

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG _____ ELECTRIC LOGS _____ FILE WATER SANDS _____ LOCATION INSPECTED _____ SWB REPORT /abd. _____

* This Application was resubmitted by the U.S.G.S Aug the 3/12/82

DATE FILED 2-9-81

LAND: FEE & PATENTED _____ STATE LEASE NO. _____ PUBLIC LEASE NO. U-14258 _____ INDIAN _____

DRILLING APPROVED 2-11-81 Gas Well

SPUDED IN: _____

COMPLETED _____ PUT TO PRODUCING _____

INITIAL PRODUCTION: _____

GRAVITY A.P.I. _____

GOR: _____

PRODUCING ZONES _____

TOTAL DEPTH: _____

WELL ELEVATION: 5162' BR

DATE ABANDONED: MAY 12, 1982 LOCATION ABANDONED, WELL NEVER DRILLED

FIELD: Wildcat 3/86

UNIT: Sulfur Canyon

COUNTY: Grand

WELL NO. Sulphur Canyon Unit #17-9 API NO. 43-019-30777

LOCATION 2038.0' FT. FROM (N)(S) LINE. 279.6' FT. FROM (E)(W) LINE. NE SE 1/4 - 1/4 SEC 17

TWP	RGE	SEC	OPERATOR	TWP	RGE	SEC	OPERATOR
				18S	24E	17	TENNECO OIL COMPANY



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 17-9
Section 17, T. 18 S., R. 24 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. You should be knowledgeable that the proposed location is within a wilderness unit (100b) but outside a proposed Wilderness Study Area. Final determination will come about late fall 1980. An archaeological clearance must be obtained after staking the site.

Sincerely yours,

C. Delano Backus ACTING
C. Delano Backus
Area Manager

RECEIVED

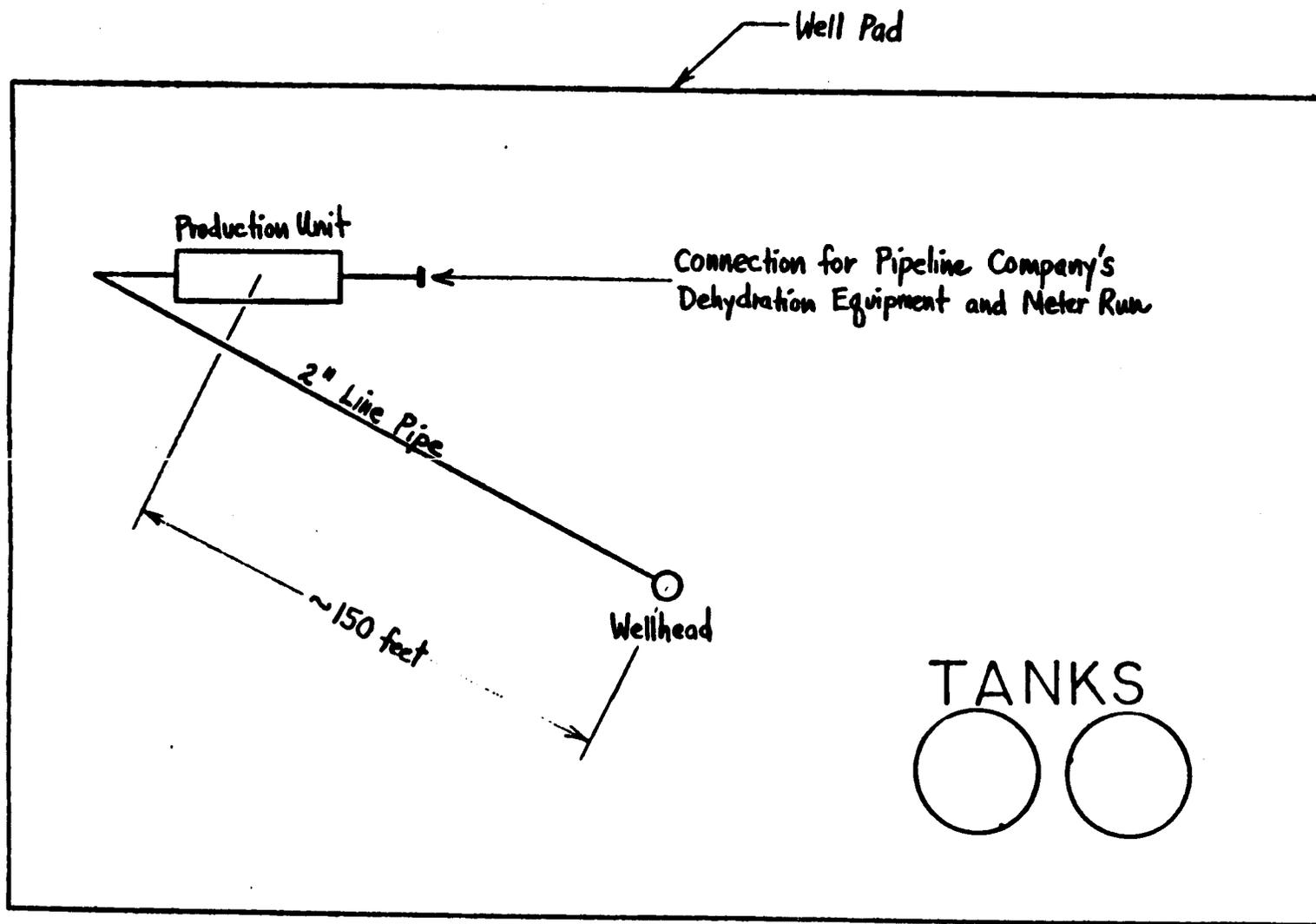
JUL 21 1980

TENNECO OIL CO.
DENVER



Save Energy and You Serve America!

PROBABLE EQUIPMENT INSTALLATION



NOT TO SCALE

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

9

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, Colorado 80155

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface: 2038.0 FSL, 279.6 FEL **NE SE**
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 14.7 miles NW of Westwater, Utah

18. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any)
 280'

16. NO. OF ACRES IN LEASE
 1952.00

17. NO. OF ACRES ASSIGNED TO THIS WELL
 360

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
 See Exhibit 6

19. PROPOSED DEPTH
 4190 *Entrada*

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, ET, GR, etc.)
 5161.5 GR

22. APPROX. DATE WORK WILL START*
 Feb./March 1981

23. 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	±4190'	Cover all possible productive zones.

Set 1-3 joints of 9 5/8" casing as surface pipe.

See attached drilling procedure.

Proposed location within the Sulphur Canyon Unit - See Exhibit 8.

Archaeological survey report attached. See Exhibit 9.

Preliminary environmental review request and response attached. See Exhibits 10 & 11.

Please expedite.

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.

SIGNED M. L. Freeman TITLE Staff Production Analyst DATE February 6, 1981

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

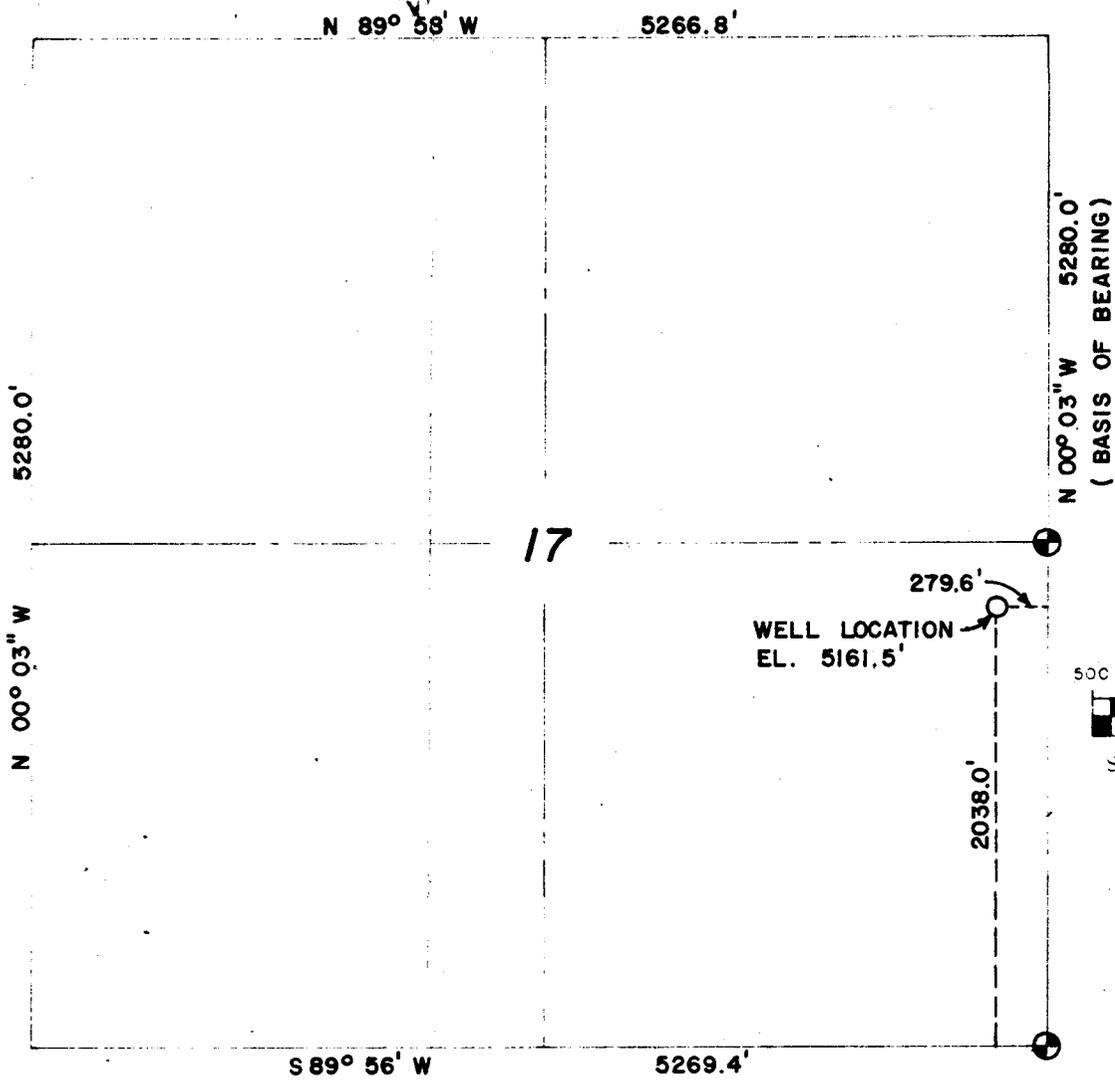
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

cc U.S.G.S. Grand Junction, Colorado
 B.L.M. Moab, Utah

APPROVED BY THE DIVISION
 OF OIL, GAS, AND MINING
 DATE: 2-11-81
 BY: M. J. Minder

RECEIVED
 FEB 9 1981
 DIVISION OF
 OIL, GAS & MINING

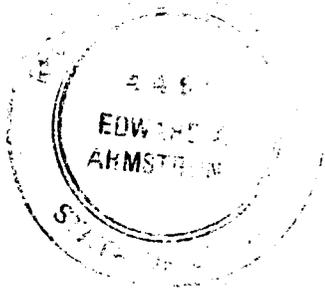


WELL LOCATION
 279.6 FT. W.E.L. - 2038.0 FT. N.S.L.
 SECTION 17, T.18 S., R.24 E., S.L.B. & M.
 GRAND COUNTY, UTAH

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		
	SCALE	1" = 1000'	TENNECO OIL
	DATE	7/31/80	TENNECO USA 17-9
	DRAWN BY	SZH	
CHECKED BY	EAA		
DATE OF PLOT	7/30/80	SHEET 1 of 5	JOB NUMBER 802943

** FILE NOTATIONS **

DATE: Feb. 10 1981
OPERATOR: Tenneco Oil Company
WELL NO: Sulphur Canyon Unit #17-9
Location: Sec. 17 ^(correct sp.) T. 18.5 R. 24E County: Grand

File Prepared: Entered on N.I.D.:
Card Indexed: Completion Sheet:
API Number 43-019-30777

CHECKED BY:

Petroleum Engineer: M. J. Minde 2-11-81

Director: _____

Administrative Aide: Unit approval - ok on bndry lines for gas w.
ok on formation

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.

February 13, 1981

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

Re: Well No. Sulphur Canyon Unit #17-9
Sec. 17, T. 18S, R.E.24E
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 43-019-30777.

Sincerely,

DIVISION OF OIL, GAS, AND MINING



Michael T. Minder
Petroleum Engineer

/ko
cc: USGS

DUPLICATE
UNITED STATES

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse)

Form approved
Budget Bureau No. 42-R1425

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

5. LEASE DESIGNATION AND SERIAL NO.
U-14258

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Sulfur Canyon

8. FARM OR LEASE NAME
Sulfur Canyon Unit

9. WELL NO.
17-9

10. FIELD AND POOL, OR WILDCAT
Sulfur Canyon

11. SEC., T., R., M., OR BLEK. AND SURVEY OR AREA
Sec. 17, T18S, R24E

12. COUNTY OR PARISH 13. STATE
Grand 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
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At proposed prod. zone

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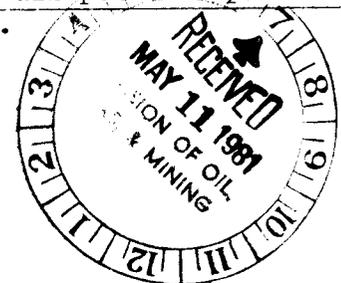
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16. NO. OF ACRES IN LEASE 1952.00
17. NO. OF ACRES ASSIGNED TO THIS WELL 360

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. See Exhibit 6 4190
20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5161.5 GR
22. APPROX. DATE WORK WILL START* Feb./March 1981

23. PROPOSED CASING AND CEMENTING PROGRAM

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See attached drilling procedure.

Proposed location within the Sulphur Canyon Unit - See Exhibit 8.

Archaeological survey report attached. See Exhibit 9.

Preliminary environmental review request and response attached. See Exhibits 10 & 11.

Please expedite.

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 M. L. Freeman TITLE Staff Production Analyst DATE February 6, 1981
(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE
APPROVED BY W. J. Martin FOR E. W. GUYNN DISTRICT ENGINEER DATE MAY 08 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

cc U.S.G.S. Grand Junction, Colorado
B.L.M. Moab, Utah

Production Facilities and Flowline NOT Approved

State Oil & Gas

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

NEPA CATEGORICAL EXCLUSION REVIEW

PROJECT IDENTIFICATION

Operator/Project Name Tenneco Sulphur Canyon Unit #17-9

Project Type Wildcat Gas Test (Unit Obligation)

Project Location 2038.0' FSL, 279.6' FEL, Sec. 17, T18S, R24E, Grand C. Utah

Date Project Submitted February 9, 1981

FIELD INSPECTION

Date March 12, 1981

Field Inspection Participants

- Bob Miskler - Tenneco
- Dallas Halley - Halley Construction
- Ernest Dungan, Mical Walker - BLM
- Glenn Doyle - USGS

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.

April 29, 1981
Date Prepared

Glenn M. Doyle
Environmental Scientist

I concur

5/4/81
Date

[Signature]
District Supervisor

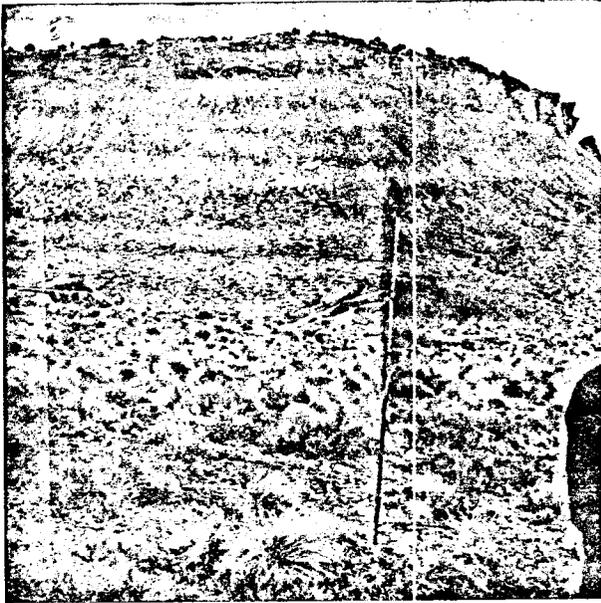
CATEGORICAL EXCLUSION REVIEW INFORMATION SOURCE

Criteria 516 DM 2.3.A	Federal/State Agency			Local and private correspondence (date)	Previous NEPA	Other studies and reports	Staff expertise	Onsite inspection (date)	Other
	Correspondence (date)	Phone check (date)	Meeting (date)						
1. Public health and safety					1, 2			3/12/81	
2. Unique characteristics					1, 2				
3. Environmentally controversial					1, 2				
4. Uncertain and unknown risks						4			
5. Establishes precedents					1, 2				
6. Cumulatively significant					1, 2		6		
7. National Register historic places	1-4/30/81								
8. Endangered/threatened species	1-4/30/81								
9. Violate Federal, State, local, tribal law						4			2

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



8/80

17-9



United States Department of the Interior

IN REPLY REFER TO

3109
(U-068)

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

APR 29 1981

Memorandum

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

From: Area Manager, Grand

Subject: Active File
Tenneco Oil Company
Sulfur Canyon 17-9, Lease #U-14258
Grand County, Utah

On March 12, 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: (2)
1-Reclamation Procedures
2-Seed Mixture
3-Suggested Colors for Production Facilities

ACTING *Gene J. Arman*

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 12 inches of topsoil in a wind-row on the south west 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) Surface disturbance on the access road in section 17 will be kept to an absolute minimum until well production is determined. Maximum travel road width will be 18 feet and total disturbed width will be 24 feet.
- 2) Top soils and vegetation removed from the new access road will be windrowed along the north side of the disturbed area.

Location -

- 1) Pit(s) will be fenced on three sides during the drilling period, and on the 4th side prior to rig removal. Fence will consist of 48 inches high woven wire with a strand of barbed wire along the top for support.

Restoration -

Producer -

- 1) Disturbed surface area(s) outside the deadmen (from 15 feet outside the anchors out to the edge of the disturbed area) will be contoured, top soils replaced, ripped and seeded. Broadcast seed will be at 2.5 times the rate on the APD.

Non-Producer -

- 1) Part 10 of your 13 Point Plan will be followed, and restoration will be approved by BLM.
- 2) Access and pad will be closed to all vehicular travel in section 17.

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>Rate</u> <u>lbs/acre</u>
Grasses		
Oryzopsis hymenoides	Indian rice grass	1
Hilaria jamesii	Curley grass	1
Elymus salivas	Wildrye	1
Forbs		
Sphaeralcea coccinia	Globemallow	1
Browse		
Atriplex confertifolia	Shadscale	1
Atriplex nuttallii	Nuttal salt bush	1
Artimisia spinescens	Bud sage	1
		7



United States Department of the Interior

IN REPLY REFER TO

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.

U. S. GEOLOGICAL SURVEY - CONSERVATION DIVISION

FROM: : DISTRICT GEOLOGIST, ME, SALT LAKE CITY, UTAH

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

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. U-14258

OPERATOR: Tenneco

WELL NO. 17-9

LOCATION: NE $\frac{1}{2}$ NE $\frac{1}{2}$ SE $\frac{1}{2}$ sec. 17, T. 18S., R. 24E., SLM

Grand County, Utah

1. Stratigraphy:

Castlegate	surface		
Frontier	2960'	Salt wash	3835'
Dakota Silt	3210'	Entrada	4070'
Dakota	3335'	<u>TD</u>	<u>4190'</u>
Morrison	3460'		

2. Fresh Water:

Fresh water possible to 500'.

3. Leasable Minerals:

Gas: Dakota, Morrison, Salt wash, Entrada

4. Additional Logs Needed: None

5. Potential Geologic Hazards: None expected

6. References and Remarks:

Signature: Gregory W. Wood

Date: 2-25-81

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

DRILLING PROCEDURE

DATE: February 2, 1981

LEASE: Sulfur Canyon Unit USA

WELL NO.: 17-9

LOCATION: 280' FEL, 2038' FSL
Section 17, T18S, R24E
Grand County, Utah

FIELD: Sulfur Canyon

ELEVATION: 5160'

TOTAL DEPTH: 4190'

PROJECTED HORIZON: Entrada

SUBMITTED BY: Bruce Ladd DATE: February 2, 1981

APPROVED BY: *Tom R...* DATE: 2/4/81

CC: Administration
DSB Well File
Field File

ESTIMATED FORMATION TOPS

Wasatch		
Mesaverde		
Mancos		
Castlegate	Surface	
Frontier	2960'	
Dakota Silt	3210'	Gas
Dakota	3335'	Gas
Morrison	3460'	Gas
Salt Wash	3835'	Gas
Entrada	4070'	Gas
TD	4190'	

1. No abnormal pressures, temperatures or H₂S 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 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 300'.
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: 0-300	300'	7", 23#, K-55, ST&C.
PRODUCTION: 0-4190	4190'	4 1/2", 10.5#, K-55, ST&C.

MUD PROGRAM

0-600 Spud mud. Viscosity as needed to clean hole.

Air or Air/Mist.

600-T.D.

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.

Deviation Surveys:

0-600 Every 100' unless hole conditions prohibit running the surveys.
Maximum deviation at T.D. 1⁰.

600-T.D. Every 500' or on trips. Maximum deviation 1⁰ per 100' or 4⁰ at TD.

Every 500' or on trips. Maximum deviation 1⁰ per 100' or 4⁰ at TD.

Samples:

None.

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.

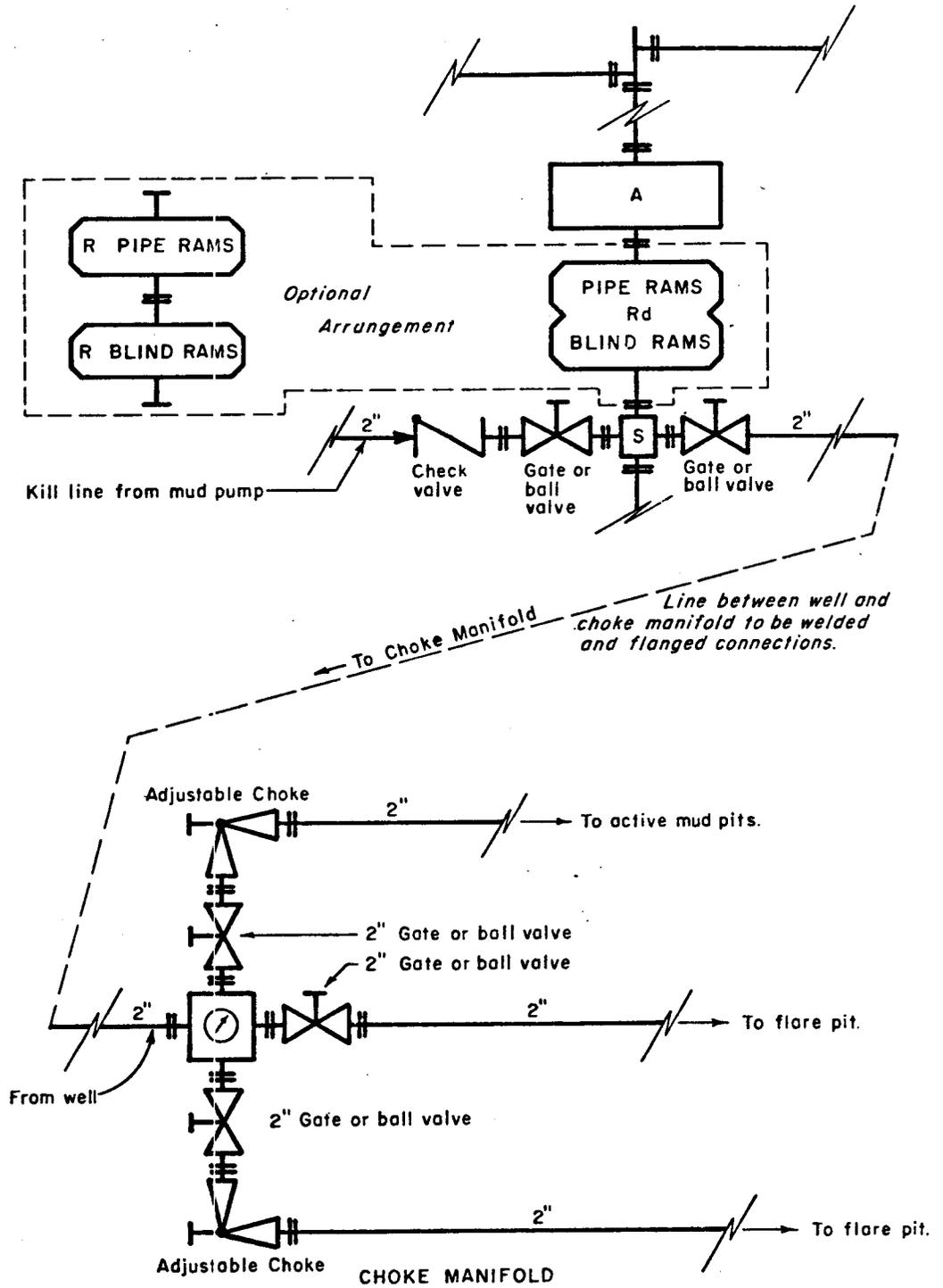
TENNECO OIL COMPANY
P.O. BOX 3249
ENGLEWOOD, COLORADO 80155
PHONE: 303-740-4800

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**

I. EXISTING ROADS

A. Proposed Well Site Location: As surveyed by a registered land surveyor, 2038 FSL, 279.6 FEL, Sec. 17, T18S, R24E, Grand County, Utah. See Exhibit #1.

B. Planned Access Route: The planned access is shown on Exhibits 4 & 5. All new road construction is within the unit boundary voiding the need of a right-of-way. See Exhibit #8.

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 shown in Exhibits 4 & 5.

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 4 and 5)

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 disturbed area will be 30 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:**
Grades will be kept to a minimum using all available engineering techniques. It is, however, impossible to give a percent grade until the road has been aligned to the satisfaction of the surface management agency. We will have grades that are safe and passable under adverse weather conditions and that utilize the existing topography and surface geological conditions.
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 BJM.

Max: cut - Minor. The existing topography is relatively level.
Max: fill -
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 6 shows existing wells within a one mile radius.

- A. **Water Wells:** none
- B. **Abandoned Wells:** one SW of 16
- 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: May consist of a well head, condensate tank, production unit, meter house, all of which would remain within the disturbed area. Exhibit 12 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 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 need 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 to be from a legal private source.
Pete Clathis will provide water.
- 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: N/A

D. Access road shown under Exhibit 4.

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 elsewhere.

E. Gargage:

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 & 3

1. Location of pits:
2. Rig Orientation:

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 re-seeded per Bureau of Land Management requirements.

XI. OTHER INFORMATION

- A. **Surface Description:** The proposed site is a desert location at the base of the Book Cliffs. The soils are sandy, sandy clay supporting native grasses, sage, cactus and annuals.
- 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:** No live streams exist in the area.
 2. **Occupied Dwellings:** Not existing.
 3. **Historical Sites:** An archaeological reconnaissance has been performed for this location and report is on file with the appropriate USGS/BLM offices. Attached as Exhibit 9.

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

M.L. Freeman
P.O. Box 3249
Englewood, Colorado 80155
Phone: (303) 740-4826

XIII. CERTIFICATION

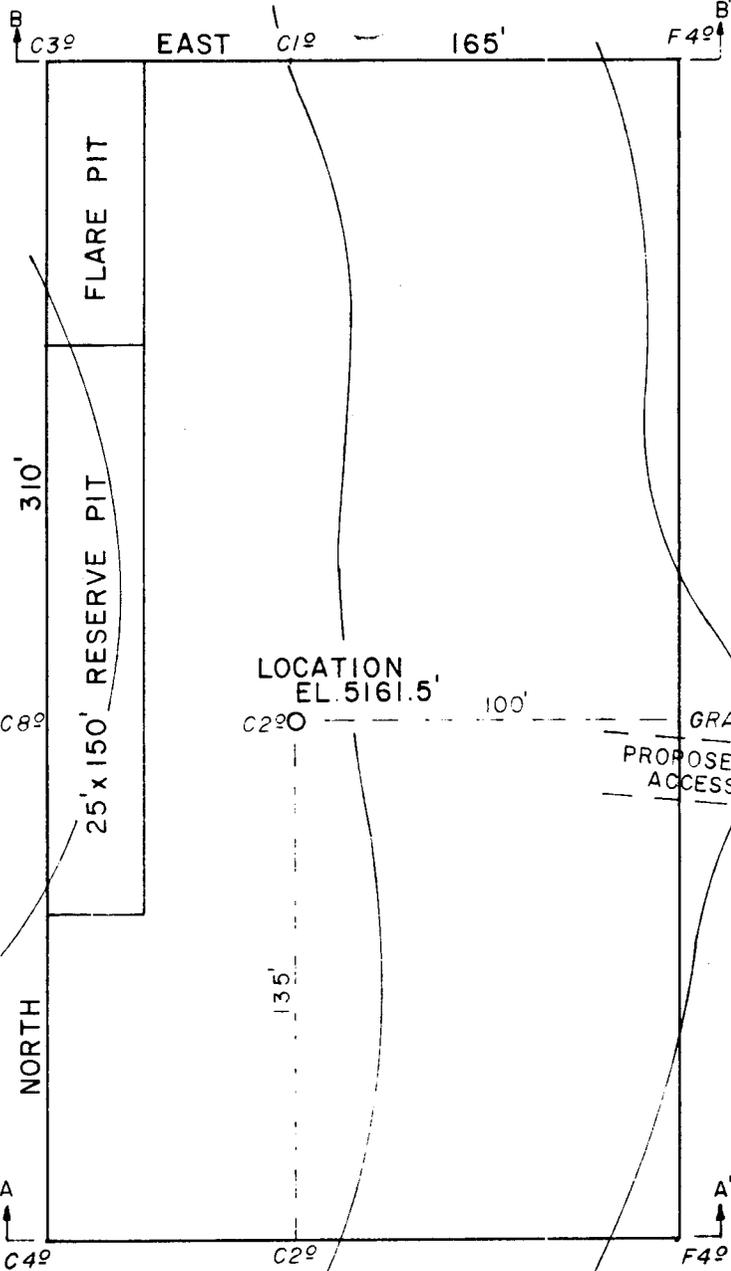
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions as they actually exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the proposed work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

DATE: February 6, 1981



M. L. Freeman
Staff Production Analyst

PAD TOPOGRAPHY



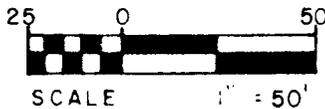
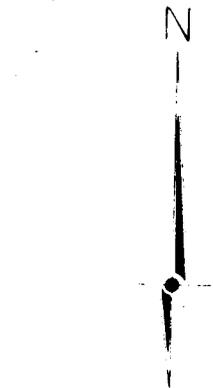
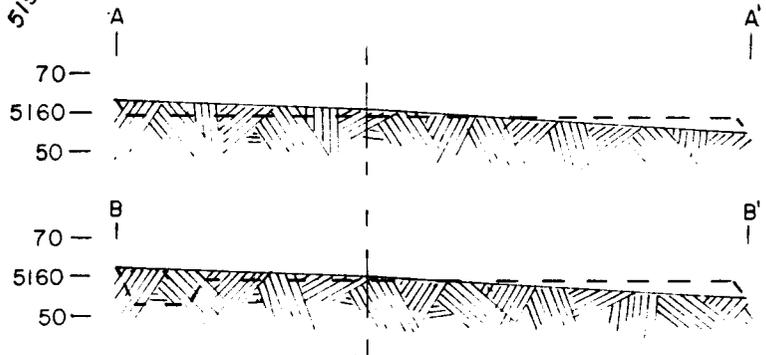
REF. PT. 200' N : EL. 5160'
 REF. PT. 200' E : EL. 5140'
 REF. PT. 200' W : EL. 5141'

LOCATION
 EL. 5161.5'

APPROXIMATE
 EARTHWORK VOLUMES

CUT : 3500 cu.yd.
 FILL : 850 cu.yd.

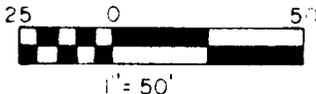
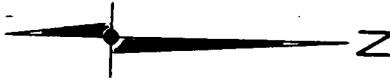
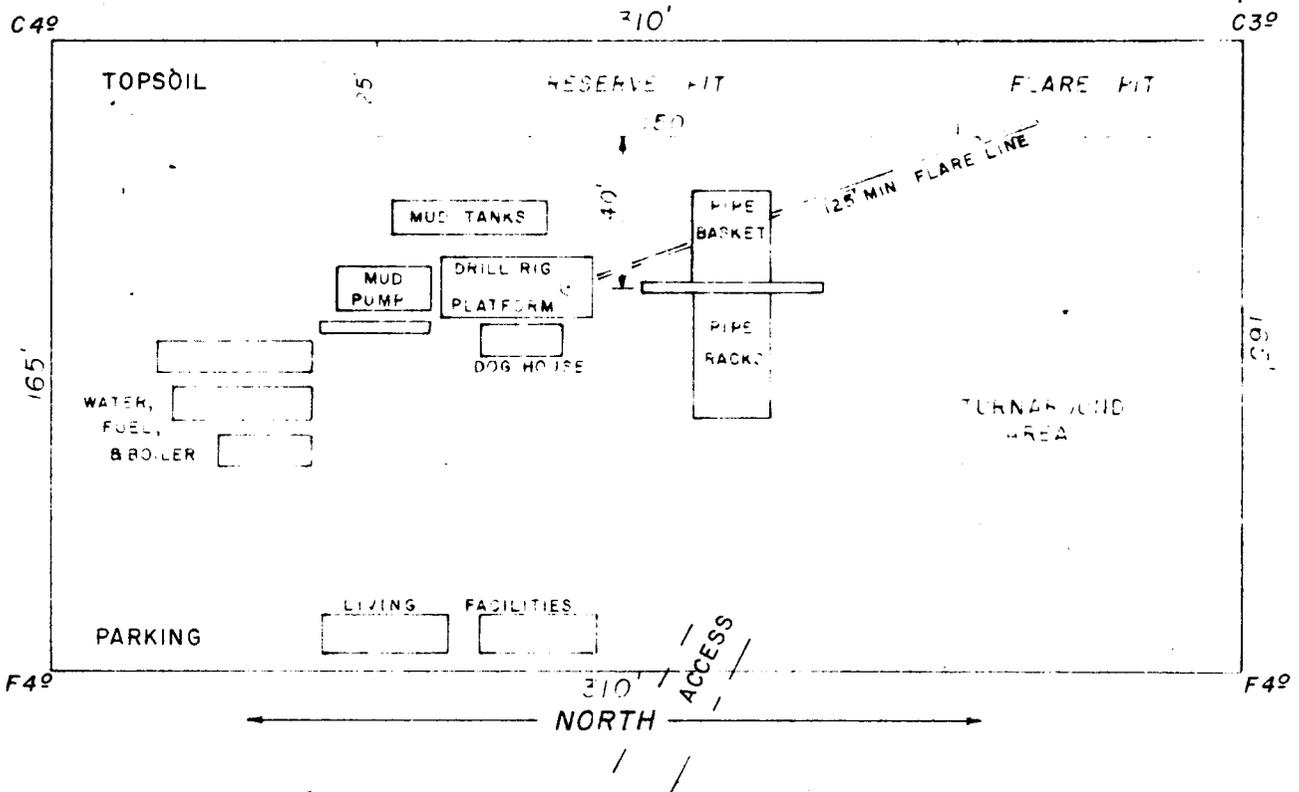
CROSS-SECTIONS



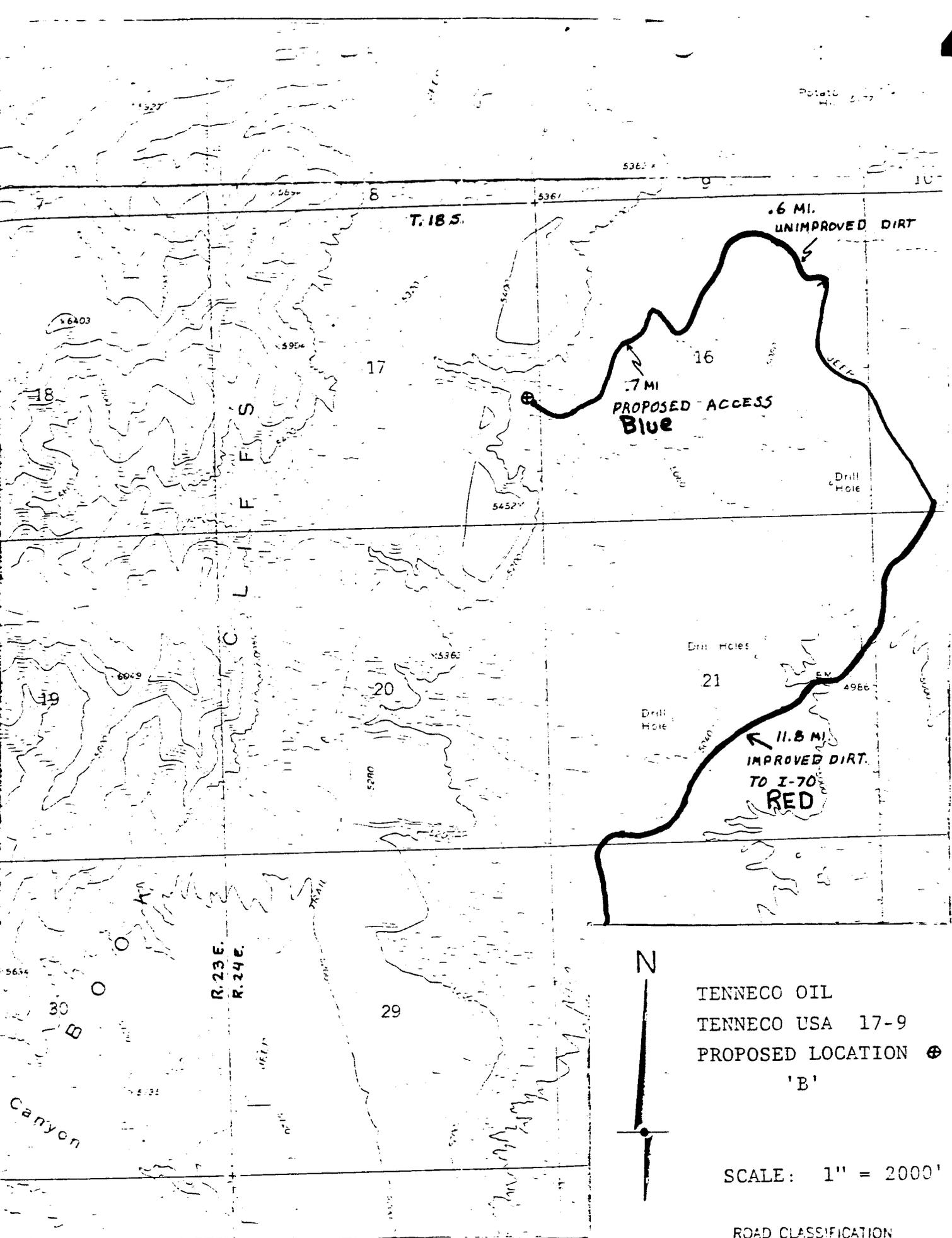
	ARMSTRONG ENGINEERS and ASSOCIATES, INC. ENGINEERING • SURVEYING • SOILS AND CONCRETE TESTING 861 ROOD AVENUE - GRAND JUNCTION, COLORADO 81501 - (303) 245-3861		
	SCALE 1" = 50' DATE 8-1-80 DRAWN BY DRS CHECKED BY JRS DATE 7-30-80	TENNECO OIL TENNECO USA 17-9	
	SHEET 2 of 5		JOB NUMBER 802943

RIG LAYOUT

3



	ARMSTRONG ENGINEERS and ASSOCIATES, INC. ENGINEERING • SURVEYING • SOILS AND CONCRETE TESTING 861 ROOD AVENUE GRAND JUNCTION, COLORADO 81501 - (303) 245-3861	
	SCALE	1" = 50'
	DATE	8-4-80
	DRAWN BY	DRS
CHECKED BY	JRS	TENNECO OIL TENNECO USA 17-9
DATE OF REVISION	7-30-80	
SHEET 3 of 5		JOB NUMBER 802943



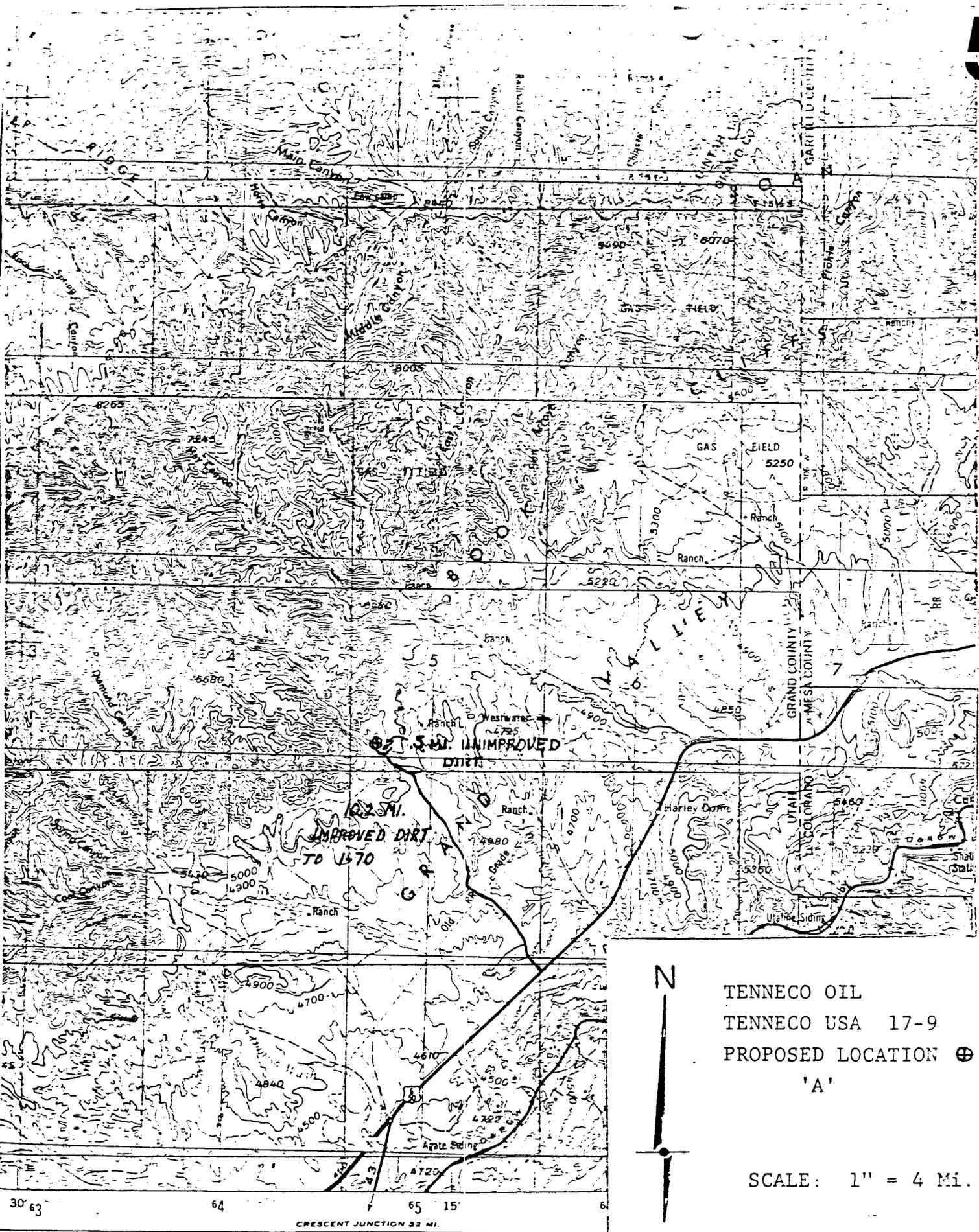
TENNECO OIL
 TENNECO USA 17-9
 PROPOSED LOCATION ⊕
 'B'

SCALE: 1" = 2000'

ROAD CLASSIFICATION

Light-duty

Unimproved dirt



TENNECO OIL
 TENNECO USA 17-9
 PROPOSED LOCATION ⊕
 'A'

SCALE: 1" = 4 Mi.

ROAD CLASSIFICATION
 Light duty ————— Unimproved dirt - - - - -

30' 63 64 65 15' 6

CRESCENT JUNCTION 32 MI.

BITTER
▲

ELLEN T. MILLER

WESTERN STATES

10-11
5026' GR 3014
5023' 3065'

GREAT WESTERN IRLG.

4960' DF
3056'

WEST WATER

17



G. W. ET AL

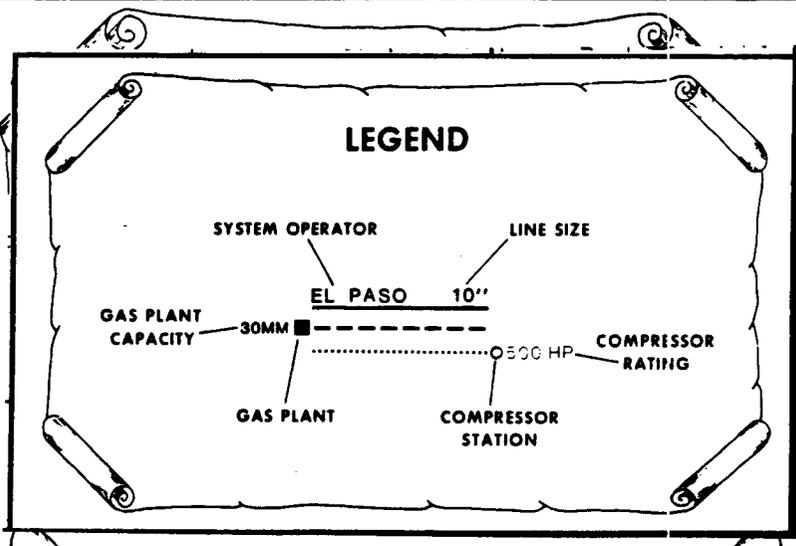
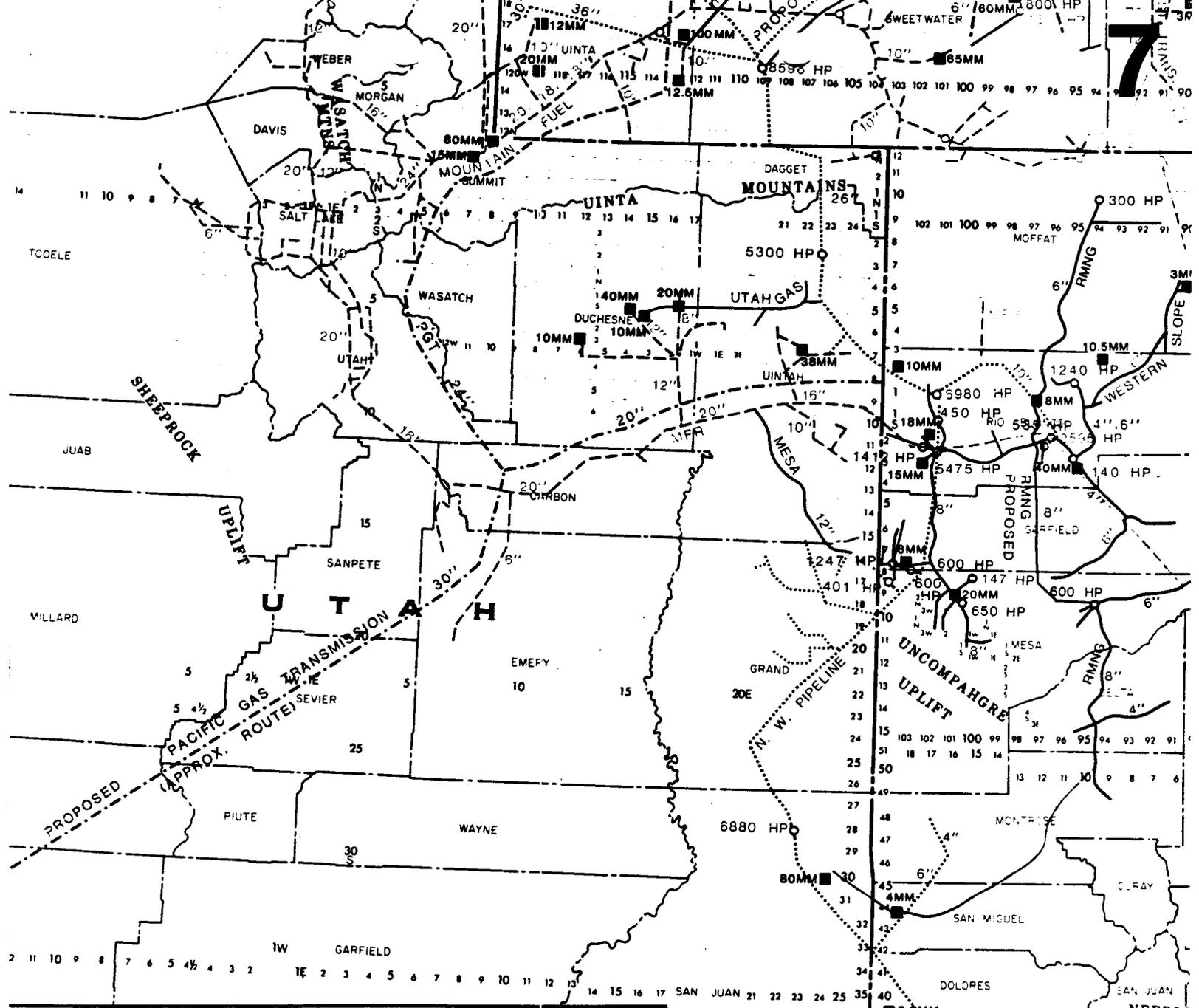
5005' RB
4502'

GREAT WESTERN DE

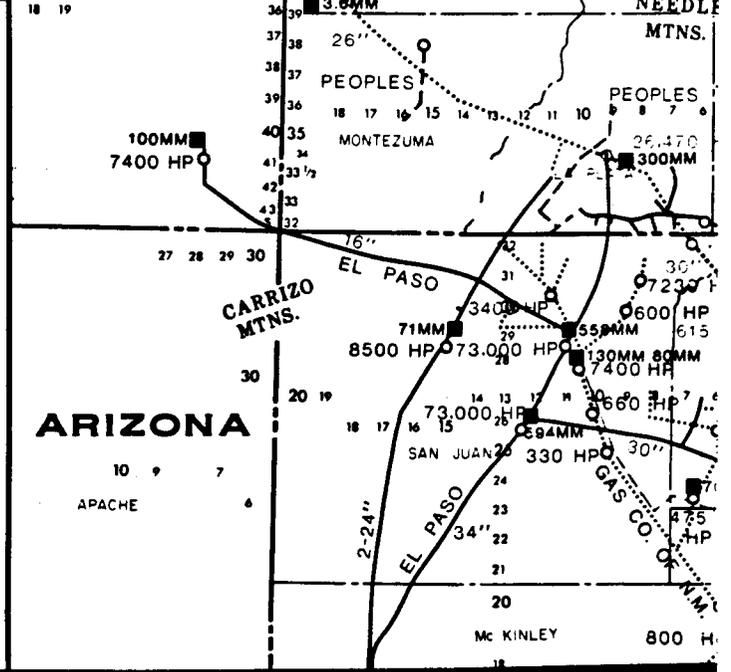
φ²
2213'

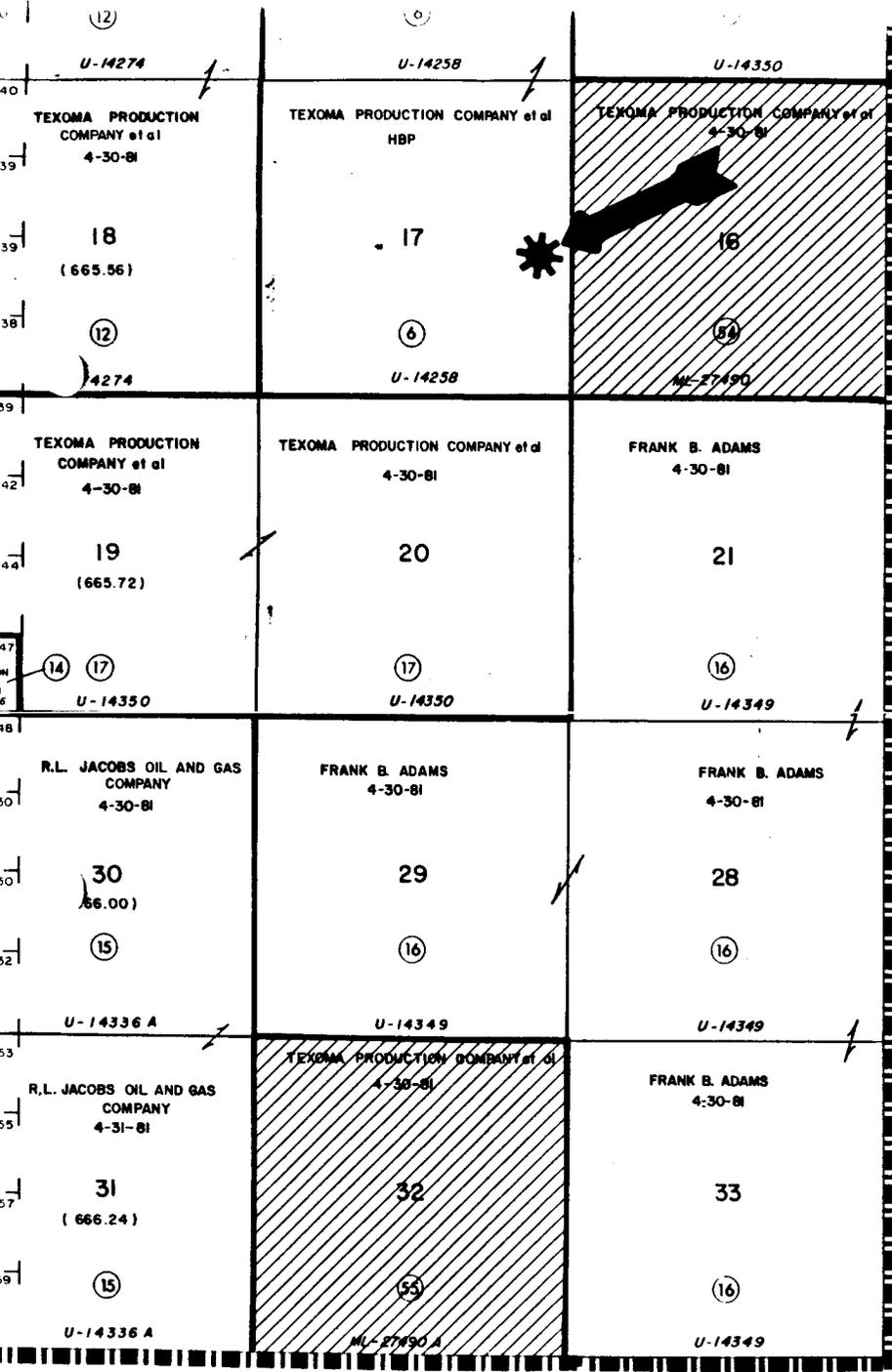
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© 1980 WESTERN OIL REPORTER
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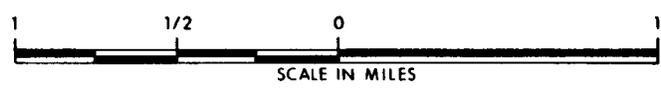




T
18
S

	ACREAGE	PERCENTAGE
FEDERAL LANDS	34,264.03	86.93%
STATE LANDS	5,152.32	13.07%
TOTALS	39,416.35	100.00%

- TRACT NUMBER
- UNIT OUTLINE



NOTE: UNLESS OTHERWISE INDICATED, THE VARIOUS SECTIONS ON THIS PLAT CONTAIN 640.00 ACRES.

EXHIBIT "A"

SULPHUR CANYON UNIT AREA

GRAND COUNTY, UTAH

TENNECO OIL COMPANY
DENVER, COLORADO

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

Summary Report of Inspection for Cultural Resources

BLM Report ID No. [grid] Report Acceptable Yes ___ No ___ Mitigation Acceptable Yes ___ No ___ Comments: [line]

9

1. Report Title [grid]

2. Development Company Tenneco Location USA 17-9

3. Report Date 08/14/1980 4. Antiquities Permit No. 80-UT-034

5. Responsible Institution NICKEL & AMERICAN COUNTY Grand

6. Fieldwork Location: TWN 18S Range 24E Section(s) 16, 17, 74, 75, 76, 77

7. Resource Area GR TWN 94 Range 98 Section(s) 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

8. 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 .7 mile proposed access road 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 Definable Acres Surveyed and/or Legally Undefinable Acres Surveyed

10. Inventory Type R= Reconnaissance I= Intensive S= Statistical Sample

11. Description of Findings (attach appendices, if appropriate) 12. Number Sites Found: 0

None

13. Collection: N Y=Yes, N=No

14. Actual/Potential National Register Properties Affected: None

15. Conclusion/Recommendations: Clearance is recommended.

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

Tenneco Oil
Exploration and Production
A Tenneco Company

10

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



SCOTT M. MATHESON
Governor

OIL, GAS, AND MINING BOARD

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1538 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771

CHARLES R. HENDERSON
Chairman

JOHN L. BELL
C. RAY JUVELIN
THADIS W. BOX
MAXILIAN A. FARBMAN
EDWARD T. BECK
E. STEELE McINTYRE

CLEON B. FEIGHT
Director

October 14, 1981

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

Re: See Attached Sheet

Gentlemen:

In reference to the above mentioned wells, considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If you do not intend to drill these wells, please notify this Division. If spudding or any other activity has taken place, please send necessary forms. If you plan to drill this location at a later date, please notify this office.

Your prompt attention to the above will be greatly appreciated.

Sincerely,

DIVISION OF OIL, GAS, AND MINING

TERRI REID
CLERK TYPIST

Well No. Middle Canyon Unit #23-6
Sec. 23, T. 16S, R. 24E
Grand County, Utah

Well No. Middle Canyon Unit #23-16
Sec. 23, T. 16S, R. 24E
Grand County, Utah

Well No. Middle Canyon Unit #27-1
Sec. 27, T. 16S, R. 24E
Grand County, Utah

Well No. Middle Canyon Unit #27-12
Sec. 27, T. 16S, R. 24E
Grand County, Utah

Well No. Federal 5-13
Sec. 5, T. 17S, R. 24E
Grand County, Utah

Well No. Hougen USA 15-9
Sec. 15, T. 17S, R. 24E
Grand County, Utah

Well No. Nataro 19-4
Sec. 19, T. 17S, R. 24E
Grand County, Utah

Well No. USA 15-7
Sec. 15, T. 18S, R. 22E
Grand County, Utah

Well No. Sulpher Canyon Unit #17-9
Sec. 17, 18S, R. 24E
Grand County, Utah

Well No. USA #12-10
Sec. 12, T. 19S, R. 22E
Grand County, Utah

State of Utah

Page 2

USA #15-7
Sec. 15, T18S R22E Grand, Utah

Name is now Diamond Canyon Unit II #15-7
State approval expires 10/28/81.

Sulfur Canyon Unit #17-9
Sec. 17, T18S R24E Grand, Utah

State approval expires 2/19/81. Will be
drilled in 1982.

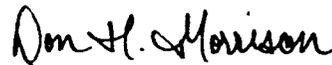
Long Canyon Unit #12-10
Sec. 12, T19S R22E Grand, Utah

Long Canyon acreage has been farmed out.
Tenneco will not be drilling this.

Should you have any further questions regarding these wells, do not hesitate to
contact this office.

Very truly yours,

TENNECO OIL COMPANY



Don H. Morrison
Production Analyst

DHM:jt



STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

May 6, 1982

Tenneco Oil Exploration & Production
P. O. Box 3249
Englewood, Colorado 80155

Re: See attached

Gentlemen:

In reference to the above mentioned wells, considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If you do not intend to drill these wells, please notify this Division. If spudding or any other activity has taken place, please send necessary forms. If you plan to drill this location at a later date, please notify as such.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS AND MINING

Cari Furse

Cari Furse
Clerk Typist

Well No. Middle Canyon Unit #23-16
Sec. 23, T. 16S, R. 24E.
Grand County, Utah

Well No. Middle Canyon Unit #27-12
Sec. 27, T. 16S, R. 24E.
Grand County, Utah

Well No. TOC TXO POGO USA #15-9
Sec. 15, T. 17S, R. 24E.
Grand County, Utah

Well No. Sulphur Canyon Unit #17-9
Sec. 17, T. 18S, R. 24E.
Grand County, Utah

~~Well No. Butler Canyon USA #3-16
Sec. 3, T. 20S, R. 17E.
Grand County, Utah~~

Well No. Butler Canyon USA #10-3
Sec. 10, T. 20S, R. 17E.
Grand County, Utah

Oil and Gas Operations
2000 Administration Building
1745 West 1700 South
Salt Lake City, Utah 84104-3884

May 12, 1982

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

Re: Rescind Application for Permit
to Drill
Well No. 17-9
Sections 17, T. 18S., R. 24E.
Grand County, Utah
Lease No. U-14258

Gentlemen:

The Application for Permit to Drill the referenced well was approved on May 8, 1981. Since that date no known activity has transpired at the approved location. Under current District policy, applications for permit to drill are effective for a period of one year. In view of the foregoing this office is rescinding the approval of the referenced application without prejudice. If you intend to drill at this location at a future date, a new application for permit to drill must be submitted.

This office requires a letter confirming that no surface disturbance has been made for this drill site. Any surface disturbance associated with the approved location of this well is to be rehabilitated. A schedule for this rehabilitation must then be submitted to this office. Your cooperation in this matter is appreciated.

Sincerely,
(ORIG. SGD.) R. A. HENRICKS
Production Unit Supervisor

SW E. W. Guynn
District Oil & Gas Supervisor

bcc: SMA
State O&G
State BLM
MMS-Vernal
Well File
APD Control

RAH/tm