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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK
 b. TYPE OF WELL
 OIL WELL GAS WELL OTHER
 SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 Total Petroleum, Inc. (303) 291-2000

3. ADDRESS OF OPERATOR
 P.O. Box 500, Denver, Co. 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface
 1290' FNL & 600' FWL (NWNW)
 At proposed prod. zone
 600' FNL & 600' FWL (NWNW)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 18 air miles NNE of Montezuma Creek, Ut.

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
 600'

16. NO. OF ACRES IN LEASE
 640

17. NO. OF ACRES ASSIGNED TO THIS WELL
 80

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
 None

19. PROPOSED DEPTH
 5900' ^{TVD} _{6000' ^{MP}}

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5278' ungraded

22. APPROX. DATE WORK WILL START*
 February, 1986

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT

DIVISION OF

- Lease is all of Section 15. Lease mineral and surface owner is United States Government, administered by Bureau of Land Management.
- Well will be directionally drilled due to topographic and archaeological constraints. Both surface and downhole locations are on same lease. Complete drilling program is on Pages 1-8.

* Complete well name is 1-15 Cliffhouse Buttes Federal

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 [Signature] TITLE Petroleum Engineer DATE 2/3/86

(This space for Federal or State office use)

PERMIT NO. 43-037-31251 APPROVAL DATE _____

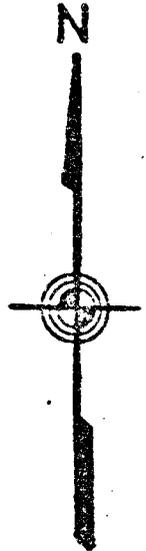
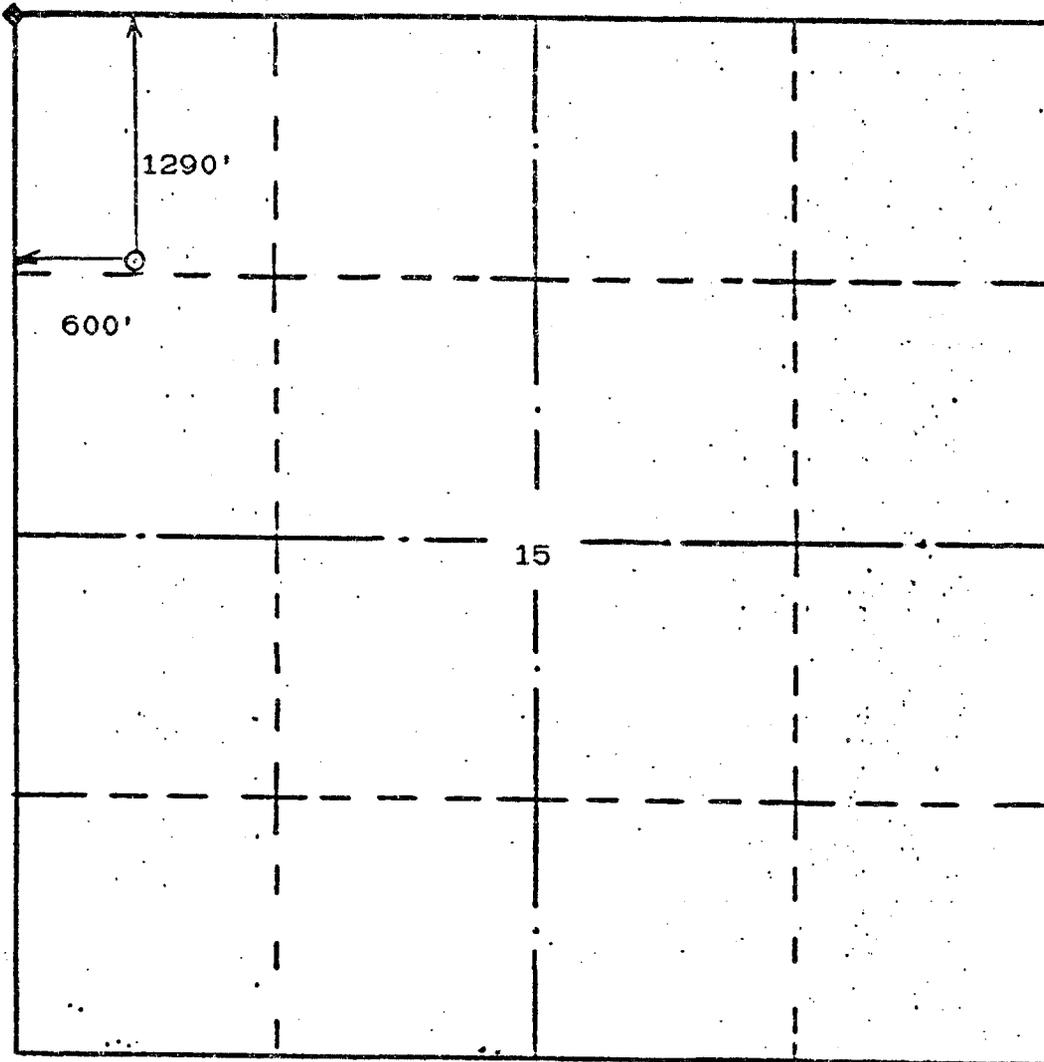
APPROVED BY _____ TITLE _____ DATE _____

cc: BLM-Moab (3), UDOGM-SLC (2)

*See Instructions On Reverse Side

[Signature] 203

WELL LOCATION AND ACREAGE DEDICATION PLAT



1"=1000'

WELL LOCATION DESCRIPTION:

TOTAL PETROLEUM
 1-15 CLIFFHOUSE BUTTES FEDERAL
 1290' FNL & 600' FWL
 SECTION 15, T. 38 S., R. 25 W., SLM
 SAN JUAN COUNTY, UTAH
 5278' GROUND ELEVATION

REFERENCES:

200' SOUTH 5264'
 200' WEST 5279'

12 JANUARY 1986

The above plat is true and correct to the best of my knowledge and belief.

Gerald C. Huddleston
 Gerald C. Huddleston
 Land Surveyor
 STATE OF UTAH

REGISTERED LAND SURVEYOR
 No. 6705

Total Petroleum, Inc.

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1-15 Cliffhouse Buttes Federal

Surface: 1290' FNL & 600' FWL

Bottom: 600' FNL & 600' FWL

Sec. 15, T. 38 S., R. 25 E., San Juan County, Utah

All lease and/or unit operations will be conducted in full compliance with applicable laws, regulations (43 CFR 3100), Onshore Oil & Gas Order #1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. The operator will furnish a copy of these conditions to his field representative to ensure compliance.

8 Point Drilling Program

1. Based on logs from MCOR's Cliffhouse Buttes Federal 1-10 (SWSE 10-38S-25E) the estimated tops of important geologic markers are:

<u>Formation Name</u>	<u>Depth (TYD)</u>	<u>Subsea</u>
Morrison	0000'	+5278' (ungraded)
Chinle	1564'	+3714'
Cutler	2614'	+2664'
Honaker Trail	4468'	+ 810'
Upper Ismay	5508'	- 230'
Desert Creek	5767'	- 489'
Akah	5857'	- 579'
T.D.	5900'	- 622'

2. The estimated depths at which water, oil, gas, or other mineral bearing zones are expected to be encountered are:

Possible Water Zones

Chinle: 1564'

Cutler: 2614'

Possible Oil Zones

Upper Ismay: 5508'

Desert Creek: 5767'

Surface casing will be set in the Chinle. Water bearing zones will be protected with weighted mud. All fresh water encountered during drilling

TOTAL - DENVER
RECEIVED

FEB 1986

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Total Petroleum, Inc.
1-15 Cliffhouse Buttes Federal
Surface: 1290' FNL & 600' FWL
Bottom: 600' FNL & 600' FWL
Sec. 15, T. 38 S., R. 25 E., San Juan County, Utah

PRODUCTION DEPT.

will be recorded by depth, cased, and cemented. All oil and gas shows will be tested to determine commercial potential.

3. BOP systems will be consistent with API RP 53. A schematic diagram of the 3000 psi BOP is on Page 3. A backup source able to close the BOPs if the primary source fails will be available on location.

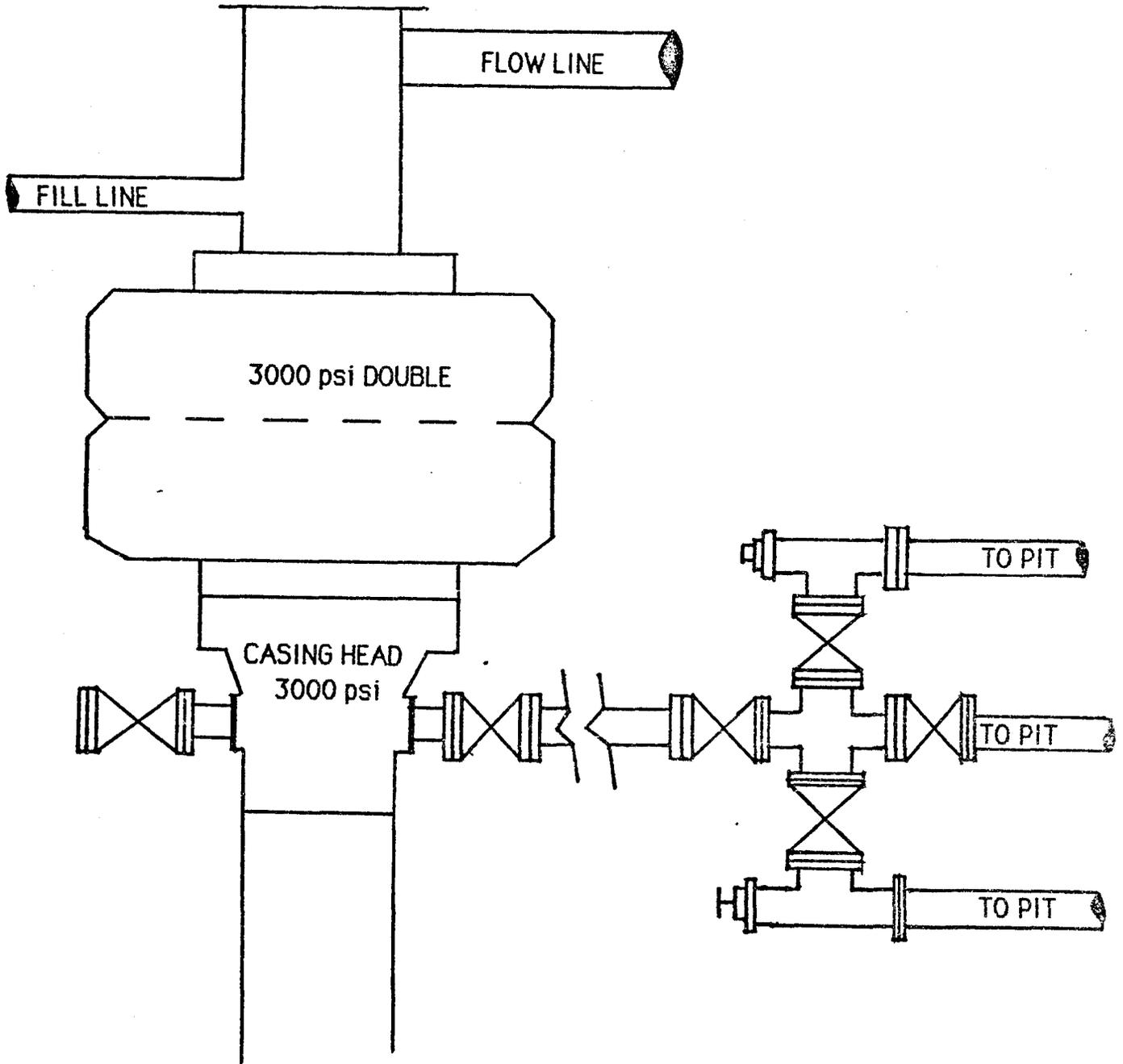
Ram preventer pressure tests will be to 1500 psi, choke and hydril preventer to 500 psi. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. BOP controls will be installed before drilling the surface casing plug, and will stay in use until the well is completed or abandoned. Preventers will be pressure tested before drilling casing cement plugs. All BOP mechanical and pressure tests will be recorded on the drillers log.

BOPs will be inspected and operated at least daily to ensure good mechanical working order. This inspection will be recorded on the daily drilling report.

4. The below may be inspected. Call Mike Wade at the Resource Area (801) 587-2201 or home (801) 587-2026 one day before the event, or on a dry hole as soon as possible. If unable to reach Mike Wade, call Greg Noble at the District Office (801) 259-6111 or home (801) 259-8811.

- Running casing strings and cement
- Cementing and testing of surface casing
- If a dry hole, setting and testing of surface casing shoe plug
- If a depleted producer, setting and testing of plugs across the producing horizon and, if applicable, the surface casing shoe plug and/or annulus squeeze jobs

Total Petroleum, Inc.
1-15 Cliffhouse Buttes Federal
Surface: 1290' FNL & 600' FWL
Bottom: 600' FNL & 600' FWL
Sec. 15, T. 38 S., R. 25 E., San Juan County, Utah



BLOWOUT PREVENTER

Total Petroleum, Inc.
 1-15 Cliffhouse Buttes Federal
 Surface: 1290' FNL & 600' FWL
 Bottom: 600' FNL & 600' FWL
 15-385-25E, San Juan County, Utah

The proposed casing and cementing program is:

<u>Hole Size</u>	<u>O.D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>	<u>Age</u>	<u>Setting Depth</u>
20"	16"		Conductor Pipe		New	0'- 80'
12-1/4"	9-5/8"	36#	K-55	ST&C	New	0'-1600'
8-3/4"	5-1/2"	15.5#	K-55	LT&C	New	0'-6002' (M.D.)

Conductor Pipe: Cement to surface with Redimix

Surface Casing: Cement to surface with:

Lead System

DS Lightweight III Cement
 + .25 lb/sk D29 (celloflake)
 + 2% CaCl₂

Weight: 12.3 lbs/gal
 Yield: 1.84 cu.ft./sk
 Water: 9.9 gal/sk
 Volume: 417 sx

Tail System

Class "B" System
 + .25 lb/sk D29 (celloflake)
 + 2% CaCl₂

Weight: 15.6 lbs/gal
 Yield: 1.18 cu. ft./sk
 Water: 5.2 gal/sk
 Volume: 200 sx

Production Casing: Cement to 4200' with:

Preliminary

Run 10 bbl Spacer 1000 and 10 bbl CW100 ahead of cement

Lead System

Class "B" Cement
 + 0.8% D60 (fluid loss)

Weight: 15.6 lbs/gal
 Yield: 1.18 cu.ft./sk
 Water: 5.2 gal/sk
 Volume: 482 sx

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5. The proposed mud program is:

<u>Depth</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Water Loss</u>
0'-1600'	Water & Gel	8.4-9.5	26-36	N/C
1600'-3000'	Chemical	8.5-8.8	28-35	N/C
3000'-5000'	Chemical	8.8-10+	34-40	15
5000'-TD	Chemical	10.0-11	38-50	6-8

A two man mud logging unit will be on location. Samples will be collected every 30' from the base of the surface casing to 4000'. Samples will be collected every 10' from 4000' to 5000'. Samples will be collected every 5' from 5000' to TD.

6. Two drill stem tests will be run in the Upper Ismay, our primary objective. If favorable and possible, a 60'-120' core will be taken. The Desert Creek, a secondary objective, may have one DST and be cored at the discretion of the geologist. The geologist will be on location from 4000' to TD.

The following logs will be run:

DIL/SFL & Sonic: Base of Surface Casing to Total Depth

FDC-CNL & Dipmeter: 4000' to Total Depth

Whether the well is completed as a dry hole or producer, "Well Completion or Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well, or after completion of operations being performed, *per* 43 CFR 3164. Two copies of all logs, core descriptions & analyses, well test data, geologic summaries, sample descriptions, and all other data obtained during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. (If requested, sample cuttings, fluids, and/or gases will be submitted to the District Manager.)

Total Petroleum, Inc.
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Surface: 1290' FNL & 600' FWL
Bottom: 600' FNL & 600' FWL
15-38S-25E, San Juan County, Utah

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7. The maximum expected bottom hole pressure is 3000 psi.
No abnormal pressures, temperatures, or hydrogen sulfide are expected.

8. Well will be directionally drilled. See PAGE 8 for kickoff point, angle, depths, and deviations. Total is the owner of all the oil and gas within a radius of 460' from all points along the intended well bore. Within 30 days of completion of the well, a complete angular deviation and directional survey of the well obtained by an approved well survey company will be filed with UDOGM.

The anticipated spud date is February, 1986. It is expected it will take 20 days to drill the well and 10 days to complete the well.

Total or its dirt contractor will contact the Resource Area 48 hours before beginning dirt work.

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the District Manager. If operations are to be suspended, prior approval of the District Manager will be obtained and notification given before resumption of operations.

The spud date will be phoned to the Resource Area, a minimum of 24 hours before spudding. A Sundry Notice (Form 3160-5), reporting the spud date and time, will be sent to the District Manager within 24 hours after spudding. If the spud is on a weekend or holiday, the Sundry will be sent on the following regular work day.

Starting with the month in which operations begin, and continuing each month until the well is physically plugged and abandoned, a "Monthly Report of Operations" (Form 3160-6) will be sent to the District Manager.

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Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual events will be promptly reported to the Resource Area *per* NTL-3A.

A Sundry Notice will be filed for prior approval of the District Manager if a replacement rig is planned for completion. All conditions of this approved plan apply to all operations of the replacement rig. In emergencies, verbal approval can be given by the District Manager.

If the well is successfully completed for production, then the District Manager will be notified. Written notification will be sent not later than 5 business days following the date on which the well is placed on production. The Resource Area will schedule a first production conference within 15 days after receipt of the first production notice.

Approval to vent/flare gas during initial well evaluation will be obtained from the District Manager. This preliminary approval will not exceed 30 days or 50 MMcf of gas. Approval to vent/flare beyond this initial period will require the District Manager's approval *per* NTL-4A.

No well abandonment operations will begin without the prior approval of the District Manager. With a newly drilled dry hole, failure, or emergency, oral approval will be obtained from the District Manager. A Sundry Notice will be sent to the District Manager within 30 days following completion of the well for abandonment. The Sundry will note where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the reclamation required by the approved APD or abandonment notice has been completed to the satisfaction of the Area Manager.

Once plugged, a regulation dry hole marker will be erected. The following information will be beaded on with a welding torch: Total Petroleum, Inc., 1-15 Cliffhouse Buttes Federal, NWNW 15-38-25, U-47970.

Preliminary Proposal and Cost Estimate for:

COMPANY Total Petroleum, Inc. Well Name 1-15- Cliffhouse Location San Juan County, Utah
Buttes Federal Sect. 15, T 38 S, R 25 E

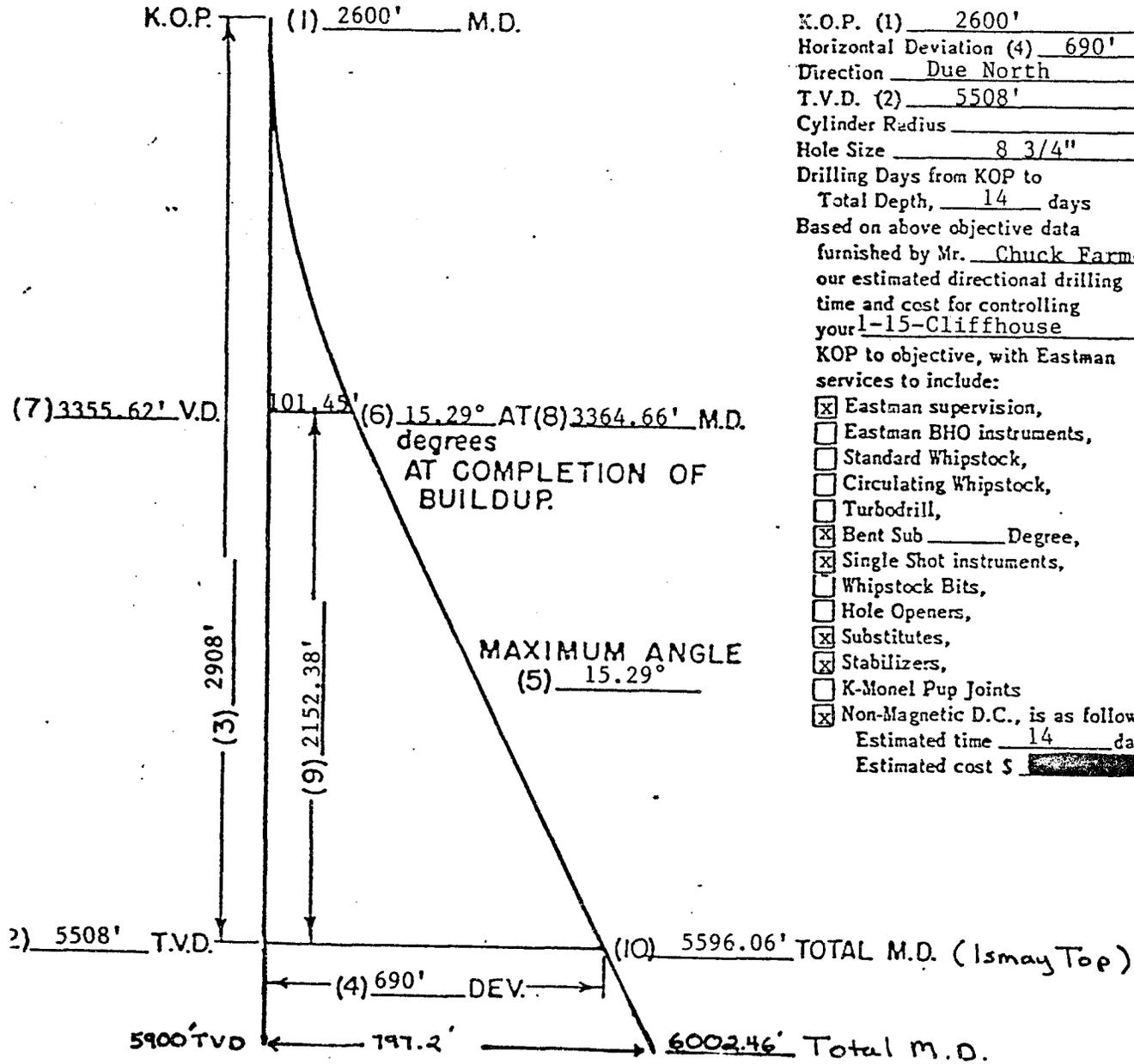
OBJECTIVE:

K.O.P. (1) 2600'
 Horizontal Deviation (4) 690'
 Direction Due North
 T.V.D. (2) 5508'
 Cylinder Radius _____
 Hole Size 8 3/4"

Drilling Days from KOP to
 Total Depth, 14 days

Based on above objective data
 furnished by Mr. Chuck Farmer
 our estimated directional drilling
 time and cost for controlling
 your 1-15-Cliffhouse from
 KOP to objective, with Eastman
 services to include:

- Eastman supervision,
- Eastman BHO instruments,
- Standard Whipstock,
- Circulating Whipstock,
- Turbodrill,
- Bent Sub _____ Degree,
- Single Shot instruments,
- Whipstock Bits,
- Hole Openers,
- Substitutes,
- Stabilizers,
- K-Monel Pup Joints
- Non-Magnetic D.C., is as follows:
 Estimated time 14 days.
 Estimated cost \$ XXXXXXXXXX



ALL INFORMATION ON PRELIMINARY PROPOSAL DETERMINED GRAPHICALLY.
 FINAL WORK PROPOSAL TO BE COMPUTED BY EASTMAN WHIPSTOCK ENGINEERING DEPT.

James M. Lusk - 1-17-86
 Eastman Whipstock Representative - Date

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13 Point Surface Use Plan

1. EXISTING ROADS (See PAGES 17-19)

From the Blue Mt. Cafe in Dove Creek, Colorado, go 2.7 miles south on Road 7. (Note: the speed limit is vigorously enforced in Dove Creek.)
Then turn right and go west 1.0 mile on Road L.
Then turn left and go south 3.0 miles on Road 6.
Then turn right and go west 3.2 miles on Road P.
Then bear left and go south 1.0 mile on Road 3.
Then turn right and go west 1.0 mile on Road R.
Then turn left and go south 1.0 mile on Road 2.
Then turn right and go west 2.1 to a large brown Wexpro tank battery.
Then turn left and go southwest 13.5 miles to a fork.
Then bear left and go south 1.0 mile to another fork.
Then turn right and go west and directly onto a Mobil dry hole.

All but the final mile of existing access is across county roads. The north half of the final mile is across private land. (The land owners have been contacted.) The south half of the final mile is on-lease road. The roads will be maintained to a standard at least equal to their present condition. No improvements or new disturbances are planned. An Encroachment Permit has been approved by the San Juan County Road Dept.

2. ROADS TO BE BUILT (See PAGES 18 & 19)

From the Mobil dry hole, a road 1,900 feet in length will curve and climb west along a seismic trail to the well. The road will be flat bladed with a 20' wide running surface and one 18" culvert. Maximum grade will be 9%. There will be no turnouts, fence crossings, or major cuts or fills.

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Surface: 1290' FNL & 600' FWL
Bottom: 600' FNL & 600' FWL
15-38S-25E, San Juan County, Utah

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Surface disturbance and vehicle travel will be limited to the approved location and access. Any additional area needed will be approved in advance by the Area Manager. BLM reserves the right to require rocking the new road if deep winter mud forms during drilling.

The access road will be water barred or brought to Class III Road Standards within 30 days of dismantling the drill rig. If this deadline can't be met, the Resource Area will be notified so that temporary drainage control can be installed. Class III Road Standards control drainage through the use of topography, ditch turnouts, dips, outsloping, crowning, low water crossings, and culverts. Specific measures will be determined at a field inspection.

3. EXISTING WELLS

There are no water, injection, disposal, or producing wells within a one mile radius.

4. PROPOSED PRODUCTION FACILITIES

The type and layout of the production facilities are not known now. A Sundry Notice will be submitted for approval before they are installed.

All permanent (on site for 6 or more months) surface facilities will be painted a flat, nonreflective, Desert Tan color. Painting will be completed within 6 months of installation. Parts required to comply with OSHA colors will be excluded.

If a tank battery is built, it will be surrounded by a dike of sufficient capacity to contain 150% of the storage capacity of the battery. All

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loading lines will be placed inside the dike.

All site security guidelines in 43 CFR 3162.7 will be obeyed. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease must have the prior written approval from the District Manager.

Any gas meter run will be within 500' of the wellhead. The gas flowline will be buried from the wellhead to the meter and 500' downstream of the meter run and any production facilities. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well pad. Meters will be calibrated in place before delivery begins. Meter accuracy tests will be conducted monthly for the first 3 months on new meters, and at least quarterly thereafter. The Resource Area will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be sent to the Resource Area. All meters will conform with the API standards for liquid hydrocarbons and AGA standards for natural gas measurement.

5. WATER SUPPLY (See PAGE 18)

Water will be trucked from Wexpro's Patterson Unit #2 well in NESW Sec. 32, T. 37 S., R. 25 E. Both Wexpro and the Utah Div. of State Lands & Forestry gave us permission to use this well on January 17, 1986. A Temporary Application to Appropriate Water was filed with the State of Utah Div. of Water Rights on January 17, 1986.

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6. CONSTRUCTION MATERIALS

Pad construction materials are native *in situ* soils on lease. The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

7. WASTE DISPOSAL

The reserve pit will not be lined. More than half of the capacity will be in cut. It will be fenced on 3 sides with woven wire topped with barbed wire. The 4th side will be fenced once the rig moves off. The fence will be kept in good repair while the pit is drying.

All trash will be placed in a portable trash cage. When full, it will be hauled to an approved landfill in Colorado. The road and pad will be kept litter free.

Human waste will be disposed of in 20' deep ratholes or chemical toilets. The ratholes will be immediately filled when the trailers are removed.

Produced water will be confined to an unlined pit for a period not to exceed 90 days after initial production. During the 90 day period an NTL-2B application will be submitted for the District Manager's approval of a permanent disposal method and site.

8. ANCILLARY FACILITIES

There will be no formal camp, though 2 camper trailers may on site for the company man and tool pusher.

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9. WELL SITE LAYOUT

See PAGES 20-22 for depictions of the well pad, cross sections, cut and fill diagrams, reserve pit, burn pit, access road onto the pad, parking, living facilities, soil stockpile, and rig orientation.

The top 6" of soil material will be removed from the location and stockpiled on the northeast side. Topsoil along the access will be reserved in place.

10. RECLAMATION

Immediately upon completion of drilling, all trash and debris will be collected from the pad and surrounding area and placed in the trash cage.

Total's dirt contractor will call the Resource Area 48 hours before starting reclamation that involves earth moving equipment, and upon completion of reclamation. The reserve pit must be completely dry before it is backfilled.

All disturbed areas will be recontoured to blend as nearly as possible with the natural topography. This includes removing all berms and refilling all cuts.

The stockpiled topsoil will be spread evenly over the disturbed area. All disturbed areas will be ripped 12" deep with the contour.

Seed will be broadcast between October 1 and February 28 with the following prescription. A harrow or similar implement will be dragged over the area to assure seed cover.

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3 lb/ac Indian ricegrass (Oryzopsis hymenoides)
3 lb/ac Galleta (Hilaria jamesii)
3 lb/ac Fourwing saltbush (Atriplex canescens)

After seeding is complete, the stockpiled boulders will be scattered evenly over the disturbed area. The access will be blocked to prevent vehicle access and water bars built as follows:

<u>Grade</u>	<u>Spacing</u>
2%	Every 200'
2-4%	Every 100'
4-5%	Every 75'
5%+	Every 50'

The reserve pit and that part of the pad not needed for production will be reclaimed as previously described. Enough topsoil will be kept to reclaim the remainder of the pad at a future date. This remaining stockpile of topsoil will be seeded in place using the prescribed seed mix.

11. SURFACE OWNER

The surface owner of the pad and the 1,900' of road requiring construction is the U.S. Government.

12. OTHER INFORMATION

The dirt contractor will be provided with an approved copy of the surface use plan.

There will be no change from the proposed drilling and/or workover plan without prior approval from the District Manager. A Sundry Notice will

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be filed for approval for all changes of plans and other operations per 43 CFR 3164.

Safe drilling and operating practices must be used. All wells, whether drilling, producing, suspended, or abandoned will be identified per 43 CFR 3162.2.

If subsurface cultural materials are exposed during construction, work in that spot will stop immediately and the Resource Area will be called. All people who are in the area will be informed by Total that they are subject to prosecution for disturbing archaeological sites or picking up artifacts, including arrowheads.

This permit will be valid for one year from the date of approval. After the permit expires, a new application will be filed for approval of any future operations.

The District Office's mailing address is P.O. Box 970, Moab, Utah 84532. The phone number is 801-259-6111. Ask for Greg Noble.

The Resource Area's mailing address is P.O. Box 7, Monticello, Utah 84535. The phone number is 801-587-2201. Ask for Rich McClure for surface problems. Ask for Mike Wade for subsurface problems.

The nearest hospital is a 75-90 minute drive to Monticello, Utah. It is 3 blocks northwest of Monticello's only stoplight. Phone number is (801) 587-2116. The nearest medically equipped helicopter is in Grand Junction, Colorado, at St. Mary's Hospital. Phone number is (303) 244-2550.

13. REPRESENTATION AND CERTIFICATION

Total Petroleum, Inc.
1-15 Cliffhouse Buttes Federal
Surface: 1290' FNL & 600' FWL
Bottom: 600' FNL & 600' FWL
15-385-25E, San Juan County, Utah

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For questions concerning the APD, please contact:

Brian Wood
Permits West, Inc.
37 Verano Loop
Santa Fe, NM 87505
(505) 984-8120

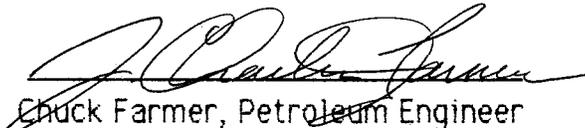
The representative for Total Petroleum, Inc. is:

Chuck Farmer, Petroleum Engineer
Total Petroleum, Inc.
P.O. Box 500
Denver, Co. 80201
(303) 291-2225

(Home: (303) 740-4370)

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 which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Total Petroleum, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.


Chuck Farmer, Petroleum Engineer

2/3/86
Date

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PIUTE KNOLL
6075

SAN MIGUEL COUNTY
DOLGRES COUNTY

8270

Eastland

Lockerby

Northdale

Dove Creek
6975

GINGER HILLS

Spring

Drive-in Theater

Elevator

Dove Creek

Farm
6770

6590

SAN JUAN COUNTY

DOLORIS COUNTY
MONTEZUMA COUNTY

Cahone

Pleasant View

5327



CROSS

1185

6650

Ralph Trading Post

(Hole) Group Ruins

(Hackberry) Group Ruins

Hovenweep National Monument

Hoven

(Sage Tower) Group Ruins

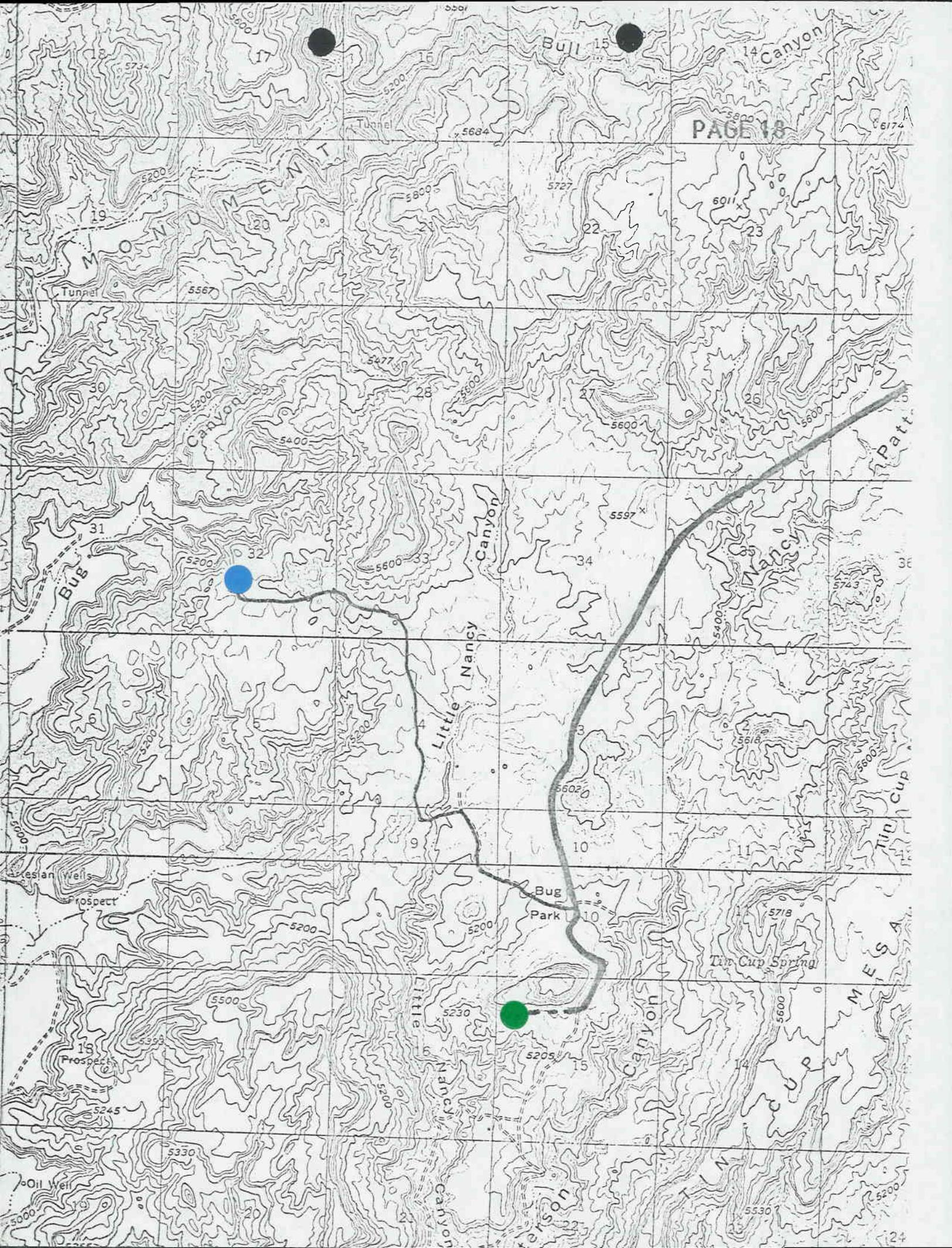
Yellowrock

Hoven

(Sage Tower) Group Ruins

Yellowrock

Hoven



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Bull 15

14 Canyon

MOUNTAIN CANYON

Bug Canyon

Little Nancy Canyon

Nancy Canyon

Bug

Little Nancy

Tip Cup

Tip Cup

Bug Park

Tip Cup Spring

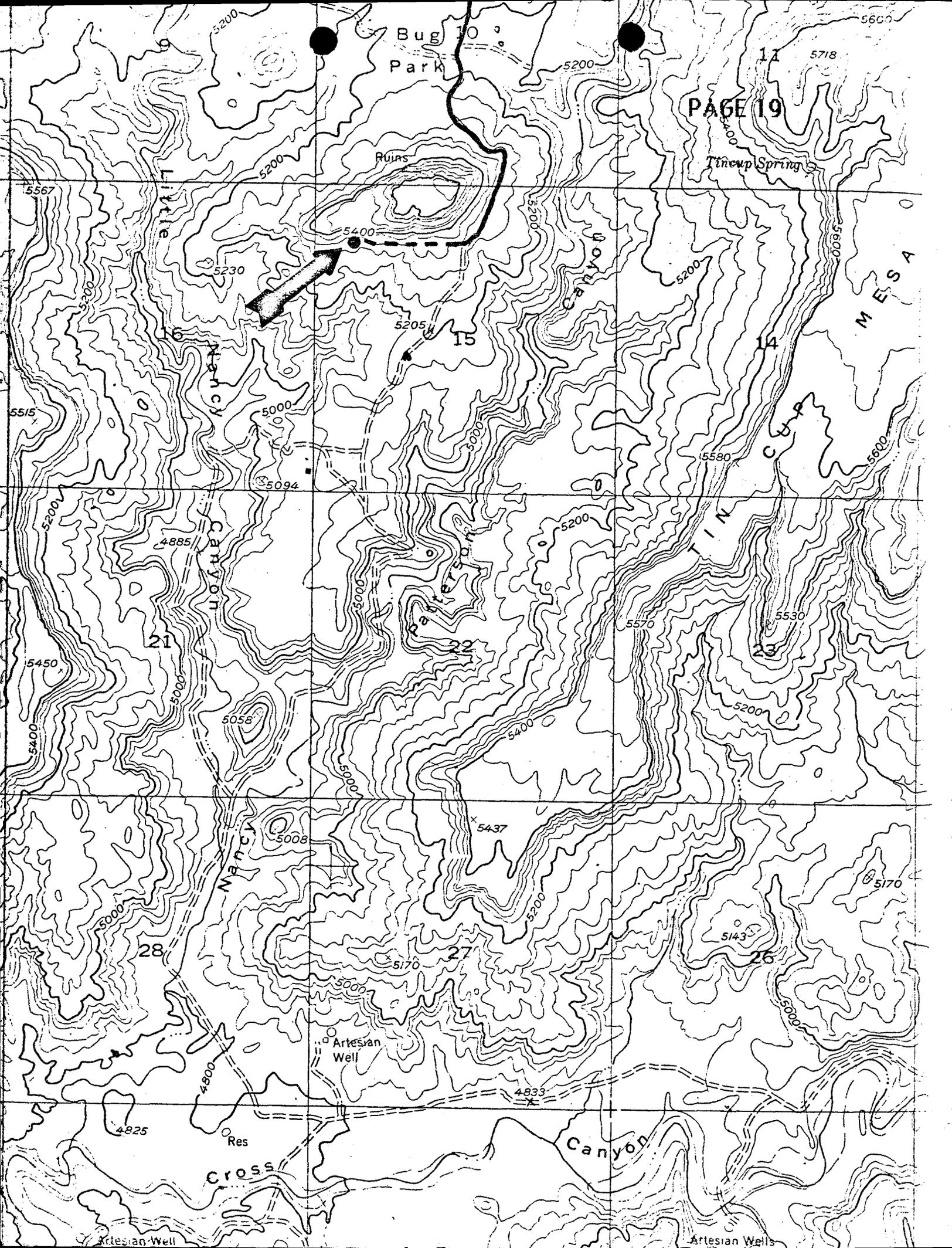
MESA

Little Nancy Canyon

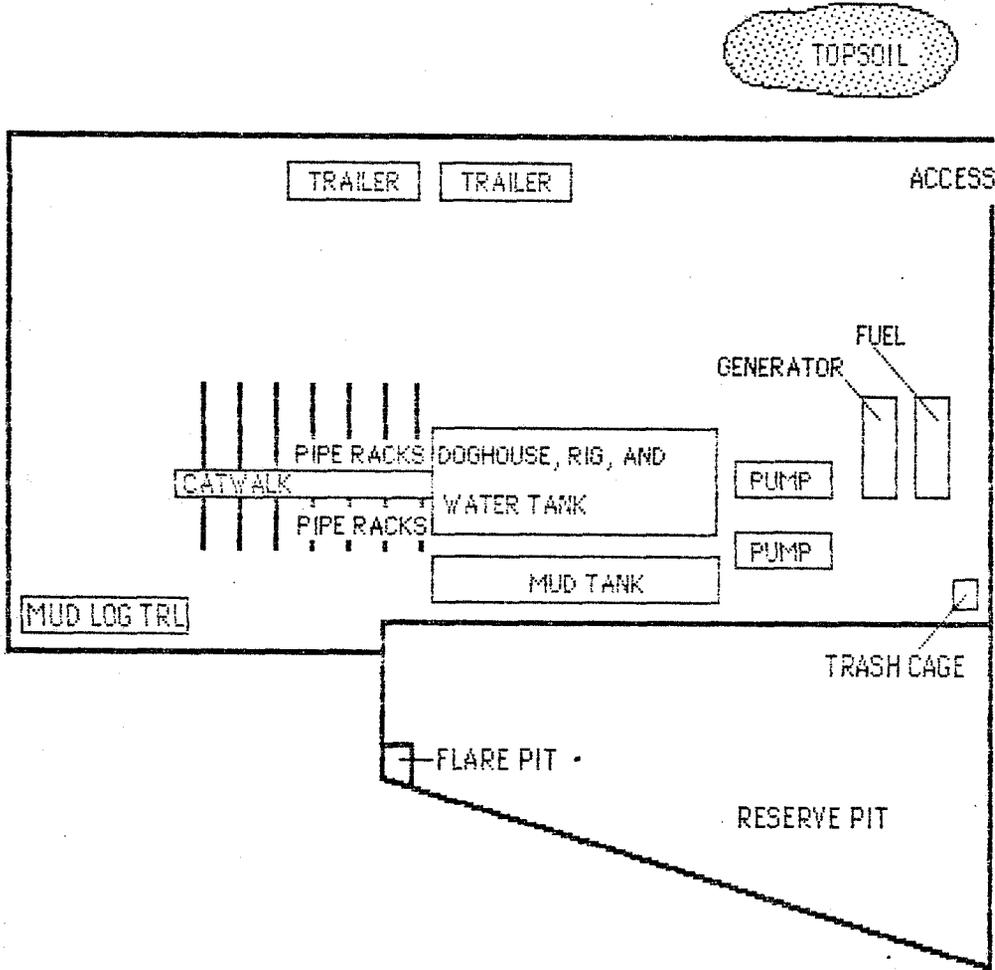
Canyon

Nancy Canyon

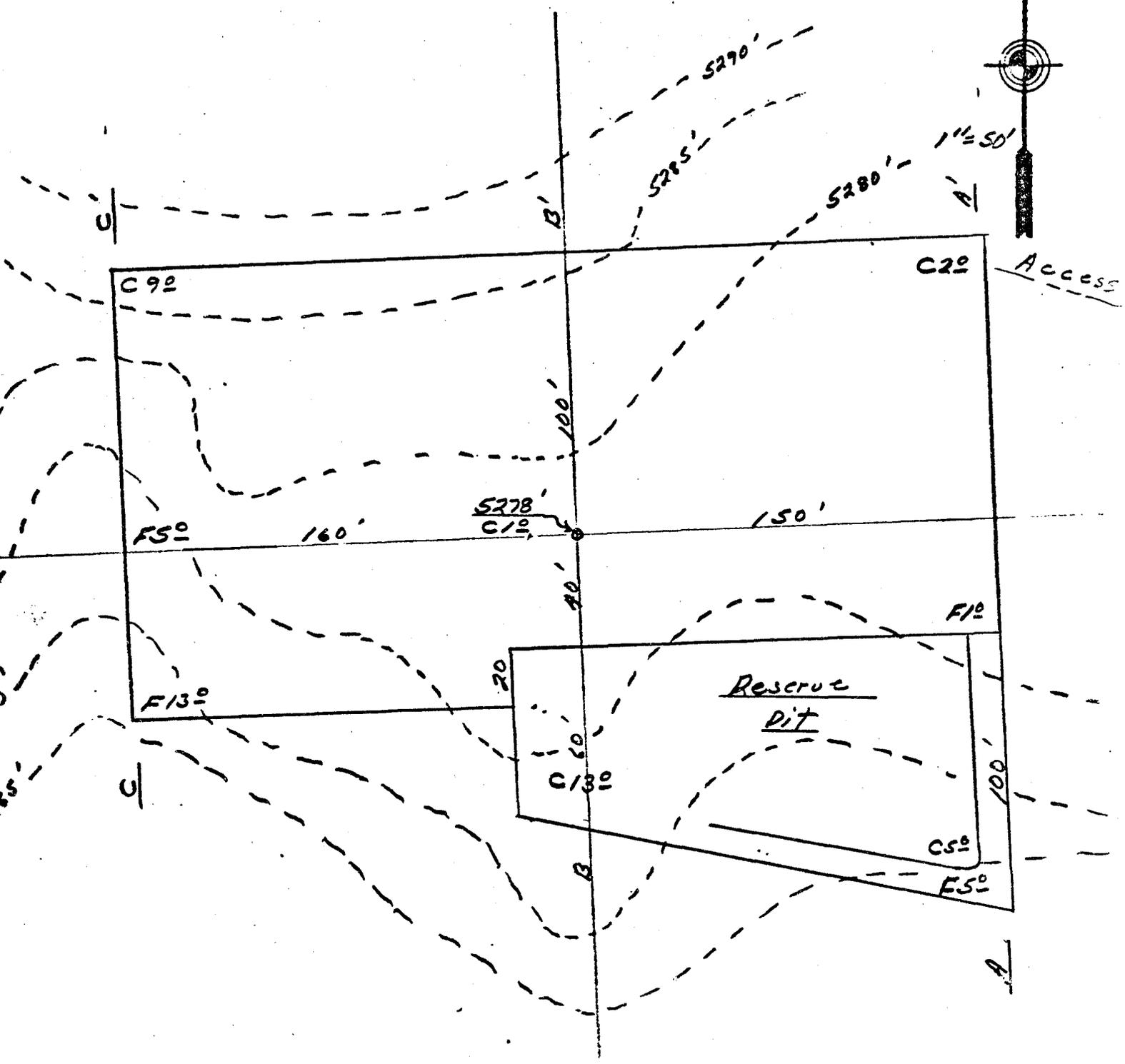
24



Total Petroleum, Inc.
1-15 Cliffhouse Buttes Federal
Surface: 1290' FNL & 600' FWL
Bottom: 600' FNL & 600' FWL
15-385-25E, San Juan County, Utah



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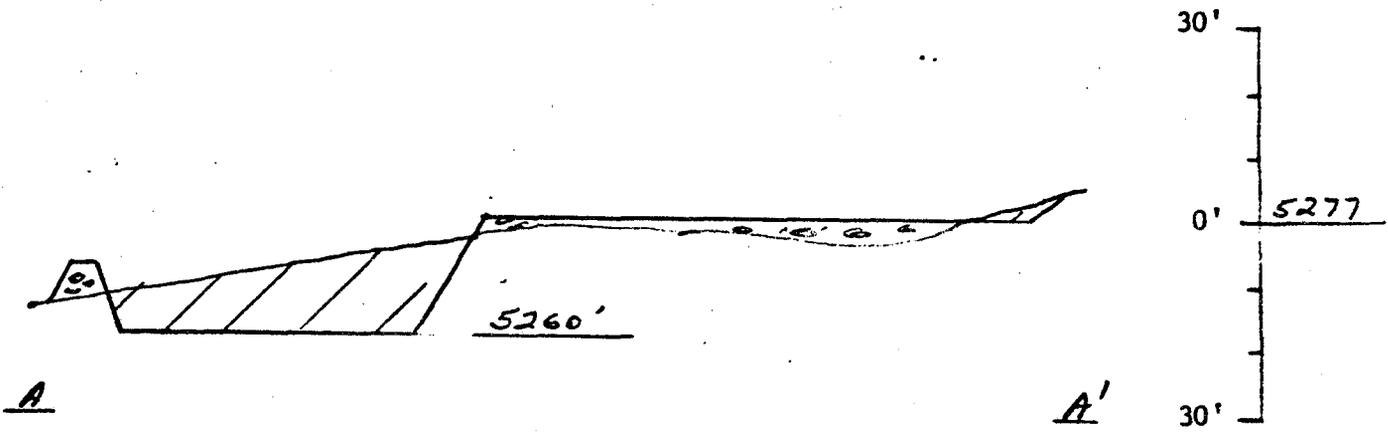
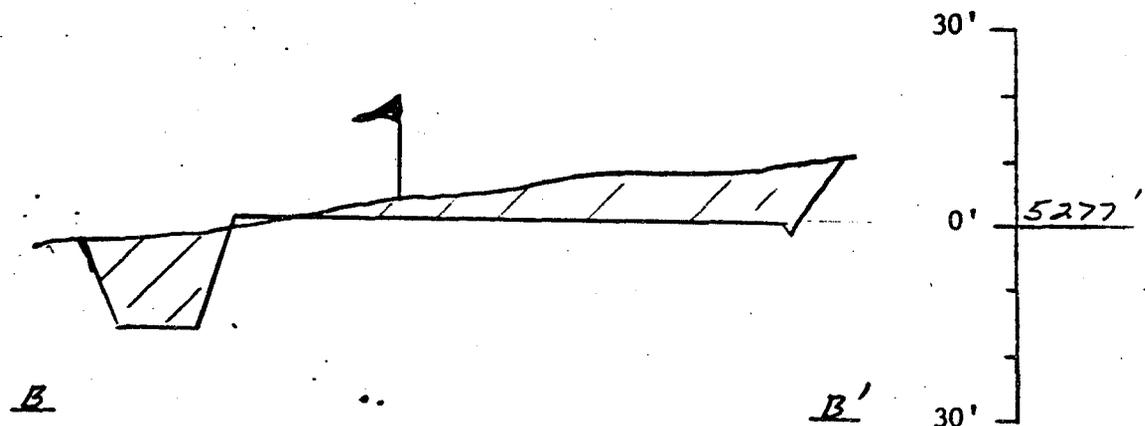
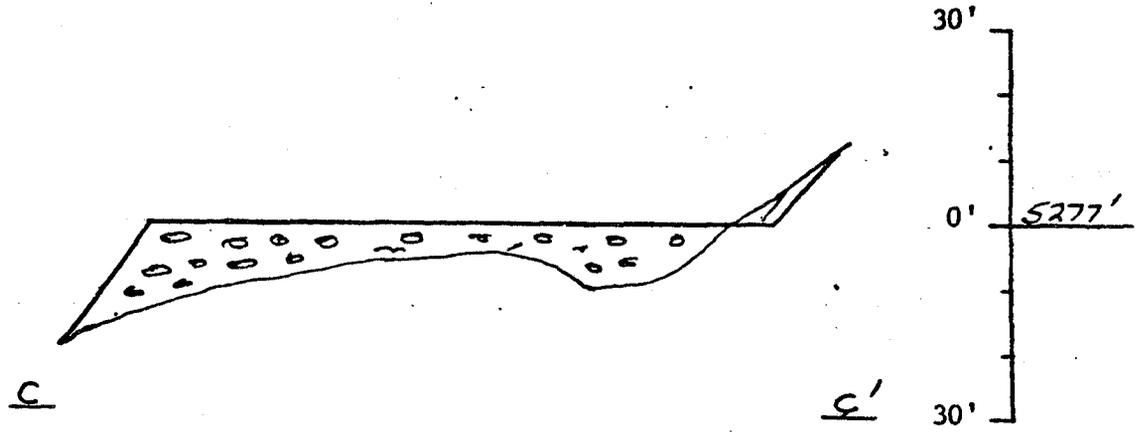
WELL PAD CROSS-SECTION

Well 1-15 CLIFFHOUSE

Cut */////*
Fill

Scales: 1"=50' H.
1"=30' V.

1.7 Vertical Exaggeration



DESIGNATION OF AGENT

Authorized Officer
Bureau of Land Management

The undersigned is, on the records of the Bureau of Land Management, Unit Operator under the Little Nancy unit agreement, San Juan County, Utah (state), No. 14-08-0001-20386 approved March 25, 1982 and hereby designated:

NAME Total Petroleum, Inc.
ADDRESS: P. O. Box 500
Denver, Colorado 80201-0500

as its agent, with full authority to act in its behalf in complying with the terms of the Unit Agreement and regulations applicable thereto and on whom the Authorized Officer or his representative may serve written or oral instructions in securing compliance with the Oil and Gas Operating Regulations with respect to drilling, testing, and completing unit well No. 1-15 in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 15, T. 38S, R. 25E, _____, San Juan County, ~~Wyoming~~ Utah.

It is understood that this designation of agent does not relieve the Unit Operator of responsibility for compliance with the terms of the unit agreement and the Oil and Gas Operating Regulations. It is also understood that this designation of agent does not constitute an assignment of any interest under the unit agreement or any lease committed thereto.

In case of default on the part of the designated agent, the Unit Operator will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The Unit Operator agrees promptly to notify the Authorized Officer of any change in the designated agent.

This designation of agent is deemed to be temporary and in no manner a permanent arrangement.

This designation is given only to enable the agent herein designated to drill the above-specified unit well. Unless sooner terminated, this designation shall terminate when there is filed in the appropriate resource area office of the Bureau of Land Management a completed file of all required Federal reports pertaining to subject well. It is also understood that this designation of agent is limited to field operations and does not cover administrative actions requiring specific authorization of the Unit Operator.

WINTERSHALL OIL AND GAS CORPORATION

Unit Operator

By: _____

Al Straub
Al Straub, Vice President

OPERATOR Total Petroleum Inc DATE 2-14-86
WELL NAME Cliffhouse Buttes Federal 1-15
SEC NWNW 15 T 38S R 25E COUNTY San Juan

43-037-31251
API NUMBER

Fed
TYPE OF LEASE

CHECK OFF:

- | | | |
|---|---|--|
| <input checked="" type="checkbox"/> PLAT | <input checked="" type="checkbox"/> BOND | <input checked="" type="checkbox"/> NEAREST WELL |
| <input checked="" type="checkbox"/> LEASE | <input checked="" type="checkbox"/> FIELD | <input type="checkbox"/> POTASH OR OIL SHALE |

PROCESSING COMMENTS:

POD - approved 3/13/86
Need water permit

APPROVAL LETTER:

SPACING: 203 Little Nancy 302
UNIT
 _____ 302.1
CAUSE NO. & DATE

STIPULATIONS:

1- water
2- Directional well



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

March 21, 1986

Total Petroleum, Inc.
P. O. Box 500
Denver, Colorado 80201

Gentlemen:

Re: Well No. Cliffhouse Buttes Federal 1-15 - NW NW Sec. 15, T. 38S, R. 25E
(Surf.) 1290' FNL, 600' FWL; (BHL) 600' FNL, 600' FWL
San Juan County, Utah

Approval to drill the referenced well is hereby granted in accordance with Section 40-6-18, Utah Code Annotated, as amended 1983; and predicated on Rule 203, Oil and Gas Conservation General Rules, subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water as required by Chapter 3, Title 73, Utah Code Annotated.
2. Submittal of directional drilling data upon completion of drilling operations to properly ascertain the location of the producing formation.

In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification to the Division within 24 hours after drilling operations commence.
2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
3. Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or R. J. Firth, Associate Director, (Home) 571-6068.
4. Compliance with the requirements and regulations of Rule 311.3, Associated Gas Flaring, Oil and Gas Conservation General Rules.

Page 2
Total Petroleum, Inc.
Well No. Cliffhouse Buttes Federal 1-15
March 21, 1986

5. Prior to commencement of the proposed drilling operations, plans for toilet facilities and the disposal of sanitary waste at each drill site shall be submitted to the local health department having jurisdiction. Any such drilling operations and any subsequent well operations must be conducted in accordance with applicable State and local health department regulations. A list of all local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 533-6163.
6. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31251.

Sincerely,



R. J. Firth
Associate Director, Oil & Gas

as
Enclosures
cc: Branch of Fluid Minerals
D. R. Nielson

8159T

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 Total Petroleum, Inc. (303) 291-2000

3. ADDRESS OF OPERATOR
 P.O. Box 500, Denver, Co. 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface 1290' FNL & 600' FWL (NWNW)
 At proposed prod. zone 600' FNL & 600' FWL (NWNW)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 18 air miles NNE of Montezuma Creek, Ut.

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit lide, if any)
 600'

16. NO. OF ACRES IN LEASE
 640

17. NO. OF ACRES ASSIGNED TO THIS WELL
 80

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
 None

19. PROPOSED DEPTH
 5900'

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5278' ungraded

22. APPROX. DATE WORK WILL START*
 February, 1986

5. LEASE DESIGNATION AND SERIAL NO.
 U-47970

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
 N/A

7. UNIT AGREEMENT NAME
 Little Nancy

8. FARM OR LEASE NAME
 Cliffhouse Buttes

9. WELL NO.
 1-15 CB Federal*

10. FIELD AND POOL, OR WILDCAT
 Wildcat

11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA
 15-385-25E SLBM

12. COUNTY OR PARISH | 13. STATE
 San Juan | Utah

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH

RECEIVED
 MAR 20 1986

DIVISION OF
 OIL, GAS & MINING

1. Lease is all of Section 15. Lease mineral and surface owner is United States Government, administered by Bureau of Land Management.
2. Well will be directionally drilled due to topographic and archæological constraints. Both surface and downhole locations are on same lease. Complete drilling program is on Pages 1-8.

* Complete well name is 1-15 Cliffhouse Buttes Federal

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 [Signature] TITLE Petroleum Engineer DATE 2/3/86
 (This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE MAR 18 1986
 APPROVED BY /S/ C. DeLANO BACKUS TITLE Acting DISTRICT MANAGER

CONDITIONS OF APPROVAL, IF ANY:
 FLARING OR VENTING OF GAS IS SUBJECT OF NTLIC4-BLM-Moab (3), UDCGM-SLC (2)
 DATED 1/1/80

*See Instructions On Reverse Side

Total Petroleum, Inc.
Well No. 1-15 Cliffhouse Buttes Federal
Sec. 15, T. 38 S., R. 25 E.
San Juan County, Utah
Lease U-47970

CONDITION OF APPROVAL

- B. THIRTEEN POINT SURFACE USE PLAN
1. Surface material may be required on the access road, if the well is drilled during wet, winter weather (to prevent maintenance problems).

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

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 "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Total Petroleum, Inc.

3. ADDRESS OF OPERATOR
P.O. Box 500, Denver, Co. 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface
Surface: 1290 FNL & 600 FWL Bottom: 600 FNL & 600 FWL

5. LEASE DESIGNATION AND SERIAL NO.
U-47970 PA

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
031028

7. UNIT AGREEMENT NAME
Little Nancy

8. WELL NO.
1-15 CB Federal*

9. FIELD AND POOL, OR WILDCAT
Wildcat

10. SEC., T., R., M., OR BLK. AND SURVEY OR ARMA
15-38S-25E SLBM

11. PERMIT NO.
43-037-31251

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

14. ELEVATIONS (Show whether DF, RT, GR, etc.)
5,278' ungraded

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MAR 3 1 1986
DIVISION OF OIL, GAS & MINING

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

Water Source

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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.)*

* Complete well name is 1-15 Cliffhouse Buttes Federal

Water source, as described on Page 11 of the APD, has been changed.
New water source is private land in 15-39N-20W, Dolores County, Co.

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MAR 3 1 1986
DIVISION OF OIL, GAS & MINING

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

SIGNED Brian Wood TITLE Consultant DATE 3-27-86

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:
cc: Farmer (1), UD08M (2), BLM (3)

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on
reverse side)

Form approved,
Budget Bureau No. 1004-0135
Expires August 31, 1985

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 "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Total Petroleum, Inc. (303) 291-2111

3. ADDRESS OF OPERATOR
P.O. Box 500, Denver, Co. 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.)
At surface
Surface: 1290 FNL & 600 FWL Bottom: 600 FNL & 600 FWL

14. PERMIT NO. _____

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
5,278' ungraded

5. LEASE DESIGNATION AND SERIAL NO.
U-47970

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
Little Nancy
FARM OR LEASE NAME
Cliffhouse Buttes
WELL NO.
1-15 CB Federal*

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
15-38S-25E SLBM

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

RECEIVED
MAR 31 1986

DIVISION OF
OIL, GAS & MINING

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) _____	
(Other) _____	Water Source <input checked="" type="checkbox"/>		

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.)*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

* Complete well name is 1-15 Cliffhouse Buttes Federal

Water source, as described on Page 11 of the APD, has been changed.
New water source is private land in 15-39N-20W, Dolores County, Co.

RECEIVED
MAR 31 1986
DIVISION OF
OIL, GAS & MINING

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

SIGNED Brian Wood TITLE Consultant DATE 3-27-86

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:
cc: Farmer (1), UDOGM (2), BLM (3)

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPlicate*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

070922

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 "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR
Total Petroleum, Inc. (303) 291-2000

3. ADDRESS OF OPERATOR
P.O. Box 500, Denver, Co. 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
Surface: 1290 FNL & 600 FWL Bottom: 600 FNL & 600 FWL

14. PERMIT NO.
43-037-31251

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
5,278' ungraded

5. LEASE DESIGNATION AND SERIAL NO.
U-47970

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
Little Nancy

8. FARM OR LEASE NAME
Cliffhouse Buttes

9. WELL NO.
Federal 1-15

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
15-38S-25E SLBM

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input checked="" type="checkbox"/>	(Other) <input type="checkbox"/>	

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.)*
(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

Will change depth at which surface casing will be set from 1,600 feet to 1,800 feet. Cement volumes will increase accordingly.

No changes in casing size, weight, grade, type, or age. All other casing strings will remain the same.

RECEIVED
JUL 07 1986

DIVISION OF
OIL, GAS & MINING

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

SIGNED Brian Wood TITLE Consultant DATE 7-2-86

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY: _____

ACCEPTED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

cc: McCarthy (1), UD00M (2), BLM (3)

Federal approval of this action is required before commencing operations.

*See Instructions on Reverse Side

DATE 7-2-86
BY John R. Bay

071517

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

API #43-037-31251

NAME OF COMPANY: TOTAL PETROLEUM INC

WELL NAME: CLIFFHOUSE BUTTES FEDERAL 1-15

SECTION NW NW 15 TOWNSHIP 38S RANGE 25E COUNTY San Juan

DRILLING CONTRACTOR Coleman Drilling

RIG # 3

SPUDED: DATE 7-14-86

TIME 5:00 PM

HOW Rotary

DRILLING WILL COMMENCE _____

REPORTED BY Dan Manley

TELEPHONE # 505-325-6892

DATE 7-15-86 SIGNED AS

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
Total Petroleum, Inc.

3. ADDRESS OF OPERATOR
P.O. Box 500 Denver, Colorado 80201-0500

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1290' FNL & 600' FWL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH: 600' FNL & 600' FWL

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

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

5. LEASE
U-47909

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Little Nancy

8. FARM OR LEASE NAME
Cliffhouse Buttes

9. WELL NO.
Federal 1-15

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 15-T38S-R25E SLBM

12. COUNTY OR PARISH | 13. STATE
San Juan | - Utah

14. API NO.
43-037-31251

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5278' Ungr.

(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.)*

This well was spudded 5:00 pm 7/14/86; ran & set 2 joints 16" 65# H-40 casing at 75' KB. Cemented w/105 sx D-S Hi Early cement w/3% CaCl.

RECEIVED
JUL 21 1986

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 [Signature] TITLE Sr. Petroleum Engr. DATE July 16, 1986

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

3
Dreg.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY **072911**

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
Total Petroleum, Inc.

3. ADDRESS OF OPERATOR
P.O. Box 500, Suite 3100, Denver, CO 80201

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1290' FNL & 600' FWL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH: 600' FNL, 600' FWL

5. LEASE
U-47909

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Little Nancy

8. FARM OR LEASE NAME
Cliffhouse Buttes

9. WELL NO.
Federal 1-15

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 15, T38S-R25E SLBM

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

14. API NO.
43-037-31251

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5278' Ungraded

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

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

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

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

Surface casing was set on 7/18/86:

9-5/8", 36#, J-55, ST&C set @ 1809'. Cmt'd w/485 sx hi-early + 2% CaCl + 1/4#/sk celloflakes followed w/200 sx "B" w/2% CaCl + 1/4#/sk celloflakes.

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

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

SIGNED Thomas R. McCarthy TITLE Sr. Petroleum Eng DATE 7/24/86

(This space for Federal or State office use)

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

RECEIVED
JUL 28 1986

080423

RECEIVED

AUG 04 1986

**DIVISION OF OIL
GAS & MINING**

IGT

TOTAL PETROLEUM, INC.
#1-15 CLIFFHOUSE BUTTES FEDERAL
SEC. 15, T38S-R25E
SAN JUAN COUNTY, UTAH

INTERMOUNTAIN GEO-TECH, INC.
P. O. BOX 158
DELTA, CO 81416
303-874-7762

TOTAL PETROLEUM, INC.
#1-15 CLIFFHOUSE BUTTES FEDERAL
SEC. 15, T38S-R25E
SAN JUAN COUNTY, UTAH

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(1) COPY, FINAL MUDLOG (5"-100')
(1) COPY, FINAL MUDLOG (2.5"-100')

DRILLING CONTRACTOR: COLEMAN RIG #3
FARMINGTON, NEW MEXICO

DRILLING FOREMEN: MR. DAN MANLEY

PUSHER: MR. GLEN STORIE

GEO-TECHNOLOGIST: MR. NICK LARKIN, JR.
INTERMOUNTAIN GEO-TECH, INC.
P. O. BOX 158
DELTA, CO 81416

DRILLING FLUID: MR. DON L. LINDER
MILPARK
FARMINGTON, NEW MEXICO

DRILL STEM TEST: MR. DELL GUNN
HALLIBURTON
FARMINGTON, NEW MEXICO

CORING: MR. ROY ROSS
NORTON CHRISTENSEN, INC.
VERNAL, UTAH

WIRE LINE LOGS: MR. STEVE PRESSLEY
GEARHART
FARMINGTON, NEW MEXICO

DIRECTIONAL DRILLER: MR. NEIL LEMON
NORTON CHRISTENSEN, INC.
SALT LAKE CITY, UTAH

GEOLOGIST: MR. DON NEUMAN
DENVER, CO

TOTAL PETROLEUM, INC.
 #1-15 CLIFFHOUSE BUTTES FEDERAL
 SEC. 15, T38S-R25E
 SAN JUAN COUNTY, UTAH

SUMMARY OF DAILY ACTIVITY

DATE	ACTIVITY	MIDNITE DEPTH	24 HOUR FOOTAGE
7-21-86	IGT UNIT #1 ON LOCATION, RIGGING UP, LOGGING, DRLG, SURV	3945'	378'
7-22-86	DRLG, SURV, DRLG, SURV, DRLG, TOH NB#6	4323'	502'
7-23-86	TIH, DRLG, TOH, MUD UP, TIH DRLG, SURV, TOH, SURV	4825'	138'
7-24-86	TOH, PUT STABILIZER ON, TIH, DRLG, SURV, TOH, CHG DIR	4963'	213'
7-25-86	TOH, TIH, DRLG, SURV, DRLG	5176'	259'
7-26-86	DRLG, SURV, DRLG, SURV, DRLG, CIRC, MUD UP FOR CORE #1	5435'	195'
7-27-86	CORING	5630'	60'
7-28-86	TOH W/CORE, LAY DOWN CORE, SHORT TRIP, CONDITION FOR DST #1	5690'	0'
7-29-86	DST #1, TOH W/DST, TIH, DRLG	5690'	89'
7-30-86	DRLG TO T.D., CIRC & COND FOR "E" LOGS	5779'	186'
7-31-86	LOGGING, IGT UNIT #1 RELEASED	5965'	--

TOTAL PETROLEUM, INC.
 #1-15 CLIFFHOUSE BUTTES FEDERAL
 SEC. 15, T38S-R25E
 SAN JUAN COUNTY, UTAH

BIT RECORD

BIT	MAKE	SIZE	TYPE	DEPTH OUT	FOOTAGE USED	HOURS
1	SMITH	12¼"	F-2	46'	46'	1
2	STC	12¼"	F-2	1810'	1734'	30½
3	STC	8¾"	F-27	2700'	890'	16½
4	CHRIS	8¾"	NC ²	4174'	1474'	41½
5	SMITH	8¾"	F-27 (RR#3)	4825'	651'	16½
6	STC	8¾"	F-3	5630'	805'	60½
7	CHRIS	8¾"	C-201	5690'	60'	13½
8	VAREL	8¾"	V-537	5965'	275'	23½

TOTAL PETROLEUM, INC.
 #1-15 CLIFFHOUSE BUTTES FEDERAL
 SEC. 15, T38S-R25E
 SAN JUAN COUNTY, UTAH

DEVIATION SHEET

NORTAK NAVIGATION SURVEY PROGRAM

SURVEY #	MEASURED DEPTH	DRIFT ANGLE	DRIFT DIRECTION	COURSE LENGTH	TVD
1	1880.0	0.50S	70.00W	70.0	1880.0
2	2129.0	1.00N	80.00W	249.0	2129.0
3	2378.0	0.75N	80.00W	249.0	2377.9
4	2626.0	1.00S	70.00W	248.0	2625.9
5	2724.0	1.25S	85.00W	98.0	2723.9
6	2850.0	2.75N	43.00W	126.0	2849.8
7	3004.0	6.00N	7.00E	154.0	3003.3
8	3098.0	8.50N	11.00E	94.0	3096.6
9	3191.0	10.10N	4.00E	93.0	3188.4
10	3823.0	12.00N	5.00W	92.0	3278.7
11	3374.0	14 5N	5.00W	91.0	3367.2
12	3466.0	16.30N	3.00W	92.0	3455.8
13	3591.0	16.20N	2.00E	125.0	3575.8
14	3715.0	15.80N	3.00E	124.0	3695.0
15	3871.0	16.10	Due N	156.0	3845.0
16	4056.0	17.00N	1.00E	185.0	4022.4
17	4252.0	16.00N	3.00E	196.0	4210.3
18	4438.0	14.30N	4.00E	186.0	4389.8
19	4595.0	13.60N	5.00E	157.0	4542.2
20	4751.0	12.40N	8.00E	156.0	4694.2
21	4905.0	13.00N	1.00E	154.0	4844.4
22	5002.0	13.00	Due N	97.0	4938.9
23	5123.0	13.25N	2.00E	121.0	5056.8
24	5217.0	14.00N	1.00E	94.0	5148.1
25	5403.0	16.80N	8.00E	186.0	5327.4
26	5587	19.30N	14.00W	184.0	5502.3
27	5613	19.70N	15.00W	26.0	5526.9

FINAL CLOSURE DIRECTION N1.54W
 FINAL CLOSURE DISTANCE 661.997 Ft.

(IGT)
DST & SHOW SHEET

SHOW # 1 FROM 5615 ' TO 5619 ' DATE 7-26-86

COMPANY TOTAL PETROLEUM, INC.
WELL #1-15 CLIFFHOUSE BUTTES FEDERAL
FIELD WILDCAT

	BEFORE SHOW	DURING SHOW	AFTER SHOW
DRILLING RATE	4.5-5 min/ft	1.5-2.5 min/ft	4.5-5 min/ft
TOTAL GAS UNITS	10 Units	170 Units	15 Units
METHANE %	.01%	0.95%	.04%
ETHANE %	tr	0.42%	tr
PROPANE %	--	0.03%	--
BUTANE (ISO) %	--	--	--
BUTANE (NOR) %	--	--	--
PENTANE %	--	--	--

SAMPLE LITHOLOGY 10% ANHY-WH 30% SH-BLK GY BLK 40% LS-DKGY BRN LT-GY, CRPXL-
VFXL DOL IP ARG DNS 20% DOL-BRN RTHY TAN TT

SAMPLE FLOR AND CUT NONE

DST # _____ FROM _____ ' TO _____ ' DATE _____
MINUTES TOP CHART BOTTOM CHART

INITIAL HYDROSTATIC

INITIAL OPEN

INITIAL SHUT-IN

SECOND OPEN

SECOND SHUT-IN

FINAL HYDROSTATIC

1ST FLOW

2ND FLOW

REMARKS BHT^o

DRILL PIPE RECOVERY

SAMPLE CHAMBER RECOVERY

DRILL PIPE- TOP- R/W= at ^oF, MIDDLE-R/W= at ^oF,

DRILL PIPE- BOTTOM-R/W= at ^oF, SAMPLE CHMER- R/W= at ^oF,

PIT MID-R/W= at ^oF

GEO-TECH Nick Larkin, Jr.

(IGT)
DST & SHOW SHEET

SHOW # 2

FROM 5623 ' TO 5630 '

DATE 7-26-86

COMPANY TOTAL PETROLEUM, INC.
WELL #1-15 CLIFFHOUSE BUTTES FEDERAL
FIELD WILDCAT

	BEFORE SHOW	DURING SHOW	AFTER SHOW
DRILLING RATE	4.5 min/ft	1.5-2 min/ft	coring
TOTAL GAS UNITS	18 Units	118 Units	13 Units
METHANE %	.01%	0.66%	.04%
ETHANE %	tr	0.33%	tr
PROFANE %	--	0.01%	--
BUTANE (ISO) %	--	--	--
BUTANE (NOR) %	--	--	--
PENTANE %	--	--	--

SAMPLE LITHOLOGY 50% DOL-BRN, TAN CRPXL-VFXL ARG 50% LS-LTBUFF, BUFF-WH LT-MGY
MIC-CRPXL FOS RTHY ARG HD
SAMPLE FLOR AND CUT RARE DULL YEL FLOR - NO CUT

DST # 1 FROM 5580 ' TO 5690 ' DATE 7-29-86

	MINUTES	TOP CHART	BOTTOM CHART
INITIAL HYDROSTATIC		3036	3042
INITIAL OPEN	30	161-748	186-821
INITIAL SHUT-IN	60	2383	2460
SECOND OPEN	60	788-1571	847-1482
SECOND SHUT-IN	120	2383	2460
FINAL HYDROSTATIC		2929	3003

1ST FLOW Open 1 oz w/2" wk blo, 11 oz 5 min, 32 oz 15 min 3 lb shut in NGTS

2ND FLOW Open w/wk blo 4 oz 27 oz 15 min 2½ lb 30 min 3½ lb 45 min 4½ lb shut in

REMARKS No gas to surface BHT^o 134 F

DRILL PIPE RECOVERY 2935' 35.3 bbls of v slight gas cut mud & salt water

SAMPLE CHAMBER RECOVERY 760 psi 2150 cc water .60 cubic ft gas

DRILL PIPE- TOP- R/W=3 at 13^oF, MIDDLE- R/W=17 at 84^oF,

DRILL PIPE- BOTTOM- R/W=.06 at 13^oF, SAMPLE CHMBR - R/W=.08 at 13^oF,

PIT MUD- R/W=.7 at 13^oF

GEO-TECH Nick Larkin, Jr.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions
verse 1001)
081125

Form Approved
Budget Bureau No. 1064-0135
Expires August 31, 1985

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 "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL GAS WELL OTHER Dry Hole

2. NAME OF OPERATOR
Total Petroleum, Inc.

3. ADDRESS OF OPERATOR
P. O. Box 500, 999-18th St., Suite 3100, Denver, CO 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
1290' FNL & 600' FWL (NW NW)
At Bottom Hole:
628' FNL & 618' FWL (NW NW)

14. PERMIT NO. 43-037-31251

15. ELEVATIONS (Show whether OP, ST, CR, etc.)

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AUG 08 1986

5. LEASE DESIGNATION AND SERIAL NO.
U-47970

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
Little Nancy

8. FARM OR LEASE NAME
Cliffhouse Buttes

9. WELL NO. #1-15 Cliffhouse
Buttes Federal

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
15-38S-25E SLBM

12. COUNTY OR PARISH San Juan 13. STATE Utah

16. Check Appropriate Box To Indicate Nature of ~~Notice~~ Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PLUG OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETION <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input checked="" type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANE <input type="checkbox"/>	(Other) <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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.)

Total Petroleum, Inc. drilled the #1-15 Cliffhouse Buttes Federal to a total depth of 5965' MD (5858'TVD) and evaluated the Ismay Formation via core, DST and log analysis. This is a notice of intent to plug and abandon by setting the following cement plugs:

Plug No. 1 - Desert Creek & Ismay 5964-5514 (450')
Cement with 170 sacks Class "G" cement (200ft³) and displace cement with 77 bbls. 10.1 ppg. mud.

Plug No. 2 - Cutler Formation 2650-2400 (250')
Cement with 90 sacks Class "B" (105ft³) and displace with 34 bbls. 10.1 ppg. mud.

Plug No. 3 - Surface Casing (1810').
Cement with 65 sacks Class "B" (75ft³) 1875-1725 (150'). Set plug half-in/half-out the surface casing at 1810'. Displace with 24 bbls. 10.1 ppg. mud.

Plug No. 4 - 10 Sk cement plug with a dryhole marker.

(Received verbal plugging approval at 3:30 p.m. on July 31, 1986 from Greg Noble of the BLM.)

(Advised John R. Baja of the State of Utah of plugging approval at 3:40 p.m. on July 31, 1986.)

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

SIGNED Alan Manley TITLE Consulting Petroleum Engineer DATE August 6, 1986

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ ACCEPTED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

Federal approval of this action is required before commencing operations.

*See Instructions on Reverse Side

DATE: 8-8-86
BY: John R. Baja

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

CLIFFHOUSE BUTTES FEDERAL 1-15 1 TEST NO. 5580.0 - 5690.0 TOTAL PETROLEUM INCORPORATED
LEASE NAME WELL NO. TESTED INTERVAL LEASE OWNER/COMPANY NAME

LEGAL LOCATION 15-38S-26E FIELD AREA WILDCAT COUNTY SAN JUAN STATE UTAH OR
SEC. - TWP. - RANG.

RECEIVED

AUG 08 1986

DIVISION OF OIL
GAS & MINING

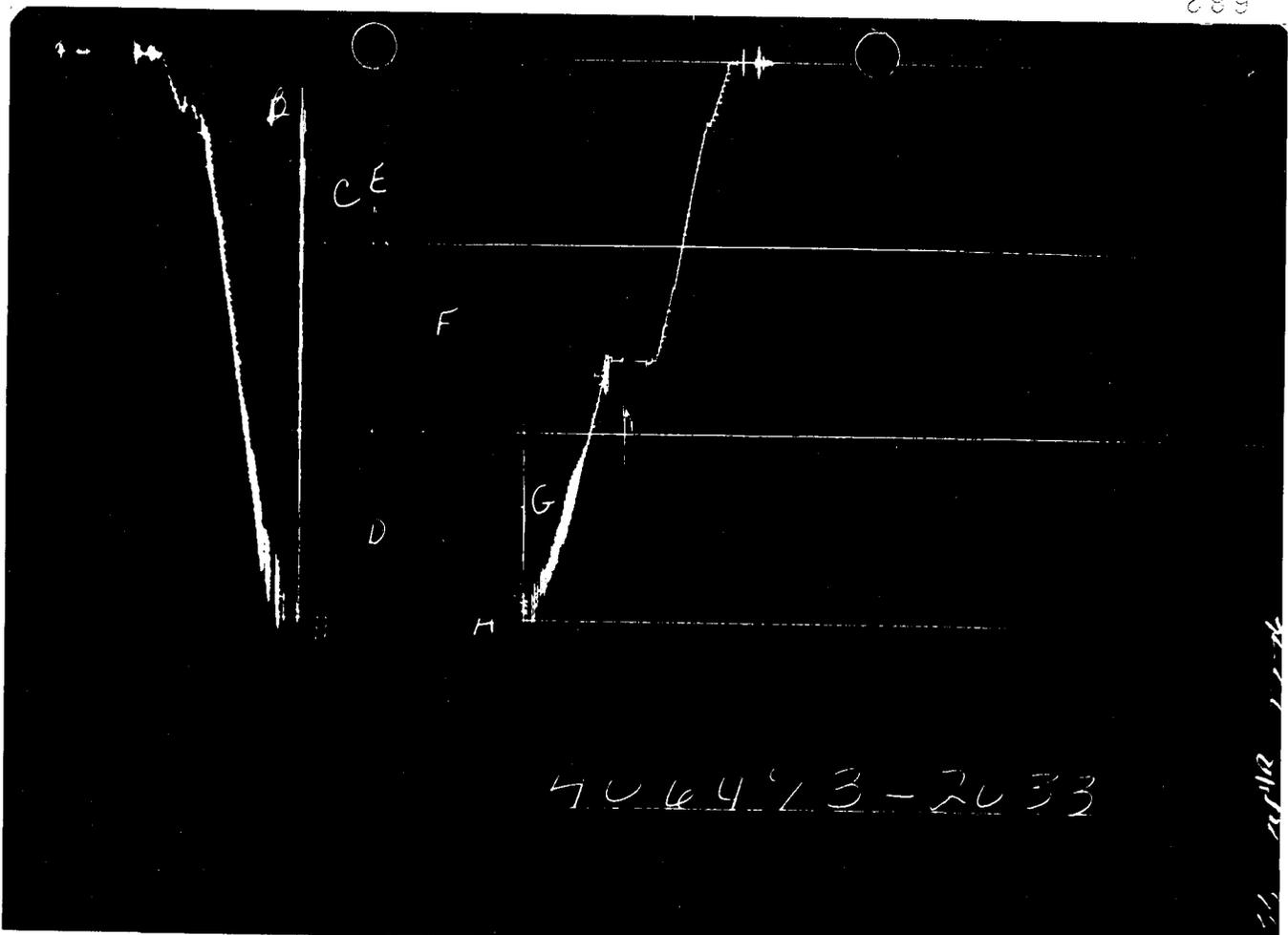
081134



TICKET NO. 40649300
04-AUG-86
FARMINGTON

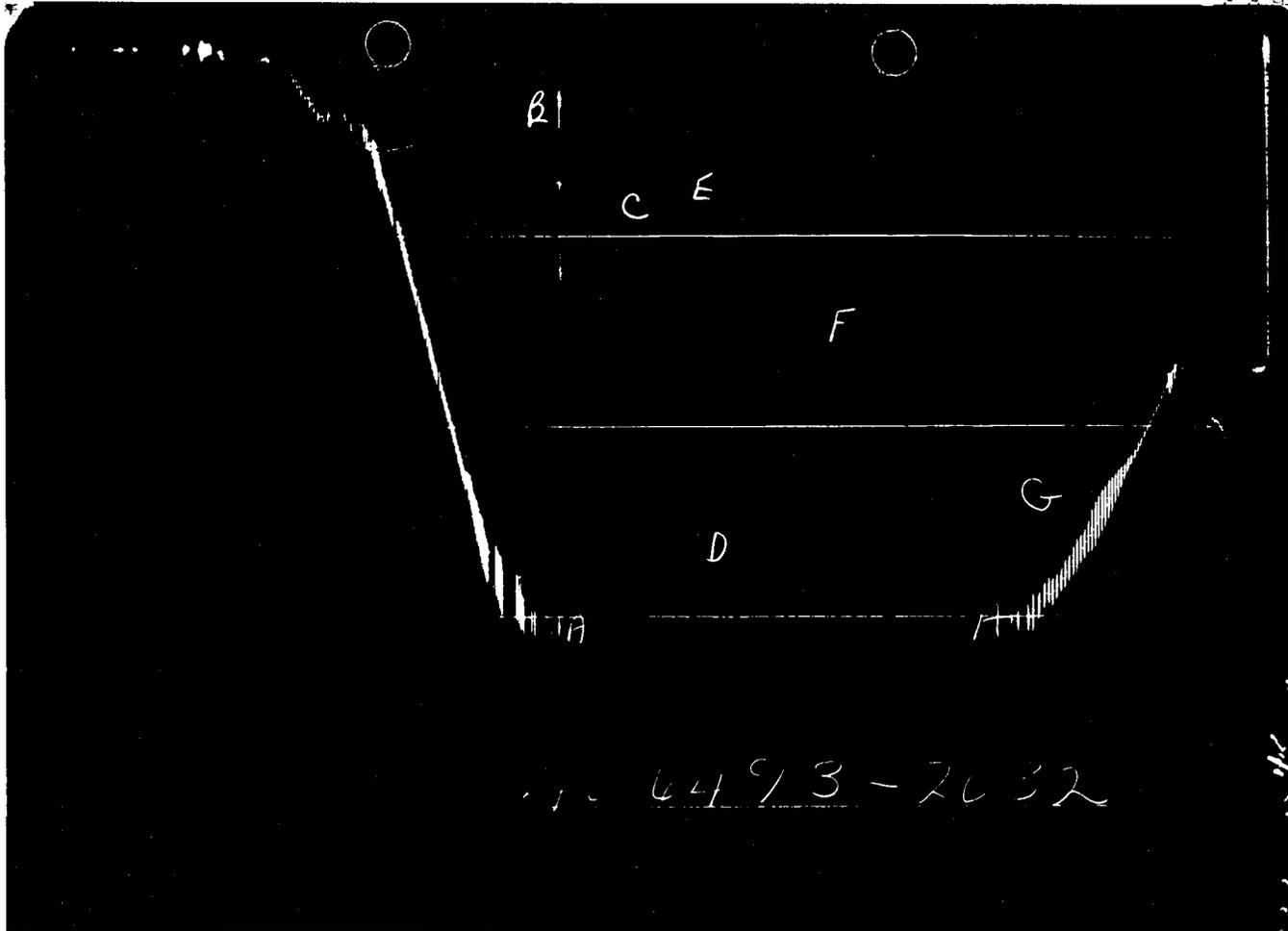
SRCS

FORMATION TESTING SERVICE REPORT



GAUGE NO: 2033 DEPTH: 5559.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3036	2967.7			
B	INITIAL FIRST FLOW	161	160.6			
C	FINAL FIRST FLOW	748	758.0	31.0	29.9	F
C	INITIAL FIRST CLOSED-IN	748	758.0			
D	FINAL FIRST CLOSED-IN	2383	2396.0	58.0	57.5	C
E	INITIAL SECOND FLOW	788	792.8			
F	FINAL SECOND FLOW	1571	1439.6	61.0	62.6	F
F	INITIAL SECOND CLOSED-IN	1571	1439.6			
G	FINAL SECOND CLOSED-IN	2383	2390.5	121.0	120.9	C
H	FINAL HYDROSTATIC	2929	2962.9			



GAUGE NO: 2032 DEPTH: 5687.0 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3042	3038.7			
B	INITIAL FIRST FLOW	186	208.1			
C	FINAL FIRST FLOW	821	831.5	31.0	29.9	F
C	INITIAL FIRST CLOSED-IN	821	831.5			
D	FINAL FIRST CLOSED-IN	2460	2470.2	58.0	57.5	C
E	INITIAL SECOND FLOW	847	864.6			
F	FINAL SECOND FLOW	1482	1511.8	61.0	62.6	F
F	INITIAL SECOND CLOSED-IN	1482	1511.8			
G	FINAL SECOND CLOSED-IN	2460	2466.0	121.0	120.9	C
H	FINAL HYDROSTATIC	3003	3029.0			

EQUIPMENT & HOLE DATA

FORMATION TESTED: UPPER ISMAY
 NET PAY (ft): 20.0
 GROSS TESTED FOOTAGE: 110.0
 ALL DEPTHS MEASURED FROM: KELLY BUSHING
 CASING PERFS. (ft): _____
 HOLE OR CASING SIZE (in): 8.750
 ELEVATION (ft): 5291.0 KELLY BUSHING
 TOTAL DEPTH (ft): 5690.0
 PACKER DEPTH(S) (ft): 5574, 5580
 FINAL SURFACE CHOKE (in): _____
 BOTTOM HOLE CHOKE (in): 0.750
 MUD WEIGHT (lb/gal): 10.30
 MUD VISCOSITY (sec): 38
 ESTIMATED HOLE TEMP. (°F): _____
 ACTUAL HOLE TEMP. (°F): 134 @ 5686.0 ft

TICKET NUMBER: 40649300
 DATE: 7-29-86 TEST NO: 1
 TYPE DST: OPENHOLE
 HALLIBURTON CAMP:
FARMINGTON
 TESTER: D. GUNN
 WITNESS: _____
 DRILLING CONTRACTOR:
COLEMAN #3

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
MUD PIT	<u>0.480 @ 82 °F</u>	<u>6686 ppm</u>
TOP	<u>0.310 @ 83 °F</u>	<u>11212 ppm</u>
MIDDLE	<u>0.170 @ 84 °F</u>	<u>21212 ppm</u>
BOTTOM	<u>0.060 @ 85 °F</u>	<u>69696 ppm</u>
SAMPLER	<u>0.080 @ 83 °F</u>	<u>48484 ppm</u>
	<u> @ °F</u>	<u> ppm</u>

SAMPLER DATA

Pstg AT SURFACE: 760.0
 cu.ft. OF GAS: 0.600
 cc OF OIL: _____
 cc OF WATER: 2150.0
 cc OF MUD: _____
 TOTAL LIQUID cc: 2150.0

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ _____ °F
 GAS/OIL RATIO (cu.ft. per bbl): _____
 GAS GRAVITY: _____

CUSHION DATA

TYPE AMOUNT WEIGHT

RECOVERED:

2935' (35.3 BBLs.) OF TOTAL FLUID-VERY SLIGHT GAS
 CUT MUD AND SALT WATER

MEASURED FROM
 TESTER VALVE

REMARKS:

TYPE & SIZE MEASURING DEVICE:					TICKET NO: 40649300
TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
7-28-86					
2130					ON LOCATION
2300					PICKED UP TOOLS
7-29-86					
0015					TRIPPED IN HOLE WITH DST #1
0308					ON BOTTOM
0310	1/8BH	1 OZ.			OPENED TOOL WITH A WEAK BLOW, 2" IN BUCKET
0311		5 OZ.			BOTTOM OF BUCKET
0315		11 OZ.			
0320		22.5 OZ.			
0325		32 OZ.			
0335		2.5#			
0341		3#			CLOSED TOOL
0439		4OZ.			OPENED TOOL
0440		8 OZ.			BOTTOM OF BUCKET
0450		19 OZ.			
0455		27 OZ.			
0500		33 OZ.			
0505		2#			
0510		2.25			
0515		3			
0520		3.125			
0525		3.5			
0530		4			
0535		4.25			
0541		4.75			CLOSED TOOL-NO GAS AT SURFACE
0742					PULLED OFF BOTTOM-OPENED BYPASS
					TRIPPED OUT OF HOLE WITH DST #1
0930					SHUT DOWN TO DROP BAR AND REVERSE OUT
1030					FINISHED TRIPPING OUT OF HOLE OUT OF HOLE
1330					JOB COMPLETED

TICKET NO: 40649300
 CLOCK NO: 7276 HOUR: 24



GAUGE NO: 2033
 DEPTH: 5559.0

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	160.6			
2	5.0	360.5	199.8		
3	10.0	463.9	103.4		
4	15.0	542.9	79.1		
5	20.0	616.7	73.8		
6	25.0	687.0	70.3		
C 7	29.9	758.0	71.0		
FIRST CLOSED-IN					
C 1	0.0	758.0			
2	4.0	2210.3	1452.3	3.5	0.928
3	8.0	2290.1	1532.0	6.3	0.674
4	12.0	2320.9	1562.9	8.5	0.544
5	16.0	2340.7	1582.7	10.4	0.458
6	20.0	2353.0	1595.0	12.0	0.397
7	24.0	2362.6	1604.6	13.3	0.352
8	28.0	2370.5	1612.5	14.5	0.316
9	32.0	2376.6	1618.6	15.5	0.287
10	36.0	2381.3	1623.3	16.4	0.263
11	40.0	2386.2	1628.2	17.1	0.243
12	44.0	2388.4	1630.4	17.8	0.225
13	48.0	2391.6	1633.6	18.4	0.211
14	52.0	2393.6	1635.6	19.0	0.197
15	56.0	2395.3	1637.3	19.5	0.186
D 16	57.5	2396.0	1638.0	19.7	0.182
SECOND FLOW					
E 1	0.0	792.8			
2	10.0	910.7	117.9		
3	20.0	1029.7	119.0		
4	30.0	1139.1	109.4		
5	40.0	1236.7	97.6		
6	50.0	1329.6	92.9		
7	60.0	1415.7	86.0		
F 8	62.6	1439.6	23.9		
SECOND CLOSED-IN					
F 1	0.0	1439.6			
2	8.0	2276.6	837.0	7.3	1.101
3	16.0	2314.4	874.8	13.7	0.831
4	24.0	2333.8	894.2	19.1	0.686
5	32.0	2344.9	905.3	23.8	0.590
6	40.0	2354.5	914.9	27.9	0.520
7	48.0	2361.0	921.3	31.6	0.467
8	56.0	2365.6	926.0	34.9	0.424
9	64.0	2371.0	931.4	37.8	0.389

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
10	72.0	2375.5	935.9	40.5	0.359
11	80.0	2378.3	938.7	42.9	0.334
12	88.0	2381.3	941.7	45.1	0.312
13	96.0	2383.7	944.1	47.1	0.293
14	104.0	2386.6	947.0	49.0	0.276
15	112.0	2388.6	949.0	50.7	0.262
G 16	120.9	2390.5	950.9	52.4	0.247

REMARKS:

TICKET NO: 40649300
 CLOCK NO: 10444 HOUR: 12



GAUGE NO: 2032
 DEPTH: 5687.0

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	208.1			
2	5.0	437.6	229.5		
3	10.0	537.9	100.3		
4	15.0	617.1	79.2		
5	20.0	690.9	73.8		
6	25.0	760.9	70.0		
C 7	29.9	831.5	70.6		
FIRST CLOSED-IN					
C 1	0.0	831.5			
2	4.0	2303.2	1471.7	3.6	0.926
3	8.0	2370.4	1538.9	6.3	0.676
4	12.0	2401.7	1570.2	8.6	0.544
5	16.0	2419.5	1588.0	10.4	0.458
6	20.0	2431.1	1599.5	12.0	0.397
7	24.0	2440.1	1608.6	13.3	0.351
8	28.0	2445.8	1614.3	14.5	0.316
9	32.0	2451.9	1620.4	15.5	0.287
10	36.0	2455.6	1624.1	16.3	0.263
11	40.0	2460.0	1628.5	17.1	0.243
12	44.0	2462.8	1631.3	17.8	0.225
13	48.0	2465.3	1633.8	18.4	0.210
14	52.0	2467.8	1636.3	19.0	0.197
15	56.0	2469.4	1637.9	19.5	0.186
D 16	57.5	2470.2	1638.7	19.7	0.182
SECOND FLOW					
E 1	0.0	864.6			
2	10.0	976.0	111.5		
3	20.0	1095.8	119.8		
4	30.0	1207.1	111.2		
5	40.0	1308.9	101.8		
6	50.0	1404.7	95.8		
7	60.0	1491.8	87.1		
F 8	62.6	1511.8	20.0		
SECOND CLOSED-IN					
F 1	0.0	1511.8			
2	8.0	2356.8	845.0	7.4	1.098
3	16.0	2394.2	882.4	13.7	0.831
4	24.0	2411.4	899.6	19.1	0.687
5	32.0	2423.4	911.6	23.8	0.591
6	40.0	2432.7	920.9	27.9	0.520
7	48.0	2438.0	926.2	31.6	0.467
8	56.0	2443.3	931.6	34.9	0.424
9	64.0	2448.0	936.2	37.8	0.389

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
10	72.0	2451.7	939.9	40.5	0.359
11	80.0	2454.4	942.6	42.9	0.334
12	88.0	2457.8	946.1	45.1	0.312
13	96.0	2460.0	948.2	47.1	0.293
14	104.0	2462.6	950.9	49.0	0.276
15	112.0	2464.1	952.3	50.7	0.262
G 16	120.9	2466.0	954.2	52.4	0.247

REMARKS:

		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	4762.0	
4		FLEX WEIGHT.....	4.500	2.764	145.0	
3		DRILL COLLARS.....	6.250	2.250	579.0	
50		IMPACT REVERSING SUB.....	6.000	2.750	1.0	5486.0
3		DRILL COLLARS.....	6.250	2.250	58.0	
5		CROSSOVER.....	6.000	3.000	1.0	
13		DUAL CIP SAMPLER.....	5.750	0.870	7.0	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	5557.0
80		AP RUNNING CASE.....	5.000	2.250	4.0	5559.0
15		JAR.....	5.030	1.750	5.0	
16		VR SAFETY JOINT.....	5.000	1.000	3.0	
70		OPEN HOLE PACKER.....	7.750	1.530	6.0	5574.0
70		OPEN HOLE PACKER.....	7.750	1.530	6.0	5580.0
5		CROSSOVER.....	6.000	3.000	1.0	
3		DRILL COLLARS.....	6.250	2.250	58.0	
5		CROSSOVER.....	6.000	3.000	1.0	
20		FLUSH JOINT ANCHOR.....	5.750	3.000	44.0	
81		BLANKED-OFF RUNNING CASE.....	5.750		4.0	5687.0
TOTAL DEPTH						5690.0

EQUIPMENT DATA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPPLICATE
(Other instructions on reverse side)

081311

Budget Bureau No. 1004-0135
Expires August 31, 1985

3
July

SUNDRY NOTICES AND REPORTS

(Do not use this form for proposals to drill or to deepen or...
Use "APPLICATION FOR PERMIT" for...

RECEIVED
AUG 11 1986

1. OIL WELL GAS WELL OTHER Dry Hole

2. NAME OF OPERATOR Total Petroleum, Inc.

3. ADDRESS OF OPERATOR P. O. Box 500, 999-18th St., Suite 3100, Denver, CO 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface 1290' FNL & 600' FWL (NW NW)
At Bottom Hole: 628' FNL & 618' FWL (NW NW)

14. PERMIT NO. 43-037-31251

15. ELEVATIONS (Show whether DF, RT, OR, etc.)

5. LEASE DESIGNATION AND SERIAL NO. U-47970

6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A

7. UNIT AGREEMENT NAME Little Nancy

8. FARM OR LEASE NAME Cliffhouse Buttes

9. WELL NO. #1-15 Cliffhouse Buttes Federal

10. FIELD AND POOL, OR WILDCAT Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 15-38S-25E SLBM

12. COUNTY OR PARISH San Juan

13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANE <input type="checkbox"/>	(Other) <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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.)*

Total Petroleum, Inc. drilled the #1-15 Cliffhouse Buttes Federal to a total depth of 5965' MD (5858'TVD) and evaluated the Ismay Formation via core, DST and log analysis. This is a notice of abandonment by setting the following cement plugs:

Plug No. 1 - Desert Creek & Ismay 5964-5514 (450'). Cemented with 170 sacks Class "G" Cement (200ft³) and displaced cement with 77 bbls. 10.1 ppg. mud.

Plug No. 2 - Cutler Formation 2650-2400 (250'). Cemented with 90 sacks Class "B" (105ft³) and displaced with 34 bbls. 10.1 ppg. mud.

Plug No. 3 - Surface Casing (1810'). Cemented with 6t sacks Class "B" (75ft³) 1875-1725 (150') Set plug half-in/half-out surface casing at 1810'. Displaced with 24 bbls. 10.1 ppg. mud.

Plug No. 4 - 10 Sk cement plug with dryhole marker.

(Received verbal plugging approval at 3:30 p.m. on July 31, 1986 from Greg Noble of the BLM.)

(Advised John R. Baza of the State of Utah of plugging approval at 3:40 p.m. on July 31, 1986.)

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

SIGNED A. Alan Manley TITLE Consulting Petroleum Engineer DATE August 8, 1986

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY:

ACCEPTED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

DATE: 8-12-86

BY: John R. Baza

*See Instructions on Reverse Side

LOG CALCULATIONS

Rw USED: .035 (optimistic)

ALL POROSITIES ARE CROSSPLOTTED FROM THE FDC-CNL LOG

<u>DEPTH (M.D.)</u>	<u>POROSITY</u>	<u>Rt</u>	<u>CALCULATED Sw</u>
5606-08'	14.5	6	64%
08-10'	15.5	4	72%
10-12'	5.5	4	100%
12-14'	4.5	9	100%
8 14-16'	7	7	100%
16-18'	10	4	100%
18-20'	12	2.5	100%
20-22'	15.5	1.5	100%
22-24'	17	1	100%
24-26'	14	1.5	100%
26-28'	8	2.5	100%
28-30'	6	7	100%
30-32'	3	25	100%
32-34'	1	60	100%
34-36'	1.5	80	100%
36-38'	1	100	100%
38-40'	1	150	100%
40-42'	1	100	100%
42-44'	1	80	100%
44-46'	1.5	55	100%
46-48'	4	35	100%
48-50'	7	25	70%
50-52'	8	15	78%
52-54'	10	10	74%
54-56'	11.5	4	100%
56-58'	14	2.5	100%
58-60'	14	2.5	100%
60-62'	13.5	3	98%
62-64'	13	4.5	83%
64-66'	9	6.5	100%
66-68'	17	9	51%
68-70'	13	9	59%
70-72'	10	10	74%
72-74'	11	12	61%
74-76'	13	12	51%
76-78'	14	12	47%
78-80'	13	12	51%
80-82'	13	11	53%
82-84'	14	10	51%
84-86'	15	9	50%
86-88'	14	9	54%
88-90'	14	9	54%
90-92'	14	10	51%
92-94'	11	15	55%
94-96'	12	15	49%
96-98'	8	20	67%
98-5700'	8	25	68%

LOG CALCULATIONS (CONT.)

<u>DEPTH (M.D.)</u>	<u>POROSITY</u>	<u>Rt</u>	<u>CALCULATED Sw</u>
5710-12'	8	4	100%
12-14'	13	2	100%
14-16'	12.5	1.5	100%
16-18'	18	.8	100%
18-20'	19	.6	100%
20-22'	19	.7	100%
22-24'	19	.7	100%
24-26'	18	.7	100%
26-28'	17	.85	100%
28-30'	15.5	1.2	100%
30-32'	14	1.5	100%
32-34'	8	3	100%

DST RESULTS

DST #1

INTERVAL: 5580 - 5690'

FORMATION: Upper Ismay

LITHOLOGY: limestone and dolomite

TESTING COMPANY: Haliburton, Farmington, New Mexico

MUD WT.: 10.3

VISCOSITY: 40

SURFACE CHOKE: .125"

BOTTOM HOLE CHOKE: .75" at 5690'

CUSHION: none

TOOL OPEN: 3:10 a.m.

TEST: IFP (30 min.) 2" blow in bucket 5 oz. in 1 min. 186 - 821#
11 oz. in 5 min.
32 oz. in 15 min.
3 lbs. in 30 min.

ISIP (60 min.) 2460#

FFP (61 min.) 4 oz. at open 847 - 1482#
4½ lbs. in 60 min.
no GTS

FSIP (120 min.) 2460 - 2460#

RECOVERY: 2935' (35.3 bbls.) VSGCMSW

CHAMBER RECOVERY: 2150 cc. SGCSW @ 760#

CORE DESCRIPTION (CONT.)

<u>Footage</u>	<u>Lithology</u>	<u>Fluorescence</u>	<u>Porosity</u>
5677'	DOLOMITE, gy-br-wh, oil stn, fossil	fair	inter, vug
78'	DOLOMITE, A/A	good	inter, vug
79'	DOLOMITE, A/A	good-v good	inter, vug
80'	LIMESTONE, gy-gy br., dolo.	good	inter, vug
81'	DOLOMITE, gy-dk gy, oil stn, odor	good	vuggy
82'	DOLOMITE, A/A	fair	inter, vug
83'	DOLOMITE, A/A	fair	inter, vug
84'	DOLOMITE, A/A	fair	inter, vug
85'	DOLOMITE, A/A	fair	inter, vug
86'	DOLOMITE, A/A	v good	inter, vug
87'	DOLOMITE, A/A	fair	pnpt, inter
88'	DOLOMITE, A/A, fossil frag.	good	inter, vug
89'	DOLOMITE, A/A	fair	inter, vug
90'	DOLOMITE, A/A	good	inter, vug

The entire core had an extremely strong gas odor and the interval from 5671-5690' was oil stained and had random bleeding gas.

CORE DESCRIPTION

INTERVAL: 5630 - 5690° Cut 60°, recovered 60°

DESCRIPTION:

<u>Footage</u>	<u>Lithology</u>	<u>Fluorecence</u>	<u>Porosity</u>
5631'	DOLOMITE, gy - med gy, fn xtal, sucro.	rare	tite
32'	DOLOMITE, A/A, anhydrite plugging	rare	tite
33'	LIMESTONE, gy - wh, dolomitic	trace	tite
34'	DOLOMITE, gy - med gy, fn xtal, anhy	good	tite
35'	DOLOMITE, A/A, anhydrite plugging	good	tite
36'	DOLOMITE, A/A	fair	tite
37'	DOLOMITE, A/A	good	tite
38'	LIMESTONE, gy - med gy, fn xtal, dolo.	rare	tite
39'	LIMESTONE, A/A	rare	tite
40'	LIMESTONE, br - gy - wh, dolomitic	trace - fair	tite
41'	LIMESTONE, A/A	fair	v. tite
42'	LIMESTONE, A/A	trace	pnpt, vug
43'	LIMESTONE, gy - med gy, dolo., anhy.	none	pnpt.
44'	LIMESTONE, A/A	rare	tite
45'	LIMESTONE, A/A	rare	tite
46'	DOLOMITE, gy - med gy, limy, fn xtal	fair	tite
47'	LIMESTONE, br - gy - wh, dolo., anhy plug.	rare	tite
48'	LIMESTONE, A/A	v. rare	tite
49'	DOLOMITE, gy - br gy, limy anhy. plug	rare	tite
50'	LIMESTONE, br - gy - wh, dolo., anhy. plug	rare	pnpt
51'	DOLOMITE, gy - med gy, limy, fn xtal	trace	pnpt
52'	LIMESTONE, gy - br gy, dolo., anhy plug	trace	tite
53'	DOLOMITE, gy - br gy, fn xtal, sucro.	fair	pnpt
54'	DOLOMITE, gy, limy, A/A	good	pnpt
55'	DOLOMITE, A/A	good	pnpt
56'	DOLOMITE, A/A	good	pnpt
57'	DOLOMITE, gy br, A/A	very good	interxtal
58'	DOLOMITE, A/A, oil stn	good	vuggy
59'	DOLOMITE, A/A	good	inter, vug
60'	DOLOMITE, A/A, limy	good	pnpt
61'	DOLOMITE, A/A	fair	pnpt
62'	LIMESTONE, gy, dolo., fn xtal	trace	vuggy
63'	DOLOMITE, gy - br gy, limy, sucrosic	fair	pnpt
64'	DOLOMITE, A/A	fair	tite
65'	DOLOMITE, gy, anhy., fn xtal	fair	pnpt
66'	DOLOMITE, A/A, limy	trace	pnpt
67'	DOLOMITE, A/A	fair	pnpt
68'	DOLOMITE, A/A	fair-good	pnpt
69'	DOLOMITE, A/A	good	pnpt
70'	DOLOMITE, A/A	good	pnpt
71'	DOLOMITE, gy - wh - br, oil stn, bldg gas	good	pnpt, vug
72'	DOLOMITE, A/A	v good	pnpt, vug
73'	DOLOMITE, A/A	good	inter, vug
74'	DOLOMITE, A/A	good	inter, vug
75'	DOLOMITE, A/A	good	inter
76'	DOLOMITE, A/A	fair	pnpt, inter
		good	inter, vug

SAMPLE DESCRIPTIONS

<u>Depth</u>	<u>Description</u>
5580-90'	SHALE, dk gy, sli calc, brittle, platy
90-5600'	A/A
5600-10'	ANHYDRITE, wh, sft
10-20'	LIMESTONE, gy-med. gy, drty, sndy, blk, y.
20-30'	DOLOMITE, lt. gy-gy, gy br, sucrosic blk, y.
5630-90'	SEE CORE DESCRIPTION - CORE #1
90-5700'	DOLOMITE, lt gy-med gy, sucrosic, blk, y.
5700-10'	A/A
10-20'	A/A
20-30'	A/A
30-40'	A/A
40-50'	SHALE, blk, slty, sft, gummy
50-60'	A/A
60-70'	A/A
70-80'	A/A
80-90'	LIMESTONE, lt-med gy, sndy, fn xtal, blk, y. DOLOMITE, lt-med gy, sucrosic, fn xtal
90-5800'	A/A
5800-10'	A/A, ANHYDRITE, wh, sft
10-20'	ANHYDRITE, wh, sft
20-30'	A/A
30-40'	A/A
40-50'	SHALE, blk, sft, pty
50-60'	A/A
60-70'	A/A
70-80'	A/A, LIMESTONE, DOLOMITE, med gy, blk, y, v fn xtal
80-90'	ANHYDRITE, wh, sft
90-5900'	LIMESTONE, gy-med gy, blk, y, v fn xtal
5900-10'	ANHYDRITE, wh, sft
10-20'	A/A
20-30'	DOLOMITE, gy-gy br, blk, y, hrd, fn xtal
30-40'	A/A
40-50'	A/A
50-60'	SHALE, dk gy, brittle, slty
60-65'	A/A

FORMATION TOPS

<u>Formation</u>	<u>Top (M.D.)</u>	<u>T.V.D.</u>	<u>Subsea</u>
Dakota-Morrison	Surface		+5291
Cutler	2470°	2469°	+2822
Henaker Trail	4632°	4578°	+713
Paradox Shale	5574°	5488°	-197
Upper Ismay	5588°	5502°	-211
Hovenweep Shale	5734°	5645°	-354
Lower Ismay	5764°	5677°	-386
Gothic Shale	5838°	5747°	-456
Desert Creek	5862°	5771°	-480
Chimney Rock	5940°	5847°	-556
Akah	5962°	5869°	-578
T.D.	5965°	5871°	-580

Date: 7/26/1986 Time: 18:38:14

PAGE: 1

Filename: "TOTAL115.SRV" Description: "CLIFF HOUSE 1-15 "

Target Coordinates: E90.0 N 0.0 E Target TVD: 5508.000

Using Radius of curvature method.

#	MEASURED DEPTH (feet)	DRIFT ANGLE (deg)	DRIFT DIRECTION (deg)	COURSE LENGTH (feet)	TRUE		VERTICAL SECTION (feet)	RECTANGULAR COORDINATES (feet)		DOBLEG -SEVERITY DG/100FT
					DEPTH (feet)	VERTICAL		---	---	
1	1880.0	0.50	S 70.00 W	70.0	1880.0	-0.1	0.1 S	0.3 W	0.71	
2	2129.0	1.00	N 80.00 W	249.0	2129.0	-0.4	0.4 S	3.5 W	0.25	
3	2378.0	0.75	N 80.00 W	249.0	2377.9	0.3	0.3 N	7.2 W	0.10	
4	2626.0	1.00	S 70.00 W	248.0	2625.9	-0.1	0.1 S	11.0 W	0.21	
5	2724.0	1.25	S 85.00 W	98.0	2723.9	-0.5	0.5 S	12.8 W	0.39	
6	2850.0	2.75	N 43.00 W	126.0	2849.8	1.1	1.1 N	16.8 W	1.76	
7	3004.0	6.00	N 7.00 E	154.0	3003.3	11.9	11.9 N	20.3 W	3.07	
8	3098.0	8.50	N 11.00 E	94.0	3096.6	23.6	23.6 N	18.5 W	2.71	
9	3191.0	10.10	N 4.00 E	93.0	3188.4	38.5	38.5 N	16.5 W	2.10	
10	3283.0	12.00	N 5.00 W	92.0	3278.7	56.1	56.1 N	16.7 W	2.78	
11	3374.0	14.75	N 5.00 W	91.0	3367.2	77.1	77.1 N	18.5 W	3.02	
12	3466.0	16.30	N 3.00 W	92.0	3455.8	101.6	101.6 N	20.2 W	1.78	
13	3591.0	16.20	N 2.00 E	125.0	3575.8	136.6	136.6 N	20.5 W	1.12	
14	3715.0	15.80	N 3.00 E	124.0	3695.0	170.7	170.7 N	19.0 W	0.39	
15	3871.0	16.10	Due N	156.0	3845.0	213.6	213.6 N	17.9 W	0.56	
16	4056.0	17.00	N 1.00 E	185.0	4022.4	266.3	266.3 N	17.4 W	0.51	
17	4252.0	16.00	N 3.00 E	196.0	4210.3	321.9	321.9 N	15.5 W	0.59	
18	4438.0	14.30	N 4.00 E	186.0	4389.8	370.4	370.4 N	12.5 W	0.92	
19	4595.0	13.60	N 5.00 E	157.0	4542.2	408.2	408.2 N	9.6 W	0.47	
20	4751.0	12.40	N 8.00 E	156.0	4694.2	443.0	443.0 N	5.8 W	0.88	
21	4905.0	13.00	N 1.00 E	154.0	4844.4	476.8	476.8 N	2.9 W	1.07	
22	5002.0	13.00	Due N	97.0	4938.9	498.6	498.6 N	2.8 W	0.23	
23	5123.0	13.25	N 2.00 E	121.0	5056.8	526.0	526.0 N	2.3 W	0.43	
24	5217.0	14.00	N 1.00 E	94.0	5148.1	548.2	548.2 N	1.7 W	0.84	
25	5403.0	16.80	N 8.00 W	186.0	5327.4	597.4	597.4 N	4.7 W	1.98	
26	5587.0	19.30	N 14.00 W	184.0	5502.3	653.4	653.4 N	15.6 W	1.69	
27	5613.0	19.70	N 15.00 W	26.0	5526.9	661.8	661.8 N	17.8 W	2.00	

--- Final Closure Direction: N 1.54 W

--- Final Closure Distance: 661.997 feet

BIT RECORD

<u>BIT #</u>	<u>MAKE</u>	<u>SIZE</u>	<u>MODEL</u>	<u>DEPTH OUT</u>	<u>FOOTAGE USED</u>	<u>HOURS USED</u>
1	STC	12 $\frac{1}{4}$	F-2	46°	46°	1
2	STC	12 $\frac{1}{4}$	F-2	1810°	1764°	30 $\frac{1}{4}$
3	STC	8 3/4	F-27	2700°	890°	16 $\frac{1}{4}$
4	Christensen	8 3/4	NC-2	4174°	1474°	41 $\frac{1}{4}$
5	STC	8 3/4	F-27	4825°	651°	16 3/4
6	STC	8 3/4	F-3	5630°	805°	60 3/4
7	Christensen	8 3/4	C-201	5690°	60°	13 $\frac{1}{4}$
8	Varel	8 3/4	V537	5965°	275°	

DAILY CHRONOLOGY

		12:00 a.m. depth
7-14-86	Set Conductor pipe, RURT, Spud well	
7-15-86	Drilling	1048'
7-16-86	Drilling, short trip	1810'
7-17-86	Run surface casing	1810'
7-18-86	Drilling, survey, TFB	2700'
7-19-86	Drilling, survey	3272'
7-20-86	Drilling, survey	3926'
7-21-86	Drilling, ream and wash to bottom, mud logger, geologist	4292'
7-22-86	Drilling, survey, TFB	4825'
7-23-86	TIH, Drilling, mix mud	4963'
7-24-86	TOH, Add stabilizer, TIH, drill, TOH, correct direction	5176'
7-25-86	TOH, TIH, drill	5435'
7-26-86	Drill, condition mud	5630'
7-27-86	TOH, TIH with core barrel, coring	5690'
7-28-86	RU DST tools, running DST #1	5690'
7-29-86	DST #1, drill	5798'
7-30-86	Drilling, RU Loggers	5965'
7-31-86	Logging, WOO	5965'
8-1-86	P&A well	5965'

RESULTS OF D.S.T.: Recovered 2935° VSGMSW

LOGGING COMPANY: Gearhart, Farmington, New Mexico
Steve Pressley, Engineer

LOGS AND INTERVALS:

LOGS AND LOGGED INTERVAL: DIL 1806 - 5962°
Sonic (BHC) 1806-- 5962°
FDC-CNL 4000 - 5962°

GENERAL INFORMATION

WELL NAME: #1-15 Cliffhouse Butte Federal

OPERATOR: Total Petroleum Inc.
999 18th St. Ste 3100
Denver, Colorado 80202

DRILLING CONTRACTOR: Coleman Drilling Co., Farmington, N.M.
Rig #3

SURFACE LOCATION: 1290° FNL 600° FWL
SW NW NW Sec. 15 T38S R25E
San Juan Co., Utah

BOTTOM HOLE LOCATION: 600° FNL 600° FWL
NW NW Sec. 15 T38S R25E

K.B.: 5291° G.L.: 5278°

COMMENCED DRILLING: July 14, 1986

COMPLETED WELL: Aug. 1, 1986

HOLE SIZE: 8 3/4" from surface casing to T.D.

WATER SOURCE: Sanchez Pond

CASING RECORD: 9 5/8" to 1810° (45 jts. 36#/ft.)

T.D.: 5965° (driller) in the Akah Formation

HOLE STATUS: Plugged and Abandoned

DIRECTIONAL DRILLER: Norton-Christensen, Salt Lake City, Utah
Neil Lemon, Engineer

MAXIMUM HOLE DEVIATION: 19.7° at 5613° (M.D.)

MUD COMPANY: Milpark, Farmington, New Mexico
Don Linder, Engineer

DRILLING SUPERVISOR: Dan Manley

CORE INTERVAL: 5630 - 5690° (Upper Ismay)

CORE COMPANY: Norton-Christensen, Farmington, New Mexico
Ray Ross, Engineer

DISPOSITION OF CORE: Core Lab, Farmington, New Mexico
Core sent to Core Lab for analysis then to Total Petroleum
in Denver, Colorado.

D.S.T. INTERVAL: D.S.T. #1 5580 - 5690° (Upper Ismay)

D.S.T. COMPANY: Haliburton, Farmington, New Mexico

Drig.

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082018

TOTAL PETROLEUM INC.
#1-15 Cliffhous Butte Federal
SW NW NW Sec. 15-T38S-R25E
San Juan Count, Utah

Donald H. Newman, Consulting Geologist
496 So. 1st West
Richfield, Utah 84701
801-896-6511

SUMMARY OF WELL

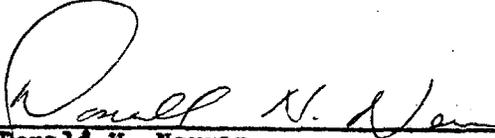
The 1-15 Cliffhouse Butte well was drilled on a seismic feature situated between Patterson Canyon and Tincup Mesa Fields. The feature had been tested earlier by the 1-10 Cliffhouse Butte well drilled by MCOR in 1981 in the SE SW SW of Sec 10-T38S-R25E. This well tested some oil out of the Upper Ismay zone of the Paradox Formation but it was felt that the 1-10 well was down on the flank of the buildup that was seen on seismic.

It was decided that a well drilled in section 15 would come up on the buildup in a more favorable position to encounter oil and gas in the Upper Ismay zone. The well was originally set to drill in the NW1/4 of 15 (600' FNL 600' FWL) but because of archeological problems the well was staked 1290' FNL and 600' FWL and was directionally drilled to the bottom hole location originally staked.

The well was drilled with fresh water to a depth of 4900' and then mudded up to improve the sample quality and safety of the well. No shows were encountered through the Honaker Trail section and the well was drilled to a depth of 5630' for coring without incident. A full diameter core was taken from 5630-90' in the Upper Ismay. There was 60' cut and 60' recovered in the coring attempt. The core consisted of limestone and dolomite which had varying degrees of fluorescence and porosity and the entire core had an extremely good gas odor and was bleeding gas randomly over the core. The bottom part of the core exhibited good vuggy and intercrystalline porosity and oil stain. The lithology of the core appeared to be more similar to the lithology of the Patterson Canyon Field than to the Tincup Mesa Field in that it did not show any signs of algal buildup.

A DST was run over the interval 5580-5690' in the Upper Ismay zone and although the pressures were good there was not gas to surface and the test recovered very slightly gas cut salt water.

The well was drilled to a T.D. of 5965' in the Akah Formation to be able to evaluate the Desert Creek zone of the Paradox Formation. The Desert Creek had no algal buildup at all and was not prospective. The well was plugged and abandoned on Aug. 1, 1986.



Donald H. Newman
Consulting Geologist

FLUID PROPERTIES:

	RESISTIVITY	CHLORIDES-PPM
MUD PIT	0.48 @ 82 F	5666
TOP OF PIPE RECOVERY	0.31 @ 83 F	11212
MIDDLE OF PIPE RECOVERY	0.17 @ 84 F	21212
BOTTOM OF PIPE RECOVERY	0.06 @ 85 F	69696
SAMPLER	0.08 @ 83 F	48484

DRILL STEM TEST REPORT

CLIFFHOUSE BUTTES FEDERAL NO. 1-15
 SAN JUAN COUNTY, UTAH

DST NO. 1 (5580-5690) 110' UPPER ISMAY FORMATION NET PAY= 20 FT.
 30-60-60-120 DATE: 7-30-86 BHT = 134 F @ 5686 FT.

SURFACE DATA:

TIME	PRESSURE	
INITIAL OPEN		
03:10	1.0 OZ.	OPENED TOOL WITH WEAK BLOW
03:11	5.0 OZ.	
03:15	11.0 OZ.	
03:20	22.5 OZ.	
03:35	2.5 LB.	
03:41	3.0 LB.	CLOSED TOOL

SECOND OPEN

04:39	4.0 OZ.	
04:40	8.0 OZ.	
04:50	19.0 OZ.	
04:55	27.0 OZ.	
05:00	33.0 OZ.	
05:05	2.0 PSI	
05:10	2.25 PSI	
05:15	3.0 PSI	
05:20	3.125 PSI	
05:25	3.5 PSI	
05:30	4.0 PSI	
05:35	4.25 PSI	
05:41	4.75 PSI	CLOSED TOOL
07:42		PULLED TOOL OFF BOTTOM

PIPE RECOVERY:

2935 FT. (35.3 BBLs) VERY SLIGHTLY GAS CUT MUD AND SALT WATER

SAMPLER RECOVERY:

0.60 CU. FT. GAS @ 760 PSI
 2150 cc WATER (SAMPLER VOLUME-2450 cc)

PRESSURES:

	TOP	BOTTOM
DEPTH	5563	5687
IH	3036	3042
IF	161-748	186-821
ISI	2383	2460
FF	788-1571	847-1482
FSI	2383	2460
FH	2929	3003

CLIFFHOUSE BUTTES FEDERAL NO. 1-15
SAN JUAN COUNTY, UTAH
KB= 5291'

<u>FORMATION</u>	<u>TOP (M.D.)</u>	<u>TRUE VERTICAL DEPTH</u>	<u>SUBSEA</u>
DAKOTA-MORRISON	SURFACE		+5291
CUTLER	2470'	2469'	+2822
HONAKER TRAIL	4632'	4582'	+706
PARADOX SHALE	5574'	5489'	-198
UPPER ISMAY	5588'	5503'	-212
HOVENWEEP SHALE	5734'	5640'	-349
LOWER ISMAY	5764'	5668'	-377
GOTHIC SHALE	5838'	5737'	-446
DESERT CREEK	5862'	5759'	-468
CHIMNEY ROCK	5940'	5830'	-539
AKAH	5962'	5850'	-539
T.D.	5965'	5853'	-562

D. DAN MANLEY, P.E.

Consulting Petroleum Engineer

Dominion Plaza Building

600 Seventeenth Street

Suite 1300-North

Denver, Colorado 80202

303-571-1600

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**DIVISION OF
OIL, GAS & MINING**

August 20, 1986

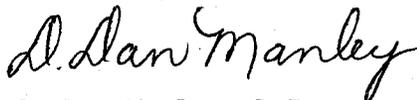
State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

RE: #1-15 Cliffhouse Buttes Federal
San Juan County, Utah

Dear Sir:

Enclosed is an original and one copy of the Well Completion Report
on the above-referenced well.

Sincerely yours,



D. Dan Manley, P.E.
Consulting Petroleum Engineer

DDM/df
Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

090206

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

4

WELL COMPLETION OR RECOMPLETION

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1a. TYPE OF WELL: OIL WELL GAS WELL DRY
 b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RESVR.

2. NAME OF OPERATOR
Total Petroleum, Inc. (303)291-2000

3. ADDRESS OF OPERATOR
999-18th Street, Suite 3100, Denver, CO 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
 At surface: 1290' FNL & 600' FWL (NW NW)
 At top prod. interval reported below: Upper Ismay Formation @ 5588' MD (5503TVD) 637' FNL & 584' FWL
 At total depth: TD 5965' MD (5853TVD) 506' FNL & 533' FWL Sec. 15-T38S-R25E

14. PERMIT NO. 43-037-3051 DATE ISSUED

15. DATE SPUNDED 7/14/786 16. DATE T.D. REACHED 7/31/86 17. DATE COMPL. (Ready to prod.) N/A

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 5277-Grd 5291' KB 19. ELEV. CASINGHEAD 5277'

20. TOTAL DEPTH, MD & TVD 5965' MD (5853TVD) 21. PLUG, BACK T.D., MD & TVD P&A'd 22. IF MULTIPLE COMPL. HOW MANY* -0- 23. INTERVALS DRILLED BY → 0-5965

24. PRODUCING INTERVAL(S). OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
None - Dry Hole

26. TYPE ELECTRIC AND OTHER LOGS RUN
DIL-BHC Sonic-LDT-GR-SP-Cal-CNL mud

27. WAS WELL CORED
Yes 5630-90(60')

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
16"	65	77.6'	20"	105sks High Early Cmt.	N/A
9-5/8"	36	1809'	12-1/4"	485sks High Early+200sks" B"	N/A

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
N/A				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
N/A		

31. PERFORATION RECORD (Interval, size and number)
N/A

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
N/A	N/A

33.* PRODUCTION

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

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

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

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)
N/A

35. LIST OF ATTACHMENTS
DST Report and Formation Top Report; Core Analysis Report & Geological Report were sent under

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

SIGNED D. Alan Manley TITLE Consulting Petroleum Engineer DATE 8/20/86

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

860905
CP

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):

38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
			See attached Drill Stem Test Report	Dakota-Morrison	Surface	2469
				Cutler	2470	4582
				Honaker Trail	4632	5489
				Paradox Shale	5574	5503
				Upper Ismay	5588	5640
				Hovenweep Shale	5734	5668
				Lower Ismay	5764	5737
				Gothic Shale	5838	5759
				Desert Creek	5862	5830
				Chimney Rock	5940	5850
				Akah	5962	5853
				T.D.	5965	

NAME	AC CODE(S)	IN
NOVA		
TAMI	3B	
VICKY		
CLAUDIA		
STEPHANE		
CHARLES	/	3B
RULA		
MARY ALICE		
CONNIE		
MILLIE		
PAM	FILE	

Required Action Code

1. Data Entry
2. Filming
3. Posting
 - a. Card Index
 - b. File Label
 - c. Lists
4. Bonding Verification
5. Other (See Norm)