

Form OGC-1a

**STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING**

(Other instructions on reverse side)

5. Lease Designation and Serial No.
U-46825

6. If Indian, Allottee or Tribe Name
N/A

7. Unit Agreement Name
N/A

8. Farm or Lease Name
Tina Federal

9. Well No.
#1

10. Field and Pool, or Wildcat
Wildcat

11. Sec., T., R., M., or Blk. and Survey or Area
Sec. 13, T37S - R23E

12. County or Parrish
San Juan

13. State
Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
DRILL DEEPEN PLUG BACK

b. Type of Well
Oil Well Gas Well Other Single Zone Multiple Zone

2. Name of Operator **303/322-7878 1777 S. Harrison St., PH 1
Raymond T. Duncan Denver, CO 80210**

3. Address of Operator **303/322-7878 P.O. Box 44065
Permitco Inc. - Agent Denver, CO 80210**

4. Location of Well (Report location clearly and in accordance with any State requirements.)*
At surface **2140' FSL and 1110' FEL**
At proposed prod. zone **NE SE Sec. 13**

14. Distance in miles and direction from nearest town or post office*
18 miles northwest of Hatch Trading Post

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any) **210'**

16. No. of acres in lease **1600**

17. No. of acres assigned to this well **40**

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft. **none**

19. Proposed depth **6450'**

20. Rotary or cable tools **Rotary**

21. Elevations (Show whether DF, RT, GR, etc.) **5889' GR**

22. Approx. date work will start*
June 6, 1987**

23. **PROPOSED CASING AND CEMENTING PROGRAM**

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
17-1/2"	13-3/8"	48#	110'	Cement to surface
12-1/4"	8-5/8"	24#	2300'	1100 sx or suffic. to circ to surf.
7-7/8"	5-1/2"	15.5#	6450'	400 sx or suffic to cover zone of interest.

Raymond T. Duncan proposes to drill a well to 6450' to test the Ismay and Desert Creek formations. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

See Onshore Order No. 1 attached.

CONFIDENTIAL - TIGHT HOLE

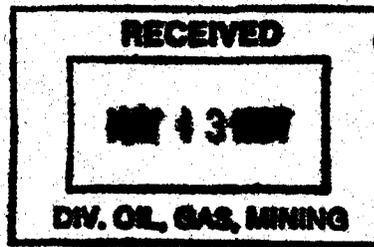
IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer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

24. Raymond T. Duncan Consultant for Raymond T. Duncan Date 5/12/87
 Signature Title

(This space for Federal or State office use)

Permit No. _____ Approval Date _____

Approved by _____ Title _____ Date _____
 Conditions of approval, if any:



May 12, 1987

State of Utah
Division of Oil, Gas & Mining
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

Re: Raymond T. Duncan
Tina Federal #1
2140' FSL and 1110' FEL
Sec. 13, T37S - R23E
San Juan County, Utah

Gentlemen:

Raymond T. Duncan proposes to drill a well at the above mentioned location.

We realize that this location is a non-standard location in accordance with the spacing rules of the State of Utah. This location was chosen based on archeological problems, topography and extensive seismic work done in the immediate area.

Raymond T. Duncan is the lease holder of all of Section 13, T37S - R23E, San Juan County, Utah. Therefore, no other lease holders will be affected by the drilling of the above proposed well.

We, therefore, request your permission to drill this well at a non-standard location.

Sincerely,

PERMITCO INC.

A handwritten signature in cursive script, appearing to read 'Lisa L. Green'.

Lisa L. Green
Consultant for
Raymond T. Duncan

cc: Raymond T. Duncan

Permitco Incorporated
A Petroleum Permitting Company

P.O. Box 44065
Denver, Colorado 80201-4065
(303) 322-7878

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

(Other instructions on reverse side)

CONFIDENTIAL

5. Lease Designation and Serial No.

U-46825

6. If Indian, Allottee or Tribe Name

N/A

7. Unit Agreement Name

N/A

8. Farm or Lease Name

Tina Federal

9. Well No.

#1

10. Field and Pool, or Wildcat

Wildcat UNDESIGNATED

11. Sec., T., R., M., or Blk. and Survey or Area

Sec. 13, T37S - R23E

12. County or Parrish

San Juan

13. State

Utah

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. DEEPEN PLUG BACK

2. Type of Well
Oil Well Gas Well Other
Single Zone Multiple Zone

2. Name of Operator Raymond T. Duncan 1777 S. Harrison St., PH I Denver, CO 80210

3. Address of Operator 303/322-7878 P.O. Box 44065 Denver, CO 80210
Permitco Inc. - Agent

4. Location of Well (Report location clearly and in accordance with any State requirements.)*
At surface 2140' FSL and 1110' FEL

At proposed prod. zone NE SE Sec. 13

14. Distance in miles and direction from nearest town or post office*
18 miles northwest of Hatch Trading Post

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any) 210'

16. No. of acres in lease 1600

17. No. of acres assigned to this well 40

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft. none

19. Proposed depth 6450' *Chemistry Rock*

20. Rotary or cable tools Rotary

21. Elevations (Show whether DF, RT, GR, etc.)
5889' GR

22. Approx. date work will start*
June 6, 1987**

PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
17-1/2"	13-3/8"	48#	110'	Cement to surface
12-1/4"	8-5/8"	24#	2300'	1100 sx or suffic. to circ to surf.
7-7/8"	5-1/2"	15.5#	6450'	400 sx or suffic to cover zones of interest.

Raymond T. Duncan proposes to drill a well to 6450' to test the Ismay and Desert Creek formations. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

See Onshore Order No. 1 attached.

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

CONFIDENTIAL - TIGHT HOLE

DATE: 5-19-87
BY: John R. Bay

WELL SPACING: 302-1

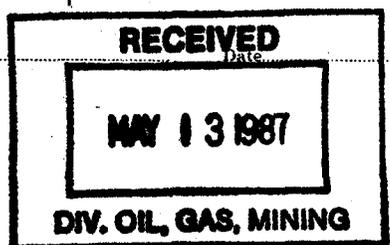
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24. Signed [Signature] Title Consultant for Raymond T. Duncan Date 5/12/87

(This space for Federal or State office use)

Permit No. _____ Approval Date _____

Approved by _____ Title _____
Conditions of approval, if any: _____



*See Instructions On Reverse Side

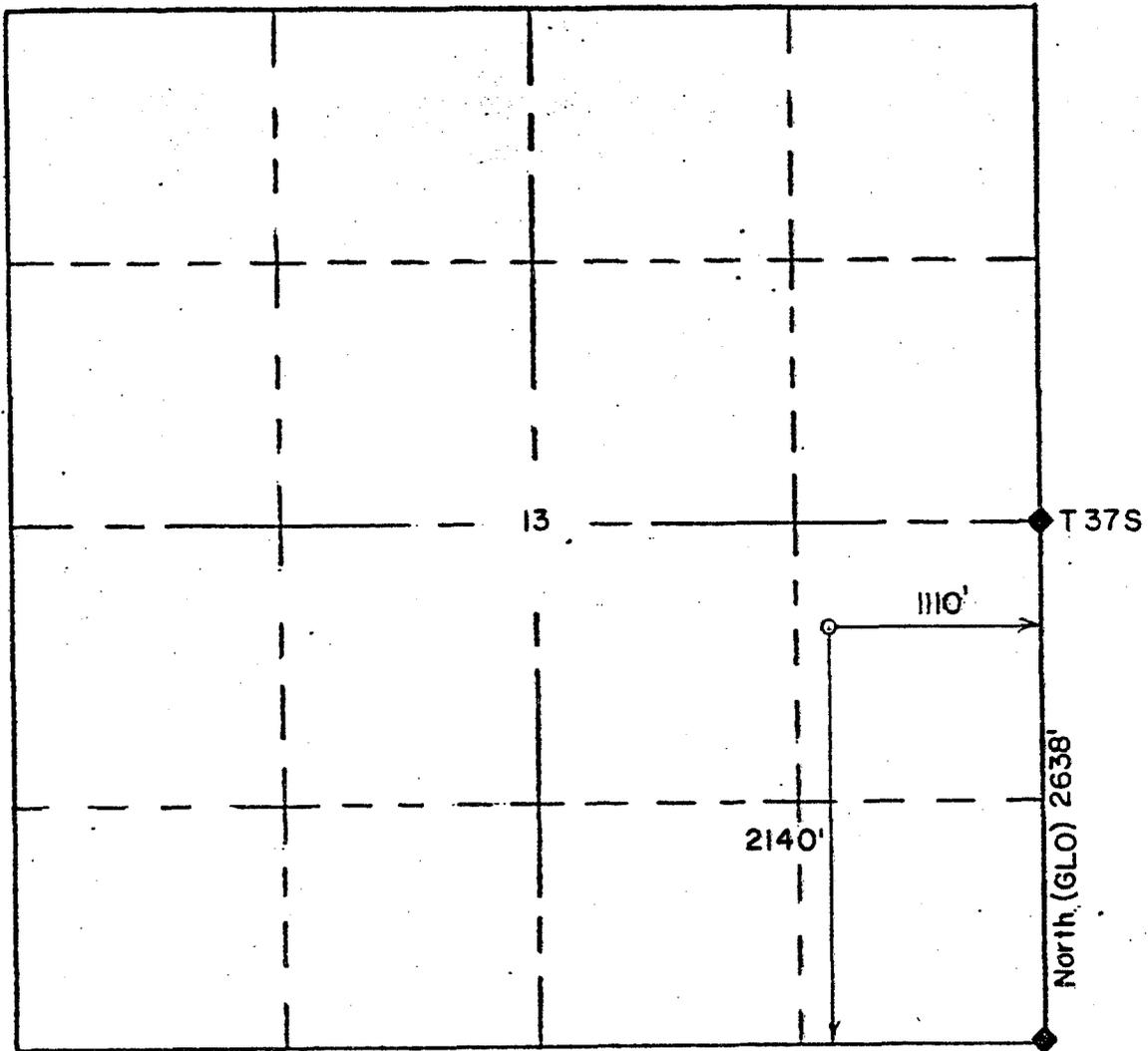
WELL LOCATION PLAT

R 23 E



1" = 1000'

◆ Brass cap

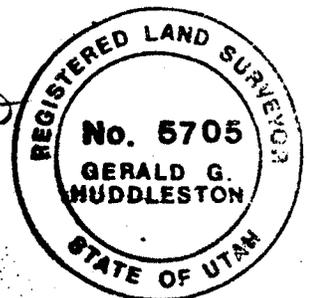
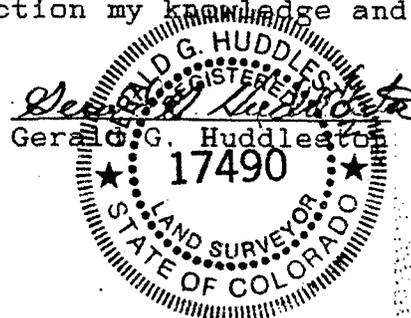


WELL LOCATION DESCRIPTION:

DUNCAN OIL Tina Federal #1
 2140' FSL & 1110' FEL
 Section 13, T37S, R23E, SLM
 San Juan County, Utah
 5889' ground elevation
 Reference: S62 11'E 340', 5921' grd

The above plat is correction my knowledge and belief.

8 May '87



CONFIDENTIAL - TIGHT HOLE

ONSHORE OIL & GAS ORDER NO. 1

Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

TINA FEDERAL #1
2140' FSL and 1110' FEL
Section 13, T37S - R23E
San Juan County, Utah

Prepared For:

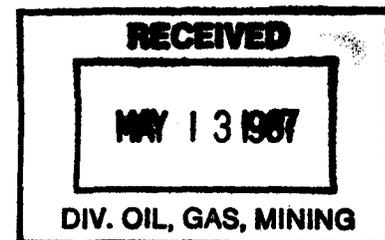
RAYMOND T. DUNCAN

By:

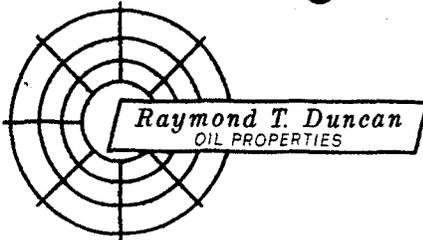
PERMITCO INC.
P.O. Box 44065
Denver, Colorado 80201-4065
303/322-7878

Copies Sent To:

- 4 - BLM - Moab, Utah
- 1 - BLM - Monticello, Utah
- 1 - Div. of Oil, Gas & Mining - SLC, Utah
- 3 - Raymond T. Duncan - Denver, CO



Permitco Incorporated
A Petroleum Permitting Company



1777 SOUTH HARRISON STREET - PENTHOUSE ONE
TELEPHONE (303) 759-3303 - DENVER, COLORADO 80210

May 11, 1987

Bureau of Land Management
Oil and Gas Office
324 S. State, Ste. 301
Salt Lake City, UT 84111

RE: Tina Federal No. 1
NE SE 13-37S-23E
San Juan Co., Utah

Gentlemen:

This letter is to inform you that Permitco is authorized to act as Agent and to sign documents on behalf of Raymond T. Duncan when necessary for filing County, State, and Federal permits including Onshore Order No. 1, Right-of-Way applications, etc., for the above captioned well.

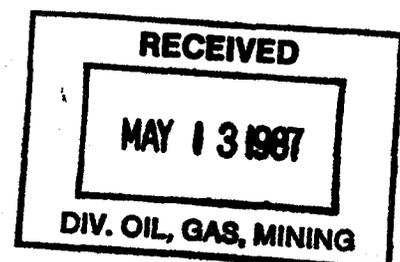
It should be understood that Permitco is acting as Agent only in those matters stated above and is not responsible for drilling, completion, production, or compliance with regulations.

Raymond T. Duncan agrees to accept full responsibility for operations conducted in order to drill, complete, and produce the above captioned well.

Very truly yours,
RAYMOND T. DUNCAN

W.S. Fallin
Production Manager

kb



ONSHORE ORDER NO.
Raymond T. Duncan
Tina Federal 1
2140' FSL and 1110' FEL
Section 13, T37S - R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

1. The surface formation and estimated formation tops to be encountered are as follows:

<u>Formation</u>	<u>Depth</u>	<u>Subsea</u>
Burro Canyon	Surface	
DeChelly	3277'	+2617'
Hermosa	4950'	+ 867'
Ismay	6077'	- 183'
U. Ismay Carb.	6110'	- 216'
Hovenweep	6210'	- 316'
Lower Ismay	6245'	- 351'
Gothic Shale	6295'	- 401'
Desert Creek	6320'	- 426'
L. Desert Creek	6375'	- 481'
Chimney Rock	6395'	- 501'
T.D.	6450'	- 556'

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

<u>Substance</u>	<u>Formation</u>	<u>Anticipated Depth</u>
Oil/Gas	Ismay	6077'
Oil/Gas	Desert Creek	6320'

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth cased and cemented. All oil and gas shows will be tested to determine commercial potential.



Permitco Incorporated
A Petroleum Permitting Company

Raymond T. Duncan

Tina Federal 1

2140' FSL and 1110' FEL

Section 13, T37S - R23E

San Juan County, Utah

DRILLING PROGRAM

3. Pressure control equipment will consist of a 10", 3000# BOP. (See BOP Diagram attached.)

BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs. The San Juan Resource Area will be notified 1 day before pressure testing.

4. a. Casing

The proposed casing program is as follows:

<u>Purpose</u>	<u>Depth</u>	<u>Hole Size</u>	<u>O.D.</u>	<u>Wt.</u>	<u>Grade</u>	<u>Type</u>	<u>New or Used</u>
Conductor	0-110'	17-1/2"	13-3/8	48#	K-55	ST&C	New
Surface	0-2300'	12-1/4"	8-5/8"	24#	K-55	ST&C	New
Produc.	0-6400'	7-7/8"	5-1/2"	15.5#	K-55	ST&C	New

- b. Cement

The cementing program will be as follows:

<u>Conductor</u> 0-110'	<u>Type and Amount</u> Circulated to surface.
<u>Surface</u> 0-2300'	<u>Type and Amount</u> 1100 sx Class B w/additives; or sufficient to circulate to surface.
<u>Production</u>	<u>Type and Amount</u> 400 sx Class B w/additives; or sufficient to cover zones of interest.

Anticipated cement tops will be reported as to depth, not the expected number of sacks.



Raymond T. Duncan

Tina Federal 1

2140' FSL and 1110' FEL

Section 13, T37S - R23E

San Juan County, Utah

DRILLING PROGRAMc. Auxiliary Equipment will be as follows:

1. Kelly cock.
2. Float above the bit.
3. A sub with a full opening valve will be on the floor when the kelly is not in use.
4. Monitoring of the system will be done visually.

5. Drilling fluid will be as follows:

<u>Interval</u>	<u>Mud Type</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>F/L</u>	<u>PH</u>
0-4800'	Natural	9.0-9.2	35	10-20	
4800-T.D.	Chem Gel	9.5-12.0	45	10 through pay zones	

6. Coring, logging and testing programs are as follows:

- a. No cores are anticipated.
- b. The logging program will consist of the following: A Dual Induction will be run from 2300' to T.D. A BHC Acoustic and BHC Density will be run from 4400' to T.D. A GR will be run from surface to T.D. and a Dipmeter (if productive or on edge of mound) will be run from 5950' to T.D.
- c. Drill Stem Tests will be run in the Ismay and Desert Creek formations if shows warrant.

Whether the well is completed as a dry hole or as a 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, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analysis, well-test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. If requested, samples (cuttings, fluids, and/or gases) will be submitted when requested by the District Manager.



Permitco Incorporated
A Petroleum Permitting Company

Raymond T. Duncan

Tina Federal 1

2140' FSL and 1110' FEL

Section 13, T37S - R23E

San Juan County, Utah

DRILLING PROGRAM

7. **Abnormal conditions, bottom hole pressures and potential hazards.**
- a. The maximum bottom hole pressure to be expected is 3700 psi.
 - b. Raymond T. Duncan plans to spud the Tina Federal #1 on approximately June 6, 1987 due to a lease expiration where the well must be on production by June 30, 1987. Raymond T. Duncan intends to complete the well immediately after the well had reached T.D.
 - c. The operator will contact the San Juan Resource Area at 801/587-2141, 48 hours prior to beginning any dirt work on this location.
 - d. 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.
 - e. The spud date will be reported orally to the San Juan Area Manager, a minimum of 24 hours before spudding. A Sundry Notice (Form 3160-5) will be sent within 24 hours of spudding, reporting the spud date and time. The Sundry will be sent to the District Manager. If spudding is on a weekend or holiday, the Sundry will be submitted on the following regular work day.
 - f. In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 9-329 "Monthly Report of Operations", starting with the month in which operations begin and continue each month until the well is physically plugged and abandoned. This report will be sent to the Moab BLM District Office, P. O. Box 970, Moab, Utah 84532.
 - g. Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Resource Area in accordance with requirements of NTL-3A.



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A Petroleum Permitting Company

Raymond T. Duncan

Tina Federal 1

2140' FSL and 1110' FEL

Section 13, T37S - R23E

San Juan County, Utah

DRILLING PROGRAM

- h. If a replacement rig is planned for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the District Manager. All conditions of this approved plan are applicable during all operations conducted with the replacement rig. In emergencies, verbal approval can be given by the District Petroleum Engineer.
- i. If the well is successfully completed for production, then the District Manager will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five business days following the date on which the well is placed on production.
- j. No well abandonment operations will begin without the prior approval of the District Manager. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the District Petroleum Engineer. A "Subsequent Report of Abandonment" (Form 3160-5), will be filed with the District Manager, within 30 days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration.
- k. Final abandonment will not be approved until surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the San Juan Area Manager or his representative, or the appropriate surface Manager.
- l. Approval to vent/flare gas during initial well evaluation will be obtained from the District Office. This preliminary approval will not exceed 30 days or 50 MMCF gas. Approval to vent/flare beyond this initial test period will require District Office approval pursuant to guidelines in NTL-4A.
- m. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. The following information will be permanently beaded-on with a welding torch: Fed, Well number, location by 1/4 1/4 section, township and range, lease number.



Permitco Incorporated
A Petroleum Permitting Company

ONSHORE ORDER NO.

Raymond T. Duncan

Tina Federal 1

2140' FSL and 1110' FEL

Section 13, T37S - R23E

San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

DRILLING PROGRAM

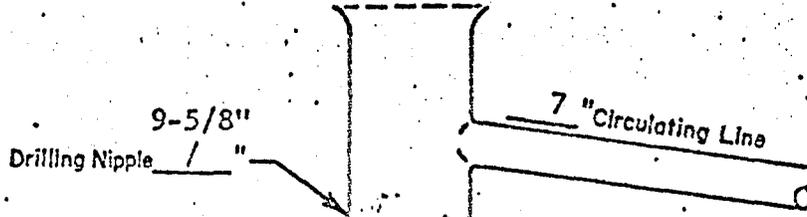
- n. A first production conference will be scheduled within 15 days after receipt of the first production notice. The San Juan Area Manager will schedule the conference.



Permitco Incorporated
A Petroleum Permitting Company

WELL NAME: _____

LOCATION : _____

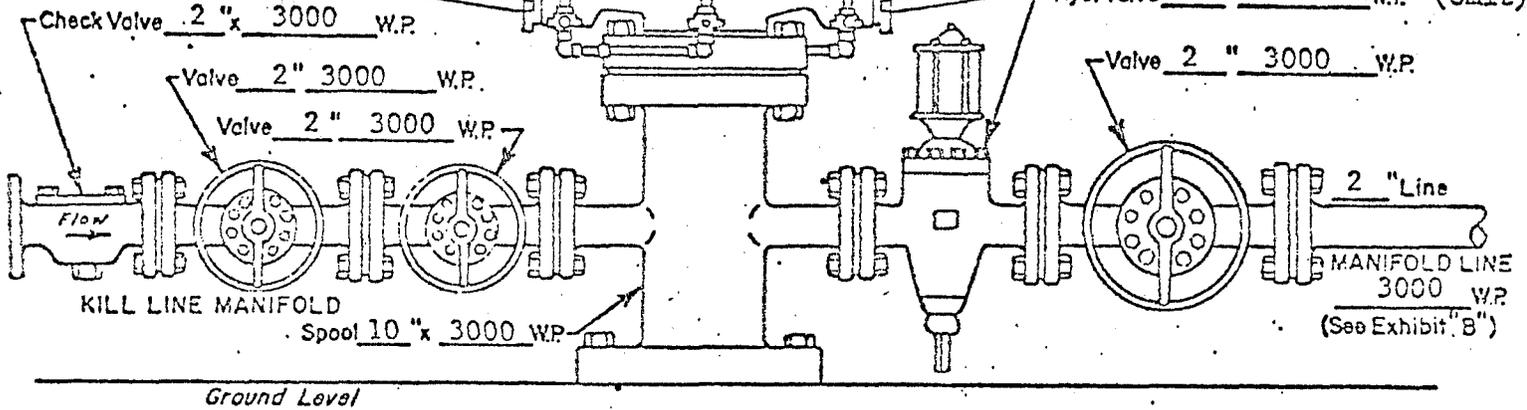


B.O.P. Bld Rams 10 "x 3000 W.P.

B.O.P. D.P. Rams 10 "x 3000 W.P.

Not Required

Hyd. Valve - " - - W.P. (Omit)



WELL HEAD B.O.P.
3000 #W.P.

Hydraulic

SURFACE USE PLAN

ONSHORE OIL & GAS ORDER NO. 1

Thirteen Point Surface Use Plan1. Existing Roads

- a. The proposed well site is located 18 miles northwest of Hatch Trading Post.
- b. Directions to the location from Hatch Trading Post are as follows:

Go north and west on the Montezuma Creek Road for 8.7 miles to the Perkins Ranch Road (#206). Turn west and proceed 4.3 miles to the Alkali Road (#204) and turn north and proceed 4.3 miles. Turn left (west) and follow the existing lease road for 3/4 mile. Turn left again, (south) onto existing seismic trail (flagged) and proceed south and west for approximately 1700 feet to the location.
- c. The roads in the area are primarily county roads. See Maps #1 and #2.
- d. Improvement to the existing access will not be necessary.
- e. All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.
- f. An encroachment permit will be obtained from the San Juan County Road Department, 801/587-2231, ext. 43.
- g. The existing R-O-W grant which was issued for access into the Grynberg Federal #1-13 is still in effect and will be used for access to this well location.

2. Planned Access Roads

- a. The last 1700 feet will be new access. The road will be flat bladed initially during construction and upgraded if production is established.



ONSHORE ORDER NO
Raymond T. Duncan
Tina Federal 1
2140' FSL and 1110' FEL
Sec. 13, T37S - R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

SURFACE USE PLAN

2. Planned Access Roads (cont.)
 - b. The maximum total disturbed width will be 30 feet.
 - c. The grade will be 5%.
 - d. No turnouts will be necessary. Culverts will be installed as necessary. Drainage will be installed as needed.
 - e. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance by the San Juan Area Manager.
 - f. The access road will be water barred or brought to Class III Road Standards within 60 days of dismantling of the drilling rig. If this time frame cannot be met, the San Juan Area Manager will be notified so that temporary drainage control can be installed along the access road.
 - g. The Class III Road Standards which ensure drainage control over the entire road through the use of natural, rolling topography; ditch turnouts; drainage dips; outsloping; crowning; low water crossings; and culverts will be determined at the appropriate field inspection.

3. Location of Existing Wells Within a 1-Mile Radius of the Proposed Location. (See Map #3).
 - a. Water Wells - none
 - b. Injection or disposal wells - none
 - c. Producing Wells - none
 - d. Drilling Wells - none

ONSHORE ORDER NO
Raymond T. Duncan
Tina Federal 1
2140' FSL and 1110' FEL
Sec. 13, T37S - R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

SURFACE USE PLAN

4. Location of Tank Batteries and Production Facilities.

- a. All permanent structures (onsite for six months or longer) constructed or installed (including oil well pump jacks) will be painted a flat, nonreflective, earthtone color to match the standard environmental colors, as determined by the Rocky Mountain Five-State Interagency Committee. All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The color will be Juniper Green to match the trees.
- b. If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain 1-1/2 times the storage capacity of the battery.
- c. Production facilities for this well will be located on this wellpad. See Diagram #1 for layout of facilities.
- d. All loading lines will be placed inside the berm surrounding the tank battery.
- e. Any necessary pits will be properly fenced to prevent any wildlife entry. The production pit will be flagged overhead.
- f. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.
- g. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.
- h. Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.



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A Petroleum Permitting Company

ONSHORE ORDER NO
Raymond T. Duncan
Tina Federal 1
2140' FSL and 1110' FEL
Sec. 13, T37S - R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

SURFACE USE PLAN

4. Production Facilities (cont.)

- i. The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The San Juan Area Manager 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 submitted to the Moab District Office. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

5. Location and Type of Water Supply

- a. All water needed for drilling purposes will be obtained from the Richard Gore Artesian Well which is located in the SE NE Sec. 12, T38S - R24E.
- b. Water will be trucked to location over the county roads in the area.
- c. No water well is to be drilled on this lease.
- d. Use of water for this operation will approved by obtaining a temporary use permit from the Utah State Engineer, 801/637-1303, and by receiving permission from the land owner or surface management agency to use the land containing the water source.

6. Source of Construction Material

- a. Road surfacing material will be obtained from a commercial source. Pad construction material will be native.
- b. The use of materials under BIM jurisdiction will conform to 43 CFR 3610.2-3. Construction material will be located on lease.

SURFACE USE PLAN

7. Methods for Handling Waste Disposal (cont.)

- a. The reserve pit will be lined with native clay or commercial bentonite. At least half of the capacity will be in cut.
- b. Three sides of the reserve pit will be fenced with four strands of barbed wire before drilling starts. The fourth side will be fenced as soon as the drilling is completed. The fence will be kept in good repair while the pit is drying.
- c. A trash pit will be constructed near the mud tanks and dug at least six feet into solid, undisturbed material. It will be totally enclosed with a fine wire mesh before the rig moves in. The road and pad will be kept litter free. If a trash cage is used, its contents will be hauled to an approved landfill.
- d. A burning permit is required for burning trash between May 1 and October 31. This will be obtained from the San Juan County Sheriff at (801) 587-2237 if operations should extend past May 1st.
- e. Produced waste water will be confined to a lined pit for a period not to exceed 90 days after initial production. During the 90-day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the District Manager's approval pursuant to Onshore Oil and Gas Order No. 3 (NTL-2B).

8. Ancillary Facilities

- a. There are no airstrips, camps, or other facilities planned during the drilling of the proposed well.

9. Well Site Layout

- a. See Diagram #2 for rig layout. See Diagram #3 for cross section of drill pad. See Diagram #4 for cuts and fills.

ONSHORE ORDER NO
Raymond T. Duncan
Tina Federal 1
2140' FSL and 1110' FEL
Sec. 13, T37S - R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

SURFACE USE PLAN

9. Wellsite Layout (cont.)

- b. The location of mud tanks; reserve, burn and trash pits; pipe racks; living facilities and soil stockpiles will be shown on Diagram #2 and #4. The location will be laid out and constructed as discussed during the predrill conference.
- c. No topsoil will be removed due to the limited amount of topsoil available and the rocky conditions on the wellpad. Topsoil along the access will be reserved in place.
- d. Access to the well pad will be from the north.
- e. The existing drainage will be diverted along the east (cut) side of the location.

10. Reclamation

- a. Immediately upon completion of drilling, all trash and debris will be collected from the location and surrounding area. All trash and debris will be disposed of in the trash pit and will then be compacted and buried under a minimum of two feet of compacted soil.
- b. The operator or his contractor will contact the San Juan Resource Area office in Monticello, Utah (801/587-2141) 48 hours before starting reclamation work that involves earthmoving equipment and upon completion of restoration measures.
- c. Before any dirt work to restore the location takes place, the reserve pit must be completely dry.
- d. 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.
- e. All disturbed areas will be ripped 12 inches deep with the contour.

Raymond T. Duncan

Tina Federal 1

2140' FSL and 1110' FEL

Sec. 13, T37S - R23E

San Juan County, Utah

SURFACE USE PLAN10. Reclamation of Surface (cont.)

- f. Water bars will be built as follows to control erosion.

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

- g. 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.

8 lbs/acre Crested Wheatgrass (*Agropyron desertorum*)
 3 lbs/acre Fourwing saltbush (*Atriplex canenscens*)
 2 lbs/ acre Desert Bitterbrush (*Purshia glandulosa*)

- h. After seeding is complete, the stockpiled trees will be scattered evenly over the disturbed areas. The access will be blocked to prevent vehicular access.
- i. The reserve pit and that portion of the location and access road not needed for production and production facilities will be reclaimed as described in the reclamation section.

11. a. Surface Ownership

Federal

b. Mineral Ownership

Federal

12. Other Information

- a. There will be no change from the proposed drilling and/or workover program without prior approval from the District Manager. Safe drilling and operating practices must be used. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.2.



Permitco Incorporated
 A Petroleum Permitting Company

ONSHORE ORDER NO. 1
Raymond T. Duncan
Tina Federal 1
2140' FSL and 1110' FEL
Sec. 13, T37S - R23E
San Juan County, Utah

CONFIDENTIAL-TIGHT HOLE

SURFACE USE PLAN

12. Other Information (cont.)

- b. "Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3164.
- c. The dirt contractor will be provided with an approved copy of the surface use plan.
- d. If subsurface cultural materials are exposed during construction, work in that spot will stop immediately and the San Juan Resource Area Office will be contacted. All people who are in the area will be informed by the operator that they are subject to prosecution for disturbing archeological sites or picking up artifacts. Salvage or excavation of identified archeological sites will be done by a BLM approved archeologist only if damage occurs.
- e. This permit will be valid for a period of one year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.
- f. An archeological study was conducted by LaPlata Archeological Consultants. Archeological sites were found on all sides of the location. Monitoring of sites will be required during construction and reclamation operations. All sites not protected by cut will be fenced. A copy of this report will be submitted directly by LaPlata Archeological Consultants.
- g. Your contact with the District Office is: Steve Jones, 801/259-6111, P.O. Box 970, Moab, Utah 84532.

The Resource Area Manager's address is P.O. Box 7, Monticello, Utah 84532. Your contact is Richard McClure, 801/587-2141.

13. Lessee's or Operator's Representative and Certification

Permit Matters

PERMITCO INC.
Lisa L. Green
P.O. Box 44065
Denver, CO 80201-4065
303/322-7878

Drilling & Completion Matters

RAYMOND T. DUNCAN
1777 S. Harrison St.
Penthouse 1
Denver, CO 80210
303/759-3303 (W) -
303/733-3604 (H) - John Bettridge



Permitco Incorporated
A Petroleum Permitting Company

Raymond T. Duncan

Tina Federal 1

2140' FSL and 1110' FEL

Sec. 13, T37S - R23E

San Juan County, Utah

SURFACE USE PLAN13. Lessee's CertificationCertification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Raymond T. Duncan and its contractors and subcontractors in conformity with the plan and the terms and conditions under which it is approved.

May 12, 1987

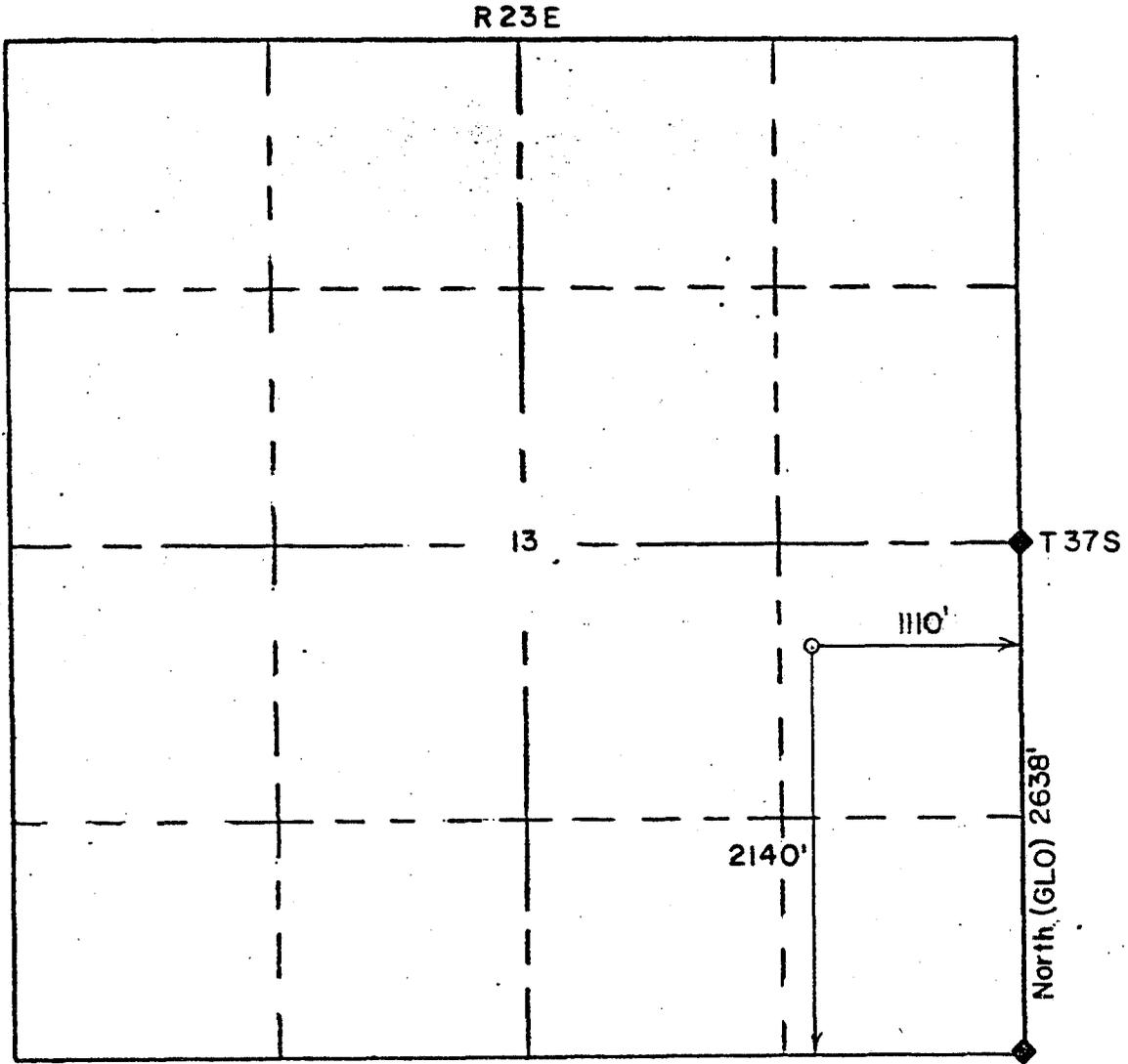
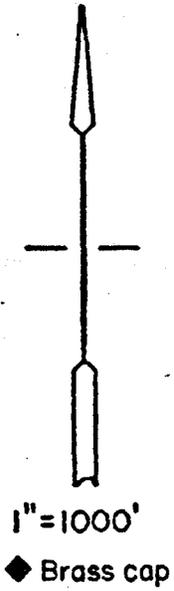
Date:


Lisa L. Green - PERMITCO INC.
Authorized Agent for:
RAYMOND T. DUNCAN



Permitco
A Petroleum Permitting Company

WELL LOCATION PLAT

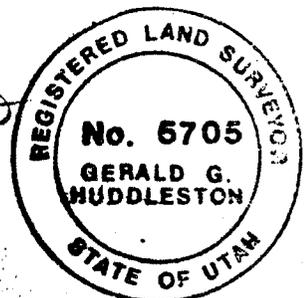
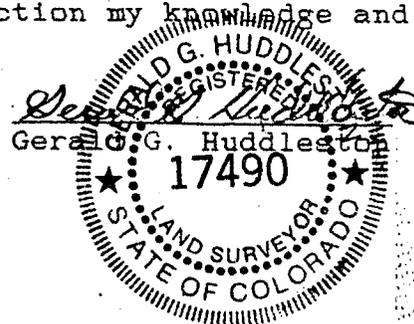


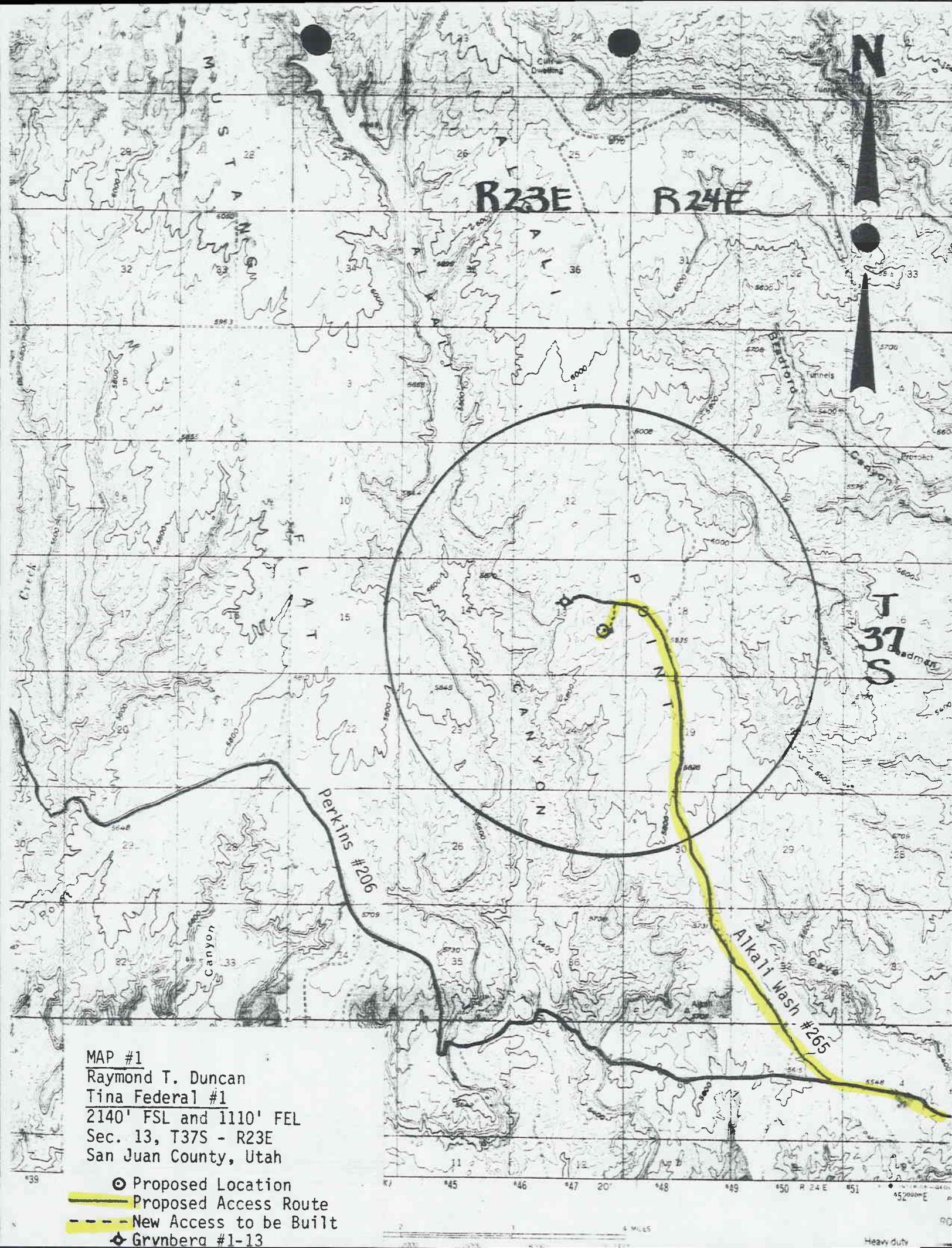
WELL LOCATION DESCRIPTION:

DUNCAN OIL Tina Federal #1
 2140' FSL & 1110' FEL
 Section 13, T37S, R23E, SLM
 San Juan County, Utah
 5889' ground elevation
 Reference: S62 11'E 340', 5921' grd

The above plat is correction my knowledge and belief.

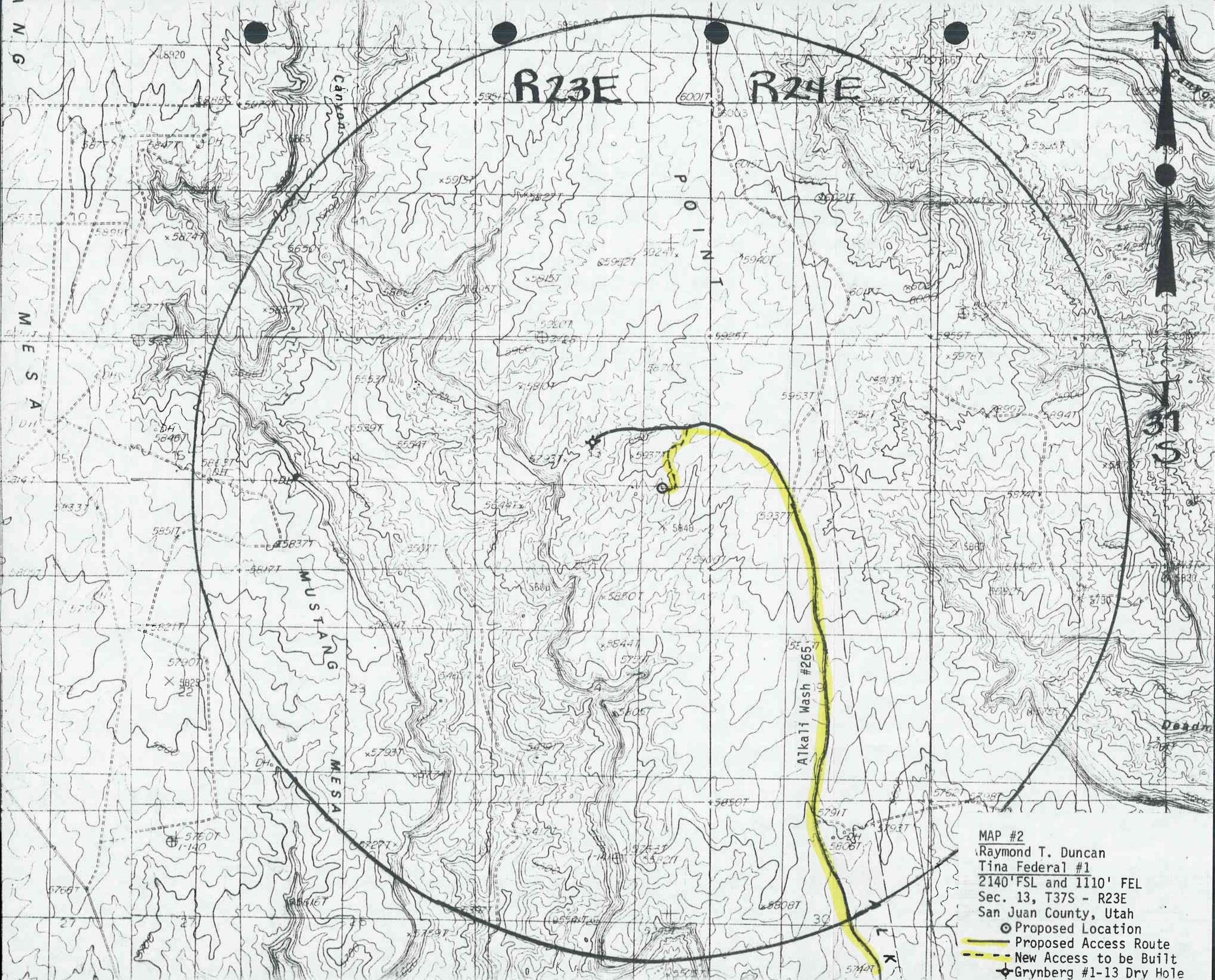
8 May '87





MAP #1
 Raymond T. Duncan
 Tina Federal #1
 2140' FSL and 1110' FEL
 Sec. 13, T37S - R23E
 San Juan County, Utah

- ⊙ Proposed Location
- Proposed Access Route
- - - New Access to be Built
- ◆ Grynberg #1-13



R23E

R24E

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Alkali Wash #265

- MAP #2
 Raymond T. Duncan
 Tina Federal #1
 2140' FSL and 1110' FEL
 Sec. 13, T37S - R23E
 San Juan County, Utah
- ⊙ Proposed Location
 - Proposed Access Route
 - - - New Access to be Built
 - ⊕ Grynberg #1-13 Dry Hole

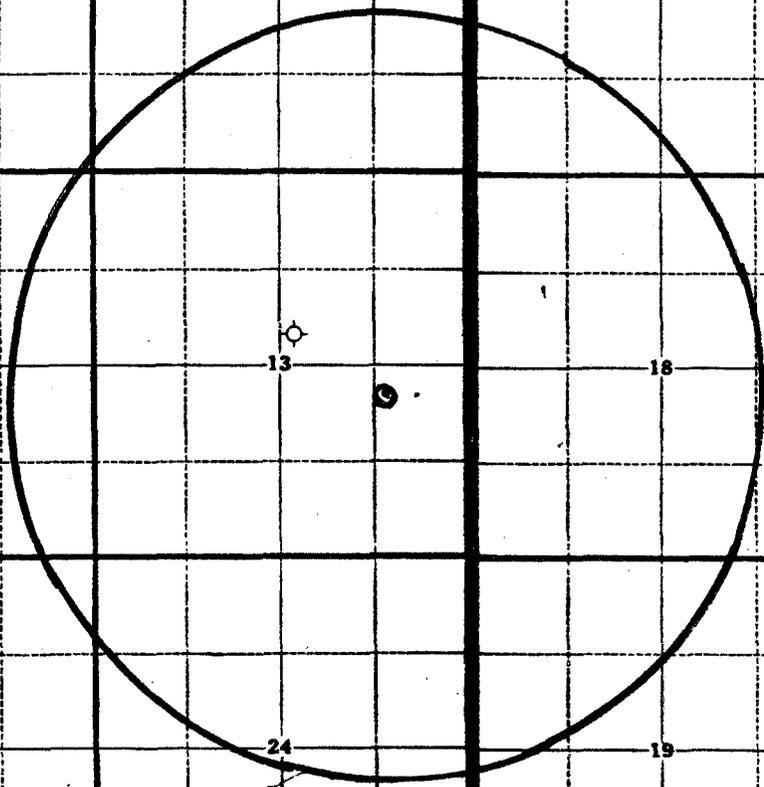
R23E

R24E

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37
S



MAP #3
Raymond T. Duncan
Tina Federal #1
2140' FSL and 1110' FEL
Sec. 13, T37S - R23E
San Juan County, Utah

- ⊙ Proposed Location
- ◇ Dry Holes

Scale: 1" = 60'

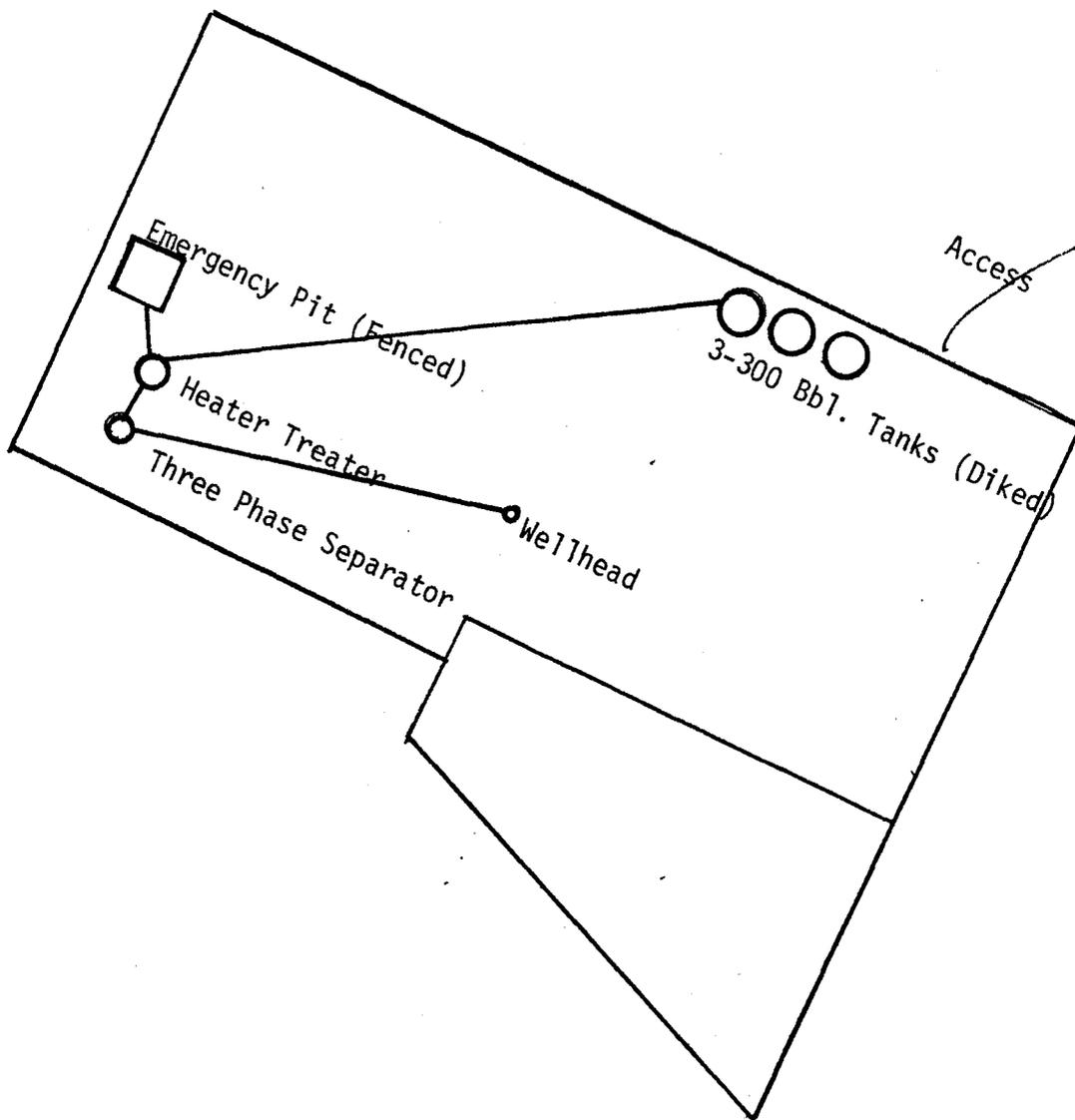


DIAGRAM #1
Production Facility Layout
Raymond T. Duncan
Tina Federal #1
2140' FSL and 1110' FEL
Sec. 13, T37S - R23E
San Juan County, Utah

Scale: 1" = 60'

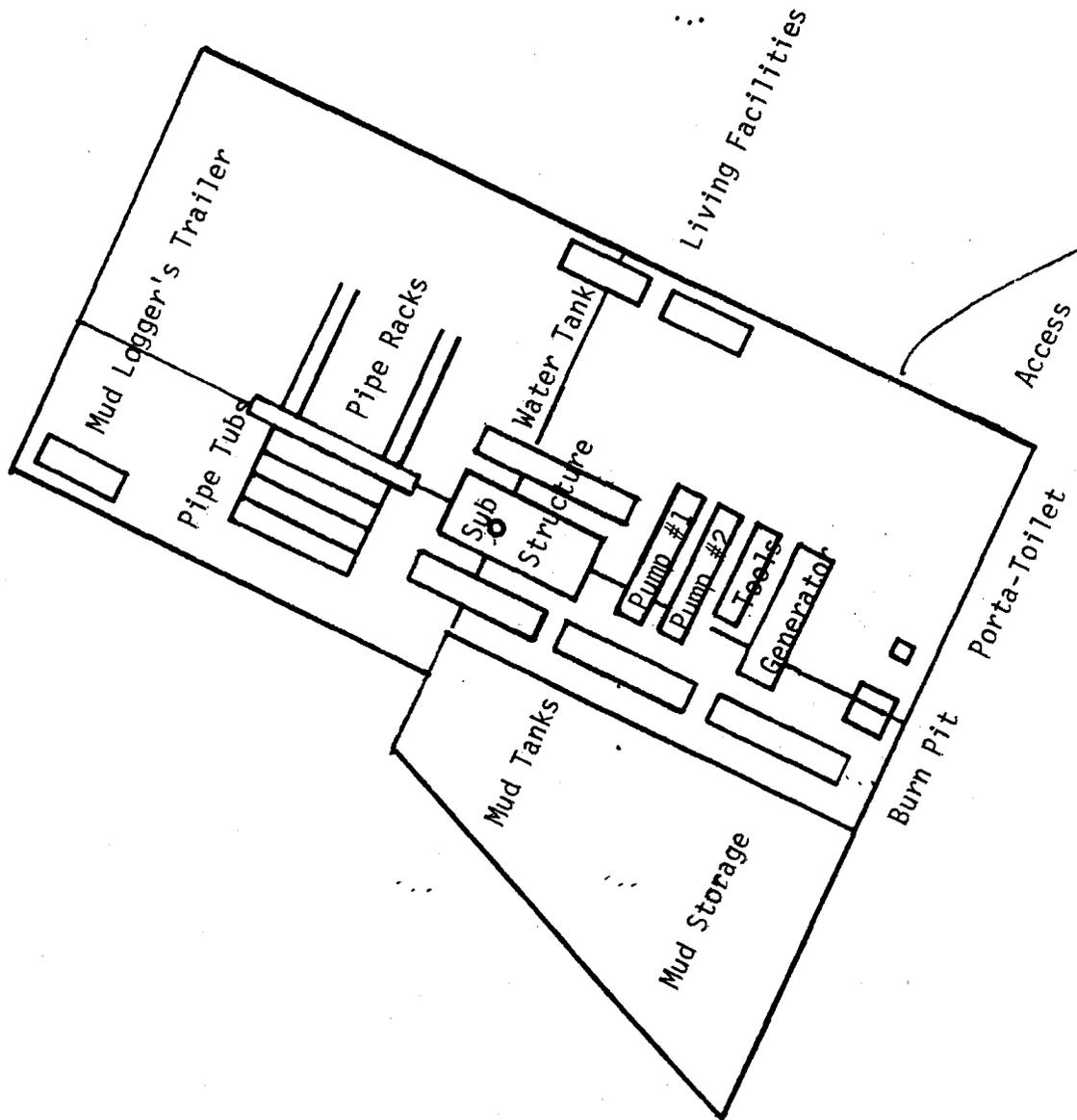


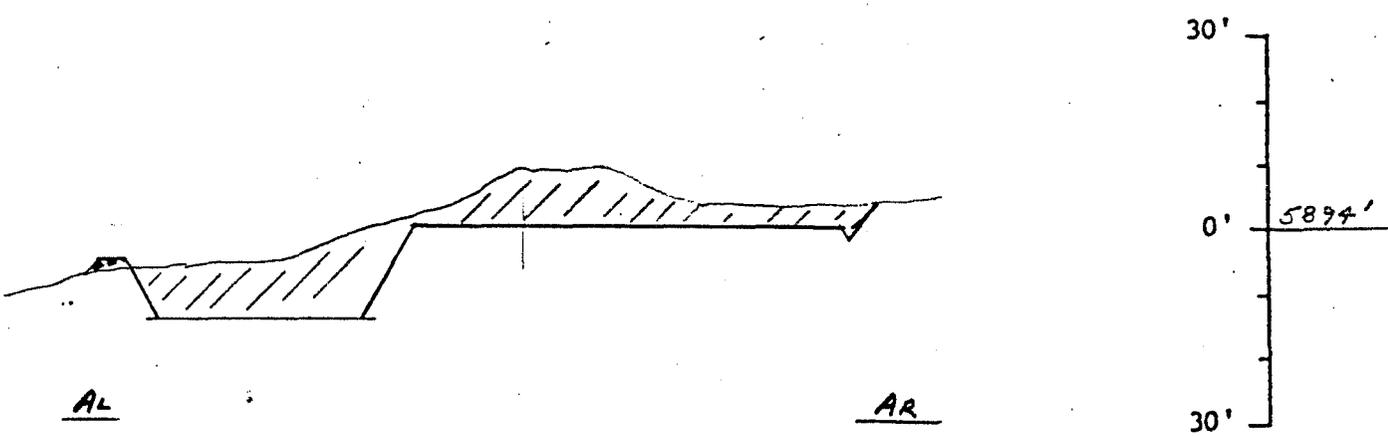
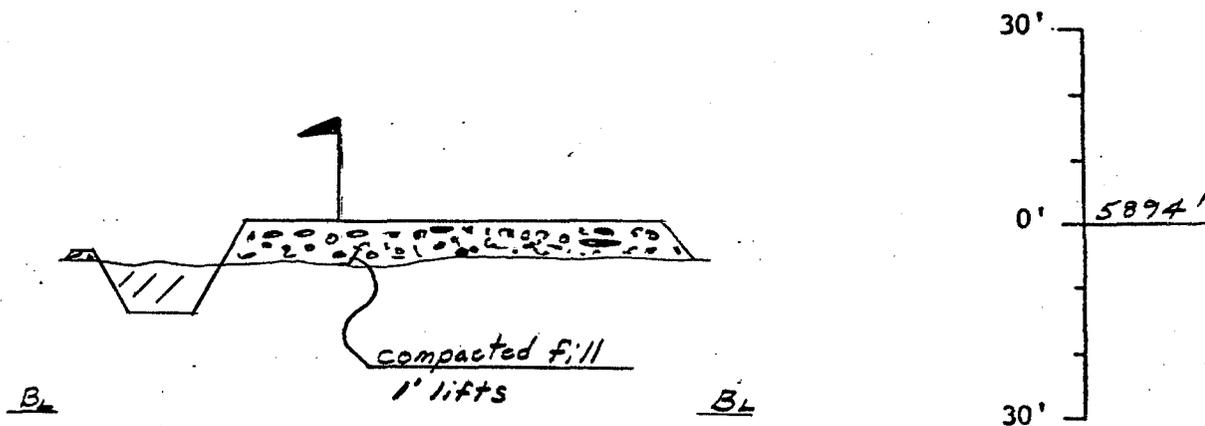
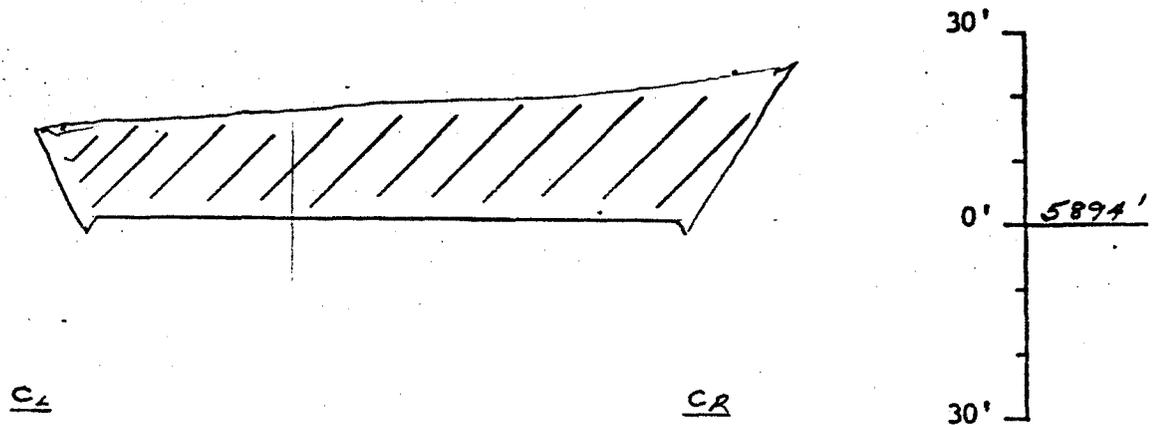
DIAGRAM #2
Rig Layout
Raymond T. Duncan
Tina Federal #1
2140' FSL and 1110' FEL
Sec. 13, T37S - R23E
San Juan County, Utah

WELL PAD CROSS-SECTION

DIAGRAM #3
Raymond T. Duncan
Tina Federal #1
2140' FSL and 1110' FEL
Sec. 13, T37S - R24E
San Juan County, Utah

Cut 
Fill 

Scales: 1" = 60' H.
1" = 30' V.



WELL PAD PLAN VIEW

DIAGRAM #4

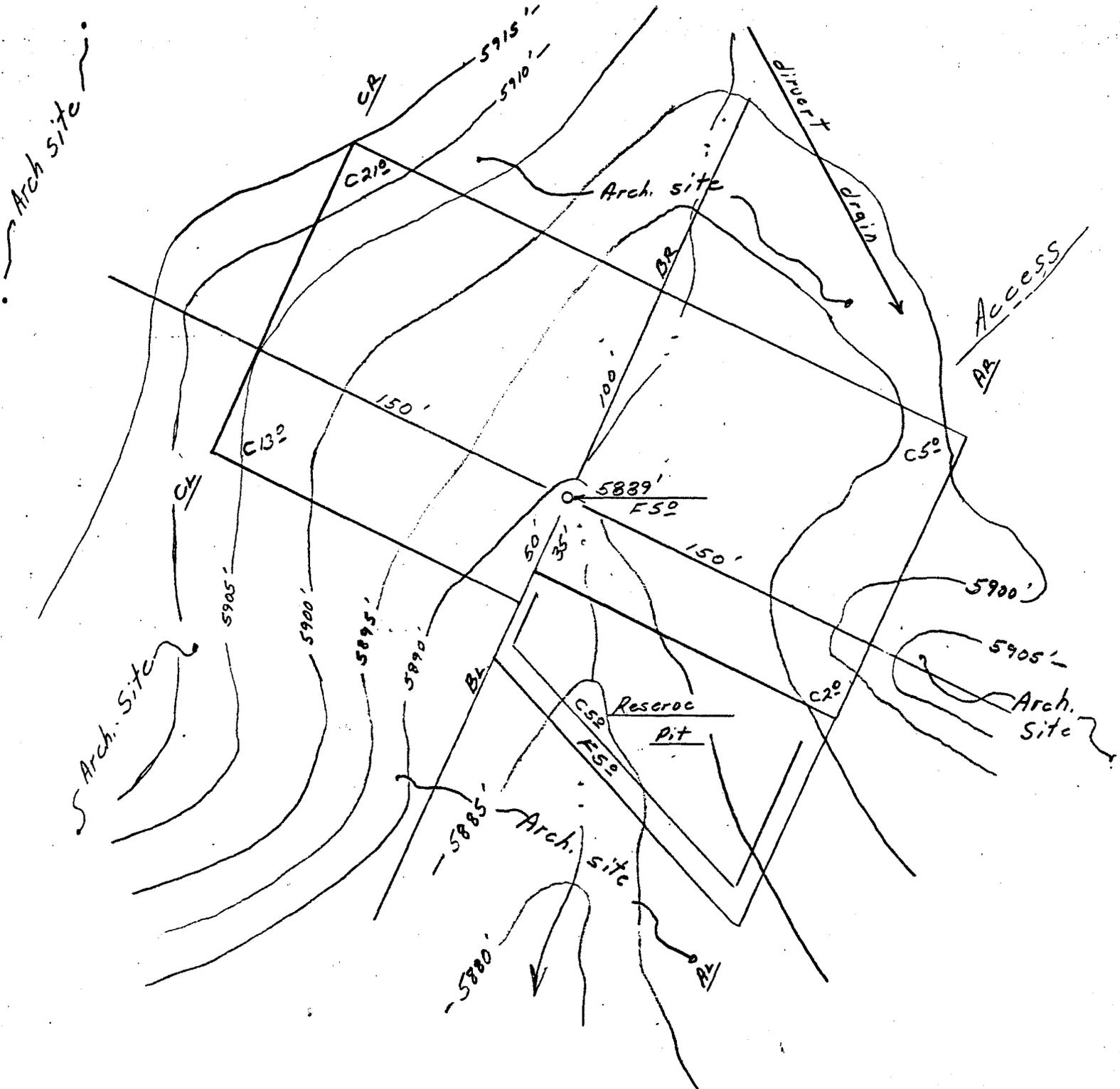
Raymond T. Duncan

Well Tina Federal #1

2140' FSL and 1110' FEL

Sec. 13, T37S - R23E

San Juan County, Utah



CONFIDENTIAL

052102

032110

OPERATOR Raymond T. Duncan DATE 5-13-87

WELL NAME Tina Federal #1

SEC ^{NESE} 13 T 37E R 23E COUNTY San Juan

43-037-31322
API NUMBER

Federal
TYPE OF LEASE

CHECK OFF:

PLAT

BOND

NEAREST WELL

LEASE

FIELD

POTASH OR OIL SHALE

PROCESSING COMMENTS:

No other well in Sec. 13.

Water permit needed

Exception letter received -

APPROVAL LETTER:

SPACING: 203 _____ UNIT

302

_____ CAUSE NO. & DATE

302.1

STIPULATIONS:

1- Water



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

May 19, 1987

Raymond T. Duncan
c/o Permitco, Inc.
P. O. Box 44065
Denver, Colorado 80210

Gentlemen:

Re: Tina Federal #1 - NE SE Sec. 13, T. 37S, R. 23E
2140' FSL, 1110' FEL - San Juan County, Utah

Approval to drill the referenced well is hereby granted in accordance with Rule 302.1, 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.

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. All well operators are responsible for sending an Entity Action Form to the Division of Oil, Gas and Mining within five working days of the time that a new well is spudded or a change in operations or interests necessitates a change in Entity status.
3. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
4. 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.

Page 2
Raymond T. Duncan
Tina Federal #1
May 19, 1987

5. Prior to commencement of the proposed drilling operations, plans for toilet facilities and the disposal of sanitary waste at the 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 43-037-31322.

Sincerely,



R. J. Firth
Associate Director, Oil & Gas

as
Enclosures
cc: Branch of Fluid Minerals
D. R. Nielson
8159T

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK OIL, GAS & MINING

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 303/759-3303 1777 S. Harrison St., PH 1
 Raymond T. Duncan Denver, CO 80210

3. ADDRESS OF OPERATOR 303/322-7878 P.O. Box 44065
 Permitco Inc. - Agent Denver, CO 80201-4065

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface 2140' FSL and 1110' FEL
 At proposed prod. zone NE SE Sec. 13

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 18 miles northwest of Hatch Trading Post

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any) 210'

16. NO. OF ACRES IN LEASE 1600

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

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

19. PROPOSED DEPTH 6450'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5889' GR

22. APPROX. DATE WORK WILL START* June 6, 1987**

5. LEASE DESIGNATION AND SERIAL NO.
 U-46825

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

7. UNIT AGREEMENT NO. 052603
 N/A

8. FARM OR LEASE NAME
 Tina Federal

9. WELL NO.
 #1

10. FIELD AND POOL, OR WILDCAT
 Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Sec. 13, T37S - R23E

12. COUNTY OR PARISH San Juan

13. STATE Utah

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	48#	110'	Cement to Surface
12-1/4"	8-5/8"	24#	2300'	1100 sx or suffic. to circ to surf
7-7/8"	5-1/2"	15.5#	6450'	400 sx or suffic. to cover zones of interest.

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 Consultant for Raymond T. Duncan DATE 5/12/87

(This space for Federal or State office use)

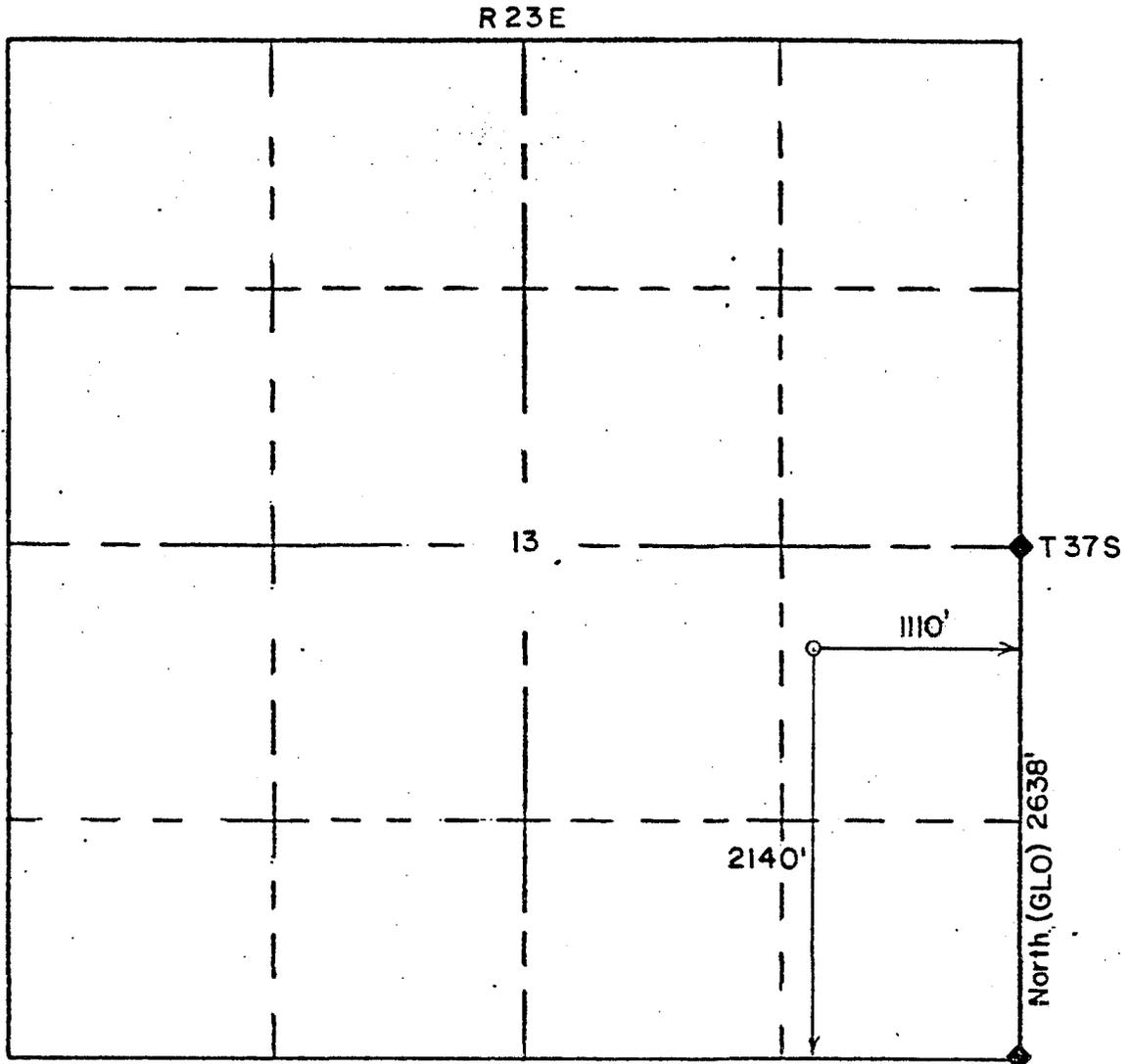
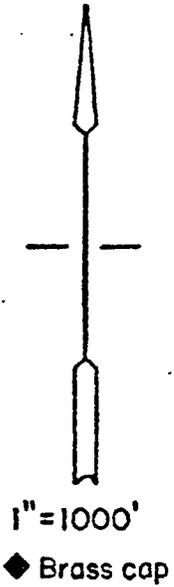
PERMIT NO. 43-037-31302 APPROVAL DATE

APPROVED BY [Signature] TITLE DISTRICT MANAGER DATE MAY 21 1987

CONDITIONS OF APPROVAL, IF ANY:
 FLARING OR VENTING OF GAS IS SUBJECT OF NTL 4-A DATED 1/1/80
 CONDITIONS OF APPROVAL ATTACHED

*See Instructions On Reverse Side

WELL LOCATION PLAT

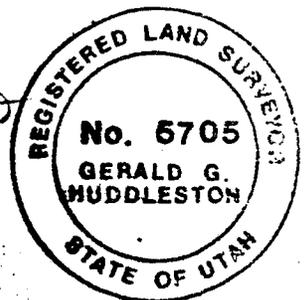
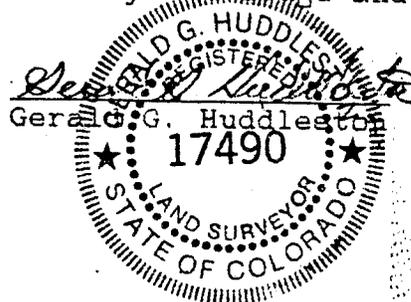


WELL LOCATION DESCRIPTION:

DUNCAN OIL Tina Federal #1
 2140' FSL & 1110' FEL
 Section 13, T37S, R23E, SLM
 San Juan County, Utah
 5889' ground elevation
 Reference: S62 11'E 340', 5921' grd

The above plat is correction my knowledge and belief.

8 May '87



Raymond T. Duncan
Well No. Tina Federal 1
Sec. 13, T. 37 S., R. 23 E.
San Juan County, Utah
Lease U-46825

CONDITIONS OF APPROVAL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Raymond T. Duncan is the bonded entity on this application. Liability will remain with the bonded party named above until we are formally notified by letter of the new bonded entity in reference to this Application for Permit to Drill.



RECEIVED
JUN 12 1987

**DIVISION OF
OIL, GAS & MINING**

1777 SOUTH HARRISON STREET - PENTHOUSE ONE
TELEPHONE (303) 759-3303 - DENVER, COLORADO 80210

June 9, 1987

State of Utah
Division of Oil, Gas & Mining
355 W. North Temple
3 Triad Center
Suite 350
Salt Lake City, Utah 84180-1203

Re: Tina Federal No. 1
NE SE Sec. 13, T37S, R23E
San Juan, Utah

Gentlemen:

Enclosed is the Sundry Notice for the notification of spud date
for the above captioned well.

Sincerely,

J. A. Bettridge
Operations Superintendent

NLR
encl.

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse side)

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. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. U-46825
2. NAME OF OPERATOR Raymond T. Duncan		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
3. ADDRESS OF OPERATOR 1777 So. Harrison St., PH1, Denver, CO 80210		7. UNIT AGREEMENT NAME N/A
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 2140' FSL and 1110' FEL		8. FARM OR LEASE NAME Tina Federal
14. PERMIT NO. 43-037-31322	15. ELEVATIONS (Show whether DF, RT, OR, etc.) 5889' KB	9. WELL NO. #1
		10. FIELD AND POOL, OR WILDCAT Wildcat
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 13, T37S, R23E
		12. COUNTY OR PARISH 13. STATE San Juan 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 type="checkbox"/>	(Other) <input type="checkbox"/>	

(Other) Notification of Spud

(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.)*

Subject well was spud June 6, 1987 at 2:00 A.M. with Arapahoe Rig #7.

RECEIVED
JUN 12 1987

DIVISION OF
OIL, GAS & MINING

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

SIGNED J. A. Bettridge TITLE Operations Supt. DATE June 8, 1987

(This space for Federal or State office use)

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

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse side)

<p align="center">SUNDRY NOTICES AND REPORTS ON WELLS</p> <p align="center">(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.)</p>		5. LEASE DESIGNATION AND SERIAL NO. U-46825
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	2. NAME OF OPERATOR Raymond T. Duncan	7. UNIT AGREEMENT NAME N/A
3. ADDRESS OF OPERATOR 1777 So. Harrison St., PH1, Denver, CO 80210	4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 2140' FSL and 1110' FEL	8. FARM OR LEASE NAME Tina Federal
14. PERMIT NO. 43-037-31322	15. ELEVATIONS (Show whether DF, RT, OR, etc.) 5889' KB	9. WELL NO. #1
		10. FIELD AND POOL, OR WILDCAT Wildcat
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 13, T37S, R23E
		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 type="checkbox"/>	(Other) _____	(Other) _____
(Other) Notification of Spud		(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.)*

Subject well was ✓spud June 6, 1987 at 2:00 A.M. with Arapahoe Rig #7.

RECEIVED
JUN 12 1987

DIVISION OF
OIL, GAS & MINING

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

SIGNED J. A. Bettridge TITLE Operations Supt. DATE June 8, 1987

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:



1777 SOUTH HARRISON STREET • PENTHOUSE ONE
TELEPHONE (303) 759-3303 • DENVER, COLORADO 80210

RECEIVED
JUL 06 1987

DIVISION OF
OIL, GAS & MINING

June 30, 1987

State of Utah Natural Resources
Oil, Gas & Mining
355 W. North Temple
3 Triad Center
Suite 350
Salt Lake City, Utah 84180-1203

Re: Tina Federal No. 1
Sec. 13, T37E, R23E
San Juan, Utah

Gentlemen:

Enclosed you will find the Sundry Notice for the Intention to Abandon the above captioned well. You will also find the Entity Action Form enclosed for the same well.

If you have any questions, please contact me at the above address.

Sincerely,

J. A. Bettridge
Production Superintendent

JAB:nr
Enclosures

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse side)

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. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER Dry		5. LEASE DESIGNATION AND SERIAL NO. U-46825																				
2. NAME OF OPERATOR Raymond T. Duncan		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A																				
3. ADDRESS OF OPERATOR 1777 So. Harrison St., PH-1, Denver, CO 80210		7. UNIT AGREEMENT NAME N/A																				
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 2140' FSL and 1110' FEL		8. FARM OR LEASE NAME Tina Federal																				
14. PERMIT NO. 43-037-31322	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 5889' KB	9. WELL NO. 1																				
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		10. FIELD AND POOL, OR WILDCAT Wildcat																				
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Verbal permission for plugging was given by BLM Steve Jones 6/19/87. Subject well was plugged at 11:30 P.M. 6/19/87. Rig was released at 6:06 A.M. 6/20/87. Plugs were set as follows:

6100'-5900'	100 sx
2350'-2259'	40 sx
100'- 0'	30 sx

RECEIVED
JUL 06 1987

DIVISION OF
OIL, GAS & MINING

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

SIGNED J.A. Bettridge TITLE Production Superintendent DATE June 30, 1987
(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: 7-2-87

BY: Original Signed by John R. Baza

Federal approval of this action is required before commencing operations.

*See Instructions on Reverse Side

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION

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DATE 7-7-87
BY John R. Daga

*See Instructions on Reverse Side

RECEIVED

JUL 06 1987

DIVISION OF
OIL, GAS & MINING

070742

040415

PA

43-037-31322

RAYMOND T. DUNCAN
NO. 1 TINA FEDERAL
NE SE SECTION 13, T37S-R23E
SAN JUAN COUNTY, UTAH



WELLSITE GEOLOGY: Jim Holst
Intermountain Wellsite Geologists
P. O. Box 4007
Casper, Wyoming 82604
(307) 266-2009

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WELL DATA

OPERATOR: Raymond T. Duncan
1777 South Harrison Street
Penthouse One
Denver, Colorado 80210
(303) 759-3303
Geologist: Bob Lentz

WELL NAME: Tina Federal No. 1

WELL LOCATION: 2140' FSL & 1110' FEL
Section 13 (NE SE)
Township 37 South, Range 23 East
San Juan County, Utah

SPUD DATE: June 6, 1987 2:00 A.M.

DATE DRILLING COMPLETED: June 18, 1987

ELEVATIONS: Ground Level: 5889'
Kelly Bushing: 5902'

SURFACE CASING: 13 3/8" set at 91'
8 5/8" set at 2301'

OPEN HOLE SIZE: 7 7/8"

TOTAL DEPTH: Driller: 6456' SLM 6458'
Logger: 6467'

DRILLING CONTRACTOR: Araphoe Drilling Rig no. 7
P. O. Box 26687
Albuquerque, New Mexico 87125
(505) 325-5018
Toolpusher: Ernie Penrod

DRILLING SUPERVISION: J.A. (Arkie) Browning
P. O. Box 1058
Cortez, Colorado 81321
(303) 565-8806
Mobile: (303) 565-5000

DRILLING MUD: Mustang Drilling Fluids
2557 East 3760 South
Vernal, Utah 84078
(801) 789-0533
Engineer: Carroll Hart

DRILL STEM TESTING: No drill stem tests

WIRELINE LOGS:

Schlumberger Well Services
200 San Juan Blvd.
P. O. Box 250
Farmington, New Mexico 87499
(505) 325-5006
Engineer: Roger Sition

WELLSITE GEOLOGY:

Intermountain Wellsite Geologists
P. O. Box 4007
Casper, Wyoming 82604
(307) 266-2009
Geologist: Jim Holst

SAMPLES:

30' samples surface to 4000'
10' samples 4000' to T.D.
1 set dry cut to Amstrat in Denver, CO
Show samples to Duncan in Denver, CO

PRESENT WELL STATUS:

Plug well and abandon location

WELL LOCATIONS IN PROSPECT AREA

Township 37 South, Range 23 East San Juan County, Utah

Section 13

- * -b- Duncan No. 1-13 Grynberg 2580' FNL & 2610' FEL (SW NE)
- b- Duncan Tina Federal No. 1 2140' FSL & 1110' FEL (NE SE)

Section 14

- o- Woods (NW SW)

Section 23

- ☼ Woods (NW SE)

Section 24

- o- Pan Am (NW SW)
- o- Cox (SW SE)

Township 37 South, Range 24 East San Juan County, Utah

Section 7

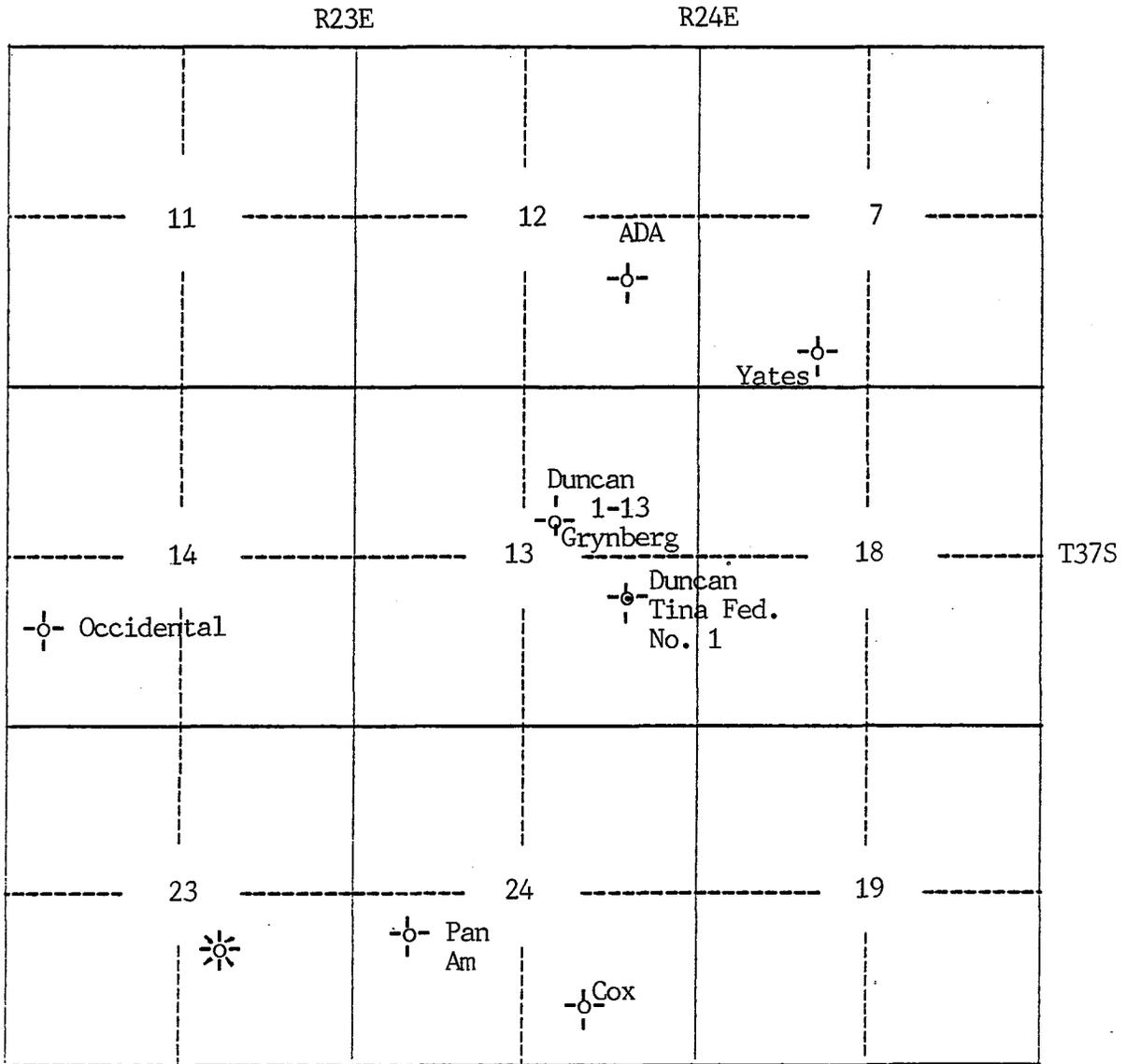
- o- Yates Alkali Point 1-37 320' FSL & 2120' FWL (SE SW)

Section 20

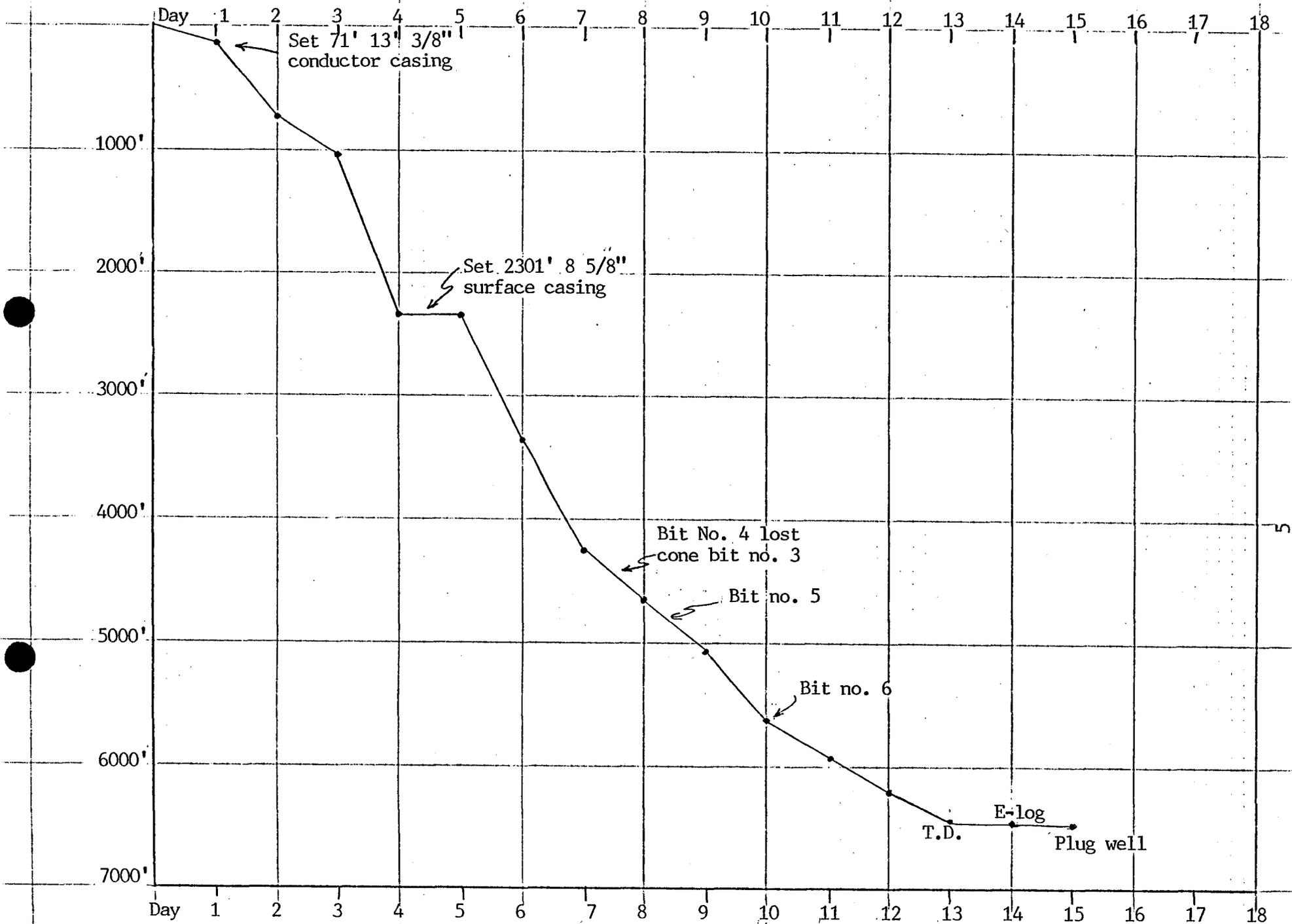
- o- MCOR No. 1-20 Federal 2050' FWL & 2100' FEL (SW SE)

* Offset well used for correlation

Base Map of Prospect Area



San Juan County, Utah



WELL DRILLING CHRONOLOGY

NOTE: Days are described here and on the following charts based on the I.A.D.C. Daily Drilling Report from 12:00 A.M. to 12:00 A.M. M.D.T. Footage drilled and cumulative footage per day is listed in parenthesis below the date.

Day 1	<u>June 6, 1987</u> (0' - 121'/121')	Drilling mouse hole. Spudded well at 2:00 A.M. Drilling 17 1/2 inch hole with surface Bit No. 1A. Drilled from 0 feet to 121 feet. Circulate and drop survey. Run 121 feet 13 3/8 inch conductor casing, cement casing and wait on cement.
Day 2	<u>June 7, 1987</u> (121' - 701'/580')	Wait on cement. Drill 50 feet of cement and drilling new hole with surface bit No. 2A. Drilling 12 1/4 inch hole. Drilled from 121 feet to 701 feet. Circulate and drop survey, conductor pipe washed free, wait on cementers.
Day 3	<u>June 8, 1987</u> (701' - 1020'/319')	Wait on cementers and re-cement conductor pipe. Wait on cement, trip into hole and tag cement at 85 feet. Drilled cement from 85 feet to 179 feet. Drilling new hole from 701 feet to 1020 feet.
Day 4	<u>June 9, 1987</u> (1020' - 2301'/1281')	Drilled from 1020 feet to 2301 feet. Rig up to run casing.
Day 5	<u>June 10, 1987</u> (2301' - 2301'/0')	Run 52 joints 24 lb J55 8 5/8 inch casing set at 2301 feet. Cement with 125 sacks Class B Lite, Tail with 150 sacks Reg and fill with 100 sacks Reg cement. Wait on cement.
Day 6	<u>June 11, 1987</u> (2301' - 3374'/1073')	Finish welding on Stamo pipe, drilling 7 7/8 inch hole with Bit No. 3. Drilled from 2301 feet to 3374 feet.
Day 7	<u>June 12, 1987</u> (3374' - 4234'/860')	Drilled from 3374 feet to 4234 feet.
Day 8	<u>June 13, 1987</u> (4234' - 4612'/378')	Drilled from 4234 feet to 4540 feet. Trip for Bit No. 4. Lost cone on Bit No. 3. S.L.M. Wash 15 feet to bottom, ream 60 feet, drill junk on bottom. Drilled from 4540 feet to 4612 feet.
Day 9	<u>June 14, 1987</u> (4612' - 5070'/458')	Drilled from 4612 feet to 4650 feet. Trip for Bit No. 5 HTC J33. Ream to bottom. Drilled from 4650 feet to 5070 feet.
Day 10	<u>June 15, 1987</u> (5070' - 5631'/561')	Drilled from 5070 feet to 5631 feet. Mud up at 5600 feet.

Day 11	<u>June 16, 1987</u> (5631' - 5915'/284')	Drilled from 5631 feet to 5723 feet. Trip for Bit No. 6 R.B.I. C.J.2 Drop survey. Drilled from 5723 feet to 5915 feet.
Day 12	<u>June 17, 1987</u> (5915' - 6206'/291')	Drilled from 5915 feet to 6206 feet.
Day 13	<u>June 18, 1987</u> (6206'/6456'/250')	Drilled from 6206 feet to 6456 feet, circulate and condition mud for E-logs. Short trip 10 stands. Circulate, drop survey and strap out of hole. Rig up loggers.
Day 14	<u>June 19, 1987</u> (6456')	Run electrical logs. Wait on orders, lay down drill collars, rig up cementers.
Day 15	<u>June 20, 1987</u> (6467')	Finish plugging well and abandon location.

BREAKDOWN OF RIG TIME

<u>1987 DATE</u>	<u>DRILLING</u>	<u>WASH/ REAM</u>	<u>COND/ CIRC</u>	<u>TRIPS</u>	<u>RIG SERVICE</u>	<u>RIG REPAIR</u>	<u>SURVEY</u>	<u>LOGGING</u>	<u>OTHER</u>	<u>COMMENTS</u>
6/6	9.5		.25				.75		13.5	Csg & W.O.C.
6/7	13.5				.25	.5	.5		9.25	W.O.C.
6/8	7.5			.75					15.75	W.O.C.
6/9	20.5		.75	1.5	.25		.5		.75	Rig up csg
6/10				2.75	1				21.25	Cmt surf csg
6/11	22.25				.25	1	.5			
6/12	23.75						.25			
6/13	18.5	.25	.25	4.25	.25		.5			Lost cone bit no. 3
6/14	18.25	1.75		3.75	.25					Trip for bit no. 5
6/15	22					1.5	.5			
6/16	18.75			4.75			.25			Trip for bit no. 6
6/17	23.25				.25		.25		.25	
6/18	16.0		3	4.5	.5					Total depth
6/19				2.0				8.0	14.0	E-logs
6/20										Plug well

SUMMARY DRILLING DATA

<u>1987 DATE</u>	<u>WOB</u>	<u>RPM</u>	<u>PP</u>	<u>FOOTAGE DRILLED</u>	<u>CUMULATIVE FOOTAGE</u>	<u>FT/HR</u>	<u>COMMENTS</u>
6/6	All	110	1000	0' - 121'	121	12.7	Run 13 3/8 conductor
6/7	40,000	60/80	1000	121' - 701'	580	43	Conductor washed out
6/8	35,000	80	1100	701' - 1020'	319	42.5	Wait on cement
6/9	40,000	60/64	1100	1020' - 2301'	1281	63.3	
6/10				2301' - 2301'	0	0	WOC Nipple up
6/11	38/40000	60/68	1500	2301' - 3374'	1073	48.2	
6/12	40,000	60/66	1700/1500	3374' - 4234'	860	36.2	
6/13	40,000	60/64	1500	4234' - 4612'	378	20.4	Lost cone bit no. 3
6/14	35,000	60/68	1500/1400	4612' - 5070'	458	25.1	Trip for bit no. 5
6/15	35/40000	66	1400	5070' - 5631'	561	25.5	
6/16	38/40000	60	1400/1600	5631' - 5915'	284	15	Trip for bit no. 6
6/17	40,000	60	1600	5915' - 6206'	291	12.5	
6/18	40,000	60	1600	6206' - 6456'	250		Drill to T.D.
6/19				Electric Logging			E-logs
6/20				Plug Well and Abandon Location			

BIT RECORD

<u>BIT NO.</u>	<u>SIZE</u>	<u>MANUF.</u>	<u>TYPE</u>	<u>FOOTAGE RUN</u>	<u>TOTAL FTG</u>	<u>HOURS RUN</u>	<u>FT/HOUR</u>	<u>DULL CODE</u>
1A	17 1/2	SEC	538J	0' - 121'	121	9.5	12.7	4-4-I
2A	12 1/4	SEC	984J	121' - 2301	2180	40.25	54.2	4-4-I
3	7 7/8	VAREL	52F	2301' - 4540'	2239	56.5	39.6	8-8-0 $\frac{1}{4}$
4	7 7/8	VAREL	537	4540' - 4650	110	8.25	13.3	8-8-0 $\frac{1}{4}$
5	7 7/8	HTC	J33	4650' - 5723	1073	44.75	23.9	8-6-I
6	7 7/8	RBI	CJ-2	5723' - 6458'	<u>735</u>	<u>53</u>	<u>13.8</u>	4-4-I
					<u>6458</u>	<u>212.25</u>	<u>30.4</u>	

SURVEY DATA

<u>1987 DATE</u>	<u>SURVEY DEPTH</u>	<u>SURVEY TYPE</u>	<u>DEGREES DEVIATION</u>
6/6	121	Dropped	1/4°
6/7	617	Wireline	1/2°
6/9	1110	Wireline	1/4°
6/9	2301	Dropped	1°
6/11	2849	Wireline	1/2°
6/11	3330	Wireline	1/2°
6/12	3841	Wireline	3/4°
6/13	4317	Wireline	3/4°
6/13	4540	Dropped	1/2°
6/15	5215	Wireline	1/2°
6/16	5723	Dropped	1°
6/17	5931	Wireline	1°
6/18	6456	Dropped	1 1/2°

DEPTH CORRECTIONS

<u>1987 DATE</u>	<u>BOARD DEPTH</u>	<u>S.L.M. DEPTH</u>	<u>CORRECTION & COMMENTS</u>
6/13	4540	4537	3' Uphole - no correction made
6/18	6456	6458	2' Downhole

MUD DATA

<u>1987</u> <u>DATE</u>	<u>DEPTH</u>	<u>Wt</u>	<u>FV</u>	<u>PV</u>	<u>YP</u>	<u>GEL</u> <u>STR</u>	<u>pH</u>	<u>Fl</u>	<u>FC</u>	<u>CL</u>	<u>Ca</u>	<u>%</u> <u>SOL</u>	<u>COMMENTS</u>
6/6	Spud	Drilling with water											Spud mud
6/7	205	8.3	27				11			800			Water
6/8	701	Wait on cement											Cut conductor pipe
6/9	1575	8.8	28				10.5			800	120		Water
6/10	2301	Wait on cement											Cement surface casing
6/11	2575	8.3	27				10			400	80		Water
6/12	3690	8.5	27				10			800	100		Water
6/13	4457	8.3	26				10			600	130		Water
6/14	4726	8.3	26				8			600	100		Water
6/15	5242	8.3	26				7.5			800	80		Water
6/16	5722	8.7	33	4	3	0/2	10.5	26.0	2	700	20	3	LSND
6/17	6000	9.8	36	9	6	1/6	12.0	8.8	2	800	40	9	Gel Chem
6/18	6304	9.9	37	12	6	2/10	12.5	10.8	2	1400	180	9.5	Dispersed
6/19	6456	Run E-logs											T.D.
6/20	6467	Plug well and abandon location											

FORMATION TOPS
(UP-HOLE STUDY)

K.B.: 5902'

<u>FORMATION</u>	<u>SAMPLE</u>	<u>E-LOG</u>	<u>SUBSEA</u>	<u>THICKNESS</u>
CRETACEOUS				
Burro Canyon	Surface			
JURASSIC PERIOD				
Morrison	185	185	+5717	810'
Bluff Sandstone	995	995	+4907	20'
Summerville	1018	1015	+4887	40'
Entrada Sandstone	1052	1055	+4847	168'
Carmel	1220	1223	+4679	42'
JURASSIC-TRIASSIC				
Navajo Sandstone	1266	1265	+4637	500'
TRIASSIC PERIOD				
Kayenta Sandstone	1742	1765	+4137	155'
Wingate Sandstone	1915	1920	+3982	252'
Chinle	2156	2172	+3730	656'
Shinarump Sand	2826	2828	+3074	47'
PERMIAN PERIOD				
Cutler	2905	2875	+3027	
Dechelly Sandstone	2905	2875	+3027	65'
Organ Rock	3020	2940	+2962	200'
Cedar Mesa Sand	3163	3140	+2762	60'
Elephant Canyon	3223	3200	+2702	1834'

FORMATION TOPS

K.B. = 5902'

<u>FORMATION</u>	<u>SAMPLE</u>	<u>E-LOG</u>	<u>SUBSEA</u>	<u>THICKNESS</u>
PENNSYLVANIAN PERIOD				
Hermosa Group (Honaker Trail Formation)	5024	5034	+868	1052'
PARADOX FORMATION				
Upper Ismay Zone	6067	6086	-184	90'
Upper Ismay Porosity	6166	6176	-274	46'
Hovenweep Shale Zone	6210	6222	-320	34'
Lower Ismay Zone	6244	6256	-354	50'
Gothic Shale Zone	6295	6306	-404	27'
Desert Creek Zone	6323	6333	-431	63'
Lower Desert Creek Porosity	6370	6396	-494	14'
Chimney Rock Shale Zone	6396	6410	-508	24'
Akah Zone	6420	6434	-532	31'
Salt	6454	6465	-563	2'
T.D.		6467	-565	

STRUCTURAL/STRATIGRAPHIC COMPARISON W/OFFSETS

	R.T. Duncan Tina Fed. No. 1 Sec. 13-37S-23E San Juan Co., Utah			R.T. Duncan #1-13 Grynberg Sec. 13-37S,-23E San Juan Co., Utah GL: 5816' KB: 5826'			MCOB #1-20 Fed. Sec. 20-37S-24E San Juan Co., Utah GL: 5649' KB: 5662'		
<u>FORMATION TOPS</u>	<u>LOG</u> <u>TOP</u>	<u>SUBSEA</u>	<u>h</u>	<u>LOG</u> <u>TOP</u>	<u>SUBSEA</u>	<u>h</u>	<u>LOG</u> <u>TOP</u>	<u>SUBSEA</u>	<u>h</u>
PENNSYLVANIAN PERIOD									
Hermosa Group	5034'	+868	1052	4960'	+866	1046			
PARADOX FORMATION									
Upper Ismay Zone	6086'	-184	90	6006'	-180	115	5807'	-145	102
Upper Ismay Porosity	6176'	-274	46	6118'	-292	33	5909'	-247	79
Hovenweep	6222'	-320	34	6151'	-325	31	5988'	-326	29
Lower Ismay	6256'	-354	50	6182'	-356	42	6017'	-355	41
Gothic Shale	6306'	-404	27	6224'	-398	30	6058'	-396	28
Desert Creek	6333'	-431	63	6254'	-428	50	6086'	-424	54
Lower Desert Creek Porosity	6396'	-494	14	6304'	-478	16	6140'	-478	15
Chimney Rock	6410'	-508	24	6320'	-494	26	6155'	-493	
Akah	6434'	-532	31	6346'	-520	31			

LOGS RUN

Dual Induction/SFL with Gamma Ray and S.P.
Base of surface casing to total depth

Litho-Density/Compensated Neutron with G.R. and Caliper
4400' to total depth

Bore Hole Compensated Sonic with G.R. and Caliper
4400' to total depth
Pull G.R. through surface casing

Cyberlook
6000' to total depth

EVALUATION OF LOG QUALITY

All logs are of good quality. No hole problems and no logging tool problems existed during logging operation. Logging personnel were very professional and performed their jobs well.

LOG CALCULATIONS

Hermosa Group

<u>DEPTH</u>	<u>∅_N</u>	<u>∅_D</u>	<u>∅_S</u>	<u>AVE ∅</u>	<u>F</u>	<u>Rt</u>	<u>Rwa</u>	<u>Rw</u>	<u>Ro</u>	<u>Sw</u>
5768	.09	.08	.12	.097	107	85	.79	.3	32.1	61
5770	.09	.10	.13	.107	87.9	60	.683	.3	26.4	66
5772	.13	.14	.16	.143	48.7	60	1.2	.3	14.6	49
5774	.12	.10	.14	.12	69.4	70	1.01	.3	20.8	55
5776	.10	.10	.12	.107	87.9	150	1.71	.3	26.4	42

Upper Ismay Zone

<u>DEPTH</u>	<u>∅_S</u>	<u>∅_N</u>	<u>∅_D</u>	<u>AVE ∅</u>	<u>F</u>	<u>Rt</u>	<u>Rwa</u>	<u>Rw</u>	<u>Ro</u>	<u>SW %</u>
6302	.04	.03	.01	.027	1406	70	.05	.04	56.25	90
6204	.06	.03	.03	.04	625	75	.112	.04	25	58
6205	.07	.03	.05	.05	400	70	.175	.04	16	48
6206	.10	.03	.04	.057	311	85	.273	.04	12.5	38
6207	.09	.02	.02	.043	533	90	.169	.04	21.3	49

Note: Tight and slightly shaly zone

LOWER ISMAY ZONE

<u>DEPTH</u>	<u>ϕ_S</u>	<u>ϕ_N</u>	<u>ϕ_D</u>	<u>AVE ϕ</u>	<u>F</u>	<u>Rt</u>	<u>Rwa</u>	<u>Rw</u>	<u>Ro</u>	<u>Sw %</u>
6294	.06	.11	.02	.063	252	50	.198	.04	10.1	45
6296	.11	.10	.05	.087	133	29	.218	.04	5.3	43
6298	.13	.11	.04	.093	115	23	.200	.04	4.6	45
6300	.13	.13	.03	.097	107	20	.187	.04	4.3	46
6302	.13	.10	.02	.083	144	25	.174	.04	5.8	48
6304	.10	.07	.02	.072	193	31	.161	.04	7.7	50

Note: Shaly zone

UPPER DESERT CREEK ZONE

6336	.14	.08	.05	.09	123	32	.26	.035	4.3	37
6338	.13	.09	.07	.097	107	30	.28	.035	3.7	35
6340	.14	.08	.04	.087	133	20	.15	.035	4.7	48
6342	.13	.14	.05	.107	88	18	.21	.035	3.1	41
6344	.16	.17	.08	.137	54	18	.34	.035	1.9	32
6346	.17	.13	.06	.12	69	20	.29	.035	2.4	35

Note: Shaly zone

LOWER DESERT CREEK ZONE

6402	.11	.11	.01	.077	170	15	.09	.035	5.9	63
6404	.13	.08	.02	.077	170	15	.09	.035	5.9	63
6406	.11	.07	.02	.067	225	20	.09	.035	7.9	63
6408	.11	.07	.01	.063	249	20	.08	.035	8.7	66

Note: Tight and shaly zone

FORMULAS AND ASSUMPTIONS USED IN CALCULATIONS

1. Sonic Porosity, ϕ_S
 - a. $\frac{\Delta t - \Delta t_{ma}}{\Delta t_{ma} - \Delta t_f}$ where $\Delta t_{ma} = 4.76$ sec/ft and $\Delta t_f = 189.0$ sec/ft
 - b. Sonic ϕ valid for clean formations.
2. Neutron Porosity, ϕ_N
 - a. Limestone matrix was run for Ismay zones
 - b. Dolomite matrix was run for Desert Creek zones
3. Density Porosity, ϕ_D
 - a. $\phi_D = \frac{p_{ma} - p_b}{p_{ma} - p_f}$ where $p_{ma} = 2.87$ for Desert Creek
 $p_{ma} = 2.71$ for Ismay zones
 $p_b =$ formation bulk density
 $p_f = 1.0$ fresh mud
4. Average ϕ
 - a. Cross plot N/D and sonic averages
5. Formation Resistivity Factor, F
 - a. $F = \frac{1}{\phi^2}$ for carbonates
 - b. F is sonic, neutron and density derived
6. True Formation Resistivity, R_t
 - a. R_t assumed to equal to RILD (valid for little or no invasion, thick beds and clean formation)
7. Resistivity of Apparent Formation Water, R_{wa}
 - a. $R_{wa} = R_t/F$
 - b. $R_{wa} = R_w$ then $S_w = 100\%$
 - c. Quicklook for hydrocarbon detection
8. Resistivity of Formation Water, R_w
 - a. $R_w = 0.04$ OHMS for Ismay Zones
 - b. $R_w = 0.035$ OHMS for Desert Creek Zones

9. Resistivity of Formation Wet Resistivity, R_o

- a. $R_o = (FR_w)$
- b. $R_o = R_t$ in wet zones
- c. Quick look for hydrocarbon detection

10. Water Saturation, S_w

a. $S_w = \sqrt{\frac{FR_w}{R_t}}$ or $\sqrt{\frac{R_o}{R_t}}$

FORWARD TO SAMPLE DESCRIPTIONS

Sample quality has been noted in parenthesis following each sample description. (1) denotes good samples, (2) denotes fair samples, and (3) denotes poor samples.

SAMPLE DESCRIPTIONS

- 4500' - 4510' Sandstone: light gray to clear, fine grained to medium grained, unconsolidated moderately sorted.
Siltstone: red, blocky, slightly sandy in part, calcareous. (3)
- 4510' - 4520' Shale: reddish brown, red brick, red, reddish orange, blocky to subplaty, silty, calcareous, soft to scattered moderately firm. (3)
- 4520' - 4540' Sandstone: clear to light gray, light pink, unconsolidated, fine grained, moderately sorted, calcareous.
Siltstone: red, blocky, sandy in part, calcareous, slightly shaly. (3)
- 4540' - 4550' Sandstone: light gray to clear, light pink, unconsolidated, fine grained, calcareous. (3)
- 4550' - 4590' Siltstone: red, blocky, slightly sandy to shaly in part, calcareous in part.
Sandstone: light pink to clear white, fine grained to very fine grained, calcareous. (3)
- 4590' - 4640' Sandstone: clear white, scattered light pink, very fine grained to fine grained, calcareous, slightly unconsolidated, moderately sorted, no shows. (3)
- 4640' - 4650' Shale: brown to dark brownish red, reddish orange, blocky, subwaxy, calcareous, silty in part. (3)
- 4650' - 4660' Sandstone: light pink white light gray, fine grained, calcareous, moderately sorted.
Shale: dark reddish brown to reddish orange, calcareous, silty to sandy in part. (3)
- 4660' - 4690' Shale - brick red to brown, blocky to splintery, noncalcareous to calcareous, subwaxy in part.
Siltstone: red, blocky, slightly sandy in part, calcareous in part, soft to moderately firm. (3)
- 4690' - 4720' Siltstone: orange to red, soft to moderately firm, calcareous in part, blocky.
Shale: brick red, red orange dark red, blocky to splintery, slightly calcareous, silty in part, scattered sandy in part. (3)

- 4720' - 4790' Shale: red orange reddish brown, blocky to splintery, scattered calcareous in part, moderately firm, silty in part.
Siltstone: orange to red brown red, sandy in part, calcareous in part.
Sandstone: light gray clear, fine to medium grained, calcareous, unconsolidated in part. (3)
- 4790' - 4830' Shale: reddish orange brownish red, blocky, calcareous in part, silty in part, moderately firm to soft.
Siltstone: red, blocky, shaly to sandy in part.
Sandstone: light pink clear, subrounded to subangular, poorly sorted. (3)
- 4830' - 4850' Sandstone: clear light gray pink white, unconsolidated, silty in part, poorly sorted, calcareous.
Shale: reddish orange reddish brown, blocky to splintery, slightly calcareous, silty in part, scattered sandy in part. (3)
- 4850' - 4860' Shale: red reddish orange, blocky to subsplintery, calcareous, silty in part.
Siltstone: red, soft, blocky, calcareous. (3)
- 4860' - 4930' Shale: reddish orange dark red, blocky to splintery, calcareous, silty to sandy in part, mottled in part, calcareous.
Sandstone: white light gray clear light pink, very fine grained, poorly sorted, unconsolidated, calcareous.
Limestone: light pink light brown, dense. (3)
- 4930' - 4940' Sandstone - light gray clear medium gray, very fine grained, scattered medium grained, silty to shaly in part, poorly sorted, clay filled.
Shale: orange red, blocky to splintery, slightly limy in part, scattered noncalcareous, soft to moderately firm, silty in part. (3)
- 4940' - 4980' Shale: reddish orange reddish brown, blocky to splintery moderately firm to soft, slightly limy in part, scattered noncalcareous, silty.
Siltstone: red, blocky, calcareous, sandy in part.
Sandstone: light gray clear, fine to medium grained, calcareous, silty to shaly in part.
Limestone: light pink, dense, cryptocrystalline. (3)
- 4980' - 5010' Shale: reddish orange brownish red, blocky, calcareous to slightly limy, silty in part.
Siltstone: red, blocky, calcareous, shaly in part.
Limestone: light pink, dense, argillaceous.
Sandstone: light gray light pink clear, fine to medium grained, subrounded, silty to shaly in part. (3)
- 5010' - 5040' Shale: red, blocky to splintery in part, calcareous to limy in part, soft to moderately firm.
Limestone: light brown creamy pink, dense, argillaceous, moderately firm, scattered sandy in part.

5010' - 5040'
(continued)

Sandstone: light gray to clear, fine grained, poorly to moderately sorted, clay filled. (3)

HERMOSA GROUP

(sample top 5040'; E-log 5034')

5040' - 5060'

Limestone: light brown grayish brown light gray, dense, cryptocrystalline to microcrystalline, argillaceous, traces of scattered fossils.

Shale: dark brown dark reddish brown, blocky, moderately firm, calcareous in part. (3)

5060' - 5100'

Shale: dark brown dark red, blocky, calcareous in part to limy in part.

Limestone: light gray light pink light brown creamy white light brown, argillaceous, dense, (3)

5100' - 5120'

Sandstone: clear light gray, silty in part, very fine grained, clay filled, calcareous, slightly micaceous, sub-rounded.

Shale: dark reddish brown, micaceous in part, blocky, silty in part, soft to moderately firm.

Limestone: light brown creamy white, dense. (3)

5120' - 5160'

Shale: dark brown dark reddish brown scattered gray, blocky, soft to moderately firm, calcareous to slightly limy in part, silty to slightly sandy.

Sandstone: clear light gray, silty in part, very fine grained, clay filled, calcareous, micaceous.

Limestone: light brown brownish gray, dense, argillaceous. (3)

5160' - 5190'

Shale: scattered dark gray dark reddish brown, silty in part, blocky, moderately firm, calcareous to limy in part, scattered micaceous.

Sandstone: clear, gray, clay filled, tight, calcareous, slightly micaceous.

Limestone: light brownish gray to creamy white, dense, scattered fossils. (3)

5190' - 5220'

Limestone: light brown light gray lightly grayish brown creamy white, dense, cryptocrystalline, sandy in part, argillaceous to slightly sandy.

Sandstone: clear gray, clay filled, slightly micaceous, calcareous.

Shale: dark brown scattered gray, blocky, moderately firm to soft, calcareous to slightly limy. (3)

5220' - 5250'

Shale: dark brown dark reddish brown scattered dark gray, blocky to splintery, soft to moderately firm, calcareous to slightly limy in part.

Limestone: brownish gray to light brown creamy white, argillaceous in part, dense, no shows, cryptocrystalline. (3)

- 5250' - 5260' Shale: reddish brown medium to dark gray, blocky, soft to moderately firm, calcareous.
Limestone: light pink light brown, argillaceous in part, dense. (3)
- 5260' - 5300' Shale: dark brown dark reddish brown scattered grayish brown, micaceous, blocky to splintery, moderately firm to soft, calcareous to scattered limy in part, silty in part.
Limestone: light to medium brown, argillaceous in part, microcrystalline, dense.
Sandstone: light to medium gray, clay filled, calcareous, micaceous, fine grained. (3)
- 5300' - 5340' Shale: red brown dark brown scattered gray, blocky to splintery, moderately firm to scattered firm, calcareous to limy in part, silty.
Limestone: light gray light brown, dense, microcrystalline to cryptocrystalline, slightly argillaceous, no visible porosity. (3)
- 5340' - 5380' Shale: dark brown to brown, blocky, soft to moderately firm, calcareous.
Sandstone: light to medium gray, fine grained, clay filled no visible porosity with black lignite.
Limestone: light grayish brown, dense, argillaceous in part. (3)
- 5380' - 5400' Limestone: light grayish brown light gray to creamy white, dense, argillaceous in part, slightly fossiliferous, microcrystalline to cryptocrystalline.
Shale: brown scattered gray, blocky to splintery, soft to moderately firm, calcareous to slightly limy in part. (3)
- 5400' - 5430' Sandstone: gray clear, very fine grained to fine grained, trashy, micaceous, subangular, calcareous, poorly sorted, clay filled.
Shale: dark reddish brown, blocky, calcareous.
Limestone: creamy white light grayish brown, slightly sandy in part, dense. (3)
- 5430' - 5470' Shale: medium gray reddish brown dark brown, blocky to splintery, calcareous to slightly limy in part.
Limestone: light gray light brownish gray, dense, cryptocrystalline to microcrystalline. (3)
- 5470' - 5490' Shale: dark reddish brown, blocky, silty to slightly sandy in part, calcareous.
Limestone: light brownish gray, microcrystalline, scattered argillaceous in part, scattered sandy. (3)
- 5490' - 5510' Shale: dark brown scattered gray, blocky, soft to moderately firm, scattered limy in part.
Sandstone: light gray, trashy, calcareous, micaceous, fine grained to very fine grained, calcareous, poorly sorted, clay filled.

- 5490' - 5510'
(continued) Limestone: light brown light gray, microcrystalline, dense, argillaceous in part, no visible porosity, no shows. (3)
- 5510' - 5550' Shale: scattered medium gray dark brown, blocky to splintery, moderately firm to scattered firm, slightly limy in part.
Limestone: light to medium gray, microcrystalline to cryptocrystalline, scattered sandy in part, scattered light brown chert, no shows. (3)
- 5550' - 5580' 70% Shale: gray to dark gray dark brown, blocky, calcareous to slightly limy, moderately firm.
30% Limestone: light gray light brown, cryptocrystalline to microcrystalline, dense, argillaceous, chert. (3)
- 5580' - 5620' 60% Limestone: light brown to dark brown, cryptocrystalline to microcrystalline, fossils in part, chert.
40% Shale: medium gray, blocky, moderately firm. (3)
- 5620' - 5650' 60% Shale: medium to light gray, blocky, limy in part, moderately firm.
40% Limestone: light brown light grayish brown creamy white, argillaceous in part, scattered chert, no visible porosity. (3)
- 5650' - 5660' 50% Shale: medium to dark gray dark brownish gray, blocky to splintery, moderately firm to firm, calcareous.
40% Limestone: medium gray, argillaceous in part, no visible porosity.
10% Sandstone: gray, very fine grained, trashy, shaly, no visible porosity. (3)
- 5660' - 5690' 60% Limestone: light to medium brown light to medium gray, cryptocrystalline, dense, scattered fossils, argillaceous.
40% Shale: gray to dark gray, splintery to blocky, moderately firm to firm, scattered calcareous to noncalcareous. (3)
- 5690' - 5710' 80% Limestone: light to medium gray, cryptocrystalline to microcrystalline, dense, argillaceous in part, scattered fossils.
20% Shale: medium to dark brownish gray, blocky to splintery, moderately firm to soft, slightly calcareous. (3)
- 5710' - 5740' 80% Shale: dark gray to gray, splintery, slightly calcareous, moderately firm to soft.
20% Limestone: light to medium gray light to medium brown, dense, argillaceous, fossils, cryptocrystalline, no visible porosity. (3)
- 5740' - 5750' 70% Shale: dark brown dark gray, blocky to splintery, limy in part, moderately firm.

- 5740' - 5750'
(continued) 20% Limestone: light to medium brown, cryptocrystalline, dense, slightly argillaceous, cherty in part.
10% Sandstone: gray, very fine to fine grained, shaly in part, calcareous. (3)
- 5750' - 5770' 80% Limestone: gray to brownish gray, microcrystalline, dense, cherty, oolitic fossils.
20% Shale: gray dark brown, blocky to splintery, limy, moderately firm. (3)
- 5770' - 5800' 70% Shale; medium to dark gray, splintery to blocky, slightly silty in part, calcareous to limy in part, moderately firm.
30% Limestone: gray white, light brownish gray, microcrystalline, slightly argillaceous, no porosity. (3)
- 5800' - 5810' 70% Limestone: brownish gray, microcrystalline, slightly argillaceous, dense.
30% Shale: dark gray, blocky to splintery, moderately firm, calcareous. (3)
- 5810' - 5830' 90% Shale: black, very carbonaceous lignite, brittle, soft, slightly calcareous.
10% Limestone: light to medium brown, microcrystalline, argillaceous in part, dense. (3)
- 5830' - 5840' 60% Limestone: creamy white to light brown, cryptocrystalline to microcrystalline, argillaceous, scattered fossils, no visible porosity.
40% Shale: medium to dark gray dark brown, blocky to splintery, moderately firm to soft, calcareous. (3)
- 5840' - 5850' 60% Shale: medium gray dark gray black, blocky to splintery, moderately firm, silty in part.
40% Limestone: grayish brown, cryptocrystalline, argillaceous, slightly fossiliferous, no visible porosity. (3)
- 5850' - 5870' 70% Limestone: gray brownish gray, microcrystalline, scattered fossils, no visible porosity.
30% Shale: dark gray medium gray, soft to moderately firm, silty. (3)
- 5870' - 5910' 70% Shale: gray dark gray black, blocky to splintery, moderately firm to firm, silty in part, slightly calcareous.
30% Limestone: brown white to light brown, argillaceous in part. dense. (3)
- 5910' - 5920' 60% Limestone: brown gray, microcrystalline to cryptocrystalline, traces of scattered fossils, no visible porosity.
40% Shale: dark brownish gray, blocky to splintery, moderately firm, slightly calcareous. (3)
- 5920' - 5930' 60% Shale: dark brownish gray, blocky, moderately firm to firm, slightly silty in part.
40% Limestone: medium to light brown, cryptocrystalline, slightly argillaceous, scattered chert, no visible porosity. (2)

- 5930' - 5940' 60% Limestone: medium to light brown, cryptocrystalline slightly argillaceous, scattered chert, no visible porosity. 40% Shale: dark brownish gray, blocky to splintery, moderately firm to firm, silty in part. (2)
- 5940' - 5960' 80% Shale: medium to dark gray, splintery, moderately firm, limy in part. 20% Limestone: white to light brown, microcrystalline, argillaceous, dense. (2)
- 5960' - 5980' 70% Shale: gray dark gray black, blocky to splintery, firm, limy in part. 30% Limestone: gray, microcrystalline, argillaceous, scattered chert, no visible porosity. (2)
- 5980' - 5990' 70% Limestone: gray brownish gray, cryptocrystalline to microcrystalline, dense, no visible porosity. 30% Shale: dark gray medium gray, splintery to blocky, calcareous. (2)
- 5990' - 6060' 60% Limestone: light to medium grayish brown, microcrystalline to cryptocrystalline, dense, argillaceous in part, cherty in part, no visible porosity. 40% Shale: gray dark gray, splintery to blocky, moderately firm to firm, slightly limy. (2)
- 6060' - 6070' 80% Shale: black dark gray, platy to splintery, moderately firm, limy in part, silty in part. 20% Limestone: medium to dark gray, firm, microcrystalline, argillaceous in part, no visible porosity, no stain. (2)
- UPPER ISMAY ZONE Sample top 6072' E-log top 6086'
- 6070' - 6090' 10% Anhydrite: white creamy white, soft. 70% Shale: dark gray, blocky to splintery, limy in part, moderately firm to soft. 20% Limestone: medium gray to grayish brown, microcrystalline, very argillaceous, no porosity. (2)
- 6090' - 6110' 60% Limestone: gray brownish gray, microcrystalline, argillaceous, anhydritic. 40% Shale: gray dark gray black, blocky to splintery, moderately firm. (2)
- 6110' - 6170' 20% Anhydrite: creamy white, soft. 60% Shale: grayish brown to dark gray, blocky, moderately firm. 20% Limestone: grayish brown, argillaceous, anhydritic. (2)
- 6170' - 6210' 70% Limestone: brown light to medium grayish brown, microcrystalline, argillaceous, anhydritic in part, scattered fossils, very poor intercrystalline, no stain, no fluorescence, no cut. 30% Shale: medium gray, splintery to blocky, slightly limy. (2)

HOVENWEEP SHALE

Sample top 6210'; E-lot top 6222'

6210' - 6250'

80% Shale: black dark gray, platy to blocky, soft, carbonaceous, moderately firm, earthy, slightly calcareous silty in part.

20% Limestone: light to medium grayish brown, microcrystalline, anhydritic, no visible porosity. (2)

6250' - 6270'

60% Shale: dark gray black, splintery to platy, earthy, calcareous.

40% Limestone: medium to dark grayish brown, cryptocrystalline, slightly argillaceous, no visible porosity, no stain, anhydritic in part. (2)

6270' - 6290'

10% Anhydrite: creamy white, soft.

50% Shale: gray medium gray, splintery to blocky, soft to moderately firm, earthy, calcareous.

40% Limestone: medium gray, argillaceous, anhydritic, no visible porosity, no stain, microcrystalline. (2)

GOTHIC SHALE

Sample top 6295'; E-log 6306'

6290' - 6320'

80% Shale; dark gray black, platy to splintery, soft, earthy, carbonaceous in part.

20% Limestone: brownish gray, microcrystalline, dense, no shows, anhydritic in part. (2)

UPPER DESERT CREEK

Sample top 6323'; E-log 6333'

6320' - 6340'

10% Anhydrite: creamy white, soft.

60% Shale: gray dark gray, platy, soft, calcareous, earthy, limy to dolomitic.

30% Dolomite: light to medium brown, microcrystalline, dense, anhydritic, no visible porosity to very poor intercrystalline porosity, no to poor fluorescence, no cut.

6340' - 6350'

10% Anhydrite; light gray white creamy white.

60% Dolomite: brownish gray, microcrystalline, dense, anhydritic, no visible porosity, no stain, fluorescence or cut.

30% Shale: gray, blocky to splintery, soft to moderately firm, calcareous to slightly limy. (2)

6350' - 6370'

60% Dolomite: gray dark gray, microcrystalline, dense, shaly, no visible porosity.

40% Shale: gray dark gray, splintery, subplaty, moderately firm to soft, calcareous to slightly limy in part. (2)

LOWER DESERT CREEK ZONE

Sample top 6376'; E-log 6386'

6370' - 6380'

70% Dolomite: dark brown, dense, microcrystalline, anhydritic, no visible porosity, no stain.

30% Shale: gray dark gray, splintery, moderately firm, calcareous, carbonaceous in part.

Anhydrite. (2)

6380' - 6390'

70% Dolomite: brown medium to dark grayish brown, microcrystalline, limy in part, anhydritic, dense, no visible porosity, no stain, no fluorescence.
30% Shale: gray, blocky, moderately firm, limy in part.
(2)

CHIMNEY ROCK SHALE

Sample top 6396'; E-log top 6310'

6390' - 6420'

70% Shale: dark brownish black dark gray, blocky to platy, scattered splintery, soft, brittle, slightly calcareous.
30% Dolomite: brown to dark grayish brown, microcrystalline to cryptocrystalline, anhydritic in part, dense.
(2)

AKAH ZONE

Sample top 6420'; E-log top 6434'

6420' - 6440'

80% Dolomite: gray medium gray brownish gray, microcrystalline, anhydritic, argillaceous in part, dense, no visible porosity, no stain, no cut.
20% Shale: dark brownish gray dark gray, blocky to splintery, soft to moderately firm, limy to dolomitic in part. (2)

6440' - 6456'

10% Anhydrite: white creamy white, soft, dense.
60% Shale: dark brownish gray, blocky to splintery, moderately firm, scattered firm, limy to dolomitic in part.
30% Dolomite: brownish gray, microcrystalline, anhydritic, limy in part, argillaceous in part, dense, no visible porosity.
Salt: by interpretation.

SUMMARY

PROSPECT OVERVIEW

The Raymond T. Duncan No. 1 Tina Federal was drilled to a total depth of 6467' (E-log) as a wild cat to further explore a seismic high in the Paradox Formation. A dry hole drilled by Duncan (No. 1-13 Grynberg Federal) 1/4 miles to the northwest indicated a buildup in the Upper Ismay Zone of the Paradox Formation. Further seismic work in the area indicated a possible Bioherm (algal mound). It was hoped that No. 1 Tina Federal would locate this potential reservoir.

FORAMTION SUMMARY

HERMOSA GROUP of the Honaker Trail Formation

(5766' - 5776') This was a 10 foot fossiliferous brownish gray limestone that broke down in drilling from 4 minutes per foot to 1.5 to 2 minutes per foot. Samples were of extremely poor quality through this interval and the samples did not reveal any porosity, stain, fluorescence, nor cut. A gas increase was noted through this interval peaking at 200 units, up from a background gas of 15 units. No heavy gases (C₄) was observed. The electrical logs reveal that this zone exhibited an average porosity of 11.5%. An analysis of the logs indicate an average Sw through this zone to be 55%. An SSP calculated Rw of 0.3 ohms was used through the Hermosa to calculate water saturations.

It was hoped that the fractured interval that existed in the No. 1 Grynberg Federal location in the Lower Hermosa carbonate would be present at this location. This fractured interval was not present in this well.

UPPER ISMAY ZONE (6203' - 6207')

The carbonate section of the Upper Ismay indicated a small buildup existed in the Upper Ismay. A slightly thinner anhydrite section above the carbonate indicated this buildup in the section. The carbonates, however, did not exhibit any primary or secondary dolomitization porosity of any significance. A thin clean limestone with little porosity did develop at 6203' - 6207'. Drilling broke down from 4 - 5 minutes per foot to 2 - 3 minutes per foot, while drilling this interval. Gas analysis revealed a gas peak of 1000 units total gas, up from a background of 30 units. Gas chromatograph analysis indicated no presence of C₄ heavy gases. Examination of samples indicated that the limestone was a light to medium grayish brown microcrystalline anhydritic limestone with very poor visible intercrystalline porosity. No vugs were observed and no hydrocarbon stain, fluorescence not cut was observed.

LOWER ISMAY ZONE (6294' - 6304')

A shaly limestone interval existed at this location with average porosity of 8% and an average water saturation value of 46%. Drill rate did not break down significantly through this interval, from 4 - 5 minutes per foot to 3.5 minutes per foot. Sample examination indicated this shaly anhydritic medium gray limestone to be non-productive. Gas analysis indicated light gas amounts with no heavy gases.

DESERT CREEK ZONE (6336' - 6346')

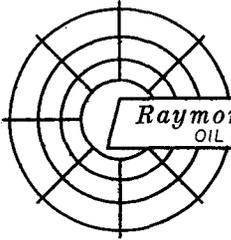
A shaly dolomite with anhydritic inclusions existed through this interval. The brownish gray dolomite was microcrystalline with no visible to very poor intercrystalline porosity with no stain, fluorescence nor cut. Drilling rate was erratic through this interval, the fastest drilling was 2 minutes per foot to 4 minutes per foot. Gas analysis indicated hydrocarbon gases to be methane, ethane, and a little propane with no heavy gases (butanes and pentanes). Logs showed an average porosity of 10% with a calculated water saturation of 40%. The logs also revealed the existence of the shaly and anhydritic properties of this interval, limiting any hydrocarbon potential.

LOWER DESERT CREEK ZONE (6402' - 6408')

The brown microcrystalline to slightly microsugrosic dolomites of this interval were argillaceous to anhydritic with no to very poor intercrystalline visible porosity. Average porosities through this zone was 6.5% with calculated water saturation values of 65%. A slight increase in background gas was observed. No drilling break was noted which indicated the tight nature of this zone. No apparent mount buildup in the Lower Desert Creek existed at this location.

POST DRILLING COMMENTS

A final examination of all possible zones penetrated through the Hermosa Group and Paradox Formation at this location reveals that no significant zones with enough porosity, permeability and hydrocarbons to justify any production. A buildup in the Upper Ismay carbonate with a thinner anhydrite and a slightly thicker Hovenweep shale does indicate that a Bioherm Mound does lie in the vicinity and further drilling in the area may locate the mound. This location is either on the nose, tail or flank of this mound.



Raymond T. Duncan
OIL PROPERTIES

RECEIVED
JUL 20 1987

1777 SOUTH HARRISON STREET - PENTHOUSE ONE
TELEPHONE (303) 759-3303 - DENVER, COLORADO 80210
DIVISION OF
OIL GAS & MINING

CONFIDENTIAL

July 14, 1987

State of Utah Natural Resources
Oil, Gas & Mining
355 W. North Temple
3 Triad Center
Suite 350
Salt Lake City, Utah 84180-1203

Re: Tina Federal No. 1
Sec. 13-T37S-R23E
San Juan, Utah

Gentlemen:

Enclosed you will find the Sundry Notice for the Subsequent Report of Abandonment as well as the Completion Report of the above captioned well.

If you have any questions, please contact me at the above address.

Sincerely,

J. A. Bettridge
Operations Superintendent

JAB:nr
Enclosures

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

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 <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER Dry		5. LEASE DESIGNATION AND SERIAL NO. U-46825
2. NAME OF OPERATOR Raymond T. Duncan		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
3. ADDRESS OF OPERATOR 1777 So. Harrison St., PH-1, Denver, CO 80210		7. UNIT AGREEMENT NAME N/A
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 2140' FSL and 1110' FEL		8. FARM OR LEASE NAME Federal
14. PERMIT NO. 43-037-31322	15. ELEVATIONS (Show whether DF, RT, OR, etc.) 5889' KB	9. WELL NO. 1
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data		10. FIELD AND POOL, OR WILDCAT Wildcat
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*		11. SEC., T., R., M., OR B.L.E. AND SURVEY OR AREA Sec. 13, T37S, R23E
		12. COUNTY OR PARISH San Juan
		13. STATE Utah

CONFIDENTIAL

NOTICE OF INTENTION TO:

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

SUBSEQUENT REPORT OF:

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
(Other) <input type="checkbox"/>	

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

Verbal permission for plugging was given by BLM Steve Jones 6/19/87. Subject well was plugged at 11:30 P.M. 6/19/87. Rig was released at 6:06 A.M. 6/20/87. Plugs were set as follows:

6100'-5900'	100 sx	Log Tops
2350'-2259'	40 sx	
100'- 0'	30 sx	
		Hermosa Group
		(Honaker Trail Form.) 5034'
		Upper Ismay Zone 6086'
		(Up. Ismay Porosity) 6176'
		Hovenweep Shale Zone 6222'
		Lower Ismay Zone 6256'
		Gothic Shale Zone 6306'
		Desert Creek Zone 6333'
		Lower Desert Creek Porosity 6396'
		Chimney Rock Shale 6410'
		Akah Zone 6434'
		Salt 6465'

The location will be restored per BLM requirements. A sundry notice will be sent once this work is completed.

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

SIGNED J.A. Bertrige TITLE Production Superintendent DATE July 16, 1987
(This space for Federal or State office use)

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

TITLE _____ DATE _____

DATE: 7-21-87
BY: J.R. Duff

RECEIVED
JUL 20 1987

*See Instructions on Reverse Side

DIVISION OF OIL, GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

5. LEASE DESIGNATION AND SERIAL NO.
U-46825
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A
7. UNIT AGREEMENT NAME
N/A
8. FARM OR LEASE NAME
Tina Federal
9. WELL NO.
1
10. FIELD AND POOL, OR WILDCAT
Wildcat
11. SEC., T., R., M., OR BLOCK AND SURVEY
OR AREA
Sec. 13-T37S, R23E

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RESVR. Other P&A

2. NAME OF OPERATOR
Raymond T. Duncan

3. ADDRESS OF OPERATOR
1777 So. Harrison St., PH-1, Denver, CO 80210

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 2140' FSL and 1110' FEL
At top prod. interval reported below
At total depth

14. PERMIT NO. 43-037-31332 DATE ISSUED

15. DATE SPUNDED 6/6/87 16. DATE T.D. REACHED 6/20/87 17. DATE COMPL. (Ready to prod.) 6/20/87 P & A 18. ELEVATIONS (DF, BKB, BT, GR, ETC.)* 5889' KB 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 6466' 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* P & A

25. WAS DIRECTIONAL SURVEY MADE
26. TYPE ELECTRIC AND OTHER LOGS RUN
Dual Induction, BHCA/GR, Litho-Density/Comp. Neutron w/ GR/Caliper
27. WAS WELL CORED No

6-2A-87
CYBERLOOK, MUD LOGS(2)

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13 3/8"	48#	121'	17 1/2"	160 sx Class "B"+ 200 sx	Cl. "B"
8 5/8"	24#	2301'	12 1/4"	925 sx Lite, 250 sx Cl.	"B"

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	AXES CEMENT	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

CONFIDENTIAL

RECEIVED
JUL 20 1987

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33. OIL GAS & MINING PRODUCTION

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

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

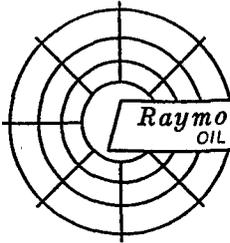
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

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

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records
SIGNED J. A. Bettridge TITLE Operations Superintendent DATE July 17, 1987

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



Raymond T. Duncan
OIL PROPERTIES

1777 SOUTH HARRISON STREET - PENTHOUSE ONE
TELEPHONE (303) 759-3303 - DENVER, COLORADO 80210

October 21, 1988

RECEIVED
OCT 26 1988

State of Utah
Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

DIVISION OF
OIL, GAS & MINING

Re: Tina Federal No. 1
Sec. 13, T37S, R23E 43-037-31300
San Juan County, Utah

Sentinel Peak #22-34 43-037-30748
Sec. 22, T41S, R26E
San Juan, Utah

Gentlemen:

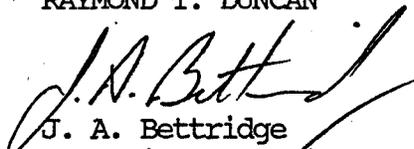
Enclosed please find a copy of the BLM Sundry Notice for Reclamation of the Tina Federal No. 1. The location has now been reseeded.

Also enclosed is a change of operator for the Sentinel Peak No. 22-34 from Raymond T. Duncan to Pioneer Oil & Gas.

Please contact me if you have any questions or need additional information.

Very truly yours,

RAYMOND T. DUNCAN


J. A. Bettridge
Operations Superintendent

JAB:nr
Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PERMIT IN THIS STATE
(Other instructions on reverse side)

Subject Bureau No. 4-4-104
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS
(Do not use this form for proposals to drill or to deepen or to recomplete a well. Use "APPLICATION FOR PERMIT" for such proposals.)

RECEIVED
OCT 26 1988

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A	
2. NAME OF OPERATOR Raymond T. Duncan		7. UNIT AGREEMENT NAME N/A	
3. ADDRESS OF OPERATOR 1777 So. Harrison St., PH-1, Denver, CO 80210		8. FARM OR LEASE NAME Tina Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 2140' FSL & 1110' FEL (NE SE)		9. WELL NO. 1	
14. PERMIT NO. 43-037-31332		15. ELEVATIONS (Show whether DF, RT, GR, etc.) 5889' KB	
		12. COUNTY OR PARISH San Juan	13. STATE UT

18. 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) Reclamation <input checked="" 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.)*

Restoration of the subject location has been completed per the requirements of the state of Utah and the BLM.

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

SIGNED J. A. Bettridge TITLE Operations Superintendent DATE Oct 21, 1988

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

FAN APP'D

4301630174

Amoco #5, NENW 34-17S-11E

5-10-91
~~000-~~

4303731453

Inude 2-17, SESW 17-31S-23E

5-13-91

4303731465

COGC 1-35-36-21, NWSW 35-36S-24E

5-13-91

4303731340

Recapture 29-34, SWSE 29-36S-23E

5-13-91

4303730499

Bug 1, NESE 12-36S-25E

5-13-91

4303731184

Cedar Point F-13-26, NWSW 12-36S-25E

5-13-91

4303730735

Bug 25, NENW 18-36S-26E

5-10-91

4303731322

Jina 1, NESE 13-37S-23E

5-13-91

4303731388

Manhattan 1-5, NWE 5-37S-24E

5-13-91

JLT List from BLM showing final
abandonment notice dates.

DTS

5-28-91