Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: U13361

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Tenneco USA

9. WELL NO.: 11-1

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

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 11, T19S, R22E

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] 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: 376.1 FNL, 934.0 FEL NE NE
At proposed prod. zone:

12. COUNTY OR PARISH: Grand
13. STATE: Utah

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): 376.1

16. NO. OF ACRES IN LEASE: 2559.92

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: 4700 Entrada

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5380

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

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	±500	Circulate to surface
6 1/4"	4 1/2" new	10.5# K55	±4700	Cover all productive zones.

See attached.

Archaeology has been done.

Pre-staking request attached.

Expect unit approval by October 1980.

RECEIVED SEP 26 1980 DIVISION OF OIL, GAS, & MINING

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING
DATE: 10/15/80
BY: [illegible]

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 23, 1980

(This space for Federal or State office use)

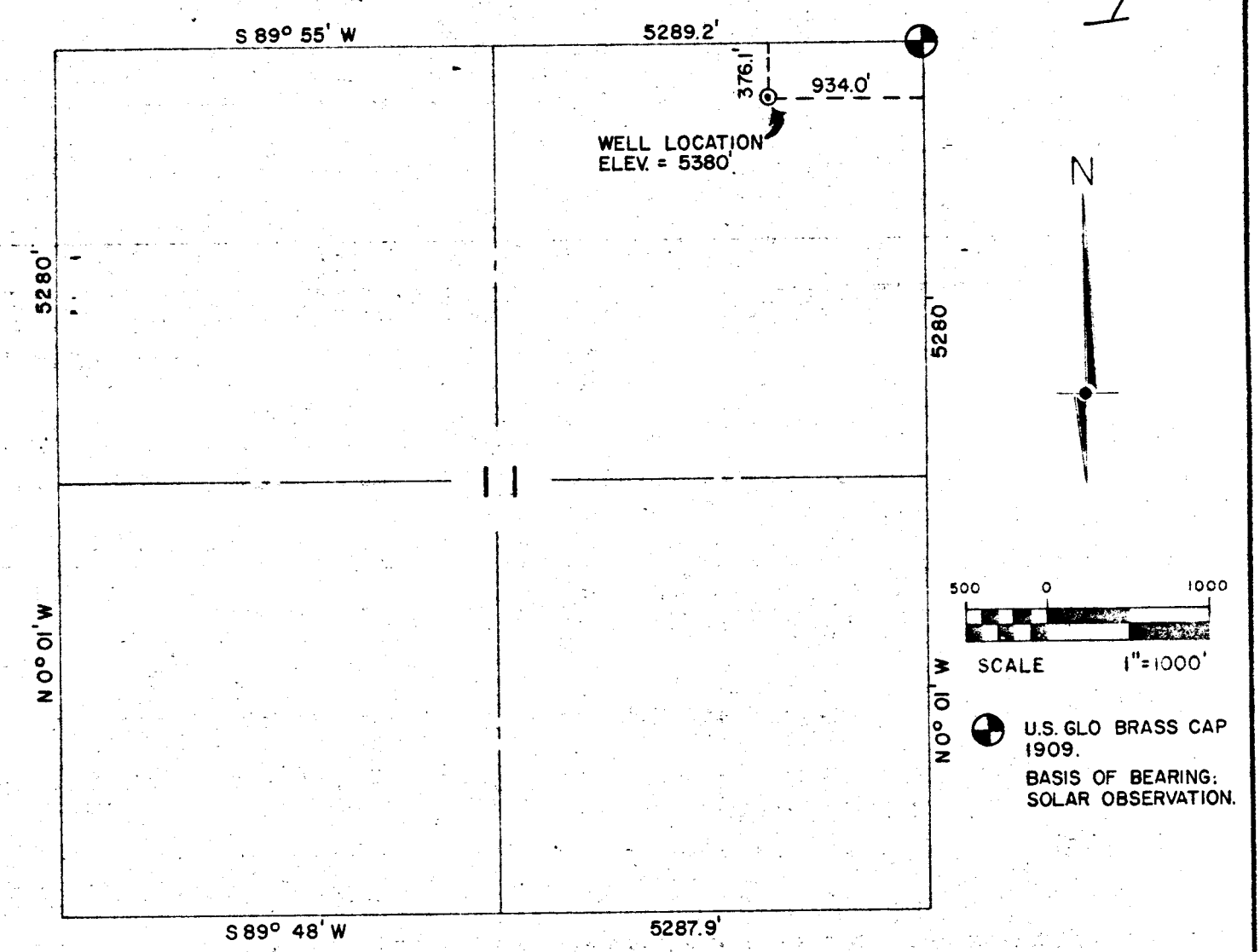
PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

I



WELL LOCATION

376.1 FT.S.N.L. – 934.0 FT.W.E.L.
SECTION 11, T.19S., R.22E., SLB&M
GRAND COUNTY, UTAH

SURVEYOR'S CERTIFICATE

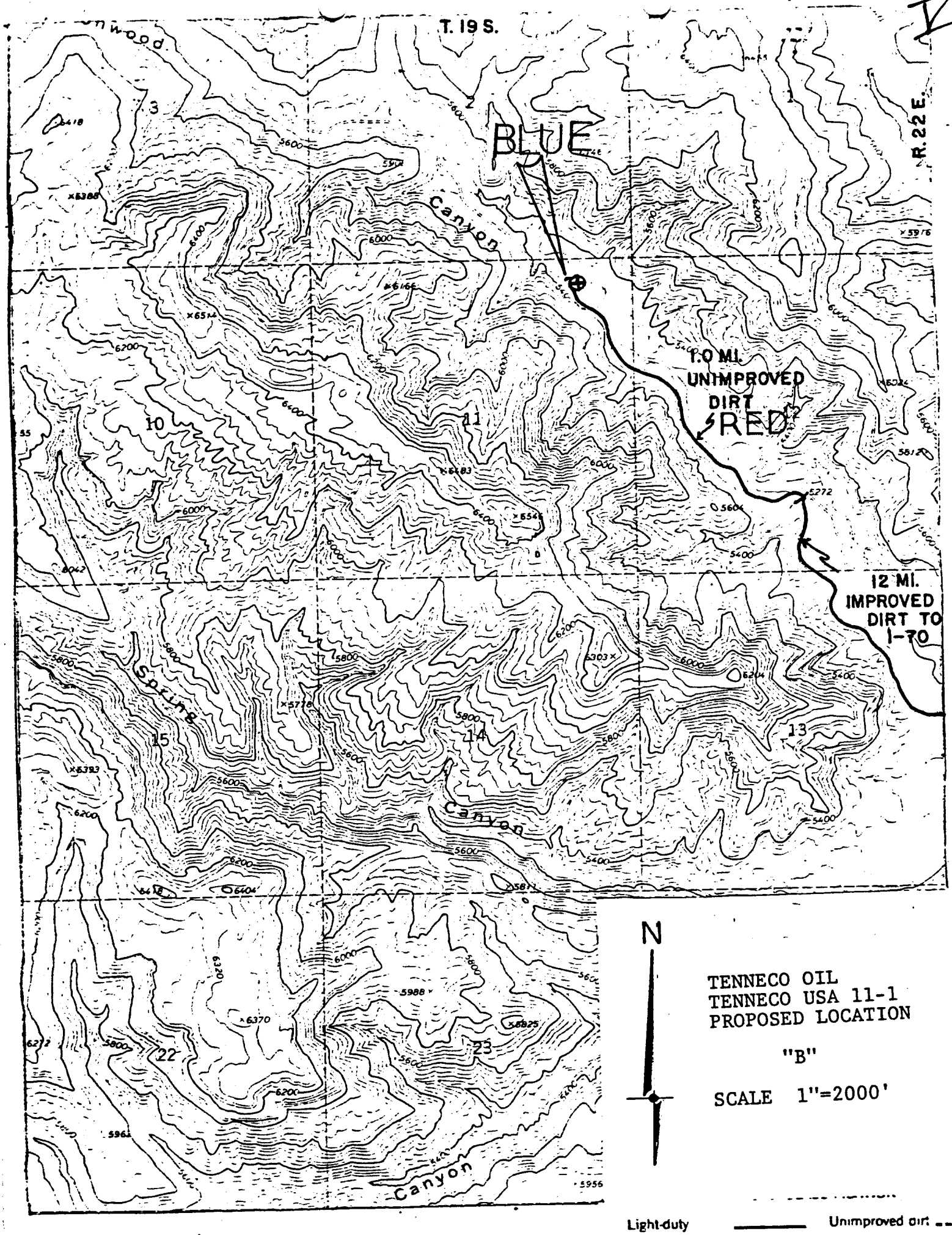
I, Edward A. Armstrong, a registered land surveyor in the State of Utah, do hereby certify that this survey was made under my direct supervision and that this plat represents said survey.

REGISTERED LAND SURVEYOR
4464
EDWARD A. ARMSTRONG
STATE OF UTAH

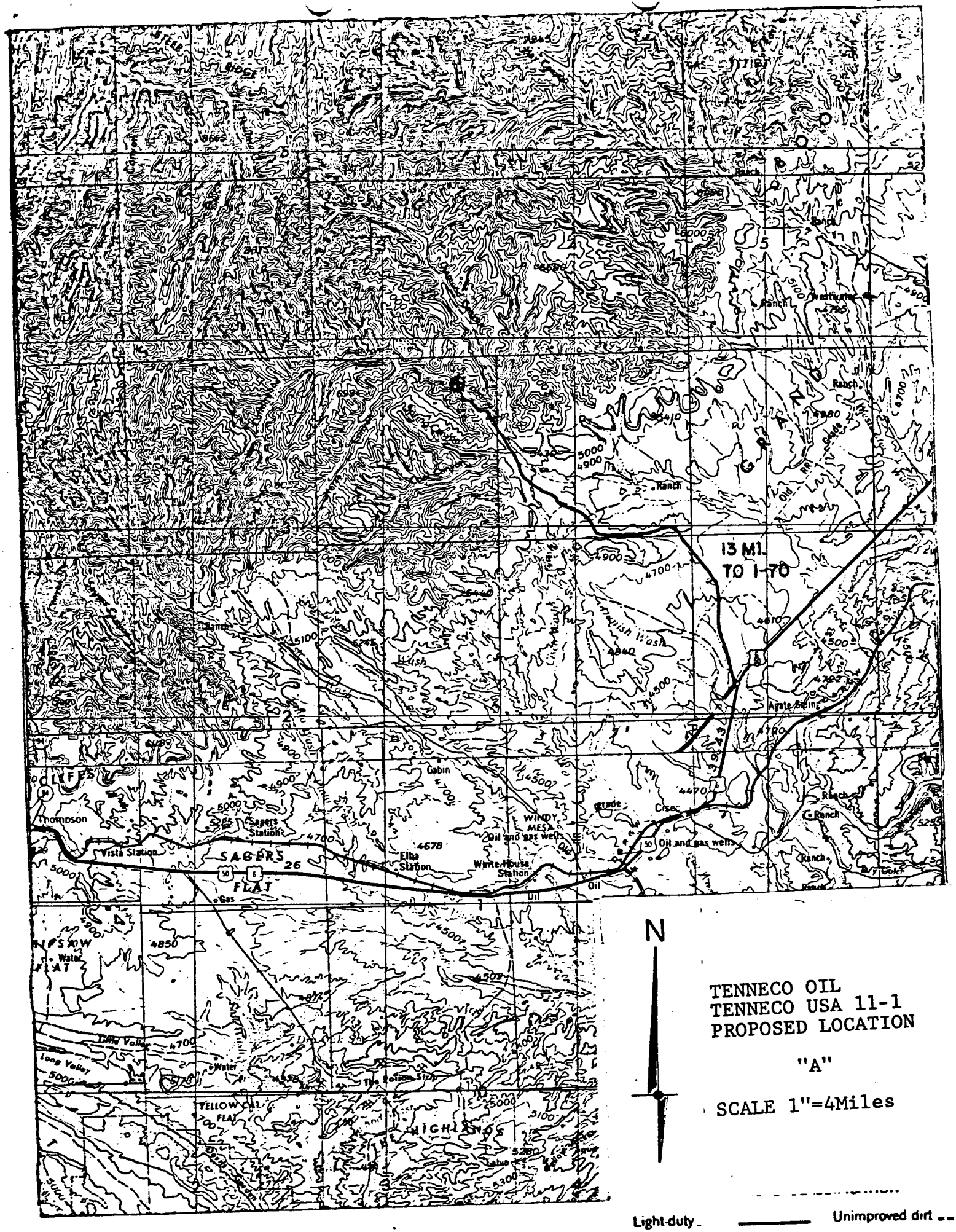
Edward A. Armstrong
EDWARD A. ARMSTRONG P.E. & L.S. 4464

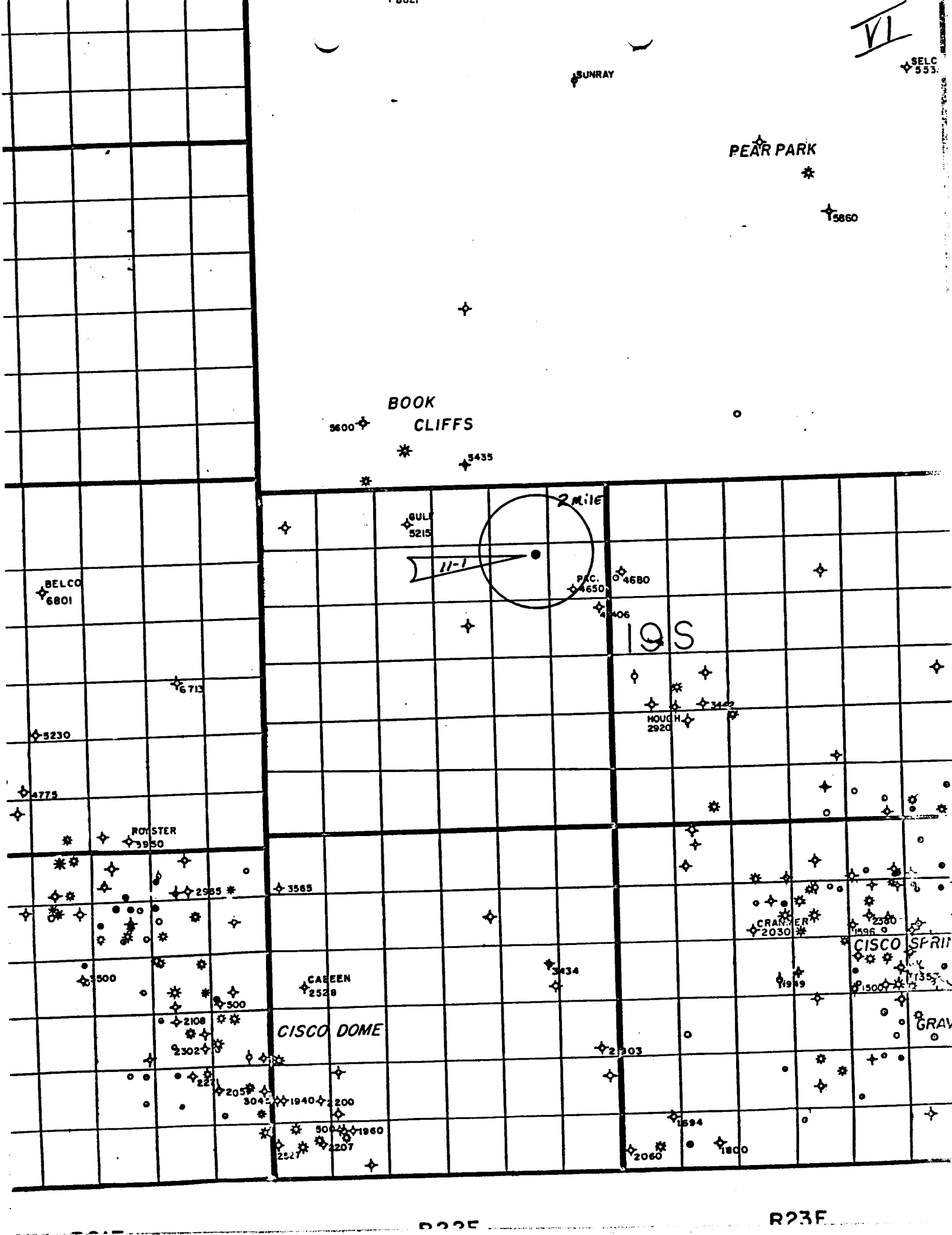
ARMSTRONG ENGINEERS and ASSOCIATES, INC.
ENGINEERING • SURVEYING • SOILS AND CONCRETE TESTING
861 ROOD AVENUE – GRAND JUNCTION, COLORADO 81501 – (303) 245-3861

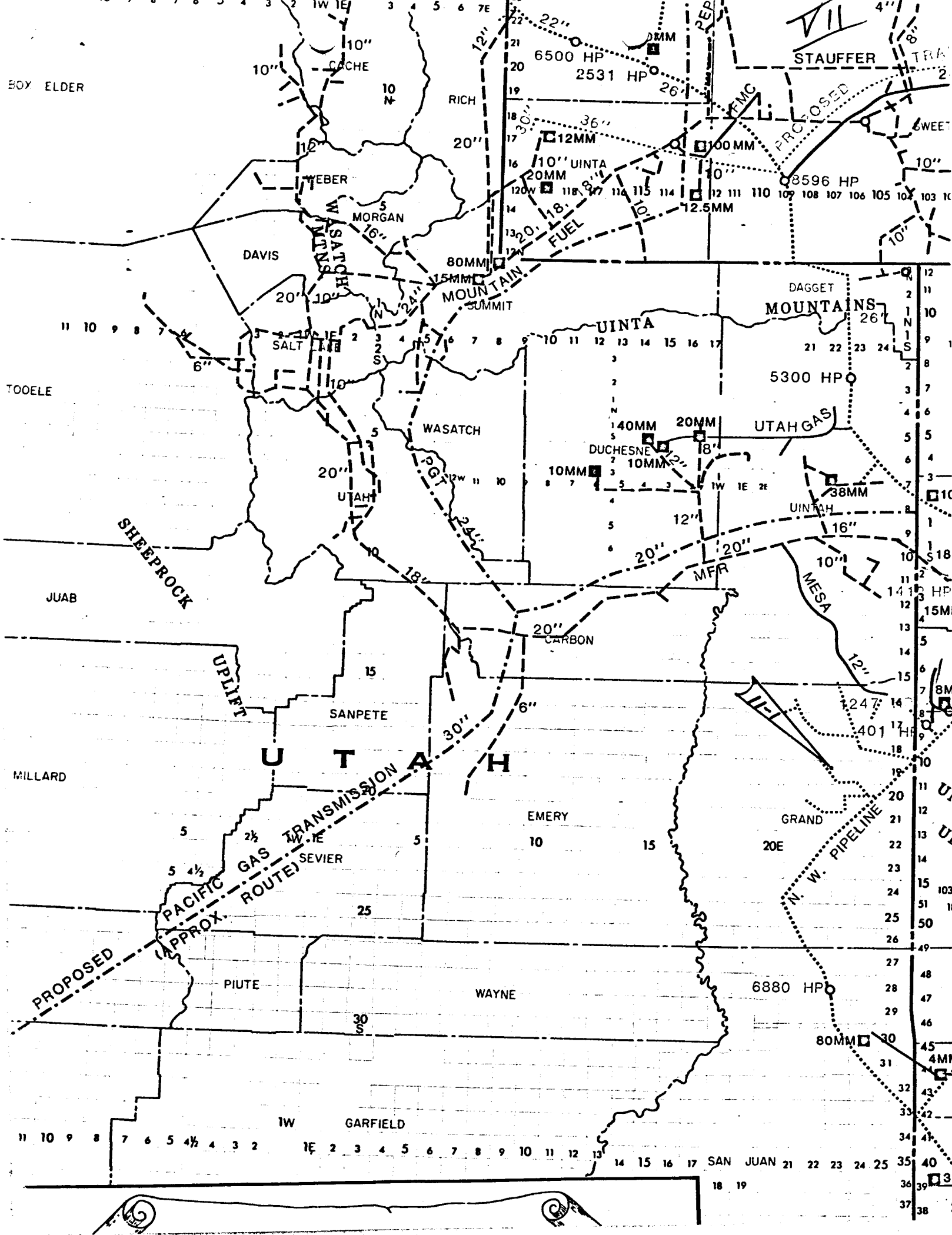
SCALE 1"=1000'	TENNECO OIL
DATE 9/16/80	USA 11-1
DRAWN BY JMT	
CHECKED BY EAA	SHEET 1 of 5
DATE CHECKED 9/9/80	JOB NUMBER 802990


T. 19 S.
R. 22 E.
BLUE
RED
1.0 MI. UNIMPROVED DIRT
12 MI. IMPROVED DIRT TO I-70
Canyon
Spring
Canyon
Canyon
N
TENNECO OIL
TENNECO USA 11-1
PROPOSED LOCATION
"B"
SCALE 1"=2000'
Light-duty
Unimproved dirt

IV


13 MI.
TO I-70
Thompson
Vista Station
SAGERS
FLAT
Sagers Station
Elba Station
Winterhouse Station
WINDY MESA
Oil and gas wells
Cisco
Agate Siding
Cabin
Ranch
Wash
Water
Long Valley
YELLOW CAT FLAT
THE HIGHLANDS
N
TENNECO OIL
TENNECO USA 11-1
PROPOSED LOCATION
"A"
SCALE 1"=4Miles
Light-duty
Unimproved dirt


VI
SUNRAY
SELC
553
PEAR PARK
5860
BOOK
CLIFFS
5600
3435
2 mile
GULF
5215
11-1
PAC.
4650
4680
4406
19S
BELCO
6801
6713
5230
4775
HOUGH
2920
3442
ROYSTER
3950
2985
3565
CRANFER
2030
2380
1596
CISCO SPRIN
3500
CABEEN
2528
3434
1949
1500
1135
500
2108
CISCO DOME
2302
2303
GRAV
2205
1940
2200
1960
2207
2527
1594
2060
1800
R23E
R23E


VII
BOX ELDER
CACHE
RICH
STAUFFER
6500 HP
2531 HP
12MM
100MM
UINTA
20MM
8596 HP
12.5MM
WEBER
MORGAN
WASATCH MTNS
DAVIS
80MM
15MM
MOUNTAIN FUEL
SUMMIT
DAGGET
MOUNTAINS
UINTA
SALT LAKE
TOOELE
5300 HP
WASATCH
40MM
20MM
UTAH GAS
DUCHESNE
10MM
10MM
38MM
UTAH
PGT
UINTAH
SHEEPROCK
JUAB
MFR
MESA
CARBON
UPLIFT
SANPETE
U T A H
MILLARD
TRANSMISSION
EMERY
GRAND
SEVIER
N. W. PIPELINE
PACIFIC GAS
(APPROX. ROUTE)
PROPOSED
PIUTE
WAYNE
6880 HP
80MM
GARFIELD
SAN JUAN

TENNECO OIL COMPANY - 10 POINT PLAN

1. The geological name of the surface formation:

2 & 3. Estimated Formation Tops: Mancos

(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_2S 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: August 8, 1980

LEASE: Tenneco USA

WELL NO.: 11-1

LOCATION: 376.1 FNL, 934 FEL
Section II, T.19S, R22E
Grand County, Utah

FIELD: Long Canyon

ELEVATION: 5240

TOTAL DEPTH: 4700

PROJECTED HORIZON: Entrada

SUBMITTED BY: Bruce Ladd DATE: 8-8-80

APPROVED BY: John W. Chen DATE: 8/27/80

CC: Administration
DSB Well File
Field File

ESTIMATED FORMATION TOPS

Mancos	Surface	
Castlegate	140 + 290	(Water)
Frontier	140 + 3515	
Dakota Silt	140 + 3765	
Dakota	140 + 3890	(Water or Gas)
Morrison	140 + 4015	(Water or Gas)
Salt Wash	140 + 4390	(Water or Gas)
Entrada	140 + 4625	(Water or Gas)
T.D.	140 + 4700	

DRILLING, CASING, AND CEMENT PROGRAM

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 blooie line.~~
4. Drill 8 3/4" hole to 500' or 200 feet into 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:	500' ±, 7", 23#, K-55, ST&C
PRODUCTION:	4700' , 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:

0-3200' 2 1/2°)
3200'-7200' 5°)

Surveys to be run every 500' or on trips, whichever comes 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)
FDC/GR) Air drilled.
DIL)

FDC/CNL)
DIL/LL8 w/SP) Mud Drilled.

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. George Ramsey (Home) 303-771-5154.

3. 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

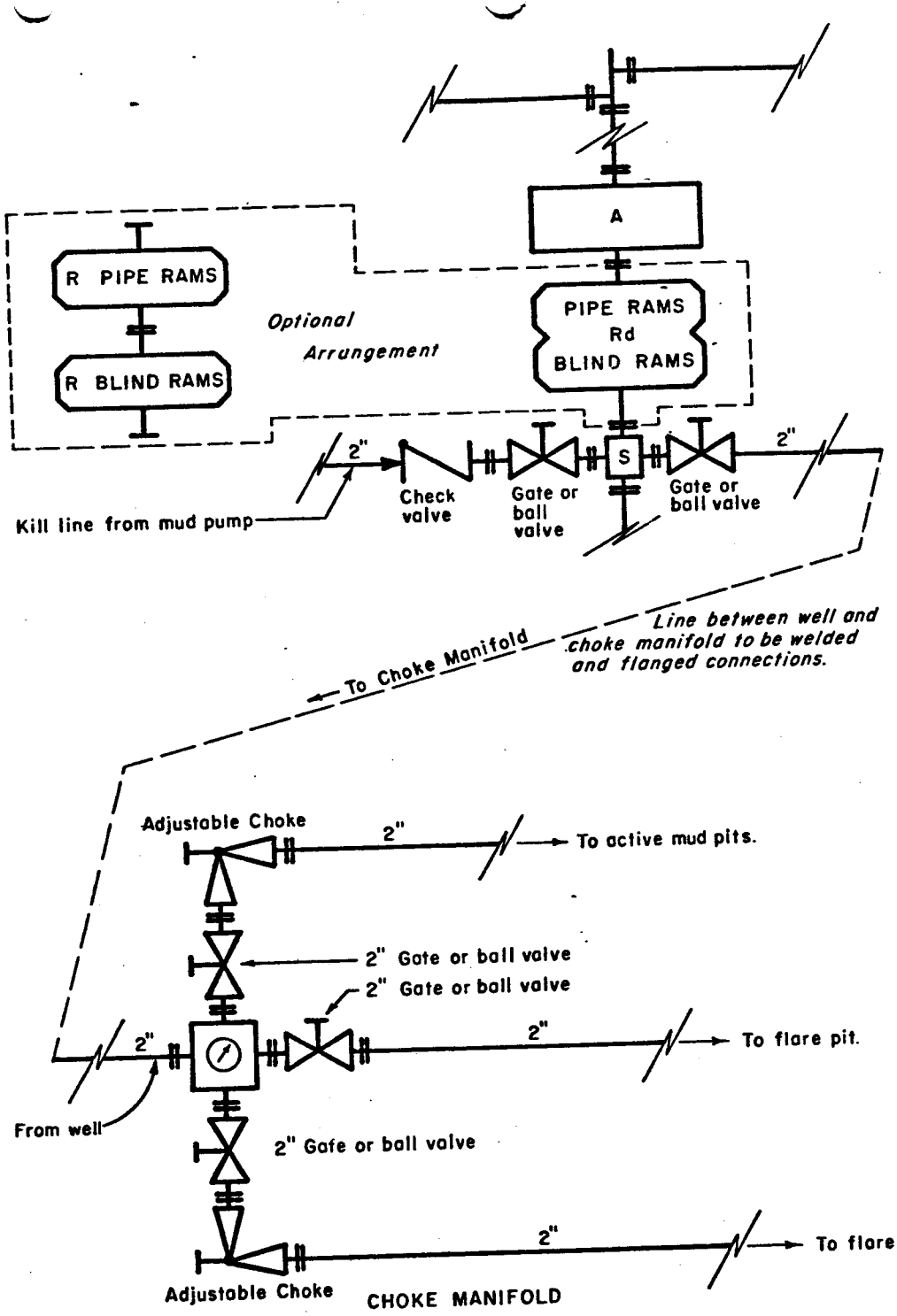
IN CASE OF EMERGENCY, NOTIFY THE FOLLOWING:

1. Mr. Don Barnes, Division Drilling Engineer.

2. Mr. George E. Ramsey, Jr., Drilling Engineers Supervisor

3. Mr. John W. Owen, Project Drilling Engineer.

4. 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

J. MAGILL 10-26-79 EVI

I. EXISTING ROADS

(a) Proposed Well Site Location:
As surveyed by a registered land surveyor, is located 376.1 FNL, 934 FEL, Sec. 11, T19S, R22E, 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 II, 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 less than 15% 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 - } minimal

(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: N/A
B. Abandoned Wells: See Exhibit VI
C. Temporarily Abandoned Wells: N/A
D. Disposal Wells N/A
E. Drilling Wells N/A
F. Producing Wells: See Exhibit VI
G. Shut-In Wells: N/A
H. Injection Wells: N/A
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 -
(2) Production facilities -
(3) Oil Gathering Lines -
(4) Gas Gathering Lines -
(5) Injection Lines -
(6) Disposal Lines -

} NONE

B. New Facilities in the Event of Production:

1. New facilities: well head, condensate tank, production unit, meter house all within area of disturbance

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 unecessary 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 legal private 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 interfear 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 toilet.

(e) Garbage:

A burncage will be constructed and fenced with small mesh wire. The small amount of refuse will be removed and taken to a public or private landfill.

(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 wil 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 inclument 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 in Cottonwood Canyon. The topography is level to gently rolling. The soil is sandy fractured sandstone supporting greasewood, sage, sparce juniper 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 Reconnissance has been performed for this location and clearance has been granted.

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 23, 1980

M. L. Freeman
Staff Production Analyst

II

ACCESS

EXISTING ROAD

FLARE PIT

RESERVE PIT

75'

175'

150'

40'

25'

165'

S65° W

N 25° W

310'

5382

5380

5378

C1 A

C2 A

C2 B

C1 B

C0 B

F1 B

F1 B'

F2 B

WELL LOCATION
EL. 5380'

APPROXIMATE
EARTHWORK VOLUMES

CUT - 1100 cu.yds.
FILL - 900 cu.yds.

RP 200' SOUTH EL. 5380'
RP 200' WEST EL. 5387'

N

A - A'

5390
5380

B - B'

5390
5380

SCALE 1" = 50'

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	9/18/80
DRAWN BY	JMT
CHECKED BY	EAA
DATE OF SURVEY	9/9/80

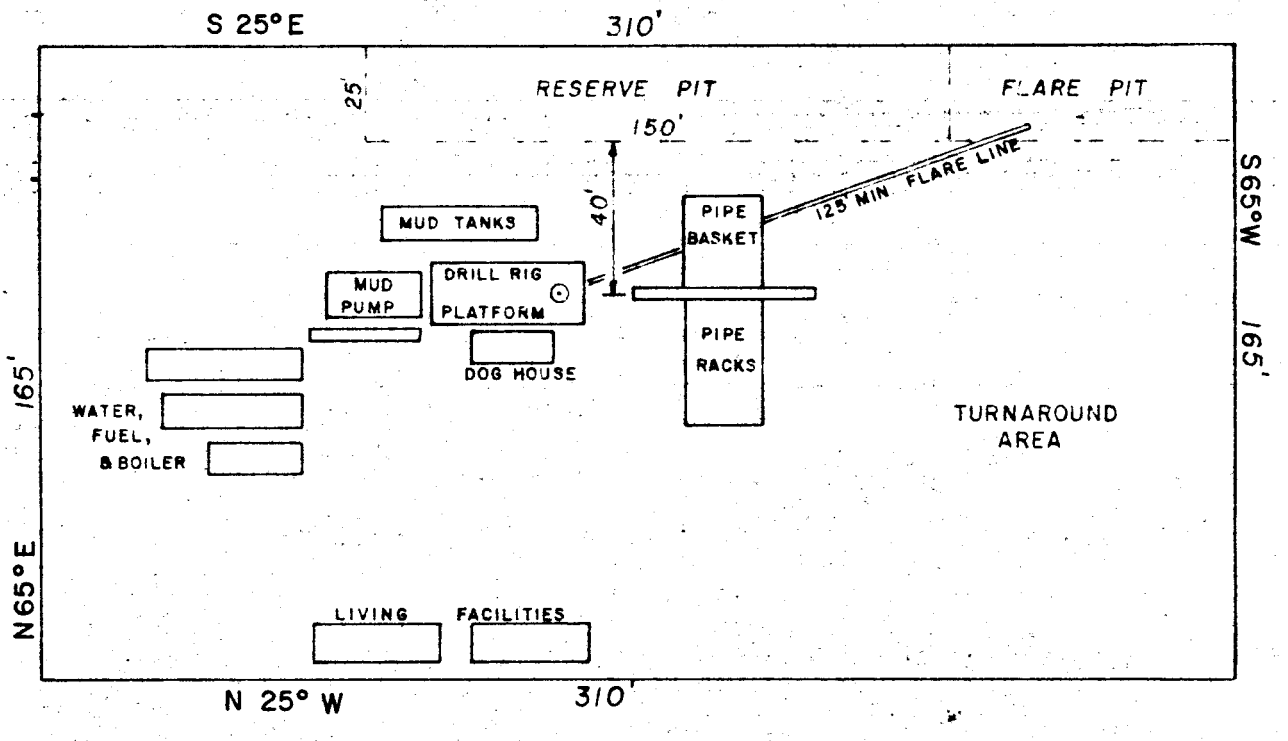
TENNECO OIL
USA 11-1

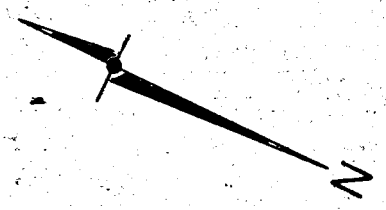
SHEET 2 of 5

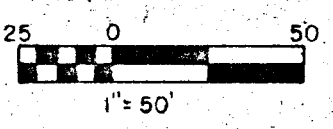
JOB NUMBER
802990

RIG LAYOUT

III







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

SCALE 1" = 50'	TENNECO OIL
DATE 9/19/80	USA 11-1
DRAWN BY JMT	
CHECKED BY EAA	SHEET 3 of 5
DATE CHECKED 9/9/80	JOB NUMBER 802990

Identification No. 752-30

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 11-1

Project Type WILDCAT GAS TEST (UNIT OBLIGATION WELL)

Project Location 376.1'FNL, 934.0'FEL, SEC. 11, T19s, R22E, GRAND CO.,UTAH

Date Project Submitted SEPTEMBER 29,1980

FIELD INSPECTION Date NOVEMBER 6,1980

Field Inspection Participants

BOB MISHLER- TENNECO

BILL AND MIKE BUNIGER - DIRT CONTRACTORS

ELMER DUNCAN- 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.

NOVEMBER 26,1980
Date Prepared

Glenn M. Doyle
Environmental Scientist

I concur

12/22/80
Date

District Supervisor

CATEGORICAL EXCLUSION REVIEW INFORMATION SOURCE

Criteria 516 DM 2.3.A	Federal/State Agency: Correspondence (date)	Federal/State Agency: Phone check (date)	Federal/State Agency: Meeting (date)	Local and private correspondence (date)	Previous NEPA	Other studies and reports	Staff expertise	Onsite inspection (date)	Other
. Public health and safety					1,2			11/6/30	
. Unique characteristics					1,2				
. Environmentally controversial					1,2				
. Uncertain and unknown risks						4			
. Establishes precedents					1,2				
. Cumulatively significant							6		
. National Register historic places	1-								
. Endangered/ threatened species	1-								
. Violate Federal, State, local, tribal law						4			3

SITE - SPECIFIC STIPULATIONS ATTACHED

COMMON REFERENCE LIST

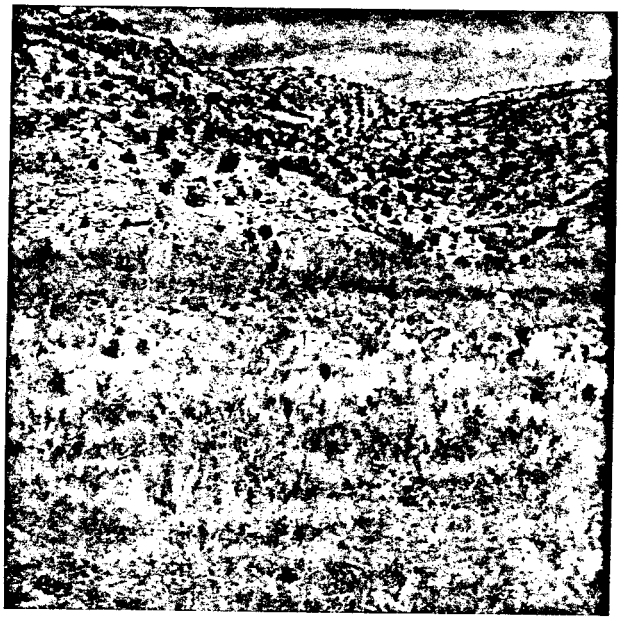
NEPA Categorical Exclusion Review

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

SITE - SPECIFIC STIPULATIONS

1) ROTATE LOCATION 180° IN ORDER TO AIM THE BLOOIE LINE AWAY FROM THE ROAD.

2) FENCE RESERVE PIT ON THREE SIDES PRIOR TO DRILLING AND ON THE FOURTH SIDE ONCE THE RIG MOVES OFF.



Tenneco #11-1

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 twelve inches of topsoil in a wind-row on the north end 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 subsurface 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 and USGS & USFS publication).

If production is obtained, all production facilities will be painted. (See enclosed list of suggested colors for production 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) New access, one mile long, will be a sixteen foot travel surface with twenty feet wide total disturbance. Only limited up-grading will be done, and low water crossings will be used.

2) Fence reserve pits on three sides during drilling with forty eight inches high woven wire and the fourth side prior to the rig being moved off. A strand of barbed wire will be placed around the top of the fence for support.

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 the BLM.

* 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 will 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 (October through mid-December).

SEED MIXTURE

Species		lbs/ac
Grasses		
Oryzopsis hymenoides	Indian Rice Grass	1
Stipa comata	Under & Thread Grass	1
Forbs		
Sphaeralcea coccinia	Globe Mallow	.5
Medicago sativa	Alfalfa (Ladak)	.5
Browse		
Artriplex canesceus	4-Wing Salt Bush	1
Ceretoides lanate	Winter fat	1
		5

** FILE NOTATIONS **

DATE: October 10, 1980

OPERATOR: Tenneco Oil Co.

WELL NO: USA 11-1

Location: Sec. 11 T. 19S R. 22E County: Grand

File Prepared: ☐ Entered on N.I.D: ☐

Card Indexed: ☐ Completion Sheet: ☐

API Number 43-019-30732

CHECKED BY:

Petroleum Engineer:

Director: OK Topo exception under C-3 (c) provided Tenneco owns or controls all oil and gas rights ~~within~~ w/in 660 feet of the proposed location

Administrative Aide:

APPROVAL LETTER:

Bond Required: ☐ Survey Plat Required: ☐

Order No. Rule C-3 ☐

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

Lease Designation Fed. Plotted on Map ☑

Approval Letter Written ☑

Hot Line ☑ P.I. ☑

October 17, 1980

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

Re: Well No. USA 11-1
Sec. 11, T. 19S, R. 22E
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 (acquifers) 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 43-019-30732.

Sincerely,

DIVISION OF OIL, GAS, AND MINING

Cleon B. Feight /ka

Cleon B. Feight
Director

/ka
cc: USGS

IN REPLY REFER TO

3100
(U-603)

United States Department of the Interior

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

December 4, 1980

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
Tenneco USA 11-1, Lease # U-13361
NE/NE Section 11 T., 19 S., 22 E., SLB&M
Grand County, Utah

On November 6, 1980 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.

M. Scott Packer

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

DEC 08 REC'D
DEC 08.

IN REPLY REFER TO

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.

IN REPLY REFER TO
3100
(U-603)

United States Department of the Interior

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

Sept. 16, 1980

Mr. Lee Freeman
Tenneco Oil
Penthouse
720 South Colorado Blvd.
Denver, Co 80222

Reference: Staking Request (PER)
Well: 11-1
Section 11: T. 19 S., R. 22 E.
Grand County, Utah

Dear Mr. Freeman:

This office has no objections to staking the above referenced locations. 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. You should be knowledgeable that the location borders the proposed wilderness study area (100 C, Cottonwood Canyon). An archaeological clearance must be obtained after staking the site(s).

Sincerely yours,

Michael E. Walker acting

C. Delano Backus
Area Manager

cc:
Grand County Road Supervisor

RECEIVED
SEP 18 1980
TENNECO OIL CO.
DENVER

Tenneco Oil

DRILLING RECORD
(E&P)

☐ DEV. DRLG. ☐ P & A
☐ WO DRLG. ☐ CONST.
☐ RECOMPLETION ☐

AFE NO. _____

FIELD GRANDCOUNTY, UTAH LEASE LONG CANYON UNIT USA WELL NO. 11-1

DATE	DEPTH	DETAIL OF OPERATION
01/31/81	59	1 day from spud Footage last 24 hours 28
		AART: Work on mud pump OA: RU and drill rat hole. NU, PU
		BHA Spud at 12:50 AM 1/31/81 Try to drill with air, too sandy, drill with
		air mist, had to mud up. Work on pump Drilling with clear water.
		Bit #1 Sz 8 3/4 Typw ST52 S/N 549580 Jets open Ft 28 Hrs 1 Ft/Hr 28
		DP Sz 3 1/2 DC #1 OD 6 x 2 1/4 BHA Lngth 30 Eff Wt 2500 Drilling
		Cost 7157 (daily) 25,439 (cumulative)
02/1/81	126	2 days from spud Footage last 24 hours 67
		AART: Drilling OA: Thaw out mud pump NU for
		mud drilling mix pit of mud, Pump 57 Bbl. No returns Pump 10 Bbl,
		full returns. Drill ahead. Boulder fell in at 72' Drill ahead.
		DMP @ SP Mud Wt 8.7 Vis 53 API WL 40 Solids 3 Gels 3/5 PV 8 YP 1
		PH 9 Sand 1/4 API Cake 2/32 PV/YP Ratio 8 Cl ppm 4200 Ca ppm 20
		Bit #1 Sz 8 3/4 Type FP52 S/N 549580 Jets open Depth out 126
		Ft 126 Hrs 1 3/4 Cum HRs 2 3/4 Ft/Hr 45.81 Bit #1 Wt on bit 5
		RPM 75 Stroke Lngth 10 SPM 72 Liner 5 1/2 GPM 272 PSI 125 Ann Vel
		89/150 DP Sz 3 1/2 DC #3 OD 5 5/8 x 2 1/4 BHA Lngth 90.28 Eff
		Wt. 7500 Daily Mud Cost 1020 Cumulative Mud cost 1020
		Drilling and Total Cost 5,868 (daily) 31,307 (cumulative)

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

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

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON USA WELL NO. 11-1

DATE	DEPTH	DETAIL OF OPERATION
2-2-81	413	3 days from spud Footage last 24 hours 287
		AART: WORK TIGHT HOLE (BOULDER FELL IN) OA: -0-
		DMP @ SP Mud Wt 9.1 Vis 49 API WL 10.2 Solids 3.0 Gels 5/10
		PV 14 YP 2 PH 9.0 Sand 1/2% API Cake 3/32 Cl ppm 300 Ca ppm 40
		Bit #1 sz 8 3/4 Type FP52 S/H549580 Jets open Ft 413 Hrs 20 Cum
		Hrs 23 1/4 Ft/Hr 20.1 Bit #1 Wt on Bit 20 RPM 70 Stroke Length 10
		SPM 72 Liner 5 1/2 GPM 210 PSI 150 ANN VEL 80/127 D.P. sz 3 1/2
		No.D.C. 12 O.D. 5 5/8 I.D. 2 1/4 BHA Length 383 Eff Wt 30000 Daily
		Mud Cost 292 Cum Mud Cost 1312 Drilling Cost Daily 5325 Cum 37132.

TOC 402 6/79

Tenneco Oil

DRILLING RECORD
(E&P)

☐ DEV. DRLG. ☐ P & A
☐ WO DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT USA WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
02/03/81	510	4 days from spud Footage last 24 hours 97
		AART: Preparing to cement 7" OA: Work tight hole,
		drill, circulate and condition mud, make short trip, POH. RU and
		run 13 jts of 7", 23#, K-55, ST&C casing. Shoe at 501' and float
		at 456' Central at 496 and 456. DMP @ SP Mud Wt 9.2 Vis 43 API
		WL 10.6 Solids 4 1/2 Gels 5/10 PV 17 YP 5 PH 9 Sand 1/2 API Cake
		3/32 PV/YP Ratio 17/5 Cl ppm 200 Ca ppm 40 Bit #1 Sz 8 3/4
		Type ST52 S/N 549580 Jets open Depht out 510 Ft 479 HRs 7 Cum
		Hrs 30 1/4 Ft/Hr 15.8 Bit #1 Wt on bit 20K RPM 70 Stroke Lngth 10"
		SPM 72 Liner 5 1/2 GPM 210 PSI 150 Ann Vel80/120 DP Sz 3 1/2
		DC #12 OD 6 - 5 5/8" 6-4 3/4" X 2 1/4 BHA Lngth 383.25
		Daily Mud Cost 160 Cumulative Mud Cost 1472 Drilling and Total Cost
		15,510 (daily) 52,642 (cumulative)

TOG 403 6/79

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ W/O DRLG. ☐ CONST.
☐ RECOMPLETION ☐

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON USA WELL NO. 11-1

DATE	DEPTH	DETAIL OF OPERATION
02/04/81	510	5 days from spud Footage last 24 hours -0-
		AART: NUBOP's OA: Cement 7" casing with 180 sx
		Cl-G + 2% $CaCl_2$ + 1/4#/sx celloflake. Plug would not drop.
		Displace with 19 bbl Circ cement to surface. WOC. Test weld
		on casing head to 2500 psi - OK. NU BOP's. Cumulative Mud Cost
		1472 Drilling Cost 9206 (daily) 61848 (cumulative)

TOC 402 6/79

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON USA 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
02/05/81	637	6 days from spud Footage last 24 hours 127
		AART: Drilling OA: NU and test BOPE to 1000 psi 15
		minutes. Hold OK. TIH, unloading hole every 100' tag
		cement at 456'. Drilled out cement and shoe. Ran survey, dried hole,
		resumed drilling FM 510'-598'. Encountered water (1-3 GPM) tried
		to dry hole, began air mist drilling resume drilling FM.
		Drilling with air mist. Bit #2 Sz 6 1/4 Type F2 S/N A3314
		Jets open Depth Inc Ft 127 Hrs 3 Cum Hrs 31 3/4 Ft/Hr 42.3
		Bit #2 Wt on bit 8,000 RPM 70 Stroke Lngth 10 Liner Air 1200 CFPM
		PSI 100 DP Sx 3 1/2 DC #7 OD 4 3/4 X 2 1/4 BHA Lngth 209.04
		Eff Wt 98,000 Depth 515 Angle 1 Cumulative Mud Cost 1,472
		Drilling and Total Cost 15,607 (daily) 77,455 (cumulative)

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WO DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT USA 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
02/06/81	1475	7 days from spud Footage last 24 hours 838
		AART: Drilling OA: 3 units background gas
		3 sec 3: flare after survey Drilling with air mist. Bit #2 Sz 6 1/4
		Type F-2 S/N A3314 Jets open Ft 965 Hrs 22 1/4 Cum Hrs 55 1/2
		Ft/Hr 43.4 Bit #2 Wt on bit 9 RPM 60 GPM 1250 CFM @ 150 psi DP Sz
		3 1/2 DC #7 OD 4 3/4 x 2 1/4 BHA Lngth 209 Eff Wt 9800 Cumulative
		Mud Cost 1472 Drilling Cost 16,643 (daily) 94,098 (cumulative)

RECEIVED
FEB 9 1981
DIVISION OF
OIL, GAS & MINING

TOC 482 6/79

m 9-331 C
(ay 1963)

SUBMIT IN TRIPLICATE*
(Other instr ns on reverse)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: U13361

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Tenneco USA

9. WELL NO.: 11-1

10. FIELD AND POOL, OR WILDCAT: Entrada Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 11, T19S, R22E

12. COUNTY OR PARISH: Grand

13. STATE: Utah

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] 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: 376.1 FNL, 934.0 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): 376.1

16. NO. OF ACRES IN LEASE: 2559.92

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: 4700

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5380

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

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	±500	Circulate to surface
6 1/4"	4 1/2" new	10.5# K55	±4700	Cover all productive zones.

See attached.

Archaeology has been done.

Pre-staking request attached.

Expect unit approval by October 1980.

RECEIVED
JAN 8 1981
DIVISION OF
OIL, GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED M.L. Freeman TITLE Staff Production Analyst DATE September 23, 1980

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY W P Martin TITLE FOR E. W. GUYNN DISTRICT ENGINEER DATE JAN 07 1981

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

NOTICE OF APPROVAL

*See Instructions On Reverse Side

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

State Oil + Gas

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

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: 376.1' FNL, 934.0' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-13361

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Long Canyon Unit USA

9. WELL NO.
11-1

10. FIELD OR WILDCAT NAME
Entrada Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 11, T19S, R22E

12. COUNTY OR PARISH: Grand
13. STATE: Utah

14. API NO.
43-019-30732

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5380' 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	☐	☒
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other) Commence drilling operations		

(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.)*

1/31/81. MIRURT. Spud well 1/31/81. RU and drill rat hole. NU. Drill 8-3/4" hole to 510'.

2/3/81. Work tight hole. Drill. Circ. and cond. mud. Make a short trip. POOH. RU and run 13 jts. of 7" 23# csg. Shoe @ 501', float collars @ 456', centralizers @ 496' and 456'.

2/4/81. Cmt. w/180 sx Class G w/2% $CACL_2$ and 1/4#/sk of Celloflake. WOC. Test weld on csg. head to 2500 PSI, held OK. NUBOP's.

2/5/81. Test BOPE to 1000 PSI for 15 min., held OK. TIH. Tag cmt. @ 456'. Drill out cmt. & shoe. Ran survey, dried hole. Resumed drilling.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Carley Struthers TITLE Asst.Div.Adm.Mgr. DATE 2/17/81

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

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

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
02/07/81	2011	8 days from spud Footage last 24 hours 536
		AART: Drilling air mist. OA: Unload hole at 1690'.
		DMP @ SP Mud Wt 8.5 Vis 36 API WL 18 HI Temp WL 2 1/2 Gels 4/10
		PV 8 YP 7 PH 9.5 Sand Tr API Cake 2/32 PV/YP 8/7 Cl ppm 100
		Depth 1844 Angle 4° Daily Mud Cost 406 Cumulative Mud Cost 2700
		Daily Cumulative
		Drilling Cost 9,899 104,524
		Evaluation Cost 660 2,640
		Total Cost 10,559 107,164
02/08/81	2707	9 days from spud Footage last 24 hours 696
		AART: Drilling with air mist. OA: ---
		DMP @ SP Mud Wt 8.5 Vis 46 API WL 8 HI Temp WL 2 1/2 Gels 4/10
		PV 8 YP 7 PH 9.5 Sand Tr API Cake 2/32 PV/YP 8/7 Cl ppm 100 Ca
		ppm 40 Bit #2 Sz 6 1/4 Type F-2 S/N A3314 Jets open Depth Out
		Inc Ft 2196 Hrs 52 1/4 Cum Hrs 96 Ft/Hr 41.6 Bit #2 Wt on bit
		8000 RPM 75 Stroke 1200 SCF @ 150 PSI. DP Sz 3 1/2 DC #7 OD
		4 3/4 x 2 1/4 BHA Lngth 209.04 Eff Wt 9800 Depth 2130 Angle 3 3/4
		Depth 2521 Angle 5 3/4 Cumulative Mud Cost 2700 Daily Cumulative
		Drilling Cost 12,093 116,617
		Evaluation Cost 660 3,300
		Total Cost 12,753 119,917

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

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

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT USA 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
02/09/81	2981	10 days from spud Footage last 24 hours 274
		AART: Drilling OA: @ 2910 87 units gas 1 unit background
		@ 2821 small flare C^1 800 units C^2 300 units C^3 100 units
		Drilling with air mist Mud 8.7 Vis 48 API WL 6.8 Solids 3 Gels 1/5
		PV 15 YP 9 PH 9.5 Sand Tr API Cake 2/32 PV/YP Ratio 1.66 Cl ppm
		9000 Ca ppm 40 Bit #2 Sz 6 1/4 Type F-2 S/N A 3314 Jets open
		Depth out 2910 Ft 2400 Hrs 62 1/4 Cum HRs 108 1/2 Ft/Hr 38.5
		Cond Dull T-2 B-6 G- 1/4 Bit #3 Sz 6 1/4 Type F-2 S/N AV0874 Jets
		open Ft 71 Hrs 2 Cum 110 1/2 Ft/Hr 35.5 Bit #3 Wt on bit 8
		RPM 80 1200 CFM @ 150 PSI. DP Sz 3 1/2 DC #7 OD 4 3/4 x 2 1/4
		BHA Lngth 209 Eff Wt 9800 Depth 2821 Angle 6 3/4 Depth 2910
		Angle 5 3/4 Daily Mud Cost 1770 Cumulative Mud Cost 4470

	Daily	Cumulative
Drilling Cost	6,953	123,570
Evaluation Cost	660	3,960
Total Cost	7,613	127,530

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
02/10/81	3541	11 days from spud Footage last 24 hours 560
		AART: Drilling with air mist. OA: Rig survey. Drilling. Survey.
		Slip drilling line. Drilling. Bit #3 Sz 6 1/4 Type F-2 S/N AV0874
		Jets open Ft 641 Hrs 21 1/4 Cum Hrs 127 3/4 Ft/Hr 29.1 Bit #3
		Wt on bit 8/10 RPM 80 1200 CFM 175 PSI DP Sz 3 1/2 DC #7 Od 4 3/4
		X 2 1/4 Eff Wt 9,800 Depth 3121 Angle 6 Depth 3509 Angle 5 3/4
		Cumulative Mud Cost 4,470 Daily Cumulative
		Drilling Cost 9,883 130,523
		Evaluation Cost 660 4,620
		Total Cost 135,143

TOC 402 6/79

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
02/11/81	3947	12 days from spud Footage last 24 hours 406
		AART: Drilling with air mist OA: Rig survey. Drilling TFB #3
		Drilling Mud Wt 8.6 Vis 48 API WL 6.8 Solids 3 Gels 1/5 PV 15
		YP 9 PH 9.5 Sand Tr API Cake 2/32 PV/YP Ratio 1.7 Cl ppm 9000
		Ca ppm 40 Bit #3 Sz 6 1/4 Type F-2 S/N AV0874 Jets open
		Depth out 3914 Ft 1004 Hrs 31 3/4 Cum Hrs 138 1/2 Ft/Hr 31.6
		Cond Dull T-5 B-5 G-I Bit #4 Sz 6 1/4 Type F-2 S/N BN 2503
		Jets open Bit #3 Wt on bit 8000 RPM 80 Stroke Lngth 1200 CFM @ 175 PSI
		Bit #4 Wt on bit 7,000 RPM 85 Stroke Lngth 1200 CFM @ 175 SPI DP
		Sz 3 1/2 DC #7 OD 4 3/4 x 2 1/4 BHA Lngth 209 Eff Wt 9,800
		Daily Mud Cost 1268 Cumulative Mud Cost 7,108. Daily Cumulative
		Drilling Cost 11,248 141,771
		Evaluation Cost 660 5,280
		Total Cost 11,908 147,051

TOC 402 6/79

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON USA 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
02/12/81	4116	13 days from spud Footage last 24 hours 169
		AART: Drilling OA: Drilling. Rig repair. Rig service
		Survey. Trip for survey barrel. Sanl line broke. DMP @ SP Mud Wt 8.6 Vi
		48 API WL 6.8 Solids 2 Gels 1/5 PV 15 YP 9 PH 9.5 Sand Tr
		API Cake 2/32 PV/YP Ratio 1.67 Cl ppm 9000 Ca ppm 40 Bit #4 Sz 6 1/4
		Type F4 S/N PN2503 Ft 202 Hrs 12 1/4 Cum Hrs 151 3/4
		Ft/Hr 16.48 Bit #4 Wt on bit 6/7 RPM 90 DP Sz 3 1/2 DC #7 OD 4
		3/4 X 2 1/4 BHA Lngth 209.04 Eff Wt 9,800 Depth 3989 Angle 11°
		Cumulative Mud Cost 7108 Daily Cumulative
		Drilling Cost 7,080 148,851
		Evaluation Cost 660 5,940
		Total Cost 7,740 154,791

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT USA WELL NO. 1-11

DATE	DEPTH	DETAIL OF OPERATION
2/13/81	4185	14 Days From Spud Footage Last 24 Hrs. 69
		AART: W.O. Repair parts. OA: SD for rig repairs. TOH
		to surface casing. W/O parts (drive belts and beake blocks.)
		Pre mix DMP @ SP
		Bit #4 Sz 6¼ Type F-4 Ser #BN2503 Jets 1,2,3 Open
		Feet 271 Hrs. 21¼ Cum Hrs. 160 3/4 Ft.Hr. 7.6
		Bit #4 Wt on Bit 6/7 RPM 90.95 PSI 175 1200scfm
		D.P. Sz 3½ No D.C. 7 O.D. 4 3/4 I.D. 2¼ BHA Lgth 209
		Eff Wt. 9800
		Daily Mud Cost 882 Cumulative Mud Cost 7990
		Daily Cumulative
		Mech Trouble Cost
		Drilling Cost 8015 164,381
		Evaluation Cost 660 6,600
		TOTAL COST 8,675 171,481

TOC 402 6/79

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT USA WELL NO. 11-1

DATE	DEPTH	DETAIL OF OPERATION		
2/14/81	4185	15 Days From Spud	Footage Last 24Hrs. 0	
		AART: TIH	OA: W/O parts. Repair rig. TIH	
		DMP @ SP -- Bit #4 Sz 6¼ Type F-4 Ser # BN2503 Jets 1,2,3 Open		
		Feet 271 Hrs. 21¼ Cum Hrs. 160 3/4 Ft/Hr. 7.6		
		D.P. Sz 3½ NoD.C. 7 O.D. 4 3/4 I.D. 2¼ BHA Lgth 209 Eff Wt. 9800		
		Pacific Gas Rig T21S, R23E, @ 1500' Gas, Oil, Conderate		
		Kill w/ 12.0 ppg. now stuck		
		Daily Mud Cost 0	Cumulative Mud Cost 7990	
			Daily	Cumualtive
		Drilling Cost	5533	170,414
		Evaluation Cost	660	7,260
		TOTAL COST		177,674
2/15/81	4356	16 Days From Spud	Footage Last 24 Hrs. 171	
		AART: Drlg.	OA: TIH 5 stds at a time.	
		Survey Rig Repair Resume drlg. Ave. 38 units BG gas		
		Top Morrison - 4230'		
		Bit #4 Sz 6¼ Type F-4 Ser # BN2503 Jets 1,2,3 Open Feet 442		
		Hrs. 36¼ Cum Hrs. 175 3/4 Ft/Hr. 11.4		
		Bit #4 Wt on Bit 8/9 RPM 85/90 PSI 175 Noz Vel 1200 SCF/D		
		D.P. Sz 3½ No D.C. 7 O.D. 4 3/4 I.D. 2¼ Bha Lgth 209		
		Eff Wt. 9800	Depth 4140 Angle 9 3/4°	
		Daily Mud Cost 0	Cumulative Mud Cost 7990	
			Daily	Cumualtive
		DRilling Cost	7533	177,947
		Evaluation Cost	660	7,920
		TOTAL COST		185,867

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT USA WELL NO. 11-1

DATE	DEPTH	DETAIL OF OPERATION
2/16/81	4423	17 Days From Spud Footage Last 24 Hrs. 67
		AART: TOOH OA: Drlg. into water @ 4410' - 1200
		gal. per hr. Drlg to 4423 water. increased 750 PSI on
		compressors displace hole w/ mud plug bit
		DMP @ SP Mud Wt. 8.6 Vis 52 Apl Wl 4 Solids 3 Gels 2/5 PV 18 YP 7
		PH 9.5 Sand Tr Apl Cake 2/32 PV/YP Ratio 2.57 Cl ppm 9000 Ca ppm 40
		Bit #4 Wt on Bit 8 RPM 85 SPM 1200 Liner FCM GPM @ 175 PSI
		D.P. Sz 3½ No D.C. 7 O.D. 4 3/4 I.D. 2¼ BHA Lgth 209
		Eff Wt. 9800 Depth 4358 Angle 8 3/4
		Daily Mud Cost 0 Cumualtive Mud Cost 7990
		Daily Cumualtive
		Drilling Cost 7080 185,027
		Evaluation Cost 660 8,580
		TOTAL COST 7740 193,607

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

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: 376' FNL 934'FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-13361

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
-

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Long Canyon Unit

9. WELL NO.
11-1

10. FIELD OR WILDCAT NAME
Undesignated Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec 11 T19S, R22E

12. COUNTY OR PARISH: Grand
13. STATE: Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)

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

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other) Change of plans		

(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.)*

2/18/81. Tenneco requests approval to drill the above referenced well 200 feet deeper than was originally indicated on the Application for Permit to Drill approved January 7, 1981.

APPROVED BY THE DIVISION
OF OIL, GAS, AND MINING
DATE: 3-27-81
BY: M. J. Minder

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Carley Hatton TITLE Asst.Div.Adm.Mgr. DATE February 19, 1981

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

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

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT USA 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
02/17/81	4423	18 days from spud Footage last 24 hours -0-
		AART: Reaming to bottom OA: TIH displace with mud. plug bit trip.
		displace with mud displace 102 bbls fresh water at 3500'. Ream to
		bottom. DMP @ SP Mud Wt 8.6 Vis 45 API WL 6.6 Solids 2.0 Gels
		2/5 VP 12 YP 8 PH 10.5 Sand Tr API Cake 2/32 PV/YP Ratio 1.5
		Cl ppm 9000 Ca ppm 40 Bit #5 Sz 6 1/4 Type F-4 S/N BN 2466 Jets
		open Cum Hrs 183 1/2 Bit #5 Wt on bit 5/6 PRM 60 Stroke Lngth 10
		SPM 70 Liner 5 1/2 PSI 300 DP Sz 3 1/2 DC #7 OD 4 3/4 x 2 1/2
		BHA Lngth 209 Eff Wt 8330 Daily Mud Cost 2360 Cumulative Mud Cost
		10,360 Daily Cumulative
		Drilling Cost 8,563 193,590
		Evaluation Cost 660 9,240
		Total Cost 9,223 202,830

TOC 402 6/79

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT USA 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
02/18/81	4423	19 days from spud Footage last 24 hours -0-
		AART: Mix LCM and volume OA: Reaming 4114 - 4243. Lost returns
		lost total 548 bbls. Mix volume and LCM 20% mix. DMP @ SP Mud Wt 8.6
		Vis 55 PH 10.5 20% LCM Gels 3/2 PV 20 YP 16
		Bit #5 Sz 6 1/4 Type F-4 S/N BN2466 Jets open Cum Hrs 183 1/2 Bit
		#5 Wt on bit 6000 RPM 60 Stroke Lngth 10 SPM 70 Liner 5 1/2 Ann
		Vel 229 DP Sz 3 1/2 DC #7 OD 4 3/4 x 2 1/4 BHA Lngth 209.04
		Eff Wt. 8428 Depth 4358 Angle 8 3/4 Daily Mud Cost 3280 Cumulative
		Mud Cost 14,639 Daily Cumulative
		Drilling Cost 8,813 202,303
		Evaluation Cost 660 9,900
		Total Cost 9,473 212,303

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY,UTAH LEASE LONG CANYON UNIT USA 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
02/19/81	4423	20 days from spud Footage last 24 hours -0-
		AART: Reaming to bottom. OA: Mix mud. partial returns at 2400'
		full returns. TIH. full returns break circulation every 3 stands
		hit bridges at 3599 - 3604 and 4179-4183. TIH to 4220. tight hole
		build volume ream to 4223. Lost 693 bbls mud total.
		DMP @ SP Mud Wt 8.6 Vis 60 API WL 7.2 Solids 2.5 Gels 4/12 PV 21
		YP 16 PH 10 Sand Tr API Cake 2/32 PV YP Ratio 1.31 Cl ppm 4000
		Ca ppm 40 Bit #5 Sz 6 1/4 Type F-4 S/N BN2466 Jets open
		Cum htr 183 1/2 Ft/Hr reaming 6.5 Bit #5 Wt on bit 3 RPM 50 Stroke
		Lngth 10 SPM 66 Liner 5 1/2 GPM 250 PSI 500 Ann Vel 229/372 DP Sz
		3 1/2 DC #7 OD 4 3/4 X 2 1/4 BHA Lngth 209 Eff Wt 8600 Daily
		Mud Cost 2721 Cumulative Mud Cost 16,360 Daily Cumulative
		Drilling Cost 8,254 210,657
		Evaluation Cost 660 10,560
		Total Cost 8,914 221,217

RECEIVED
FEB 23 1981
DIVISION OF
OIL, GAS & MINING

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

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

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT USA WELL NO. 11-1

DATE	DEPTH	DETAIL OF OPERATION
2-20-81	4502	21 Days from spud Footage last 24 hours 79
		AART: DRLG. OA: REAMING 4233-4423
		DMP @ SP Mud Wt 8.6 Vis 60 API WL 7.2 Solids 2 1/4 GELS 4/12 PV 21
		YP 16 PH 10 SAND 1/4% API Cake 2/32 PV/YP Ratio 1'31 Cl ppm 400
		Ca ppm 40 Bit #5 sz 6 1/4 Type F-4 S/NBN 2466 Jets open Ft 79
		Hrs 13 Cum Hrs 196 1/2 Ft/Hr 6.1 Bit #5 Wt on Bit 8 RPM 60 Stroke
		Length 10 SPM 66 Liner 5 1/2 GPM 250 PSI 500 ANN VEL 372/229 D.P.
		sz 3 1/2 No.D.C. 7 O.D. 4 3/4 I.D. 2 1/4 BHA Length 209 Eff Wt 8425
		Cum Mud Cost 16360
		Daily / Cumulative
		Mechanical Trouble Cost 2796 35,506
		Drilling Cost 2797 180,744
		Evaluation Cost 7.920
		Total Cost 5593 224,170

RECEIVED
FEB 26 1981
DIVISION OF
OIL, GAS & MINING

FILE IN TRIPLICATE
FORM OGC-8-X

56 64 03

RECEIVED
FEB 20 1991
DIVISION OF
OIL, GAS & MINING

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

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number Long Canyon Unit USA 11-1

Operator Tenneco Address P.O. Box 3249 Englewood 80155

Contractor Twin Arrow Address P.O. Box 948 Rangely 81648

Location NW¼ NE¼ Sec. 11 T: 19S R. 22E County Grand

Water Sands

	Depth From	Depth To	Volume Flow Rate or Head	Quality Fresh or Salty
1.	4410'	4423' K.B.	1200 gallons/hr	Fresh
2.				
3.				
4.				
5.				

(Continue of reverse side if necessary)

Formation Tops

Remarks Mudded up well @ 4423' - lost circulation

NOTE: (a) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.

(b) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

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

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON USA 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
02/21/81	4502	22 days from spud Footage last 24 hours -0-
		AART: TIH. OA: ---
		DMP @ SP Mud Wt 8.6 Vis 60 API WL 7.2 Solids 1/4 Gels 4/12 PV 21 YP 16
		PH 10 Sand 1/4 API Cake 2/32 PV/YP Ratio 1.31 Cl ppm 400 Ca ppm 40 Bit
		#5 Sz 6 1/4 Type F-4 S/N BN2466 Depth out 4502 Ft 79 Hrs 13 Cu
		196 1/2 Ft/Hr 6.1 Cond Dull T-2 B-2 G-I Bit #6 Sz 6 1/4 Type V-2
		S/N BN4194 DP Sz 3 1/2 DC #6 OD 4 3/4 x 2 1/4 BHA Lngth 178 Eff
		Wt 8425 Depth 4502 Angle mis run Cumulative Mud cost 16360
		Daily / Cumulative
		Mechanical Trouble Cost — 35,506
		Drilling Cost 5,533 186,277
		Evaluation Cost 660 8,580
		Total Cost 6,193 230,363
02/22/81	4502	23 days from spud Footage last 24 hours -0-
		AART: TIH OA: Work on pump TOOH. change out pump
		pick up DC's. TIH. Bit #6 Sz 6 1/4 Type D2 S/N BN4194 Cum Hrs
		196 1/2 DP Sz 3 1/2 DC #12 OF 4 3/4 x 2 1/4 BHA Lngth 359 Eff Wt
		14,400 Cumulative Mud Cost 16,360 Daily / Cumulative
		Mechanical Trouble Cost — 35,506
		Drilling Cost 5,533 191,810
		Evaluation Cost 660 9,240
		Total Cost 6,193 236,556
02/23/81	4545	24 days from spud Footage last 24 hours 43
		AART: Drilling OA: Trip out kelly pipe and swival. 2 unit
		gas 4520-22'. No background gas while drilling. 50% lime 30% shale. 10%
		siltstone

RECEIVED
MAR 4 1981
DIVISION OF
OIL, GAS & MINING

TOC 402 6/79

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
02/23/81	4545	Cont. 10% sandstone. DMP @ SP Mud Wt 8.6 Vis 62 API WL 7
		HI Temp WL 2 3/4 Gels 5/12 PV 18 YP 17 PH 9 Sand 1/2% API CAke 2/32
		PV/YP 1.05 Cl ppm 400 CA ppm 40 Bit #6 Sz 6 1/4 Type F-2 S/N BN4194
		Jets open Depth out 4524 Ft 23 Hrs 10 Cum Hrs 206 1/2 Ft/Hr 2.3
		Cond Dull T-5 B-4 G-In Bit #7 Sz 6 1/4 Type F-4 S/N BN2426 R/R
		Jets open Ft 21 Hrs 2 Cum Hrs 208 1/2 Ft/Hr 10.5 Bit #6 Wt on bit
		14,000 RPM 50 Bit #7 Wt on bit 14,000 RPM 50 Stroke Lngth 8 SPM 115
		Liner 4 1/2 GPM 219 PSI 500 Ann Vel 200 DP Sz 3 1/2 DC #12 OD
		4 3/4 X 2 1/4 BHA Lngth 359.65 Eff Wt 14,475 Depth 4524 Angle 8
		Daily Mud Cost 2035 Cumulative Mud Cost 18,395 Daily Cumulative
		Mechanical Trouble Cost 35,506
		Drilling Cost 7,568 199,378
		Evaluation Cost 650 9,900
		Total Cost 8,228 244,784

RECEIVED
MAR 4 1981
DIVISION OF
OIL, GAS & MINING

TOC 402 6/79

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
02/24/81	4599	25 days from spud Footage last 24 hours 54
		AART: Drilling OA: RR Rot drive chain, TOOH for hole
		in DP 54 stand 5 in. LD 3 joints, TIH, work on drive chain.
		DMP @ SP Mud Wt 8.6 Vis 56 API WL 6.8 Solids 2 3/4 Gels 5/12
		PV 18 YP 17 PH 9 SAnd 1/2 API Cake 2/32 PV/YP Ratio
		1.2 Cl ppm 400 Ca ppm 40 Bit #7 Sz 6 1/4 Type F-4 S/N BN2466
		Jets open Ft 75 Hrs 14 1/4 cum Hrs 222 3/4 Ft/Hr 6.1 Bit #7
		Wt on bit 14 RPM 50/60 Stroke Lngth 8 SPM 60 Liner 4 1/2
		GPM 219 PSI 500 Ann Vel 200/325 DP Sz 3 1/2 DC #10 OD 4 3/4
		X 2 1/4 BHA Lngth 359 Eff Wt 14,000 Depth 4527 Angle 8 Daily mud
		Cost -0- Cumulative Mud Cost 18,395 Daily Cumulative
		Mechanical Trouble cost 35,506
		Drilling Cost 5,533 204,911
		Evaluation Cost 660 10,560
		Total Cost 250,977

RECEIVED
MAR 4 1981
DIVISION OF
OIL, GAS & MINING

TOC 402 6/79

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT USA WELL NO. 11-1

DATE	DEPTH	DETAIL OF OPERATION
2-25-81	4665	26 days from spud Footage last 24 hours 66
		AART: DRLG OA: GAS SHOW 4610-4640: 4610--12 Units
		4615--12 Units, 4620--11 Units, 4625--13 Units, 4630--15 Units, 4635--
		17 Units, 4640--18 Units Peak 800 ppm-C1, 300 ppm-C2, 200 ppm-C3,TR-C4.
		90% sd 10% sh.
		DMP @ SP Mud Wt 8.6 Vis 48 API WL 8 SOLIDS 2 1/4 GELS 1/5 PV 10
		YP 5 PH 9.0 SAND 1/4% API Cake 2/32 PV/YP Ratio 2 Cl ppm 500 Ca
		ppm 40 Bit #7 sz 6 1/4 Type F-4 S/NBN2466 Jets open Depth Out
		4640 Ft 116 Hrs 25 1/4 Cum Hrs 233 3/4 Ft/Hr 4/5 COND CULL T-3
		B-3 G-I Bit #8 sz 6 2/4 Type F-4 S/NBN2500 Jets 1-20-2-20-3-20
		Ft 25 Hrs 3 Cum Hrs 236 3/4 Ft/Hr 8.3 Bit #8 Wt on Bit 14 RPM 60
		Stroke Length 8 SPM 120 Liner 4 1/2 GPM 227 PSI 550 ANN VEL 208/338
		D.P. sz 3 1/2 No. D.C. 12 O.D. 4 3/4 I.D. 2 1/4 BHA Length 359 Eff
		Wt 14,475 Daily Mud Cost 350 Cum MUd Cost 18725.

	Daily	Cumulative
Mechanical Trouble Cost		35,506
Drilling Cost	8863	213,594
Evaluation Cost	660	11,220
Total Cost	9343	260,320

RECEIVED
MAR 4 1981
DIVISION OF
OIL, GAS & MINING

TOC 402 6/79

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT USA WELL NO. 11-1

DATE	DEPTH	DETAIL OF OPERATION
2-26-81	4787	27 days from spud Footage last 24 hours 122
		AART: DRLG OA: 4733 TOP OF ENTRADA NO BACKGROUND
		GAS, NO SHOWS ON THE HOT WIRE. 4810-4815, TD this afternoon.
		DMP @ SP 8.7 Vis 45 API WL 8 SOLIDS 2 1/4 GELS 5/8 PV 12 YP 9
		PH 10 SAND 3/4% API Cake 2/32 PV/YP ratio 1/33 Cl ppm 700 Ca ppm
		50 Bit #8 sz 6 1/4 Type F4 S/NON2500 Jets 1-20 2-20 3-20 Depth
		Out INC Ft 147 Hrs 24 1/2 Cum Hrs 258.25 Ft/Hr 5.67 Bit #8 Wt on
		Bit 14 RPM 60 Stroke Length 8 SPM 120 Liner 4 1/2 GPM 227 PSI 550
		ANN VEL 208/338 D.P. sz 3 1/2 No. D.C. 12 O.D. 4 3/4 I.D. 2 1/4
		BHA Length 259.65 Eff Wt 14,475 Daily Mud Cost 650 Cum Mud Cost 19395
		Daily / Cumulative
		Mechanical Trouble Cost — 35,506
		Drilling Cost — 6183 — 219,777
		Evaluation Cost — 660 — 11,880
		Total Cost — 6843 — 267,163

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
02/27/81	4810	28 days from spud Footage last 24 hours 23
		AART: Logging OA: Drill to TD, C & C, POOH for logs,
		SLM. (OK) logs to 4802 (4220' tight) DMP @ SP Mud Wt 8.7 Vis 45
		API WL 8 Solids 3 1/4 Gels 5/8 PV 12 YP 9 PH 10 Sand 3/4 API Cake
		2/32 PV/YP Ratio 1.3 Cl ppm 700 Ca ppm 50 Bit #8 Sz 6 1/4 Type F-4
		S/N BN500 Jets 1-20 2-20 3-20 Depth out 4810 Ft 170 Hrs 30 1/2 Cum Hrs
		254 1/4 Ft/Hr 5.5 Cond Dull T-2 B-2 G-I Bit #8 wt on bit 14 RPM 55/60
		Stroke Lngth 8 SPM 120 Liner 4 1/2 GPM 227 PSI 500 Ann Vel 208 Noz
		Vel 338 DP Sz 3 1/2 DC #12 OD 4 3/4 x 2 1/4 BHA Lngth 159.6 Eff
		Wt 18,700 Daily Mud Cost 250 Cumulative Mud Cost 19,725 Daily Cumulative
		Mechanical Trouble Cost 35,506
		Drilling Cost 5,803 225,760
		Evaluation Cost 660 12,540
		Total Cost 6,523 272,706

TOC 402 6/79

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT USA 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
02/28/81	4810	29 days from spud Footage last 24 hours -0-
		AART: Logging OA: Logging 4222 tight. TIH with bit ream
		4222-4261. RIH to bottom C & C POOH, light plant down. RU and log
		(8-10 hrs left (SWC)) DMP @ SP Mud Wt 8.8 Vis 50 API WL 5 Solids
		2 1/2 Gels 5/17 PV 15 YP 15 PH 10 Sand TR API Cake 2/32 PV/YP
		Ratio 1 Cl ppm 500 Ca ppm 50 Bit #8 Sz 6 1/4 S/N BN2500 Jets 1-20 2-
		20 3-20 Depth out 4810 Ft 170 Hrs 30 1/2 Cum Hrs 254 1/4 Ft/Hr 5.57
		Cond Cull T-2 B-2 G-I Ream at 2-3K, 50 RPM DP Sz 3 1/2 DC #12 OD
		4 3/4 x 2 1/4 BHA Lngth 359.6 Eff Wt 14,475 Daily Mud Cost 409
		Cumulative Mud Cost 20,154 Daily Cumulative
		Mechanical Trouble Cost 35,506
		Drilling Cost 225,660
		Evaluation Cost 5,942 18,842
		Total Cost 5,942 279,648
03/01/81	4836	30 days from spud Footage last 24 hours 26
		AART: Drilling OA: Logging, rig repair, TIH, wash 120 to bottom
		drill ahead. DMP @ SP Mud Wt 8.8 Vis 55 API WL 5 Solids 2 1/2 Gels
		5/17 PV 15 YP 15 PH 10 Sand 3/4 API Cake 2/32 PV/YP Ratio 1 Cl
		ppm 500 Ca ppm 50 Bit #9 Sz 6 1/4 Type F-4 S/N BN2500 Jets 1-20
		2-20 3-20 Ft 196 Hrs 37 1/2 Cum Hrs 271 1/4 Ft/Hr 3.71 Bit #9
		Wt on bit 14 RPM 55 Stroke Lngth 8 SPM 120 Liner 4 1/2 GPM 227 PSI 55
		Ann Vel 203/338 DP Sz 3 1/2 DC #12 OD 4 3/4 X 2 1/4 BHA Lngth 359.65
		Eff Wt 14,475 Cumulative Mud Cost 20,154 Daily Cumulative
		Mechanical Trouble Cost 35,506
		Drilling cost 1,385 227,045
		Evaluation Cost 26,600 45,082
		Total Cost 27,985 307,633

TOC 402 6/79

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
03/02/81	4900	31 days from spud Footage last 24 hours 90'
		AART: TOH for logs. OA: Entrada 4840-50/ DMP @ SP Mud Wt 8.9 Vis
		55 API WL 5 HI Temp WL 3 1/4 Gels 1/5 PV 14 YP 8 PH 9 Sand 3/4
		API Cake 2/32 PV/YP 1.75 Cl ppm 400 Ca ppm 50 Bit #9 Sz 6 1/4
		Type F-4 S/N RR Jets 1-20 2-20 3-20 Depth out 4900 Ft 286 Hrs 52
		Cum Hrs 285 3/4 Ft/Hr 6.2 Bit #9 Wt on bit 14,000 RPM 55 Stroke
		Lngth 8 SPM 120 Liner 5 1/2 GPM 227 PSI 550 Ann Vel 208 DP Sz 3 1/2
		DC #12 OD 4 3/4 x 2 1/4 BHA Lngth 359.65 Daily Mud cost 650
		Cumulative Mud Cost 25,636 Daily Cumulative
		Mechanical Trouble Cost 35,506
		Drilling Cost 8,160 235,205
		Evaluation Cost 2,625 47,707
		Total Cost 10,785 318,418

TOC 402 6/79

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WO DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT USA 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION		
03/03/81	4900	32 days from spud Footage last 24 hours -0-		
		AART: RU casing crew OA:TOH. Log well. Rig repair. TIH.		
		Circulate. LDDP DC's. DMP @ SP Mud Wt 8.9 Vis 55 API WL 5		
		Solids 3 1/4 Gels 1/5 PV 14 YP 8 PH 9.0 Sand 3/4 API Cake 2/32		
		PV/YP Ratio 1.75 Cl ppm 400 Ca ppm 50 Bit #9 Sz 6 1/4 Type F3		
		S/N RR/BN2500 Jets open Depth out 4900 Ft 286 Hrs 52 Cum Hrs 285		
		3/4 Ft/Hr 6.2 Cond Dull T-3 B-2 G-I Stroke Lngth 8 SPM 120		
		Liner 4 1/2 GPM 227 PSI 500 DP Sz 3 1/2 DC #12 OD 4 3/4 X 2 1/4		
		BHA Lngth 359.65 Eff Wt 14,475 Depth 4900 Angle 7 Cumulative		
		Mud Cost 25,636	Daily	Cumulative
		Mechanical Trouble Cost		35,506
		Drilling Cost		235,205
		Evaluation Cost	13,357	61,064
		Completion Cost	1,979	1,979
		Total Cost	15,336	333,754

TOC 402 6/79

43-019-30732

```
*************************
*                       *
*                       *
*                       *
*************************
*-----------------------*
*------SCHLUMBERGER-----*
*-----------------------*
*************************
```

SCHLUMBERGER DIRECTIONAL SURVEY

RECEIVED
MAR 23 1981
DIVISION OF
OIL, GAS & MINING

TENNECO OIL COMPANY

LONG CANYON 11-1

WILDCAT

GRAND COUNTY, UTAH

RUN NO. 1 524 - 4778

FEBRUARY 26, 1981

START OF SURVEY IS CASING AT 524 FT.

RADIUS OF CURVATURE METHOD

REFERENCE JOB 11262.

Schlumberger

DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
524.0	0.2	213.0	524.0	0.0	0.0	0.0
540.0	1.2	139.0	540.0	-0.2	0.0	0.2
560.0	1.0	86.0	560.0	-0.3	0.4	0.5
580.0	1.5	129.0	580.0	-0.5	0.8	0.9
600.0	0.0	0.0	600.0	-0.7	1.1	1.3
620.0	0.8	116.0	620.0	-0.8	1.2	1.4
640.0	0.2	220.0	640.0	-0.9	1.2	1.5
660.0	1.0	120.0	660.0	-1.0	1.4	1.8
680.0	1.2	131.0	680.0	-1.3	1.7	2.1
700.0	0.9	94.0	700.0	-1.5	2.0	2.5
720.0	0.7	82.0	720.0	-1.5	2.2	2.7
740.0	1.0	84.0	740.0	-1.4	2.5	2.9
760.0	1.2	87.0	760.0	-1.4	2.9	3.2
780.0	1.1	87.0	780.0	-1.4	3.3	3.6
800.0	2.0	108.0	800.0	-1.4	3.8	4.1
820.0	2.1	134.0	819.9	-1.9	4.4	4.8
840.0	2.3	138.0	839.9	-2.4	4.9	5.5
860.0	2.5	140.0	859.9	-3.1	5.4	6.2
880.0	2.2	141.0	879.9	-3.6	5.9	7.0
900.0	2.3	138.0	899.9	-4.2	6.4	7.7
920.0	2.5	140.0	919.9	-4.9	7.0	8.5
940.0	2.2	138.0	939.8	-5.5	7.5	9.3
960.0	2.3	142.0	959.8	-6.1	8.1	10.1
980.0	2.5	141.0	979.8	-6.8	8.6	11.0
1000.0	2.6	145.0	999.8	-7.5	9.1	11.8
1020.0	2.7	145.0	1019.8	-8.3	9.7	12.7
1040.0	2.6	145.0	1039.7	-9.1	10.2	13.7
1060.0	2.8	145.0	1059.7	-9.9	10.8	14.6
1080.0	3.0	145.0	1079.7	-10.7	11.3	15.6
1100.0	3.2	145.0	1099.7	-11.6	12.0	16.6
1120.0	3.3	145.0	1119.6	-12.5	12.7	17.8
1140.0	3.4	144.0	1139.6	-13.5	13.3	19.0
1160.0	3.6	144.0	1159.6	-14.5	14.1	20.2
1180.0	3.7	143.0	1179.5	-15.5	14.8	21.5
1200.0	3.8	139.0	1199.5	-16.5	15.6	22.8
1220.0	3.8	140.0	1219.4	-17.6	16.5	24.1
1240.0	4.0	141.0	1239.4	-18.6	17.4	25.5
1260.0	4.2	142.0	1259.3	-19.7	18.3	26.9
1280.0	4.1	145.0	1279.3	-20.9	19.1	28.3
1300.0	4.0	144.0	1299.2	-22.0	19.9	29.7
1320.0	3.9	147.0	1319.2	-23.2	20.7	31.1
1340.0	3.8	147.0	1339.1	-24.3	21.5	32.4
1360.0	4.2	200.0	1359.1	-25.6	21.9	33.7
1380.0	4.2	133.0	1379.0	-26.8	22.4	34.9
1400.0	4.3	133.0	1399.0	-27.8	23.5	36.4
1420.0	4.3	152.0	1418.9	-29.0	24.4	37.9

Schlumberger

DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
1440.0	4.3	149.0	1438.9	-30.3	25.2	39.4
1460.0	4.3	175.0	1458.8	-31.7	25.7	40.7
1480.0	4.4	138.0	1478.8	-32.9	26.5	42.2
1500.0	4.4	153.0	1498.7	-34.1	27.3	43.7
1520.0	4.5	141.0	1518.6	-35.5	27.7	45.0
1540.0	4.5	141.0	1538.6	-36.7	28.7	46.6
1560.0	4.5	145.0	1558.5	-37.9	29.6	48.1
1580.0	4.2	146.0	1578.5	-39.2	30.4	49.6
1600.0	4.1	146.0	1598.4	-40.4	31.3	51.1
1620.0	4.2	145.0	1618.4	-41.6	32.1	52.5
1640.0	4.2	146.0	1638.3	-42.8	32.9	54.0
1660.0	4.0	145.0	1658.3	-44.0	33.7	55.4
1680.0	4.2	147.0	1678.2	-45.2	34.5	56.8
1700.0	3.9	137.0	1698.2	-46.3	35.3	58.2
1720.0	3.8	133.0	1718.1	-47.3	36.3	59.6
1740.0	3.6	129.0	1738.1	-48.1	37.2	60.8
1760.0	3.6	130.0	1758.0	-48.9	38.2	62.0
1780.0	3.8	142.0	1778.0	-49.8	39.1	63.3
1800.0	3.9	177.0	1798.0	-50.5	38.6	63.6
1820.0	4.0	128.0	1817.9	-51.5	39.4	64.8
1840.0	4.0	128.0	1837.9	-52.3	40.5	66.2
1860.0	4.1	141.0	1857.8	-53.3	41.6	67.6
1880.0	4.2	218.0	1877.8	-54.4	42.0	68.8
1900.0	3.9	127.0	1897.7	-55.5	42.5	69.9
1920.0	3.8	124.0	1917.7	-56.3	43.6	71.2
1940.0	3.9	124.0	1937.6	-57.0	44.7	72.4
1960.0	3.8	123.0	1957.6	-57.8	45.8	73.8
1980.0	4.0	125.0	1977.5	-58.6	46.9	75.1
2000.0	4.2	128.0	1997.5	-59.4	48.1	76.4
2020.0	4.2	140.0	2017.4	-60.4	49.2	77.9
2040.0	4.0	129.0	2037.4	-61.4	50.1	79.3
2060.0	4.2	130.0	2057.3	-62.3	51.3	80.7
2080.0	4.0	137.0	2077.3	-63.3	52.3	82.1
2100.0	4.0	159.0	2097.2	-64.6	52.6	83.3
2120.0	4.1	123.0	2117.2	-65.6	53.6	84.7
2140.0	4.1	127.0	2137.1	-66.4	54.8	86.1
2160.0	4.1	137.0	2157.1	-67.4	55.8	87.5
2180.0	4.2	175.0	2177.0	-68.5	56.6	88.9
2200.0	4.0	129.0	2197.0	-69.8	57.1	90.2
2220.0	4.2	122.0	2216.9	-70.6	58.3	91.5
2240.0	4.4	131.0	2236.9	-71.4	59.5	93.0
2260.0	4.4	132.0	2256.8	-72.4	60.6	94.5
2280.0	4.5	131.0	2276.8	-73.5	61.8	96.0
2300.0	4.6	132.0	2296.7	-74.5	63.0	97.6
2320.0	4.8	131.0	2316.6	-75.6	64.2	99.2
2340.0	4.8	131.0	2336.6	-76.7	65.5	100.8

Schlumberger

DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
2360.0	5.0	130.0	2356.5	-77.8	66.8	102.5
2380.0	5.2	130.0	2376.4	-78.9	68.1	104.3
2400.0	5.4	133.0	2396.3	-80.1	69.5	106.1
2420.0	5.4	130.0	2416.2	-81.4	70.9	107.9
2440.0	5.6	130.0	2436.1	-82.6	72.4	109.9
2460.0	5.8	130.0	2456.0	-83.9	73.9	111.8
2480.0	6.0	130.0	2475.9	-85.2	75.5	113.9
2500.0	6.0	130.0	2495.8	-86.6	77.1	115.9
2520.0	6.2	131.0	2515.7	-87.9	78.7	118.0
2540.0	6.2	130.0	2535.6	-89.3	80.4	120.2
2560.0	6.2	130.0	2555.5	-90.7	82.1	122.3
2580.0	6.2	129.0	2575.4	-92.0	83.7	124.4
2600.0	6.2	129.0	2595.3	-93.4	85.4	126.6
2620.0	6.2	130.0	2615.1	-94.8	87.1	128.7
2640.0	6.4	130.0	2635.0	-96.2	88.8	130.9
2660.0	6.4	130.0	2654.9	-97.6	90.5	133.1
2680.0	6.4	129.0	2674.8	-99.0	92.2	135.3
2700.0	6.4	129.0	2694.6	-100.4	94.0	137.5
2720.0	6.6	129.0	2714.5	-101.9	95.7	139.8
2740.0	6.6	130.0	2734.4	-103.3	97.5	142.0
2760.0	6.5	129.0	2754.2	-104.8	99.3	144.3
2780.0	6.6	129.0	2774.1	-106.2	101.0	146.6
2800.0	6.6	130.0	2794.0	-107.7	102.8	148.9
2820.0	6.6	130.0	2813.9	-109.1	104.6	151.2
2840.0	6.6	130.0	2833.7	-110.6	106.4	153.5
2860.0	6.7	130.0	2853.6	-112.1	108.2	155.8
2880.0	6.6	130.0	2873.4	-113.6	110.0	158.1
2900.0	6.6	130.0	2893.3	-115.1	111.7	160.4
2920.0	6.6	130.0	2913.2	-116.6	113.5	162.7
2940.0	6.5	132.0	2933.0	-118.1	115.2	165.0
2960.0	6.4	132.0	2952.9	-119.6	116.9	167.2
2980.0	6.2	132.0	2972.8	-121.1	118.5	169.4
3000.0	6.2	132.0	2992.7	-122.6	120.1	171.6
3020.0	6.2	132.0	3012.6	-124.0	121.7	173.8
3040.0	6.0	131.0	3032.4	-125.4	123.3	175.9
3060.0	5.8	131.0	3052.3	-126.8	124.9	177.9
3080.0	5.8	132.0	3072.2	-128.1	126.4	179.9
3100.0	5.8	132.0	3092.1	-129.5	127.9	182.0
3120.0	5.8	131.0	3112.0	-130.8	129.4	184.0
3140.0	5.8	131.0	3131.9	-132.1	130.9	186.0
3160.0	5.6	131.0	3151.8	-133.4	132.4	188.0
3180.0	5.6	131.0	3171.7	-134.7	133.9	189.9
3200.0	5.6	131.0	3191.6	-136.0	135.4	191.9
3220.0	5.6	131.0	3211.5	-137.2	136.9	193.8
3240.0	5.4	130.0	3231.5	-138.5	138.3	195.7
3260.0	5.4	131.0	3251.4	-139.7	139.8	197.6

Schlumberger

DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	CO-ORDINATES + EAST - WEST	COURSE LENGTH FEET
3280.0	5.4	132.0	3271.3	-140.9	141.2	199.5
3300.0	5.4	132.0	3291.2	-142.2	142.6	201.4
3320.0	5.2	131.0	3311.1	-143.4	143.9	203.2
3340.0	5.4	131.0	3331.0	-144.7	145.3	205.1
3360.0	5.5	132.0	3350.9	-145.9	146.8	207.0
3380.0	5.6	133.0	3370.8	-147.2	148.2	208.9
3400.0	5.7	132.0	3390.7	-148.6	149.6	210.9
3420.0	5.8	133.0	3410.6	-149.9	151.1	212.8
3440.0	5.8	133.0	3430.5	-151.3	152.5	214.8
3460.0	5.8	131.0	3450.4	-152.7	154.0	216.9
3480.0	6.1	128.0	3470.3	-154.0	155.6	218.9
3500.0	6.2	124.0	3490.2	-155.3	157.4	221.1
3520.0	6.4	125.0	3510.1	-156.5	159.2	223.2
3540.0	6.6	126.0	3530.0	-157.8	161.1	225.5
3560.0	6.7	125.0	3549.8	-159.2	162.9	227.8
3580.0	6.9	124.0	3569.7	-160.6	164.9	230.1
3600.0	7.0	124.0	3589.5	-161.9	166.9	232.5
3620.0	7.2	123.0	3609.4	-163.3	169.0	235.0
3640.0	7.4	123.0	3629.2	-164.6	171.1	237.4
3660.0	7.6	125.0	3649.0	-166.1	173.3	240.0
3680.0	7.6	123.0	3668.9	-167.5	175.5	242.6
3700.0	7.6	124.0	3688.7	-169.0	177.7	245.2
3720.0	7.7	122.0	3708.5	-170.4	179.9	247.8
3740.0	8.0	125.0	3728.3	-171.9	182.2	250.5
3760.0	8.4	125.0	3748.1	-173.6	184.5	253.3
3780.0	8.6	125.0	3767.9	-175.2	186.9	256.2
3800.0	9.0	124.0	3787.7	-177.0	189.4	259.3
3820.0	9.4	125.0	3807.4	-178.9	192.0	262.4
3840.0	9.6	126.0	3827.1	-180.8	194.7	265.7
3860.0	9.8	128.0	3846.9	-182.9	197.4	269.1
3880.0	10.2	128.0	3866.6	-185.0	200.1	272.5
3900.0	10.5	127.0	3886.2	-187.2	202.9	276.1
3920.0	11.0	129.0	3905.9	-189.5	205.9	279.8
3940.0	11.0	128.0	3925.5	-191.8	208.9	283.6
3960.0	11.0	129.0	3945.1	-194.2	211.8	287.4
3980.0	11.0	130.0	3964.8	-196.6	214.8	291.2
4000.0	11.0	131.0	3984.4	-199.1	217.7	295.0
4020.0	10.6	131.0	4004.1	-201.6	220.5	298.8
4040.0	10.4	131.0	4023.7	-204.0	223.3	302.4
4060.0	10.2	131.0	4043.4	-206.4	225.9	306.0
4080.0	10.0	132.0	4063.1	-208.7	228.5	309.5
4100.0	10.0	130.0	4082.8	-211.0	231.1	313.0
4120.0	9.8	130.0	4102.5	-213.2	233.8	316.4
4140.0	9.8	131.0	4122.2	-215.4	236.4	319.8
4160.0	9.8	132.0	4141.9	-217.6	239.0	323.2
4180.0	9.5	132.0	4161.6	-219.8	241.5	326.5

Schlumberger

DEPTH FEET	DEVIATION DEGREES	AZIMUTH DEGREES	TRUE VERTICAL DEPTH FEET	CO-ORDINATES + NORTH - SOUTH	+ EAST - WEST	COURSE LENGTH FEET
4200.0	9.7	135.0	4181.3	-222.2	243.9	329.9
4220.0	9.5	134.0	4201.1	-224.5	246.3	333.2
4240.0	9.3	132.0	4220.8	-226.8	248.6	336.5
4260.0	9.4	132.0	4240.5	-229.0	251.0	339.8
4280.0	9.6	136.0	4260.2	-231.3	253.4	343.1
4300.0	9.8	138.0	4280.0	-233.8	255.7	346.5
4320.0	9.8	137.0	4299.7	-236.3	258.0	349.8
4340.0	10.0	139.0	4319.4	-238.8	260.4	353.3
4360.0	9.8	139.0	4339.1	-241.4	262.6	356.7
4380.0	9.8	140.0	4358.8	-244.0	264.8	360.0
4400.0	9.6	140.0	4378.5	-246.6	266.9	363.4
4420.0	9.4	138.0	4398.2	-249.0	269.1	366.7
4440.0	9.2	138.0	4418.0	-251.4	271.3	369.9
4460.0	9.2	136.0	4437.7	-253.8	273.5	373.1
4480.0	9.0	138.0	4457.4	-256.1	275.6	376.2
4500.0	8.6	137.0	4477.2	-258.3	277.7	379.3
4520.0	8.4	137.0	4497.0	-260.5	279.7	382.2
4540.0	8.2	137.0	4516.8	-262.6	281.7	385.1
4560.0	7.8	133.0	4536.6	-264.5	283.7	387.9
4580.0	7.6	132.0	4556.4	-266.4	285.7	390.6
4600.0	7.6	133.0	4576.2	-268.2	287.6	393.3
4620.0	7.4	132.0	4596.1	-269.9	289.5	395.8
4640.0	7.4	134.0	4615.9	-271.7	291.4	398.4
4660.0	7.2	134.0	4635.7	-273.5	293.2	401.0
4680.0	7.1	135.0	4655.6	-275.2	295.0	403.5
4700.0	7.0	131.0	4675.4	-276.9	296.8	405.9
4720.0	7.0	130.0	4695.3	-278.5	298.7	408.4
4740.0	6.8	131.0	4715.1	-280.0	300.5	410.7
4760.0	6.8	136.0	4735.0	-281.6	302.2	413.1
4778.0	6.3	142.0	4752.9	-283.1	303.6	415.2

Schlumberger

BOTTOM HOLE LOCATION

COURSE LENGTH:	415.2	FEET
COURSE AZIMUTH:	133.0	DEGREES
MEASURED DEPTH:	4778.0	FEET
TRUE VERTICAL DEPTH:	4752.9	FEET
DISTANCE SOUTH:	283.1	FEET
DISTANCE EAST:	303.6	FEET

EXACT RADIUS OF CURVATURE METHOD

Schlumberger

```
****************
*              *
****************
* SCHLUMBERGER *
****************
```

HIGH RESOLUTION

DIPMETER

****

CLUSTER LISTING
****

TENNECO OIL COMPANY

WILDCAT

GRAND , UTAH

LONG CANYON 11-1

RUN NO. ONE JOB NO. 11262

CLUSTER RESULTS ONLY

4FT. CORR. - 2 FT. STEP

40 DEG. X2 SEARCH ANGLE

MAR 23 1981

DIVISION OF
OIL, GAS & MINING

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
524			0.2	213	7.9	7.7	
526	2.3	333	0.4	208	7.9	7.6	A
528	2.5	331	0.5	202	7.9	7.5	A
530	2.7	326	0.7	195	7.9	7.5	A
532	2.9	319	0.8	184	7.9	7.4	A
534	2.6	334	0.9	170	7.8	7.4	A
536	2.2	310	1.0	157	7.9	7.5	A
538	2.3	296	1.1	148	7.9	7.6	A
540	2.3	307	1.2	139	7.9	7.6	A
542	3.8	306	1.2	131	7.9	7.6	A
544	4.5	272	1.2	126	7.9	7.6	A
546	2.6	290	1.2	121	7.9	7.7	A
548	2.3	315	1.2	112	7.9	7.6	A
550	2.7	309	1.1	105	7.9	7.6	A
552	2.9	302	1.0	100	8.0	7.6	A
554	3.5	267	1.0	96	8.1	7.7	A
556	4.1	267	1.0	91	8.2	7.9	A
558	2.4	298	1.0	87	8.3	8.0	A
560	3.1	302	1.0	86	8.3	8.0	A
562	4.9	42	1.1	86	8.2	7.9	A
564	5.7	95	1.2	88	8.0	7.7	A
566	2.3	291	1.3	91	7.9	7.7	A
568	3.6	325	1.4	97	7.9	7.7	A
570	2.9	296	1.5	107	7.9	7.7	A
572	9.8	9	1.6	124	7.9	7.7	A
574	14.7	342	1.6	131	7.8	7.5	A
576	8.6	327	1.6	129	7.5	7.2	A
578	4.5	301	1.6	129	7.5	7.3	C
580	2.8	267	1.5	129	7.8	7.5	A
582	3.1	323	1.5	128	7.8	7.5	A
584	3.7	331	1.4	127	7.9	7.6	A
586	5.0	301	1.4	128	8.0	7.7	A
588	5.9	295	1.3	127	8.1	7.7	A
590	2.8	293	1.1	126	8.2	7.7	A
592	5.1	288	0.8	129	8.3	7.7	A
594	3.4	293	0.4	146	8.2	7.6	A
596	3.4	36	0.0	0	8.0	7.5	A
598	1.2	296	0.0	0	7.9	7.5	A
600	1.4	282	0.0	0	7.9	7.5	A
602	1.8	316	0.0	0	8.0	7.6	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
604	2.5	334	0.2	205	8.0	7.7	A
606	2.4	335	0.4	203	8.0	7.7	A
608	2.4	336	0.7	192	8.0	7.7	A
610	2.9	330	0.9	174	8.0	7.7	A
612	3.4	323	1.1	157	7.9	7.6	A
614	3.7	318	1.2	148	8.0	7.6	A
616	3.7	307	1.1	136	8.0	7.6	A
618	3.6	293	1.0	124	7.9	7.6	A
620	3.3	304	0.8	116	7.7	7.3	A
622	6.6	323	0.5	123	7.6	7.3	C
624			0.0	0	7.7	7.4	
626	1.9	341	0.0	0	7.6	7.3	A
628	1.9	313	0.0	0	7.6	7.1	A
630	0.2	136	0.0	0	7.5	7.0	A
632	2.0	285	0.0	0	7.5	7.0	A
634	3.2	287	0.0	0	7.6	7.0	A
636	1.2	348	0.0	0	7.6	7.1	A
638	2.3	264	0.0	0	7.7	7.2	A
640	2.4	244	0.2	220	7.7	7.3	C
642	6.4	21	0.5	195	7.7	7.3	A
644	7.2	331	0.9	150	7.6	7.2	A
646	8.5	330	1.0	127	7.6	7.1	A
648	2.4	309	1.0	125	7.6	7.1	A
650	2.5	297	1.0	123	7.6	7.1	A
652	2.7	312	1.0	121	7.7	7.2	A
654	1.3	322	1.0	120	7.8	7.3	A
656	1.5	321	1.0	120	7.8	7.1	A
658	3.4	321	1.0	120	7.6	7.0	A
660	4.6	358	1.0	120	7.6	7.0	A
662	5.1	1	1.0	121	7.6	7.0	A
664	4.0	13	1.0	122	7.6	7.0	C
666	0.6	331	1.0	124	7.6	7.0	C
668	1.7	327	1.0	125	7.6	7.1	A
670	2.7	315	1.0	127	7.7	7.2	A
672	3.7	342	1.0	129	7.8	7.2	A
674	2.9	338	1.0	130	7.8	7.1	A
676	3.6	336	1.0	130	7.8	7.2	A
678	3.5	330	1.1	130	7.8	7.1	A
680	3.7	323	1.2	131	7.9	7.2	A
682	3.2	331	1.2	133	7.9	7.3	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
684	3.3	334	1.2	137	7.9	7.3	A
686	3.4	334	1.1	140	7.9	7.1	A
688	3.9	335	1.0	142	7.7	7.0	A
690	3.9	336	1.0	145	7.7	7.0	A
692	3.3	318	1.1	147	7.8	7.0	A
694	2.9	308	1.2	138	7.7	7.1	A
696	3.1	330	1.1	118	7.6	7.2	A
698	2.7	323	1.0	103	7.6	7.3	A
700	3.0	323	0.9	94	7.4	7.1	A
702	4.3	297	0.9	90	7.3	7.0	A
704	4.0	286	1.0	89	7.3	7.1	A
706	2.4	296	0.9	90	7.4	7.2	A
708	3.2	292	0.8	90	7.3	7.2	A
710	2.8	280	0.8	88	7.3	7.2	A
712	2.7	310	0.8	86	7.4	7.5	A
714	1.6	10	0.8	84	7.5	7.6	A
716	3.9	284	0.8	84	7.5	7.6	C
718			0.8	84	7.4	7.6	
720	1.9	315	0.7	82	7.2	7.5	A
722	1.5	95	0.8	81	7.1	7.5	A
724			0.8	80	7.2	7.5	
726	2.1	272	0.8	81	7.3	7.5	C
728	4.4	276	0.8	81	7.3	7.5	C
730	4.7	298	0.8	80	7.4	7.5	A
732	3.9	303	0.8	81	7.5	7.5	A
734	2.9	300	0.9	83	7.5	7.5	A
736	1.7	255	1.0	85	7.5	7.5	A
738	4.2	189	1.0	86	7.2	7.2	A
740	1.7	285	1.0	84	7.0	7.0	A
742	6.4	305	1.1	84	7.3	7.4	A
744	6.2	308	1.1	84	7.6	7.6	A
746	2.2	6	1.1	85	7.6	7.6	A
748	5.1	327	1.1	86	7.5	7.6	A
750	5.0	330	1.1	85	7.5	7.5	A
752	2.1	288	1.0	85	7.4	7.5	C
754	3.8	316	1.1	87	7.3	7.5	C
756	3.9	325	1.2	87	7.4	7.6	C
758	6.2	272	1.2	87	7.5	7.6	C
760	3.3	238	1.2	87	7.5	7.6	C
762	1.6	1	1.2	87	7.5	7.5	C

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
764	2.4	282	1.2	89	7.5	7.5	A
766	2.5	174	1.2	91	7.5	7.5	C
768	3.3	296	1.2	92	7.4	7.4	A
770	2.7	300	1.1	91	7.4	7.3	A
772	2.6	299	1.0	91	7.2	7.1	A
774	2.4	305	1.0	91	7.1	7.0	A
776	2.5	311	1.0	90	7.1	7.0	A
778	2.3	314	1.0	88	7.0	7.0	A
780	1.9	320	1.1	87	7.0	6.9	A
782	2.2	320	1.2	87	7.0	6.8	A
784	2.4	313	1.2	88	7.0	6.8	A
786	2.6	308	1.3	88	7.0	6.8	A
788	2.6	312	1.4	89	6.9	6.7	A
790	3.0	300	1.4	92	6.9	6.7	A
792	3.4	290	1.5	95	7.1	6.9	A
794	3.3	291	1.6	95	7.1	7.0	A
796	3.4	297	1.7	96	7.2	7.1	A
798	3.3	303	1.8	99	7.2	7.2	A
800	3.4	305	2.0	108	7.4	7.4	A
802	3.0	314	2.1	122	7.6	7.5	A
804	3.4	315	2.1	135	7.6	7.5	A
806	3.6	317	2.0	137	7.5	7.4	A
808	4.1	323	2.0	136	7.4	7.3	A
810	4.5	324	2.1	135	7.4	7.3	A
812	3.8	315	2.3	135	7.4	7.2	A
814	3.7	314	2.3	135	7.3	7.2	A
816	3.6	315	2.2	134	7.4	7.3	A
818	4.1	311	2.2	134	7.5	7.3	A
820	5.2	311	2.1	134	7.6	7.4	A
822	4.3	315	2.0	135	7.6	7.5	A
824	3.0	319	2.0	135	7.6	7.5	A
826	2.1	316	2.0	135	7.6	7.6	C
828	10.0	299	2.1	136	7.6	7.5	A
830	7.1	297	2.2	138	7.6	7.5	A
832	6.0	305	2.2	138	7.5	7.6	A
834	5.0	313	2.2	139	7.5	7.6	A
836	4.1	313	2.2	139	7.5	7.7	A
838	3.9	312	2.2	139	7.5	7.7	A
840	3.9	317	2.3	138	7.4	7.7	A
842	4.1	317	2.3	138	7.3	7.6	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
844	3.7	302	2.3	138	7.3	7.6	A
846	4.1	308	2.2	138	7.3	7.6	A
848	31.9	135	2.3	138	7.3	7.6	D
850	5.4	314	2.3	138	7.4	7.6	A
852	3.4	319	2.2	137	7.5	7.6	A
854	3.9	322	2.3	138	7.5	7.6	A
856	4.1	312	2.4	139	7.5	7.6	A
858	4.2	312	2.4	139	7.5	7.5	A
860	4.5	318	2.5	140	7.5	7.6	A
862	4.4	319	2.4	140	7.4	7.6	A
864	3.7	315	2.1	138	7.4	7.7	A
866	3.6	309	2.0	138	7.5	7.7	A
868	3.7	306	2.0	137	7.5	7.7	A
870	3.7	310	2.0	138	7.4	7.7	A
872	3.9	322	2.1	139	7.4	7.8	A
874	3.8	323	2.1	138	7.3	7.7	A
876	3.8	310	2.2	139	7.1	7.6	A
878	3.8	313	2.2	140	7.1	7.6	A
880	3.5	318	2.2	141	7.1	7.6	A
882	3.6	316	2.2	140	7.2	7.7	A
884	4.1	314	2.3	139	7.3	7.7	A
886	4.2	311	2.3	138	7.4	7.7	A
888	4.1	308	2.2	138	7.4	7.7	A
890	4.0	311	2.2	139	7.3	7.7	A
892	3.9	311	2.2	139	7.3	7.8	A
894	3.3	318	2.2	139	7.3	7.9	A
896	8.0	80	2.2	138	7.4	7.9	C
898	3.8	279	2.2	138	7.3	7.9	A
900	3.4	303	2.3	138	7.2	8.0	A
902	2.5	269	2.4	139	7.1	8.0	C
904	3.4	291	2.4	139	7.0	7.8	A
906	3.8	317	2.4	140	7.0	7.7	A
908	3.8	318	2.4	141	7.0	7.7	A
910	4.0	315	2.5	141	7.1	7.7	A
912	3.7	318	2.5	141	7.1	7.7	C
914	4.0	311	2.4	140	7.1	7.7	C
916	4.6	320	2.4	140	7.2	7.7	A
918	4.7	320	2.5	140	7.3	7.7	A
920	4.2	317	2.5	140	7.3	7.8	A
922	4.8	308	2.5	140	7.4	8.0	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
924	4.7	308	2.5	139	7.4	8.1	A
926	4.4	305	2.5	140	7.4	8.1	A
928	4.1	313	2.6	140	7.4	8.1	A
930	4.1	315	2.5	139	7.4	8.1	A
932	4.4	314	2.5	139	7.4	8.1	A
934	4.3	312	2.4	140	7.3	8.0	A
936	4.4	319	2.3	139	7.1	7.9	A
938	3.4	328	2.2	138	7.0	7.8	A
940	3.4	317	2.2	138	7.1	7.8	A
942	4.1	318	2.4	138	7.1	7.8	A
944	4.6	318	2.5	137	7.2	7.8	A
946	4.8	325	2.5	138	7.3	7.8	A
948	4.7	313	2.5	139	7.4	7.8	A
950	4.2	316	2.5	139	7.4	7.8	A
952	4.4	323	2.5	140	7.3	7.8	A
954	4.3	321	2.5	141	7.3	7.9	A
956	3.9	312	2.3	141	7.2	7.9	A
958	4.0	312	2.2	142	7.2	8.0	A
960	4.1	313	2.3	142	7.2	8.0	A
962	3.9	311	2.3	142	7.1	8.1	A
964	3.6	319	2.3	142	7.1	8.1	A
966	3.6	323	2.3	142	7.0	8.0	A
968	4.4	326	2.4	142	7.0	7.8	A
970	3.9	324	2.5	143	7.0	7.7	A
972	4.0	316	2.4	143	7.1	7.7	A
974	3.9	325	2.4	143	7.3	7.9	A
976	4.3	328	2.5	142	7.4	8.0	A
978	5.3	321	2.6	141	7.4	7.9	A
980	4.0	324	2.5	141	7.4	8.0	A
982	3.9	313	2.4	142	7.4	8.0	A
984	4.1	308	2.4	144	7.3	8.0	A
986	4.7	305	2.5	144	7.2	8.0	A
988	4.7	315	2.6	144	7.1	8.0	A
990	4.6	316	2.6	143	7.1	8.1	A
992	3.2	315	2.5	144	7.1	8.1	A
994	1.8	311	2.4	144	7.1	8.1	A
996	2.4	325	2.4	144	7.0	8.1	A
998	3.5	323	2.5	145	7.0	8.0	A
1000	4.2	316	2.6	145	7.1	7.9	A
1002	4.1	314	2.7	145	7.1	7.8	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
1004	4.3	318	2.8	145	7.2	7.8	A
1006	4.4	317	2.7	145	7.3	7.9	A
1008	3.1	312	2.6	145	7.4	7.9	A
1010	3.9	316	2.6	145	7.4	8.0	A
1012	5.5	324	2.6	146	7.3	8.0	A
1014	5.8	330	2.6	146	7.3	8.0	A
1016	4.0	311	2.6	146	7.2	8.1	A
1018	4.8	323	2.7	145	7.1	8.1	A
1020	4.2	316	2.7	145	7.1	8.1	A
1022	4.3	312	2.8	146	7.1	8.2	A
1024	4.5	310	2.8	146	7.0	8.2	A
1026	4.1	314	2.8	145	7.0	8.2	A
1028	4.2	315	2.8	145	6.9	8.1	A
1030	4.4	317	2.8	145	6.9	8.1	A
1032	4.5	316	2.8	145	6.9	8.1	A
1034	4.6	305	2.8	145	7.0	8.0	A
1036	4.2	306	2.7	145	7.1	8.1	A
1038	4.2	309	2.6	145	7.2	8.1	A
1040	4.2	315	2.6	145	7.3	8.0	A
1042	4.4	306	2.7	145	7.3	8.1	A
1044	2.8	279	2.8	146	7.2	8.1	A
1046	4.0	323	2.7	146	7.1	8.1	A
1048	4.1	322	2.7	145	7.1	8.2	A
1050	4.2	312	2.8	145	7.1	8.3	A
1052	12.2	278	2.8	145	7.2	8.4	A
1054	13.5	276	2.8	145	7.3	8.5	A
1056	4.6	314	2.8	145	7.1	8.4	A
1058	4.4	316	2.8	145	6.9	8.2	A
1060	4.1	318	2.8	145	6.9	8.1	A
1062	4.2	308	2.8	145	6.9	8.1	A
1064	3.9	316	2.8	145	7.0	8.1	A
1066	3.8	318	2.9	145	7.1	8.1	A
1068	40.6	350	3.0	145	7.2	8.1	C
1070	40.0	352	2.9	145	7.3	8.1	C
1072	3.4	316	2.9	145	7.2	8.1	C
1074	3.1	319	2.9	145	7.2	8.1	A
1076	3.2	313	3.0	145	7.1	8.1	A
1078	3.6	310	3.0	145	7.1	8.1	A
1080	3.6	305	3.0	145	7.1	8.1	A
1082	3.3	308	3.0	145	7.1	8.2	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
1084	3.4	304	3.0	145	7.1	8.4	A
1086	4.6	294	3.0	145	7.1	8.4	A
1088	4.4	309	3.0	145	6.9	8.2	A
1090	3.8	313	3.1	144	6.9	8.1	A
1092	4.0	311	3.2	145	6.9	8.1	A
1094	4.5	303	3.2	145	7.0	8.1	A
1096	3.4	318	3.2	145	7.1	8.1	A
1098	3.6	319	3.2	145	7.3	8.1	A
1100	3.8	317	3.2	145	7.4	8.1	A
1102	3.5	317	3.2	144	7.4	8.1	A
1104	3.7	325	3.3	144	7.3	8.1	A
1106	3.8	317	3.4	144	7.3	8.1	A
1108			3.5	144	7.2	8.0	
1110			3.5	144	7.1	8.0	
1112	4.7	317	3.4	144	7.3	8.1	B
1114	6.2	4	3.2	144	7.4	8.1	B
1116	6.1	4	3.2	145	7.4	8.2	B
1118	3.4	320	3.2	145	7.3	8.2	A
1120	4.1	312	3.3	145	7.1	8.1	A
1122	4.2	312	3.4	145	7.1	8.1	A
1124	3.5	320	3.5	144	7.1	8.1	A
1126	3.9	314	3.6	144	7.2	8.0	A
1128	4.9	336	3.5	144	7.3	8.1	A
1130	4.5	336	3.4	145	7.4	8.1	A
1132	4.1	319	3.4	144	7.5	8.1	A
1134	3.9	318	3.4	144	7.4	8.0	A
1136	2.8	317	3.4	144	7.4	8.1	A
1138	3.3	326	3.4	144	7.4	8.1	A
1140	4.1	319	3.4	144	7.5	8.0	A
1142	4.0	322	3.5	144	7.5	8.1	A
1144	3.7	330	3.6	144	7.5	8.1	A
1146	4.1	321	3.7	143	7.6	8.1	A
1148	3.3	309	3.7	143	7.5	8.1	A
1150	3.6	311	3.6	144	7.3	8.0	A
1152	4.1	319	3.7	144	7.3	7.8	A
1154	4.2	318	3.7	144	7.4	7.8	A
1156	4.0	319	3.6	144	7.4	7.7	A
1158	3.4	319	3.6	143	7.4	7.7	A
1160	3.6	323	3.6	144	7.5	7.7	A
1162	3.9	320	3.7	144	7.5	7.7	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
1164	4.0	319	3.8	144	7.5	7.7	A
1166	4.1	319	3.7	144	7.5	7.7	A
1168	4.9	329	3.7	144	7.4	7.7	C
1170	4.9	326	3.7	143	7.5	7.7	A
1172	3.5	23	3.7	143	7.5	7.6	A
1174	3.4	24	3.8	144	7.6	7.6	A
1176	4.1	321	3.7	145	7.6	7.7	A
1178	4.1	327	3.7	145	7.6	7.7	A
1180	6.1	321	3.7	143	7.5	7.6	A
1182	6.2	318	3.7	143	7.5	7.4	A
1184	5.1	302	3.8	143	7.5	7.3	A
1186	3.1	314	3.8	142	7.5	7.3	A
1188	5.3	327	3.7	142	7.5	7.3	A
1190	4.4	341	3.7	143	7.6	7.3	A
1192	3.2	278	3.8	143	7.6	7.4	A
1194	3.2	277	3.8	142	7.7	7.5	A
1196	5.0	328	3.8	142	7.7	7.4	A
1198	3.0	338	3.8	140	7.6	7.4	A
1200	2.1	334	3.8	139	7.7	7.5	A
1202	4.3	344	3.8	140	7.8	7.4	A
1204	5.5	320	3.8	139	7.7	7.3	A
1206	5.3	315	3.8	139	7.7	7.3	A
1208	3.8	315	3.8	139	7.8	7.3	A
1210	3.6	295	3.9	140	7.8	7.3	A
1212	5.2	299	3.9	140	7.7	7.2	A
1214	4.5	312	3.9	140	7.6	7.1	A
1216	4.2	337	3.9	140	7.6	7.1	A
1218	4.1	345	3.9	140	7.6	7.1	A
1220	3.2	300	3.8	140	7.6	7.1	A
1222	3.5	303	3.9	140	7.6	7.2	A
1224	3.9	310	4.0	140	7.7	7.3	A
1226	2.9	325	4.0	140	7.7	7.3	A
1228	3.5	327	4.0	140	7.8	7.3	A
1230	5.8	310	4.0	141	7.8	7.3	B
1232	3.5	256	4.1	141	7.9	7.4	D
1234			4.2	141	7.9	7.5	
1236	7.4	338	4.2	141	7.9	7.5	D
1238	6.8	306	4.1	141	7.9	7.5	D
1240	5.0	324	4.0	141	8.0	7.4	B
1242	4.8	326	4.1	142	7.9	7.3	B

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
1244	15.2	332	4.1	143	7.8	7.2	D
1246	11.5	347	4.1	143	7.8	7.2	B
1248	8.9	340	4.2	142	7.8	7.2	D
1250	4.6	274	4.1	142	7.9	7.3	C
1252	4.5	293	4.1	142	7.9	7.3	A
1254	4.8	293	4.2	143	8.0	7.4	A
1256	6.7	305	4.3	143	8.0	7.4	C
1258	29.5	245	4.2	142	7.9	7.3	B
1260			4.2	142	7.8	7.3	
1262			4.3	143	7.8	7.3	
1264			4.5	143	7.9	7.3	
1266	8.7	348	4.4	143	7.9	7.3	D
1268			4.1	143	7.9	7.3	
1270			4.0	143	7.9	7.3	
1272			4.0	143	7.9	7.3	
1274	7.2	315	4.0	143	7.9	7.1	B
1276	3.9	314	4.1	143	7.8	7.0	B
1278	4.1	315	4.2	144	7.7	7.0	B
1280	2.7	353	4.1	145	7.6	7.1	D
1282	11.1	356	4.0	145	7.6	7.1	D
1284			4.0	144	7.7	7.1	
1286	6.4	263	4.1	143	7.7	7.1	A
1288	6.8	252	4.1	143	7.4	6.8	A
1290	6.9	330	4.1	143	7.2	6.6	A
1292	5.3	311	3.9	144	7.2	6.7	A
1294	12.1	322	3.9	144	7.5	6.9	A
1296	5.2	253	4.0	144	7.7	7.2	A
1298	4.1	329	4.0	144	7.8	7.3	C
1300	3.4	314	4.0	144	7.9	7.3	C
1302	5.6	281	4.0	145	7.9	7.3	A
1304	6.9	274	3.9	145	7.8	7.3	A
1306	5.9	313	4.0	146	7.8	7.2	D
1308	5.2	312	4.0	147	7.8	7.2	D
1310			4.0	148	7.7	7.2	
1312	6.3	291	4.0	147	7.7	7.2	D
1314	5.3	328	4.0	146	7.8	7.3	B
1316			4.0	146	7.9	7.4	
1318	4.3	312	4.0	146	7.9	7.6	B
1320			3.9	147	7.9	7.6	
1322	7.2	317	3.9	148	7.9	7.6	D

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
1324			4.0	148	7.9	7.5	
1326	4.9	334	3.9	148	7.9	7.5	C
1328	4.7	333	3.9	148	7.9	7.5	A
1330	4.4	309	4.0	147	7.9	7.5	A
1332	3.3	319	4.0	148	7.9	7.5	A
1334	3.3	328	3.9	149	7.9	7.5	A
1336	3.0	311	3.8	148	7.8	7.4	A
1338	4.2	321	3.8	148	7.6	7.3	A
1340	4.4	325	3.8	147	7.6	7.3	A
1342	3.7	322	3.8	146	7.6	7.3	A
1344	4.4	312	3.9	146	7.6	7.3	A
1346	4.5	318	3.9	145	7.7	7.3	A
1348			3.9	145	7.8	7.5	
1350	5.1	313	4.2	145	7.8	7.5	A
1352	4.0	316	4.2	143	7.9	7.5	A
1354	4.1	324	4.2	144	7.8	7.5	A
1356	4.4	321	4.2	156	7.8	7.5	A
1358	3.6	352	4.2	178	7.8	7.5	A
1360	5.0	8	4.2	200	7.8	7.5	A
1362	4.7	8	4.2	207	7.9	7.5	A
1364	3.7	5	4.2	200	7.9	7.5	A
1366	4.3	13	4.2	183	7.9	7.5	A
1368	5.8	348	4.2	166	7.7	7.3	C
1370	43.1	356	4.2	157	7.6	7.2	B
1372			4.2	148	7.6	7.2	
1374			4.2	142	7.7	7.3	
1376			4.2	136	7.8	7.3	
1378	4.6	297	4.2	135	7.9	7.4	B
1380	7.6	274	4.2	133	7.9	7.5	B
1382	5.5	297	4.2	132	7.9	7.5	D
1384	4.0	290	4.2	131	7.9	7.5	B
1386			4.2	131	7.9	7.5	
1388			4.2	130	7.9	7.5	
1390	3.3	239	4.3	130	7.8	7.4	D
1392	7.5	319	4.3	131	7.7	7.4	D
1394	7.5	152	4.3	131	7.8	7.5	D
1396	6.2	2	4.3	131	7.8	7.4	D
1398	1.1	210	4.3	131	7.7	7.3	D
1400	5.1	269	4.3	133	7.6	7.3	D
1402	6.5	292	4.3	133	7.6	7.3	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
1404	7.4	290	4.3	133	7.6	7.3	A
1406	6.5	339	4.3	133	7.6	7.3	C
1408	3.4	347	4.3	135	7.8	7.4	A
1410	7.5	324	4.3	137	7.9	7.5	A
1412			4.3	139	7.9	7.6	
1414	4.4	312	4.3	139	7.9	7.6	A
1416			4.3	143	7.9	7.6	
1418			4.3	149	7.9	7.5	
1420	3.8	298	4.3	152	7.8	7.5	A
1422			4.3	152	7.8	7.5	
1424			4.3	151	7.9	7.6	
1426	4.0	286	4.3	150	7.9	7.6	D
1428			4.3	149	7.8	7.5	
1430	44.3	279	4.3	150	7.7	7.4	D
1432	41.3	280	4.3	150	7.6	7.3	D
1434	41.1	279	4.3	150	7.6	7.3	D
1436	6.5	297	4.3	151	7.6	7.3	D
1438	3.9	315	4.3	150	7.6	7.3	B
1440	5.5	310	4.3	149	7.6	7.3	D
1442	5.1	317	4.3	149	7.7	7.4	A
1444	5.8	309	4.3	148	7.8	7.5	C
1446			4.3	148	7.8	7.5	
1448	5.4	305	4.3	148	7.8	7.3	C
1450	3.4	312	4.3	160	7.8	7.3	C
1452			4.3	189	7.8	7.3	
1454	2.8	12	4.3	203	7.8	7.4	C
1456	5.7	13	4.3	202	7.9	7.5	C
1458	7.0	352	4.3	192	7.9	7.6	A
1460	6.3	331	4.3	175	7.8	7.5	A
1462	4.0	349	4.3	162	7.6	7.3	A
1464	5.7	335	4.3	152	7.6	7.2	A
1466	6.2	325	4.3	145	7.6	7.2	A
1468	3.7	304	4.3	139	7.6	7.1	A
1470	5.0	309	4.3	137	7.6	7.1	A
1472	5.9	312	4.3	137	7.6	7.2	A
1474	5.3	29	4.4	136	7.6	7.2	A
1476	4.8	301	4.4	136	7.6	7.2	C
1478	5.2	298	4.4	136	7.6	7.2	C
1480	4.2	314	4.4	138	7.6	7.2	A
1482	5.0	323	4.4	140	7.6	7.2	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
1484	4.9	334	4.4	145	7.6	7.2	C
1486	4.4	294	4.4	149	7.6	7.2	D
1488	3.3	304	4.4	147	7.6	7.2	B
1490	4.9	336	4.4	146	7.6	7.2	D
1492			4.4	145	7.5	7.1	
1494	2.4	283	4.4	145	7.4	7.1	D
1496	5.2	326	4.4	147	7.4	7.1	D
1498	4.8	319	4.4	146	7.4	7.1	D
1500	5.8	308	4.4	153	7.4	7.1	D
1502			4.4	180	7.5	7.1	
1504			4.4	211	7.6	7.2	
1506	3.7	28	4.4	214	7.6	7.3	A
1508	3.4	13	4.4	202	7.6	7.3	A
1510	3.5	359	4.4	184	7.6	7.3	A
1512			4.4	167	7.6	7.3	
1514			4.3	159	7.6	7.3	
1516	2.0	28	4.4	151	7.6	7.3	C
1518	3.7	302	4.5	146	7.7	7.3	C
1520	4.5	298	4.5	141	7.7	7.3	C
1522	10.7	303	4.4	138	7.6	7.2	A
1524	11.4	303	4.3	137	7.5	7.1	A
1526	3.0	314	4.3	136	7.5	7.1	A
1528	3.6	304	4.2	135	7.5	7.1	A
1530	3.7	309	4.2	135	7.5	7.1	A
1532	3.5	320	4.2	135	7.6	7.2	A
1534	5.1	298	4.2	136	7.7	7.3	C
1536	5.1	285	4.3	136	7.8	7.4	C
1538	4.9	293	4.4	138	7.8	7.5	A
1540	3.3	304	4.5	141	7.8	7.5	A
1542	4.2	343	4.4	146	7.7	7.4	C
1544	4.4	342	4.2	149	7.6	7.3	C
1546	4.3	303	4.2	148	7.6	7.3	A
1548	4.8	332	4.2	148	7.7	7.4	C
1550	4.3	331	4.2	148	7.8	7.5	C
1552	3.9	332	4.3	147	7.7	7.4	C
1554	2.9	326	4.3	147	7.5	7.3	A
1556	4.4	325	4.4	146	7.5	7.3	A
1558	4.9	311	4.4	145	7.5	7.2	A
1560	5.2	314	4.5	145	7.5	7.3	A
1562	4.8	314	4.5	146	7.5	7.3	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
1564	4.5	315	4.5	146	7.6	7.4	A
1566	4.9	318	4.4	146	7.6	7.5	A
1568	4.4	318	4.5	147	7.7	7.5	A
1570	4.2	311	4.5	146	7.7	7.5	A
1572	4.4	316	4.4	146	7.6	7.5	A
1574	4.6	320	4.4	146	7.6	7.5	A
1576	4.4	322	4.4	146	7.6	7.5	A
1578	4.2	321	4.3	146	7.6	7.5	A
1580	4.3	318	4.2	146	7.6	7.6	A
1582	4.5	313	4.2	146	7.6	7.7	A
1584	4.7	308	4.2	146	7.5	7.7	A
1586	4.7	314	4.2	146	7.4	7.6	A
1588	4.5	315	4.2	145	7.4	7.5	A
1590	4.5	314	4.2	145	7.5	7.5	A
1592	4.4	311	4.2	145	7.5	7.5	A
1594	4.8	307	4.2	145	7.5	7.6	A
1596	5.0	306	4.2	145	7.5	7.5	A
1598	4.7	309	4.2	145	7.5	7.5	A
1600	4.2	310	4.1	146	7.5	7.5	A
1602	3.9	310	4.1	146	7.5	7.5	A
1604	4.4	301	4.1	146	7.4	7.4	A
1606	5.3	289	4.0	146	7.3	7.3	A
1608	4.2	312	4.1	146	7.1	7.2	A
1610	4.2	331	4.2	145	7.2	7.3	A
1612	3.8	331	4.2	145	7.3	7.6	A
1614	4.1	323	4.2	145	7.3	7.7	A
1616	4.2	318	4.2	145	7.2	7.6	A
1618	4.0	320	4.2	145	7.3	7.4	A
1620	4.2	316	4.2	145	7.3	7.3	A
1622	3.9	322	4.2	145	7.3	7.4	A
1624	3.8	322	4.2	146	7.4	7.5	A
1626	4.4	320	4.2	146	7.4	7.5	A
1628	4.4	322	4.2	147	7.4	7.5	A
1630	4.1	319	4.2	147	7.4	7.5	A
1632	4.1	308	4.1	146	7.4	7.4	A
1634	4.6	314	4.2	147	7.3	7.3	A
1636	4.6	324	4.2	146	7.4	7.4	A
1638	4.0	322	4.1	146	7.4	7.5	A
1640	4.3	313	4.2	146	7.4	7.5	A
1642	4.4	310	4.2	145	7.3	7.5	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
1644	4.3	315	4.2	145	7.2	7.5	A
1646	4.4	314	4.2	145	7.1	7.4	A
1648	4.3	311	4.2	145	7.1	7.3	A
1650	4.0	322	4.2	145	7.2	7.3	A
1652	4.2	322	4.1	144	7.2	7.3	A
1654	4.7	320	4.1	144	7.2	7.3	A
1656	3.4	311	4.0	145	7.4	7.3	A
1658	3.2	306	4.0	145	7.5	7.3	A
1660	4.0	317	4.0	145	7.5	7.3	A
1662	4.4	318	4.0	146	7.4	7.3	A
1664	4.5	320	4.0	146	7.4	7.3	A
1666	4.4	320	4.0	145	7.3	7.3	A
1668	4.4	315	4.0	146	7.4	7.4	A
1670	4.4	324	4.0	145	7.4	7.5	A
1672	4.3	323	4.0	145	7.4	7.5	A
1674	4.3	320	4.1	145	7.4	7.5	A
1676	4.4	322	4.1	146	7.2	7.5	A
1678	4.5	319	4.2	146	7.2	7.4	A
1680	4.5	319	4.2	147	7.3	7.3	A
1682	4.4	321	4.2	147	7.3	7.3	A
1684	4.8	325	4.1	146	7.4	7.3	A
1686	4.7	326	4.0	147	7.5	7.3	A
1688	4.5	327	4.0	148	7.6	7.5	A
1690	3.9	321	3.9	148	7.6	7.5	A
1692	3.8	314	3.8	144	7.6	7.5	A
1694	4.0	308	3.8	140	7.6	7.5	A
1696	4.2	308	3.8	138	7.6	7.5	A
1698	4.3	310	3.8	137	7.6	7.5	A
1700	4.2	314	3.9	137	7.6	7.5	A
1702	4.3	313	3.9	137	7.6	7.6	A
1704	4.4	309	3.9	137	7.5	7.6	A
1706	4.4	311	4.0	137	7.4	7.6	A
1708	4.3	307	3.9	137	7.3	7.4	A
1710	4.0	305	3.9	136	7.3	7.3	A
1712	4.0	307	3.8	135	7.3	7.3	A
1714	3.9	306	3.7	134	7.3	7.3	A
1716	4.1	302	3.8	132	7.4	7.3	A
1718	4.4	303	3.8	132	7.5	7.4	A
1720	4.6	307	3.8	133	7.6	7.5	A
1722	4.5	308	3.8	133	7.6	7.5	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
1724	4.4	304	3.8	132	7.6	7.5	A
1726	4.2	302	3.7	131	7.6	7.5	A
1728	4.2	308	3.6	131	7.6	7.5	A
1730	4.2	306	3.6	130	7.6	7.6	A
1732	4.0	304	3.6	130	7.7	7.6	A
1734	3.9	303	3.6	130	7.7	7.7	A
1736	4.0	301	3.6	130	7.7	7.7	A
1738	4.0	301	3.6	130	7.5	7.5	A
1740	4.1	299	3.6	129	7.3	7.3	A
1742	4.3	303	3.6	129	7.2	7.2	A
1744	4.1	303	3.6	129	7.2	7.2	A
1746	3.9	303	3.6	129	7.3	7.2	A
1748	4.2	304	3.7	128	7.4	7.2	A
1750	4.2	307	3.7	128	7.4	7.2	A
1752	4.3	307	3.7	128	7.4	7.2	A
1754	3.8	293	3.6	129	7.4	7.2	A
1756	4.1	291	3.6	130	7.3	7.2	A
1758	4.5	293	3.6	130	7.3	7.2	A
1760	4.0	304	3.6	130	7.4	7.2	A
1762	4.0	309	3.6	131	7.5	7.3	A
1764	3.9	297	3.6	132	7.5	7.3	A
1766	4.3	279	3.6	132	7.4	7.3	A
1768	4.5	291	3.7	134	7.3	7.3	A
1770	4.7	306	3.7	137	7.2	7.1	A
1772	4.3	313	3.6	142	7.1	6.9	A
1774	4.3	313	3.8	144	7.1	6.9	A
1776	4.2	308	3.8	144	7.1	7.0	A
1778	4.0	306	3.8	143	7.2	7.0	A
1780	4.0	306	3.8	142	7.3	7.0	A
1782	4.0	311	3.8	142	7.4	7.0	A
1784	3.4	340	3.8	176	7.5	7.1	A
1786	2.8	60	3.8	238	7.5	7.1	A
1788	3.1	90	3.9	265	7.5	7.0	A
1790	3.0	94	3.9	266	7.5	7.0	A
1792	3.0	81	3.9	257	7.4	7.0	A
1794	3.0	72	3.9	248	7.3	7.0	A
1796	3.3	45	3.9	230	7.3	7.0	A
1798	3.3	19	3.9	205	7.4	7.0	A
1800	3.4	352	3.9	177	7.4	7.0	A
1802	4.2	327	3.9	160	7.3	6.9	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
1804	4.1	312	3.9	146	7.3	6.8	A
1806	4.5	311	3.9	138	7.3	6.9	A
1808	4.8	303	3.9	133	7.4	7.0	A
1810	4.4	305	3.9	132	7.4	7.0	A
1812	4.5	303	3.9	131	7.5	7.1	A
1814	4.6	297	3.9	130	7.5	7.1	A
1816	4.5	303	3.9	129	7.4	7.0	A
1818	4.5	307	4.0	129	7.4	7.0	A
1820	4.6	304	4.0	128	7.4	7.0	A
1822	4.8	302	4.0	127	7.4	7.1	A
1824	4.6	300	4.0	128	7.5	7.2	A
1826	4.6	299	4.0	128	7.5	7.2	A
1828	4.9	303	4.0	128	7.6	7.3	A
1830	4.8	306	4.0	129	7.6	7.3	A
1832	4.8	307	4.0	128	7.4	7.2	A
1834	5.1	309	4.0	127	7.3	7.1	A
1836	5.3	316	4.0	128	7.3	7.1	A
1838	4.5	317	4.0	128	7.4	7.1	A
1840	3.8	312	4.0	128	7.4	7.1	A
1842	4.5	324	4.0	128	7.5	7.1	A
1844	5.4	327	4.0	128	7.5	7.2	A
1846	5.0	311	4.1	128	7.5	7.3	A
1848	4.6	311	4.1	129	7.6	7.3	A
1850	4.6	314	4.1	130	7.6	7.3	A
1852	4.9	316	4.1	132	7.6	7.3	A
1854	4.8	316	4.1	135	7.6	7.3	A
1856	4.7	319	4.1	140	7.6	7.3	A
1858	4.6	320	4.1	142	7.6	7.3	A
1860	4.5	320	4.1	141	7.6	7.3	A
1862	4.6	318	4.1	141	7.5	7.2	A
1864	4.3	320	4.1	141	7.4	7.1	A
1866	4.6	321	4.1	141	7.4	7.0	A
1868	4.4	318	4.1	141	7.4	7.0	A
1870	4.6	316	4.1	140	7.5	7.1	A
1872	4.6	317	4.1	139	7.6	7.1	A
1874	4.4	322	4.1	144	7.6	7.1	A
1876	4.6	356	4.2	178	7.6	7.1	A
1878	4.1	24	4.2	210	7.5	7.0	A
1880	4.0	32	4.2	218	7.4	7.0	A
1882	4.3	25	4.2	213	7.4	7.2	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
1884	4.3	3	4.2	191	7.4	7.2	A
1886	4.2	344	4.2	170	7.5	7.1	A
1888	4.4	331	4.2	159	7.6	7.1	A
1890	4.9	326	4.1	149	7.6	7.1	A
1892	4.9	313	4.1	137	7.5	7.0	A
1894	4.7	305	4.1	132	7.5	7.0	A
1896	4.6	310	4.0	131	7.4	7.0	A
1898	4.6	312	4.0	129	7.4	7.0	A
1900	4.5	309	3.9	127	7.5	7.0	A
1902	4.2	301	3.8	126	7.5	7.1	A
1904	4.3	299	3.7	126	7.5	7.1	A
1906	4.7	300	3.7	126	7.5	7.2	A
1908	4.4	305	3.9	125	7.5	7.2	A
1910	4.2	309	3.9	125	7.5	7.2	A
1912	4.3	307	3.8	124	7.5	7.2	A
1914	4.5	304	3.9	124	7.5	7.2	A
1916	4.7	305	3.9	124	7.5	7.2	A
1918	4.7	307	3.8	124	7.5	7.2	A
1920	4.1	296	3.8	124	7.5	7.3	A
1922	4.2	297	3.8	123	7.6	7.3	A
1924	4.6	306	3.9	122	7.5	7.2	A
1926	4.4	304	3.9	123	7.4	7.2	A
1928	4.5	306	3.9	124	7.4	7.1	A
1930	4.4	309	3.8	124	7.4	7.2	A
1932	4.4	309	3.9	123	7.5	7.3	A
1934	4.4	302	4.0	123	7.6	7.3	A
1936	4.6	303	4.0	123	7.6	7.3	A
1938	4.6	308	3.9	124	7.7	7.4	A
1940	4.4	306	3.9	124	7.7	7.3	A
1942	4.3	305	4.0	125	7.6	7.2	A
1944	4.6	307	4.0	125	7.6	7.2	A
1946	4.5	309	4.0	125	7.6	7.3	A
1948	4.7	308	4.0	125	7.6	7.3	A
1950	4.7	308	4.0	126	7.6	7.3	A
1952	4.6	307	4.0	126	7.6	7.3	A
1954	4.3	304	3.9	125	7.6	7.3	A
1956	4.5	306	3.8	124	7.5	7.2	A
1958	4.7	309	3.8	124	7.4	7.1	A
1960	4.6	304	3.8	123	7.4	7.2	A
1962	4.5	304	3.8	122	7.5	7.2	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
1964	4.4	301	3.8	121	7.6	7.2	A
1966	4.8	298	3.9	122	7.6	7.3	A
1968	4.9	299	4.0	123	7.7	7.3	A
1970	4.8	307	4.0	124	7.8	7.3	A
1972	5.7	307	4.0	126	7.7	7.3	A
1974	5.8	303	4.0	126	7.6	7.3	A
1976	4.8	299	4.0	126	7.7	7.3	A
1978	4.6	310	4.0	125	7.6	7.3	A
1980	4.3	315	4.0	125	7.6	7.3	A
1982	4.4	304	4.0	126	7.6	7.4	A
1984	4.6	303	4.0	127	7.7	7.5	A
1986	4.6	304	4.0	127	7.6	7.4	A
1988	4.6	308	4.0	126	7.5	7.3	A
1990	4.6	306	4.0	126	7.5	7.3	A
1992	4.5	304	4.0	127	7.5	7.3	A
1994	4.3	305	4.0	128	7.5	7.3	A
1996	4.6	306	4.1	128	7.5	7.3	A
1998	4.7	310	4.2	127	7.6	7.3	A
2000	4.6	311	4.2	128	7.6	7.3	A
2002	4.7	309	4.1	128	7.6	7.3	A
2004	4.7	310	4.1	127	7.6	7.3	A
2006	4.0	312	4.2	128	7.7	7.4	A
2008	4.0	312	4.2	129	7.7	7.5	A
2010	4.5	310	4.2	129	7.6	7.5	A
2012	4.5	310	4.2	133	7.6	7.4	A
2014	4.3	310	4.2	137	7.6	7.3	A
2016	4.4	315	4.2	138	7.6	7.3	A
2018	4.4	321	4.2	139	7.6	7.3	A
2020	4.5	316	4.2	140	7.5	7.2	A
2022	4.3	313	4.2	140	7.5	7.2	A
2024	4.4	318	4.1	139	7.4	7.2	A
2026	4.4	318	4.1	138	7.4	7.2	A
2028	4.5	319	4.1	139	7.5	7.2	A
2030	4.8	314	4.0	137	7.4	7.2	A
2032	4.3	318	4.1	133	7.4	7.2	A
2034	4.0	315	4.1	131	7.4	7.1	A
2036	4.4	307	4.1	131	7.3	7.1	A
2038	4.7	308	4.0	130	7.3	7.2	A
2040	4.3	310	4.0	129	7.3	7.2	A
2042	4.3	312	4.0	129	7.3	7.1	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
2044	4.7	306	4.0	128	7.1	7.0	A
2046	4.9	304	4.1	129	7.1	7.0	A
2048	4.7	311	4.2	128	7.0	7.0	A
2050	4.7	314	4.2	129	7.1	7.0	A
2052	4.8	310	4.2	128	7.1	7.0	A
2054	4.7	307	4.2	128	7.1	7.0	A
2056	4.5	310	4.2	130	7.2	7.0	A
2058	4.7	312	4.2	130	7.2	7.1	A
2060	5.0	311	4.2	130	7.3	7.2	A
2062	4.9	311	4.2	131	7.4	7.2	A
2064	4.8	312	4.2	130	7.3	7.1	A
2066	4.4	314	4.2	131	7.3	7.1	A
2068	4.2	315	4.2	133	7.4	7.1	A
2070	4.3	313	4.2	136	7.3	7.2	A
2072	4.3	317	4.2	139	7.4	7.2	A
2074	4.5	318	4.1	140	7.4	7.2	A
2076	4.3	318	4.0	141	7.3	7.2	A
2078	4.0	315	4.0	139	7.3	7.1	A
2080	3.7	314	4.0	137	7.2	7.1	A
2082	4.3	321	4.0	137	7.2	7.0	A
2084	4.4	320	4.0	137	7.3	7.0	A
2086	4.4	318	4.0	137	7.3	7.0	A
2088	4.4	327	4.0	149	7.4	7.0	A
2090	4.2	357	4.0	182	7.5	7.0	A
2092	4.3	31	4.0	215	7.5	7.1	A
2094	4.2	32	4.0	216	7.5	7.1	A
2096	3.9	15	4.0	200	7.4	7.1	A
2098	3.9	355	4.0	180	7.4	7.1	A
2100	4.1	335	4.0	159	7.3	7.0	A
2102	4.3	329	4.0	149	7.4	7.0	A
2104	4.5	323	4.0	140	7.5	7.1	A
2106	4.5	314	4.0	134	7.6	7.1	A
2108	4.5	313	4.1	129	7.6	7.1	A
2110	4.5	311	4.1	127	7.6	7.1	A
2112	4.7	309	4.1	126	7.5	7.1	A
2114	4.9	305	4.1	124	7.4	7.0	A
2116	4.8	299	4.1	123	7.3	7.0	A
2118	4.5	304	4.1	123	7.3	7.0	A
2120	4.6	300	4.1	123	7.4	7.1	A
2122	4.6	298	4.1	123	7.4	7.1	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
2124	4.4	295	4.1	123	7.5	7.2	A
2126	4.3	297	4.1	125	7.6	7.2	A
2128	4.5	299	4.1	126	7.5	7.1	A
2130	4.5	303	4.1	126	7.5	7.1	A
2132	4.5	304	4.1	127	7.4	7.1	A
2134	4.6	303	4.1	127	7.4	7.1	A
2136	4.7	307	4.1	127	7.4	7.1	A
2138	4.9	311	4.1	127	7.5	7.2	A
2140	4.2	313	4.1	127	7.5	7.2	A
2142	4.1	308	4.1	128	7.5	7.1	A
2144	4.4	305	4.1	129	7.3	7.0	A
2146	4.6	299	4.1	129	7.2	7.0	A
2148	5.6	308	4.1	131	7.3	7.0	A
2150	5.9	311	4.1	134	7.2	7.0	A
2152	4.5	322	4.1	135	7.2	7.0	A
2154	4.4	317	4.1	136	7.3	7.1	A
2156	4.4	313	4.1	136	7.4	7.1	A
2158	4.2	314	4.1	137	7.4	7.1	A
2160	4.6	310	4.1	137	7.4	7.1	A
2162	4.6	317	4.1	137	7.4	7.1	A
2164	4.6	324	4.2	138	7.4	7.1	A
2166	4.9	319	4.2	138	7.3	7.1	A
2168	4.7	314	4.2	137	7.3	7.1	A
2170	4.7	310	4.2	136	7.4	7.1	A
2172	4.3	312	4.2	136	7.4	7.1	A
2174	4.1	313	4.2	135	7.3	7.1	A
2176	4.0	316	4.2	135	7.2	7.0	A
2178	4.8	322	4.2	145	7.3	6.9	A
2180	4.7	347	4.2	175	7.3	6.9	A
2182	4.0	12	4.2	204	7.3	6.9	A
2184	3.7	31	4.2	217	7.4	7.0	A
2186	4.2	27	4.2	208	7.4	7.0	A
2188	4.7	7	4.2	190	7.4	7.1	A
2190	4.9	342	4.2	168	7.3	7.0	A
2192	4.4	325	4.0	148	7.2	7.0	A
2194	4.2	318	4.0	140	7.3	6.9	A
2196	4.4	317	4.0	134	7.3	6.8	A
2198	4.6	312	4.0	131	7.4	6.9	A
2200	4.3	305	4.0	129	7.5	7.0	A
2202	5.0	297	4.0	126	7.5	7.0	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
2204	4.4	306	4.0	124	7.5	7.0	A
2206	4.2	302	4.0	123	7.3	6.8	A
2208	4.7	303	4.0	121	7.2	6.7	A
2210	4.7	299	4.0	121	7.1	6.7	A
2212	4.7	302	4.0	121	7.1	6.6	A
2214	4.5	300	4.0	119	7.1	6.6	A
2216	4.6	298	4.0	120	7.1	6.7	A
2218	4.6	302	4.1	122	7.1	6.7	A
2220	4.7	297	4.2	122	7.1	6.8	A
2222	4.4	303	4.2	123	7.1	6.7	A
2224	4.3	304	4.2	124	7.1	6.7	A
2226	4.6	303	4.2	124	7.1	6.7	A
2228	4.3	304	4.2	125	7.1	6.8	A
2230	4.0	303	4.2	124	7.2	6.9	A
2232	4.7	301	4.2	123	7.3	7.0	A
2234	4.6	300	4.2	122	7.3	7.0	A
2236	4.3	300	4.2	124	7.2	6.9	A
2238	4.8	310	4.3	128	7.1	6.8	A
2240	4.8	314	4.4	131	7.1	6.8	A
2242	4.9	314	4.4	131	7.1	6.8	A
2244	4.8	312	4.4	131	7.1	6.9	A
2246	5.0	309	4.4	131	7.2	7.0	A
2248	5.0	306	4.4	130	7.2	7.0	A
2250	5.0	305	4.4	130	7.2	7.0	A
2252	5.1	308	4.4	130	7.2	7.0	A
2254	4.6	311	4.4	131	7.1	7.0	A
2256	4.6	310	4.4	131	7.1	7.0	A
2258	4.6	297	4.4	132	7.1	7.0	A
2260	4.3	299	4.4	132	7.1	7.0	A
2262	4.6	311	4.4	131	7.2	7.0	A
2264	5.3	301	4.4	132	7.2	7.0	A
2266	5.6	295	4.4	132	7.1	7.0	A
2268	4.8	306	4.4	132	7.1	6.9	A
2270	4.6	311	4.4	132	7.0	6.8	A
2272	4.7	308	4.4	132	7.0	6.8	A
2274	4.7	309	4.4	132	7.0	6.8	A
2276	4.5	315	4.4	132	7.0	6.8	A
2278	4.8	309	4.4	132	7.1	6.8	A
2280	4.9	305	4.5	131	7.1	6.9	A
2282	4.6	309	4.4	131	7.1	7.0	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
2284	4.5	312	4.5	131	7.1	7.0	A
2286	4.6	306	4.5	130	7.1	7.0	A
2288	4.7	306	4.5	130	7.1	7.0	A
2290	4.7	307	4.5	131	7.1	7.1	A
2292	4.6	307	4.6	131	7.1	7.1	A
2294	4.8	308	4.6	131	7.1	7.2	A
2296	5.2	309	4.6	132	7.1	7.2	A
2298	4.9	312	4.6	132	7.1	7.2	A
2300	4.6	311	4.6	132	7.1	7.1	A
2302	4.7	311	4.6	132	7.0	7.0	A
2304	5.0	308	4.6	132	7.0	7.0	A
2306	4.8	306	4.6	131	7.1	7.0	A
2308	4.6	308	4.6	131	7.1	7.1	A
2310	4.7	308	4.6	131	7.1	7.2	A
2312	4.8	305	4.6	131	7.2	7.2	A
2314	4.8	308	4.7	131	7.2	7.2	A
2316	4.7	308	4.7	131	7.1	7.2	A
2318	4.9	306	4.8	131	7.1	7.2	A
2320	5.1	308	4.8	131	7.1	7.2	A
2322	5.0	312	4.8	130	7.1	7.3	A
2324	4.7	314	4.8	130	7.1	7.4	A
2326	4.5	311	4.8	130	7.1	7.5	A
2328	4.5	308	4.8	130	7.2	7.5	A
2330	4.5	309	4.8	130	7.3	7.4	A
2332	4.5	311	4.8	130	7.2	7.3	A
2334	4.4	311	4.8	131	7.1	7.2	A
2336	4.4	319	4.8	131	7.1	7.1	A
2338	4.3	320	4.8	131	7.1	7.2	A
2340	4.0	319	4.8	131	7.2	7.3	A
2342	4.0	318	4.8	131	7.3	7.3	A
2344	4.7	316	4.9	131	7.3	7.3	A
2346	5.6	320	5.0	132	7.3	7.3	A
2348	5.4	322	5.0	131	7.3	7.3	A
2350	4.8	324	5.0	131	7.2	7.4	A
2352	4.8	328	5.0	130	7.2	7.5	A
2354	5.3	327	5.0	131	7.2	7.6	A
2356	5.4	319	5.0	131	7.3	7.6	A
2358	5.3	314	5.0	130	7.3	7.6	A
2360	5.2	312	5.0	130	7.2	7.5	A
2362	4.9	310	5.0	130	7.2	7.4	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
2364	4.5	310	5.0	131	7.1	7.3	A
2366	4.4	314	5.0	130	7.1	7.2	A
2368	4.2	317	5.0	130	7.1	7.2	A
2370	4.6	321	5.1	130	7.1	7.3	A
2372	3.7	322	5.2	130	7.2	7.4	A
2374	3.8	316	5.2	130	7.2	7.5	A
2376	4.3	313	5.2	130	7.2	7.6	A
2378	5.6	303	5.2	130	7.1	7.5	A
2380	5.3	307	5.2	130	7.1	7.5	A
2382	5.2	308	5.2	131	7.1	7.5	A
2384	5.1	309	5.2	131	7.1	7.4	A
2386			5.2	132	7.2	7.5	
2388	5.5	307	5.2	131	7.2	7.6	A
2390	5.3	305	5.2	131	7.2	7.6	A
2392	5.0	310	5.2	131	7.2	7.5	A
2394	5.0	309	5.2	130	7.2	7.3	A
2396	5.0	308	5.2	130	7.1	7.2	A
2398	5.2	309	5.3	132	7.1	7.2	A
2400	5.3	309	5.4	133	7.1	7.1	A
2402	5.1	307	5.4	132	7.2	7.2	A
2404	4.2	302	5.4	130	7.2	7.3	A
2406	4.3	301	5.4	130	7.2	7.4	A
2408	4.7	308	5.4	131	7.2	7.6	A
2410	5.9	306	5.4	131	7.2	7.7	A
2412	5.1	308	5.4	130	7.1	7.5	A
2414	4.9	314	5.4	130	7.1	7.4	A
2416	5.7	313	5.4	130	7.1	7.4	A
2418	5.8	304	5.4	130	7.1	7.5	A
2420	5.3	304	5.4	130	7.1	7.5	C
2422	4.8	312	5.5	130	7.1	7.5	A
2424	5.2	310	5.6	130	7.1	7.5	A
2426	5.3	306	5.6	130	7.1	7.5	A
2428	6.0	303	5.6	130	7.1	7.4	A
2430	6.0	308	5.6	130	7.2	7.3	A
2432	5.3	314	5.6	130	7.3	7.2	A
2434	4.5	312	5.6	130	7.3	7.3	A
2436	5.3	304	5.6	130	7.3	7.3	A
2438	4.8	304	5.6	130	7.3	7.3	A
2440	5.2	311	5.6	130	7.3	7.3	A
2442	5.6	310	5.7	130	7.2	7.3	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
2444	5.2	312	5.6	130	7.2	7.2	A
2446	5.0	313	5.6	129	7.3	7.3	A
2448	4.8	306	5.7	129	7.2	7.3	A
2450	5.7	308	5.8	129	7.2	7.3	A
2452	5.6	311	5.8	130	7.2	7.3	A
2454	4.9	301	5.8	130	7.2	7.3	A
2456	5.1	301	5.8	130	7.2	7.2	A
2458	5.4	307	5.8	130	7.2	7.2	A
2460	5.0	309	5.8	130	7.1	7.2	A
2462	3.1	316	5.8	129	7.2	7.2	A
2464	4.1	313	5.8	129	7.3	7.2	A
2466	4.5	315	5.8	129	7.3	7.2	A
2468	4.6	313	5.8	130	7.3	7.2	A
2470	5.0	327	5.8	130	7.3	7.2	C
2472	4.2	322	5.8	130	7.3	7.2	A
2474	4.8	320	5.8	130	7.2	7.2	A
2476	4.8	305	5.9	130	7.2	7.2	C
2478	5.2	316	6.0	130	7.3	7.3	C
2480	4.7	295	6.0	130	7.3	7.2	A
2482	5.5	311	6.0	130	7.3	7.2	C
2484	5.2	302	6.0	130	7.2	7.2	A
2486	5.1	304	6.0	130	7.1	7.1	A
2488	5.6	317	6.0	130	7.1	7.1	C
2490	5.8	314	6.0	130	7.2	7.2	A
2492	5.3	304	6.0	130	7.2	7.2	A
2494	4.9	315	6.0	130	7.3	7.2	A
2496	5.6	307	6.0	130	7.3	7.2	C
2498	6.0	294	6.0	130	7.2	7.2	A
2500	6.2	314	6.0	130	7.2	7.2	A
2502	5.5	308	6.0	129	7.2	7.2	A
2504	7.1	303	6.0	130	7.2	7.1	C
2506	7.8	303	6.0	130	7.1	7.1	C
2508	5.4	313	6.1	130	7.2	7.1	C
2510	5.4	308	6.1	129	7.2	7.1	A
2512	5.4	309	6.2	129	7.2	7.1	A
2514	5.6	315	6.2	130	7.2	7.1	A
2516	5.8	311	6.2	131	7.1	7.0	C
2518	5.6	309	6.2	131	7.1	7.0	C
2520	5.5	312	6.2	131	7.1	7.0	A
2522	5.5	312	6.2	131	7.1	7.1	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
2524	5.5	309	6.2	130	7.1	7.1	A
2526	5.5	309	6.2	130	7.2	7.2	A
2528	5.5	309	6.2	130	7.3	7.3	A
2530	5.5	308	6.2	130	7.2	7.3	A
2532	5.7	308	6.2	129	7.2	7.3	A
2534	5.6	312	6.2	130	7.2	7.3	A
2536	5.5	311	6.2	131	7.2	7.3	C
2538	5.4	308	6.2	130	7.2	7.4	C
2540	5.9	306	6.2	130	7.3	7.5	A
2542	5.9	306	6.2	130	7.2	7.5	A
2544	5.4	307	6.2	130	7.2	7.5	A
2546	5.7	310	6.2	130	7.2	7.4	A
2548	5.9	305	6.2	127	7.1	7.3	A
2550	5.5	305	6.2	127	7.1	7.3	A
2552	6.3	306	6.2	128	7.1	7.3	A
2554	5.9	307	6.2	129	7.0	7.3	C
2556	6.8	312	6.2	129	6.9	7.4	A
2558	8.6	287	6.2	130	7.0	7.5	C
2560	5.5	311	6.2	130	7.0	7.5	C
2562	5.9	300	6.2	129	7.0	7.5	A
2564	5.3	327	6.2	129	7.1	7.3	C
2566	5.0	317	6.2	131	7.2	7.2	A
2568	5.6	312	6.2	131	7.3	7.3	C
2570	6.6	329	6.2	130	7.2	7.4	A
2572	5.2	305	6.2	131	7.2	7.5	A
2574	5.9	315	6.2	130	7.1	7.5	C
2576	6.1	313	6.2	130	7.1	7.5	C
2578	5.6	307	6.2	130	7.0	7.4	A
2580	5.4	312	6.2	129	6.9	7.3	A
2582	5.4	313	6.2	129	6.9	7.2	A
2584	5.5	307	6.2	129	6.9	7.2	A
2586	6.3	303	6.2	129	6.9	7.2	C
2588	6.0	306	6.2	129	7.0	7.2	A
2590	5.9	304	6.2	130	7.1	7.2	A
2592	6.2	316	6.2	130	7.0	7.2	D
2594	6.3	302	6.2	130	7.0	7.1	A
2596	6.5	308	6.2	130	7.0	7.1	A
2598	6.3	312	6.2	130	7.0	7.2	A
2600	5.8	311	6.2	129	7.1	7.2	C
2602	5.2	289	6.2	129	7.0	7.2	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
2604	5.1	297	6.2	129	6.7	7.2	A
2606	5.2	303	6.2	129	6.6	7.1	C
2608	5.8	308	6.2	129	6.8	7.2	C
2610	5.5	296	6.2	129	6.9	7.2	C
2612	5.5	307	6.2	130	6.8	7.1	A
2614	5.4	309	6.2	130	6.9	7.1	A
2616	5.2	301	6.2	130	7.0	7.1	A
2618	5.5	299	6.2	129	7.1	7.1	A
2620	5.8	306	6.2	130	7.0	7.2	A
2622	5.7	310	6.3	130	7.0	7.2	A
2624	5.8	310	6.3	130	7.0	7.1	A
2626	5.8	305	6.3	130	6.9	7.1	A
2628	5.5	311	6.3	130	6.9	7.1	A
2630	5.3	310	6.4	129	6.9	7.1	A
2632	5.6	303	6.4	129	6.9	7.2	A
2634	5.5	305	6.4	129	6.9	7.2	A
2636	5.6	307	6.4	129	6.8	7.2	A
2638	5.8	308	6.4	130	6.9	7.2	A
2640	6.1	310	6.4	130	7.0	7.2	A
2642	6.1	308	6.4	130	7.0	7.2	A
2644	5.5	305	6.4	130	6.9	7.1	A
2646	5.6	309	6.4	130	6.9	7.1	A
2648	6.0	312	6.4	129	7.0	7.1	A
2650	6.2	308	6.4	129	7.0	7.2	A
2652	5.5	302	6.4	129	7.1	7.2	A
2654	5.7	306	6.4	129	7.1	7.2	A
2656	5.7	309	6.4	129	7.0	7.2	A
2658	5.7	311	6.4	129	7.0	7.2	A
2660	5.5	306	6.4	130	7.1	7.3	A
2662	5.2	303	6.4	129	7.0	7.3	A
2664	5.5	313	6.4	129	7.0	7.3	A
2666	5.7	312	6.4	129	7.0	7.3	A
2668	5.4	302	6.4	130	7.1	7.3	A
2670	5.6	300	6.4	130	7.1	7.3	A
2672	5.7	309	6.4	130	7.0	7.2	A
2674	5.6	310	6.4	130	7.0	7.2	A
2676	5.1	313	6.4	129	6.9	7.2	A
2678	5.2	312	6.4	129	6.9	7.1	A
2680	5.3	313	6.4	129	7.0	7.2	A
2682	5.5	315	6.4	129	7.0	7.2	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
2684	5.4	319	6.4	129	7.0	7.2	A
2686	7.6	351	6.4	129	7.0	7.1	A
2688	7.6	350	6.4	129	7.0	7.1	A
2690	5.5	306	6.4	129	7.0	7.1	A
2692	6.1	308	6.4	128	7.0	7.1	C
2694	6.1	307	6.4	128	7.0	7.2	A
2696	6.2	305	6.4	129	7.0	7.2	A
2698	6.2	306	6.4	129	7.1	7.2	A
2700	6.1	309	6.4	129	7.0	7.2	A
2702	5.7	308	6.4	130	7.0	7.2	A
2704	5.5	310	6.4	130	6.9	7.1	A
2706	5.4	309	6.4	129	6.8	7.1	A
2708	5.8	307	6.5	129	6.8	7.1	A
2710	6.0	302	6.6	129	6.9	7.1	A
2712	6.2	307	6.6	130	7.0	7.1	A
2714	6.2	310	6.6	130	7.0	7.2	A
2716	5.8	308	6.6	130	7.0	7.2	A
2718	6.1	310	6.6	129	7.0	7.1	A
2720	5.9	310	6.6	129	7.0	7.1	A
2722	5.8	308	6.6	129	7.0	7.2	A
2724	5.7	308	6.5	129	7.0	7.2	A
2726	5.0	312	6.4	130	7.0	7.2	A
2728	2.2	310	6.4	129	6.9	7.2	A
2730	2.3	275	6.5	129	6.9	7.1	A
2732	8.5	309	6.6	130	6.9	7.1	A
2734	6.9	310	6.6	130	6.9	7.2	A
2736	6.3	309	6.6	130	7.0	7.2	A
2738	6.3	310	6.6	130	7.0	7.3	A
2740	5.6	309	6.6	130	7.0	7.3	A
2742	5.6	310	6.6	130	7.0	7.3	A
2744	6.1	312	6.6	130	7.0	7.3	A
2746	6.0	311	6.6	130	6.9	7.3	A
2748	5.8	311	6.6	130	6.9	7.3	A
2750	6.0	310	6.6	129	6.9	7.3	A
2752	6.3	313	6.6	129	7.1	7.3	A
2754	6.2	313	6.6	129	7.1	7.3	A
2756	5.8	308	6.5	130	7.0	7.3	A
2758	6.0	307	6.4	130	7.0	7.3	A
2760	5.8	306	6.5	129	6.9	7.3	A
2762	5.7	309	6.6	130	6.9	7.3	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
2764	6.0	309	6.6	130	6.9	7.3	A
2766	6.1	310	6.6	130	6.9	7.3	A
2768	5.5	315	6.6	129	6.9	7.2	A
2770	5.6	311	6.6	129	6.9	7.2	A
2772	5.9	306	6.6	130	7.0	7.3	A
2774	5.9	305	6.6	130	7.0	7.3	A
2776	6.5	308	6.6	129	7.0	7.3	A
2778	6.5	312	6.6	129	7.0	7.2	A
2780	6.1	313	6.6	129	7.0	7.2	A
2782	6.1	311	6.6	129	7.0	7.3	A
2784	5.8	310	6.6	129	7.0	7.3	A
2786	5.6	306	6.6	129	6.9	7.3	A
2788	5.8	303	6.6	129	6.9	7.3	A
2790	5.7	308	6.6	129	6.8	7.3	A
2792	6.0	311	6.6	129	6.8	7.3	A
2794	6.0	311	6.6	130	6.8	7.3	A
2796	5.9	309	6.6	130	6.8	7.3	A
2798	5.5	307	6.6	130	6.8	7.2	C
2800	5.1	306	6.6	130	6.8	7.2	A
2802	5.7	308	6.6	129	6.8	7.1	A
2804	5.6	310	6.6	129	6.8	7.1	A
2806	4.8	312	6.6	130	6.9	7.2	A
2808	5.0	308	6.6	129	7.0	7.3	A
2810	5.9	307	6.6	129	7.0	7.2	A
2812	5.3	304	6.6	129	7.0	7.2	A
2814	5.6	308	6.6	129	7.0	7.3	A
2816	5.5	311	6.6	129	7.0	7.3	A
2818	5.8	310	6.6	129	7.0	7.3	A
2820	3.9	310	6.6	130	7.0	7.3	A
2822	6.6	319	6.6	130	6.9	7.3	A
2824	5.6	309	6.6	130	6.9	7.3	A
2826	5.7	310	6.7	130	6.9	7.3	A
2828	5.6	315	6.8	130	7.0	7.3	A
2830	5.7	320	6.8	130	7.0	7.3	C
2832	5.8	312	6.8	130	7.0	7.2	A
2834	5.7	309	6.7	130	7.0	7.2	A
2836	6.0	312	6.6	130	7.0	7.2	A
2838	6.1	312	6.6	130	6.9	7.2	A
2840	5.9	310	6.6	130	6.9	7.2	A
2842	5.9	306	6.6	130	6.9	7.2	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
2844	6.0	305	6.6	130	6.9	7.3	A
2846	5.3	309	6.7	130	6.9	7.3	A
2848	5.1	320	6.8	130	7.0	7.3	A
2850	5.7	310	6.7	130	6.9	7.4	A
2852	5.6	309	6.6	130	6.9	7.4	C
2854	47.7	232	6.6	130	6.8	7.3	D
2856			6.6	131	6.8	7.3	
2858	5.6	313	6.6	130	6.8	7.3	A
2860	5.8	310	6.7	130	6.8	7.3	A
2862	5.9	311	6.7	130	6.8	7.2	A
2864	5.9	310	6.7	131	6.8	7.1	A
2866	5.8	309	6.6	131	6.8	7.2	A
2868	6.2	309	6.7	131	6.8	7.2	A
2870	6.4	307	6.8	130	6.8	7.2	A
2872	5.9	308	6.8	130	6.8	7.2	A
2874	5.8	309	6.7	130	6.8	7.2	A
2876	5.7	309	6.6	130	6.8	7.2	C
2878	5.6	307	6.6	130	6.8	7.3	A
2880	5.7	305	6.6	130	6.8	7.4	A
2882	6.2	307	6.6	130	6.8	7.4	A
2884	6.0	310	6.6	130	6.8	7.3	A
2886	5.7	311	6.6	130	6.8	7.3	A
2888	5.7	309	6.6	130	6.8	7.3	A
2890	5.8	307	6.6	130	6.8	7.3	A
2892	5.9	307	6.6	131	6.8	7.3	A
2894	6.1	310	6.6	130	6.8	7.3	A
2896	6.1	309	6.6	130	6.8	7.3	A
2898	5.8	305	6.6	130	6.9	7.3	A
2900	5.7	308	6.6	130	6.9	7.3	A
2902	5.7	307	6.6	130	6.8	7.3	A
2904	5.7	308	6.5	129	6.8	7.3	A
2906	5.8	309	6.5	130	6.8	7.3	A
2908	6.0	307	6.6	130	6.8	7.3	A
2910	5.7	308	6.6	130	6.8	7.3	A
2912	5.6	306	6.6	129	6.8	7.4	A
2914	5.8	307	6.6	130	6.8	7.5	A
2916	6.0	306	6.6	130	6.8	7.4	A
2918	6.1	307	6.6	130	6.8	7.4	A
2920	6.1	309	6.6	130	6.8	7.4	A
2922	5.9	310	6.6	131	6.8	7.5	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
2924	5.9	314	6.6	132	6.8	7.4	A
2926	5.8	314	6.6	132	6.8	7.4	A
2928	5.7	307	6.6	132	6.8	7.5	A
2930	5.8	310	6.6	133	6.9	7.5	A
2932	5.1	319	6.6	132	6.9	7.4	A
2934	6.2	317	6.6	132	6.9	7.3	A
2936	6.0	312	6.5	132	6.9	7.3	A
2938	5.8	304	6.4	132	6.9	7.3	A
2940	6.1	310	6.5	132	6.8	7.3	A
2942	6.4	312	6.5	131	6.8	7.4	A
2944	5.8	308	6.6	131	6.9	7.5	A
2946	7.1	303	6.6	131	6.9	7.5	A
2948	7.2	304	6.6	132	6.8	7.5	A
2950	6.2	314	6.6	132	6.8	7.5	A
2952	6.0	309	6.6	132	6.8	7.5	A
2954	6.1	312	6.6	131	6.9	7.5	A
2956	6.1	313	6.6	131	6.9	7.4	A
2958	5.9	308	6.5	131	6.9	7.3	A
2960	5.7	309	6.4	132	6.9	7.3	A
2962	5.8	304	6.4	132	6.9	7.3	A
2964	5.9	305	6.4	132	6.9	7.2	A
2966	5.8	311	6.4	132	6.9	7.2	A
2968	5.9	307	6.4	132	6.9	7.2	A
2970	6.1	311	6.4	132	6.9	7.2	A
2972	7.0	322	6.4	131	6.8	7.2	A
2974	7.6	324	6.4	131	6.8	7.2	A
2976	5.9	308	6.3	131	6.9	7.3	A
2978	5.8	311	6.2	131	6.9	7.3	A
2980	5.6	313	6.2	132	6.9	7.3	A
2982	6.0	310	6.3	132	6.9	7.3	A
2984	6.0	315	6.4	132	6.9	7.3	A
2986	6.0	310	6.3	132	6.9	7.3	A
2988	5.3	307	6.2	132	6.9	7.3	A
2990	4.7	312	6.2	133	6.9	7.3	A
2992	5.9	317	6.2	133	6.9	7.3	A
2994	6.1	314	6.2	133	6.9	7.3	A
2996	4.9	309	6.2	132	6.9	7.3	A
2998	4.3	308	6.2	132	7.0	7.3	A
3000	6.2	314	6.2	132	7.1	7.3	A
3002	6.3	311	6.2	132	7.0	7.3	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
3004	5.8	307	6.2	132	6.9	7.3	A
3006	5.9	307	6.2	132	6.9	7.3	A
3008	5.7	309	6.2	132	6.8	7.3	C
3010	5.6	306	6.2	132	6.8	7.2	A
3012	5.6	306	6.1	131	6.8	7.1	A
3014	6.1	307	6.1	131	6.8	7.1	A
3016	5.7	313	6.1	132	6.8	7.0	A
3018	5.4	312	6.1	132	6.8	7.0	A
3020	4.9	301	6.2	132	6.8	7.1	A
3022	5.4	311	6.1	132	6.8	7.2	A
3024	5.7	309	6.0	132	6.8	7.2	A
3026	5.8	307	6.0	132	6.9	7.2	A
3028	5.6	310	6.0	132	6.9	7.2	A
3030	5.3	309	6.0	132	6.9	7.2	A
3032	6.1	318	6.0	131	7.0	7.2	A
3034	6.2	315	6.0	131	7.0	7.2	A
3036	5.0	304	6.0	130	6.9	7.1	A
3038	5.2	299	6.0	131	6.9	7.2	A
3040	5.5	299	6.0	131	6.9	7.1	A
3042	5.3	306	6.0	131	6.9	7.1	A
3044	5.5	311	6.0	132	6.8	7.1	A
3046	5.6	309	6.0	132	6.8	7.1	A
3048	5.6	309	6.0	131	6.9	7.1	A
3050	5.9	309	6.0	131	6.9	7.1	A
3052	5.9	313	6.0	132	7.0	7.1	A
3054	5.8	312	5.9	132	7.0	7.1	A
3056	5.5	308	5.8	132	7.0	7.1	A
3058	5.5	306	5.8	132	6.9	7.0	A
3060	5.7	307	5.8	131	6.9	7.0	A
3062	5.6	308	5.8	130	7.0	7.1	A
3064	5.8	310	5.8	130	6.9	7.1	A
3066	5.8	307	5.8	130	6.9	7.1	A
3068	5.8	306	5.8	130	7.0	7.1	A
3070	5.4	312	5.8	131	7.0	7.1	A
3072	5.3	310	5.8	131	7.0	7.1	A
3074	5.6	306	5.8	130	7.0	7.1	A
3076	5.5	304	5.8	131	7.0	7.1	A
3078	6.0	303	5.8	132	7.0	7.1	A
3080	5.6	307	5.8	132	7.0	7.1	A
3082	5.9	311	5.8	132	7.0	7.1	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
3084	5.9	310	5.8	132	7.0	7.1	A
3086	5.5	310	5.8	132	7.0	7.1	A
3088	5.2	312	5.8	132	7.1	7.1	A
3090	5.7	309	5.8	132	7.1	7.1	A
3092	5.9	306	5.8	131	7.0	7.1	A
3094	5.7	306	5.8	131	7.0	7.1	A
3096	5.8	310	5.8	131	7.0	7.2	A
3098	5.8	313	5.8	132	7.0	7.2	A
3100	5.8	310	5.8	132	7.1	7.2	A
3102	5.6	309	5.8	131	7.0	7.2	A
3104	5.4	311	5.8	131	7.0	7.1	A
3106	5.5	311	5.8	131	7.0	7.1	A
3108	5.7	306	5.8	131	7.0	7.1	A
3110	5.7	307	5.8	131	7.0	7.0	A
3112	5.7	310	5.8	131	7.0	7.0	A
3114	5.3	302	5.8	131	7.0	7.0	A
3116	6.4	311	5.8	131	7.0	7.0	A
3118	5.9	316	5.8	131	7.0	7.1	A
3120	4.7	315	5.8	131	7.0	7.1	A
3122	5.8	310	5.8	131	7.0	7.1	A
3124	5.7	306	5.8	131	7.0	7.1	A
3126	5.5	310	5.8	131	7.0	7.2	A
3128	4.7	311	5.8	131	7.0	7.2	A
3130	4.5	305	5.8	130	7.0	7.2	A
3132	5.5	306	5.8	131	7.0	7.2	A
3134	6.3	309	5.8	131	7.0	7.2	A
3136	6.4	309	5.8	131	7.0	7.2	C
3138	6.3	301	5.8	131	7.1	7.2	A
3140	6.1	299	5.8	131	7.0	7.2	A
3142	5.6	305	5.8	131	7.0	7.2	A
3144	5.8	308	5.8	131	7.1	7.2	A
3146	5.8	307	5.8	131	7.1	7.2	A
3148	6.0	308	5.8	131	7.1	7.2	A
3150	6.1	308	5.8	131	7.1	7.2	A
3152	6.0	308	5.7	131	7.1	7.3	A
3154	5.6	309	5.6	131	7.1	7.3	A
3156	5.9	306	5.6	131	7.1	7.3	A
3158	5.7	309	5.6	132	7.1	7.3	A
3160	5.3	312	5.6	131	7.1	7.3	A
3162	5.4	311	5.6	130	7.1	7.3	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
3164	5.5	312	5.6	131	7.1	7.3	A
3166	6.1	311	5.6	131	7.0	7.2	A
3168	5.7	311	5.6	130	7.0	7.2	A
3170	5.3	294	5.6	130	7.1	7.2	A
3172	5.9	297	5.6	131	7.1	7.1	A
3174	6.5	313	5.6	131	7.1	7.1	A
3176	6.0	308	5.6	131	7.1	7.1	A
3178	5.1	310	5.6	131	7.1	7.1	A
3180	5.1	311	5.6	131	7.1	7.1	A
3182	5.7	310	5.6	131	7.1	7.1	A
3184	5.7	308	5.6	131	7.1	7.2	A
3186	5.1	308	5.6	132	7.1	7.3	A
3188	5.4	308	5.6	131	7.1	7.3	A
3190	6.0	305	5.6	130	7.1	7.3	A
3192	5.4	305	5.6	130	7.1	7.3	A
3194	5.2	304	5.6	130	7.1	7.3	A
3196	5.6	313	5.6	131	7.1	7.3	A
3198	5.4	304	5.6	131	7.1	7.3	A
3200	6.2	269	5.6	131	7.0	7.3	C
3202	6.6	292	5.6	131	7.4	7.1	A
3204	6.7	277	5.6	131	7.9	7.0	C
3206	6.2	294	5.6	131	7.9	7.1	C
3208	6.4	314	5.6	131	7.6	7.2	C
3210	6.3	314	5.6	131	7.1	7.3	C
3212	5.9	310	5.6	131	6.8	7.2	A
3214	5.8	306	5.6	131	6.8	7.2	A
3216	6.2	304	5.6	131	7.0	7.2	A
3218	6.1	300	5.6	131	7.1	7.3	A
3220	6.0	298	5.6	131	7.1	7.2	A
3222	5.6	310	5.6	130	7.1	7.2	A
3224	5.8	308	5.6	130	7.2	7.3	A
3226	6.0	313	5.6	130	7.2	7.3	A
3228	6.2	312	5.6	130	7.1	7.2	A
3230	5.8	310	5.5	130	7.1	7.2	A
3232	5.3	308	5.4	131	7.1	7.1	A
3234	4.8	305	5.4	131	7.1	7.1	A
3236	5.3	308	5.4	130	7.1	7.1	A
3238	5.4	311	5.4	130	7.1	7.1	A
3240	5.9	310	5.4	130	7.1	7.1	A
3242	6.2	306	5.4	131	7.1	7.2	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
3244	5.6	315	5.4	131	7.1	7.1	A
3246	5.6	312	5.4	131	7.0	7.0	A
3248	5.6	302	5.4	131	6.9	7.0	A
3250	6.4	307	5.4	131	7.0	7.0	A
3252	6.9	311	5.4	130	7.1	7.2	A
3254	6.6	315	5.4	131	7.1	7.2	A
3256	5.5	314	5.4	131	7.1	7.1	A
3258	6.2	316	5.4	131	7.1	7.1	A
3260	7.1	315	5.4	131	7.1	7.1	A
3262	6.8	307	5.4	131	7.1	7.1	A
3264	6.2	308	5.4	131	7.1	7.0	A
3266	5.8	308	5.4	132	7.1	7.0	A
3268	5.3	309	5.4	132	7.2	7.0	A
3270	5.4	309	5.4	131	7.2	7.0	A
3272	5.7	313	5.4	131	7.1	7.0	A
3274	5.6	316	5.4	131	7.1	7.1	A
3276	5.5	304	5.4	131	7.1	7.1	A
3278	6.1	304	5.4	132	7.1	7.1	A
3280	6.1	307	5.4	132	7.1	7.1	A
3282	5.7	306	5.4	132	7.1	7.1	A
3284	5.8	304	5.4	131	7.1	7.1	A
3286	6.1	304	5.4	132	7.2	7.2	A
3288	6.0	305	5.4	132	7.2	7.2	A
3290	5.7	308	5.4	133	7.2	7.2	A
3292	5.9	311	5.4	133	7.1	7.1	A
3294	5.9	307	5.4	133	7.1	7.1	A
3296	6.0	306	5.4	132	7.1	7.0	A
3298	5.9	309	5.4	132	7.1	7.0	A
3300	6.4	307	5.4	132	7.1	7.0	A
3302	5.7	308	5.3	131	7.1	7.0	C
3304	5.4	314	5.2	132	7.1	7.0	A
3306	5.8	304	5.2	132	7.1	7.0	A
3308	5.4	302	5.2	132	7.1	7.1	A
3310	5.3	301	5.2	132	7.2	7.1	A
3312	5.5	309	5.2	132	7.2	7.1	A
3314	5.8	306	5.2	132	7.1	7.0	A
3316	6.0	309	5.2	132	7.1	7.0	A
3318	6.1	311	5.2	132	7.1	7.0	A
3320	5.7	309	5.2	131	7.1	7.0	A
3322	5.4	305	5.2	130	7.1	7.0	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
3324	5.5	303	5.2	130	7.2	7.0	A
3326	5.8	308	5.3	131	7.2	7.0	A
3328	6.0	311	5.4	131	7.2	7.0	A
3330	5.8	309	5.4	131	7.1	7.0	A
3332	5.6	311	5.4	131	7.1	7.0	A
3334	5.8	316	5.4	132	7.1	7.0	A
3336	7.0	308	5.4	132	7.1	7.1	A
3338	6.5	301	5.4	132	7.1	7.1	A
3340	5.3	301	5.4	131	7.1	7.1	A
3342	5.3	306	5.4	132	7.2	7.1	A
3344	6.1	305	5.4	132	7.3	7.1	A
3346	6.2	305	5.4	132	7.3	7.1	A
3348	6.0	303	5.4	131	7.3	7.1	A
3350	5.8	300	5.4	131	7.3	7.1	A
3352	5.8	308	5.4	132	7.3	7.1	A
3354	6.2	310	5.4	132	7.4	7.1	A
3356	5.7	313	5.4	133	7.5	7.2	A
3358	5.8	301	5.4	132	7.5	7.3	A
3360	6.0	300	5.5	132	7.5	7.2	A
3362	6.0	306	5.5	132	7.4	7.2	A
3364	6.1	304	5.6	132	7.3	7.1	A
3366	6.1	301	5.6	132	7.2	7.1	A
3368	5.9	307	5.6	133	7.3	7.1	A
3370	6.3	307	5.6	133	7.3	7.1	A
3372	6.0	302	5.6	132	7.3	7.1	A
3374	6.2	304	5.6	132	7.3	7.1	A
3376	6.9	307	5.6	133	7.3	7.1	A
3378	6.4	306	5.6	134	7.2	7.1	A
3380	5.4	314	5.6	133	7.1	7.0	C
3382	5.4	310	5.6	133	7.1	7.0	A
3384	3.7	310	5.6	132	7.1	7.1	A
3386	3.4	302	5.6	132	7.1	7.1	A
3388	7.3	299	5.6	133	7.2	7.1	A
3390	8.6	300	5.6	133	7.3	7.2	A
3392	5.9	311	5.6	133	7.3	7.2	A
3394	5.9	300	5.6	133	7.3	7.2	A
3396	6.5	301	5.6	132	7.2	7.2	A
3398	6.8	302	5.7	132	7.1	7.2	A
3400	7.9	300	5.7	132	7.2	7.3	A
3402	5.2	304	5.8	132	7.3	7.3	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
3404	5.0	304	5.7	133	7.3	7.3	A
3406	7.1	309	5.6	134	7.4	7.4	A
3408	6.2	312	5.6	134	7.4	7.4	A
3410	6.0	308	5.6	135	7.3	7.2	A
3412	5.2	311	5.6	134	7.2	7.1	A
3414	5.1	306	5.7	133	7.1	7.0	A
3416	6.1	304	5.8	133	7.1	7.0	A
3418	5.8	309	5.8	133	7.1	7.1	A
3420	5.3	310	5.8	133	7.2	7.2	A
3422	6.1	305	5.8	134	7.3	7.2	A
3424	6.0	309	5.8	135	7.4	7.2	A
3426	6.2	310	5.8	134	7.3	7.1	A
3428	6.0	313	5.8	133	7.2	7.0	A
3430	5.5	303	5.8	133	7.1	6.9	A
3432	5.6	297	5.8	133	7.1	6.9	A
3434	6.1	307	5.8	133	7.1	7.0	A
3436	6.2	309	5.8	134	7.3	7.0	A
3438	6.3	303	5.8	134	7.4	7.0	A
3440	6.4	303	5.8	133	7.2	6.9	A
3442	6.5	306	5.8	133	7.1	6.8	A
3444	6.1	308	5.8	133	7.1	6.9	A
3446	5.3	308	5.8	133	7.1	6.9	A
3448	5.0	302	5.8	134	7.2	7.0	A
3450	5.9	306	5.8	133	7.4	7.0	A
3452	6.0	309	5.8	133	7.4	7.0	A
3454	6.2	309	5.8	133	7.2	7.0	A
3456	6.2	308	5.8	132	7.1	7.0	A
3458	6.0	310	5.8	131	7.1	7.0	A
3460	6.0	310	5.8	131	7.1	6.9	A
3462	6.2	307	5.8	130	7.1	6.8	A
3464	6.4	301	5.9	129	7.1	6.8	A
3466	6.5	302	6.0	130	7.1	6.8	A
3468	6.1	306	6.0	130	7.1	6.9	A
3470	6.0	303	6.0	129	7.2	7.0	A
3472	7.9	286	6.0	130	7.3	7.0	A
3474	5.8	306	6.0	130	7.3	7.0	A
3476	6.1	302	6.0	130	7.3	7.0	A
3478	6.1	300	6.0	129	7.3	7.0	A
3480	6.2	301	6.1	128	7.3	7.0	A
3482	6.2	303	6.2	128	7.4	7.0	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
3484	6.1	316	6.2	129	7.4	7.0	A
3486	6.2	315	6.2	128	7.3	6.9	A
3488	6.1	307	6.2	128	7.1	6.8	A
3490	6.0	308	6.2	128	7.1	6.7	A
3492	5.7	310	6.2	128	7.1	6.8	A
3494	5.6	310	6.2	127	7.1	6.8	A
3496	6.0	302	6.2	126	7.2	6.9	A
3498	6.2	301	6.2	126	7.3	7.0	A
3500	6.2	298	6.2	124	7.3	7.0	A
3502	6.2	300	6.2	124	7.3	7.0	A
3504	6.4	301	6.2	125	7.2	7.0	A
3506	5.7	298	6.3	124	7.1	7.0	A
3508	5.8	301	6.4	124	7.1	7.0	A
3510	7.8	292	6.4	124	7.1	7.0	A
3512	7.8	294	6.4	125	7.1	7.0	A
3514	5.7	300	6.4	126	7.1	7.0	A
3516	6.2	330	6.4	127	7.1	7.0	A
3518	6.1	328	6.4	126	7.1	7.0	A
3520	6.4	306	6.4	125	7.1	6.9	A
3522	6.2	306	6.5	126	7.1	6.8	A
3524	6.1	306	6.6	126	7.1	6.9	A
3526	6.6	306	6.6	125	7.1	7.0	A
3528	6.9	306	6.6	125	7.1	7.0	A
3530	6.3	301	6.6	125	7.1	7.1	A
3532	6.3	303	6.6	126	7.1	7.1	A
3534	6.2	308	6.6	126	7.1	7.1	A
3536	5.7	308	6.6	126	7.0	7.0	A
3538	5.9	314	6.6	126	7.0	7.0	A
3540	5.8	310	6.6	126	7.1	7.0	A
3542	5.5	309	6.6	126	7.1	7.1	A
3544	5.5	311	6.6	127	7.1	7.1	A
3546	5.9	307	6.6	126	7.2	7.1	A
3548	5.8	305	6.6	127	7.2	7.1	A
3550	6.8	288	6.6	126	7.1	7.0	A
3552	6.4	297	6.6	125	7.1	7.0	A
3554	5.7	299	6.6	125	7.1	7.0	A
3556	6.8	323	6.6	126	7.1	7.1	A
3558	6.8	319	6.6	125	7.1	7.1	A
3560	6.4	308	6.7	125	7.1	7.1	A
3562	5.6	310	6.8	125	7.1	7.1	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE		DIAM 1-3	DIAM 2-4	QUAL. INDEX BEST =A
3564	5.[illegible]	[illegible]			7.1	7.1	A
3566	6.[illegible]	202			7.1	7.1	A
3568	5.[illegible]	[illegible]			7.1	7.1	A
3570	5.1	295			7.1	7.1	A
3572	3.[illegible]	349			7.1	7.2	A
3574	3.[illegible]	353			7.1	7.2	A
3576	7.[illegible]	[illegible]			7.1	7.2	A
3578	5.[illegible]	315			7.1	7.2	A
3580	3.[illegible]	336			7.2	7.3	A
3582	3.[illegible]	350			7.2	7.3	A
3584	6.[illegible]	[illegible]			7.1	7.3	A
3586	7.0	[illegible]			7.1	7.3	A
3588	7.[illegible]	[illegible]			7.1	7.3	A
3590	4.[illegible]	[illegible]			7.1	7.3	A
3592	4.[illegible]	[illegible]			7.1	7.4	A
3594	6.[illegible]	[illegible]			7.2	7.5	A
3596	7.[illegible]	[illegible]			7.2	7.5	A
3598	5.[illegible]	[illegible]			[illegible].1	7.4	A
3600	4.[illegible]	[illegible]			[illegible].1	7.3	A
3602	4.	[illegible]			[illegible].1	7.2	A
3604			7.2	124	7.1	7.2	
3606	8.7	287	7.2	124	7.1	7.2	C
3608	6.9	300	7.2	124	7.1	7.2	A
3610	6.0	314	7.2	123	7.2	7.3	A
3612	6.2	319	7.2	124	7.2	7.2	A
3614	7.2	305	7.2	124	7.1	7.1	A
3616	7.1	304	7.2	123	7.1	7.1	A
3618	6.6	307	7.2	123	7.1	7.1	A
3620	6.6	313	7.2	123	7.1	7.2	A
3622	7.0	305	7.2	123	7.1	7.2	A
3624	5.5	314	7.2	123	7.1	7.4	A
3626	5.6	312	7.2	122	7.1	7.4	A
3628	4.8	292	7.2	122	7.1	7.3	A
3630	5.2	304	7.2	123	7.1	7.2	A
3632	6.5	314	7.3	123	7.1	7.1	C
3634	6.9	314	7.3	124	7.1	7.0	C
3636	6.2	301	7.4	124	7.1	7.0	A
3638	6.1	299	7.4	123	7.1	7.0	A
3640	6.1	322	7.4	123	7.1	7.0	A
3642	6.1	318	7.4	123	7.1	7.0	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
3644	6.3	306	7.4	123	7.1	7.0	A
3646	6.2	304	7.4	123	7.1	7.0	A
3648	6.6	306	7.4	123	7.1	7.1	A
3650	6.9	307	7.5	122	7.1	7.1	A
3652	7.4	304	7.6	122	7.1	7.1	A
3654	6.7	305	7.6	123	7.1	7.1	A
3656	6.9	308	7.6	124	7.1	7.2	A
3658	7.4	309	7.6	125	7.1	7.2	A
3660	5.9	319	7.6	125	7.1	7.1	A
3662	6.0	320	7.6	124	7.1	7.1	A
3664	7.1	304	7.6	124	7.1	7.1	A
3666	7.1	302	7.6	123	7.0	7.1	A
3668	6.9	300	7.6	124	7.0	7.0	A
3670	6.5	294	7.6	124	7.0	7.0	A
3672	6.5	301	7.6	123	7.0	7.0	A
3674	7.0	305	7.6	123	6.9	7.0	A
3676	6.8	313	7.6	123	6.9	7.2	A
3678	6.5	310	7.6	122	6.9	7.2	A
3680	6.0	294	7.6	123	6.9	7.2	A
3682	7.6	310	7.6	123	6.9	7.3	A
3684	7.3	303	7.6	123	7.0	7.3	C
3686			7.6	124	7.0	7.3	
3688	4.4	280	7.6	123	7.0	7.2	A
3690	4.5	269	7.6	123	7.0	7.2	C
3692			7.6	123	7.0	7.2	
3694			7.6	123	7.0	7.2	
3696	10.2	18	7.6	123	6.9	7.2	C
3698	5.7	298	7.6	123	7.0	7.3	C
3700	8.1	316	7.6	124	7.0	7.2	C
3702	9.3	319	7.6	124	6.9	7.2	C
3704	6.8	306	7.6	124	6.9	7.1	A
3706	6.8	308	7.6	124	6.9	7.1	A
3708	4.4	297	7.7	124	6.9	7.1	A
3710	5.3	296	7.6	123	6.9	7.1	A
3712	8.4	309	7.6	123	6.9	7.2	A
3714	7.5	305	7.6	123	7.0	7.1	A
3716	6.6	306	7.6	123	7.0	7.0	D
3718	8.2	314	7.6	123	7.0	7.0	D
3720	8.1	297	7.7	122	7.0	7.0	D
3722	7.9	298	7.7	122	7.0	7.0	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
3724	7.1	299	7.8	123	7.0	7.0	A
3726	7.4	293	7.8	123	7.1	7.0	A
3728	8.3	299	7.8	123	7.1	7.0	A
3730	7.3	308	7.8	123	7.1	7.0	A
3732	6.2	306	7.8	124	7.1	7.0	A
3734	6.6	299	7.8	124	7.1	7.1	A
3736	7.0	294	7.9	125	7.1	7.1	A
3738	6.9	297	8.0	125	7.1	7.1	A
3740	6.8	297	8.0	125	7.1	7.1	A
3742	5.9	294	8.0	124	7.1	7.1	A
3744	6.0	293	8.0	123	7.1	7.3	A
3746	7.8	303	8.1	123	7.0	7.3	A
3748	7.5	292	8.2	123	7.0	7.3	A
3750	7.5	295	8.2	125	6.9	7.1	A
3752	7.0	302	8.2	126	6.8	7.0	A
3754	6.6	303	8.2	126	6.9	7.0	A
3756	6.2	305	8.2	126	6.9	7.0	A
3758	6.1	305	8.3	125	7.0	7.0	A
3760	7.2	301	8.4	125	6.9	6.9	A
3762	6.9	301	8.4	125	6.9	6.9	A
3764	5.5	310	8.4	125	7.0	7.0	A
3766	5.3	317	8.4	126	7.0	7.0	A
3768	5.6	298	8.4	126	6.9	7.0	A
3770	6.3	322	8.4	125	6.9	7.1	A
3772	6.4	326	8.5	126	6.9	7.1	A
3774	7.8	306	8.6	127	6.8	6.9	A
3776	8.5	300	8.6	126	6.8	6.8	A
3778	6.7	302	8.6	124	6.9	6.8	A
3780	5.1	290	8.6	125	7.0	7.0	A
3782	4.7	295	8.6	125	7.1	7.1	A
3784	6.2	309	8.7	125	7.1	7.2	A
3786	6.3	317	8.7	126	7.1	7.2	A
3788	6.6	338	8.8	126	7.0	7.1	A
3790	8.7	307	8.8	126	7.0	7.1	A
3792	9.8	283	8.8	126	6.9	7.3	A
3794	7.7	298	8.9	127	7.1	7.5	A
3796	6.5	302	9.0	125	7.2	7.6	A
3798	5.2	309	9.0	124	7.2	7.7	A
3800	5.2	304	9.0	124	7.1	7.7	A
3802	5.4	300	9.0	125	7.1	7.7	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
3804	7.0	300	9.0	125	7.1	7.8	A
3806	7.6	301	9.1	126	7.1	7.9	A
3808	4.9	192	9.2	126	7.1	8.1	D
3810	4.5	187	9.2	126	7.1	8.1	D
3812	5.2	300	9.2	126	7.1	8.1	A
3814	7.1	306	9.2	127	7.4	8.3	C
3816	7.5	307	9.2	127	7.4	8.3	C
3818	8.0	317	9.3	125	7.3	8.1	A
3820	7.1	313	9.4	125	7.2	8.1	C
3822	7.3	310	9.4	126	7.1	8.0	A
3824	7.2	307	9.4	128	7.0	7.8	A
3826	7.3	300	9.4	127	7.0	7.7	A
3828	6.6	301	9.4	126	7.1	7.5	A
3830	6.3	308	9.5	127	7.1	7.3	A
3832	6.2	301	9.6	128	7.1	7.3	A
3834	6.1	298	9.6	128	7.1	7.4	A
3836	6.1	298	9.6	127	7.1	7.7	A
3838	6.4	296	9.6	127	7.1	7.7	A
3840	6.9	304	9.6	126	7.0	7.6	A
3842	7.4	320	9.6	125	7.0	7.7	A
3844	8.8	333	9.6	126	7.1	7.9	A
3846	15.5	226	9.6	128	7.0	7.8	A
3848	17.1	227	9.6	128	6.9	7.6	A
3850	7.2	294	9.7	128	7.0	7.6	A
3852	7.1	302	9.8	128	7.0	7.5	A
3854	7.4	301	9.8	128	6.9	7.3	A
3856	7.2	313	9.8	127	6.9	7.2	A
3858	6.9	316	9.8	128	6.9	7.2	A
3860	7.0	306	9.8	128	7.0	7.1	A
3862	7.1	305	9.8	128	7.0	7.1	A
3864	6.5	308	9.9	128	7.0	7.2	A
3866	6.5	307	10.0	128	7.1	7.2	A
3868	7.1	306	10.0	128	7.1	7.2	A
3870	7.2	304	10.0	128	7.0	7.2	A
3872	5.5	298	10.0	129	6.9	7.2	A
3874	4.8	302	10.0	128	6.8	7.2	A
3876	5.3	310	10.0	127	6.8	7.2	A
3878	7.9	305	10.1	128	6.8	7.2	A
3880	9.2	300	10.2	128	6.8	7.1	A
3882	8.3	302	10.2	128	6.8	7.2	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
3884	6.4	308	10.2	128	6.9	7.2	A
3886	6.0	305	10.2	128	7.0	7.3	A
3888	6.3	303	10.2	129	7.0	7.4	A
3890	6.4	303	10.2	128	7.1	7.5	A
3892	6.2	298	10.3	128	7.1	7.5	A
3894	7.1	298	10.4	129	7.0	7.5	A
3896	7.6	292	10.4	129	7.0	7.5	A
3898	7.3	290	10.4	128	7.1	7.7	A
3900	8.3	317	10.5	127	7.2	8.4	A
3902	8.8	319	10.6	128	7.3	8.8	A
3904	8.2	320	10.6	129	7.2	8.2	A
3906	8.3	313	10.7	129	6.9	7.7	A
3908	8.4	310	10.8	128	6.6	7.5	A
3910	8.5	304	10.8	128	6.6	7.5	A
3912	7.9	307	10.8	128	6.8	7.6	A
3914	7.4	310	10.8	128	6.9	7.7	A
3916	8.1	309	10.8	128	7.0	7.6	C
3918	8.1	308	10.9	128	7.1	7.5	A
3920	7.8	309	11.0	129	7.0	7.4	A
3922	8.1	308	11.0	129	6.9	7.3	A
3924	8.4	305	11.0	128	6.8	7.1	A
3926	8.3	304	11.0	128	6.8	7.1	A
3928	7.8	309	11.0	128	6.8	7.0	A
3930	7.4	312	11.0	128	6.8	7.0	A
3932	6.3	314	11.0	126	6.9	7.0	A
3934	6.5	313	11.0	127	6.9	7.1	A
3936	7.6	309	11.1	128	6.8	7.3	A
3938	8.0	322	11.1	128	6.9	7.3	A
3940	7.6	327	11.0	128	6.9	7.3	A
3942	6.5	319	11.0	128	6.9	7.5	A
3944	7.3	315	11.0	129	6.9	7.6	A
3946	7.7	311	11.0	128	6.9	7.7	A
3948	7.5	306	11.0	129	6.9	7.8	A
3950	7.5	306	11.0	129	6.9	7.8	A
3952	8.2	299	11.0	129	6.8	7.9	C
3954	11.4	293	11.0	129	6.8	8.0	C
3956	7.6	305	11.0	130	6.8	7.9	A
3958	7.2	307	11.0	129	6.8	7.7	A
3960	6.9	293	11.0	129	6.7	7.7	A
3962	9.2	312	11.0	130	6.7	7.7	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
3964	8.9	311	11.0	130	6.6	7.6	A
3966	8.9	304	11.0	130	6.6	7.6	A
3968	7.8	308	11.0	129	6.6	7.6	A
3970	6.0	308	11.0	129	6.6	7.6	A
3972	5.1	303	11.0	129	6.7	7.7	A
3974	5.9	278	11.0	129	6.8	7.9	C
3976	6.9	316	11.0	129	6.8	8.5	A
3978	9.2	307	11.0	129	6.8	8.9	A
3980	8.9	304	11.0	130	6.9	9.4	A
3982	8.2	308	11.0	131	7.0	9.5	A
3984	9.1	272	11.0	131	7.1	9.1	A
3986	9.6	267	11.0	130	7.0	9.3	A
3988	8.0	299	10.9	130	6.9	9.7	C
3990	5.4	317	10.9	130	7.0	9.3	C
3992	2.5	297	10.9	131	6.9	8.3	A
3994	6.0	311	10.9	131	6.8	7.8	A
3996	6.7	309	10.9	129	6.8	7.9	A
3998	7.3	300	10.9	130	6.8	8.0	C
4000			11.0	131	6.8	7.8	
4002	10.7	311	11.0	131	7.0	7.4	C
4004	6.1	333	11.0	131	7.0	7.6	A
4006			10.9	131	6.9	8.0	
4008			10.8	131	6.8	7.7	
4010	9.3	303	10.8	131	6.8	7.3	A
4012	7.4	301	10.8	132	6.9	7.3	A
4014	6.5	319	10.7	132	6.9	7.3	A
4016			10.6	131	6.9	7.4	
4018			10.6	131	6.9	7.3	
4020	5.7	281	10.6	131	6.8	7.2	A
4022	8.6	312	10.6	132	6.8	7.1	A
4024	9.0	321	10.6	132	6.8	7.1	A
4026	8.8	303	10.6	132	7.4	8.4	C
4028	10.4	284	10.6	132	8.0	9.1	A
4030	10.5	289	10.6	131	7.4	7.8	A
4032	8.3	302	10.6	131	6.8	7.2	A
4034	5.5	346	10.6	131	6.8	7.3	A
4036	4.3	338	10.6	132	6.8	7.3	A
4038	9.6	352	10.5	132	6.8	7.1	A
4040	5.6	355	10.4	131	6.8	7.1	A
4042	8.7	332	10.4	132	6.8	7.1	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
4044	8.6	303	10.4	133	6.8	7.1	A
4046	7.4	299	10.4	132	6.8	7.1	A
4048	8.4	296	10.4	132	6.7	7.1	A
4050	8.0	300	10.3	133	6.7	7.1	A
4052	7.5	303	10.2	133	6.7	7.1	A
4054	9.4	307	10.2	133	6.7	7.0	A
4056	9.2	306	10.2	131	6.6	7.0	A
4058	8.7	302	10.2	131	6.7	7.0	A
4060	9.5	312	10.2	131	6.8	7.0	A
4062	9.6	305	10.1	131	6.8	7.0	A
4064	10.3	304	10.0	131	6.8	6.9	A
4066	9.7	309	10.0	131	6.8	6.8	A
4068	5.8	336	10.0	132	6.8	6.9	A
4070	3.6	292	10.0	132	6.8	6.8	A
4072	5.3	272	10.0	131	6.8	6.9	A
4074	6.6	285	10.0	131	6.8	7.0	A
4076	7.5	294	10.0	132	6.8	7.0	C
4078	7.6	329	10.0	132	6.8	7.0	A
4080	5.8	305	10.0	132	6.8	6.9	C
4082	7.9	315	10.0	132	6.8	6.8	C
4084	9.1	310	10.0	132	6.8	6.8	A
4086	9.2	306	10.0	132	6.8	6.9	A
4088	7.5	304	10.0	132	6.8	7.0	A
4090	8.2	315	10.0	132	6.7	7.0	A
4092	8.8	310	10.0	132	6.6	7.0	A
4094	8.9	304	10.0	132	6.6	7.0	A
4096	7.5	304	10.0	131	6.6	7.0	A
4098	7.8	311	10.0	130	6.6	7.0	A
4100	5.2	297	10.0	130	6.7	6.9	A
4102	5.5	299	10.0	130	6.7	6.9	A
4104	8.3	310	10.0	130	6.7	7.0	A
4106	8.1	308	10.0	131	6.6	7.0	A
4108	8.3	305	10.0	130	6.6	7.0	A
4110	8.0	296	10.0	130	6.7	7.0	A
4112	12.3	310	9.9	130	7.1	7.7	A
4114	12.5	308	9.9	130	7.1	7.6	A
4116	8.7	308	9.8	130	6.8	7.0	A
4118	7.5	308	9.8	130	6.9	7.2	A
4120	8.9	313	9.8	130	6.9	7.3	A
4122	6.8	303	9.8	131	6.8	7.2	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
4124	6.4	302	9.8	131	6.8	7.4	A
4126	6.7	300	9.8	130	6.8	7.4	A
4128	7.4	300	9.8	130	6.8	7.2	A
4130	8.4	275	9.8	130	6.9	7.3	A
4132	8.0	273	9.8	130	7.3	7.6	A
4134	11.6	285	9.8	131	7.3	7.4	A
4136	7.6	306	9.8	130	6.8	6.9	A
4138	7.2	304	9.8	130	6.9	7.0	A
4140	6.9	304	9.8	131	7.0	7.3	A
4142	9.6	311	9.8	130	7.5	8.6	C
4144	10.3	292	9.7	130	7.8	9.4	A
4146	6.9	274	9.7	129	7.9	9.7	A
4148	5.3	264	9.8	131	7.5	8.9	A
4150	3.7	230	9.8	131	6.8	7.1	A
4152	3.2	193	9.8	131	6.8	6.9	A
4154	0.6	151	9.8	131	6.8	6.8	A
4156	1.3	120	9.8	131	6.8	6.6	A
4158	13.5	315	9.8	131	6.8	6.5	A
4160	4.8	310	9.8	132	6.8	6.5	A
4162	10.0	308	9.8	131	6.8	6.5	A
4164	11.9	311	9.7	131	6.8	6.5	A
4166	11.5	305	9.6	131	6.8	6.6	A
4168	9.2	306	9.6	131	6.8	6.5	A
4170	7.1	313	9.5	130	6.7	6.5	A
4172	7.4	321	9.4	130	6.7	6.5	A
4174	8.9	310	9.4	129	7.1	7.7	A
4176	2.1	237	9.5	129	7.3	8.1	C
4178	3.7	301	9.5	132	7.2	7.7	C
4180	6.8	312	9.5	132	9.1	11.4	C
4182			9.5	132	13.4	15.1	
4184	8.7	264	9.6	132	11.8	12.1	C
4186	7.1	291	9.6	131	8.8	9.6	A
4188	7.7	296	9.7	132	11.1	13.8	A
4190	9.7	314	9.8	135	9.8	12.2	C
4192	7.5	278	9.7	135	9.0	11.0	A
4194	9.0	305	9.7	133	12.2	15.6	C
4196	10.0	262	9.7	132	10.6	13.3	A
4198	7.3	225	9.7	134	7.5	9.3	C
4200	7.8	273	9.7	135	7.8	10.1	A
4202			9.7	135	7.6	9.2	

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
4204	11.6	329	9.7	133	6.9	6.7	C
4206			9.7	132	6.9	6.7	
4208	3.6	252	9.7	133	6.9	6.7	B
4210	3.8	229	9.6	133	6.8	6.6	B
4212	3.4	167	9.6	133	6.8	6.5	B
4214	4.1	172	9.6	132	6.8	6.5	B
4216	3.0	142	9.6	133	6.8	6.3	B
4218			9.6	133	6.9	6.4	
4220			9.5	134	6.9	6.5	
4222			9.4	134	6.8	6.4	
4224	5.4	158	9.4	135	6.8	6.5	D
4226	2.5	260	9.4	135	6.9	6.7	A
4228	12.3	15	9.4	135	6.9	6.6	C
4230	2.8	359	9.4	135	6.9	6.6	A
4232			9.4	135	6.9	6.6	
4234	8.5	313	9.4	135	6.9	6.5	A
4236	1.7	325	9.4	133	6.8	6.4	A
4238	1.1	41	9.4	133	6.8	6.3	A
4240	6.7	334	9.3	132	6.8	6.5	A
4242	5.0	293	9.3	132	7.0	6.8	A
4244			9.4	132	6.9	6.6	
4246	8.6	313	9.4	133	6.9	6.4	A
4248	10.7	335	9.4	134	6.9	6.4	C
4250	11.7	351	9.4	135	6.9	6.4	C
4252	6.6	294	9.4	134	6.9	6.4	A
4254	5.5	331	9.4	133	6.8	6.3	A
4256	5.2	309	9.4	133	6.8	6.3	A
4258			9.4	132	6.7	6.3	
4260			9.4	132	6.7	6.5	
4262	8.8	347	9.4	133	6.8	6.6	A
4264	7.8	327	9.4	134	6.9	6.6	A
4266	7.3	322	9.4	134	6.9	6.7	B
4268			9.5	134	6.9	6.8	
4270			9.6	133	6.9	6.8	
4272			9.6	133	6.9	6.8	
4274			9.5	134	7.5	7.7	
4276			9.5	135	7.7	8.8	
4278			9.5	135	7.5	8.7	
4280			9.6	136	7.4	8.0	
4282			9.6	137	7.1	7.2	

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
4284	10.4	347	9.7	137	6.8	6.6	D
4286	15.3	356	9.8	137	6.7	6.5	A
4288	19.4	338	9.8	137	6.7	6.5	A
4290	14.9	340	9.8	137	6.6	6.5	A
4292	7.0	348	9.8	138	6.6	6.5	A
4294	7.4	336	9.8	137	6.7	6.5	A
4296	10.2	324	9.8	137	6.7	6.6	A
4298	6.2	303	9.8	138	6.6	6.5	A
4300	6.4	311	9.8	138	6.7	6.3	A
4302	11.1	319	9.8	139	6.8	6.5	A
4304	12.0	316	9.8	140	6.7	6.6	A
4306	7.6	307	9.8	140	6.7	6.5	A
4308	5.9	311	9.8	139	6.8	6.5	A
4310	7.8	302	9.8	138	6.8	6.5	A
4312	8.4	314	9.8	137	6.8	6.5	A
4314	6.2	328	9.8	137	6.8	6.5	A
4316	7.1	358	9.8	137	6.8	6.5	A
4318	9.6	338	9.8	138	6.8	6.5	A
4320	6.8	349	9.8	137	6.8	6.6	A
4322	3.4	30	9.8	137	6.7	6.6	A
4324	2.4	39	9.9	138	6.7	6.5	A
4326	3.6	324	9.9	137	6.8	6.5	A
4328	4.6	318	9.9	136	6.8	6.6	A
4330	13.4	261	9.9	135	6.9	6.6	A
4332			10.0	135	6.8	6.6	
4334	18.6	260	10.0	136	6.8	6.4	C
4336	10.1	281	10.0	137	6.8	6.4	A
4338	12.5	276	10.0	138	6.7	6.3	A
4340	13.5	271	10.0	139	6.7	6.2	A
4342	14.0	250	10.0	140	6.7	6.1	A
4344	14.7	264	10.0	141	6.7	6.2	C
4346	9.7	345	10.0	141	6.7	6.2	A
4348	7.6	340	9.9	140	6.7	6.3	A
4350	7.5	340	9.8	140	6.8	6.3	A
4352	8.7	324	9.8	140	6.8	6.3	A
4354			9.8	138	6.8	6.4	
4356			9.8	138	6.8	6.5	
4358	8.5	324	9.8	139	6.8	6.5	A
4360	8.6	316	9.8	139	6.8	6.4	A
4362	7.2	309	9.8	139	6.8	6.5	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
4364	6.1	326	9.8	140	6.7	6.4	A
4366	5.5	319	9.8	139	6.7	6.4	A
4368	4.6	322	9.8	140	6.8	6.5	A
4370	6.8	330	9.8	140	6.8	6.5	A
4372	4.7	290	9.8	140	6.8	6.5	A
4374	7.6	320	9.8	139	6.8	6.5	A
4376	7.1	303	9.8	139	6.8	6.7	A
4378	6.6	291	9.8	140	6.8	6.8	A
4380	5.4	284	9.8	140	6.8	6.6	A
4382	5.0	303	9.8	140	6.8	6.6	A
4384	7.6	319	9.8	141	6.8	6.6	A
4386	8.7	320	9.8	141	6.8	6.8	A
4388	7.6	327	9.8	141	6.9	6.8	A
4390	8.7	310	9.7	142	6.8	6.6	A
4392	7.3	314	9.6	142	6.8	6.5	A
4394	7.3	314	9.6	141	6.8	6.6	A
4396	7.5	309	9.6	140	6.8	6.6	A
4398	6.9	303	9.6	140	6.8	6.6	A
4400	7.3	318	9.6	140	6.9	6.7	A
4402	7.1	321	9.6	140	6.9	6.7	A
4404	8.1	343	9.6	139	7.0	6.7	A
4406	8.2	286	9.6	139	7.0	6.7	A
4408	7.3	281	9.5	138	6.9	6.6	A
4410	5.5	309	9.4	137	6.9	6.5	A
4412	7.9	326	9.4	137	6.8	6.5	A
4414	7.7	259	9.4	137	6.9	6.6	C
4416	7.8	296	9.4	137	6.9	6.6	A
4418	8.1	310	9.4	138	6.8	6.5	A
4420	7.5	305	9.4	138	6.8	6.5	A
4422	8.1	299	9.4	138	6.7	6.3	A
4424	11.2	313	9.4	137	6.6	6.1	A
4426			9.4	138	6.6	6.1	
4428	9.7	53	9.4	137	6.7	6.1	B
4430	9.3	51	9.4	137	6.8	6.3	D
4432	5.8	291	9.4	138	6.9	6.5	A
4434	5.9	290	9.3	138	7.0	6.5	A
4436	4.1	305	9.2	138	7.1	6.4	A
4438	3.5	332	9.2	139	7.1	6.5	A
4440	6.1	303	9.2	138	7.1	6.5	A
4442	7.4	306	9.2	138	7.1	6.5	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
4444	7.2	317	9.2	138	7.1	6.5	A
4446	4.4	333	9.2	137	7.2	6.5	A
4448	4.6	300	9.2	137	7.3	6.5	A
4450	4.0	289	9.2	137	7.3	6.5	A
4452	3.6	285	9.2	137	7.3	6.5	A
4454	10.5	305	9.2	138	7.3	6.5	A
4456	14.3	312	9.2	136	7.3	6.5	A
4458	15.5	306	9.2	135	7.3	6.5	C
4460	14.7	314	9.2	136	7.3	6.6	C
4462	4.9	312	9.2	136	7.3	6.6	C
4464	3.4	291	9.1	137	7.3	6.8	A
4466	9.0	304	9.1	137	7.2	6.8	A
4468	8.4	285	9.0	137	7.2	6.7	A
4470	1.8	182	9.0	137	7.1	6.7	A
4472	6.1	9	9.0	137	7.1	6.7	C
4474	16.8	341	9.0	137	7.1	6.7	B
4476	7.8	316	9.0	138	7.1	6.7	A
4478	6.7	301	9.0	138	7.1	6.7	A
4480	6.8	292	9.0	138	7.1	6.7	A
4482	9.1	307	9.0	138	7.1	6.7	A
4484	8.5	320	8.9	138	7.1	6.7	A
4486	5.4	295	8.8	138	7.1	6.7	A
4488	5.3	275	8.8	138	7.1	6.7	A
4490	6.9	320	8.8	139	7.1	6.7	A
4492	9.0	320	8.8	138	7.1	6.7	A
4494	7.5	334	8.7	137	7.1	6.7	A
4496	7.2	309	8.6	137	7.1	6.8	A
4498	9.2	304	8.6	137	7.1	6.8	A
4500	8.8	310	8.6	137	7.1	6.8	A
4502	11.8	311	8.6	138	7.1	6.8	A
4504	11.3	314	8.6	138	7.1	6.7	A
4506	7.2	323	8.6	137	7.1	6.7	A
4508	9.1	318	8.6	137	7.1	6.8	A
4510	8.8	309	8.6	137	7.1	6.8	A
4512	8.1	302	8.6	137	7.1	6.9	A
4514	9.3	291	8.5	136	7.1	7.0	A
4516	8.6	313	8.4	137	7.1	7.0	A
4518	6.9	308	8.4	137	7.1	6.9	A
4520	6.9	302	8.4	137	7.1	6.8	A
4522	6.9	301	8.4	137	7.0	6.8	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
4524	7.2	290	8.4	135	6.8	6.5	A
4526	6.5	287	8.4	135	6.7	6.2	A
4528	6.6	61	8.4	134	6.7	6.3	A
4530	6.0	99	8.4	133	6.9	6.5	A
4532	5.3	292	8.4	134	6.9	6.6	A
4534	4.6	295	8.4	135	6.8	6.4	A
4536	4.7	15	8.3	137	6.7	6.3	A
4538	10.9	328	8.2	137	6.8	6.5	A
4540	9.6	322	8.2	137	7.0	6.7	A
4542	7.8	330	8.2	137	7.0	6.7	A
4544	7.1	345	8.2	136	7.0	6.7	A
4546	6.4	331	8.1	135	7.1	6.8	A
4548	5.0	315	8.0	134	7.1	6.8	A
4550	4.8	317	8.0	134	7.1	6.8	A
4552	4.6	309	8.0	135	7.1	6.8	A
4554	1.2	237	7.9	136	7.1	6.7	A
4556	2.6	337	7.8	135	7.0	6.6	A
4558	3.4	335	7.8	134	6.7	6.3	A
4560	8.3	328	7.8	133	6.5	6.1	A
4562	4.3	315	7.8	132	6.7	6.3	A
4564	5.4	355	7.8	133	7.0	6.7	A
4566	5.6	356	7.8	134	7.2	7.0	A
4568	6.2	222	7.8	134	7.2	7.1	C
4570	6.7	243	7.8	134	7.3	7.0	C
4572	7.8	317	7.7	135	7.3	7.0	A
4574	7.1	317	7.7	134	7.3	7.0	A
4576	5.9	320	7.6	134	7.3	7.0	A
4578	4.6	302	7.6	133	7.3	7.0	A
4580	9.4	273	7.6	132	7.3	6.9	C
4582	9.8	302	7.6	132	7.3	6.9	A
4584	9.6	303	7.6	132	7.1	6.8	A
4586	9.8	288	7.6	132	7.0	6.7	A
4588	9.9	304	7.6	133	6.9	6.5	A
4590	10.9	315	7.6	134	7.1	6.5	A
4592	12.1	312	7.6	134	7.1	6.5	A
4594	8.5	303	7.6	134	7.0	6.5	A
4596	7.4	310	7.6	133	7.0	6.5	A
4598	7.7	316	7.6	133	7.0	6.5	A
4600	7.8	317	7.6	133	7.0	6.6	A
4602	9.2	318	7.6	132	7.0	6.6	C

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
4604	14.7	325	7.6	132	7.1	6.7	C
4606	1.3	49	7.6	133	7.1	6.7	C
4608	3.0	305	7.5	133	7.1	6.8	C
4610	15.2	24	7.4	132	7.1	6.8	B
4612	9.4	341	7.4	132	7.1	6.9	A
4614	7.0	315	7.4	133	7.1	7.0	A
4616	7.9	289	7.4	133	7.1	7.0	A
4618	11.3	287	7.4	133	7.1	7.0	A
4620	12.0	301	7.4	132	7.1	7.0	A
4622	8.3	298	7.4	132	7.1	7.0	A
4624	5.3	296	7.4	133	7.1	6.9	A
4626	3.5	315	7.4	134	7.1	6.7	A
4628	6.5	336	7.4	134	7.1	6.7	A
4630	6.7	320	7.4	135	7.1	6.8	A
4632	9.7	283	7.4	134	7.1	6.9	A
4634	11.1	288	7.4	133	7.2	7.0	A
4636	6.1	280	7.4	133	7.3	7.0	A
4638	5.9	277	7.4	133	7.3	7.0	A
4640	7.5	293	7.4	134	7.3	6.9	A
4642	5.3	276	7.4	133	7.3	6.9	A
4644	4.8	264	7.4	134	7.3	7.0	A
4646			7.4	135	7.2	6.9	
4648	8.4	313	7.4	135	7.2	6.8	C
4650	3.2	323	7.4	133	7.1	6.7	A
4652	6.1	353	7.4	133	7.1	6.7	A
4654	4.0	16	7.4	134	7.1	6.7	A
4656	6.3	29	7.3	134	7.1	6.7	A
4658	9.8	27	7.2	134	7.0	6.6	A
4660	12.7	24	7.2	134	6.8	6.5	C
4662	10.3	353	7.2	135	6.8	6.3	C
4664	13.0	7	7.2	135	6.8	6.3	C
4666	14.2	30	7.2	135	6.8	6.4	C
4668	5.4	337	7.2	135	6.8	6.4	A
4670	5.6	327	7.2	135	6.8	6.5	A
4672	6.5	311	7.2	135	6.8	6.5	A
4674	5.6	302	7.2	135	6.8	6.5	A
4676	5.7	300	7.2	136	6.7	6.5	A
4678	6.1	264	7.2	136	6.6	6.5	A
4680	14.0	311	7.1	135	6.5	6.5	A
4682	13.5	310	7.0	135	6.6	6.5	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
4684	12.5	340	7.0	135	6.7	6.5	A
4686	12.6	334	7.0	134	6.8	6.5	A
4688	15.4	314	7.0	132	6.8	6.5	A
4690	15.0	311	7.0	132	6.8	6.5	A
4692	11.5	322	7.0	132	6.8	6.5	A
4694	12.5	320	7.0	132	6.9	6.5	A
4696	14.0	318	7.0	132	7.1	6.6	A
4698	10.8	298	7.0	131	7.1	6.7	D
4700	14.7	302	7.0	131	7.0	6.7	D
4702			6.9	132	7.0	6.6	
4704	11.7	350	6.8	132	7.0	6.6	D
4706	8.2	352	6.9	132	7.0	6.5	B
4708	9.8	341	7.0	131	6.9	6.5	B
4710	6.9	333	7.0	131	6.9	6.5	A
4712	7.2	323	7.0	131	6.9	6.5	A
4714	8.1	315	7.0	131	6.9	6.5	A
4716	7.4	328	7.0	131	6.9	6.5	A
4718	6.9	332	7.0	131	6.8	6.4	A
4720	7.8	309	7.0	130	6.7	6.3	A
4722	4.0	259	7.0	130	6.7	6.4	A
4724	0.4	351	6.9	130	6.8	6.5	A
4726	5.6	8	6.8	130	6.9	6.5	A
4728	13.7	319	6.8	130	6.9	6.5	A
4730	12.3	321	6.8	130	6.8	6.5	A
4732	3.4	326	6.8	130	6.9	6.5	A
4734	11.4	344	6.8	131	6.9	6.5	A
4736	12.2	356	6.8	131	6.8	6.5	A
4738			6.8	131	6.8	6.5	
4740	12.5	331	6.8	131	6.8	6.5	C
4742	12.4	315	6.8	131	6.8	6.5	A
4744	5.3	320	6.8	131	6.8	6.5	A
4746	5.0	3	6.8	131	6.9	6.5	A
4748	9.0	357	6.8	132	6.9	6.5	A
4750	9.9	326	6.8	132	6.9	6.5	A
4752	11.2	321	6.8	132	6.8	6.5	A
4754	9.2	294	6.8	133	6.8	6.5	A
4756	8.7	326	6.8	135	6.8	6.4	A
4758	10.3	335	6.8	135	6.8	6.4	A
4760	6.9	314	6.8	136	6.8	6.4	A
4762	12.9	344	6.8	139	6.8	6.4	C

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
4764	7.4	110	6.8	142	6.8	6.4	C
4766	2.4	317	6.8	140	6.8	6.4	A
4768	8.4	345	6.7	137	6.9	6.4	A
4770	12.5	355	6.6	136	6.9	6.5	A
4772	0.5	59	6.5	136	6.9	6.5	A
4774	3.0	294	6.4	136	6.9	6.5	A
4776			6.3	139	6.4	6.4	
4778	9.2	322	6.3	142	6.0	6.2	C

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
4562	4.4	328	7.8	136	6.6	6.2	A
4564	4.9	5	7.8	137	6.9	6.5	A
4566	4.6	7	7.8	137	7.2	6.8	A
4568	7.4	266	7.7	135	7.3	7.0	A
4570	8.2	257	7.6	135	7.3	7.0	C
4572	8.4	335	7.6	135	7.3	7.0	A
4574	7.0	312	7.6	135	7.3	7.0	A
4576	6.1	307	7.6	135	7.3	7.0	A
4578	7.5	294	7.6	135	7.3	7.0	A
4580	6.8	258	7.6	136	7.2	7.0	A
4582	9.1	312	7.6	135	7.1	7.0	A
4584	9.3	307	7.6	134	7.1	6.9	A
4586	12.3	287	7.6	135	7.1	6.8	A
4588	14.6	311	7.6	136	7.1	6.5	A
4590	12.1	320	7.6	135	7.1	6.4	A
4592	14.3	313	7.6	133	7.1	6.5	A
4594	8.1	306	7.6	133	7.0	6.5	A
4596	7.6	310	7.6	134	7.0	6.5	A
4598	7.8	318	7.6	135	7.0	6.5	A
4600	7.0	318	7.6	135	7.0	6.5	A
4602	5.2	326	7.6	134	7.0	6.6	B
4604	14.6	331	7.6	134	7.1	6.7	D
4606			7.6	134	7.1	6.7	
4608	4.5	323	7.6	134	7.1	6.8	D
4610	7.5	353	7.5	133	7.1	6.9	D
4612	35.4	113	7.4	134	7.1	6.9	B
4614	7.9	323	7.4	135	7.1	7.0	B
4616	7.7	317	7.4	135	7.1	7.0	B
4618	9.8	291	7.4	134	7.1	7.0	A
4620	12.7	296	7.4	133	7.1	7.0	A
4622	10.8	294	7.4	132	7.1	7.0	A
4624	6.1	299	7.4	131	7.1	6.9	A
4626	4.3	308	7.4	131	7.1	6.8	A
4628	4.5	299	7.4	132	7.1	6.7	A
4630	7.1	316	7.4	133	7.1	6.8	A
4632	7.9	318	7.4	132	7.1	6.9	A
4634	11.6	285	7.4	133	7.2	7.0	A
4636	11.1	287	7.4	133	7.2	7.0	A
4638	6.5	282	7.4	133	7.3	7.0	A
4640	6.8	282	7.4	134	7.3	7.0	A

Schlumberger

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

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: 376.1' FNL 934.0' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-13361

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Long Canyon Unit USA

9. WELL NO.
11-1

10. FIELD OR WILDCAT NAME
Entrada Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 11, T19S, R22E

12. COUNTY OR PARISH
Grand

13. STATE
Utah

14. API NO.
43-019-30732

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5380' 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	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other) Tubing detail, swabbing activities		

(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.)*

03/25/81 Csg. pressure @ 550 psi. Cut sand line off @ sinker bars. POOH w/ 2-3/8" tbg. Had 2 jts full of frac. sand. RIH and set 2-3/8" tbg @ 4083'. Made 9 swab runs. Recovered 41 bbls fluid. Fluid level @ 3100'. Csg. pressure @ 75 psi.

03/26/81 Well shut-in. Csg pressure: 0. Tbg pressure: 0. Lowered tbg and tagged sand fill @ 4152'. Ran hydrostatic bailer and recovered 190' of frac sand. No fluid recovered. 31 bbls to recover.

03/27/81 SICP: 115 psi. SITP: 100 psi. RIH w/2-3/8" tbg. Landed tbg @ 4186'. IFL @ 2500'. Made 9 swab runs. Recovered 35 bbls fluid. Csg pressure after swabs: OPSI. RDMOSU.

03/29/81 RU swab unit. SICP: 600 psi. Initial fluid level @ 1100'. Made 16 swab runs and recovered 64 bbls fluid. Well kicked off and flowed 2-1/2 hrs. Csg pressure dropped and well died.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED William H. Hegle TITLE Adm. Supervisor DATE April 1, 1981

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

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

AFE NO. _____

FIELD DOUGLAS CREEK ARCH LEASE LONG CANYON WELL NO. 11-1

DATE	DEPTH	DETAIL OF OPERATION
1981 3/23		AART: Well flowing to pit to CU to get flow rate.
		OA: Shut in for Sunday.
		Daily Cost: $280 Cum Cost: $530,685

RECEIVED APR 1 1984 DIVISION OF OIL, GAS & MINING

TOC 402 6/79

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

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: 376.1' FNL, 934.0 FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-13361

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Long Canyon Unit USA

9. WELL NO.
11-1

10. FIELD OR WILDCAT NAME
Wildcate Entrada

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 11, T19S, R22E

12. COUNTY OR PARISH: Grand
13. STATE: Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)

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

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☒
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other)		

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

RECEIVED
APR 7 1981
DIVISION OF OIL, GAS & MINING

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

3/6/81 - MIRUSU. Ran CBL/GR/CNL. Circ and cond hole. Pressure test csg to 4000 PSI.
3/8/81 - RIH w/2-3/8" tbg and 3-3/4" bit. Tag bottom @ 4830'. Circ and cond hole w/2% KCL water. Swabbed down to 4200'. POOH w/2-3/8" tbg and bit.
3/9/81 - Perf Morrison from 4666-4686'. RIH w/2-3/8" tbg and pkr. Swab well dry. Set pkr @ 4620'. RIH w/pressure bomb.
3/11/81 - 40 hr SITP: 0-PSI. POOH w/pressure bomb. POOH w/2-3/8" tbg and pkr. RIH w/2-3/8" tbg and F nipple open ended to 3400'. Acidize Morrison w/5000 gals 7-1/2% MSR acid and 50 balls. AIR: 4 BPM, AIR: 2000 PSI, ISIP: 1100 PSI, 15 min SIP: 550 PSI. POOH w/2-3/8" tbg. Frac'd Morrison w/75% quality foam (59,000 gals) and 73,500# of 20/40 sand. AIR: 20 BPM, AIP: 2800 PSI, ISIP: 3000 PSI, 15 min SIP: 1800 PSI.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED [signature] TITLE Asst.Div.Adm.Mgr. DATE March 26, 1981

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD GRAND COUNTY, UTAH LEASE LONG CANYON UNIT 11-1 WELL NO. _____

DATE	DEPTH	DETAIL OF OPERATION
03/04/81	4900	33 days from spud Footage last 24 hours -0-
		AART: RDRT OA: Run 109 joitns, 4 1/2 10.5
		K-55 STC guide shoe at 4881' KB, FC at 4835, C & C pump 10Bbl
		of 2% KCl + .5% NSR-1 Displace with 2% KCl water (78 bbl). PD
		wtih 1300 psi, float OK. 6:15 PM 3/381. ND set slips, cut off
		RR, at 7:00 AM 3/4/81 Cumulative Mud Cost 45,631 Daily Cumulativ
		Mechanical Trouble Cost 35,506
		Drilling Cost 235,205
		Evaluation Cost 61,004
		Completion Cost 39,886 41,865
		Total Cost 373,580

RECEIVED
APR 9 1981
DIVISION OF
OIL, GAS & MINING

TOC 402 6/79

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ R & A
☐ WC DRLG. ☐ CONST.
☐ RECOMPLETION ☐ _____

AFE NO. _____

FIELD DOUGLAS CREEK ARCH LEASE LONG CANYON WELL NO. 11-1

DATE	DEPTH	DETAIL OF OPERATION
1981 3/6		AART: MIRUSU. Run CBL/GR/CNL. Circ hole & PT csg to 4000 psi.
		OA: Standby.
		Daily Cost: $1,800 Cum Cost: $335,800
3/7		AART: RIH with 2 3/8" tbg and 3 3/4" bit. Circulate hole with 2% KCL
		wtr. Pressure test csg to 4000#.
		OA: Run CBL with gamaray to top of cement and run CNL with gamaray
		from td to 3900 and 1900 to 600'. SDON.
		Daily Cost: $8,780 Cum Cost: $384,680
3/8		AART: Perforate and run pressure bombs.
		OA: RIH with 2 3/8 tbg and 3 3/4" bit. Tag bottom at 4830'.
		Circulate hole with 2% KCL wtr. Pressure tested csg to 4000#.
		Swbd down to 4200'. POOH with 2 3/8 tbg and 3 3/4 bit.
		Daily Cost: $3,780 Cum Cost: $388,360
3/9		AART: Well shut in. Running pressure buildup.
		OA: Perforate 20' Morrison Zone from 4666'-4686'. RIH with 2 3/8
		tbg & pkr. Swab well dry. Set pkr at 4620'. Run in with
		pressure bomb. Test flow rate for 4 hrs. Gas TSTM. Shut in
		well for 40 hrs.
		DC $5,831 Cum Cost: $394,191
3/10		AART: POOH with pressure bombs. Acidize and frac well.
		OA: Well shut in for pressure survey. 24 hr shut in. Csg pressure 0.
		Tbg pressure 0.
		Daily Cost: $1,780 Cum Cost: $395,971

TOC 402 6/79

Tenneco Oil
A Tenneco Company

DRILLING RECORD
(E&P)

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

AFE NO. _____

FIELD DOUGLAS CREEK ARCH LEASE LONG CANYON WELL NO. 11-1

DATE	DEPTH	DETAIL OF OPERATION
1981 3/11		AART: Flow to pit to clean up and test rate.
		OA: 40 hr. SITP - 0 psi. POOH with pressure bomb. POOH with 2 3/8
		tbg andpkr. RIH with 2 3/8 tbg and F nipple open ended to 3400'.
		Acidize Morrison zone with 500 gal of 7 1/2% MRS acid and 50 ball
		sealers. AIR was 4 BPM, AIP was 2000 psi. ISIP was 1100 psi.
		15 min. SIP 550 psi. POOH with 2 3/8 tbg, frac well with 75%
		quality foam at 20BPM with 3% acid and frac fluid with 59,000 gal
		of foam and 73,500# of 20/40 sd. AIR 20 BPM, AIP 2800 psi. ISIP
		3000 psi 15 min. SIP 1800 psi.
		DC $38,613 Cum Cost: $438,584
3/12		AART: Swabbed well to get flow rate.
		OA: Well was dead. Csg pressure 1100#. Tbg pressure 0. Swabbed
		160 bbls, 226 to recover. Fluid level at first run was 1500'.
		Last run was 2400'. Csg pressure on last run was 900#.
		Daily Cost: $20,220 Cum Cost: $454,804
3/13		AART: Swab well to get flow rate.
		OA: SICP 380 psi, SITP 0 psi. IFL 2400'. Made 28 runs with swab.
		Recovered 170 BW FFL 2500'. Csg pressure was 450 psi at end of
		day. 56 BLWTBR.
		Daily Cost: $2,380 Cum Cost: $457,084
3/14		AART: RIH w/2-3/8" tbg w/cmt retainer, cmt w/50 sxs cmt.
		OA: SICP 600 psi, SITP 0 psi. FL on 1st swb run @3000'.
		Recovered 85 BW, 29 bbls fluid overload. Last run Fl
		@2500', CP 580 psi. POOH w/tbg. SDON.
		Daily Cost: $1,980 Cum Cost: $459,002

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

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

AFE NO. _____

FIELD DOUGLAS CREEK ARCH LEASE LONG CANYON WELL NO. 11-1

DATE	DEPTH	DETAIL OF OPERATION
1981 3/15		AART: Swb well to get back flow rate.
		OA: RIH w/2-3/8" tbg w/cmt retainer. Set retainer @4625'.
		Cmt'd Morrison 4666' to 4686' w/50 sxs cmt. Circ'd hole
		w/2% KCl. Swbd dn to 4100'. Perf'd 3 zones 4523-30',
		4534-40', 4548-46'. RIH w/2-3/8" tbg. SDON.
		Daily Cost: $7,872 Cum Cost: $466,874
3/16		AART: Swbg to CU.
		OA: SICP 0 psi, SITP 0 psi. Made 1 swb run, IFL 3000'.
		Swb hung in tbg, had to pmp swb out of tbg w/circulating
		pmp. Swb kept hanging up. Bent swb shieve in crown.
		Recovered very little wtr. SDON.
		Daily Cost: $2,780 Cum Cost: $469,654
3/17		AART: Swbg.
		OA: SICP 0 psi, SITP 0 psi. Changed out swb shieve. IFL @1000'.
		Made 9 swb runs, recovered 65 BF, 5 bbls overload. FFL
		@4300'. SDON.
		Daily Cost: $2,780 Cum Cost: $472,434
3/18		AART: Well SI, taking press survey.
		OA: Well SI. SICP 0 psi, SITP 0 psi. FL @1500'. Made 6 swb runs,
		recovered 29 BF, 34 bbls overload. POOH w/2-3/8" tbg. Set
		CIBP @4450'. Perf'd Dakota 4156-72'. RIH w/2-3/8" tbg &
		pkr. Set pkr @4110'. Swbd well dry. Ran press surveys
		on brm @6 o'clock. Took 4 hr flow rate. Well SI @10 pm.
		SDON.
		Daily Cost: $4,977 Cum Cost: $477,411

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

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

AFE NO. _____

FIELD DOUGLAS CREEK ARCH LEASE LONG CANYON WELL NO. 11-1

DATE	DEPTH	DETAIL OF OPERATION
1981 3/19		AART: Well SI, taking press survey.
		OA: Well SI, taking press survey.
		Daily Cost: $1,780 Cum Cost: $479,191
3/20		AART: POOH w/press bomb & swb well.
		OA: Well SI 24 hrs for press survey. Small blow on tbg.
		Daily Cost: $1,780 Cum Cost: $480,971
3/21		AART: Acidize and frac well.
		OA: POH with pressure survey tools. Final build up pressure was
		104 psi after 65 hr. buildup. Survey shows fluid level at 3800.
		Made 2 runs with swab. Recovered 1 bbl of fluid. Fluid level
		at 4160. Waited 3 hrs. Made 1 run with swab. Recovered no
		fluid. Waited 2 1/2 more hours. Made 1 run with swab, recovered
		no fluid. SDON.
		Daily Cost: $2,080 Cum Cost: $483,051
3/22		AART: Shut down for Sunday.
		OA: Acidize Dakota Zone 4156/4176 with 500 gal of 7 1/2% MSR acid
		and 48 ball sealers. AIR 4 1/2 BPM, AIP 2250 psi. Broke down
		at 2550 psi, ISIP 1250 psi, 15 min. SIP 500 psi. POH with
		2 3/8 tubing, pkr, RIH with 2 3/8 tbg. Open ended with F nipple
		to 3800'. Frac Dakota Zone 4156/4176 with 75% quality foam at
		20 BPM using 3% acid and 59,000 gal of foam and 73,500# of 20/40
		sand. AIR was 20 BPM, AIP 3100 psi, ISIP 2900 psi. 15 min. SIP
		2150 psi.
		Daily Cost: $47,354 Cum Cost: $530,405

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

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: 376.1' FNL 934.0' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U13361

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Long Canyon Unit

9. WELL NO.
11-1

10. FIELD OR WILDCAT NAME
Entrada Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 11 T19S R22E

12. COUNTY OR PARISH
Grand

13. STATE
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5380' 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	☐	☐
FRACTURE TREAT	☐	☒
SHOOT OR ACIDIZE	☐	☒
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other)		

(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.)*

3/18/81. Well shut-in. SICP: 0-PSI. SITP: 0 PSI Fluid level @ 1500'. Made 6 swab runs. Recovered 29 bbls fluid, 34 bbls overload. POOH w/2-3/8" tbg. Set cast iron bridge plug. Perf'd Dakota 4156-72'. RIH w/2-3/8" tbg and pkr. @ 4110'. Swabbed well dry. Ran pressure surveys. Took 4 hr. flow rate. Well shut-in.
3/22/81. POOH. w/pressure survey tools. Made 4 swab runs. Recovered 1 bbl fluid total, none @ end.
3/23/81. Acidized Dakota (4156-72') w/500 gals 7½% MSR acid and 48 ball sealers. AIR: 4.5 BPM AIP: 2250 PSI, ISIP: 12500 PSI. 15 mins SIP: 500PSI. POOH w/2-3/8" tbg. and pkr. RIH w/tbg open ended (nipple at bottom) to 3800'. Frac'd Dakota w/59,000 gals 75% quality foam, 3% KCL carrying 73,500# 20/40 sand. AIR: 20 BPM, AIP: 3100PSI ISIP: 2900 PSI. 15 mins SIP: 2150 PSI. Well flowing to clean-up for flow rate.

RECEIVED
APR 13 1981
DIVISION OF OIL, GAS & MINING

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Conley Mathews TITLE Asst.Div. Adm.Mgr. DATE March 25, 1981

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

Tenneco Oil
A Tenneco Company

DRILLING RECORD
(E&P)

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

AFE NO. _____

FIELD DOUGLAS CREEK ARCH LEASE LONG CANYON WELL NO. 11-1

DATE	DEPTH	DETAIL OF OPERATION
1981 4/1		AART: Swbg.
		OA: SICP 580 psi, SITP 180 psi. Opened well up & well
		unloaded @3 BO & flwd 45 mins. CP dropped to 180 psi.
		Blew csg dn. RIH w/2-3/8" tbg & tagged sd fill @4307'.
		Pld up & landed tbg @4186'. Made 6 swb runs & recovered
		4 BF. FL @3900'. Well making small gas blow. SDON.
		Daily Cost: $1,300 Cum Cost: $544,871
4/2		AART: WO pmpg unit.
		OA: SITP 0 psi, SICP 400 psi. IFL @2500'. Made 7 swb runs, re-
		covered 23 BW & 2 BO. Well kicked off & flwd 1-1/2 hrs. CP
		dropped to 300 psi & well died. SDON.
		Daily Cost: $1,000 Cum Cost: $545,871
4/3		WO pmpg equip.
		Daily Cost: $0 Cum Cost: $545,871
4/4/		AART: Hooking up pumping unit. APR 13 1981
		OA: Waiting on pumping unit.
		Daily Cost: $500 Cum Cost: $546,871
4/5		AART: Shut down for Sunday
		OA: SICP 770. SITP 0. Blew well down. RIH with 4851' of 3/4 "
		rods and pump. Hooked up pumping unit. Set 300 bbl tank.
		Worked on motor mounts for pumping unit. SICP 0. SITP 0.
		SDON.
		Daily Cost: $16,451 Cum Cost:$563,322

TOC 402 6/79

Tenneco Oil
A Tenneco Company

DRILLING RECORD (E&P)

☐ DEV. DRLG. ☐ P & A
☐ W.C DRLG. ☐ CONST.
☐ RECOMPLETION ☐

AFE NO. _____

FIELD DOUGLAS CREEK ARCH LEASE LONG CANYON WELL NO. 11-1

DATE	DEPTH	DETAIL OF OPERATION
1981 4/6		AART: Mounting motor on pumping unit. Rigged down service unit.
		OA: Sd for Sunday.
		Daily Cost: $0 Cum Cost: $563,322
4/7		AART: Working on pumping unit and motor. Waiting on starting motor
		parts and belts.
		OA: SICP 210 SITP 0. RDMOSU. Working on pumping unit and motor.
		Finished hooking up 300 bbl tank. Filled tubing 16 bbls wtr.
		DC $2,400 Cum Cost: $565,722
4/8		AART: Waiting on parts.
		OA: Shut in csg pressure 250. STIP 0. Hooking up motor. Hooking
		up pumping unit. Building dike around tank. Waiting on parts
		for motor.
		DC $1,000 Cum Cost: $566,722
4/9		AART: Testing well.
		OA: SICP 500. SITP 0. Finished hooking up motor and pumping unit
		After 3 hrs. pumping put well on test at 90 MCF 100 psi csg press
		10 SPM. 3 BPH water.
		Daily Cost: $200 CC $566,922
4/10		AART: Waiting on parts.
		OA: Testing well. 90 MCF w/csg pressure 100 psi. Pumping unit
		thru counter weight. Shut down waiting on parts.
		Daily Cost $200 CC $567,122

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

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: 376.1' FNL & 934.0' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-13361

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Long Canyon Unit

9. WELL NO.
11-1

10. FIELD OR WILDCAT NAME
Entrada Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 11, T19S, R22E

12. COUNTY OR PARISH
Grand

13. STATE
Utah

14. API NO.
43-019-30732

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5380' 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	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other) install pumping unit		

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

OIL, GAS & MINING

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

4/5/81. SICP. 770 PSI. SITP. 0 PSI. Blew well down. RIH w/4851' of 3/4" rods and pump. Hooked up pumping unit. Set 300 bbl. tank. Mount motor on pumping unit. RD service unit.

4/9/81. After 3 hrs. pumping put well on test @ 90 MCF gas 100 PSI csg pressure w/3 bbls per hour of water.

4/22/81. Started flow test 4/20/81. 24 hr test; 94 MCF, 59 bbls water. CP went from 720 to 90 PSI.

4/30/81-5/9/81. Waiting on parts.

5/9/81. Well back on line. Rate 100 MCF gas @ 700 PSI (CP) pumping rate; 20 strokes/minute.

5/10/81 Rate: 100 MCF, CP: 90 PSI Pumping @ 10 strokes/minute 66 bbls water.

5/11/81 Rate: 100 MCF, CP: 90 PSI Pumping @ 10 strokes/minute 59 bbls water.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED [signature] TITLE Asst. Div. Adm.Mgr DATE 5/18/81

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

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: 376.1' FNL & 934.0' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-13361

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Long Canyon Unit

8. FARM OR LEASE NAME

9. WELL NO.
11-1

10. FIELD OR WILDCAT NAME
Entrada Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 11, T19S R22E

12. COUNTY OR PARISH: Grand
13. STATE: Utah

14. API NO.
43-019-30732

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5380' 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	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other)		

(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.)*

5/12/81. Rate: 135 MCF CP: 90 PSI Pumping @ 10 strokes/minute 30 bbls. water
5/13/81. Rate: 50 MCF CP: 80 PSI Pumping @ 10 strokes/minute 20 bbls. water
5/14/81. Rate: 50 MCF CP: 50 PSI Pumping @ 8 strokes/minute 20 bbls. water
5/15/81. Rate: 51 MCF CP: 30 PSI Pumping @ 8 strokes/minute 10 bbls. water
5/16/81. Rate: 50 MCF CP: 50 PSI, o bbls. oil, 11 bbls. water
5/17/81. 24 hour test: 50 MCF CP: 40 PSI, 0 bbls. oil, 11 bbls. water
5/18/81. 24 hour test: 50 MCF CP: 40 PSI, 0 bbls. oil, 11 bbls. water
5/19/81. 24 hour test: 50 MCF CP: 40 PSI, 0 bbls. oil, 11 bbls. water
5/20/81. 24 hour test: 50 MCF CP: 40 PSI, 0 bbls, oil, 11 bbls. water. Fluid level @ 4123'.
5/21/81. Shut in for pressure build-up test.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Capley [illegible] TITLE Div. Asst. Adm. Mgr. DATE 5/27/81

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

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: 376.1' FNL 934' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-13361

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Long Canyon Unit

8. FARM OR LEASE NAME

9. WELL NO.
11-1

10. FIELD OR WILDCAT NAME
Entrada Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 11, T19S R22E

12. COUNTY OR PARISH: Grand
13. STATE: Utah

14. API NO.
43-019-30732

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5380' 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	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐

(other) Request to temporarily suspend operations.

JUN 8 [illegible]
DIVISION OF
OIL, GAS & MINING

(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.)*

5/29/81 - Tenneco has temporarily abandoned above referenced well due to low production potential indicated by 12 day test: 36 MCF gas, 0 bbls oil, 11 bbls water @ 30 PSI csg pressure.

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

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Curley Vatkins TITLE Asst.Div.Adm.Mgr. DATE 6/2/81

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

DIVISION OF OIL, GAS AND MINING

PLUGGING PROGRAM

NAME OF COMPANY: Tennaco

WELL NAME: Long Canyon #11-1

SECTION 11 TOWNSHIP 19S RANGE 22E COUNTY Grand

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

TOTAL DEPTH: 4900 - 4450' PBTD

CASING PROGRAM:

7', @ 23# 501' circ. to surface
4 1/2" @ 4881' 200 sx. (TOC 3240)
Perf. 4666' - 4686'
4523' - 4548'
4156' - 4172'
Cement ret. 4625' squeeze perfs. 50 sx.
CLBP 4550'

FORMATION TOPS:

Castle Gate	1615' - 650'
Mancos	2965' - 3025'
Dakota	4145' - 4430'
Morrison	4430' - TD

PLUGS SET AS FOLLOWS:

1. 4000' cmt. ret. 100 sx. (H) squeeze 50 sx. into perfs.
2. 3100' part casing cement 3200' - 2900' Place 200' cmt. plug across casing stub.
3. 700' - 400'
4. 100' - surface

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

DATE 11-20-81 SIGNED MTM M. T. Minder

Form OGC -3

STATE OF UTAH

OIL & GAS CONSERVATION COMMISSION

SUBMIT IN DUPLICATE*
(See other instructions on reverse side)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other plug & abandon

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 376.1 FNL, 934' FEL
At top prod. interval reported below NE NE
At total depth

5. LEASE DESIGNATION AND SERIAL NO.: U-13361

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: Long Canyon Unit

8. FARM OR LEASE NAME:

9. WELL NO.: 11-1

10. FIELD AND POOL, OR WILDCAT: Wildcat Entrada

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 11, T19S, R22E

14. PERMIT NO.: 43-019-30732 DATE ISSUED: 10-15-80

12. COUNTY OR PARISH: Grand 13. STATE: Utah

15. DATE SPUDDED: 1-31-81 16. DATE T.D. REACHED: 17. DATE COMPL. (Ready to prod.): P&A-d on 12-1-81 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*: 5380 ' gr. 19. ELEV. CASINGHEAD: --

20. TOTAL DEPTH, MD & TVD: 4900' 21. PLUG, BACK T.D., MD & TVD: 4450' 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)*: 4666--4686' Morrison

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: DI-SFL, BCSL, CNFD, CBL, CNL, GR

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
7"	23#	501'	8-3/4"	180 sx CL-G w/2% CACL 7 1/4# sx celloflak	
4-1/2"	10.5#	4881'	6-1/4"	200 sx CL-G w/10% H-6 w/additives	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)
4666-4686'

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
4666-4686' Morrison	Acidize w/5000 gal 7½% MSR acid & 50 balls. Frac Morrison w/75% quality foam & 73,500# of 20/40 sand.

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 [signature] TITLE Production Analyst DATE 12/7/81

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

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.
If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.
Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.
Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.
Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.
Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.
Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Mancos "B"	1255'	4033'	
Dakota Silt	4033'	4151'	
Dakota Sandstone	4151'	4302'	
Morrison	4302'	4660'	
Entrada	4660'	TD	

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

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: 376.1' FNL 934' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-13361

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Long Canyon Unit

8. FARM OR LEASE NAME

9. WELL NO.
11-1

10. FIELD OR WILDCAT NAME
Entrada Test

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 11, T19S R22E

12. COUNTY OR PARISH
Grand

13. STATE
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5380' 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	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☒	☐
(other)		

(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.)*

11/30/81 - Tenneco proposes to plug and abandon the above referenced well in accordance with the attached detailed procedure.

RECEIVED
DEC 07 1981
DIVISION OF
OIL, GAS & MINING

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: 12-29-81
BY: Original Signed by C. B. Feight

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Saundra Peron TITLE Production Analyst DATE 11/30/81
Saundra Peron

(This space for Federal or State office use)

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

*See Instructions on Reverse Side

FIELD: Douglas Creek Arch

WELL NAME: Long Canyon Unit 11-1

LOCATION: Sec.11, T19S, R22E

COUNTY: Grand, Utah

WI: 100% BPO

RI: 78%

7 "OD, 23 LB, _____ CSG.W/ 180 SX

TOC @ surface.

4-1/2 "OD, 10.5 LB, _____ CSG.W/ 200 SX

TOC @ See CBL.

DETAILED PROCEDURE

1. MIRUSU. Kill well if necessary. Remove WH & install BOPE.
2. POOH w/rods, pmp & tbg & lay dn rods.
3. PU a cmt retainer & RIH on 2-3/8" tbg to 4000' & set. Load annulus w/wtr & PT retainer to 500 psig. PU on tbg & PT tbg to 2000 psig. Sting out of ret. & establish reverse circ. Sting back into ret. & establish rate into perfs.
4. Pmp 100 sxs Class H w/.4% Halad-9. Pmp until 1500 psig is encountered or until 1 bbl cmt is left in tbg. With 1 bbl cmt left to displace, sting out of retainer & reverse tbg clean. Displace hole w/10 ppg mud. POOH w/tbg.
5. MIRUWL. RIH to 3100' & cut csg w/WL chemical cutter for 4-1/2", 10.5# csg. TOC @3240'.
6. RU csg crew. POOH w/4-1/2" csg, break out & lay dn.
7. PU 2-3/8" tbg open ended & RIH to 100' below csg stub & spot a 300' cmt plug (55 sxs) across stub.
8. PUH w/tbg to 700' (base of surface pipe @501') & spot a 300' plug across base of 7" surface using 70 sxs Class H.
9. PUH w/tbg to 100' & circ cmt to surface. POOH w/tbg.
10. Place 4" P&A marker @surface stating well name & number, section, township & range. And date P&A'd.
11. Remove all pmpg equip & haul to TOC yard. Fill in all pits & restore location to original.

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

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: 376.1' FNL, 934' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-13361

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Long Canyon Unit

8. FARM OR LEASE NAME

9. WELL NO.
11-1

10. FIELD OR WILDCAT NAME
Wildcat Entrada

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 11, T19S, R22E

12. COUNTY OR PARISH: Grand
13. STATE: Utah

14. API NO.
43-019-30722

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5380' 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	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☒	☐
(other)		

RECEIVED
DEC 16 1981
DIVISION OF
OIL, GAS & MINING

(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.)*

11/26 - OA: Rode SU fr Long Canyon 14-1. MIRUSU.

11/28 - OA: LD horsehead. POOH w/rods & pmp. NDWH, NUBOP. POOH w/2-3/8" tbg. & F nipple. RIH w/part of tbg & cmt retainer.

11/29 - OA: Finished RIH w/2-3/8" tbg & cmt retainer. Set cmt retainer @ 4001'. RU Dowell & pmpd 100 sxs Class 'G' cmt w/.4% Halad 9 @2 BPM & 2000 psi. 1 bbls. left in tbg. Reversed out tbg clean. Displaced hole w/10# mud. POOH w/tbg. MIRUWL. Cut csg. @3100' w/chemical cutter. RU csgq crew. POOH partiall w/csg.

OVER.....

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED [signature] TITLE Production Analyst DATE 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 Feight

*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

12/1 - OA: POOH w/4-1/2" csg. Total rec'd = 3098'. RIH w/2-3/8" tbg to 3200'. Pmpd 55 sxs Class 'G' cmt @2 BP POOH to 700'. Spotted 300' plug w/Class 'G' cmt. PUH to 100'. Pmpd Class 'G' cmt to surface. POOH w/tbg. Placed 4-1/2" P&A marker. TD 4881'.

STATE OF UTAH
DIVISION OF
OIL, GAS AND MINING
DATE:
BY:

comp 2

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

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 Co.

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

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 376.1' FNL, 934' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-13361

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Long Canyon Unit

8. FARM OR LEASE NAME

9. WELL NO.
11-1

10. FIELD OR WILDCAT NAME
Wildcat Entrada

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 11, T29S, R22E

12. COUNTY OR PARISH
Grand

13. STATE
Utah

14. API NO.
43-019-30722

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5380' 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	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☐	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☒
(other)		

RECEIVED
JAN 31 1983
DIVISION OF
OIL, GAS & MINING

(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.)*

11/26/81: MIRUSU.
11/28/81: LD horsehead. POOH w/rods & pmp. NDWH, NUBOP. POOH w/2-3/8" tbg & F nipple. RIH w/part of tbg & cmt retainer.
11/29/81: Finished RIH w/2-3/8" tbg & cmt retainer. Set cmt retainer @ 4001'. RU Dowell & pmpd 100 sxs Cl/G cmt w/.4% Halad 9 @ 2 BPM & 2000 psi. 1 bbls left in tbg. Reversed out tbg clean. Displaced hole w/10# mud. POOH w/tbg. MIRUWL. Cut csg @ 3100' w/chemical cutter. RU csg crew. POOH partially w/csg.
12/1/81: POOH w/4-1/2" csg. Total rec'd = 3098'. RIH w/2-3/8" tbg to 3200'. Pmpd 55 sxs Cl/G cmt @ 2 BPM. POOH to 700'. Spotted 300' plug w/Cl/G cmt. PUH to 100'. Pmpd Cl/G cmt to surface. POOH w/tbg. Placed 4-1/2" P&A marker. TD 4881'.

(303) 740 2591

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED Denise Wilson TITLE Production Analyst DATE January 27, 1983

(This space for Federal or State office use)

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

ACCEPTED
~~APPROVED BY THE STATE~~
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: 2-1-83
BY: [illegible]

*See Instructions on Reverse Side

OPERATOR - 090

16 - 20 S 21 E GRAND

SUN RESOURCES STATE 5-16

500 FNL - 1820 FEL