50 vis fresh water gel based abandonment mud between plugs; clean, restore, and regrade site, regulation dryhole marker

DATE 11-20-81

SIGNED MTM

*M. J. Munder*

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. oil well  gas well  other

2. NAME OF OPERATOR  
Tenneco Oil Company

3. ADDRESS OF OPERATOR  
P. O. Box 3249, Englewood, CO 80155

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 1885' FSL 1206' FWL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

5. LEASE  
USA-016339

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
Butler Canyon

8. FARM OR LEASE NAME  
Butler Canyon Unit USA

9. WELL NO.  
33-12

10. FIELD OR WILDCAT NAME  
Entrada TEst - Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 33, T19S, R17E

12. COUNTY OR PARISH  
Grand

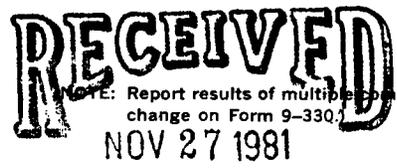
13. STATE  
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)  
5079' gr.

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

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>		<input type="checkbox"/>
(other)			



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

DIVISION OF  
OIL, GAS & MINING

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.)\*

10/28/81 - Spud well. (Technical spud was 9/25/81)

10/31/81 - Run 40 jts 1652' 9-5/8" 36# K-55 Stc. Shoe @ 1647'. Cmtd w/125 bbls mud ahead and 20 bbls fresh watr and 400 sx 50:50 POZ w/2% gel, 3% KCL, 5#/sx Gilsonite, 2% cc, 1/4#/sx Celloflake and 120 sx Cl-H neat w/2% cc, 1/4#/sx Cellowflake.

11/4/81 - Drlg and survey.

11/9/81 - Log well.

11/10/81 - Ran 66 jts 2284' 7" C-95 LT&C 26# and 66 jts 3111' 7" N-80 26# LT&C shoe @ 5143'. Circ. Cmtd w/160 sx Cl-H w/additives. Displace w/195 bbls water. Good circ while cmtg.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

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

SIGNED Saundra Peron TITLE Production Analyst DATE 11/19/81  
Saundra Peron

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY**

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1.  Oil well     gas well     other

2. NAME OF OPERATOR  
Tenneco Oil Company

3. ADDRESS OF OPERATOR  
P. O. Box 3249, Englewood, CO 80155

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 1885' FSL, 1206' FWL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

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

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>		<input type="checkbox"/>
(other)			

5. LEASE <u>USA-016339</u>	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
7. UNIT AGREEMENT NAME <u>Butler Canyon</u>	
8. FARM OR LEASE NAME <u>Butler Canyon Unit USA</u>	
9. WELL NO. <u>33-12</u>	
10. FIELD OR WILDCAT NAME <u>Entrada Test - Wildcat</u>	
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA <u>Sec. 33, T19S R17E</u>	
12. COUNTY OR PARISH <u>Grand</u>	13. STATE <u>Utah</u>
14. API NO.	
15. ELEVATIONS (SHOW DF, KDB, AND WD) <u>5079' gr.</u>	

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

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

11/14/81 - Set plug #1 50-5050 w/35 sxs C1-H neat. Plug #2 4700-4600' w/75 sxs C1-H neat. Plug #3 1722-1572' w/75 sxs C1-H neat. Plug #4 60' to surface w/25 sxs C1-H.

11/16/81 - Rig release.

**RECEIVED**  
DEC 01 1981

DIVISION OF  
OIL, GAS & MINING

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

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

SIGNED Sandra Peron TITLE Production Analyst DATE 11/23/81  
Sandra Peron

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY**

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. oil well  gas well  other

2. NAME OF OPERATOR  
Tenneco Oil Company

3. ADDRESS OF OPERATOR  
P. O. Box 3249, Englewood, CO

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 1885' FSL 1206' FWL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

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

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON*	<input checked="" type="checkbox"/>		<input type="checkbox"/>
(other)			

5. LEASE  
USA-016339

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
Butler Canyon

8. FARM OR LEASE NAME  
Butler Canyon Unit USA

9. WELL NO.  
33-12

10. FIELD OR WILDCAT NAME  
Entrada Test - Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 33, T19S R17E

12. COUNTY OR PARISH  
Grand

13. STATE  
Utah

14. API NO.

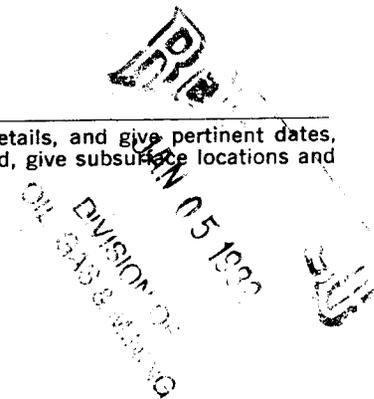
15. ELEVATIONS (SHOW DF, KDB, AND WD)  
5079' gr.

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

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

11-14-81 - Set plug #1 @ 5250'-5050' w/35 sxs Cl-H neat.  
Set plug #2 @ 4700-4600' w/75 sxs Cl-H neat  
Set plug #3 @ 1722-1572' w/75 sxs Cl-H neat  
Set plug #4 @ 60' to surface w/25 sxs Cl-H.

11-16-81 - Rig release.



Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

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

SIGNED Sandra Peron TITLE Production Analyst DATE 12/28/81

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY**

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

1. oil well  gas well  other

2. NAME OF OPERATOR  
Tenneco Oil Company

3. ADDRESS OF OPERATOR  
P. O. Box 3249, Englewood, CO 80155

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 1885' FSL 1206' FWL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH: same as above

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

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON* (other)	<input type="checkbox"/>		<input checked="" type="checkbox"/>

5. LEASE  
USA U-016339

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
Butler Canyon Unit

8. FARM OR LEASE NAME  
Butler Canyon Unit USA

9. WELL NO.  
33-12

10. FIELD OR WILDCAT NAME  
Entrada Test - Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 33, T19S R17E

12. COUNTY OR PARISH  
Grand

13. STATE  
UT

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)  
5079' ground

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

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

11/15/81 - Set plug #1 from 5250-5050' w/35 sx Class H cmt neat. TOOH. NDBOP. Weld on 7" pull joint, pull 7" csg slips. NUBOP. Run free point. 100% stuck @ 4800'. 75% free @ 4650'. Jet cmt 7" csg @ 4650'. TOOH w/41 jts 7" C-95 and 65 jts 7" N-80 csg. TIH opened to 4700'. Set plug #2 from 4700-4600' w/75 sx Class H neat. Set plug #3 from 1722-1 w/75 sx Class H neat. Set plug #4 from 60' to surface w/25 sx Class H.

11/16/81 - Clean mud tanks. Mud used was: 9.2 vis 50 type 5-3. ND. RD gas buster. Well is plugged and abandoned. Surface will be restored, graded and reseeded to BLM standards.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

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

SIGNED Donald Morrison TITLE Production Analyst DATE 3/30/82

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

RECEIVED

APR 02 1982

\*See Instructions on Reverse Side

**DIVISION OF  
OIL, GAS & MINING**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R855.5.

12

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 P & A

2. NAME OF OPERATOR  
Tenneco Oil Company

3. ADDRESS OF OPERATOR  
P. O. Box 3249, Englewood, CO 80155

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 1885' FSL 1206' FWL  
At top prod. interval reported below  
At total depth

NWSW

14. PERMIT NO. 43-019-30835 DATE ISSUED 8-11-81

5. LEASE DESIGNATION AND SERIAL NO.  
USA U-016339  
6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
7. UNIT AGREEMENT NAME  
Butler Canyon Unit  
8. FARM OR LEASE NAME  
Butler Canyon Unit USA  
9. WELL NO.  
33-12  
10. FIELD AND POOL, OR WILDCAT  
~~Entrada Test Wildcat~~  
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
Sec. 33, T19S R17E  
12. COUNTY OR PARISH  
Grand  
13. STATE  
UT

15. DATE SPUDDED 10/28/81 16. DATE T.D. REACHED 11/14/82 17. DATE COMPL. (Ready to prod.) P&A'd 11/15/82 18. ELEVATIONS (DF, REB, RT, GR, ETC.)\* 5091' KB 19. ELEV. CASINGHEAD 5079' gr

20. TOTAL DEPTH, MD & TVD 5730' KB 21. PLUG, BACK T.D., MD & TVD - 22. IF MULTIPLE COMPL., HOW MANY\* - 23. INTERVALS DRILLED BY ROTARY TOOLS 0' - TD CABLE TOOLS -

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN Formation Density-Comp. Neutron, BHC Sonic GR, DIL-GR, Dual Ind - SFL-GR, FDC-CNL-GR, Cyberlook, Sonic GR 27. WAS WELL CORED No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9-5/8"	36#	1647' KB	12-1/4"	400 sx 50/50 POZ, 120 sx	Cl-H neat
7"	26#	5143' KB	8-3/4"	160 sx Cl-H	

29. LINER RECORD 30. TUBING RECORD

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

31. PERFORATION RECORD (Interval, size and number) 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.\* PRODUCTION

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

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.) N/A TEST WITNESSED BY

35. LIST OF ATTACHMENTS  
Electric logs forwarded by Schlumberger

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  
SIGNED Denise Wilson TITLE Production Analyst DATE 6/16/82

\*(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.)

**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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Dakota	4672' KB		Water, sand
Morrison	4891' KB		Water, sand
Entrada	5580' KB		Water, sand

**38. GEOLOGIC MARKERS**

NAME	MEAS. DEPTH	TOP	TRUE VERT. DEPTH