

**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  
720 So. Colorado Blvd., Denver, Colorado 80222

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 At surface 991.3 FNL, 1047.4 FEL  
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
See Exhibit IV

1d. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)  
991.3'

15. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
4100

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
4956 GR

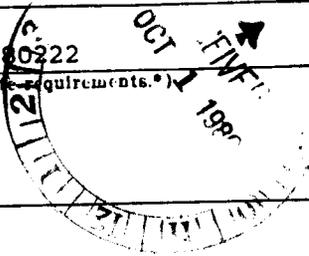
22. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8 3/4"	7" new	23# K55	±300'	Circulate to surface
6 1/4"	4 1/2" new	10.5# K55	±4100'	Cover all productive zones

Set 1-3 joints 9 5/8" as conductor.

Preliminary environmental review request and response attached.

Archaeological report attached.



5. LEASE DESIGNATION AND SERIAL NO.  
U14266

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Tenneco USA

9. WELL NO.  
14-1

10. FIELD AND POOL, OR WILDCAT  
Entrada Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 14, T19S, R23E

12. COUNTY OR PARISH  
Grand

13. STATE  
Utah

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 M. L. Freeman TITLE Staff Production Analyst DATE September 25, 1980

(This space for Federal or State office use)

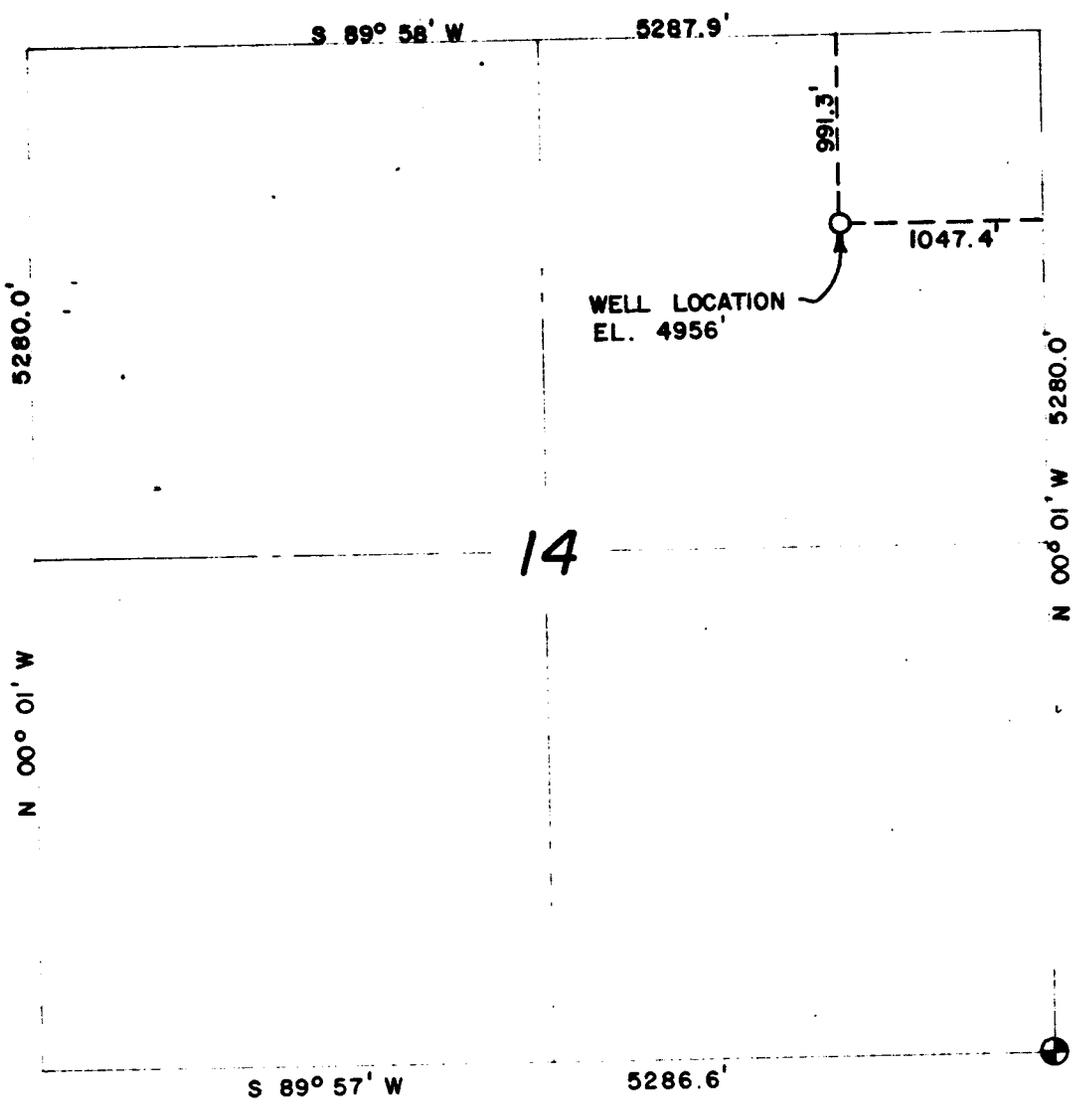
PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

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

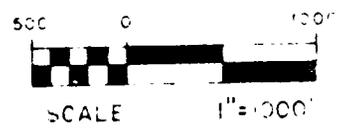
CONDITIONS OF APPROVAL, IF ANY:

*10/15/80  
CB Feight*

I



14



BASIS OF BEARING  
SOLAR OBSERVATION

FOUND U.S.G.L.O.  
BRASS CAP 1909

WELL LOCATION  
 991.3 FT. S. N. L. - 1047.4 FT. W. E. L.  
 SECTION 14, T. 19 S., R. 23 E., S.L.B. & 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.

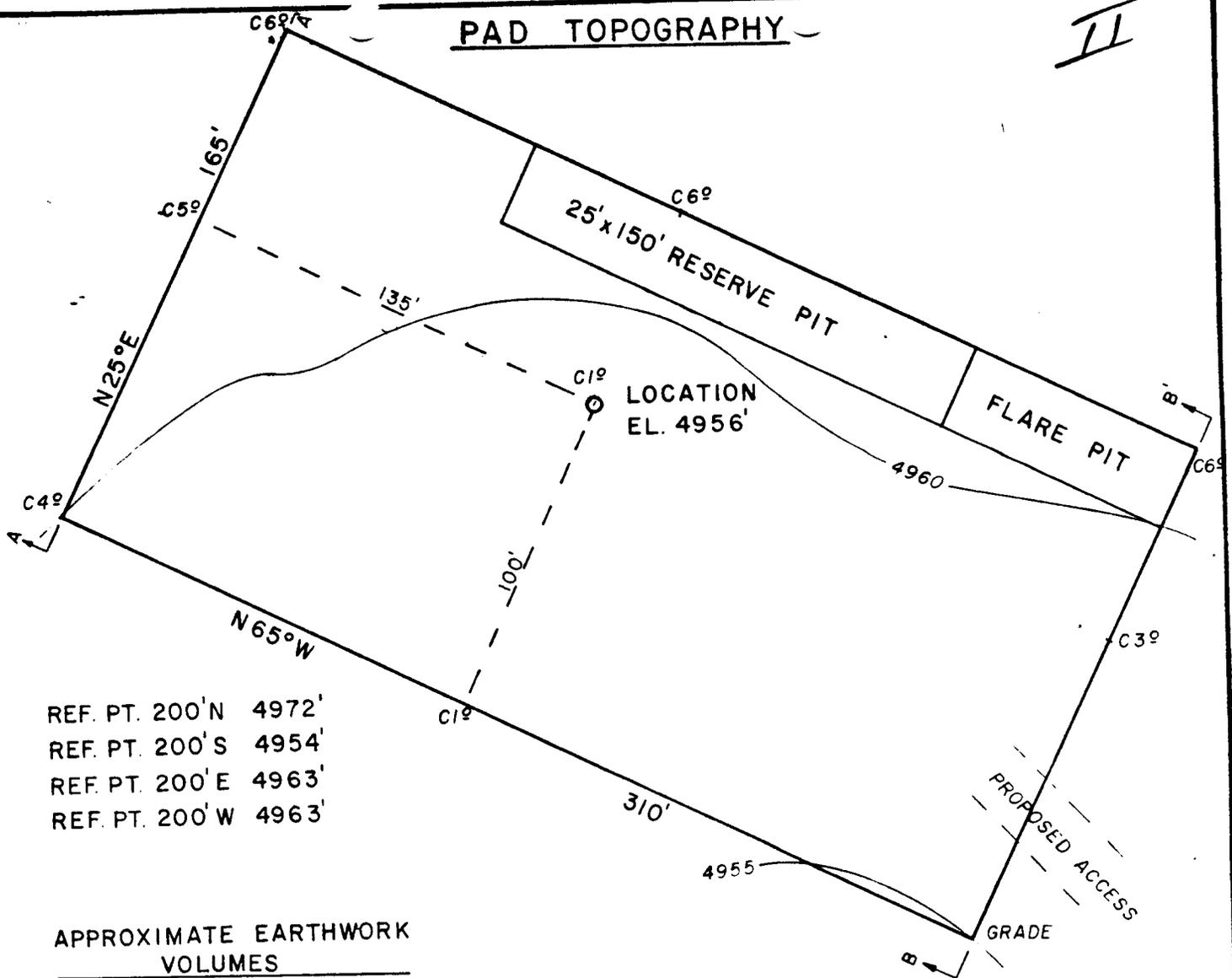
*Edward A. Armstrong*  
 EDWARD A. ARMSTRONG P.E. & L.S. 4464



	ARMSTRONG ENGINEERS and ASSOCIATES, INC. ENGINEERING • SURVEYING • SOILS AND CONCRETE TESTING 861 ROOD AVENUE GRAND JUNCTION, COLORADO 81501 (303) 245 3861	
	PROJECT TENNECO OIL	TENNECO USA 14-1
	DATE 7/31/80	SHEET 1 of 5
	DRAWN BY SZH	JOB NUMBER 802944
CHECKED BY EAA		
DATE OF SURVEY 7/30/80		

**PAD TOPOGRAPHY**

II



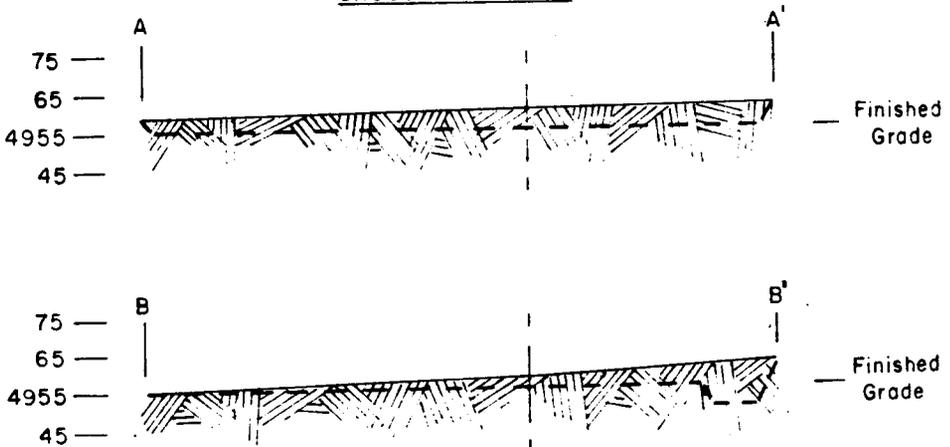
- REF. PT. 200'N 4972'
- REF. PT. 200'S 4954'
- REF. PT. 200'E 4963'
- REF. PT. 200'W 4963'

**APPROXIMATE EARTHWORK VOLUMES**

CUT: 5300 cu.yd.  
 FILL: 0



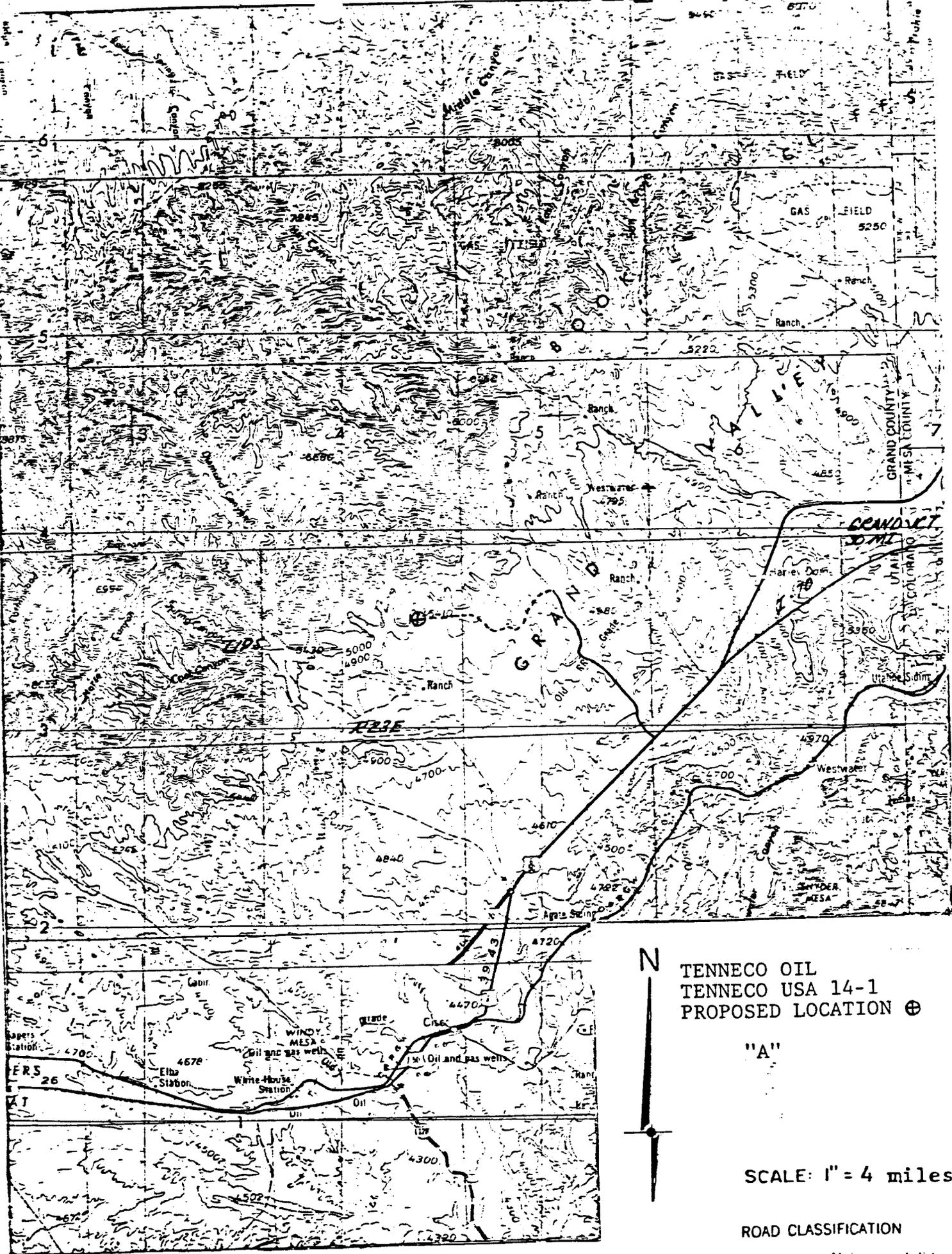
**CROSS - SECTIONS**



**ARMSTRONG ENGINEERS and ASSOCIATES, INC.**  
 ENGINEERING • SURVEYING • SOILS AND CONCRETE TESTING  
 861 ROOD AVENUE -- GRAND JUNCTION, COLORADO 81501 -- (303) 245-3861

DATE: 7-31-80  
 DRAWN BY: DRS  
 CHECKED BY: JRS  
 DATE: 7-30-80

**TENNECO OIL**  
**TENNECO USA 14-1**  
**SHEET 2 of 5**  
 JOB NUMBER: 802944



TENNECO OIL  
 TENNECO USA 14-1  
 PROPOSED LOCATION ⊕

"A"

SCALE: 1" = 4 miles

ROAD CLASSIFICATION

Light-duty. ————— Unimproved dirt - - - - -



VI

SELC 553

SUNRAY

PEAR PARK

5860

BOOK CLIFFS

3600

3435

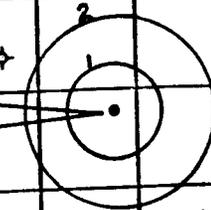
GULF 5215

BELCO 6801

PAC. 4650

4680

14-12



HOUGH 2920

5230

4775

ROYSER 3950

6713

3565

CRAMER 2030

CISCO ST. 21

CABEEN 2528

3434

CISCO DOME

GRA

500

2108

2302

22

205

304

22.7

1940

200

500

1960

207

2003

1594

2060

1800

As of 9-15-80



TENNECO OIL COMPANY - 10 POINT PLAN

1. The geological name of the surface formation: Mancos
- 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 (October 1980) 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: September 4, 1980

LEASE: Tenneco USA

WELL NO.: 14-1

LOCATION 991.3 FNL, 1047.4 FEL  
Section 14, T 19S, R23E  
Grand County, Utah

FIELD: Long Canyon

ELEVATION: 4956

TOTAL DEPTH: 4100

PROJECTED HORIZON: Entrada

SUBMITTED BY: Bruce Ladd

DATE: September 4, 1980

APPROVED BY: *John W. Owen*

DATE: 9/8/80

CC: Administration  
DSB Well File  
Field File

ESTIMATED FORMATION TOPS

Mesa Verde	
Mancos	Surface
Castlegate	Outcrops
Frontier	2856
Dakota Silt	3106
Dakota	3231 (Gas)
Morrison	3356 (Water or Gas)
Salt Wash	3731 (Water or Gas)
Entrada	3976 (Water or Gas)
T.D.	4076

1. MIRURT.
2. Set 1-3 jts. of 9 5/8" casing as needed to be used as conductor pipe.
3. Install casing head and nipple up rotating head and blosie line.
4. Drill 8 3/4" hole to 300' or through the Castlegate Formation.
5. Run 7", 23#, K-55, ST&C surface casing to T.D. Cement with sufficient volume to circulate cement to the surface.
6. WOC. Nipple up BOP's, rotating head, choke manifold, etc. Pressure test BOP's, manifold, etc. to 1000 psi for 15 minutes.
7. TIH and displace water in casing with air. Drill out shoe and dry up hole.
8. Drill 6 1/4" hole to T.D.
9. Log well as per G. E. Department recommendations.
10. 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.
11. 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:	300' ±, 7", 23#, K-55, ST&C
PRODUCTION:	4100' , 4 1/2", 10.5#, K-55, ST&C

MUD PROGRAM

1. Anticipate drilling entire hole with air.
2. In the event liquids are encountered, mist drilling will be attempted.
3. Should mist drilling be unsuccessful, the hole will have to be mudded up.
4. Also, if gas is encountered in sufficient volume to compromise the safety of the operations, mudding up will be required.
5. If mudding up is necessary, the following guidelines should be followed.  
 (1) Weight + 9.0 ppg. (2) Vis. as needed to clean hole. (3) W.L. 10cc or less.

EVALUATION

Cores and DST's: No cores or DST's are anticipated.

Deviation Surveys:

0- 300' 2 1/2° ) Surveys to be run every 500' or on trips, whichever comes  
 300-4100 5° ) first. Record surveys on IADC Drilling Report Sheet.  
 Maximum allowable deviations: (1) 1° change per 100' intervals  
 (2) 2 1/2° at surface casing setting depth.  
 (3) 5° at T.D.

In the event that the maximum allowable deviations are exceeded, the Denver Office of Tenneco Oil Company will be notified immediately.

Samples: NONE.

Logs:

SNP/GR	}	Air drilled.	FDC/CHL	}	Mud Drilled.
FDC/GR			DIL/LL3 w/SP		
DIL					

BLOWOUT EQUIPMENT

1. Double ram hydraulic with pipe and blind rams operated by an accumulator.
2. Rotating head on 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 costs, plus any other pertinent information, will be called into Tenneco Oil Company, Denver, Colorado, between 7:30 a.m. and 8:00 a.m.

1. 303-758-7130 (Office) Don Barnes  
303-758-7287 (Office) Don Barnes' private line, Monday-Friday (before 7:45 a.m.)  
303-936-0704 (Home) Don Barnes, weekends and holidays.
2. John Owen (Home) 303-795-0221

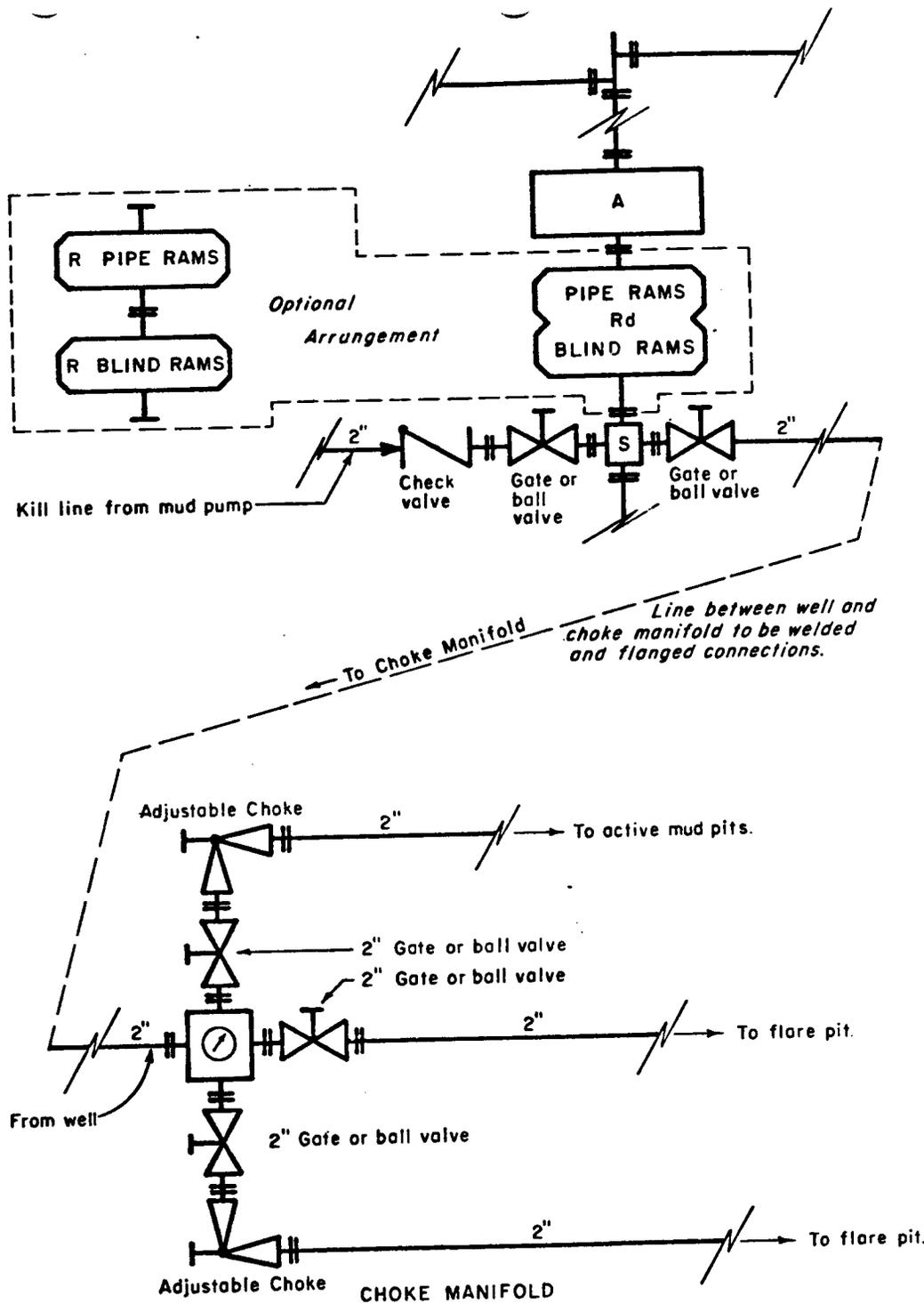
The yellow sheet of the IADC Report is to be filled out completely. The original copy of the drilling time recorder, and copies of any invoices from this well, signed and received for Tenneco Oil Company, will be mailed daily to:

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

ATTENTION: Drilling Department

IN CASE OF EMERGENCY, NOTIFY THE FOLLOWING:

1. Mr. Don Barnes, Division Drilling Engineer.
2. Mr. John W. Owen, Project Drilling Engineer.
3. Mr. Mike Lacey, Division Production Manager (Home 303-979-0509).



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  
 CHOKE MANIFOLD**

I. EXISTING ROADS

(a) Proposed Well Site Location:

As surveyed by a registered land surveyor is located 991.3 FNL, 1047.4 FEL, Sec. 14, T19S, R23E, Grand County, Utah.  
See Exhibit I

(b) Planned Access Route: See Exhibits IV & V.

(c) Access Road Labelled:

Color Code: Red - Improved surfaced roads  
Blue - New access road to be constructed.

(d) Not applicable, the proposed well is a development well.

(e) The existing roads are show in Exhibits IV & V.

(f) Existing Road Maintenance or Improvement:

The existing road will not require improvement. However, 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 IV & V)

The planned new 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 twenty feet. The average traveled surface width will be twenty feet. Road construction will be in accordance with typical roadways requested by the U. S. Bureau of Land Management.

(2) Maximum Grades:

The maximum grade will be 3% percent, however, this may vary as topographical conditions vary.

- (3) Turnouts: Turnouts are not required
  
- (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 BLM.  
  
 Max: cut - }  
 Max: fill - } minor
  
- (6) Surfacing Material:  
 The proposed permanent access road will be constructed with native material.
  
- (7) Gates, Cattleguards, Fence Cuts:  
  
 Not needed
  
- (8) New portion of road will be center flagged

III. LOCATION OF EXISTING WELLS

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

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

- (1) Tank batteries - None
- (2) Production facilities - None
- (3) Oil Gathering Lines - None
- (4) Gas Gathering Lines - None
- (5) Injection Lines - None
- (6) Disposal Lines - None

B. New Facilities in the Event of Production:

- 1. New facilities: well head, condensate tank, production unit, meter house all on disturbed ground.
- 2. Dimension of the facilities are shown in Exhibits II & III.
- 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 assume 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 not yet determined but will be from a private legal source.
- (b) Water Transportation system: Water to be hauled in trucks from an undetermined pick up point.
- (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: NA

### (d) Access road shown under item II

## 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. Previous 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. Waste will be contained in a pit and backfilled immediately following the drilling operations or removed by supplier of the toilet.

### (e) Garbage:

A burn cage will be constructed and fenced with small mesh wire. The small amount of refuse will be removed to a landfill after drilling operations.

### (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

1. See Exhibits
2. Location of pits: Exhibits II & III
3. Rig Orientation: Exhibits II & III
4. 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 clean up. Previous 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 proposed site is located on the desert side of the Book Cliffs. The topography is rolling with southerly drainage. The soil is alluvial, sandy, sandy clay supporting sage and native grasses.

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.

C. **Proximity of Water, Dwelling, Historical Sites:**

1. **Water:** No reservoirs or live streams in the area.
2. **Occupied Dwellings:** Not existing.
3. **Historical Sites:** An Archaeological Reconnaissance has been performed for this location and clearance has been granted. Report attached.

XII. OPERATOR'S REPRESENTATIVE

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

Donald Barnes  
720 So. Colorado Blvd.  
Denver, Colorado 80222  
Office: (303) 758-7130  
Extension 212

M. L. Freeman  
720 So. Colorado Blvd.  
Denver, Colorado 80222  
Office: (303) 758-7130  
Extension 280

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 will conform to this plan.

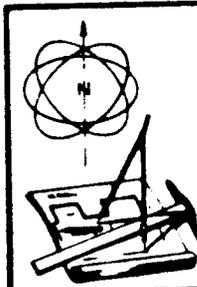
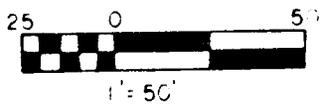
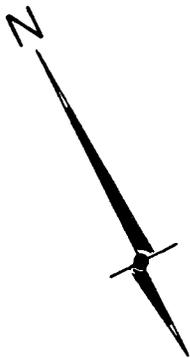
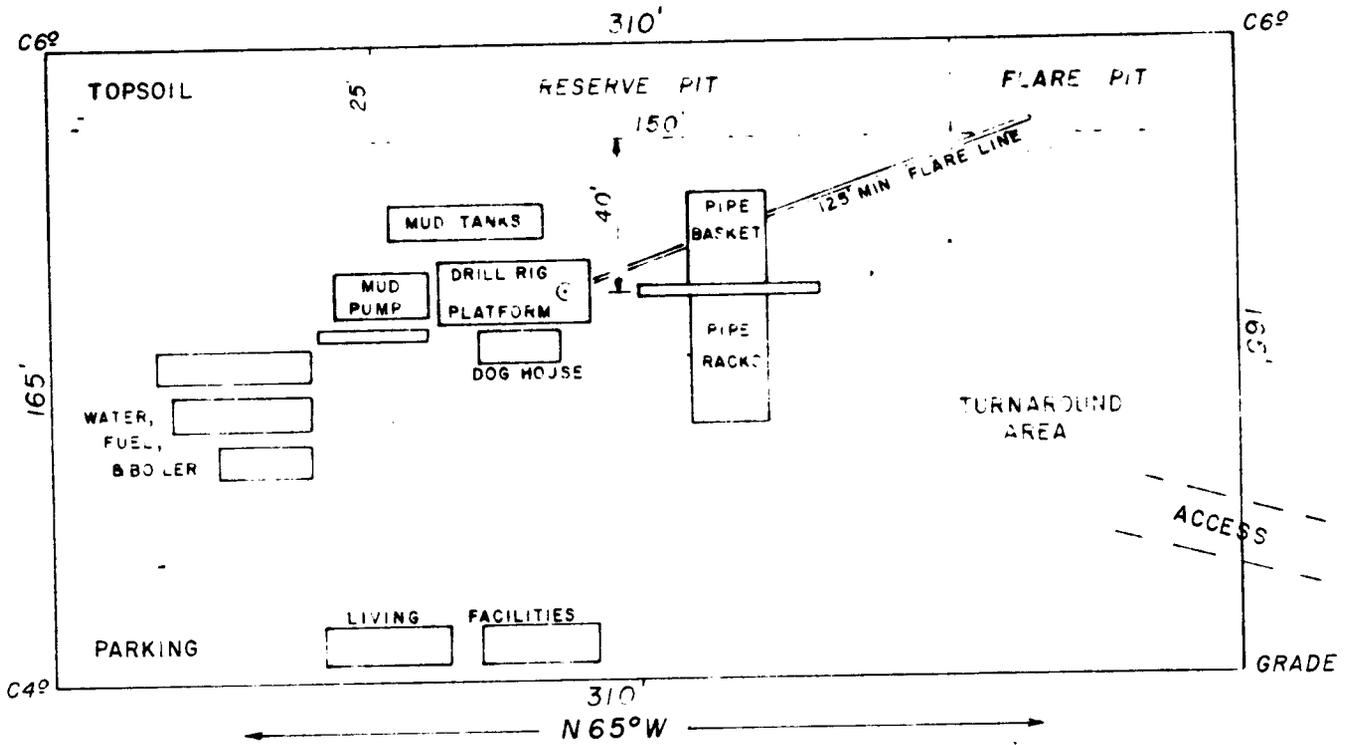
DATE: September 25, 1980



M. L. Freeman  
Staff Production Analyst

# RIG LAYOUT

111



**ARMSTRONG ENGINEERS and ASSOCIATES, INC.**  
 ENGINEERING • SURVEYING • SOILS AND CONCRETE TESTING  
 861 ROOD AVENUE GRAND JUNCTION, COLORADO 81501 - (303) 245-3861

DATE: 8-04-80  
 DRAWN BY: DRS  
 CHECKED BY: JRS  
 DATE OF SURVEY: 7-30-80

**TENNECO OIL**  
**TENNECO USA 14-1**

**SHEET 3 of 5**

**JOB NUMBER**  
**802944**

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

NEPA CATEGORICAL EXCLUSION REVIEW

PROJECT IDENTIFICATION

Operator/Project Name Tenneco USA 14-1  
 Project Type Wildcat Gas Test (Unit Obligation Well)  
 Project Location 991.3' FNL1047.4' FELm Sec. 14, T19S, R23E Grand Co., UT  
 Date Project Submitted October 1, 1980

FIELD INSPECTION Date November 24, 1980

Field Inspection

Participants	<u>Lee Freeman</u>	<u>Operator</u>
	<u>Mike Buniger</u>	<u>Buniger Construction</u>
	<u>Elmer Duncan, Mical Walker</u>	<u>Bureau of Land Management</u>
	<u>Glenn Doyle</u>	<u>U. S. Geological Survey</u>
	<u>Craig Ivie</u>	<u>Northwest Pipeline</u>
	<u>Typing In &amp; Out 1/26/81</u>	

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.

December 15, 1981  
 Date Prepared

Glenn M. Doyle  
 Environmental Scientist

I concur

2/13/81  
 Date

[Signature]  
 District Supervisor

CATEGORICAL EXCLUSION REVIEW INFORMATION SOURCE

Criteria 516 DM 2.3.A	Federal/State Agency			Local and private corre- spondence (date)	Previous NEPA	Other studies and reports	Staff expertise	Onsite inspection (date)	Other
	Corre- spondence (date)	Phone check (date)	Meeting (date)						
1. Public health and safety					1, 2			11-24-80	
2. Unique charac- teristics					1		6		
3. Environmentally controversial					1, 2		6		
4. Uncertain and unknown risks						4			
5. Establishes precedents					1, 2				
6. Cumulatively significant							6		
7. National Register historic places	1 - 1/29/81								
8. Endangered/ threatened species	1 - 1/29/81								
9. Violate Federal, State, local, tribal law						4			3

## COMMON REFERENCE LIST

### NEPA Categorical Exclusion Review

1. SMA Input
2. Reviews, reports, or information received from Geological Survey (CD, GD, WRD, TD).
3. Lease Stipulations/Terms
4. Application to Drill
5. Operator correspondence
6. Field observation
7. Private Rehabilitation Agreement

## STANDARD STIPULATIONS FOR OIL & GAS EXPLORATION

Contact this office at least 24 hours prior to beginning construction of access road and pad.

Stockpile the surface 12 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 new access road (approximately 3.5 miles long) goes south east from the 14-1 location, through the  $S\frac{1}{2}S\frac{1}{2}$  section 14,  $SW\frac{1}{4}SW\frac{1}{4}$  section 13,  $W\frac{1}{2}W\frac{1}{2}$  section 24,  $S\frac{1}{2}W\frac{1}{2}$  section 25,  $W\frac{1}{2}E\frac{1}{2}$  section 36, all in T. 19 S., R. 23 E., and connects with an existing road in the  $NW\frac{1}{4}SE\frac{1}{4}$  section 36, T. 19 S., R. 23 E.

At least one-half mile of the proposed road in section 25 is on private land - where it crosses the  $NE\frac{1}{4}SW\frac{1}{4}$  and  $SE\frac{1}{4}NW\frac{1}{4}$ . This land belongs to Colorado - Utah Livestock Company of Fruita, Colorado.

Tenneco Oil Company will provide written approval from the owner to cross and a written rehabilitation agreement prior to APD approval.

The road through section 25 is off from Lease # U-14266, and that part off the private land will require a ROW.

Surface disturbance will be kept to a minimum over the full distance. Soils and vegetation removed from the road surface will be windrowed along the east side of the construction area.

2) All drainage channels will be left open, with low water crossings installed where this access road crosses the Cottonwood Wash in section 25, Buck Canyon Wash in section 24, and two washes - one in section 13 and one in section 14, all in T. 19 S., R. 23 E.

3) This access will avoid two reservoirs in section 13 by staying to the west of each one.

4) Turn outs along the two mile road will be visible, one from another, and long enough for two trucks to pass safely (100' long).

5) Road travel surface will be a maximum of 18' wide.

6) Access road will be up-graded to BLM standards, according to the yellow pamphlet "Surface Operating Standards for Oil & Gas Exploration and Development", only if the well is a producer.

#### Location-

1) Pit(s) will be fenced on three sides during drilling and the fourth side prior to moving the rig away. Use 48" high woven wire with one strand of barbed wire along the top for support.

2) A ditch will be constructed around the north and west side of the location to control any water away from the pad.

3) The new access road will enter the site at the south east corner.

#### Rehabilitation-

1) Recontouring of the disturbed surface, not needed for production, and/or the whole pad will be done according to your plan and as outlined in the yellow pamphlet mentioned above.

2) Seeding will be done by drilling.

SEED MIXTURE

SPECIES

LBS/ACRE

Grasses

Oryzopsis hymenoides	Indian Rice Grass	1
Hilaria jamesii	Curley Grass	1

Forbs

Sphaeralcea coccinia	Globemallow	1
----------------------	-------------	---

Browse

Atriplex confertifolia	Shadscale	1
Atriplex corrugata	Matt Salt Bush	1
Ceretoides lanata	Winterfat	1

Total	6
-------	---

\*\* FILE NOTATIONS \*\*

DATE: October 10, 1980

OPERATOR: Jenneco Oil Co.

WELL NO: USA 14-1

Location: Sec. 14 T. 19S R. 23E County: Grand

File Prepared:

Entered on N.I.D:

Card Indexed:

Completion Sheet:

API Number 43-019-30729

CHECKED BY:

Petroleum Engineer: \_\_\_\_\_

Director: <sup>(c-30)</sup> OK (topographic exception provided Jenneco owns or controls all gas rights within 660' of proposed location)

Administrative Aide: \_\_\_\_\_

APPROVAL LETTER:

Bond Required:

Survey Plat Required:

Order No. \_\_\_\_\_

O.K. Rule C-3

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

Lease Designation  Fed

Plotted on Map

Hot Line

Approval Letter Written

P.I.

October 17, 1980

Tenneco Oil Company  
720 So. Colorado Blvd.  
Denver, Colorado 80222

Re: Well No. USA 14-1  
Sec. 14, T. 19S, R. 23E  
Grand County, Utah

Insofar as this office is concerned, approval to drill the above referred to gas well on said unorthodox location is hereby granted in accordance with Rule C-3(c), 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 43-019-30729.

Sincerely,

DIVISION OF OIL, GAS, AND MINING



Cleon B. Feight  
Director

/ka  
cc: USGS

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

DUPLICATE

5. LEASE DENIGATION AND SERIAL NO.  
U14266

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Tenneco USA

9. WELL NO.  
14-1

10. FIELD AND POOL, OR WILDCAT  
Entrada Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 14, T19S, R23E

12. COUNTY OR PARISH  
Grand

13. STATE  
Utah

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  
720 So. Colorado Blvd., Denver, Colorado 80222

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface 991.3 FNL, 1047.4 FEL  
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
See Exhibit IV

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
991.3'

16. NO. OF ACRES IN LEASE  
2560

17. NO. OF ACRES ASSIGNED TO THIS WELL  
360 unit well

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

19. PROPOSED DEPTH  
4100

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
4956 GR

22. APPROX. DATE WORK WILL START\*  
October 1980

28. 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# K55	±300'	Circulate to surface
6 1/4"	4 1/2" new	10.5# K55	±4100'	Cover all productive zones

Set 1-3 joints 9 5/8" as conductor.

Preliminary environmental review request and response attached.

Archaeological report attached.

RECEIVED FEB 17 1981 OIL DIVISION OF 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 M. L. Freeman TITLE Staff Production Analyst DATE September 25, 1980

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE APPROVED BY (Orig. Sgd.) A. M. RAFFOUL TITLE FOR E. W. GUYNN DISTRICT ENGINEER DATE FEB 13 1981

CONDITIONS OF APPROVAL, IF ANY:

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

NOTICE OF APPROVAL

Stab Oil Gas



# United States Department of the Interior

IN REPLY REFER TO  
3100  
(U-603)

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

JAN 28 1981

## Memorandum

To: Oil & Gas Office  
USGS Conservation Division  
P. O. Box 3768  
Grand Junction, CO 81502

From: Acting Area Manager, Grand

Subject: Tenneco Oil Company  
Tenn. USA 14-1, Lease #U-14266  
NE/NE Section 14, T. 19 S., R. 23 E., SLB&M  
Grand County, Utah

On 11/24/80 a representative from this office met with Glen Doyle, USGS, and Lee Freeman 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 Co.

*M. Scott Packer*

Enclosures: (3)  
1-Reclamation Procedures  
2-Seed Mixture  
3-Suggested Colors - Facilities

U. S. GEOLOGICAL SURVEY  
OIL AND GAS OPERATIONS  
RECEIVED

JAN 29 1981

GRAND JUNCTION, COLORADO

## 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%	Grade	-	200 ft. intervals
2-4%	Grade	-	100 ft. intervals
4-5%	Grade	-	75 ft. intervals
5%	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.).



# 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.

USO 3110-1  
1/70

3110  
U- 14266

### STIPULATION

As to lands administered by the Bureau of Land Management under the above oil and gas lease, the lessee hereby agrees that the following stipulations are by this reference incorporated as terms and conditions of said lease:

Before undertaking any exploratory operations involving use of bulldozers, earth-moving, or similar mobile equipment which may result in scarring of public lands, damaging surface resources, or inducing erosion thereon, he or his designee shall submit in writing to the Bureau of Land Management District Manager in the District in which the land is located, advance notice of such operation. Said operations include but are not limited to exploratory drilling, construction of access roads or airstrips, and the conduct of seismic operations.

THE ANSCHUTZ CORPORATION, INC.  
1111 17TH ST. BLDG.  
DENVER, COLORADO 80202

Mrs. Williams  
Lessee

**Tenneco Oil**  
**Exploration and Production**  
A Tenneco Company

Rocky Mountain Division

Penthouse  
720 South Colorado Blvd.  
Denver, Colorado 80222  
(303) 758-7130

July 7, 1980

Mr. Ed Guynn  
U. S. Geological Survey  
2000 Administration Bldg.  
1745 West, 1700 South  
Salt Lake City, Utah 84138

Re: Tenneco State 7-8	Tenneco USA 15-15
NE $\frac{1}{4}$ , Sec. 7, T18S, R21E	SE $\frac{1}{4}$ , Sec. 15, T18S, R22E
Tenneco State 11-15	Tenneco USA 17-9
SE $\frac{1}{4}$ , Sec. 11, T19S, R20E	SE $\frac{1}{4}$ , Sec. 17, T18S, R24E
Tenneco USA 12-10	Tenneco USA 30-16
SE $\frac{1}{4}$ , Sec. 12, T19S, R22E	SE $\frac{1}{4}$ , Sec. 30, T18S, R24E
Tenneco USA 14-1	Tenneco State 36-7
NE $\frac{1}{4}$ , Sec. 14, T19S, R23E	NE $\frac{1}{4}$ , Sec. 36, T18S, R20E
	Grand County, Utah

Dear Mr. Guynn:

Pursuant to NTL-6 Part II A, a preliminary environmental review is requested prior to the entry on the ground for the purpose of staking the referenced locations, access roads, and other surface use areas.

Please notify us at your earliest convenience of the status of approval.

Yours very truly,

TENNECO OIL COMPANY



M. L. Freeman  
Staff Production Analyst

MLF/rr  
Encls.

cc: Bureau of Land Management  
Moab, Utah



# United States Department of the Interior

IN REPLY REFER TO

3100  
(U-603)

BUREAU OF LAND MANAGEMENT

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

July 15, 1980

Mr. Lee Freeman  
Tenneco Oil  
720 S. Colorado Blvd.  
Penthouse  
Denver, CO. 80222

Reference: Staking Request  
Well: USA 14-1  
Section 14, T. 19 S., R. 23 E.  
Grand County, Utah

Dear Mr. Freeman:

This office has no objections to staking the above referenced 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. A road right-of-way may be required on access to this location. An archaeological clearance must be obtained after staking the site.

Sincerely yours,

C. Delano Backus  
Area Manager

ACTING

RECEIVED

JUL 21 1980

TENNECO OIL CO.  
DENVER



*Save Energy and You Serve America!*

Department of the Interior  
Bureau of Land Management  
Utah State Office

Summary Report of  
Inspection for Cultural Resources

BLM Report ID No. 1 4 10  
Report Acceptable Yes  No   
Mitigation Acceptable Yes  No   
Comments: \_\_\_\_\_

Report Title \_\_\_\_\_ 40

Development Company Tenneco Location USA 14-1

Report Date 0 8 14 1 9 8 0  
MONTH YEAR

4. Antiquities Permit No. 80-UT-034

Responsible Institution N I C K E N S & A S S O C County Grand

Fieldwork Location: TWN 1 9 S Range 2 3 E Section(s) 0 8 0 9 1 7 1 8  
62 65 66 69 70 71 72 73 74 75 76 77

TWN 1 9 S Range 2 4 E Section(s) 1 3 1 4  
78 81 82 85 86 87 88 89 90 91 92 93

Resource Area G R TWN \_\_\_\_\_ Range \_\_\_\_\_ Section(s) \_\_\_\_\_  
110 111 94 97 98 101 102 103 104 105 106 107 108 109

PO= PONY EXPRESS, BR= BEAR RIVER, PR= PRICE RIVER, WS= WARM SPRINGS  
BC= BOOK CLIFFS, HR= HOUSE RANGE, SE= SEVIER RIVER  
HM= HENRY MOUNTAINS, BE= BEAVER RIVER, DX= DIXIE  
KA= KANAB, ES= ESCALANTE, SJ= SAN JUAN, GR= GRAND  
SR= SAN RAFAEL, DM= DIAMOND MOUNTAIN,

Fill in spaces 65, 69, 81, 85, 97, 101 Only if:  
V= Vernal Meridian  
H= Half Township

Description of Examination Procedures: 100% of flagged location was inspected by walking in zig zag parallel sweeps at approximately 3 m intervals over the area. Location measured approximately 300' on a side. A 50' right-of-way on either side of a flagged centerline for the 10,000' proposed access road and on either side of a 3.7 mile existing road to be improved was surveyed by walking up one side and back the other in a zig zag sweep. S. Larralde, Staff Archaeologist, conducted the fieldwork.

9. Linear Miles Surveyed and/or \_\_\_\_\_  
112 117

10. Inventory Type 1  
130

Definable Acres Surveyed and/or \_\_\_\_\_ (approx.)  
118 123

R= Reconnaissance  
I= Intensive  
S= Statistical Sample

\* Legally Undefinable Acres Surveyed \_\_\_\_\_  
(\*A parcel hard to cadastrally locate i.e., center of section)

11. Description of Findings (attach appendices, if appropriate) 12. Number Sites Found: 1 1 1 1 1  
No sites = 0 131 135

- 1. Site: sheepherder's camp with ca. 1920s component and recent component (site form attached)
- 2. Sheepherder's camps judged to be less than 50 years old, 1 cairn and 1 large upright log post were also located--see map and attachment
- 3. Isolated finds as summarized in attachment.

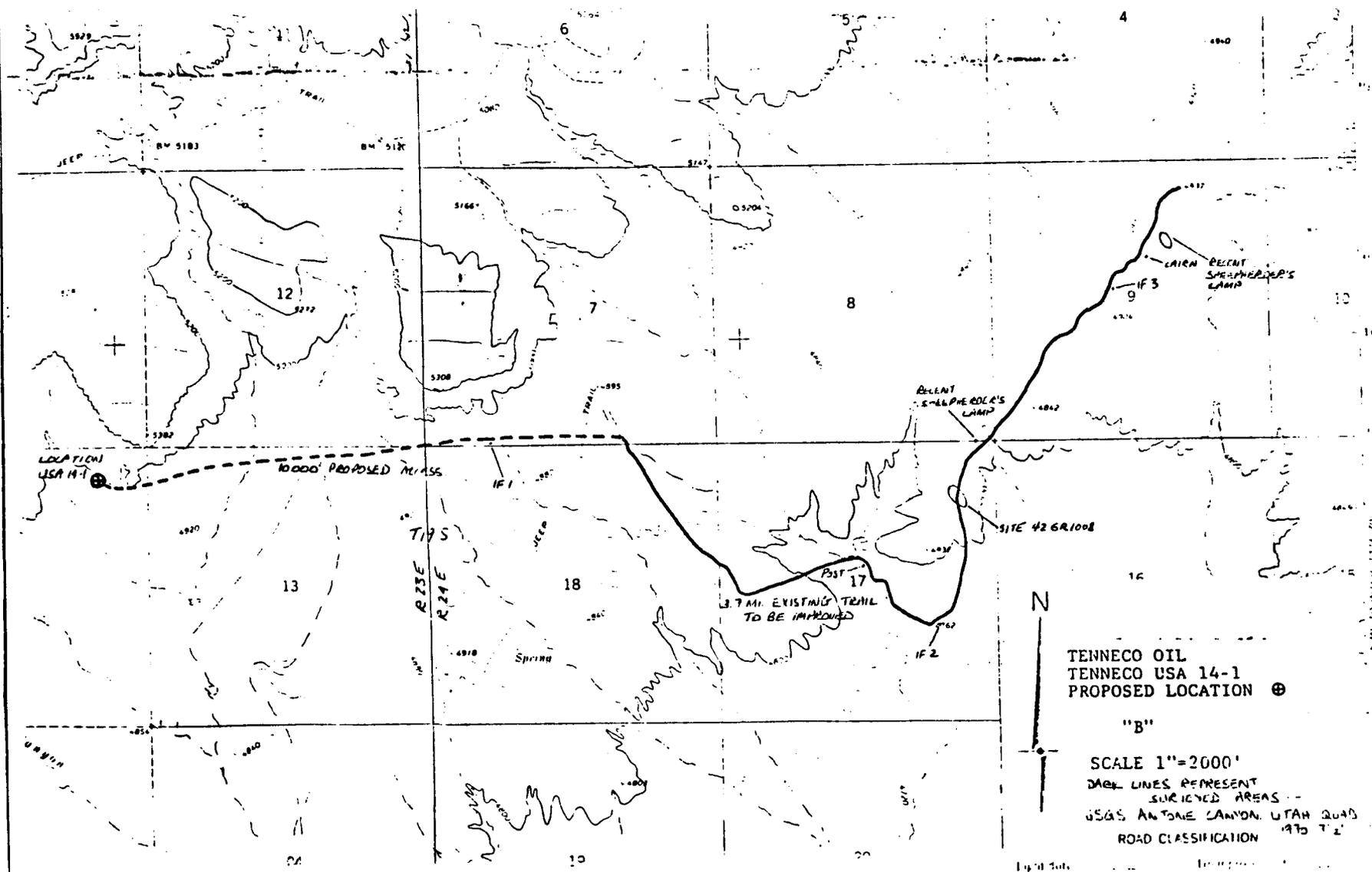
13. Collection: Y Y=Yes, N=No  
136  
one bottle

14. Actual/Potential National Register Properties Affected:  
None

15. Conclusion/Recommendations: Clearance is recommended. The Moab District BLM archaeologist should be notified if other prehistoric cultural material is found during road construction. The road should follow the existing route and improvements should be limited to the north side of the right-of-way at the sheepherder camp location, to avoid site impact.

16. Signature and Title of Institutional Officer Responsible Paul R. Arkins  
Principal Investigator

Note: Include only requested information in numbered spaces.  
\* For extra locations use additional 8100-3 forms



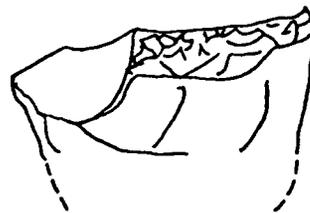
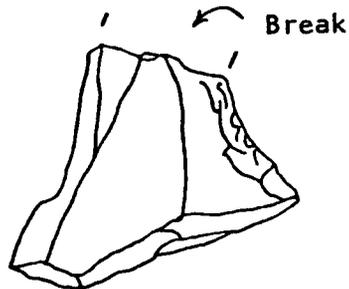
Tenneco Location USA 14-1  
Summary of Isolated Finds

IF 1 T19S, R24E, Sec. 18 NE $\frac{1}{4}$ , NW $\frac{1}{4}$ , NW $\frac{1}{4}$   
Antone Canyon, Utah quadrangle  
7.5' 1970.  
S side of R.O.W. approximately  
10 m S of centerline

1 12.5 cm ht. x 10.0 cm  
diameter hole-in-the-top  
can

IF 2 T19S, R24E, Sec. 17 SW $\frac{1}{4}$ , NE $\frac{1}{4}$ , SE $\frac{1}{4}$   
Antone Canyon, Utah quadrangle  
7.5' 1970.  
S side of R.O.W. approximately  
10 m S of existing road

1 dark brown chert  
interior flake, unifacially  
retouched along one edge.  
L - 3 cm  
W - 3.3 cm  
Th - 1.5 cm



Close up of ventral side  
utilization

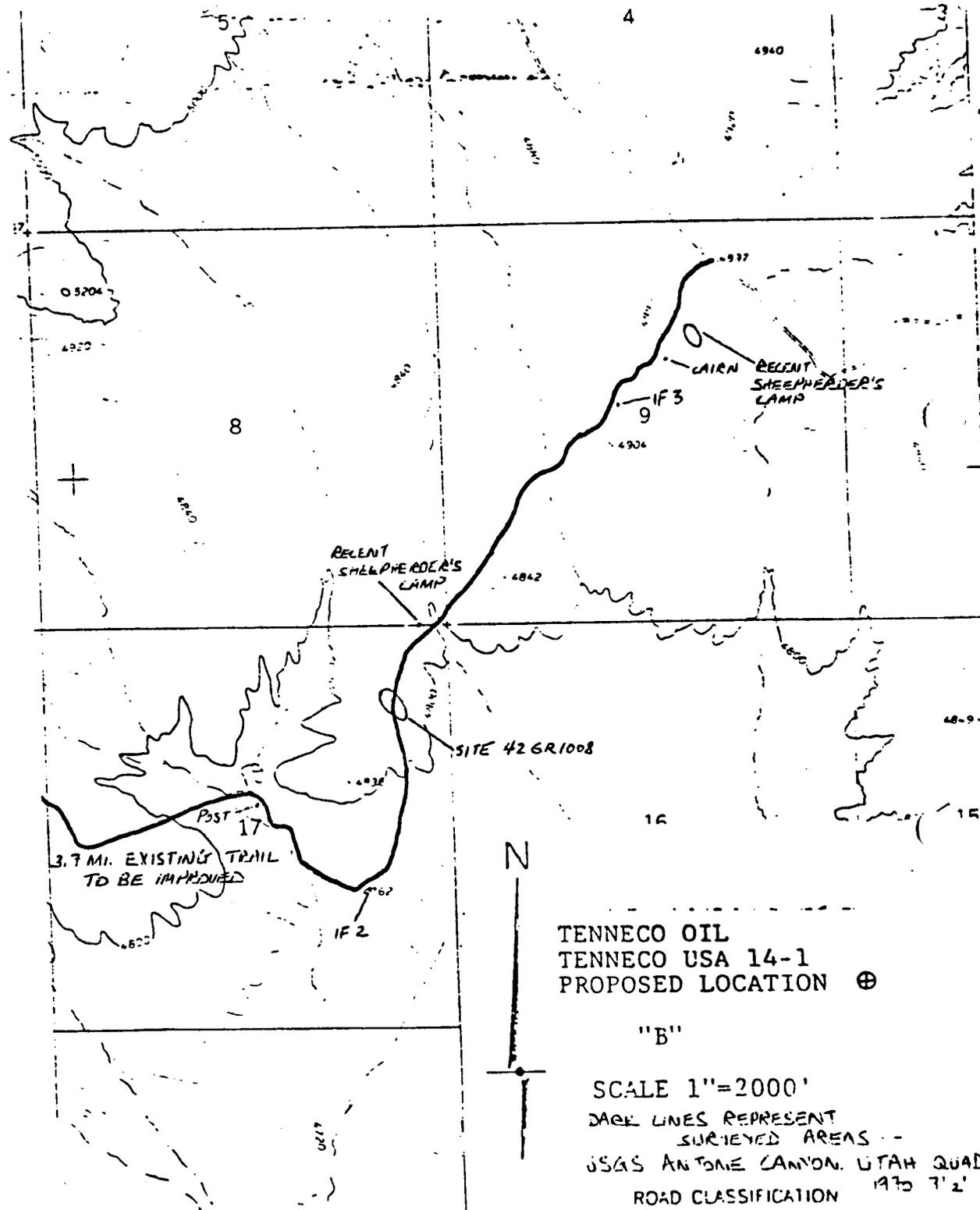
IF 3 T19S, R24E, Sec. 9 SE $\frac{1}{4}$ , SE $\frac{1}{4}$ , NW $\frac{1}{4}$   
Antone Canyon, Utah quadrangle  
7.5' 1970.  
S side of R.O.W. approximately  
10 m S of existing road

5 12.5 cm ht. x 10.0 cm  
diameter hole-in-the-top  
cans within a 10 m  
diameter area

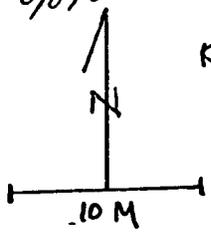
In addition, 2 recent shepherd's camps were located and are marked on attached topographic map, along with 1 cairn and 1 large upright ponderosa or fir post ca. 1.25 m in ht. and .40 m in diameter, function unknown.





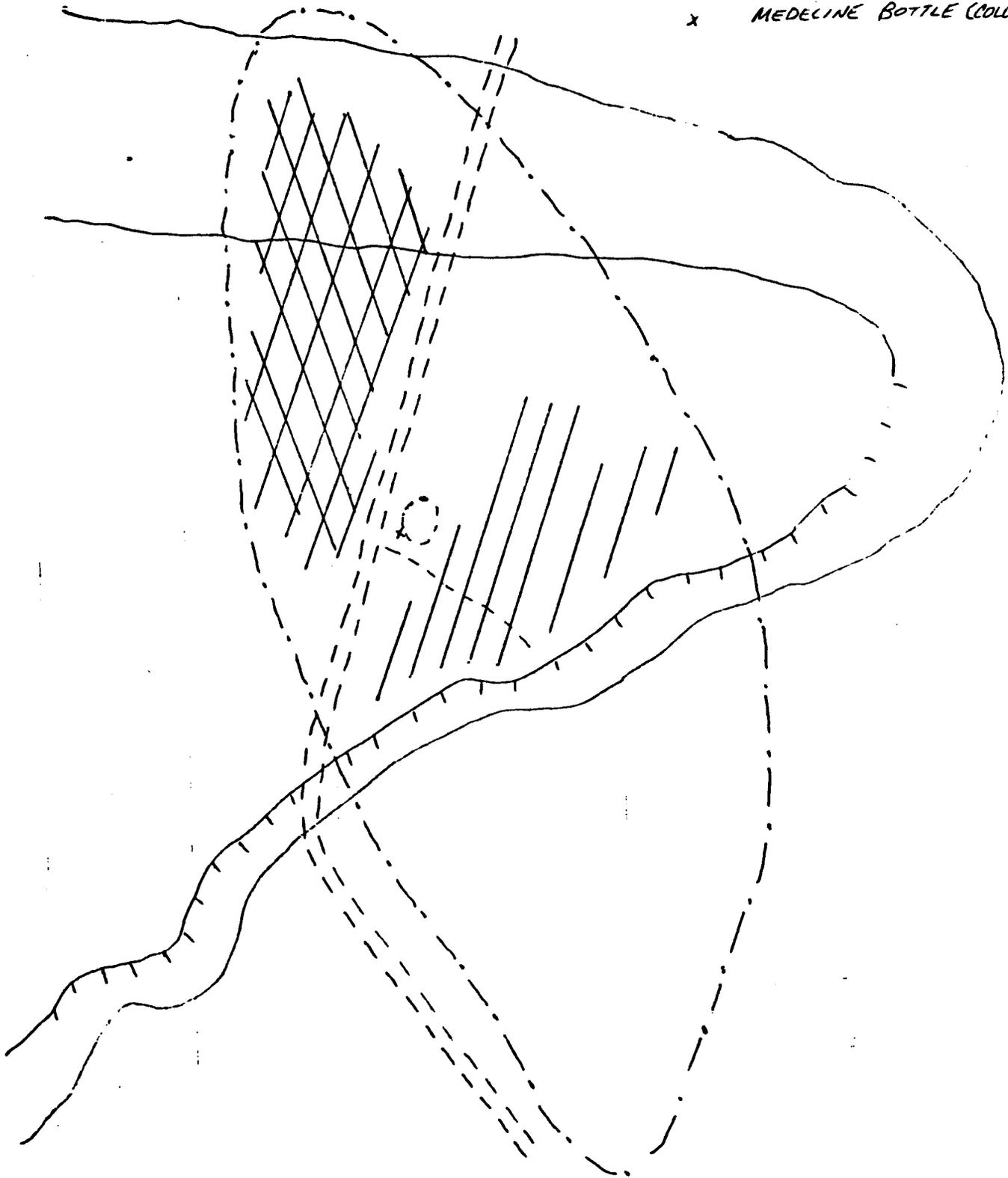


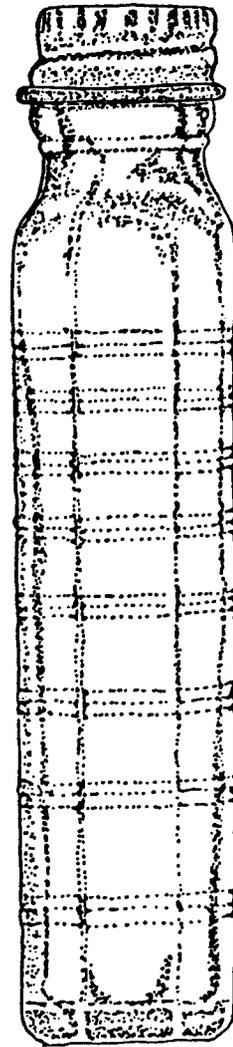
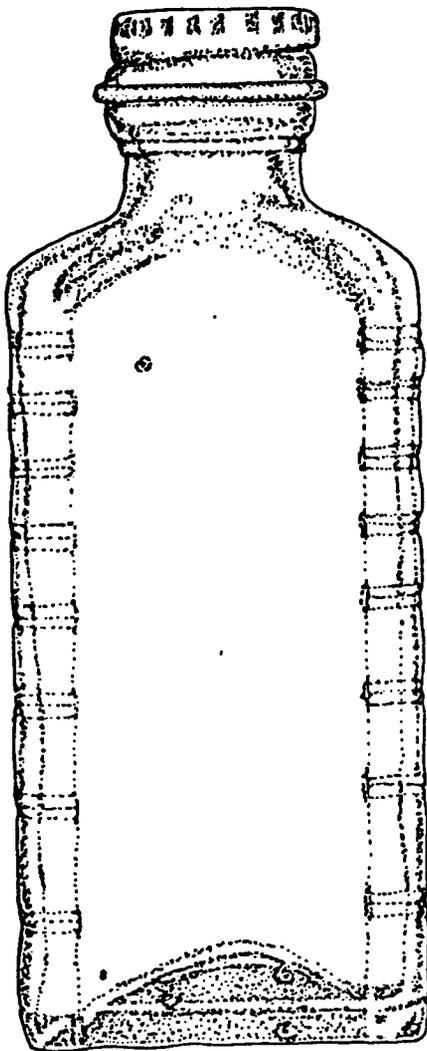
TENNECO LOCATION, USA 14-1  
 3.7 mile segment of road to be improved  
 8/8/80 S. LARRALDE



KEY: === ROAD TO BE IMPROVED  
 --- TRAIL TO EDGE OF CUESTA  
 - - - - SITE BOUNDARY  
 ~~~~~ CONTOUR LINES, APPROX. 20' INTERVAL

TTT EDGE OF CUESTA  
 (O) PILE OF COAL, MANURE, HAY  
 /// SLATTER OF HOLE-IN-THE-TOE CANS & WOOD FRAGS.  
 XXX HAY, RECENT CANS, SHEEP BONES  
 x MEDICINE BOTTLE (COLLECTED)





Collected from 42GR1008 (see map for artifact location at site).  
1937 or 1947, Owens Glass Co., Owens, Iowa. Trade mark illustrated in:  
Toulouse, J. H.  
1971 Bottle Makers and Their Marks. Thomas Nelson, Inc., New York.













- DEV. DRLG.     P & A  
 WC DRLG.     CONST.  
 RECOMPLETION

AFE NO. \_\_\_\_\_

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT USA 14-1 WELL NO. \_\_\_\_\_

| DATE     | DEPTH | DETAIL OF OPERATION                                                                                                                           |                                  |
|----------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| 04/04/81 | 337   | 2 days from spud                                                                                                                              | Footage last 24 hours 12         |
|          |       | AART: Drilling                                                                                                                                | OA: Cement 7" casing with 80 sx  |
|          |       | Cl-G + 3% CaCl <sub>2</sub> + 1/4#/sx flocele. PD at 8:30 AM 4/3/81. Circulate cement to surface. WOC. Weld on wellhead. NU BOP's ID 6" DC's. |                                  |
|          |       | Pressure test BOP's to 1000 psi for 15 minutes. OK PU BHA Drill out shoe and dry up hole. Drilling with air. Bit #2 Sz 6 1/4 Type             |                                  |
|          |       | V-2 S/N AB6558 Jets open Ft 12 Hrs 1/4 Cum Hrs 10 1/4 Ft/Hr 48                                                                                |                                  |
|          |       | Bit #2 Wt on bit 8 RPM 55 PSI 100 DP Sz 3 1/2 DC #10 OD 4 5/8                                                                                 |                                  |
|          |       | x 2 5/16 BHA Length 311 Eff Wt 10,000 Drilling Cost 14,256 (daily)                                                                            |                                  |
|          |       | 67,192 (cumulative)                                                                                                                           |                                  |
| 04/05/81 | 1340  | 3 days from spud                                                                                                                              | Footage last 24 hours 1003       |
|          |       | AART: Drilling                                                                                                                                | OA: hole became wet. Got to mist |
|          |       | at 413' and unload hole. Dry up hole and resume air drilling.                                                                                 |                                  |
|          |       | Drilling with air. Bit #2 Sz 6 1/4 Type V2 S/N AB6558                                                                                         |                                  |
|          |       | Jets open Ft 1003 Hrs 22 Cum Hrs 32 1/4 Ft/Hr 45.5 Bit #2 Wt o                                                                                |                                  |
|          |       | 12/15 RPM 60 PSI 110 DP Sz 3 1/2 DC #18 OD 4 5/8 x 2 5/16 BHA                                                                                 |                                  |
|          |       | Length 558 Eff Wt 18,000 Depth 507 Angle 1/2 Depth 1009 Angle 1                                                                               |                                  |
|          |       |                                                                                                                                               | Daily Cumulative                 |
|          |       | Drilling Cost                                                                                                                                 | 12,715 79,907                    |
|          |       | Evlaution Cost                                                                                                                                | 1,800 1,800                      |
|          |       | Total Cost                                                                                                                                    | 14,515 81,707                    |



**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  
Box 3249 Englewood, Colorado 80155

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 991.3' FNL 1047/4 FEL  
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 checked="" 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) Commence drilling operations |                          |                                     |

5. LEASE  
U-14266

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Long Canyon Unit USA

9. WELL NO.  
14-1

10. FIELD OR WILDCAT NAME  
Entrada Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec 14 T19S R23E

12. COUNTY OR PARISH  
Grand

13. STATE  
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)  
4956' 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.)\*

4/3/81. MIRURT Spud well 4/2/81 w/Cardinal rig #4. Run 49' of 9-5/8" 36# csg. Cmt w/50sx Redi-Mix, Drill to 325'. Run 8jts 7" 23# csg set @ 325'.

4/4/81. Cmt w/80sx Class-G w/3% CaCl<sub>2</sub> and 1/4#/sk Flocele. Plug down. Circ cmt to surface. WOC. Weld on wellhead. NUBOPS. Pressure test BOPS to 1000PSI for 15 mins. OK Drill out shoe and dry up well. Resume drilling.

4/14/81. Drill to 3875'. Laid down drill pipe. RU and run 96 jts of 4 1/2" 10.5# csg. Set @ 3871'. Cmt w/160sx self stress modified (10% THC-60, 10% salt, 3% NFR-1 and 5% KCL). Preceded cmt w/10 bbls fresh water and 40 bbls KCL water. Plug down WOC. Float collar @ 3831'. Release rig after circ'g cmt to csg top. 4/14/81.

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

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

SIGNED *Wiley Hattis* TITLE Asst. Div. Adm. Mgr. DATE April 20, 1981

(This space for Federal or State office use)

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

\*See Instructions on Reverse Side



APR 24 1981

DIVISION OF  
OIL, GAS & MINING

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  
Box 3249, Englewood, CO 80155

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 991.3' FNL, 1047.4' FEL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

5. LEASE  
U-14266

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Long Canyon Unit USA

9. WELL NO.  
14-1

10. FIELD OR WILDCAT NAME  
Entrada Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Section 14, T19S, R23E

12. COUNTY OR PARISH  
Grand

13. STATE  
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)  
4956' 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)                  | <input type="checkbox"/> |                       | <input type="checkbox"/> |

(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.)\*

4/30/81. RIH w/2-3/8" tbg. and bit. Tagged PBDT @ 3822'. Circ'd hole w/2% KCL water. Pressure test csg. to 3500 psi. Held OK. Swabbed fluid level down to 3100'.

5/1/81. POOH w/2-3/8" tbg. Perf'd Morrison @ 2 JSPF: 3298-3337'. RIH w/tbg. and set pkr. @ 3240'. Break perms down w/18 bbls. 2% KCL water and 87 balls. AIR: 2.5 BPM, AIP: 4250 psi, ISIP: 1100 psi, 15 min. SIP: 750 psi. Released pkr. and RIH to 3364'. Made 14 swab runs, recovered 30 bbls. fluid.

5/2/81. SICP: 200 psi. Initial fluid level @ 3000'. Made 6 swab runs & reversed 4 bbls. fluid. Pulled up & set pkr. @ 3240'. Acidize Morrison w/500 gals. 7 1/2% MSR and 87 ball sealers. AIR: 3 BPM, AIR: 2250 psi, ISIP: 750 psi, 15 min. SIP: 300 psi. Release pkr. & RIH to 3364'. Made 11 swab runs & recovered 26 bbls. of fluid 100% recovery. Final fluid level @ 2900'.

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

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

SIGNED Curley Stappan TITLE Asst. Div. Adm. Mgr. DATE 5/7/81

(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: 991.3' FNL 1047.4' FEL  
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  
U-14266

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Long Canyon Unit USA

9. WELL NO.  
14-1

10. FIELD OR WILDCAT NAME  
Entrada Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 14, T19S, R23E

12. COUNTY OR PARISH  
Grand

13. STATE  
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)  
4956' 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.)\*

5/3/81 - SICP: 500 PSI, SITP: 50 PSI. Initial fluid level @ 1000'. Made 6 swab runs, recovered 37 bbls fluid. Well kicked off and flowed for 20 mins. CP dropped and well died. Made 2 swab runs, recovered 1 bbl fluid. Shut in 1 hr; CP to 270 PSI. Made 1 swab run, recovered 2 bbls fluid. Shut in 1 hr; CP to 340 PSI. Made 2 swab runs and recovered 7 bbls fluid. Well kicked off and flowed 20 mins. CP dropped to 120 PSI and well died. Blew csg down. POOH w/tbg and pkr. RIH w/2-3/8" tbg to 3358' shut-in well.

5/5/81 - NDBOP. RDMOSU. Tenneco proposes to temporarily abandon this well to re-evaluate potential and possible plans to plug and abandon.

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING  
*Providing compliance with Rule C-5 & C-22 is maintained.*

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

18. I hereby certify that the foregoing is true and correct. DATE: 5-22-81  
SIGNED: Curly M. [Signature] BY: [Signature] DATE: 5/13/81

(This space for Federal or State office use)

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

DIVISION OF OIL, GAS AND MINING

PLUGGING PROGRAM

NAME OF COMPANY: Tennaco Frank Weiss - 303-740-4840

WELL NAME: Long Canyon 14-1

SECTION 14 TOWNSHIP 19S RANGE 23E COUNTY Grand

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

TOTAL DEPTH: 5875' - 3822'

CASING PROGRAM:

7", 23# @ 325' circ. to surface  
4 1/2" 10.5 @ 3871' (2600 TOC)  
Perf. 3298' - 3227'

FORMATION TOPS:

|          |            |
|----------|------------|
| Dakota   | 3075'      |
| Morrison | 3338'      |
| Entrada  | 3807' - TD |

PLUGS SET AS FOLLOWS:

1. 3000' cmt rt. 80 sx. CL 'H' squeeze 50 sx. into perf.
2. 2560' part casing, 200' cement plus across casing stub
3. 425' - 225'
4. 100' - surface

Place 10#, 50 vis fresh water gel based abandonment mud between plugs; clean, restore and regrade site, erect regulation dryhole marker.

DATE 11-20-81

SIGNED MTM

*W. J. Menden*

**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: 991.3' FNL 1047.4' FEL  
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<br>U-14266                                                    |                   |
| 6. IF INDIAN, ALLOTTEE OR TRIBE NAME                                   |                   |
| 7. UNIT AGREEMENT NAME                                                 |                   |
| 8. FARM OR LEASE NAME<br>Long Canyon Unit USA                          |                   |
| 9. WELL NO.<br>14-1                                                    |                   |
| 10. FIELD OR WILDCAT NAME<br>Entrada Test                              |                   |
| 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA<br>Sec. 14, T19S R23E |                   |
| 12. COUNTY OR PARISH<br>Grand                                          | 13. STATE<br>Utah |
| 14. API NO.                                                            |                   |
| 15. ELEVATIONS (SHOW DF, KDB, AND WD)<br>4956' gr.                     |                   |

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

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

12/1/81 - Tenneco proposes to plug and abandon the above referenced well in accordance with the attached procedures.

**APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING**

DATE: 12-25-81  
BY: Original Signed by G. B. [Signature]

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 12/2/81  
Saundra Peron

(This space for Federal or State office use)

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

WELL NO. 14-1

WI 100% 100% \*BPO  
RI 78%

7" OD, 23 LB, K-55 CSG.W/ 80 SX  
TOC @ \_\_\_\_\_

4-1/2" OD, 10.5 LB, K055 CSG.W/ 160 SX  
TOC @ \_\_\_\_\_

DETAILED PROCEDURE

1. MIRUSU. Kill well if necessary. Remove WH & install BOPE.
2. POOH w/tbg.
3. PU a cmt. ret. for 4-1/2", 10.5#, K-55 csg. RIH on 2-3/8" tbg to 3000' & set. Load annulus w/wtr & PT ret. to 500 psig. PU on tbg & PT tbg to 2000 psig. Sting out of ret. & establish reverse circ. Sting into ret. & est. rate into perfs.
4. Pump 80 sxs Class H w/.4% Haled 9. Pump until 1500 psig is encountered or 1 bbl cmt is left to displace. Sting out of ret. & reverse tbg clean. Displace hole w/10 ppg mud. POOH w/tbg.
5. MIRUWL. RIH to 2550' & cut csg w/WL chemical cutter for 4-1/2", 10.5# csg. TOC @2500'.
6. RU csg crew. POOH, bréak out & lay dn 4-1/2".
7. PU 2-3/8" tbg open ended & RIH to 100' below csg stub & spot a 200' cmt plug (35 s. across the stub.
8. PUH w/tbg to 425' (base of 7" @325') & spot a 200' plug across the base of the 7" surface using 50 sxs Class H.
9. PUH w/2-3/8" tbg to 100' \* circ cmt to surface. POOH w/tbg.
10. Place a 4" P&A marker @ surface stating well name, number, section, township, range & date of P&A.
11. Remove all equip fr location & haul to 100 yard. Fill in all pits & restore location to original condition.

D

**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: 991.3 FNL  
AT TOP PROD. INTERVAL: 1047.4 FEL  
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  
U-14266

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Long Canyon Unit USA

9. WELL NO.  
14-1

10. FIELD OR WILDCAT NAME  
Entrada Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 14, T19S, R23E

12. COUNTY OR PARISH  
Grand

13. STATE  
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)  
4956' 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.)\*

11/22 - OA: MIRUSU. NDWH, NUBOP. POOH w/tbg & F nipple. RIH w/Baker cmt ret. Set @2992'.

11/24 - PBDT 2991' OA: PT cmt retainer & csg. to 1000 psi. PT tbg to 200 psi. Established rate into Morrison perms 3298-3327' @4 BPM & 2000 psi. Cmt'd perms w/80 sxs Class 'H' w/.4% Halad 9. Rate 5 BPM & 2000 psi. Stung out of retainer. Reverse circ'd tbg clean. POOH w/tbg. NDBOP, NDWH to csg spool. Cut csg w/chemical cutter 2560' POOH w/csg.

11/25 - PBDT 2991' OA: RIH w/tbg to 2660'. Started to circ hole full, 250 bbls. no return. Pmpd 25 sxs Class 'H' cmt w/14% Halad 9. POOH w/tbg.

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

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

SIGNED Sandra Brown TITLE Production Analyst DATE 12/7/81

(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: 12/16/81  
BY: CB- [Signature]

\*See Instructions on Reverse Side

## Instructions

**General:** This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law 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.

**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 17:** Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

GPO : 1976 O - 214-149

11/26 - OA: RIH w/tbg. Tagged cmt plug @ 2500'. PUH to 430' Reverse circ'd. Pmpd 50 sxs Class 'H' cmt. PUH to 100' Pmpd cmt to surface. POOH. Cut WH off. Installed P&A marker. RDMOSU.

12/1 - Plug No 1 (2991-3327') 80 sx Morrison/Dakota. Cut csg @2550'. POOH w/4-1/2"  
Plug No. 2 (2500-2660') 35 sx 4-1/2" csg. stub  
Plug No. 3 (230 - 430') 50 sx 7" csg stub  
Plug No. 4 (Surf-100') surface plug  
10 ppg mud between plugs

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

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved.  
Budget Bureau No. 42-R355.5.

**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. RESER.  Other plugged & abandoned

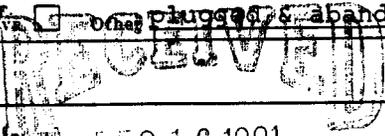
2. NAME OF OPERATOR  
Tenneco Oil Company

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 991.3' FNL, 1047.4' FEL

At top prod. interval reported below

At total depth



DIVISION OF  
**NE NE OIL, GAS & MINING**

14. PERMIT NO. 43-019-30729 | DATE ISSUED 10-15-80

5. LEASE DESIGNATION AND SERIAL NO.  
U-14266

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Longanyon Unit USA

9. WELL NO.  
14-1

10. FIELD AND POOL, OR WILDCAT  
Entrada Test

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

Sec. 14, T19S, R23E

12. COUNTY OR PARISH Grand | 13. STATE Utah

15. DATE SPUDDED 4-2-81 | 16. DATE T.D. REACHED 4-14-81 | 17. DATE COMPL. (Ready to prod.) P&A'd 11/26/81 | 18. ELEVATIONS (DF, REB, RT, GR, ETC.)\* 4956' gr. | 19. ELEV. CASINGHEAD --

20. TOTAL DEPTH, MD & TVD 3875' | 21. PLUG, BACK T.D., MD & TVD 3822' | 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)\* 3298'- 3337' Morrison | 25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN (DI-SFL, BCSL, CNFDL) | 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"      | 35#             | set as conductor |           | 50 sx Redimix               |               |
| 7"          | 23#             | 325'             |           | 80 sx CL-G w/3% CACL & 1/4# | sx flocele    |
| 4-1/2"      | 10.5#           | 3871'            |           | 160 sx self stress modified |               |

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.

| INTERVAL   | SIZE   | AMOUNT AND KIND OF MATERIAL USED             |
|------------|--------|----------------------------------------------|
| 3298-3337' | 2 JSPF | Acidize w/500 gal 7-1/2% MSR & 87 ball slrs. |

33.\* PRODUCTION

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

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

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

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

35. LIST OF ATTACHMENTS  
Electric logs to be forwarded by Schlumberger

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Quanda Tyson TITLE Production Analyst DATE 12/7/81

# 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.

**Item 4:** 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:<br>SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING<br>DEPTH INTERVAL TESTED, CURSION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERY |       | 38. GEOLOGIC MARKERS |                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----------------------|-----------------------------|
| FORMATION                                                                                                                                                                                                                                           | TOP   | BOTTOM               | DESCRIPTION, CONTENTS, ETC. |
| Dakota                                                                                                                                                                                                                                              | 2947' | 3076'                | Silt                        |
| Dakota                                                                                                                                                                                                                                              | 3076' | 3212'                | Sandstone                   |
| Morrison                                                                                                                                                                                                                                            | 3212' | 3807'                |                             |
| Entrada                                                                                                                                                                                                                                             | 3807' | TD                   |                             |

| NAME | NEAR. DEPTH | TOP | TRUE VERT. DEPTH |
|------|-------------|-----|------------------|
|      |             |     |                  |

**Tenneco Oil**  
**Exploration and Production**  
A Tenneco Company



Rocky Mountain Division

P.O. Box 3249  
Englewood, Colorado 80155  
(303) 740-4800

Delivery Address:  
6061 South Willow Drive  
Englewood, Colorado

December 9, 1981

United States Geological Survey  
2000 Administration Building  
1745 West 1700 South  
Salt Lake City, Utah 84104

RE: Well Nos. 11-1, 14-1, 16-4  
Grand County, Utah

Gentlemen:

Enclosed please find Deviations on the above referenced wells in the Long Canyon Unit.

If you need any additional information, please feel free to call me.

Very truly yours,

TENNECO OIL COMPANY

A handwritten signature in cursive script, appearing to read "Sandra F. Peron".

Sandra F. Peron

SFP:jt

Enclosure

cc: Oil & Gas Commission  
State of Utah

RECEIVED  
DEC 10 1981

DIVISION OF  
OIL, GAS & MINING

LTOEP 103A 7/80

**Tenneco Oil**  
**Exploration and Production**  
A Tenneco Company



Rocky Mountain Division

P.O. Box 3249  
Englewood, Colorado 80155  
(303) 740-4800

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6061 South Willow Drive  
Englewood, Colorado

**TABULATION OF DEVIATION TESTS**

**TENNECO OIL COMPANY**

DEPTH INCLINATION

|      |        |
|------|--------|
| 92'  | 0°     |
| 390  | 0°     |
| 900  | 1°     |
| 1400 | 2°     |
| 1509 | 1-3/4° |
| 2000 | 2°     |
| 2500 | 2°     |
| 3023 | 3°     |
| 3457 | 2-3/4° |
| 3920 | 1-3/4° |
| 4310 | 1-3/4° |
| 4390 | 1-3/4° |

DEPTH INCLINATION

AFFIDAVIT

This is to certify that to the best of my knowledge, the above tabulation details the deviation test taken on Tenneco Oil Company's well: Long Canyon Unit State 16-4, Sec. 16, T19S, R23E, Grand County, Utah.

Signed: Sandra Peron  
Agent for Tenneco Oil Company

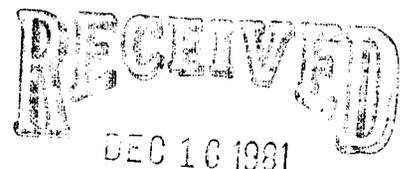
THE STATE OF COLORADO )  
CITY AND COUNTY OF DENVER)

Before me, the undersigned authority, on this day, personally appeared, Sandra Peron, known to me to be an Agent for Tenneco Oil Company, and to be the person whose name is subscribed to the above statement, who, being by me duly sworn on oath, states that she has knowledge of the facts stated herein, and that said statement is true and correct. Subscribed and sworn to before me, a Notary Public in and for said County and State, this 9th day of December 1981.

Christie Longman  
Notary Public

My Commission Expires:

6/24/85



DIVISION OF  
OIL, GAS & MINING



Rocky Mountain Division

PO Box 3249  
Englewood, Colorado 80155  
(303) 740-4800

Delivery Address:  
6061 South Willow Drive  
Englewood, Colorado

**TABULATION OF DEVIATION TESTS**

**TENNECO OIL COMPANY**

DEPTH INCLINATION

|      |                    |
|------|--------------------|
| 211' | 3/4 <sup>o</sup>   |
| 507  | 1/2 <sup>o</sup>   |
| 1009 | 1 <sup>o</sup>     |
| 1544 | 1-1/4 <sup>o</sup> |
| 2047 | 1 <sup>o</sup>     |
| 2519 | 1-3/4 <sup>o</sup> |
| 2991 | 3/4 <sup>o</sup>   |
| 3419 | 1-1/2 <sup>o</sup> |
| 3875 | 4 <sup>o</sup>     |

DEPTH INCLINATION

AFFIDAVIT

This is to certify that to the best of my knowledge, the above tabulation details the deviation test taken on Tenneco Oil Company's well: Long Canyon Unit USA 14-1, Sec. 14, T19S R23E, Grand County, Utah.

Signed: Sandra Peron  
Agent for Tenneco Oil Company

THE STATE OF COLORADO     )  
CITY AND COUNTY OF DENVER)

Before me, the undersigned authority, on this day, personally appeared, Sandra Peron, known to me to be an Agent for Tenneco Oil Company, and to be the person whose name is subscribed to the above statement, who, being by me duly sworn on oath, states that she has knowledge of the facts stated herein, and that said statement is true and correct. Subscribed and sworn to before me, a Notary Public in and for said County and State, this 9th day of December 1981.

Charlotte Wagoner  
Notary Public

My Commission Expires:

6/24/85



Rocky Mountain Division

PO Box 3249  
 Englewood, Colorado 80155  
 (303) 740-4800

Delivery Address:  
 6061 South Willow Drive  
 Englewood, Colorado

**TABULATION OF DEVIATION TESTS**

TENNECO OIL COMPANY

DEPTH INCLINATION

DEPTH INCLINATION

|      |        |
|------|--------|
| 515' | 1°     |
| 1039 | 2-3/4° |
| 1844 | 4°     |
| 2130 | 3-3/4° |
| 2521 | 5-3/4° |
| 2821 | 6-3/4° |
| 2910 | 5-3/4° |
| 3121 | 6°     |
| 3509 | 5-3/4° |
| 3989 | 11°    |
| 4006 | 11°    |
| 4140 | 9-3/4° |
| 4358 | 8-3/4° |
| 4524 | 8°     |
| 4527 | 8°     |
| 4800 | 7°     |
| 4900 | 7°     |

AFFIDAVIT

This is to certify that to the best of my knowledge, the above tabulation details the deviation test taken on Tenneco Oil Company's well: Long Canyon Unit State 11-1, Sec. 11, T19S, R22E, Grand County, Utah

Signed: Sandra Peron  
 Agent for Tenneco Oil Company

THE STATE OF COLORADO )  
 CITY AND COUNTY OF DENVER)

Before me, the undersigned authority, on this day, personally appeared, Sandra Peron, known to me to be an Agent for Tenneco Oil Company, and to be the person whose name is subscribed to the above statement, who, being by me duly sworn on oath, states that she has knowledge of the facts stated herein, and that said statement is true and correct. Subscribed and sworn to before me, a Notary Public in and for said County and State, this 9th day of December 1981.

Charlotte Flanagan  
 Notary Public

My Commission Expires:  
6/24/85