

*orig. R. Heitzman  
file*

HEITZMAN DRILL-SITE SERVICES

DALE HEITZMAN  
ROBERT M. ANDERSON

MEMBER: RMOGA

May 1, 1989

**RECEIVED**  
MAY 04 1989

DIVISION OF  
OIL, GAS & MINING

Ms. Dianne R. Nielson, Director  
State of Utah Division of Oil, Gas and Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Re: Spacing Exception Rule 302  
Coastal Oil & Gas Corporation  
COGC #1-35-36-21 Federal  
2175.2' FSL, 381.6' FWL  
Section 35, T36S, R21E  
San Juan County, Utah  
Federal Lease # U-57656

Dear Ms. Nielson:

Coastal Oil & Gas Corporation requests a Spacing Exception Rule 302 for the above referenced location due to topography and archeological sites within the proposed drillsite area.

Federal lease # U-57656 covers the S $\frac{1}{2}$  Section 34, therefore no other lease owners are within 460 feet of this location.

Attached are survey plat, area topographic map, rig layout and cut and fill data.

Your immediate attention to this request will be appreciated as Coastal Oil plans to drill this 6100' Akah test as soon as the Bureau of Land Management permits are approved.

Sincerely,

HEITZMAN DRILL-SITE SERVICES

*Dale Heitzman*  
Dale Heitzman  
Authorized Agent

DH:cs  
Attachments

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

DATE: 5-22-89  
BY: *John R. Byrnes*

Sec. \_\_\_\_\_, Township 36 S, Range 21 E, SAN JUAN County, State of UTAH



Form 105 - Island Township Plat

In stock and for sale by Triangle Blue Print & Supply Co. of Oklahoma City

COASTAL OIL & GAS CORPORATION  
Lease #U-57656, COGC #1-35-36-21 Federal  
NW $\frac{1}{4}$ SW $\frac{1}{4}$ , Section 35, T36S, R21E  
San Juan County, Utah

Drilling Prognosis

1. Estimated Tops of Important Geologic Markers:

Morrison	Surface	Ismay	5670'
Chinle	1830'	Gothic	5860'
DeChelly	2590'	Desert Creek	5880'
Hermosa	4590'	Total Depth	6100'
Honaker Trail	6560'		

2. Estimated Depths of Anticipated Water, Oil, Gas or Mineral Formations:

Ismay	5670'	Oil/Gas (Primary Objective)
Desert Creek	5880'	Oil/Gas (Primary Objective)

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.

3. Pressure Control Equipment: (Schematic Attached)

A. Type: 11" Double Gate Hydraulic with optional 11" Annular Preventer (Hydril).

The Blow-Out Preventer will be equipped as follows:

1. One (1) blind ram (above).
2. One (1) pipe ram (below).
3. Kill line (2-inch minimum).
4. One (1) kill line valve (2-inch minimum).
5. One (1) choke line valve.
6. Two (2) adjustable chokes.
7. Upper kelly cock valve with handle available.
8. Safety valve & subs to fit all drill strings in use.
9. 2-inch (minimum) choke line.
10. Fill-up line above the uppermost preventer.

B. Pressure Rating: 2000 psi

C. Testing Procedure:

Optional Annular Preventer (Hydril).

At a minimum, the Annular Preventer will be pressure tested to 50% of the rated working pressure for a period

3. Pressure Control Equipment:

C. Testing Procedure:

Optional Annular Preventer (Hydril) - Continued

of ten (10) minutes or until provisions of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the annular preventer is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition to the above, the annular preventer will be functionally operated at least weekly.

Blow-Out Preventer.

At a minimum, the BOP, choke manifold, and related equipment will be pressure tested to the approved working pressure of the BOP stack (if isolated from the surface casing by a test plug) or to 70% of the internal yield strength of the surface casing (if the BOP is not isolated from the casing by a test plug). Pressure will be maintained for a period of at least ten (10) minutes or until the requirements of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the BOP is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition to the above, the pipe and blind rams will be activated each trip, but not more than once each day.

All BOP drills and tests will be recorded in the IADC driller's log.

3. Pressure Control Equipment:

D. Choke Manifold Equipment:

All choke lines will be straight lines unless turns use tee blocks or are targeted with running tees, and will be anchored to prevent whip and vibration.

E. Accumulator:

The accumulator will have sufficient capacity to close all BOP's and retain 200 psi above precharge. Nitrogen bottles which meet the manufacturer's specifications will be used as the backup to the required independent power source. The accumulator precharge pressure test will be conducted prior to connecting the closing unit to the BOP stack and at least once every six (6) months thereafter. The accumulator pressure will be corrected if the measured precharge pressure is found to be above or below the maximum or minimum limits specified in Onshore Operating Order #2.

A flare line will be installed after the choke manifold, extending 100 feet (minimum) from the center of the drill hole to a separate flare pit.

The Blow-Out Preventer and related pressure control equipment will be installed, tested and maintained in compliance with the specifications in and requirements of Onshore Operating Order Number 2.

Fill line will be two (2) inches, kill line will be two (2) inches, choke relief line will be two (2) inches. BOP drills and tests will be recorded in the IADC driller's log.

The choke manifold and BOP extension rods with handwheels will be located outside the rig substructure. The hydraulic BOP closing unit will be located at least twenty-five (25) feet from the well head. Exact locations and configurations will depend upon the particular rig contracted to drill this hole.

The choke line (the line which connects the BOP stack to the choke manifold) will be as straight as possible and turns, if required, will have a targeted T block if the required BOP stack is three (3) thousand pounds or greater.

4. The Proposed Casing and Cementing Program: (All New)

A. Casing Program:

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft.</u>	<u>Grade</u>	<u>Joint</u>	<u>Depth Set</u>
22"	16"	Steel	CMP*	N/A	0- 60'
12-1/4"	9-5/8"	36.0#	K-55	ST&C	0-2000'
8-3/4"	5-1/2"	15.5#	K-55	LT&C	0-6100'

\* Corrugated Metal Pipe (Conductor) - Optional.

Casing String(s) will be pressure tested to 0.2 psi/foot, or 1000 psi, whichever is greater, after cementing and prior to drilling out from under the casing shoe.

B. Cementing Program:

- Surface Conductor : Approximately 30 sx Redi-mix cement, circulated to surface.
- Surface Casing : Approximately 1500 sx Class "G" cement, circulated to surface.
- Production Casing : Approximately 600 sx Class "G" cement with additives. Actual cement volumes to be determined from caliper log. Top of cement will be at approximately 3800'.

A greater amount of cement will be used if necessary to ensure that all potentially productive hydrocarbon zones are cemented off. Fill-up to be determined from logs.

5. Mud Program: (Monitor with PVI and Flow Sensor Device)

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-2000'	Native Mud/Gel	N/C	N/C	No Control
2000-6100'	Low Solids/Lightly Treated	9.0#	36-40	10 cc/less

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blowout will be available at the well site during drilling operations.

6. Evaluation Program:

<u>Logs</u>	:	FDC-CNL-GR	:	6100' - 4700'
		DLL-MSFL-SP	:	6100' - 2000'

6. Evaluation Program: Continued

Logs : Sonic-GR\* : 6100' - 2000'

\* Pull Gamma Ray to surface.

A two (2) man logging unit will be on location from the top of the Hermosa Formation (4590') to total depth.

DST's : One (1) DST possible in both the Ismay and Desert Creek formations.

Cores : None anticipated.

Evaluation Program may change at the discretion of the well-site geologist, with prior approval of the Bureau of Land Management.

Stimulation : No stimulation or frac treatment has been formulated for this test at this time. The drill site, as approved, will be of sufficient size to accommodate all completion activities.

Whether the well is completed as a dry hole or as a producer, Well Completion and Recompletion Report and Log (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after the completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164.

Two (2) copies of all logs, core descriptions, core analyses, 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. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the District Manager, Bureau of Land Management.

7. Abnormal Conditions:

No abnormal temperatures or pressures are anticipated. No H<sub>2</sub>S gas has been encountered in or known to exist from previous wells drilled to similar depths in this area. Maximum anticipated bottom hole pressure equals approximately 2648 psi (calculated at 0.434 psi/foot) and maximum anticipated surface pressure equals approximately 1342 psi (calculated at 0.22 psi/foot).

8. Anticipated Starting Dates and Notification of Operations:

A. Anticipated Starting Dates:

Anticipated Commencement Date : June 1, 1989  
Drilling Days : Approximately 14 Days  
Completion Days : Approximately 10 days

B. Notification of Operations:

Coastal Oil & Gas Corporation will contact the Authorized Officer, San Juan Resource Area Office, forty-eight (48) hours prior to beginning of construction operations on this location.

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, Bureau of Land Management. If operations are to be suspended, prior approval of the District Manager will be obtained and notification given before resumption of operations.

The spud date will be orally reported to the Area Manager within a minimum of twenty-four (24) hours prior to spudding. Written notification in the form of a "Sundry Notice" (Form 3160-5) will be submitted to the District Office within twenty-four (24) hours after spudding. If the spudding occurs on a weekend or holiday, the written report will be submitted on the following regular work day.

In accordance with Onshore Operating Order #1, this well will be reported on Form 9-329, "Monthly Report of Operations", starting with the month in which operations commence and continuing each month until the well is physically plugged and abandoned. This report will be filed directly with the BLM District Office, P.O. Box 970, Moab, Utah 84532.

Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Resource Area in accordance with the requirements of NTL-3A.

8. Anticipated Starting Dates and Notification of Operations:

B. Notification of Operations: Continued

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed for prior approval of the District Manager, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig. In emergency situations, verbal approval to bring on a replacement rig will be approved by the District Petroleum Engineer.

Should the well be successfully completed for production, 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 (5) business days following the date on which the well is placed on production.

A first production conference will be scheduled within fifteen (15) days after receipt of the first production report, if required by the Authorized Officer. If so required, the San Juan Resource Area Office will coordinate the field conference.

No well abandonment operations will be commenced 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 thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration operations. Final abandonment will not be approved until the surface reclamation work required by the approved Application for Permit to Drill or approved abandonment notice has been completed to the satisfaction of the Area Manager or his representative, or the appropriate surface management agency.

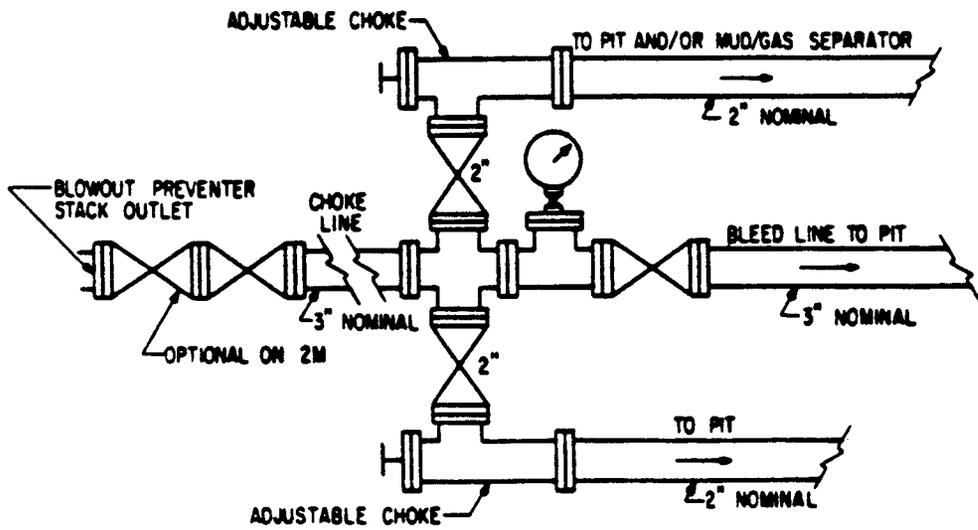
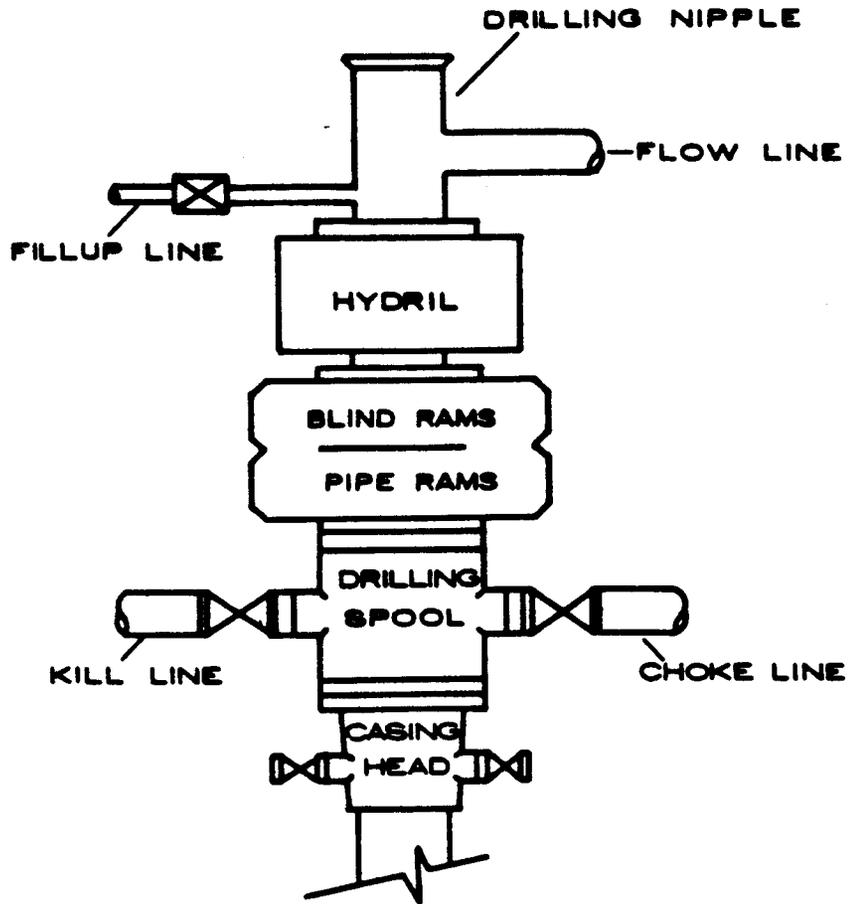
Approval to vent/flare gas during initial well evaluation will be obtained from the District Office. This preliminary approval will not exceed thirty (30) days or fifty (50) MMCF gas. Approval to vent/flare beyond this initial test period will require District Office approval pursuant to the guidelines contained in NTL-4A.

8. Anticipated Starting Dates and Notification of Operations:

B. Notification of Operations: Continued

Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. The following information will be permanently placed on the marker with a plate, cap, or beaded-on with a welding torch: "Fed" or "Ind", as applicable; Company Name, Well Name and Number, Location by Quarter/Quarter, Section, Township, Range, and Federal or Indian Lease Number.

# BOP STACK



COASTAL OIL & GAS CORPORATION  
Lease #U-57656, COGC #1-35-36-21 Federal  
NW $\frac{1}{4}$ SW $\frac{1}{4}$ , Section 35, T36S, R21E  
San Juan County, Utah

Multi-Point Surface Use and Operations Plan

1. Existing Roads: Refer to Maps "A" and "B" (shown in RED)
  - A. The proposed well site is staked and two 200-foot + reference stakes are present.
  - B. To reach the location from the town of Blanding, Utah; proceed south approximately 3.8 miles on Utah State Highway #47 (a paved, 2-lane highway), thence generally west approximately 4.9 miles on Utah State Highway #95 (a paved, 2-lane highway), thence north approximately 3.2 miles on San Juan County Road #268 (crowned & ditched with a gravel surface), thence generally east and north approximately 1.3 miles to the proposed COGC #1-35-36-21 Federal well location.
  - C. Access Roads - refer to Maps "A" and "B".
  - D. Access Roads within a one-mile radius - refer to Map "B".
  - E. A Road Use Permit will be obtained from the San Juan County Road and Bridge Department prior to use of County Road #268. The existing county road will be maintained in the same or better condition as existed prior to the commencement of operations and said maintenance will continue until final abandonment and reclamation of the well location.
  
2. Planned Access Roads: Refer to Map "B" (shown in GREEN)

Approximately 1.3 miles of new road construction will be required for access to the proposed COGC #1-35-36-21 Federal well location.

  - A. Width - 18 foot running surface, flat-bladed for drilling operations. The maximum total disturbed width along the access route will not exceed 50 feet.
  - B. Maximum grade - 10% or less.
  - C. Turnouts - will be constructed as necessary along the proposed access route in order to allow for the safe passage of traffic.
  - D. Drainage design - if production is established, the access road will be upgraded in conformance with Bureau of Land Management Class III standards. Road will be crowned, ditched and water turnouts installed as necessary to provide proper drainage along the access route.

2. Planned Access Roads: Continued

- E. Culverts, cuts and fills - if production is established, the access route will be upgraded in conformance with Bureau of Land Management Class III road construction standards. Culverts of the length and diameter necessary to provide for both the free flow of water under the access road and adequate drainage of the road running surface will be installed according to Class III construction standards. In addition, construction of a low water crossing will be required in/across Brushy Basin Draw in the NW $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 3, T36S, R21E. Cuts and/or fills of approximately ten (10) feet are anticipated along the proposed access route.
- F. Surface materials - none required for drilling operations. If production is established, the access road will be surfaced with gravel to an average minimum depth of six (6) inches. These surfacing materials will be purchased from a local contractor having a permitted source of materials in the area
- G. Gates, cattleguards or fence cuts - none required.
- H. The proposed access road route has been flagged.
- I. Surface disturbance and vehicular travel will be limited to the approved location and access road. Any additional area needed will be approved by the Area Manager in advance.
- J. The access road will be rehabilitated or brought to Resource (Class III) Road Standards within sixty (60) days of dismantling the drilling rig. If this time frame cannot be met, the Area Manager will be notified so that temporary drainage controls can be installed along the access road

3. Location of Existing Wells Within a One-Mile Radius:

- A. Water Wells - none known.
- B. Abandoned wells - NW $\frac{1}{4}$ NE $\frac{1}{4}$ , Section 2, T37S, R21E.
- C. Temporarily abandoned wells - none known.
- D. Disposal wells - none known.
- E. Drilling Wells - none known.
- F. Producing wells - none known.
- G. Shut-in wells - none known.
- H. Injection wells - none known.
- I. Monitoring wells - none known.

4. Location of Existing and/or Proposed Facilities Owned By Coastal Oil & Gas Corporation Within a One-Mile Radius:

A. Existing

1. Tank batteries - none.
2. Production facilities - none.
3. Oil gathering lines - none.
4. Gas gathering lines - none.

B. New Facilities Contemplated

1. All production facilities will be located on the disturbed portion of the well pad and at a minimum of twenty (20) feet from the toe of the backcut or top of the fill slope.
2. Production facilities will require an area approximately 300' X 150'. A diagram showing the proposed production facility layout will be submitted to the Authorized Officer via Sundry Notice (Form 3160-5) for approval prior to commencement of installation operations.
3. Production facilities will be accommodated on the well pad. Construction materials needed for installation of the production facilities will be obtained from the site; any additional materials needed will be purchased from a local supplier as required. A dike will be constructed completely around the production facilities (i.e., production tanks, produced water tanks and/or heater/treater). The dikes will be constructed of compacted subsoil, be impervious, hold 1.5 times the capacity of the tank battery, and be independent of the back cut.
4. All permanent (on-site for six (6) months or longer) above-the-ground structures constructed or installed (including oil well pump jacks) will be painted a flat, non-reflective, earth tone color to match the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six (6) months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded. Colors will be as follows: Munsell standard color "Juniper Green".
5. All loading lines and valves will be placed inside the berm surrounding the tank battery.
6. All site security guidelines identified in 43 CFR 3162.7 will be adhered to.
7. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.

4. Location of Existing and/or Proposed Facilities Owned By Coastal Oil & Gas Corporation Within a One-Mile Radius:

B. New Facilities Contemplated - Continued

8. Gas meter runs for each well will be located within five hundred (500) feet of the well head. The gas flowline will be buried from the well head to the meter along with any other sections occurring on the pad. Meter runs will be housed and/or fenced.
9. 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 (3) months on new meter installations and at least quarterly thereafter. The Area Manager will be provided with a date and time for the initial calibration and all future meter-proving schedules. A copy of the meter calibration reports will be submitted to the Resource Area Office. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.
- C. The production pit will be fenced stock-tight with four (4) strands of barbed wire held in place by side posts and wooden corner "H" braces in order to protect live-stock and wildlife.
- D. During drilling and subsequent operations, all equipment and vehicles will be confined to the access road and any additional areas which may be specified in the approved Application for Permit to Drill.
- E. Reclamation of disturbed areas no longer needed for operations will be accomplished by grading, leveling and seeding as recommended by the Authorized Officer, Bureau of Land Management.

5. Location and Type of Water Supply:

- A. Water for drilling will be obtained from Cottonwood Wash at a point located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 3, T37S, R21E. An Application for Permit to Appropriate Surface Water will be filed with the State of Utah, and approval obtained, prior to diversion of any water from Cottonwood Wash. Should this source prove inadequate, water will be obtained from the municipal water supply for the town of Blanding, Utah.

5. Location and Type of Water Supply: Continued

- B. Water will be trucked over existing roads from the point of diversion to the proposed COGC #1-35-36-21 Federal well location. No new construction will be required on/along the proposed water haul route. Access across off-lease Federal lands which will be crossed on/along the proposed water haul route will be obtained via a separate right-of-way application to be filed with the San Juan Resource Area Office, Bureau of Land Management.
- C. No water well will be drilled on this location.

6. Source of Construction Materials:

- A. No construction materials will be needed for well pad construction; surface and subsurface soils will be sufficient. Refer to Item #2F regarding construction materials which may be required on the access road.
- B. No construction materials will be taken from Federal and/or Indian lands without prior approval from the Area Manager, San Juan Resource Area Office, Bureau of Land Management under 43 CFR 3610.2-3.
- C. If production is established, any construction materials needed for surfacing the access road and installation of production facilities will be purchased from a local supplier having an approved (permitted) source of materials in the area.
- D. No new access roads for construction materials will be required.

7. Methods of Handling Waste Materials:

- A. Cuttings - the cuttings will be deposited in the reserve pit.
- B. Drilling fluids - including salts and chemicals will be contained in the reserve pit and allowed to evaporate. The reserve pit will be designed to prevent the collection of surface runoff and will be constructed with a minimum of one-half (1/2) the total depth below the original ground level at the lowest point in the pit.
- C. Produced fluids - hydrocarbons produced during completion operations will be placed in test tanks on the location. Water produced during completion operations will be put into the reserve pit as per NTL-2B. Any spills of potentially noxious substances will be cleaned up and immediately removed to an approved disposal site.

7. Methods of Handling Waste Materials: Continued

- C. Produced waste water will be confined to the reserve pit for a period not to exceed ninety (90) days after initial production. During this ninety (90) day period, Coastal Oil & Gas Corporation will file an application for approval of a permanent disposal method and location (including the required water analysis) with the Authorized Officer pursuant to Onshore Oil & Gas Order #3 (NTL-2B).
- D. Sewage - portable, self-contained chemical toilets will be provided for human waste disposal. The toilet holding tanks will be pumped as necessary, and the contents disposed of in an approved sewage disposal facility.
- E. Garbage and other waste material - garbage and flammable wastes will be disposed of in a portable trash cage. The trash cage will be completely enclosed on four (4) sides and 3/4 of the top with small mesh wire in order to prevent trash from being carried or blown off-site. Upon completion of operations (or as deemed necessary), the contents thereof will be disposed of in nearest sanitary landfill (Blanding, Utah). If burning is required on location, permit will be obtained from the Utah State Fire Warden.
- F. Immediately after removal of the drilling rig, all debris and waste materials not contained in the trash cage will be cleaned up and removed from the well location. No adverse materials will be left on the location. Any open pits will be fenced during drilling operation and the fencing maintained until such time as the pits are backfilled.

8. Ancillary Facilities:

None required.

9. Wellsite Layout:

- A. Figure #1 shows the drill site layout as staked. Cross sections have been drafted to visualize the planned cuts and fills across the location. All available (minimum of six (6) inches) topsoil will be stripped from the location (including areas of cut, fill, and/or subsoil storage) and stockpiled for future reclamation of the well site. Refer to Figure #1 for the location of the topsoil stockpiles.

9. Wellsite Layout: Continued

- B. Figure #1 is a diagram showing the rig layout. No permanent living facilities are planned. There will be approximately three (3) trailers on location: one each for the mud logger, geologist and toolpusher.
- C. A diagram showing the proposed production facility layout will be submitted to the Authorized Officer via Sundry Notice (Form 3160-5) for approval prior to the commencement of installation operations (Refer to Item #4B for additional information in this regard).
- D. If porous subsoil materials (i.e., gravel, scoria, sand, faulted rock structures, etc.) are encountered during the course of reserve pit construction, an impervious (bentonite) liner will be installed in order to prevent drilling water loss through seepage.

10. Plans for Reclamation of the Surface:

- A. Backfilling, leveling and re-contouring are planned as soon as the reserve pit has dried. All waste materials will be disposed of immediately upon termination of drilling and completion activities. If production is established, the unneeded areas of the location will be reclaimed as soon as the reserve pit has dried. For production, the fill slopes will be reduced from a 1.5:1 slope to a 3:1 slope and the cut slopes will be reduced from a 1.5:1 slope to a 3:1 slope by pushing the fill material back into the cut.
- B. Upon completion of backfilling, leveling and re-contouring, the stockpiled topsoil will be evenly spread over the reclaimed area(s) and all disturbed surfaces (including the access road and well pad areas) will be scarified and left with a rough surface. Rippers will be spaced approximately eighteen inches apart and the soil surface will be scarified to an approximate depth of one (1) foot.
- C. All disturbed surfaces (including the access road and well pad areas) will be reseeded using the seed mixture recommended by the Authorized Officer, Bureau of Land Management as follows:

<u>Species</u>	<u>lbs. PLS/Acre</u>
Western Wheatgrass	4
Indian Ricegrass	2
Regular Bitterbrush	2
Curly Grass	1

10. Plans for Reclamation of the Surface:

- C. All disturbed surfaces (including the access road and well pad areas) will be reseeded using the seed mixture recommended by the Authorized Officer, Bureau of Land Management as follows: Continued

<u>Species</u>	<u>lbs. PLS/Acre</u>
Cliffrose	1
Four-Wing Saltbush	1

Seed will be broadcast or drilled on the contour to an approximate depth of one-half (1/2) inch. If broadcast, a harrow or some other implement will be dragged over the seeded area to assure seed coverage. Fall seeding will be completed after October 1 and prior to ground frost.

- D. Three sides of the reserve pit will be fenced during drilling operations and the fourth side will be fenced immediately upon rig removal. Said fencing will consist of four (4) strands of barbed wire held in place with side posts and wooden corner "H" braces in order to protect livestock and wildlife (refer to Item #4C).
- E. If any oil is on the pits and is not immediately removed after operations cease, the pit containing the oil or other adverse substance(s) will be flagged overhead or covered with wire mesh.
- F. Reclamation operations will begin after the drilling rig has been removed. Removal of oil or other adverse substances will begin immediately or the affected area(s) will be flagged and/or fenced. Other clean-up will be done as needed. Re-seeding activities are considered best in the Fall, 1990, unless requested otherwise.

11. Surface Ownership:

The well site and proposed access road are situated on surface owned by the United States of America and administered by:

Area Manager  
San Juan Resource Area Office  
Bureau of Land Management  
P.O. Box 7  
Monticello, Utah 84535-0007  
Phone: (801) 587-2141

12. Other Information:

- A. General Description of the Project Area: The project area is situated in the "Canyonlands" area of south-eastern Utah within an extensive area of extremely broken upland topography south of the Manti- La Sal National Forest, east of both the Natural Bridges National Monument and the Grand Gulch Primitive and northwest of the Navajo Indian Reservation. More specifically, the well location is situated on a west-facing slope directly above (east of) Brushy Basin Wash, northeast of Cottonwood Draw, and north of Black Mesa. This area is characterized by severely undulating upland areas which are dissected by numerous, dendritically-patterned ephemeral drainages. This area exhibits a sparse to moderate vegetation density which is typical of semi-arid areas at moderate elevations (5500-6000'). Flora consists of western wheatgrass, curly grass, Indian ricegrass, cliffrose, various species of cactus, sagebrush, bitterbrush, deciduous trees and shrubs along the larger drainages, junipers, and pinyon pine at the higher elevations. Fauna consists of mule deer, mountain lions, coyotes, rabbits, raptors, and various smaller vertebrates and invertebrates. There are no known threatened or endangered species that will be affected by this proposed drilling operation.
- B. Surface Use Activities: The primary surface use is for grazing.
- C. Proximity of Water, Occupied Dwellings, Archaeological, Historical or Cultural Sites:
1. The closest source of semi-permanent water is Cottonwood Draw, located approximately 1.5 miles to the west.
  2. The closest occupied dwellings are located approximately 6.0 miles to the east in the outlying areas surrounding the town of Blanding.
  3. There are no known archaeological, historical or cultural sites, which are potentially eligible for inclusion in the National Register of Historic Places, that will be disturbed by this drilling operation. Cultural resources in direct proximity to any proposed surface disturbing activity will be clearly marked and subsequently cordoned-off prior to commencement of construction activities

12. Other Information:

C. Proximity of Water, Occupied Dwellings, Archaeological, Historical or Cultural Sites: Continued

If in connection with construction operations, Coastal Oil & Gas Corporation, their contractors, subcontractors, or the employees of any of them discover, encounter, or become aware of any objects or sites of cultural value on the affected area, such as historical or prehistorical ruins, graves or grave markers, fossils, or artifacts, Coastal Oil & Gas Corporation will immediately suspend all operations in the vicinity of the cultural value and notify the Bureau of Land Management Authorized Officer of the findings. Operations may resume at the discovery site upon receipt of written instructions and authorization by the Area Manager, Green River Resource Area Office, Bureau of Land Management, Rock Springs, Wyoming 82902.

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

Representative

Heitzman Drill-Site Services\*  
Dale Heitzman and/or  
Robert M. Anderson  
P.O. Drawer 3579  
Casper, Wyoming 82602  
Phone: (307) 266-4840

Coastal Oil & Gas Corp.  
Charles F. Mowry, Drilling  
Superintendent  
P.O. Box 749  
Denver, CO 80201-0749  
Phone: (303) 572-1121

\* Contact for any additional information which may be required for approval of this Application for Permit to Drill.

Certification

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil & Gas Orders, the approved plan of operations, and any applicable Notice to Lessees. Coastal Oil & Gas Corporation will be fully responsible for the actions of their subcontractors. A copy of these conditions will be furnished to the field representative(s) to ensure compliance.

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

Certification - Continued

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

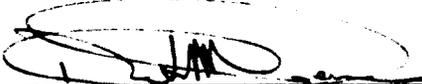
"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval of all changes of plans and other operations in accordance with 43 CFR 3164.

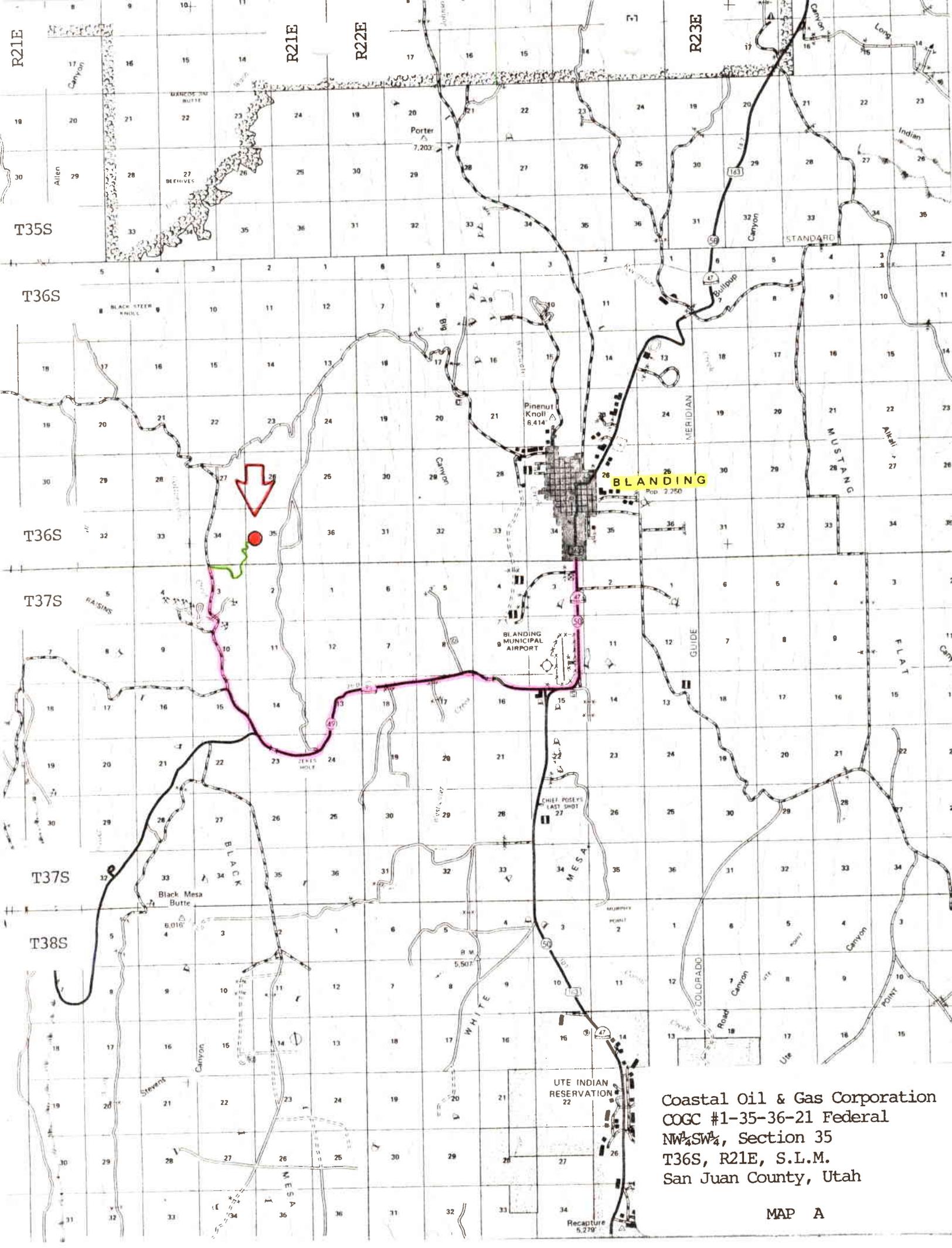
The dirt contractor will be provided with a copy of the Surface Use Plan from the approved Application for Permit to Drill.

This drilling 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.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Coastal Oil & Gas Corporation, its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

5 May 1989  
Date

  
Robert M. Anderson/Authorized Agent



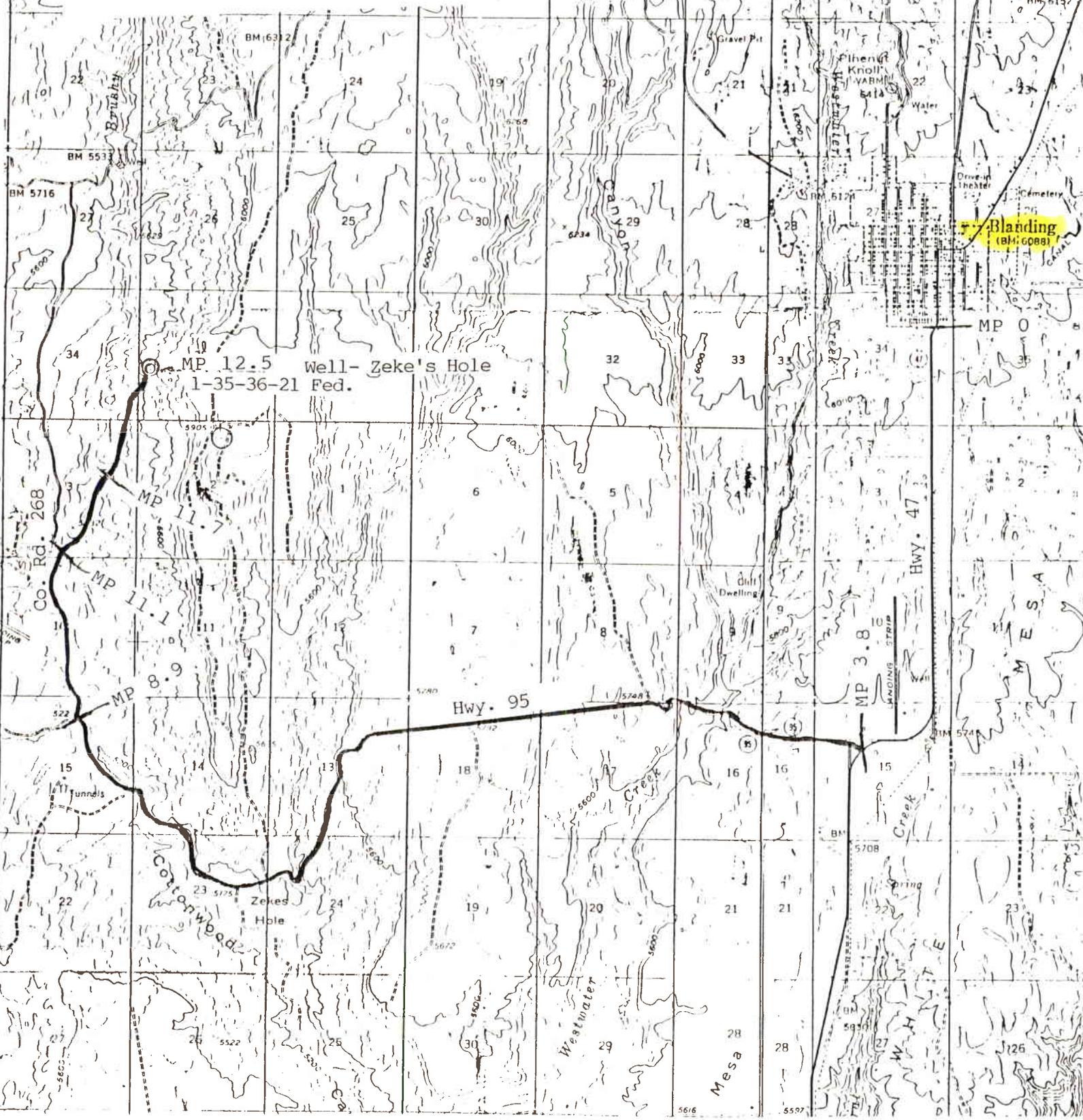
Coastal Oil & Gas Corporation  
 COGC #1-35-36-21 Federal  
 NW $\frac{1}{4}$ SW $\frac{1}{4}$ , Section 35  
 T36S, R21E, S.L.M.  
 San Juan County, Utah



Coastal Oil  
April 18, 1989

Location for Zeke's Hole  
1-35-36-21 Federal

Proposed Access Road Location Map



Tabulation of Proposed Access Road

Milepost	Description
0	Blanding south City Limit, State Hwy. 47
3.8	Intersection State Highways 47 and 95
8.9	Intersection State Hwy. 95 and Co. Rd. 268
11.1	Leave Co. Rd. 268
11.7	End existing road - being seismograph trail
12.5	Well-Zeke's Hole 1-35-36-21 Federal

NOTE: Location of Access Road is only Proposed as of April 18, 1989. Exact location of access is to be determined and surveyed on date of on-site location inspection, scheduled for April 26.

Well is located in the NW $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 35, T.36N., R.21E., S.L.M., San Juan County, Utah.

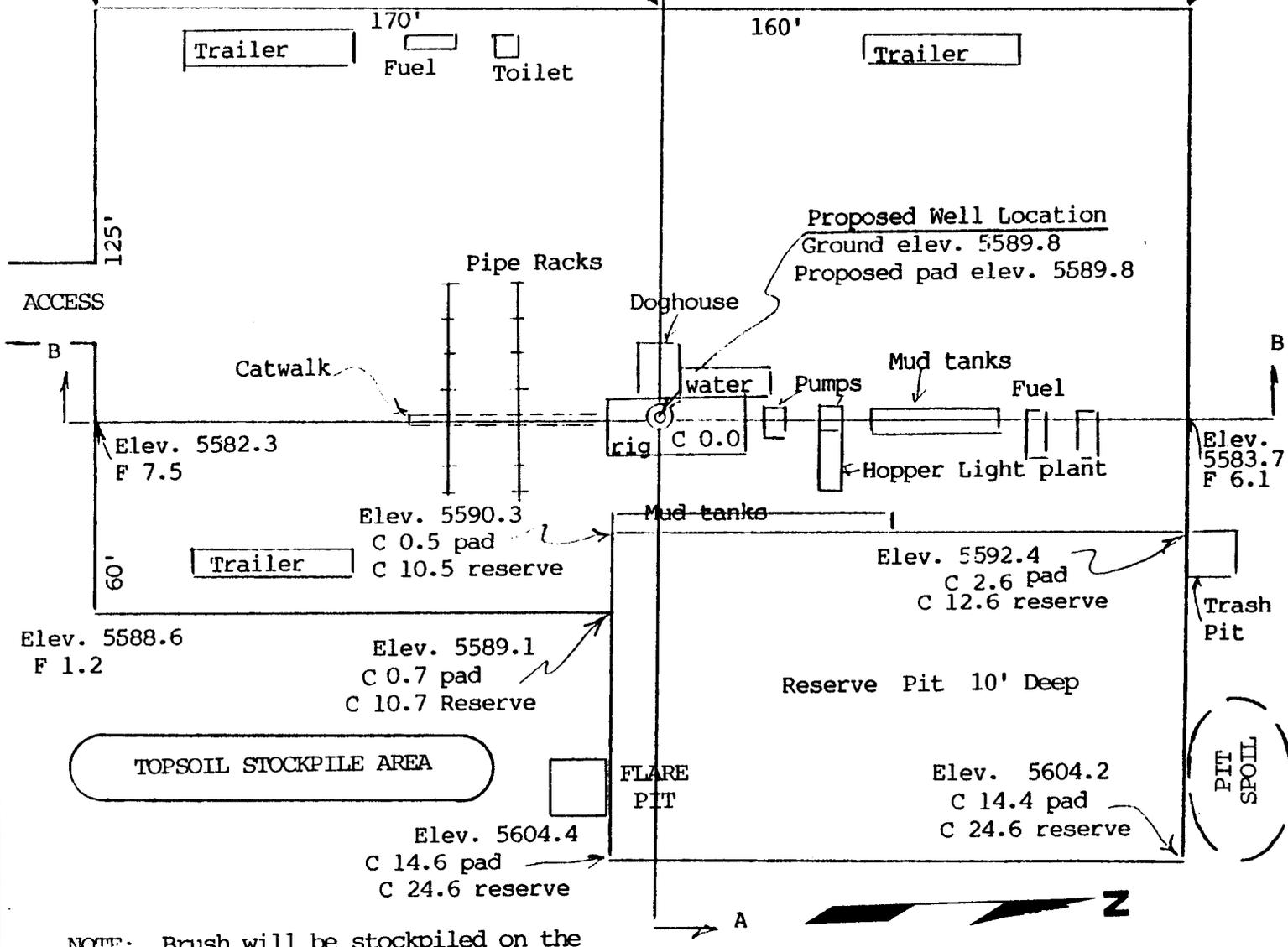
Coastal Oil  
 Location for Zeke's Hole 1-35-36-21 Federal

Apr 18, 1989

Elev. 5568.5  
 F 21.3

Elev. 5571.7  
 F 18.1

Elev. 5567.9  
 F 21.9



NOTE: Brush will be stockpiled on the west side of the location in such a manner as to avoid archaeological sites identified in that area.

Horizontal scale: 1" = 50'  
 Vertical scale: 1" = 20'

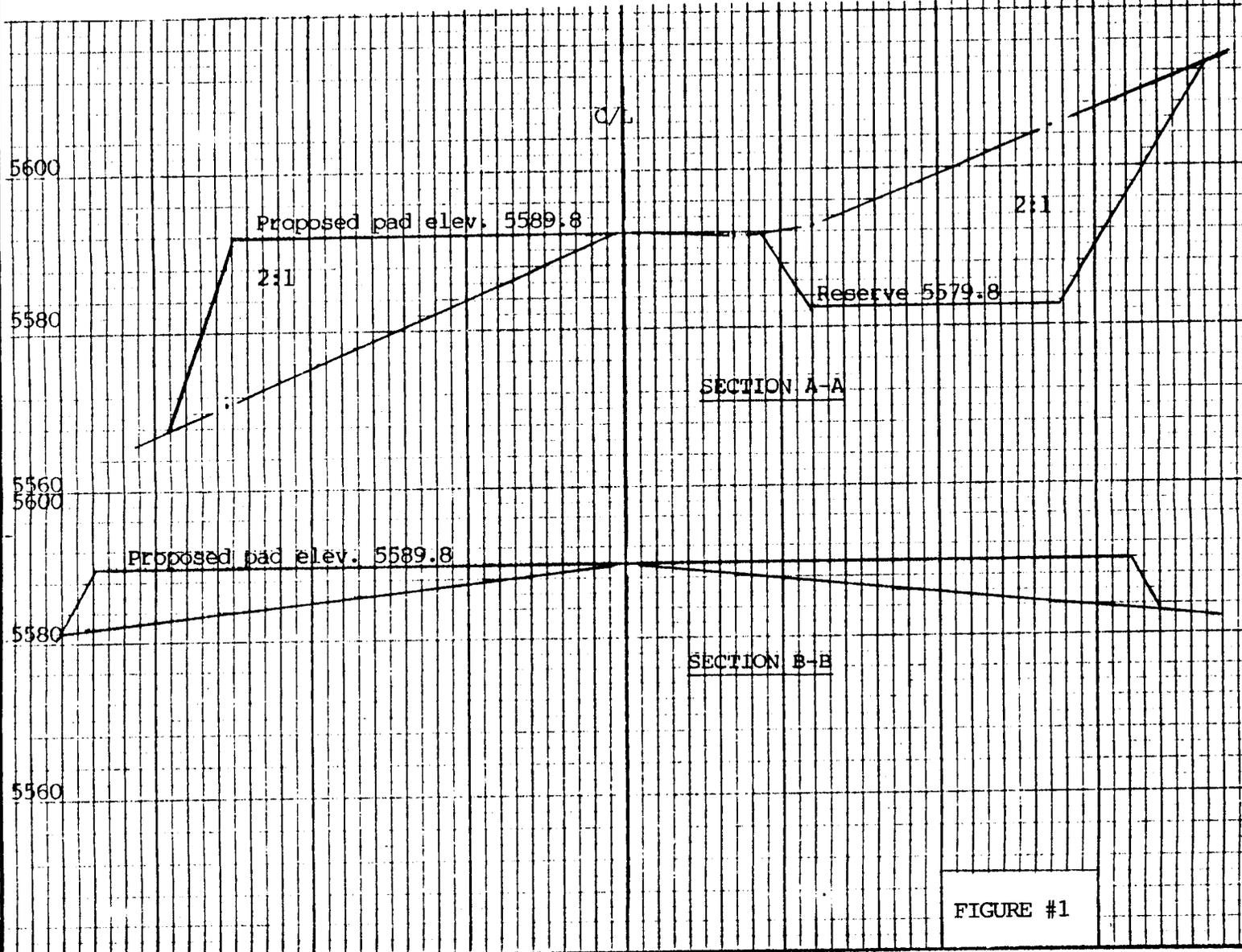
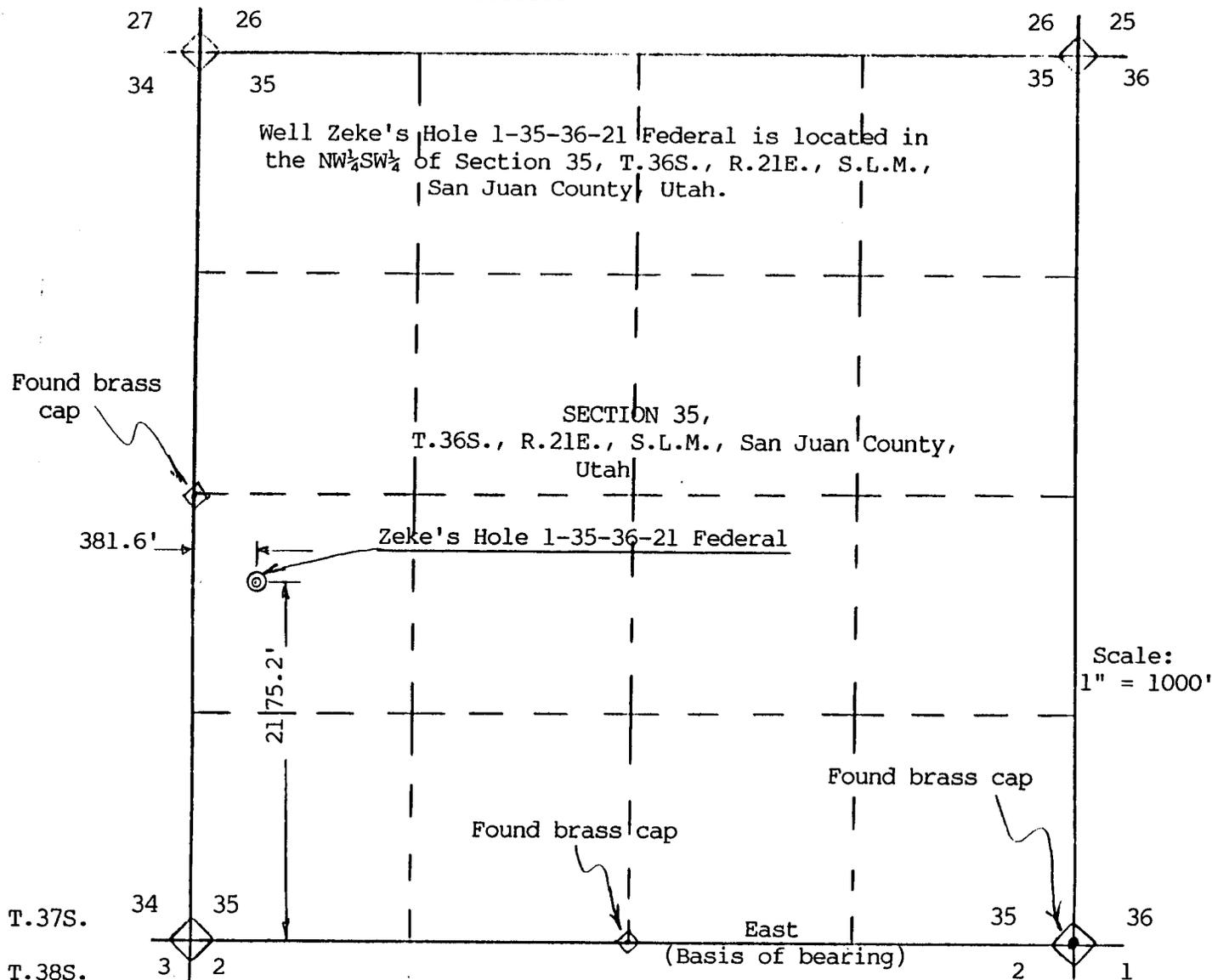
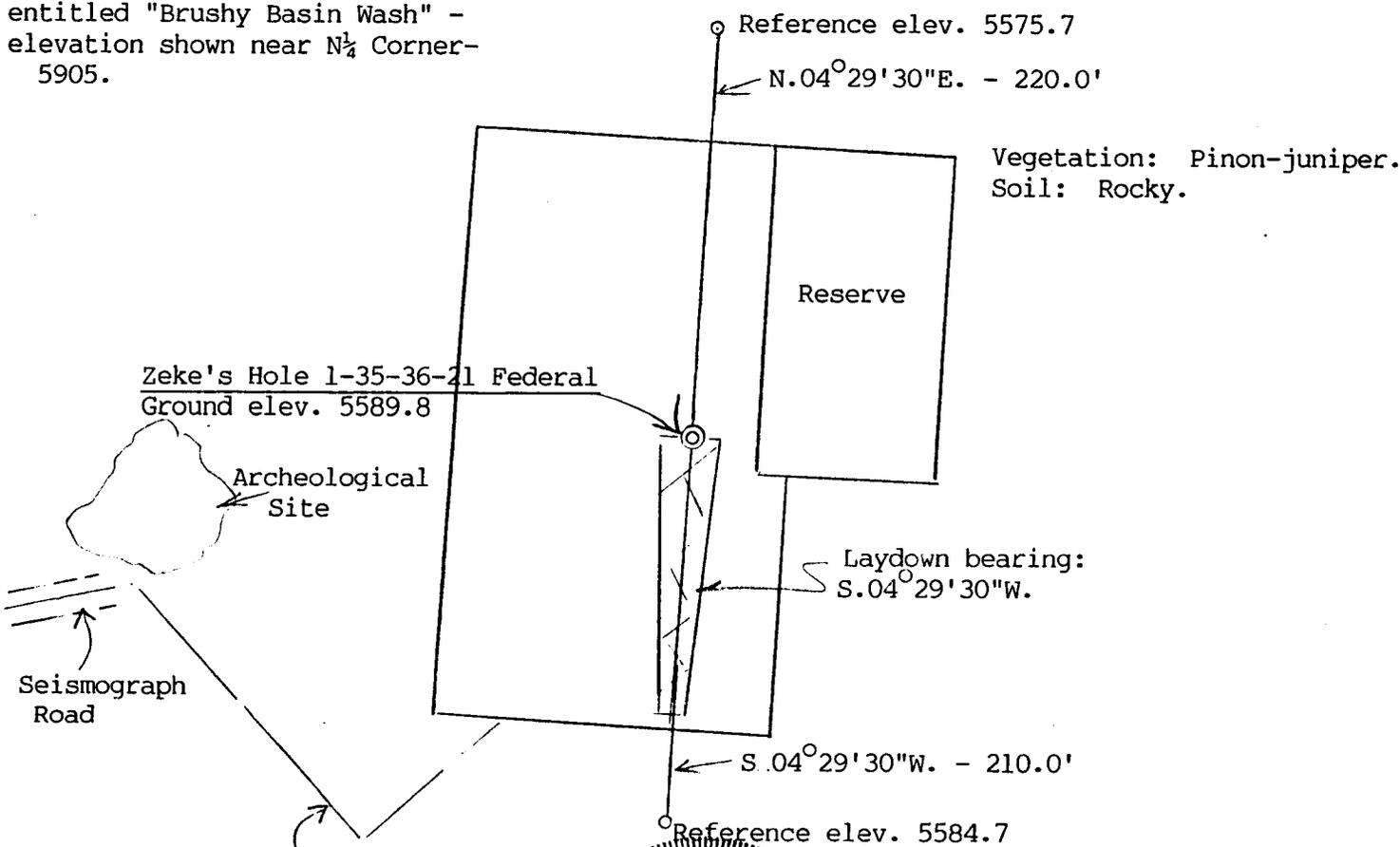


FIGURE #1



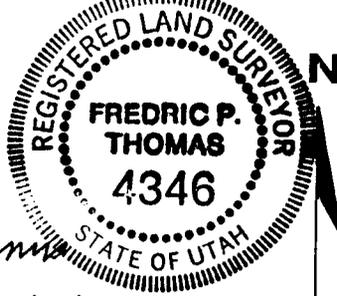
Elevations based on USGLO map entitled "Brushy Basin Wash" - elevation shown near N $\frac{1}{4}$  Corner-5905.



KNOW ALL MEN BY THESE PRESENTS:  
 THAT I, FREDRIC P. THOMAS do hereby certify that I prepared this plat from an actual and accurate survey of the land and that the same is true and correct to the best of my knowledge and belief.

*Fredric P. Thomas*  
 FREDRIC P THOMAS  
 Reg. L.S. and P.E.  
 Colo. Reg. No. 6728  
 Utah Reg. No. 4346

Bearing by  
 Solar observation



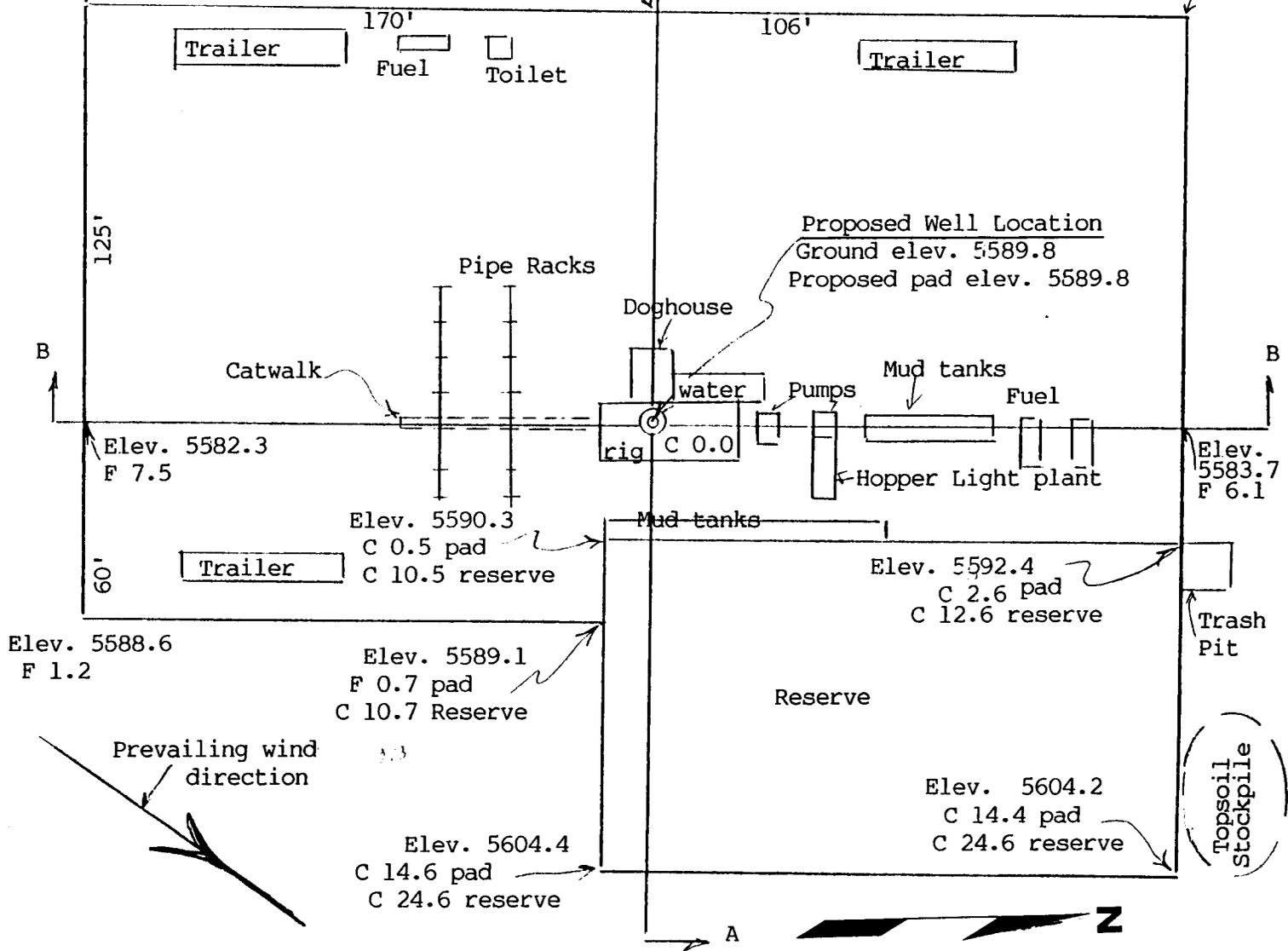
**THOMAS** Engineering Inc.

215 N. Linden  
 Cortez, Colorado  
 565-4496

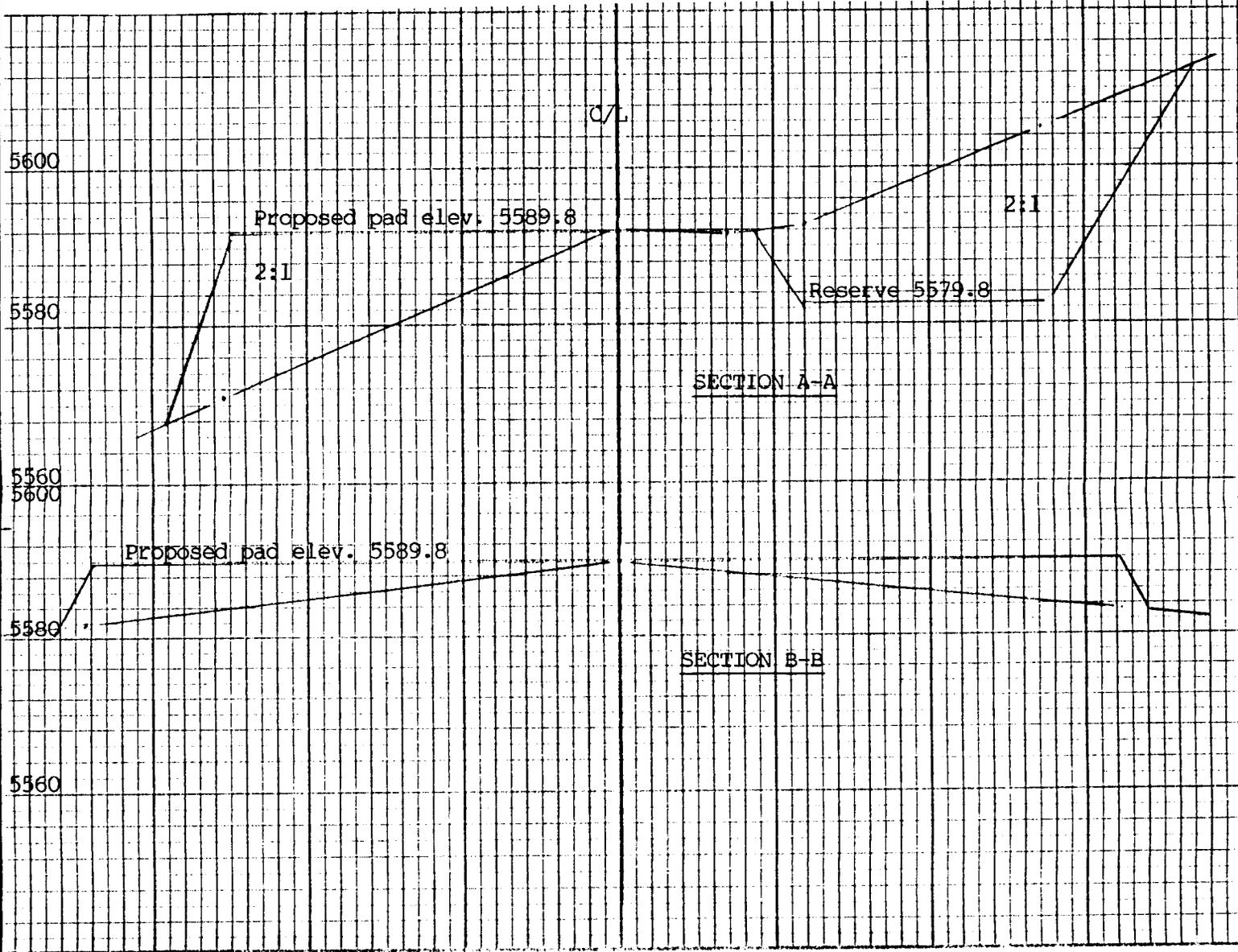
Elev. 5568.5  
F 21.3

Elev. 5571.7  
F 18.1

Elev. 5567.9  
F 21.9



Horizontal scale: 1" = 50'  
Vertical scale: 1" = 20'



**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

12

**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 BORE       MULTIPLE BORE

2. NAME OF OPERATOR  
 Coastal Oil & Gas Corporation

3. ADDRESS OF OPERATOR  
 P. O. Box 749, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with BLM Form 1000-1)  
 At surface: 2175.2' FSL, 381.6' FWL (NW $\frac{1}{4}$ SW $\frac{1}{4}$ ) 35-36-21E  
 At proposed prod. zone: Same

**RECEIVED**  
MAY 10 1989

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 Approximately 6 Miles West/Southwest of Bluff, CO, GAS & MINING

16. NO. OF ACRES IN LEASE  
 2360

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
 N/A

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 5589.8' GR

5. LEASE DESIGNATION AND SERIAL NO.  
 U-57656

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 Not Applicable

7. UNIT AGREEMENT NAME  
 Not Applicable

8. FARM OR LEASE NAME  
 COGC

9. WELL NO.  
 1-35-36-21 Federal

10. FIELD AND POOL, OR WILDCAT  
 Wildcat

11. SEC., T. R. M., OR BLE AND SURVEY OR AREA  
 Section 35, T36S, R21E

12. COUNTY OR PARISH  
 San Juan

13. STATE  
 Utah

16. NO. OF ACRES IN LEASE  
 2360

19. PROPOSED DEPTH  
 6100' Desert Creek

22. APPROX. DATE WORK WILL START\*  
 June 1, 1989

**23. PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
22 "	16 " CMP	Conductor	0- 60'	30 sx Redi-Mix, Circ. to Surf.*
12-1/4"	9-5/8" K-55	36.0#	0-2000'	1500 sx Circ. to Surface **
8-3/4"	5-1/2" K-55	15.5#	2000-6100'	600 sx Class "G"

\* Conductor Optional.  
 \*\* Cement volumes may change due to hole size. Calculate from Caliper log.

EIGHT-POINT RESOURCE PROTECTION PLAN ATTACHED.

I hereby certify that Coastal Oil & Gas Corporation is authorized by the proper Lease Interest Owners to conduct lease operations associated with this Application for Permit to Drill the COGC #1-35-36-21 Federal, Federal Lease # U-57656. Bond coverage will be assumed by Coastal Oil & Gas Corporation under the Operating Rider attached to their nationwide bond.

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.

34. SIGNED Randy L. Bartley TITLE Manager, Drilling & Prod. DATE May 8, 1989  
 (This space for Federal or State office use)

PERMIT NO. 43-037-31465 APPROVAL DATE \_\_\_\_\_  
 APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING

APPROVED BY \_\_\_\_\_ DATE 6-7-89  
 CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_ BY Shirley R. Baya  
 WELL SPACING: R615-8-3

\*See Instructions On Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK  
 DRILL  DEEPEN  PLUG BACK

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

2. NAME OF OPERATOR  
 Coastal Oil & Gas Corporation

3. ADDRESS OF OPERATOR  
 P. O. Box 749, Denver, Colorado 80209

4. LOCATION OF WELL (Report location clearly and in accordance with the State requirements.)  
 At surface: 2175.2' FSL, 381.6' FWL (NW $\frac{1}{4}$ SW $\frac{1}{4}$ ) 35-36S-21E  
 At proposed prod. bore: Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 Approximately 6 Miles West/Southwest of Blanding, Utah

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)  
 381.6'

16. NO. OF ACRES IN LEASE  
 2360

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.  
 N/A

19. PROPOSED DEPTH  
 6100'

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 5589.8' GR

22. APPROX. DATE WORK WILL START\*  
 June 1, 1989

RECEIVED  
MAY 10 1989

5. LEASE DESIGNATION AND SERIAL NO.  
 U-57656

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 Not Applicable

7. UNIT AGREEMENT NAME  
 Not Applicable

8. FARM OR LEASE NAME  
 COGC

9. WELL NO.  
 1-35-36-21 Federal

10. FIELD AND POOL, OR WILDCAT  
 Wildcat

11. SEC., T., R. M., OR BLK AND SURVEY OR AREA  
 Section 35, T36S, R21E

12. COUNTY OR PARISH  
 San Juan

13. STATE  
 Utah

PROPOSED CASING AND CEMENTING PROGRAM

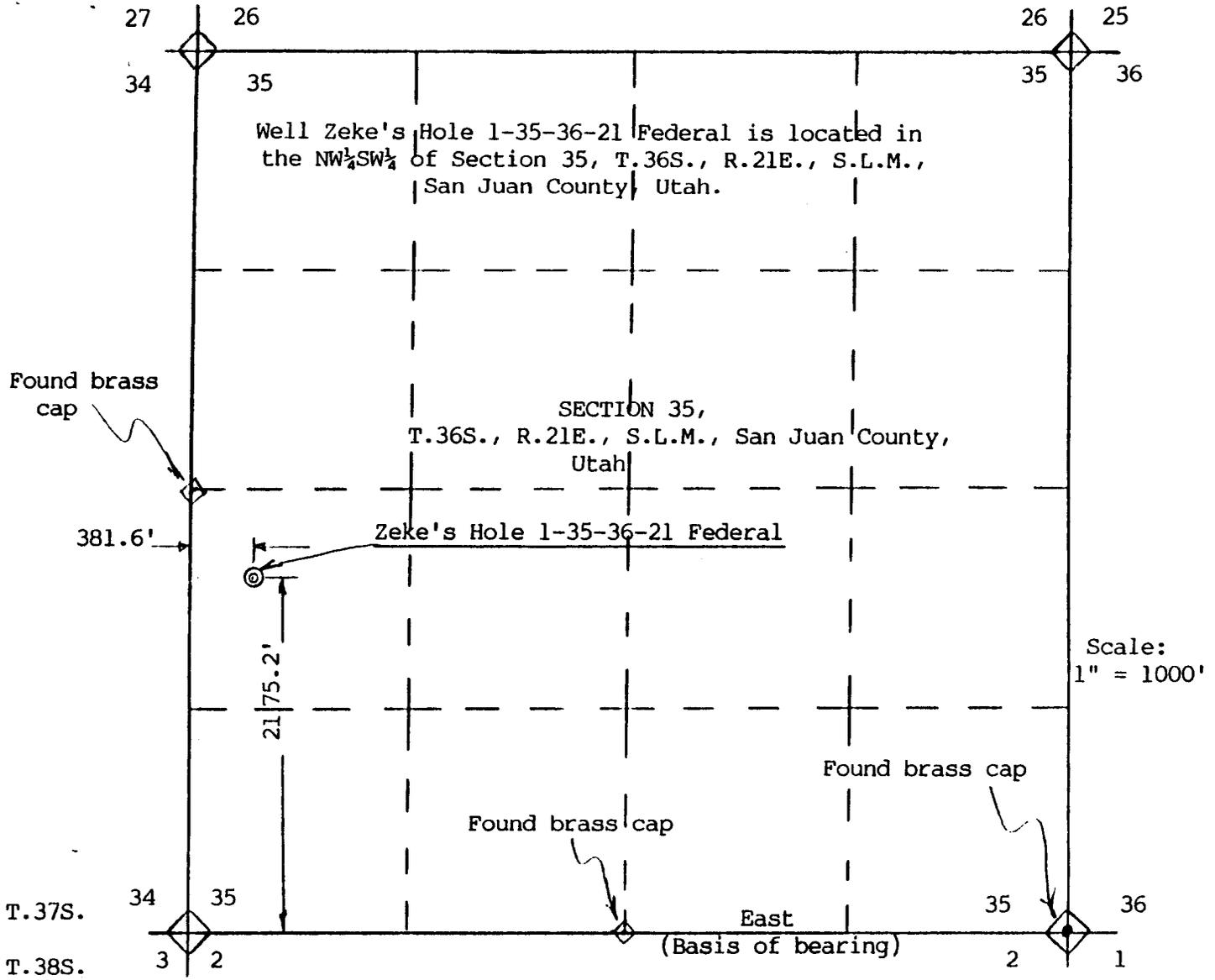
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
22 "	16 " CMP	Conductor	0- 60'	30 sx Redi-Mix, Circ. to Surf.?
12-1/4"	9-5/8" K-55	36.0#	0-2000'	1500 sx Circ. to Surface **
8-3/4"	5-1/2" K-55	15.5#	2000-6100'	600 sx Class "G"

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.

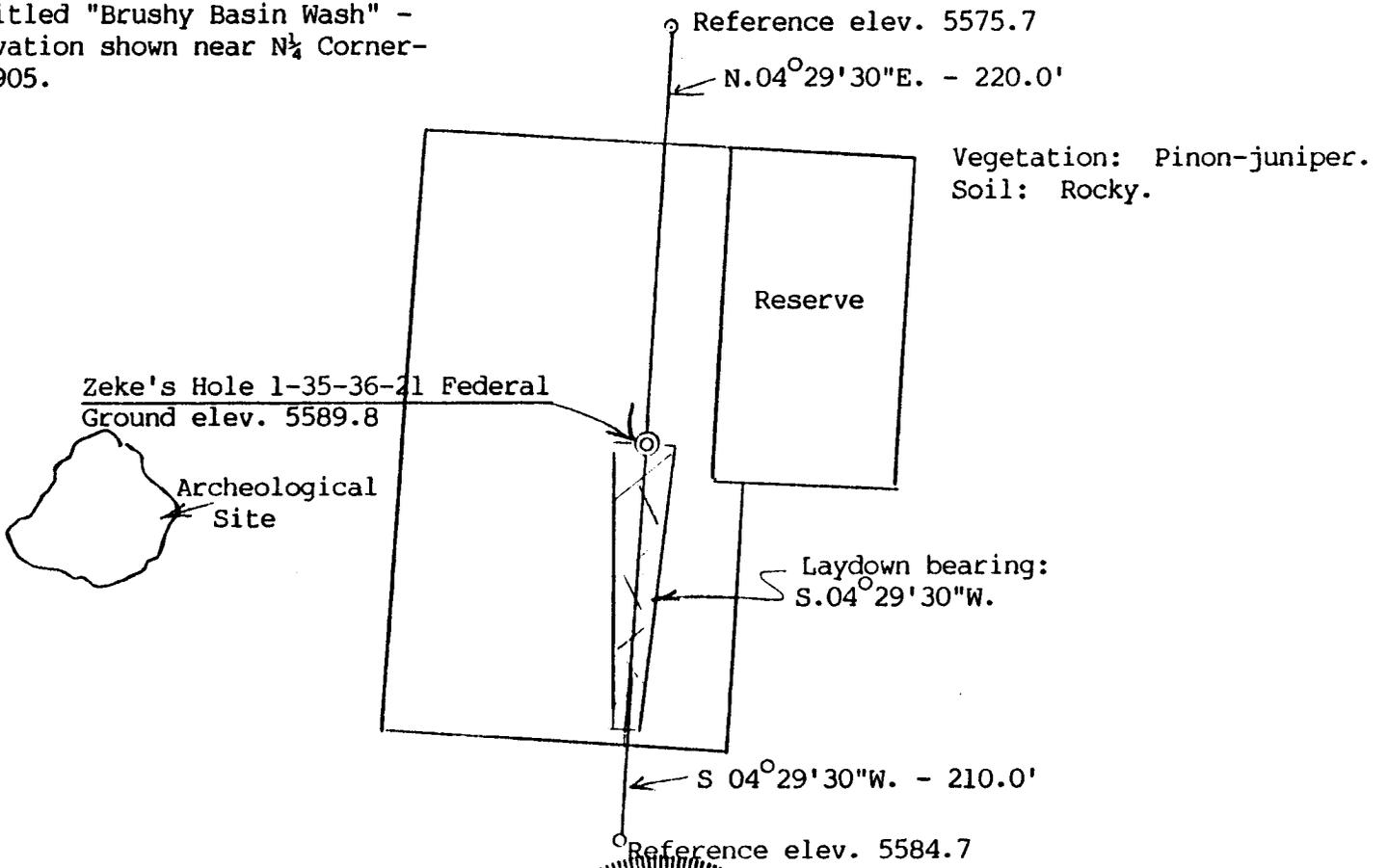
34. SIGNED Randy C. Bartley TITLE Manager, Drilling & Prod. DATE May 8, 1989  
 (This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL D \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_  
 CONDITIONS OF APPROVAL, IF ANY:

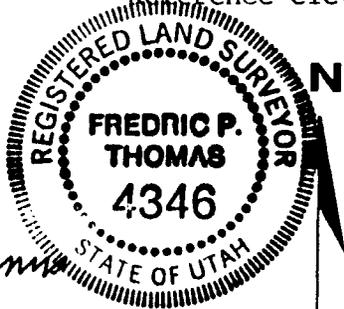
\*See Instructions On Reverse



Elevations based on USGLO map entitled "Brushy Basin Wash" - elevation shown near N 1/4 Corner-5905.



KNOW ALL MEN BY THESE PRESENTS:  
 THAT I, FREDRIC P. THOMAS do hereby certify that I prepared this plat from an actual and accurate survey of the land and that the same is true and correct to the best of my knowledge and belief.



*Fredric P. Thomas*  
 FREDRIC P. THOMAS  
 Reg. L.S. and P.E.  
 Colo. Reg. No. 6720  
 Utah Reg. No. 4346

Bearing by  
 Solar  
 observation

**THOMAS** Engineering Inc.

215 N. Linden  
 Cortez, Colorado  
 565-4496

OPERATOR Coastal Oil & Gas Corp. DATE 5-12-89

WELL NAME COBP 1-35-36-21

SEC NWSW 35 T 36S R 21E COUNTY San Juan

43-037-31465  
API NUMBER

Federal  
TYPE OF LEASE

CHECK OFF:

PLAT

<sup>NATIONWIDE</sup> BOND

NEAREST WELL

LEASE

FIELD

POTASH OR OIL SHALE

PROCESSING COMMENTS:

No other well within 920'  
Need Water Permit  
Exception Location Req. on APD (Lease Plat & 460' radius)  
RDC 5-23-89 Process 10-6-89

APPROVAL LETTER:

SPACING:  R615-2-3 N/A  R615-3-2  
UNIT  
 N/A  R615-3-3  
CAUSE NO. & DATE

STIPULATIONS:

1. Water Permit (received 5-15-89 TL63903 / 09-11-37 Able Trucking)

TEMPORARY  
DIVISION OF  
OIL, GAS & MINING

RECEIVED  
FILING FOR WATER IN THE  
STATE OF UTAH  
MAY 3 1989  
MAY 08 1989  
APPLICATION TO APPROPRIATE WATER RIGHTS  
SALT LAKE  
WATER RIGHTS PRICE

Rec. by VP  
Fee Rec. 30.00  
Receipt # 24187  
Microfilmed \_\_\_\_\_  
Roll # \_\_\_\_\_

For the purpose of acquiring the right to use a portion of the unappropriated water of the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Title 73, Chapter 3 of the Utah Code Annotated (1953, as amended).

\* WATER RIGHT NO. 09 - 1637 \* APPLICATION NO. A T63903

1. \*PRIORITY OF RIGHT: May 3, 1989 \* FILING DATE: May 3, 1989  
*for: Coastal Oil & Gas Corp.*

2. OWNER INFORMATION  
Name(s): Aable Trucking c/o Bill Hass \* Interest: 100 %  
Address: 256 Walker  
City: Moab State: Utah Zip Code: 84532  
Is the land owned by the applicant? Yes \_\_\_\_\_ No X - BLM  
(If "No", please explain in EXPLANATORY section.)

3. QUANTITY OF WATER: \_\_\_\_\_ cfs and/or 3.0 ac-ft

4. SOURCE: Cottonwood Wash \* DRAINAGE: \_\_\_\_\_  
which is tributary to \_\_\_\_\_  
which is tributary to \_\_\_\_\_  
POINT(S) OF DIVERSION: \_\_\_\_\_ COUNTY: San Juan  
N. 140 ft. & E. 2360 ft. from SW Cor. Sec. 3, T37S, R21E, S1B&M.

Description of Diverting Works: Portable pump and water trucks  
\* COMMON DESCRIPTION: 6 miles West of Blanding Black Mesa Butte Quad

5. POINT(S) OF REDIVERSION  
The water will be rediverted from \_\_\_\_\_ at a point:  
\_\_\_\_\_  
\_\_\_\_\_  
Description of Rediverting Works: \_\_\_\_\_

6. POINT(S) OF RETURN  
The amount of water consumed will be \_\_\_\_\_ cfs or 3.0 ac-ft  
The amount of water returned will be \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft  
The water will be returned to the natural stream/source at a point(s): \_\_\_\_\_

7. STORAGE  
Reservoir Name: \_\_\_\_\_ Storage Period: from \_\_\_\_\_ to \_\_\_\_\_  
Capacity: \_\_\_\_\_ ac-ft. Inundated Area: \_\_\_\_\_ acres  
Height of dam: \_\_\_\_\_ feet  
Legal description of inundated area by 40 acre tract(s): \_\_\_\_\_

\* These items are to be completed by the Division of Water Rights

TEMPORARY

Appropriate

8. List any other water rig which will supplement this application \_\_\_\_\_

9. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_\_\_ to \_\_\_\_\_
Stockwatering: From \_\_\_\_\_ to \_\_\_\_\_
Domestic: From \_\_\_\_\_ to \_\_\_\_\_
Municipal: From \_\_\_\_\_ to \_\_\_\_\_
Mining: From \_\_\_\_\_ to \_\_\_\_\_
Power: From \_\_\_\_\_ to \_\_\_\_\_
Other: Exploration Drilling From May 5, 1989 to May 4, 1990

10. PURPOSE AND EXTENT OF USE

Irrigation: \_\_\_\_\_ acres. Sole supply of \_\_\_\_\_ acres.
Stockwatering (number and kind): \_\_\_\_\_
Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons
Municipal (name): \_\_\_\_\_
Mining: \_\_\_\_\_ Mining District in the \_\_\_\_\_ Mine
Ores mined: \_\_\_\_\_
Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_
Other (describe): Oil and Gas Drilling

11. PLACE OF USE

Legal description of place of use by 40 acre tract(s): Well #1-35-36-21 Federal at Zeacs Hole:
S. 900 ft. & W. 600 ft. from NE Cor. Sec. 35, T36S, R21E, SLB&M (NE 1/4 NE 1/4).

12. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. (Use additional pages of same size if necessary):
This well is being drilled by Coastal Oil and Gas.
If additional water is needed, Blanding City will lease to Able Trucking.

\*\*\*\*\*

The applicant(s) hereby acknowledges that he/she/they are a citizen(s) of the United States of America or intends to become such a citizen(s). The quantity of water sought to be appropriated is limited to that which can be beneficially used for the purposes herein described. The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

Bill P. [Signature]
Signature of Applicant(s)

TEMPORARY

STATE ENGINEER'S ENDORSEMENT

WATER RIGHT NUMBER: 09 - 1637

APPLICATION NO. T63903

1. May 3, 1989            Application received by MP.
  2. May 4, 1989            Application designated for APPROVAL by MP and KLJ.
  3. Comments:
- 
- 

Conditions:

This application is hereby APPROVED, dated May 12, 1989, subject to prior rights and this application will expire on May 12, 1990.

  
Robert L. Morgan, P.E.  
State Engineer

# SOUTHEASTERN UTAH ASSOCIATION OF LOCAL GOVERNMENTS

P. O. Drawer A1 • Price, Utah 84501 • Telephone 637-5444

WILLIAM D. HOWELL  
Executive Director

**RECEIVED**  
MAY 25 1989

## AREAWIDE CLEARINGHOUSE A-95 REVIEW

NOI \_\_\_ Preapp \_\_\_ App \_\_\_ State Plan \_\_\_ State Action X Subdivision \_\_\_ (ASP # 5-428-5)

Other (indicate) \_\_\_\_\_ SAI Number UT890424-010

### Applicant (Address, Phone Number):

Oil, Gas and Mining  
355 west North temple  
3 Triad center, Suite 350  
Salt Lake City, Utah 84180-1203

### Federal Funds:

Requested: \_\_\_\_\_

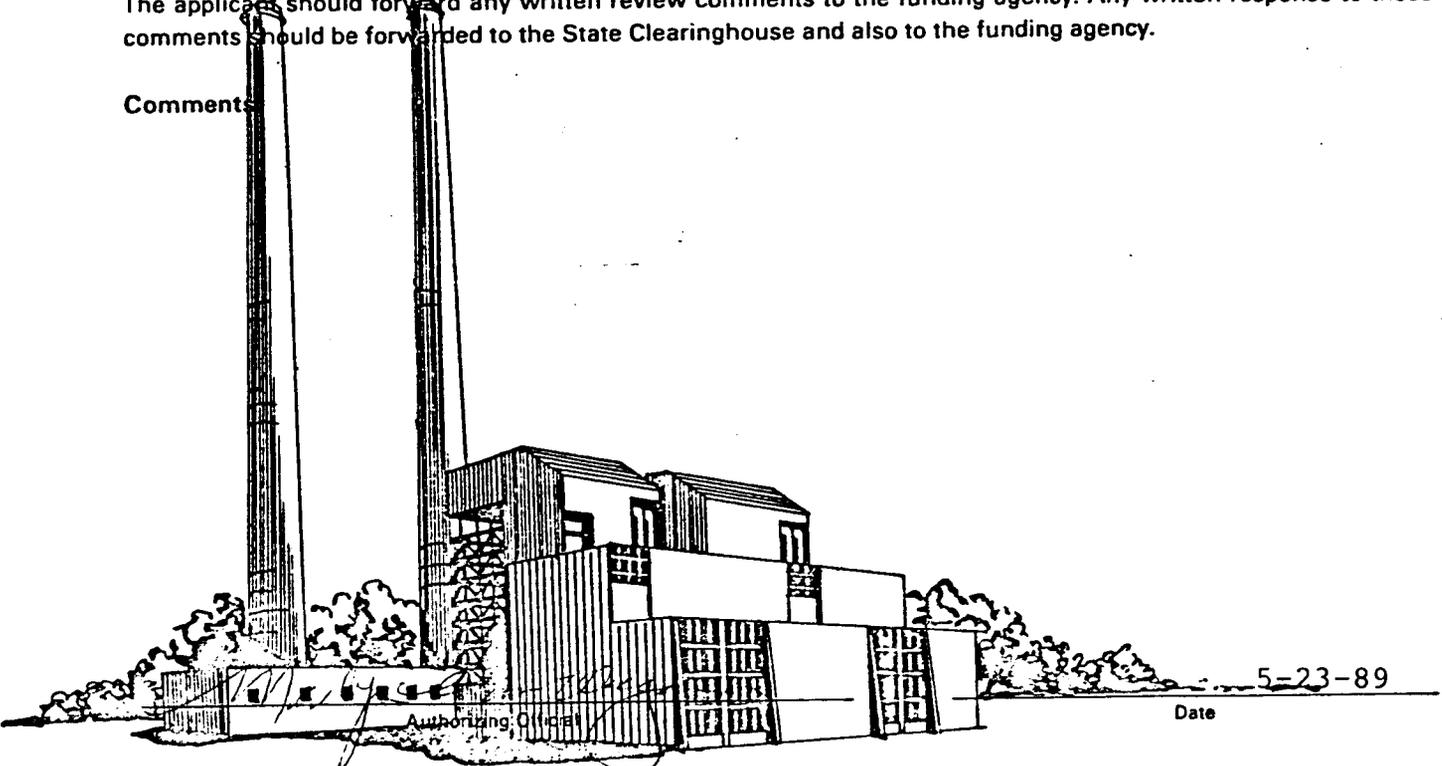
### Title:

APPLICATION FOR PERMIT TO DRILL

- No comment
- See comments below
- No action taken because of insufficient information
- Please send your formal application to us for review. Your attendance is requested

The applicant should forward any written review comments to the funding agency. Any written response to those comments should be forwarded to the State Clearinghouse and also to the funding agency.

### Comments:

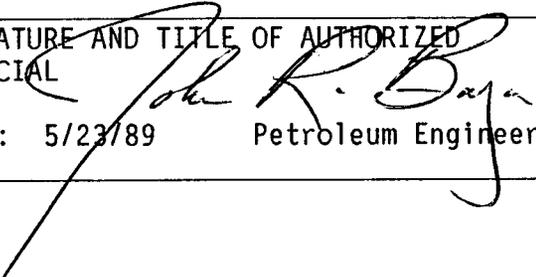


Authorizing Official

Date 5-23-89

STATE ACTIONS

Mail to:  
RDCC Coordinator  
116 State Capitol  
Salt Lake City, Utah 84114

- 
1. ADMINISTERING STATE AGENCY  
OIL, GAS AND MINING  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, UT 84180-1203
2. STATE APPLICATION IDENTIFIER NUMBER:  
(assigned by State Clearinghouse)
- 
3. APPROXIMATE DATE PROJECT WILL START:  
Upon approval
- 
4. AREAWIDE CLEARING HOUSE(S) RECEIVING STATE ACTIONS:  
(to be sent out by agency in block 1)  
Southeastern Utah Association of Local Governments
- 
5. TYPE OF ACTION:  Lease  Permit  License  Land Aquisition  
 Land Sale  Land Exchange  Other\_\_\_\_\_
- 
6. TITLE OF PROPOSED ACTION:  
Application for Permit to Drill
- 
7. DESCRIPTION:  
Coastal Oil and Gas Corporation proposes to drill a wildcat well, the Federal #1-35-36-21, on federal lease number U-57656 in San Juan County, Utah. This action is being presented to RDCC for consideration of resource issues affecting state interests. The U.S. Bureau of Land Management is the primary administrative agency in this case and must issue approval to drill jointly with DOGM before operations can commence.
- 
8. LAND AFFECTED (site location map required) (indicate county)  
NW/4, SW/4, Section 35, Township 36 South, Range 21 East, San Juan County, Utah
- 
9. HAS THE LOCAL GOVERNMENT(S) BEEN CONTACTED?  
Unknown
- 
10. POSSIBLE SIGNIFICANT IMPACTS LIKELY TO OCCUR:  
Degree of impact is based on the discovery of oil or gas in commercial quantities.
- 
11. NAME AND PHONE NUMBER OF DISTRICT REPRESENTATIVE FROM YOUR AGENCY NEAR PROJECT SITE, IF APPLICABLE:  
Glen Goodwin, Monticello, 587-2561
- 
12. FOR FURTHER INFORMATION, CONTACT: 13. SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL  
John Baza  
PHONE: 538-5340
-   
DATE: 5/23/89  
Petroleum Engineer
-

R21E

COGC #1-35-36-21 Federal

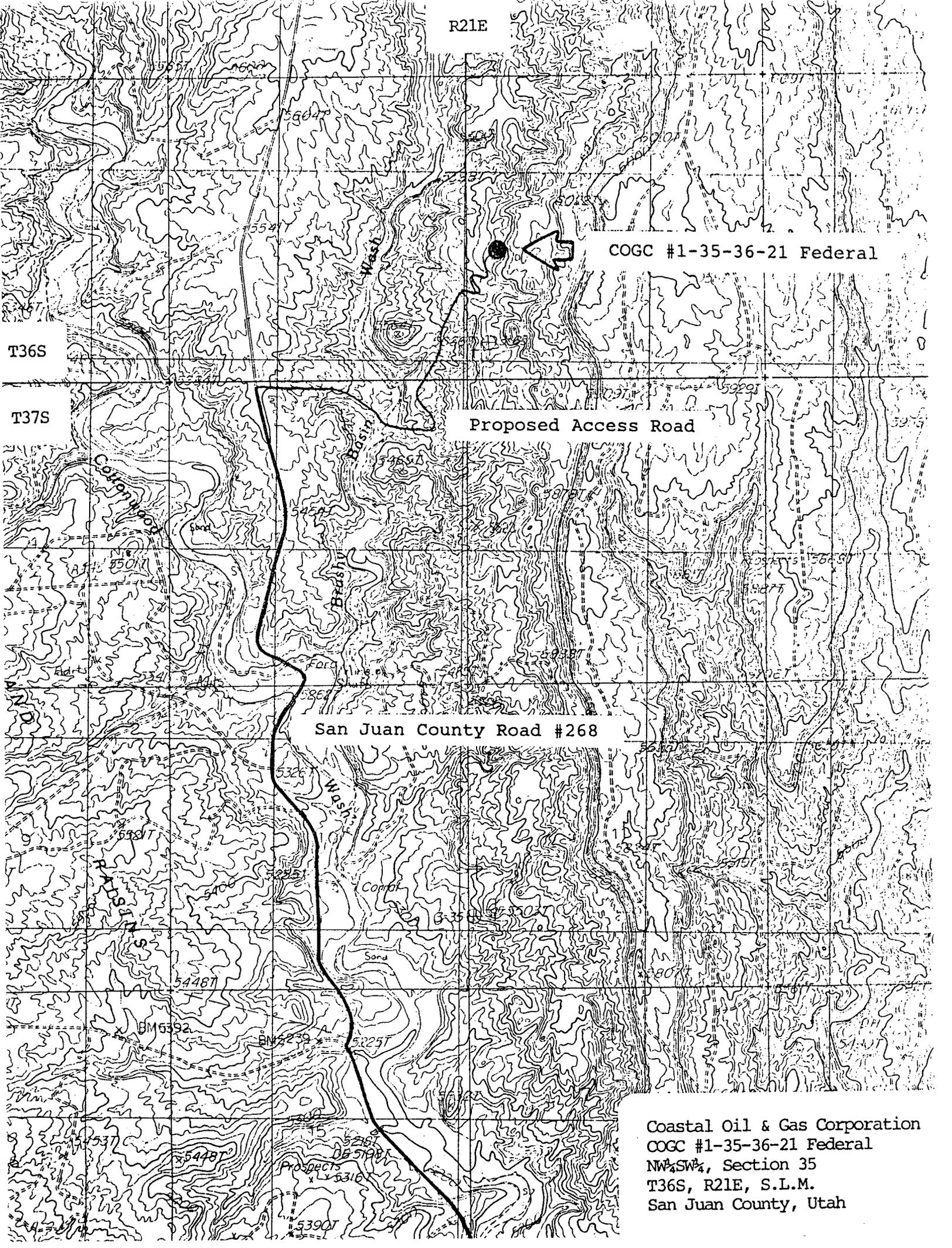
T36S

Proposed Access Road

T37S

San Juan County Road #268

Coastal Oil & Gas Corporation  
COGC #1-35-36-21 Federal  
NW $\frac{1}{4}$ SW $\frac{1}{4}$ , Section 35  
T36S, R21E, S.L.M.  
San Juan County, Utah





# State of Utah

## DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter

Governor

Dee C. Hansen

Executive Director

Dianne R. Nielson, Ph.D.

Division Director

355 West North Temple

3 Triad Center, Suite 350

Salt Lake City, Utah 84180-1203

801-538-5340

June 7, 1989

Coastal Oil & Gas Corporation  
P. O. Box 749  
Denver, Colorado 80201-0749

Gentlemen:

Re: COGC 1-35-36-21 - NW SW Sec. 35, T. 36S, R. 21E - San Juan County, Utah  
2175' FSL, 382' FWL

Approval to drill the referenced well is hereby granted in accordance with Rule R615-3-3, Oil and Gas Conservation General Rules.

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

1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of an Entity Action Form within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form 7.
4. Prompt notification if it is necessary to plug and abandon the well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or Jim Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Rule R615-3-20, Gas Flaring or Venting, Oil and Gas Conservation General Rules.
6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 538-6121.

Page 2  
Coastal Oil & Gas Corporation  
COGC 1-35-36-21  
June 7, 1989

7. 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 43-037-31465.

Sincerely,



R. J. Firth  
Associate Director, Oil & Gas

lcr  
Enclosures  
cc: Bureau of Land Management  
D. R. Nielson  
J. L. Thompson  
WE14/1-2

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

1a. TYPE OF WORK  
 DRILL                       DEEPEN                       PLUG BACK

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

2. NAME OF OPERATOR  
 Coastal Oil & Gas Corporation

3. ADDRESS OF OPERATOR  
 P. O. Box 749, Denver, Colorado 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 At surface  
 2175.2' FSL, 381.6' FWL (NW $\frac{1}{4}$ SW $\frac{1}{4}$ ) 35-36S-21E  
 At proposed prod. hole  
 Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE  
 Approximately 6 Miles West/Southwest of Blanding, Utah

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)  
 381.6'

16. NO. OF ACRES IN LEASE  
 2360

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.  
 N/A

19. PROPOSED DEPTH  
 6100'

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, ET, GR, etc.)  
 5589.8' GR

22. APPROX. DATE WORK WILL START\*  
 June 1, 1989

23. PROPOSED CASING AND CEMENTING PROGRAM

5. LEASE DESIGNATION AND SERIAL NO.  
 U-57656

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 Not Applicable

7. UNIT AGREEMENT NAME  
 Not Applicable

8. FARM OR LEASE NAME  
 COGC

9. WELL NO.  
 1-35-36-21 Federal

10. FIELD AND POOL, OR WILDCAT  
 Wildcat

11. SEC., T., R. N., OR BLK. AND SURVEY OR AREA  
 Section 35, T36S, R21E

12. COUNTY OR PARISH  
 San Juan

13. STATE  
 Utah

**RECEIVED**  
 JUL 03 1989

DIVISION OF  
 OIL, GAS & MINING

I hereby certify that Coastal Oil & Gas Corporation is authorized by the proper Lease Interest Owners to conduct lease operations associated with this Application for Permit to Drill the COGC #1-35-36-21 Federal, Federal Lease # U-57656. Bond coverage will be assumed by Coastal Oil & Gas Corporation under the Operating Rider attached to their nationwide bond.

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 Randy L. Bartley TITLE Manager, Drilling & Prod. DATE May 8, 1989

PERMIT NO. 43-037-31465 APPROVAL DATE \_\_\_\_\_

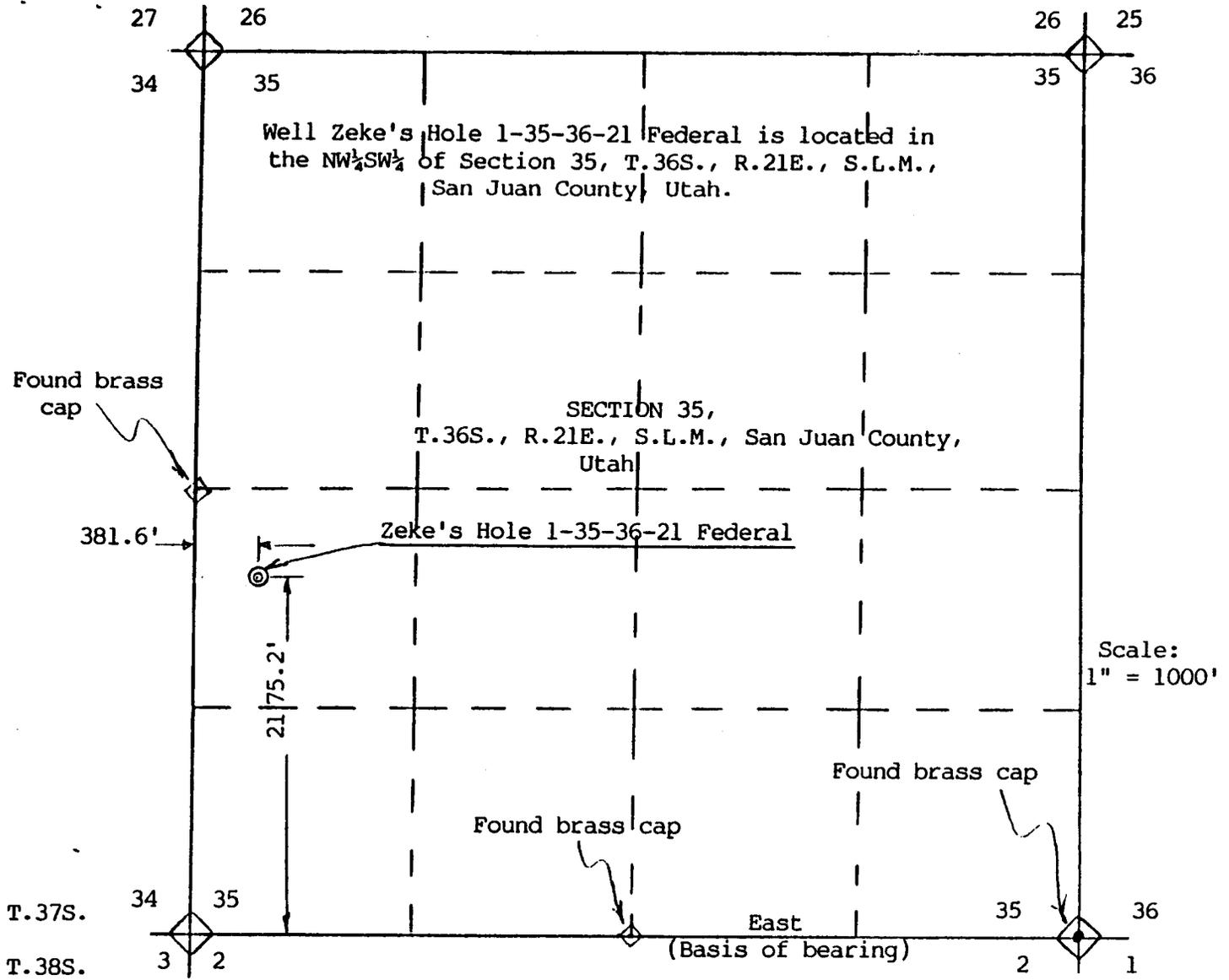
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:  
 DATED 1/1/88 CONDITIONAL APPROVAL ATTACHED

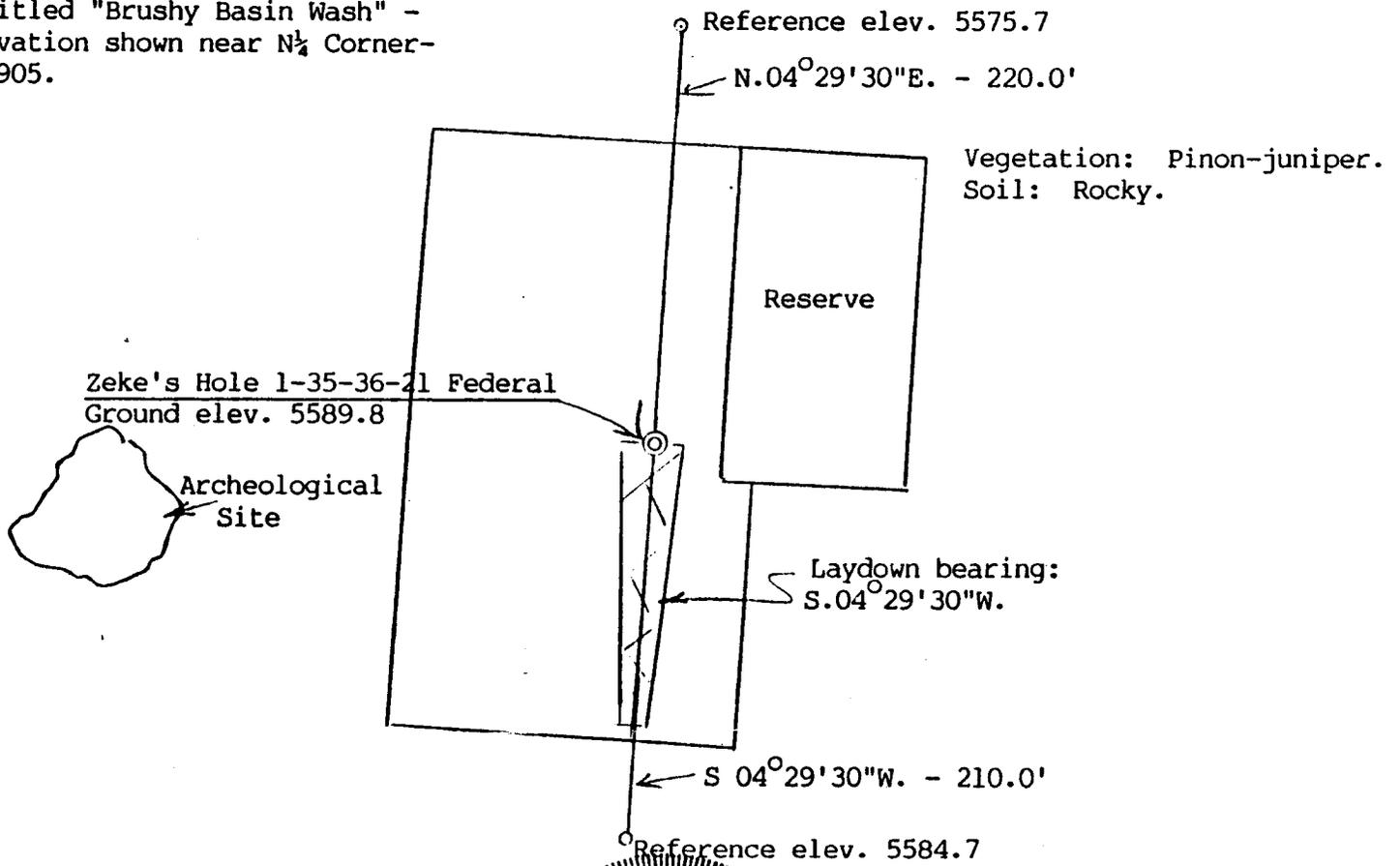
GAS IS SUBJECT TO NTL 4-A  
 FLARING OR VENTING OF  
 GAS SHALL BE AS

\*See Instructions On Reverse Side

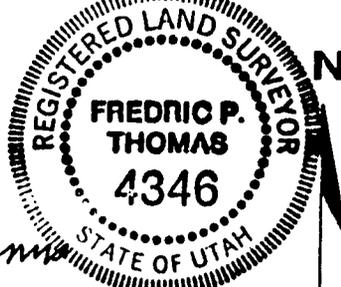
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



Elevations based on USGLO map entitled "Brushy Basin Wash" - elevation shown near N $\frac{1}{4}$  Corner-5905.



KNOW ALL MEN BY THESE PRESENTS: THAT I, FREDRIC P. THOMAS do hereby certify that I prepared this plat from an actual and accurate survey of the land and that the same is true and correct to the best of my knowledge and belief.



THOMAS Engineering Inc.

215 N. Linden  
 Cortez, Colorado  
 565-4496

*Fredric P. Thomas*  
 FREDRIC P THOMAS  
 Reg. L.S. and P.E.  
 Colo. Reg. No. 6728  
 Bearing by Solar observation

Utah Reg. No. 4346

Coastal Oil & Gas Corporation  
Well No. COGC 1-35-36-21 Federal  
NWSW Sec. 35, T. 36 S., R. 21 E.  
San Juan County, Utah  
Lease U-57656

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.

Be advised that Coastal Oil & Gas Corporation is considered to be the operator of the above well, and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by BLM Bond No. C00018. (Principal - Coastal Oil & Gas Corp.) as provided for in 43 CFR 3104.3.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

B. Additional Requirements According To Onshore Oil and Gas Order No. 2

- 2000 psi BOP & BOPE:

- If repair or replacement of the BOPE is required after testing, this work shall be performed prior to drilling out the casing shoe.
- When the BOPE cannot function to secure the hole, the hole shall be secured using cement, retrievable packer or bridge plug packer, bridge plug or other acceptable approved methods to assure safe well conditions.

- Choke Manifold Equipment:

All valves (except chokes) in the kill line, choke manifold and choke line shall be a type that does not restrict the flow (full opening) and that allows a straight through flow.

Pressure gauges in the well control system shall be a type designed for drilling fluid service.

- 2000 psi system - Accumulator Equipment:

Power for the closing unit pumps shall be available to the unit at all times so that the pumps shall automatically start when the closing unit manifold pressure has decreased to a pre-set level.

Each BOP closing unit shall be equipped with sufficient number and sizes of pumps so that, with the accumulator system isolated from service, the pumps shall be capable of opening the hydraulically-operated gate valve (if so equipped), plus closing the annular preventer on the smallest size drill pipe to be used within 2 minutes, and obtain a minimum of 200 psi. above specified accumulator precharge pressure.

A manual locking device (i.e., hand wheels) or automatic locking devices shall be installed on all systems of 2M or greater. A valve shall be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve shall be maintained in the open position and shall be closed only when the power source for the accumulator system is inoperative.

- BOP Testing:

Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.

When testing the kill line valve(s), the check valve shall be held open or the ball removed.

Pipe and blind rams shall be activated each trip, however, this function need not be performed more than once a day.

A BOPE pit level drill shall be conducted weekly for each drilling crew.

Pressure tests shall apply to all related well control equipment.

- Casing and Cementing:

All waiting on cement times shall be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

All casing, except the conductor casing, shall be new or reconditioned and tested used casing that meets or exceeds API standards for new casing.

The surface casing shall be cemented back to surface either during the primary cement job or by remedial cementing.

All of the above described tests shall be recorded in the drilling log.

All indications of usable water shall be reported to the authorized officer prior to running the next string of casing or before plugging orders are requested, whichever occurs first.

Surface casing shall have centralizers on at least the bottom three joints depending on the severity of hole inclination.

Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a suitable preflush fluid, inner string cement method., etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

All casing strings below the conductor shall be pressure tested to 0.22 psi/ft. of casing string length or 1500 psi, whichever is greater, but not to exceed 70 percent of the minimum internal yield. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.

- Mud Program Requirements:

The characteristics, use and testing of drilling mud and the implementation of related drilling procedures shall be designed to prevent the loss of well control. Sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring well control.

- Record slow pump speed on daily drilling report after mudding up.
- Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume.
- A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.
- All flare systems shall be designed to gather and burn all gas. The flare line(s) discharge shall be located not less than 100 feet from the well head, having straight lines unless turns are targeted with running tees, and shall be positioned downwind of the prevailing wind direction and shall be anchored. The flare system shall have an effective method for ignition. Where non-combustible gas is likely or expected to be vented, the system shall be provided supplemental fuel for ignition and to maintain a continuous flare.

- Drill Stem Testing Requirements:

Initial opening of drill stem test tools shall be restricted to daylight hours unless specific approval to start during other hours is obtained from the authorized officer. However, DSTs may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e., lighting which is adequate for visibility and vapor-proof for safe operations). Packers can be released, but tripping shall not begin before daylight, unless prior approval is obtained from the authorized officer. Closed chamber DSTs may be accomplished day or night.

- A DST that flows to the surface with evidence of hydrocarbons shall be either reversed out of the testing string under controlled surface conditions, or displaced into the formation prior to pulling the test tool. This would involve providing some means for reverse circulation.
- Separation equipment required for the anticipated recovery shall be properly installed before a test starts.
- All engines within 100 feet of the wellbore that are required to "run" during the test shall have spark arresters or water cooled exhausts.

- Special Drilling Operations:

In addition to the equipment already specified elsewhere in Onshore Order No. 2 , the following equipment shall be in place and operational during air/gas drilling:

- Properly lubricated and maintained rotating head;
- Spark arresters on engines or water cooled exhaust;
- Blooie line discharge 100 feet from well bore and securely anchored;
- Straight run on blooie line unless otherwise approved;
- Deduster equipment;
- All cuttings and circulating medium shall be directed into a reserve or blooie pit;
- Float valve above bit;
- Automatic igniter or continuous pilot light on the blooie line;
- Compressors located in the opposite direction from the blooie line a minimum of 100 feet from the well bore;
- Mud circulating equipment, water, and mud materials (does not have to be premixed) sufficient to maintain the capacity of the hole and circulating tanks or pits.

NOTIFICATIONS

Notify Mike Wade of the San Juan Resource Area, at  
 (801) 587-2141 for the following:

2 days prior to commencement of dirt work, construction or  
 reclamation;

1 day prior to spudding;

1 day prior to running and cementing surface casing.

Notify the Moab District Office, Branch of Fluid Minerals at (801) 259-6111  
 for the following:

No well abandonment operations will be commenced without the prior  
 approval of the District Manager. In the case of newly drilled dry  
 holes, and in emergency situations, verbal approval can be obtained  
 by calling the following individuals, in the order listed.

Dale Manchester, Petroleum Engineer      Office Phone: (801) 259-6111

Home Phone: (801) 259-6239

Eric Jones, Petroleum Engineer      Office Phone: (801) 259-6111

Home Phone: (801) 259-2214

If unable to reach the above individuals including weekends, holidays,  
 or after hours please call the following:

Lynn Jackson, Chief, Branch of Fluid Minerals

Office Phone: (801) 259-6111

Home Phone: (801) 259-7990

24 HOURS ADVANCE NOTICE IS REQUIRED FOR ALL ABANDONMENTS.

DIVISION OF OIL, GAS AND MINING

API NO. 43-037-31465

SPUDDING INFORMATION

NAME OF COMPANY: COASTAL OIL & GAS COMPANY

WELL NAME: COGC 1-35-36-21

SECTION NWSW 35 TOWNSHIP 36S RANGE 21E COUNTY SAN JUAN

DRILLING CONTRACTOR EXETER

RIG # 68

SPUDED: DATE 7/17/89

TIME 7:00 p.m.

How ROTARY

DRILLING WILL COMMENCE \_\_\_\_\_

REPORTED BY DON

TELEPHONE #

DATE 7/18/89 SIGNED TAS

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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verse side)

CATE  
OR F-

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

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for

RECEIVED  
JUL 25 1989

DIVISION OF  
OIL, GAS & MINING

<p>1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER</p> <p>2. NAME OF OPERATOR Coastal Oil &amp; Gas Corporation</p> <p>3. ADDRESS OF OPERATOR P.O. Box 749, Denver, CO 80201-0749</p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface  2175' FSL &amp; 382' FWL NW/SW Section 35</p>	<p>5. LEASE DESIGNATION AND SERIAL NO. U-57656</p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A</p> <p>7. UNIT AGREEMENT NAME N/A</p> <p>8. FARM OR LEASE NAME COGC</p> <p>9. WELL NO. 1-35-36-21 Federal</p> <p>10. FIELD AND POOL, OR WILDCAT Wildcat</p> <p>11. SEC., T., R. N., OR B.L.E. AND SURVEY OR AREA NW/SW Section 35, T36S, R21E</p> <p>12. COUNTY OR PARISH   13. STATE San Juan   UT</p>
<p>14. PERMIT NO. 43-037-31465</p>	<p>15. ELEVATIONS (Show whether OF, BT, OR, OR.) 5589.8' GR</p>

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"/>	WATER SHUT-OFF	<input type="checkbox"/>
FRACURE TREAT	<input type="checkbox"/>	FRACURE TREATMENT	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	SHOOTING OR ACIDIZING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	(Other) Report of Spud	<input checked="" type="checkbox"/>
(Other)	<input type="checkbox"/>		
FULL OR ALTER CASING	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>	ABANDONMENT*	<input type="checkbox"/>
CHANGE PLANS	<input type="checkbox"/>		

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

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

Well was spud @ 11:30 a.m. on July 18, 1989. See attached chronological report for preliminary work done.

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

SIGNED Branda W. Swank TITLE Regulatory Analyst DATE July 21, 1989

(This space for Federal or State office use)

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

CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_

\*See Instructions on Reverse Side

CHRONOLOGICAL HISTORY

2175.2' FSL & 381.6' FWL  
NW/SW SECTION 35-T36S-R21E

#1-35-36-21 FEDERAL  
ZEKE'S HOLE PROSPECT  
SAN JUAN COUNTY, UTAH  
CONTR: EXETER #68/MILPARK  
WI: 49.803% COGC AFE: 12235  
ATD: 6100' (DESERT CREEK & ISMAY)  
SD: 7/18/89  
CSG: 13-3/8" @ 40'  
DHC(M\$): 275.0

- 6/26/89 Bldg location. Expect to spud 7/10/89.
- 7/12/89 Bldg loc. Will complete dirtwork today. Built 1.2 miles access road. Road and location in solid rock, required blasting. Dug pit in dry riverbed for water, making 5 BPH. Exeter rig #68 will be available Sunday, 7/16/89. Will spud Monday, 7/17/89. CC: \$27,420.
- 7/18/89 50' Drlg rathole & mousehole. 50'/3 hrs. MIRU Exeter rig #68. Drill 8-3/4" pilot hole to 50'. Ream out 8-3/4" hole w/17-1/2 bit. RU & cmt 13-3/8" conductor csg w/50 sx Class G w/3% CaCl<sub>2</sub> using DS. Cmt in place @ 12:00 a.m. WO cmt. RU to drill rathole & mousehole. MW 9.1, VIS 31, WL N/C, PV 5, YP 4, 6.1% SOL, PH 10.2, CL 600, CA 440, GELS 2, 10" 3, CAKE 1. CC: \$13,173.
- 7/19/89 1043' Drlg ahead. 993'/17-3/4 hrs. Finish drlg mousehole. NU conductor & flowline, PU BHA. Spud 12-1/4" hole @ 11:30 a.m., 7/18/89. Drill 12-1/4" hole & lost circulation @ 64'. Mix and pump LCM pill & recovered returns. Svys: 3/4 deg @ 300'; 3/4 deg @ 550'; 3/4 deg @ 800'. MW 9.2, VIS 27, WL N/C, PV 4, YP 1, 0% OIL, 0% LCM, 6.9% SOL, PH 8.5, TR ALK, CL 500, CA 800, GELS 0, 10" 1. CC: \$63,818.
- 7/20/89 1632' Drlg 589'/13-1/2 hrs. Drlg, svy 1-1/4 deg @ 1080'. Drlg, svy @ 1450' - misrun. Drlg, svy @ 1501' 4-1/4 deg. Drlg, svy 4-3/4 deg @ 1533'. Circ & svy @ 1563' 5 deg. TOH @ 1578'. LD shock sub. PU mill tooth bit & TIH to 1118'. Ream & wash 1118' to 1578'. Drlg, svy 3-3/4 deg @ 1618'. Drlg. MW 8.7, VIS 27, WL N/C, PV 2, YP 1, 0% OIL, 0% LCM, 2.8% SOL, PH 8.5, ALK 0/.4, CL 450, CA 1200, GELS 0, 10" 1. CC: \$74,281.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPI  
(Other instructions  
verse side)

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

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. U-57656
2. NAME OF OPERATOR Coastal Oil & Gas Corporation		6. IF INDIAN, ALLOTTEE OR TRIBE NAME N/A
3. ADDRESS OF OPERATOR P.O. Box 749, Denver, CO 80201-0749		7. UNIT AGREEMENT NAME N/A
4. LOCATION OF WELL (Report location clearly and in accordance with BLM Form 3160-5. See also space 17 below.) At surface 2175' FSL & 382' FWL NW/SW Section 35		8. FARM OR LEASE NAME COGC
14. PERMIT NO. 43-037-31465		9. WELL NO. 1-35-36-21 Federal
15. ELEVATIONS (Show whether by, etc., etc.) 5589.8' GR		10. FIELD AND POOL, OR WILDCAT Wildcat
DIVISION OF OIL, GAS & MINING		11. SEC., T., R., M., OR B.L.K. AND SURVEY OR AREA NW/SW Section 35, T36S, R21E
		12. COUNTY OR PARISH   13. STATE San Juan   UT

RECEIVED  
JUL 26 1989

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) <u>Change casing depth</u> <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.)

The APD for the above referenced well proposed the 9-5/8" K-55, 36# casing to be set from 0-2000'. With verbal approval from the BLM the casing was actually set from 0-1932'.

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

SIGNED Brenda W. Swank TITLE Regulatory Analyst DATE July 24, 1989

(This space for Federal or State office use)

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

CONDITIONS OF APPROVAL, IF ANY:

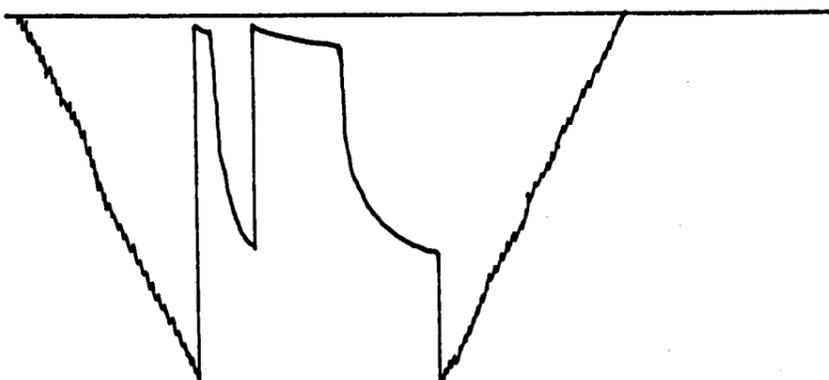
\*See Instructions on Reverse Side

Initial Shut In:	1727	1766	60	MIN.
Final Flow:	67-120	81-135	120	MIN.
Final Shut In:	1754	1833	240	MIN.
Final Hydrostatic:	2836	2885		

Remarks: IF: open tool w/ 8 oz. & strong blow to btm of bucket; 2min.-16 oz. w/strong blow; 10min.-36 oz. w/strong blow; 15min.- 2<sup>3</sup>/<sub>4</sub> psi w/strong blow; NTGS; CLOSE TOOL: ISI: 60 MIN. NGTS  
 FF: open tool w/strong blow; 3min.-10psi w/strong blow to btm of bucket; 6min.-switch to 3/8" choke, 5psi w/strong blow; 10min. 1<sup>1</sup>/<sub>2</sub> psi w/strong blow; pressure decr.; 20min.-16oz.w/strong blow; 23 min.-14 oz strong blow, GTS, 8-10' Flare; 30min.-9oz w/strong blow, 8'-10' Flare, pressure stab to end of open; CLOSE TOOL; FSI: 240min., Flare died 30min. into FSI  
 PIPE REC: 434' highly gas & oil cut drilling mud (10% gas -20% oil)  
 SMPL CHMBR REC: 2240 cc smplr- 1400cc fluid-1200 cc oil, 200cc mud, 1.38 cfg @175 psi  
 Rw PIT MUD: 2.2 @ 70°F CL-2000ppm

Chart:

BOTTOM CHART @ 5828'



DST NUMBER: #2

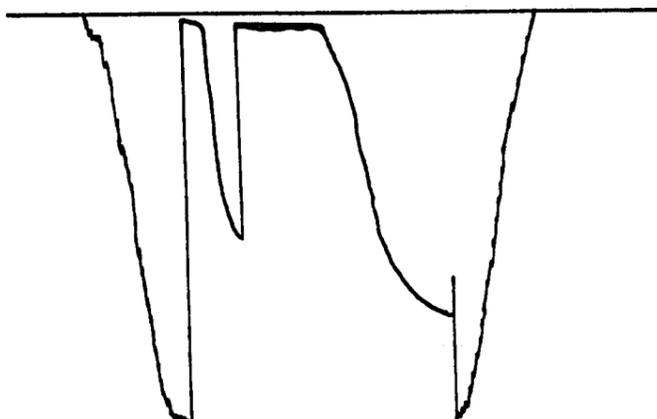
INTERVAL TESTED: 5948-5972

BHT: N/A

	PSI		TIME
	TOP CHART	BOTTOM CHART	
Initial Hydrostatic:	5933 2978	5968 2946	
Initial Flow:	27-41	53-53	15 MIN.
Initial Shut In:	1874	1850	60 MIN.
Final Flow:	54-67	66-79	120 MIN.
Final Shut In:	2277	2284	240 MIN.
Final Hydrostatic:	2965	2932	

Remarks: IF: open tool w/ wk blow 1/4" in pail, increasing slowly; 5 MIN-1" in pail; 10 MIN-2" in pail; 15 MIN-2 3/4" in pail; close tool. FF: open tool w/ stng blow 1/16" in pail; 15 MIN-3/4" in pail; 30 MIN-1 1/2" in pail; 45 MIN-1 1/2" in pail; 60 MIN-1 1/2" in pail; 75 MIN-1 1/2" in pail; 90 MIN-1 1/2" in pail; 105 MIN-1 1/2" in pail; 120 MIN-1 1/2" in pail; close tool  
 Recovery: 120' of water cut drilling mud, sample chamber recovery, 2450 cc of sample, 2350 cc of water, 0 cc of oil, 100 cc of mud, 0 cfg @ 50 PSI: RW:mudpit 2.3 @ 75°F C<sub>1</sub> 2500 PPM

Chart:



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OIL, GAS & MINING



7-31-89

WOB 42  
RPM 90  
PP 1200  
SPM 70

WOB 42  
RPM 90  
PP 1200  
SPM 70

8-1-89

Bit #8 Cut 1250 in 77% HRS.  
8-1-89  
NE#9 SRC 8-14 586K

60  
80  
5600  
20  
40  
60  
80  
5700  
20  
40  
60  
80  
5800  
20  
40  
60

CG

CG

CG

NOTE SCALE CHANGE CARBIDE LAG 7 MIN. B.U.

25 50 100 200 400 800 1600  
5M 10M 60M 110M 2M 12M 1M 6M

RECYCLED TRIP GAS

slfrm-frm

SLTST-brn,mgly,gybrn,sbblky-sbplty,slfrm-frm,mica,sdy ip,calc,arg

CHT-bf,hd

LS-bf-tan,occ wh-crm,micxl-crpxl,rthy-chk,occ cln,vslsly,ros ip,vsl dol, anhy ip,mfrm-mhd

9.3 33 8.4 1/32 11.5  
CL=2600

SH-lt-mgy,occ blk-dkgy,sbblky sbplty,mica ip,calc-carb

LS-pred wh-crm,bf,occ ltgybrn micxl-crpxl,pred rthy-chk, occ cln-dns,slanhy,occ dol, vslsly,grdg to mrlst ip, mfrm-mhd

TR DOL-brn,micxl,rthy,slmy, arg,frm

SH-lt-mgy,plty-sbblky, splnty ip,mica ip,calc, vsicarb,mrly,occ grdg to shly ls,slsly,occ dol, mfrm-frm

DOL-lt-mbrn,micxl,lmy,rthy, vslsly,vslfos,vrr intxl0, mfrm-frm,NFSOC

TR ANHY-wh-sft

SH-m-dkgy,brn,redbrn,sbblky, occ sbplty,slfrm-frm,grdg to sltst,mcalc

LS-wh-crm,ltbrn,lt-mgy,crpxl, occ micxl,sbplty-blky,frm-slfrm,dol ip,slty ip

CIRCULATE BOTTOMS UP

LS-wh,ltbrn,micxl,occ crpxl, rthy,occ chky,sl dol,anhy ip,w/ thin brn,micxl-vfxl, rthy,lmy DOL incl,fnt-bri dull yelgold flor,g fast stmg yelwh cut,p-lt yelwh stn

SH-mgy-blk,mglybrn,brn,sbblky, occ sbplty,frm,slcalc-lmy, carb,grdg to sltst,tr pyr

DOL-brn,crpxl-micxl,pred cln-dns,occ rthy,vsl slty ip, slfos,frm-mhd,NFSOC

LS-tan-bf,crpxl-micxl,cln-rthy,slfos,dol ip,anhy ip, frm-mhd,NFSOC

NOTE: SEE END OF LOG FOR DST REPORT

DOL-tan-ltbrn,micxl-vfxl,occ crpxl,rthy,sl lmy,occ fos, sl anhy,w/ tr anhy incl,g intxl-tr pp vug0,frm-mfrm

9.4 36 9.6 2/32 10.5

SH-dkgy-blk,sbblky-sbplty-plty ip,mica,calc-carb,sooty,sl dol,slty ip,sft-frm

DOL-ltgy-ltbrn,occ gybrn, micxl,occ vfxl,rthy,lmy,sl anhy,slty-vslty,grdg to dol slst,fr intxl0,frm-mhd,rr dully gold flor,vrr stn,vp

5 10 15 20

5 25 50 100 200 400 800  
5M 10M 60M 110M 1M 6M 0.5M 5M

5 10 15 20

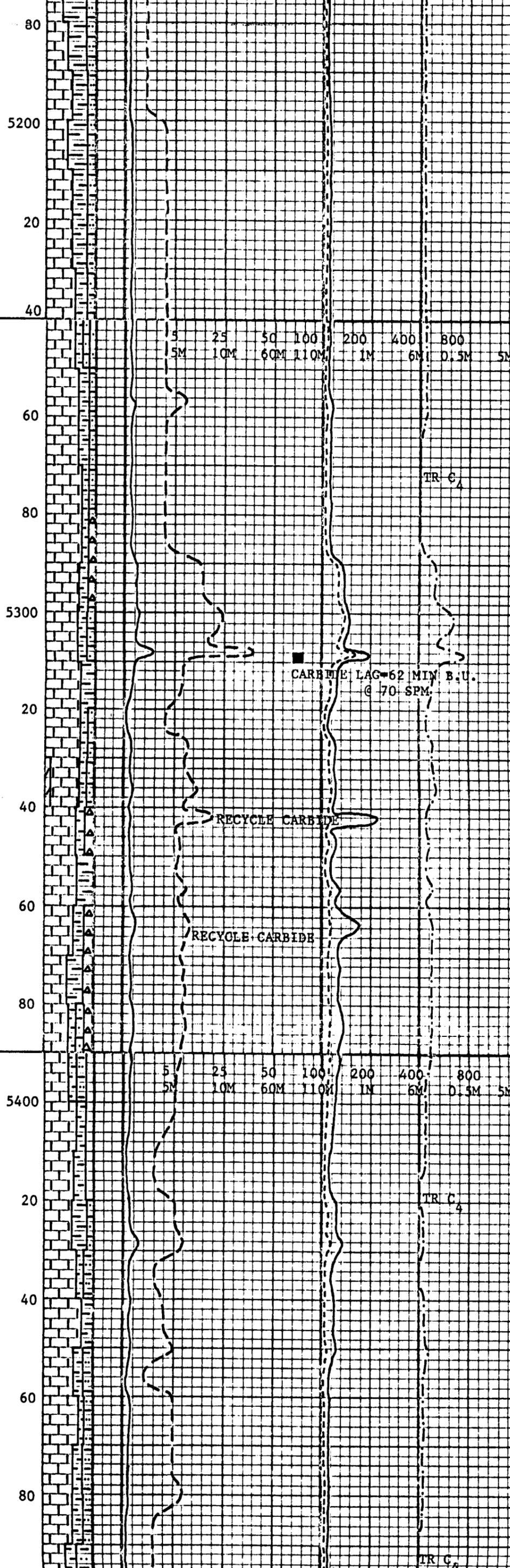
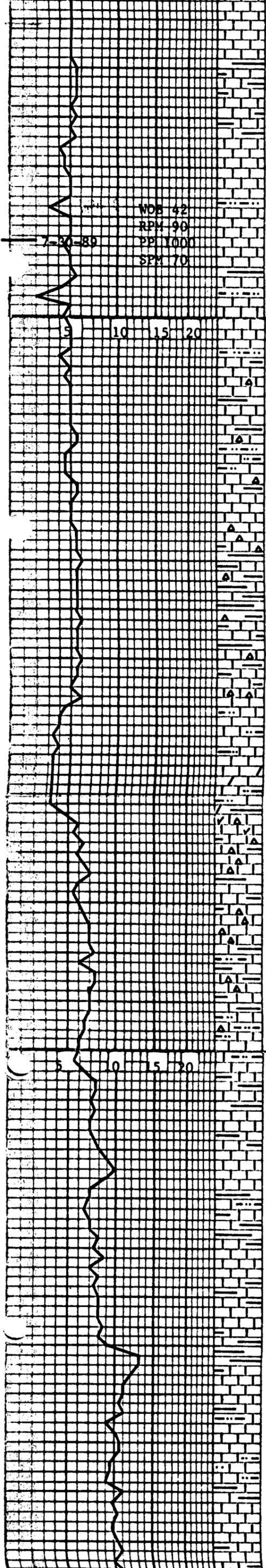
25 50 100 200 400 800 1600  
5M 10M 60M 110M 2M 12M 1M 6M

D  
S  
T  
#  
1

2

TR C

TG



LS-wh-crm,ltgy,pnk ip,micxl-crpxl,chk ip,sft-slfrm,dns ip

ABNT REDORNG CVGS

SLTST-dkgy,gygn,slcalc-calc, arg,blk-sbblky,frm,abnt mica

SH-mgy,sbblky-sbplty,slcalc, slfrm-frm,tr carb

LS-bf-brn,occ wh,occ ltgybrn, micxl-crpxl,rthy-chk,occ cln,slsly,vsl fos,chtly ip, sl anhy,mfrm-mhd

SLTST-gybrn,ltgy,lmy,arg,sl sdy,mica,grdg to slty ls ip, fri-mfrm

SH-lt-mgy,occ dkgy,sbblky-sbplty,mica,slsly,calc-carb,vsl dol,sft-mfrm

BEGIN MUDDING UP

8.4 27 N/C -- 9.5  
CL 2300

TR CHT-trnsl,bf,smky brn,hd

ABNT CVGS VP SPL

DOL-ltbrn,occ mbrn,micxl,rthy,slsly,lmy ip,vsl fos, arg,mfrm-frm,NFSOC

TR ANHY-wh,sft

SH-m-dkgy,gybrn,blk-sbplty, mica,calc-dol,sl carb,sl slty ip,mfrm-frm

CHT-trnsl-bf

LS-bf-tan,occ wh,brn ip, crpxl-micxl,occ rthy-chk, pred cln,chtly ip,sl anhy mfrm-mhd,NFSOC

ABNT CVGS VPSPL

CHT-trnsl,bf,hd

LS-bf-wh,occ tan-brn,occ gybrn micxl-crpxl,rthy,slsly, ool ip,sl chtly,anhy ip,mfrm-hd

SH-m-dkgy,gybrn,occ blk, sbblky-sbplty,mica ip,slsly slty,calc,slcarb,occ sldol, sft-frm

LS-pred wh-crm,occ bf,brn-gy, brn ip,micxl,crpxl ip,rthy-chk,vslsly,occ fos,chtly ip, occ mrly,mfrm-mhd

SLTST-lt-mgy,blk,gybrn,brn, lmy-arg cmt,sbblky-sbplty, sft-slfrm,mica,tr carb,sl sdy ip

LS-wh-crm-bf,lt-mgy,gybrn, micxl-crpxl,chk,slty ip, dol ip,mfrm-hd

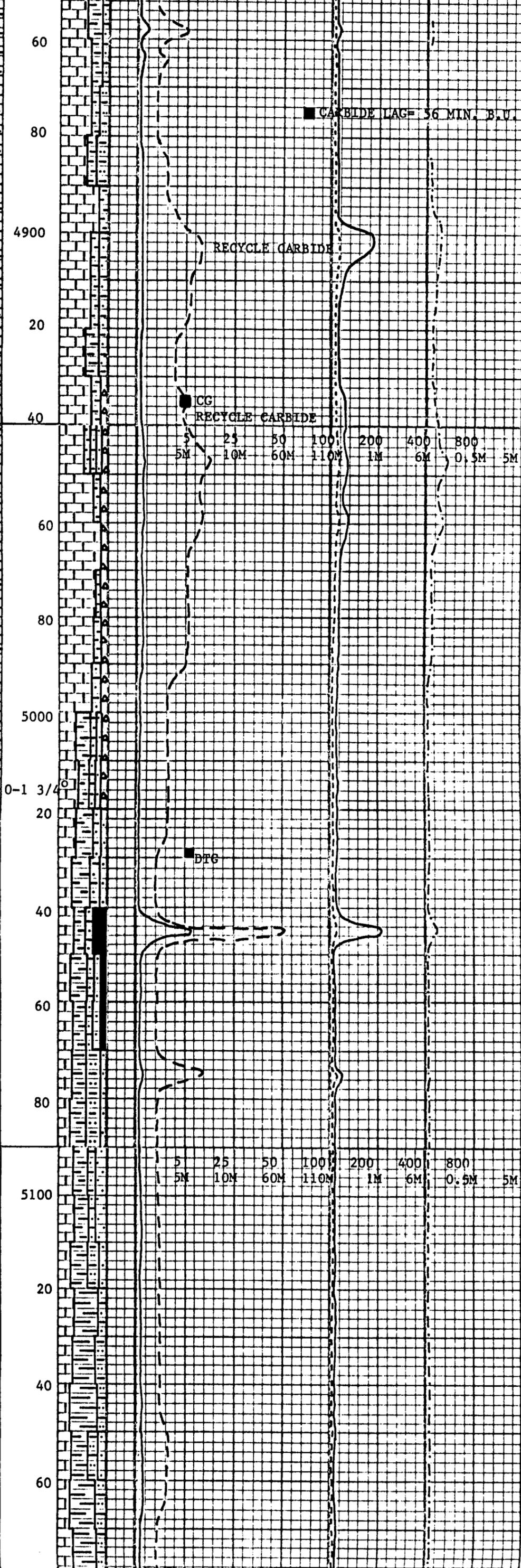
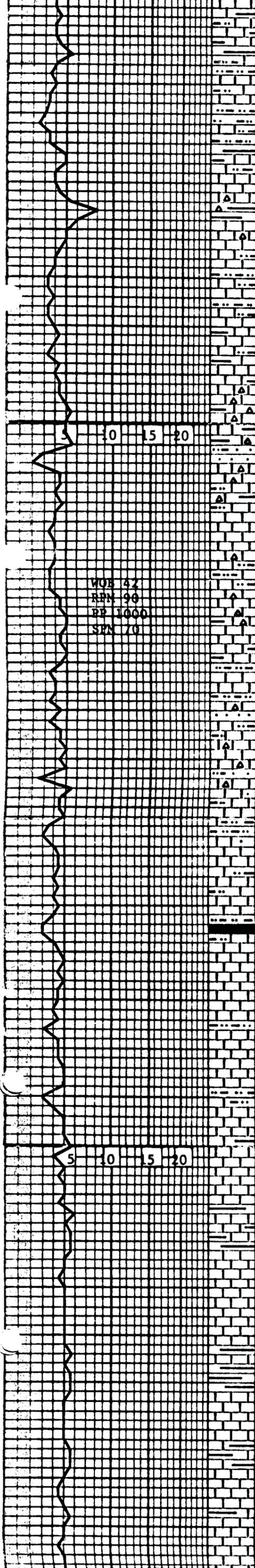
TR C<sub>4</sub>

CARBIDE LAG-62 MIN B;U.  
@ 70-SPM

RECYCLE CARBIDE

RECYCLE CARBIDE

TR C<sub>4</sub>



mfrm

LS-pred bf,tan,occ wh,lt brn, crpxl-micxl,rthy-chk,occ cln dns ip,sl fos,sl slty,mrly ip,mfrm-mhd

TR SS-clr,trnsl,vf-f gr,sbang sbrd,w srt,m-p cmt,v sl calc cly cmt,sl slty,mica ip,fri sl frm

ABNT CVGS V P SPL

SH-lt -dk gy,occ redorng-orng, sbblky-sbplty,sl calc-calc, carb,sl mica,v sl slty,sft-mfrm

SLTST-lt gy-lt brn,sdy,mica,sl calc-calc,arg,fri-frm

CL  
8.4 27 N/C -- 7.5 1800

CHT-bf,trnsl,occ smky gy,hd

SS-clr,ltgy,vf-fgr,sbang-sbrd wsrt,p-mcmt,sl calc cly cmt arg,sl mica,slty ip,fri, NFSOC

LS-wh-crm,bf-ltbrn,crpxl-micxl,rthy,chk ip,occ cln, dns,sl chty,sl fos,mfrm-frm

SH-brn,gybrn,dkgy,sbblky-sbplty,mica,slcarb,calc, vs1 dol,sft-frm

CHT-smkybrn,trnsl,hd

SS-clr-wh,m-fgr,sbang-sbrnd, wsrt,p-mcmt,sl-mcalc,mod cly cmt,sl slty,fri,NFSOC

SLTST-lt-mgy,gybrn,sndy,arg, slcalc-calc,mica,fri-slfrm

ABNT REDORNG-ORNG SH CVGS

COAL-dkbrn-blk,vit,brit,sl slty

LS-wh-crm,tan,crpxl-micxl,chk ip,slfrm-frm

SLTST-tan-brn,sndy ip,arg, slcalc-calc,mica,slfrm

LS-wh-crm,tan,micxl-crpxl, chk ip,sl chty,dns,mfrm-frm

ABNT REDORNG,ORNG CVGS

SH-lt-mgy,brn,sbblky,calc, slfrm-frm

TR CHT-smkybrn,trnsl,hd

LS-wh,crm,ltgy,micxl-crpxl, chk,sl chty,dns,frm

SLTST-lt-mgy,gybrn,slcalc-calc,arg,blky,frm-hd,mica

SH-lt-mgy,sbblky-sbplty, slcalc-calc,slfrm-frm

WOB 42  
RPM 90  
PP 1000  
SPN 70



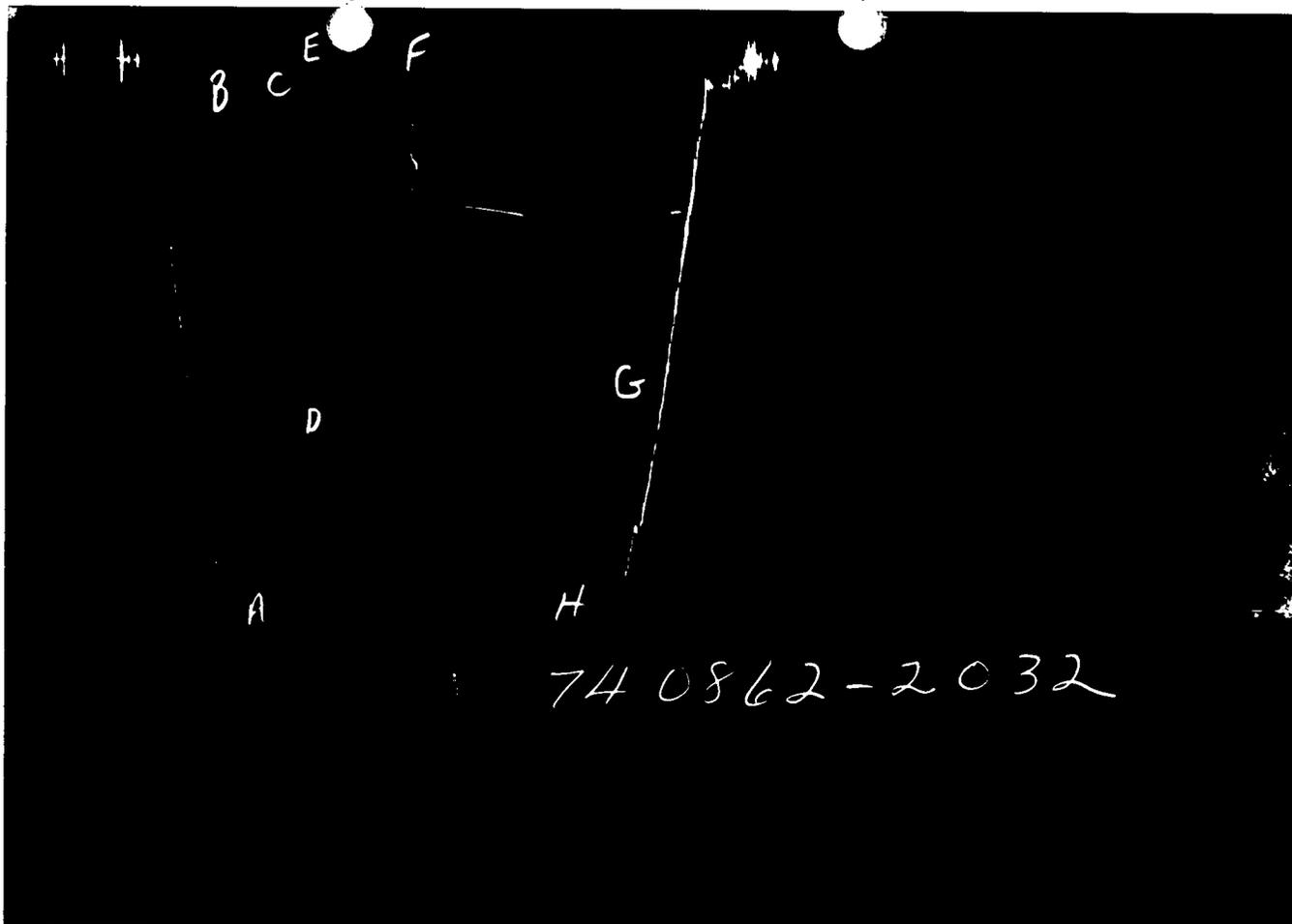
**RECEIVED**  
AUG 14 1989

DIVISION OF  
OIL, GAS & MINING

<p align="center"> <b>COASTAL OIL AND GAS CORPORATION</b>   <b>LEASE : C.O.G.C. FEDERAL</b>   <b>WELL NO. : 1-35</b>   <b>TEST NO. : 1</b> </p>
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TICKET NO. 74086200  
08-AUG-89  
FARMINGTON

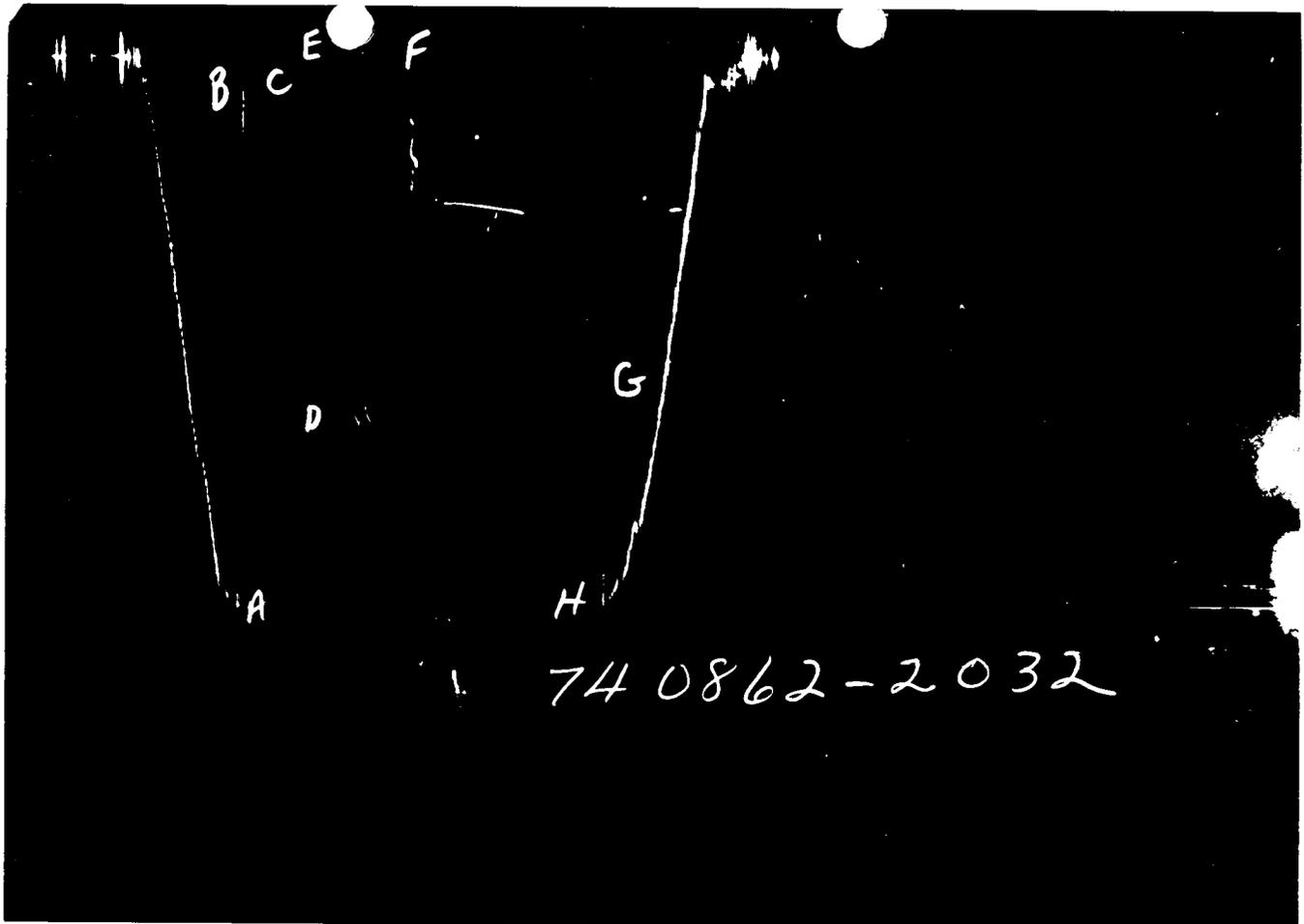
LEGAL LOCATION SEC - TWP - RNG	35-36N-21E	FIELD AREA	WILDCAT	COUNTY	SPN JURN	STATE	UTRH DR
LEASE NAME	C.O.G.C. FEDERAL	WELL NO.	1-35	TEST NO.	1	TESTED INTERVAL	5805.0 - 5832.0
				CORSTAL OIL AND GAS CORPORATION LEASE OWNER/COMPANY NAME			
				43-037-314105			



74 0862-2032

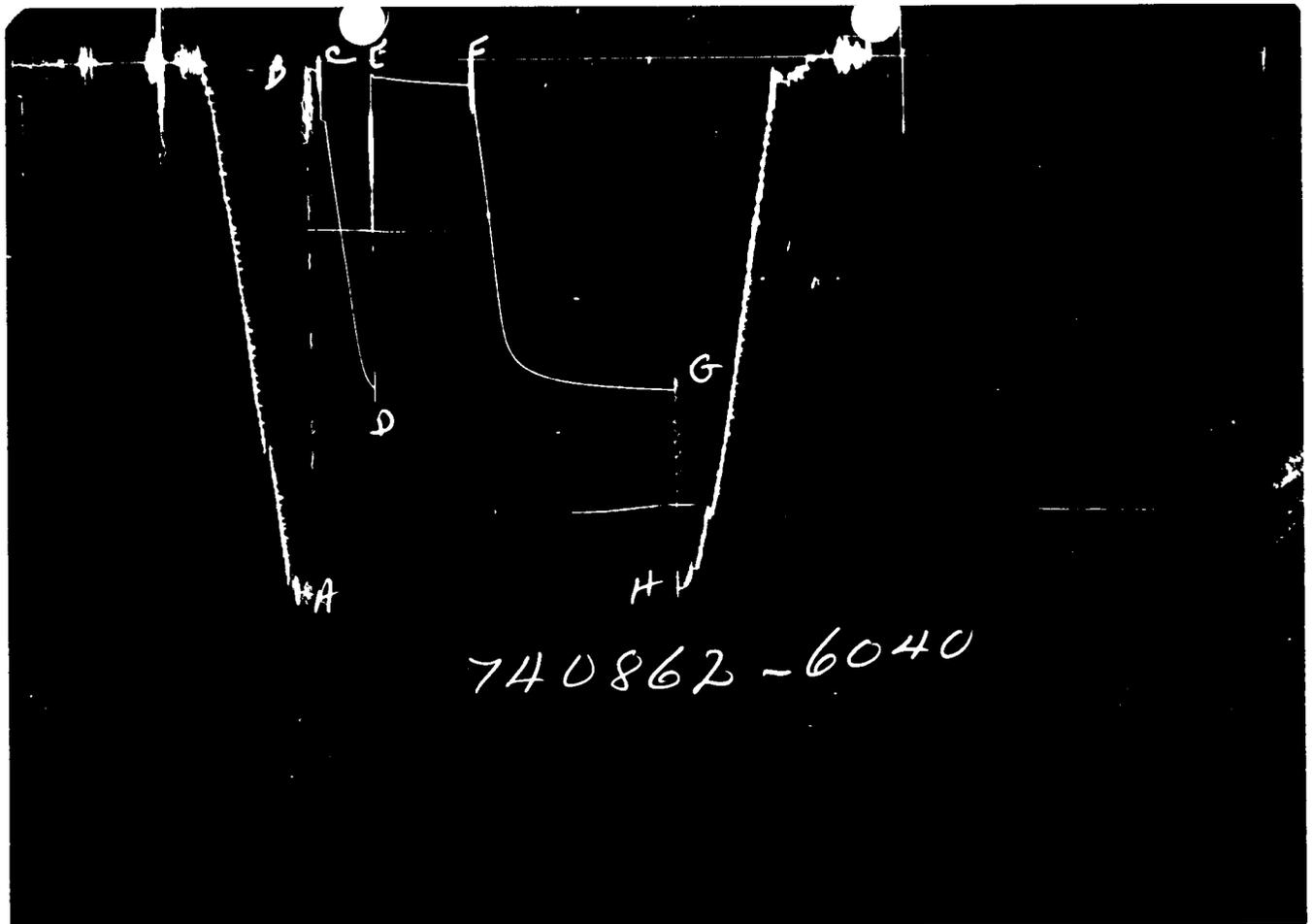
GAUGE NO: 2032 DEPTH: 5829.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2898	2878.6			
B	INITIAL FIRST FLOW	54	50.6			
C	FINAL FIRST FLOW	67	75.9	15.0	15.6	F
C	INITIAL FIRST CLOSED-IN	67	75.9			
D	FINAL FIRST CLOSED-IN	1766	1782.6	60.0	60.4	C
E	INITIAL SECOND FLOW	81	75.5			
F	FINAL SECOND FLOW	135	147.8	123.0	122.6	F
F	INITIAL SECOND CLOSED-IN	135	147.8			
G	FINAL SECOND CLOSED-IN	1833	1799.8	239.0	238.4	C
H	FINAL HYDROSTATIC	2884	2874.8			



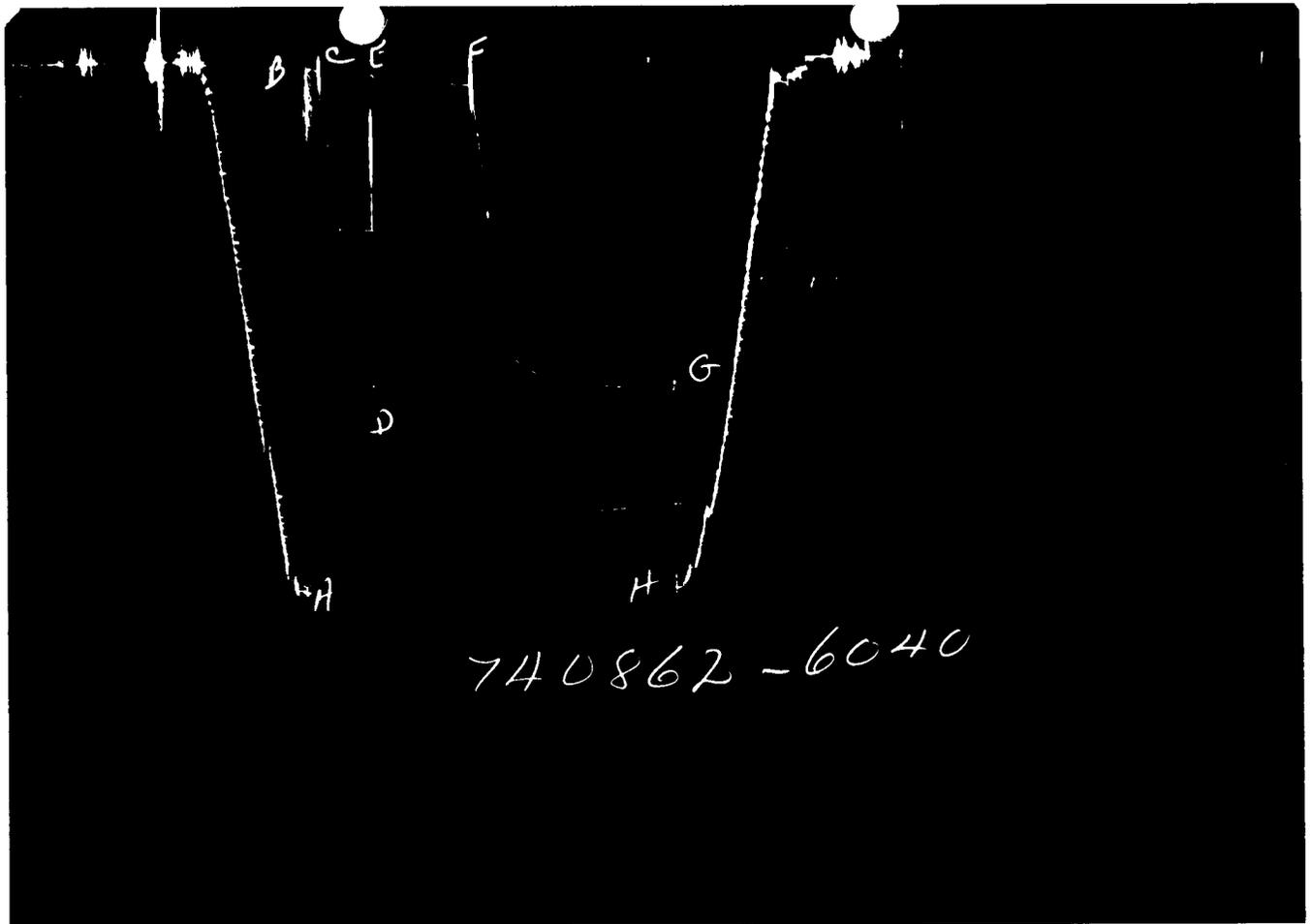
GAUGE NO: 2032 DEPTH: 5829.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2898	2878.6			
B	INITIAL FIRST FLOW	54	50.6			
C	FINAL FIRST FLOW	67	75.9	15.0	15.6	F
C	INITIAL FIRST CLOSED-IN	67	75.9			
D	FINAL FIRST CLOSED-IN	1766	1782.6	60.0	60.4	C
E	INITIAL SECOND FLOW	81	75.5			
F	FINAL SECOND FLOW	135	147.8	123.0	122.6	F
F	INITIAL SECOND CLOSED-IN	135	147.8			
G	FINAL SECOND CLOSED-IN	1833	1799.8	239.0	238.4	C
H	FINAL HYDROSTATIC	2884	2874.8			



GAUGE NO: 6040 DEPTH: 5780.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2773	2854.9			
B	INITIAL FIRST FLOW	26	41.3			
C	FINAL FIRST FLOW	42	58.7	15.0	15.6	F
C	INITIAL FIRST CLOSED-IN	42	58.7			
D	FINAL FIRST CLOSED-IN	1706	1756.1	60.0	60.4	C
E	INITIAL SECOND FLOW	79	71.3			
F	FINAL SECOND FLOW	118	133.7	123.0	122.6	F
F	INITIAL SECOND CLOSED-IN	118	133.7			
G	FINAL SECOND CLOSED-IN	1733	1780.0	239.0	238.4	C
H	FINAL HYDROSTATIC	2760	2852.6			



740862-6040

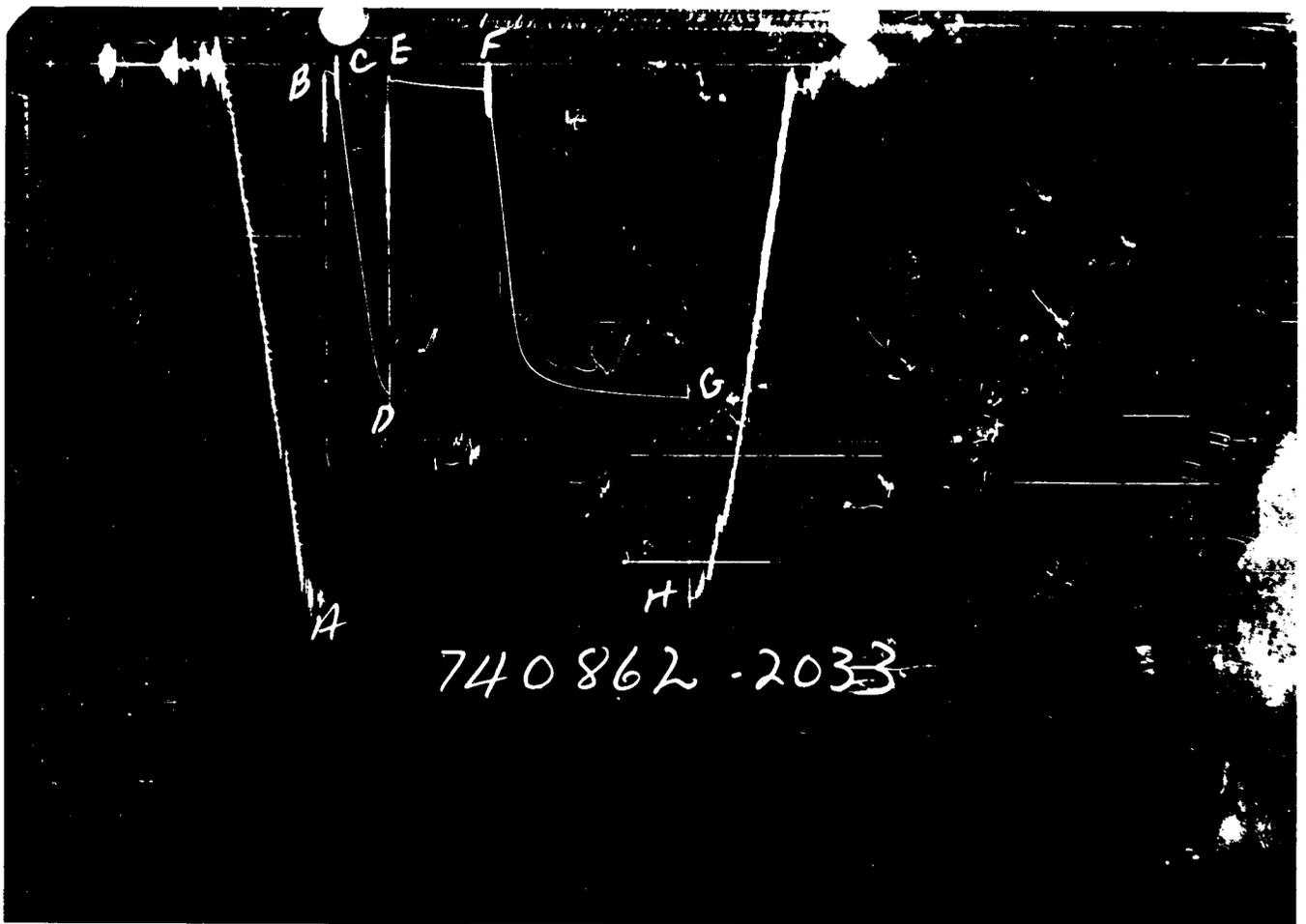
GAUGE NO: 6040 DEPTH: 5780.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2773	2854.9			
B	INITIAL FIRST FLOW	26	41.3			
C	FINAL FIRST FLOW	42	58.7	15.0	15.6	F
C	INITIAL FIRST CLOSED-IN	42	58.7			
D	FINAL FIRST CLOSED-IN	1706	1756.1	60.0	60.4	C
E	INITIAL SECOND FLOW	79	71.3			
F	FINAL SECOND FLOW	118	133.7	123.0	122.6	F
F	INITIAL SECOND CLOSED-IN	118	133.7			
G	FINAL SECOND CLOSED-IN	1733	1780.0	239.0	238.4	C
H	FINAL HYDROSTATIC	2760	2852.6			



GAUGE NO: 2033 DEPTH: 5784.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2836	2853.1			
B	INITIAL FIRST FLOW	53	31.9			
C	FINAL FIRST FLOW	67	60.0	15.0	15.6	F
C	INITIAL FIRST CLOSED-IN	67	60.0			
D	FINAL FIRST CLOSED-IN	1727	1759.8	60.0	60.4	C
E	INITIAL SECOND FLOW	67	62.5			
F	FINAL SECOND FLOW	120	133.5	123.0	122.6	F
F	INITIAL SECOND CLOSED-IN	120	133.5			
G	FINAL SECOND CLOSED-IN	1754	1778.5	239.0	238.4	C
H	FINAL HYDROSTATIC	2836	2849.3			



GAUGE NO: 20      DEPTH: 5000.0      BLANKED OFF: NO      HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
G	INTAKE PRESSURE IN	203.8	205.1			
B	INTAKE PRESSURE	53	31.9	15.0	15.6	F
C	INTAKE PRESSURE	67	60.0			
E	INTAKE PRESSURE IN	67	60.0	60.0	60.4	F
D	INTAKE PRESSURE IN	1727	1759.3			
F	INTAKE PRESSURE	67	62.5	123.0	122.6	F
H	INTAKE PRESSURE IN	120	133.5			
F	INTAKE PRESSURE IN	120	133.5	239.0	239.4	F
G	INTAKE PRESSURE IN	1754	1786.5			
H	INTAKE PRESSURE	2538	2549.3			

COGC # 1-35-36-21 FEDERAL  
COASTAL OIL AND GAS CORPORATION

NW SW Section 35  
Township 36 South, Range 21 East  
San Juan County, Utah

GEOLOGIST: MR. CHARLIE CALLAHAN  
1820 12th Street  
Greeley, Colorado 80631  
Phone (303) 356-2449

## HOLE INFORMATION

NAME: COGC #1-35-36-21 FEDERAL  
OPERATOR: COASTAL OIL AND GAS CORPORATION

LOCATION: NW SW Section 35  
Township 36 South, Range 21 East  
San Juan County, Utah

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Spud Date: 7/17/89  
Total Depth Date: 8/5/89  
Total Depth: 6049 (Driller's)  
Total E-log Depth: 6040  
Status: Plug and Abandon

Ground Level Elevation: 5580  
Floor Elevation: 5590 (Approximate 2' blade down)

---

Drilling Rig: Exeter #68  
Hole Size: 50' of 17 1/2", 1935 of 12 1/4", 4114'  
of 8 3/4"  
Surface Casing: 50' conductor, 1928 of 11 5/8" surface

Mud Program: Fresh Water/High Ph

Electrical Logs: Haliburton Logging Services  
Engineer..... Mr. Gary Frisch

CDL CNS Gamma Ray  
4600' to TD  
B H C Sonic Ray with Gamma  
2002' to TD  
Dual Laterolog MSFL Log  
2002' to TD, Gamma TD to 2900'

Sidewall Cores: HLS (Halliburton Logging Service)  
5814', 5815', 5816.5', 5817' (wash out),  
5817.5' (wash out), 5818' (wash out),  
5818.5', 5819', 5819.5' (wash out)  
5820' (wash out), 5821', 5822', 5956',  
5959', 5970'

Drill Stem Tests: Halliburton, Testing Mr. K. G. Trough

Upper Ismay  
DST #1 5806-5832 (Strip Log)  
5798-5824 (E-log)

---

Lower Desert Creek  
DST #2 5948-5972 (Strip Log)  
5939-5963 (E-Log)

#### Rig Personalities

Company Representative: Mr. Don Nichols, Coastal

Geologist: Mr. Charles Callahan

Mudlogger: Mr. David Meade, Mr. Mark Wagner,  
Rocky Mtn. Geo Engineering

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Back Fly of Report	.....	<u>Strip Log</u>

## Formation Tops

<u>Formation</u>	<u>Strip Log</u>	<u>E-Log</u>	<u>Subsea</u>
Surface Casing		1928	+3662
Honaker Trail		4565	+1025
Paradox Shale	5642	5633	- 43
Upper Ismay	5648	5639	- 49
Show Number 1	5628-5634	5619-5625	- 29/- 35
Hovenweep	5768	5759	- 169
Lower Ismay	5792	5784	- 194
Drill Stem Test 1	5806-5832	5798-5824	-208/-234
Gothic	5840	5832	- 242
Upper Desert Creek	5856	5846	- 256
Lower Desert Creek	5945	5936	- 356
Drill Stem Test 2	5948-5972	5939-5963	-349/-373
Chimney Rock	5987	5976	- 386
Akah	6014	6005	- 415
Salt	6046	6037	- 447
Total Depth	6049	6040	- 460

Show Report Section

Note: Parenthesized values reflect multiples of Before readings.

1. Upper Ismae Zone 5728-5734

---

	<u>Before</u>	<u>During</u>	<u>After</u>	
Drill Rate	5	2	3 1/2	min/foot
Hotwire	6	51	4*	units
C1	874 (1)	6240 (7.5)	585 (<1)*	ppm
C2	390 (1)	2106 (6)	270 (<1)*	ppm
C3	158 (1)	1068 (6)	106 (<1)*	ppm
C4	63 (1)	273 (6)	42 (<1)*	ppm

---

\*Gas circulated up as a show. Gas values reflect significantly less "carry over" from mud system, reflecting the liberation of drilling fluid gas during two hours of circulation.

Lithology:

Limestone- buff to buff brown, microcrystalline (35%) to cryptocrystalline (65%) and microsugrosic (5%), moderately firm, occasionally moderately dolomitic (in darker parts), microsparitic (80%), to micritic (20%), (on the border of being entirely a mudstone), .25% to .5% dark brown to black organic surface and intercrystalline stain, isolated anhydrite fracture fill, no significant

torque on floor (no fracture porosity), 1% mineral fluorescence associated with anhydrite rich parts, no oil fluorescence, diffuse dull yellow milky cut (damp) from tightly bound traces of live oil- mostly likely in non-connected micro-molds

Rating: Gas= Poor, Cuts=Poor, Rock=Poor

Analysis:

This porosity was poorly developed, and, likely reflects regional depositional variations. No classical reef area sequence was present above the show interval.

2. Lower Ismay Porosity Zone 5822-5832(Strip Log)

---

	<u>Before</u>	<u>During</u>	<u>After*</u>	
Drill Rate	6 1/2	1 1/2-2	3 1/2	min/ft
Hotwire	36	405	50	units
C1	2280 (1)	24320 (10.67	5320 (2.3)	ppm
C2	1196 (1)	11440 (9.56	6720 (5.6)	ppm
C3	616 (1)	6720 (10.9	1680 (2.7)	ppm
C4	420 (1)	3360 (8)	1050 (2.5)	ppm

---

\*After bottoms up values, with an additional one hour circulation time.

Lithology:

Dolomite- light grey brown to buff grey, microsucrosic (70%), 5% sucrosic, 25% cryptocrystalline, moderately firm to trace very firm and brittle, slightly to moderately calcitic, anhydritic towards top of interval, anhydrite and calcite lined vugs (>1 mm), possible scattered molds, 40% clean-60% with mobilizable incrustalline clays, moderately to strongly altered- with faint bioclastic relics in part, pinpoint vugs on .5% of sample, isolated connections between vugs (no obvious stain paths), streaks to 10% intercrystalline porosity 30-40% of sample complicated by mobile clays (no statistical clustering of chip size, as well as numerous variations of porosity observed cutting across chips), 20% dull gold fluorescence, 5% anhydritic mineral fluorescence, traces of very light brown live oil stain (to .25%), no significant dead oil stain, streaming yellow milky cut (damp) from clean light brown microsucrosic parts

Rating:

Gas= Good, Cut= Fair, Rocks= Poor (tipped from Fair to poor on basis of having just 4 fast feet)

Overall: FAIR

Analysis:

The Lower Ismay show was a complex show to evaluate.

1. The porosity present in the sample was both scattered and discontinuous (as the mud was in superb shape, sample recovery most likely includes a representation of all porosity)
2. Grab samples, when rapidly processed by mud loggers, did not flash cut wet, suggesting the gas was bound up in the cuttings.
3. The drill test over the interval suggested a tight reservoir with insufficient formation pressure to instigate self fracturing.
4. As no formation water was recovered in the DST over this interval, no concrete formation resistivities could be plugged into log analysis equations (besides the zone was washed out).
5. The gamma ray readings present over the interval likely are accurate, despite the washout present over the core of the show.
6. Pad sensitive readings over the fastest 4' interval on the E-log are not accurate due to a) washout, and b) hydrocarbon loading.
7. The abundance of intercrystalline clays, most likely HCL insoluble, would likely migrate if the zone was stimulated, causing production to decline over a short period of time.
8. If the Lower Desert Creek show had been sufficient to warrant debate over completing this hole, the Lower Ismay show might have the deciding factor in running pipe on this well. Unfortunately, this show alone does not a well make.

3. Lower Desert Creek Porosity 5962-5963 (Strip Log)

---

	<u>Before*</u>	<u>During</u>	<u>After</u>	
Drill Rate	5	1	2.5	min/ft
Hotwire	80 (1)	135 (1.68)	70 (.875)	units
C1	608 (1)	7144 (11.75)	1425 (2.34)	ppm
C2	520 (1)	4056 (7.8)	780 (1.5)	ppm
C3	896 (1)	2100 (2.34)	840 (.93)	ppm
C4	672 (1)	1050 (1.56)	630 (.93)	ppm

---

\*Before readings on top of small recycle

Lithology:

Dolomite- medium brown to light brown grey becoming uniformly brown grey, microsugrosic to sugrosic (80%) with streaks microcrystalline (20%) - mostly in the top 3' of interval; moderately firm to firm and brittle (becoming firmer towards base), slightly to moderately calcitic- more calcitic in clay parts, 30-40% clay matrix (discernible between rhombs), fairly massive-becoming more massive towards base, 80-85% of the chips of same size- suggesting isotropicity, .25% black surface stain along bedding planes (with pyrite on the stain), .1% live brown oil as pinpoint stain, fair to good intercrystalline porosity- likely continuous particular over the fast feet, 10% green 1% orange with scattered light pink mineral fluorescence, isolated fair to poor yellow green cuts from very isolated (.1%) live oil wet. Good cuts from tightly bound, intercrystalline live oil when dried

Rating:

Gas= Poor      Cuts= Poor to trace Fair      Rock= Good      Overall= Poor to trace fair

Additional Factor:

The complete evaluation of this well was complicated slightly by 4' of additional porosity which followed immediately down hole from the DST'd interval. Particular when considered in conjunction with the Neutron Log's readings over this porosity, one might have over estimated the importance of this additional interval. However, lithologically, the 5974-5978 Strip Log interval was virtually identical to the DST'd interval (5948-5972 Strip Log). In addition, this strong rock type similarity alone almost proves that both strip log intervals share a common reservoir (as do the additional logs)

Regretably, this common resevoir proved devoid of significant pressure and hydrocarbon.

CONCLUSIONS:

1. As formation water was recovered in the sample chamber during the DST and the test was mechanically successful, the poor pressures and recoveries from DST #2 accurately reflect the poor resevoir characteristics of this zone on this well.

## Drill Stem Test #1

Interval: 5806-5832 (Strip Log)  
(E-Log)

Formation: Lower Ismay

Type: Conventional, without water cushion

Times: 15-60-120-240

Surface Choke: 1/4" transferred to 3/8" 5 minutes into the final flow

### Surface Blows:

Initial Open: Opened tool- blow to bottom of bucket in 30 second. Transferred to guage which read 8 ounces.  
16 ounces at 2 minutes  
36 ounces at 4 minutes  
2 3/4 lbs at 15 minutes

Initial Shut-in: Shut in tool with 2 3/4 PSI  
Blow dead in 33 minutes

Final Open: Opend tool with strong blow to bottom of bucket in 10 seconds.  
10 lbs in 3 minutes  
5 minutes- transferred to 3/8" choke  
6 minutes 5 lbs  
10 minutes 1 1/2 lbs  
20 minutes 16 ounces  
23 minutes- gas to surface with 8' to 10' flare  
23-120 minutes, 9 ounces of pressure, 8' to 10' flare continued

Final Shut-in: Flare died one hour into the shut-in

Pipe Recovery:

434' of highly oil and gas cut drilling mud with @ 20% oil and 10% gas

Mud values could not be determined for the TOP and MIDDLE samples

BOTTOM: Light Oil with 48.8% gravity at C@ 60 F  
2500 ppm Chlorides, compared to 2300 ppm pit mud  
Nitrates were 22 ppm, compared to 100 ppm pit mud

Sampler:

175 PSI  
1.38 cubic feet of gas  
1200 cc of condensate (very low gravity oil)  
200 cc of drilling mud

118 degrees F

Note: Insufficient fluids present to be able to perform accurate resistivity and Chlorides measurements

Pressures:

Outside Depth: 5828

Initial Hydrostatic	2836
Final Hydrostatic	2836
Initial Flow	53-67
Initial Shut-in	1727
Final Flow	67-120
Final Shut-in	1754

Test was mechanically valid

Oil Recovery:

Approximately .5 bbls

## CONCLUSIONS:

1. This test was run based upon strong gas, fair cuts, and poor sample shows. The recoveries suggest that a) the zone had condensate, that b) the hydrocarbons were, as a rule, tightly bound within the matrix, and, that c) the rock exhibited low permeabilities, as shown by both the open and shut-in pressures.
2. Open and shut-in times effectively evaluated the zone (despite the failure of the slope of the opens to totally level off((See Charts)), because:
  - a) rates of increase of pressure were declining by the end of the final open,
  - b) the ratio of condensate to mud in the sample chamber strongly suggest that most drilling fluid had been expelled from the formation.
3. The test was mechanically successful.

## Drill Stem Test #2

Interval: 5948-5972 (Strip Log)  
(E-Log)

Formation: Lower Desert Creek

Type: Conventional, without water cushion

Times: 15-60-120-240

Surface Choke: 1/4"

### Surface Blows:

Initial Open: Tool opened with weak blow of 1/4" which increased slowly  
1" in pail at 5 minutes  
2" in pail at 10 minutes  
2 3/4" in at 15 minutes

Initial Shut-in: Opened to pit and the blow was dead in 5 minutes

Final Open: Opened with 1/16" blow  
3/4" in pail at 15 minutes  
1 1/4" in pail at 30 & 45 minutes  
1 1/2" in pail at 60 minutes  
1 1/2" in pail through 120 minutes

Final Shut-in: Opened to pit, blow died in 4 minutes

Note: No gas to surface

Pipe Recovery:

120' of water cut drilling mud with a slight trace of gas

TOP and BOTTOM:	1.7 @ 80 F	3000 ppm Chlorides
Pit Mud:	2.3 @ 75 F	2500 ppm Chlorides

Sampler:

50 PSI  
No gas  
100 cc of drilling mud  
2350 cc of water      1.2 @ 80 F      5300 ppm Chlorides

128 degrees F

Pressures:              Inside              Depth: 5937

Initial Hydrostatic	2941
Final Hydrostatic	2928
Initial Flow	27-40
Initial Shut-in	1874
Final Flow	54-80
Final Shut-in	2255

Test was mechanically valid

CONCLUSIONS:

1. This test was run based upon geologic model vis-a-vis comparable interval results in offset wells.
2. The third porosity streak (See Desert Creek Show Report Section), was not developed in the Zeke's Hole offset well, and, was not drilled through in the DST'd interval (This interval, see E-logs, failed to produce significant gas or any variations from show parameters of the tested interval).
3. The opens and shut-ins of this test effectively evaluated this zone as:
  - a) Slope of rate of change in the opens had leveled off
  - b) The presence of abundant formation water in the sampler strongly suggest that test results were not significantly affected by drilling pit mud invasion.

### EQUIPMENT & HOLE DATA

FORMATION TESTED: LOWER ISMAY  
 NET PAY (ft): 6.0  
 GROSS TESTED FOOTAGE: 27.0  
 ALL DEPTHS MEASURED FROM: KB (12' AGL)  
 CASING PERFS. (ft): \_\_\_\_\_  
 HOLE OR CASING SIZE (in): 8.750  
 ELEVATION (ft): 5592.0 KELLY BUSHING  
 TOTAL DEPTH (ft): 5832.0  
 PACKER DEPTH(S) (ft): 5799, 5805  
 FINAL SURFACE CHOKE (in): 0.37500  
 BOTTOM HOLE CHOKE (in): 0.750  
 MUD WEIGHT (lb/gal): 9.60  
 MUD VISCOSITY (sec): 37  
 ESTIMATED HOLE TEMP. (°F): \_\_\_\_\_  
 ACTUAL HOLE TEMP. (°F): 118 @ 5828.0 ft

TICKET NUMBER: 74086200  
 DATE: 8-1-89 TEST NO: 1  
 TYPE DST: OPEN HOLE  
 FIELD CAMP:  
FARMINGTON  
 TESTER: K.G. TROUTH  
 WITNESS: DON NICHOLS  
 DRILLING CONTRACTOR:  
EXETER DRILLING COMPANY #68

### FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
<u>MUD PIT</u>	<u>2.200 @ 70 °F</u>	<u>2000 ppm</u>
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm

### SAMPLER DATA

Psig AT SURFACE: 175.0  
 cu.ft. OF GAS: 1.380  
 cc OF OIL: 1200.0  
 cc OF WATER: \_\_\_\_\_  
 cc OF MUD: 200.0  
 TOTAL LIQUID cc: 1400.0

### HYDROCARBON PROPERTIES

OIL GRAVITY (°API): 46.7 @ 60 °F  
 GAS/OIL RATIO (cu.ft. per bbl): \_\_\_\_\_  
 GAS GRAVITY: \_\_\_\_\_

### CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

### RECOVERED :

434' OF HIGHLY OIL AND GAS CUT DRILLING MUD  
 (APPROXIMATELY 20% OIL AND 10% GAS)

MEASURED FROM  
 TESTER VALVE

### REMARKS :

REPORTED SAMPLER PSI SHOULD BE CONSIDERED QUESTIONABLE -- APPEARS TO HAVE TRAPPED A PORTION OF THE FINAL CIP.

TYPE & SIZE MEASURING DEVICE : _____				MANIFOLD 1/4" CHOKE _____		TICKET NO : 74086200
TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS	
8-1-89						
1430						ON LOCATION--TRIPPED OUT OF HOLE
1600						PICKED UP AND MADE UP TOOLS
1650						TRIPPED IN HOLE WITH SAME
1820						PICKED UP AND MADE UP CONTROL HEAD
1830						SET PACKER WITH 28,000# ON TOOL
1835	.25	8 OZ.				OPENED TOOL, NO FILL-BLOW ON BOTTOM OF PAIL IN 30 SECONDS
1837		16 OZ.				STRONG BLOW
1845		36 OZ.				STRONG BLOW
1849		2.75				STRONG BLOW
1850						CLOSED TOOL
1852						OPENED MANIFOLD AND BLEW DOWN DRILL PIPE
1923						DRILL PIPE DEAD
1950	.25					OPENED TOOL WITH A STRONG BLOW ON BOTTOM OF PAIL IN 10 SEC.
1953		10				STRONG BLOW
1955	3/8					SWITCHED TO 3/8" CHOKE
1956		5				PRESSURE DROPPING
2000		1.5				PRESSURE DROPPING
2010		16 OZ.				PRESSURE DROPPING
2013		14 OZ.				GAS TO SURFACE IN 23 MINUTES
2020		9 OZ.				STEADY BLOW
2035		9 OZ.				SAME
2050		9 OZ.				SAME
2105		9 OZ.				SAME
2120		9 OZ.				SAME
2135		9 OZ.				SAME
2150		9 OZ.				SAME, SLIPS WOULD NOT HOLD
2153						CLOSED TOOL
2233						FLARE DEAD, NO GAS
8-2-89						
0152						PULLED TOOL LOOSE
0200						TRIPPED OUT OF HOLE
0630						OUT OF HOLE WITH TOOL



TICKET NO: 74086200  
 CLOCK NO: 13741 HOUR: 24

GAUGE NO: 6040  
 DEPTH: 5780.0

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
<b>FIRST FLOW</b>					
B	1	0.0	41.3		
	2	2.0	40.4	-0.9	
	3	4.0	39.9	-0.5	
	4	6.0	39.9	0.0	
	5	8.0	41.7	1.9	
	6	10.0	45.8	4.0	
	7	12.0	50.9	5.1	
	8	14.0	56.3	5.4	
C	9	15.6	58.7	2.4	
<b>FIRST CLOSED-IN</b>					
C	1	0.0	58.7		
<input checked="" type="checkbox"/>	2	5.4	316.8	258.1	4.0 0.590
	3	6.0	341.1	282.4	4.3 0.558
	4	7.0	379.7	320.9	4.8 0.509
	5	8.0	424.7	365.9	5.3 0.470
	6	9.0	461.1	402.3	5.7 0.437
	7	10.0	500.5	441.8	6.1 0.408
	8	12.0	575.9	517.2	6.8 0.361
	9	14.0	638.5	579.7	7.4 0.325
	10	16.0	715.6	656.9	7.9 0.295
	11	18.0	778.1	719.4	8.4 0.271
	12	20.0	851.2	792.5	8.8 0.250
	13	22.0	911.4	852.6	9.1 0.233
	14	24.0	986.1	927.4	9.5 0.217
	15	26.0	1050.2	991.5	9.8 0.204
	16	28.0	1109.3	1050.6	10.0 0.192
	17	30.0	1171.6	1112.8	10.3 0.182
	18	35.0	1349.7	1291.0	10.8 0.160
	19	40.0	1505.0	1446.2	11.2 0.143
	20	45.0	1621.6	1562.9	11.6 0.129
	21	50.1	1694.0	1635.2	11.9 0.118
	22	55.0	1732.8	1674.1	12.1 0.108
D	23	60.4	1756.1	1697.3	12.4 0.100
<b>SECOND FLOW</b>					
E	1	0.0	71.3		
	2	5.0	86.5	15.2	
	3	10.0	89.3	2.8	
	4	15.0	89.3	0.0	
	5	20.0	93.0	3.6	
	6	25.0	96.9	3.9	
	7	30.0	99.8	3.0	
	8	35.0	103.1	3.2	
	9	40.0	105.8	2.7	
	10	45.0	108.3	2.6	
	11	50.0	109.9	1.6	

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
<b>SECOND FLOW - CONTINUED</b>					
	12	55.0	112.5	2.6	
	13	60.0	113.8	1.3	
	14	65.0	115.9	2.0	
	15	70.0	118.4	2.6	
	16	75.0	120.6	2.2	
	17	80.0	121.9	1.3	
	18	85.0	123.0	1.1	
	19	90.0	124.5	1.5	
	20	95.0	125.7	1.2	
	21	100.0	127.9	2.2	
	22	105.0	128.8	0.9	
	23	110.0	130.8	2.0	
	24	115.0	131.6	0.8	
	25	120.0	134.2	2.6	
F	26	122.5	133.7	-0.5	
<b>SECOND CLOSED-IN</b>					
F	1	0.0	133.7		
	2	1.0	184.6	51.0	1.0 2.147
	3	2.0	228.0	94.4	1.9 1.855
	4	3.0	262.7	129.0	2.9 1.671
	5	4.0	304.7	171.1	3.9 1.551
	6	5.0	345.2	211.5	4.8 1.457
	7	6.0	377.0	243.3	5.8 1.380
	8	7.0	402.9	269.2	6.7 1.316
	9	8.0	448.3	314.6	7.5 1.263
	10	9.0	482.1	348.5	8.5 1.212
	11	10.0	522.6	389.0	9.3 1.170
	12	12.0	598.5	464.8	11.0 1.097
	13	14.0	682.4	548.7	12.7 1.037
	14	16.0	765.5	631.8	14.4 0.983
	15	18.0	851.2	717.5	15.9 0.939
	16	20.0	935.8	802.1	17.5 0.899
	17	22.0	1025.9	892.2	19.0 0.863
	18	24.0	1124.2	990.5	20.4 0.830
	19	26.0	1200.2	1066.5	21.9 0.800
	20	28.0	1287.4	1153.7	23.3 0.774
	21	30.0	1359.0	1225.3	24.6 0.749
	22	35.0	1491.6	1357.9	27.9 0.695
	23	40.0	1551.2	1417.5	31.0 0.649
	24	45.0	1592.7	1459.1	33.9 0.610
	25	50.0	1620.4	1486.8	36.7 0.576
	26	55.0	1640.7	1507.1	39.4 0.545
	27	60.0	1656.2	1522.5	41.8 0.519
	28	70.0	1679.4	1545.8	46.5 0.473
	29	80.0	1698.4	1564.7	50.7 0.436
	30	90.0	1712.6	1579.0	54.5 0.404
	31	100.0	1723.3	1589.6	58.0 0.377
	32	110.0	1731.5	1597.8	61.2 0.353
	33	120.0	1738.9	1605.2	64.2 0.333
	34	135.0	1747.6	1613.9	68.3 0.306

LEGEND:  
 STAIR-STEP

REMARKS:

TICKET NO: 74086200  
 CLOCK NO: 13741 HOUR: 24

GAUGE NO: 6040  
 DEPTH: 5780.0

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
35	150.0	1755.0	1621.3	71.9	0.284
36	165.0	1761.3	1627.6	75.2	0.264
37	180.0	1766.4	1632.8	78.2	0.247
38	195.0	1771.7	1638.0	80.9	0.233
39	210.0	1774.9	1641.2	83.4	0.220
40	225.0	1778.2	1644.6	85.6	0.208
G 41	238.4	1780.0	1646.3	87.5	0.199

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$

LEGEND:  
 STAIR-STEP  
 REMARKS:

TICKET NO: 74086200

CLOCK NO: 12118 HOUR: 24

GAUGE NO: 2033

DEPTH: 5784.0

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
<b>FIRST FLOW</b>					
B	1	0.0	31.9		
	2	2.0	33.8	1.9	
	3	4.0	34.5	0.7	
	4	6.0	35.8	1.3	
	5	8.0	42.5	6.7	
	6	10.0	45.1	3.6	
	7	12.0	51.9	5.7	
	8	14.0	56.4	4.5	
C	9	15.6	60.0	3.6	
<b>FIRST CLOSED-IN</b>					
C	1	0.0	60.0		
	2	1.0	96.8	36.8	1.0 1.204
	3	2.0	142.8	82.8	1.7 0.952
	4	3.0	194.0	134.0	2.5 0.792
	5	4.0	227.5	167.5	3.2 0.689
	6	5.0	268.5	208.4	3.8 0.613
	7	6.0	320.3	260.3	4.3 0.556
	8	7.0	361.4	301.4	4.8 0.510
	9	8.0	393.5	333.5	5.3 0.470
	10	9.0	442.1	382.1	5.7 0.436
	11	10.0	472.4	412.3	6.1 0.409
	12	12.0	556.7	496.7	6.8 0.361
	13	14.0	628.4	568.4	7.4 0.325
	14	16.0	704.7	644.7	7.9 0.295
	15	18.0	769.5	709.5	8.4 0.271
	16	20.0	836.1	776.1	8.8 0.250
	17	22.0	902.9	842.8	9.1 0.233
	18	24.0	971.8	911.8	9.5 0.217
	19	26.0	1040.9	980.9	9.7 0.204
	20	28.0	1107.4	1047.4	10.0 0.192
	21	30.0	1174.1	1114.1	10.3 0.182
	22	35.0	1349.1	1289.0	10.8 0.160
	23	40.0	1503.8	1443.8	11.2 0.143
	24	45.0	1625.8	1565.8	11.6 0.129
	25	50.0	1697.6	1637.6	11.9 0.118
	26	55.0	1736.0	1676.0	12.1 0.108
D	27	60.4	1759.8	1699.8	12.4 0.100
<b>SECOND FLOW</b>					
E	1	0.0	62.5		
	2	5.0	87.7	25.1	
	3	10.0	85.8	-1.9	
	4	15.0	87.0	1.2	
	5	20.0	91.4	4.4	
	6	25.0	94.5	3.1	
	7	30.0	98.2	3.7	
	8	35.0	101.2	2.9	

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
<b>SECOND FLOW - CONTINUED</b>					
	9	40.0	104.4	3.2	
	10	45.1	106.5	2.1	
	11	50.0	108.2	1.7	
	12	55.0	110.5	2.3	
	13	60.0	111.6	1.1	
	14	65.0	113.9	2.3	
	15	70.0	116.3	2.4	
	16	75.0	117.9	1.6	
	17	80.0	119.1	1.2	
	18	85.0	120.6	1.5	
	19	90.0	122.0	1.5	
	20	95.0	123.4	1.3	
	21	100.0	125.2	1.9	
	22	105.0	126.6	1.3	
	23	110.0	129.2	2.7	
	24	115.0	130.3	1.1	
	25	120.0	131.1	0.8	
F	26	122.6	133.5	2.4	
<b>SECOND CLOSED-IN</b>					
F	1	0.0	133.5		
	2	1.0	167.4	33.8	1.0 2.136
	3	2.0	206.4	72.9	1.9 1.851
	4	3.0	235.4	101.9	3.0 1.669
	5	4.0	288.1	154.6	3.9 1.550
	6	5.0	332.0	198.4	4.8 1.457
	7	6.0	361.9	228.4	5.7 1.382
	8	7.0	398.9	265.4	6.7 1.317
	9	8.0	439.7	306.2	7.6 1.262
	10	9.0	477.6	344.1	8.5 1.213
	11	10.0	510.8	377.3	9.4 1.170
	12	12.0	593.2	459.6	11.0 1.097
	13	14.0	689.3	555.8	12.7 1.035
	14	16.0	766.3	632.7	14.3 0.984
	15	18.0	856.5	723.0	15.9 0.939
	16	20.0	948.7	815.1	17.5 0.898
	17	22.0	1032.8	899.2	19.0 0.862
	18	24.0	1132.4	998.9	20.4 0.830
	19	26.0	1215.2	1081.6	21.9 0.800
	20	28.0	1284.1	1150.6	23.3 0.774
	21	30.0	1359.1	1225.6	24.6 0.749
	22	35.0	1484.6	1351.1	27.9 0.694
	23	40.0	1551.3	1417.8	31.0 0.649
	24	45.0	1594.4	1460.9	33.9 0.610
	25	50.0	1620.2	1486.7	36.7 0.576
	26	55.0	1639.0	1505.5	39.4 0.545
	27	60.0	1656.0	1522.4	41.8 0.519
	28	70.0	1681.0	1547.4	46.5 0.473
	29	80.0	1699.0	1565.4	50.7 0.436
	30	90.0	1711.8	1578.3	54.5 0.404
	31	100.0	1722.2	1586.7	58.0 0.377
	32	110.0	1731.9	1598.4	61.3 0.353

REMARKS:

TICKET NO : 74086200  
 CLOCK NO : 12118 HOUR : 24

GAUGE NO : 2033  
 DEPTH : 5784.0

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
33	120.0	1738.2	1604.7	64.2	0.333
34	135.0	1745.8	1612.3	68.3	0.306
35	150.0	1753.6	1620.1	71.9	0.284
36	165.0	1759.8	1626.3	75.2	0.264
37	180.0	1764.6	1631.0	78.2	0.247
38	195.0	1769.1	1635.5	80.9	0.233
39	210.0	1772.6	1639.1	83.3	0.220
40	225.0	1775.7	1642.2	85.6	0.208
G 41	238.4	1778.5	1644.9	87.5	0.199

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$

REMARKS :

TICKET NO: 74086200  
 CLOCK NO: 9756 HOUR: 24

GAUGE NO: 2032  
 DEPTH: 5829.0

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
<b>FIRST FLOW</b>					
B	1	0.0	50.6		
	2	2.0	51.3	0.7	
	3	4.0	53.3	2.0	
	4	6.0	56.6	3.3	
	5	8.0	61.2	4.6	
	6	10.0	65.1	3.9	
	7	12.0	70.0	4.9	
	8	13.9	73.8	3.8	
C	9	15.6	75.9	2.1	
<b>FIRST CLOSED-IN</b>					
C	1	0.0	75.9		
	2	1.0	127.2	51.3	0.9 1.221
	3	2.0	183.4	107.5	1.7 0.951
	4	3.0	227.0	151.1	2.5 0.790
	5	4.0	273.0	197.1	3.2 0.691
	6	5.0	309.9	234.0	3.8 0.616
	7	6.0	354.5	278.6	4.3 0.555
	8	7.0	401.2	325.3	4.8 0.508
	9	8.0	435.8	359.9	5.3 0.470
	10	9.0	470.7	394.8	5.7 0.435
	11	10.1	513.2	437.3	6.1 0.406
	12	12.0	582.3	506.4	6.8 0.361
	13	14.0	670.5	594.6	7.4 0.325
	14	16.0	735.8	659.9	7.9 0.296
	15	18.0	803.9	728.0	8.4 0.271
	16	20.0	873.2	797.3	8.8 0.250
	17	22.0	938.6	862.7	9.1 0.232
	18	24.0	1000.9	925.0	9.5 0.217
	19	26.0	1069.3	993.4	9.7 0.204
	20	28.0	1138.6	1062.7	10.0 0.192
	21	30.0	1202.2	1126.3	10.3 0.182
	22	35.0	1383.6	1307.7	10.8 0.160
	23	40.0	1541.8	1465.9	11.2 0.143
	24	45.0	1654.1	1578.2	11.6 0.129
	25	50.0	1724.2	1648.3	11.9 0.118
	26	55.0	1759.8	1683.9	12.1 0.108
D	27	60.4	1782.6	1706.7	12.4 0.100
<b>SECOND FLOW</b>					
E	1	0.0	75.5		
	2	5.0	100.4	24.9	
	3	10.0	100.3	-0.1	
	4	15.0	101.3	1.1	
	5	20.0	106.2	4.9	
	6	25.0	109.6	3.4	
	7	30.0	113.2	3.6	
	8	35.0	115.8	2.6	

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
<b>SECOND FLOW - CONTINUED</b>					
	9	40.0	118.8	3.0	
	10	45.0	121.3	2.5	
	11	50.0	122.8	1.4	
	12	55.0	125.0	2.2	
	13	60.0	127.1	2.1	
	14	65.0	129.5	2.4	
	15	70.0	132.0	2.5	
	16	75.0	133.6	1.6	
	17	80.0	134.1	0.5	
	18	85.0	136.1	2.0	
	19	90.0	137.2	1.2	
	20	95.0	138.6	1.3	
	21	100.0	139.5	0.9	
	22	105.0	142.0	2.5	
	23	110.0	143.6	1.6	
	24	115.0	144.6	1.1	
	25	120.0	145.9	1.3	
F	26	122.6	147.8	1.8	
<b>SECOND CLOSED-IN</b>					
F	1	0.0	147.8		
	2	1.0	202.1	54.4	1.0 2.158
	3	2.0	255.2	107.4	1.9 1.853
	4	3.0	287.1	139.4	2.9 1.678
	5	4.0	324.9	177.1	3.8 1.555
	6	5.0	360.4	212.7	4.8 1.458
	7	6.0	404.0	256.2	5.7 1.382
	8	7.0	438.1	290.3	6.7 1.316
	9	8.0	470.2	322.4	7.6 1.260
	10	9.1	518.1	370.3	8.5 1.211
	11	10.0	551.3	403.5	9.3 1.172
	12	12.0	623.3	475.6	11.0 1.099
	13	14.0	706.7	558.9	12.7 1.036
	14	16.0	792.8	645.0	14.3 0.984
	15	18.0	873.3	725.5	15.9 0.939
	16	20.0	963.8	816.1	17.5 0.897
	17	22.0	1060.6	912.8	19.0 0.863
	18	24.0	1150.4	1002.6	20.4 0.830
	19	26.0	1243.5	1095.8	21.9 0.801
	20	28.0	1326.9	1179.1	23.3 0.774
	21	30.0	1394.5	1246.7	24.7 0.748
	22	35.0	1518.6	1370.9	27.9 0.694
	23	40.0	1582.1	1434.4	31.0 0.648
	24	45.0	1619.4	1471.7	33.9 0.610
	25	50.0	1646.8	1499.0	36.7 0.576
	26	55.0	1664.6	1516.8	39.3 0.546
	27	60.0	1680.2	1532.4	41.8 0.519
	28	70.0	1702.4	1554.7	46.4 0.474
	29	80.0	1719.5	1571.7	50.7 0.436
	30	90.0	1732.0	1584.3	54.5 0.404
	31	100.0	1742.4	1594.6	58.0 0.377
	32	110.0	1752.8	1605.1	61.2 0.353

REMARKS:

TICKET NO: 74086200  
 CLOCK NO: 9756 HOUR: 24

GAUGE NO: 2032  
 DEPTH: 5829.0

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND CLOSED-IN - CONTINUED					
33	120.0	1759.9	1612.1	64.2	0.333
34	135.0	1767.8	1620.0	68.3	0.306
35	150.0	1775.8	1628.0	71.9	0.284
36	165.0	1781.0	1633.2	75.2	0.264
37	180.0	1786.2	1638.5	78.2	0.247
38	195.0	1790.2	1642.4	80.9	0.233
39	210.0	1794.7	1647.0	83.3	0.220
40	225.0	1798.0	1650.2	85.6	0.208
G 41	238.4	1799.8	1652.1	87.5	0.199

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$

REMARKS:

		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	5250.0	
3		DRILL COLLARS.....	6.250	2.250	438.0	
50		IMPACT REVERSING SUB.....	6.250	2.250	1.0	5679.0
3		DRILL COLLARS.....	6.250	2.250	86.5	
5		CROSSOVER.....	6.000	2.250	1.0	
13		DUAL CIP SAMPLER.....	5.000	0.750	7.0	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	5778.0
80		AP RUNNING CASE.....	5.000	2.250	4.0	5780.0
80		AP RUNNING CASE.....	5.000	2.250	4.0	5784.0
15		JAR.....	5.000	1.750	5.0	
16		VR SAFETY JOINT.....	5.000	1.000	3.0	
70		OPEN HOLE PACKER.....	7.750	1.580	6.0	5799.0
70		OPEN HOLE PACKER.....	7.750	1.580	6.0	5805.0
20		FLUSH JOINT ANCHOR.....	5.750	2.750	21.0	
81		BLANKED-OFF RUNNING CASE.....	5.750		4.0	5829.0
TOTAL DEPTH						5832.0

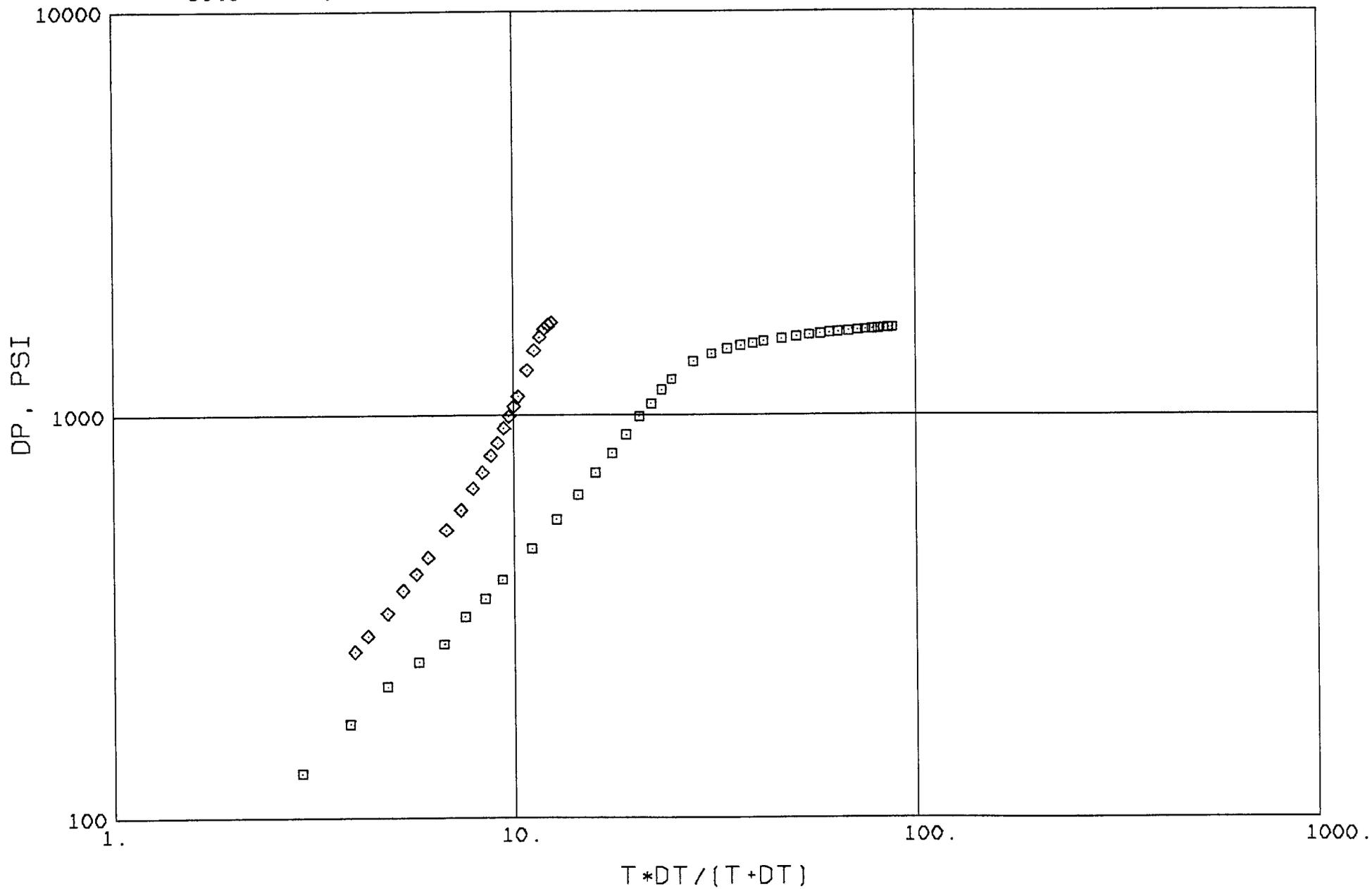
EQUIPMENT DATA

TICKET NO 74086200

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6040     ◇ □

GAUGE NO CIP 1 2  
2033

GAUGE NO CIP 1 2  
2032

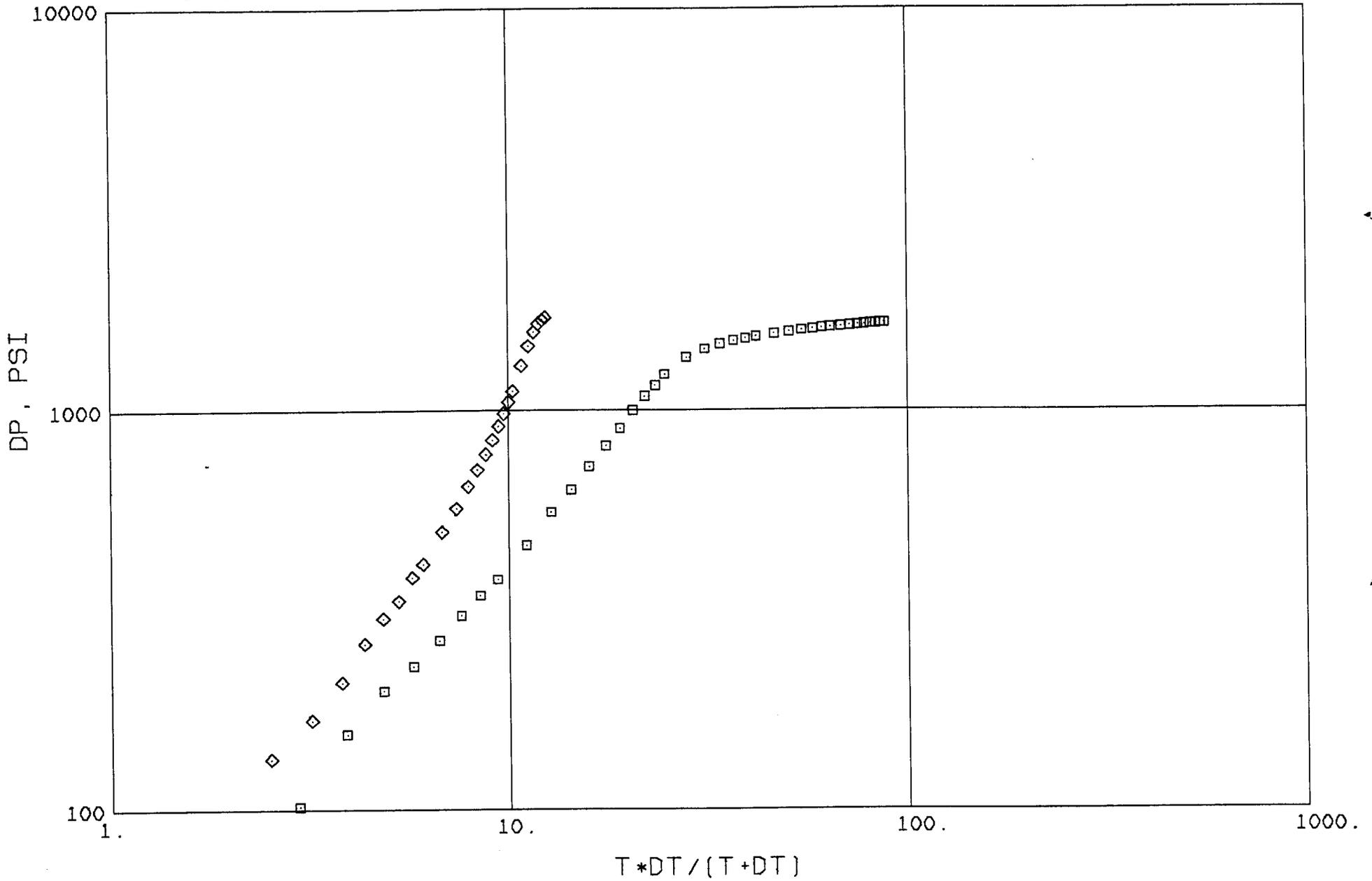


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GAUGE NO CIP 1 2  
2033  $\diamond$   $\square$

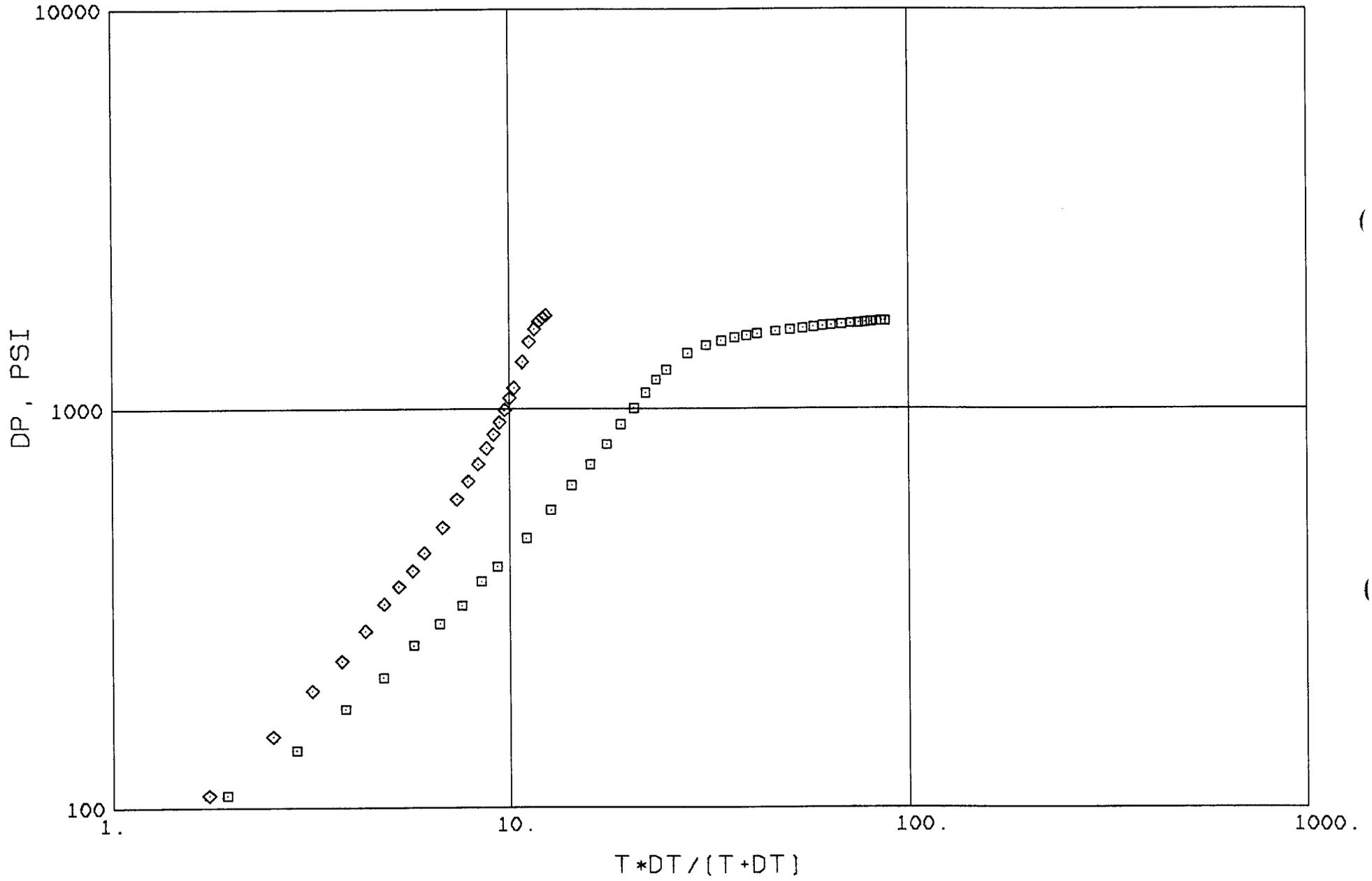
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2032



GAUGE NO CIP 1 2  
6040

GAUGE NO CIP 1 2  
2033

GAUGE NO CIP 1 2  
2032  $\diamond$   $\square$

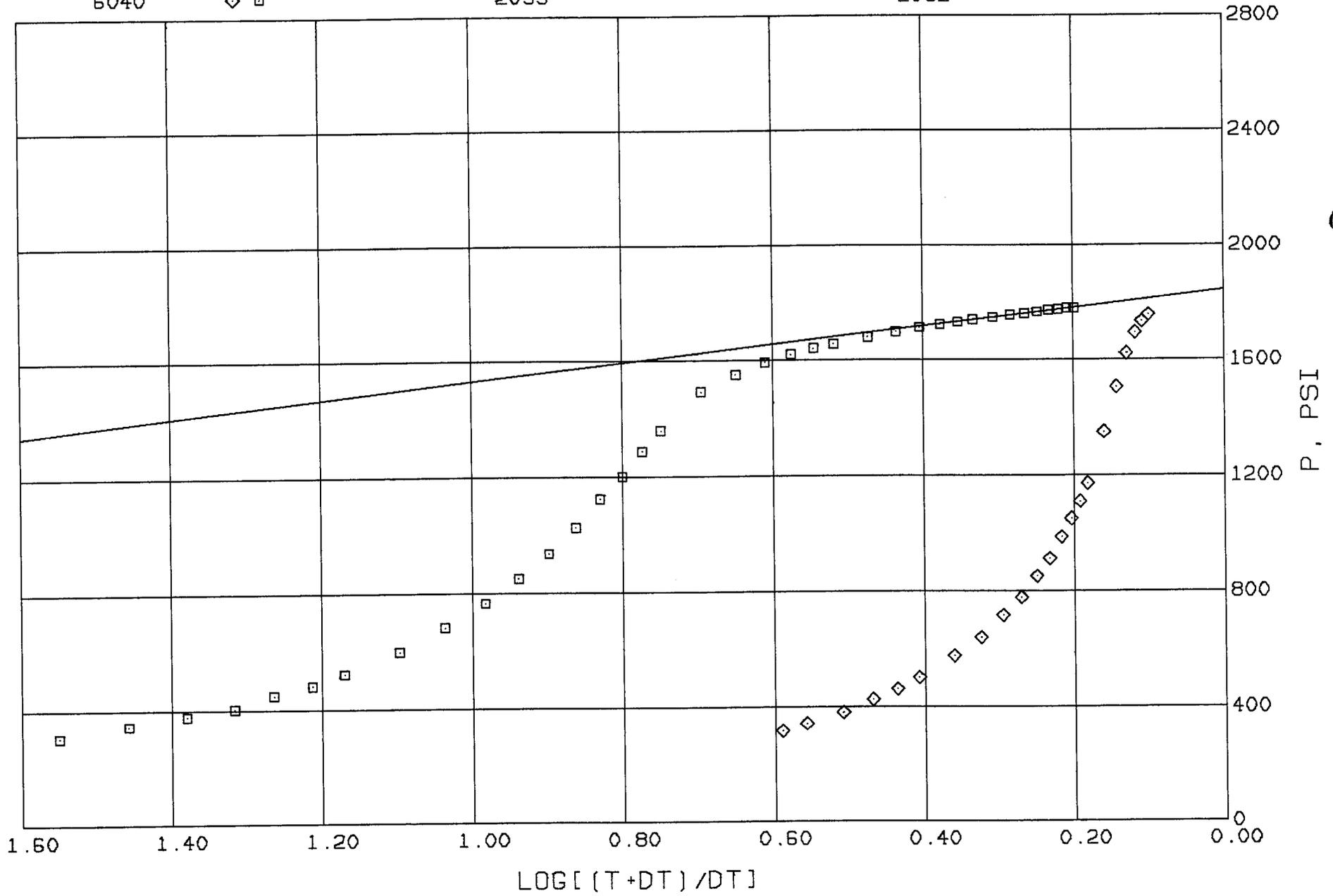


TICKET NO 74086200

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6040     ◇ □

GAUGE NO CIP 1 2  
2033

GAUGE NO CIP 1 2  
2032



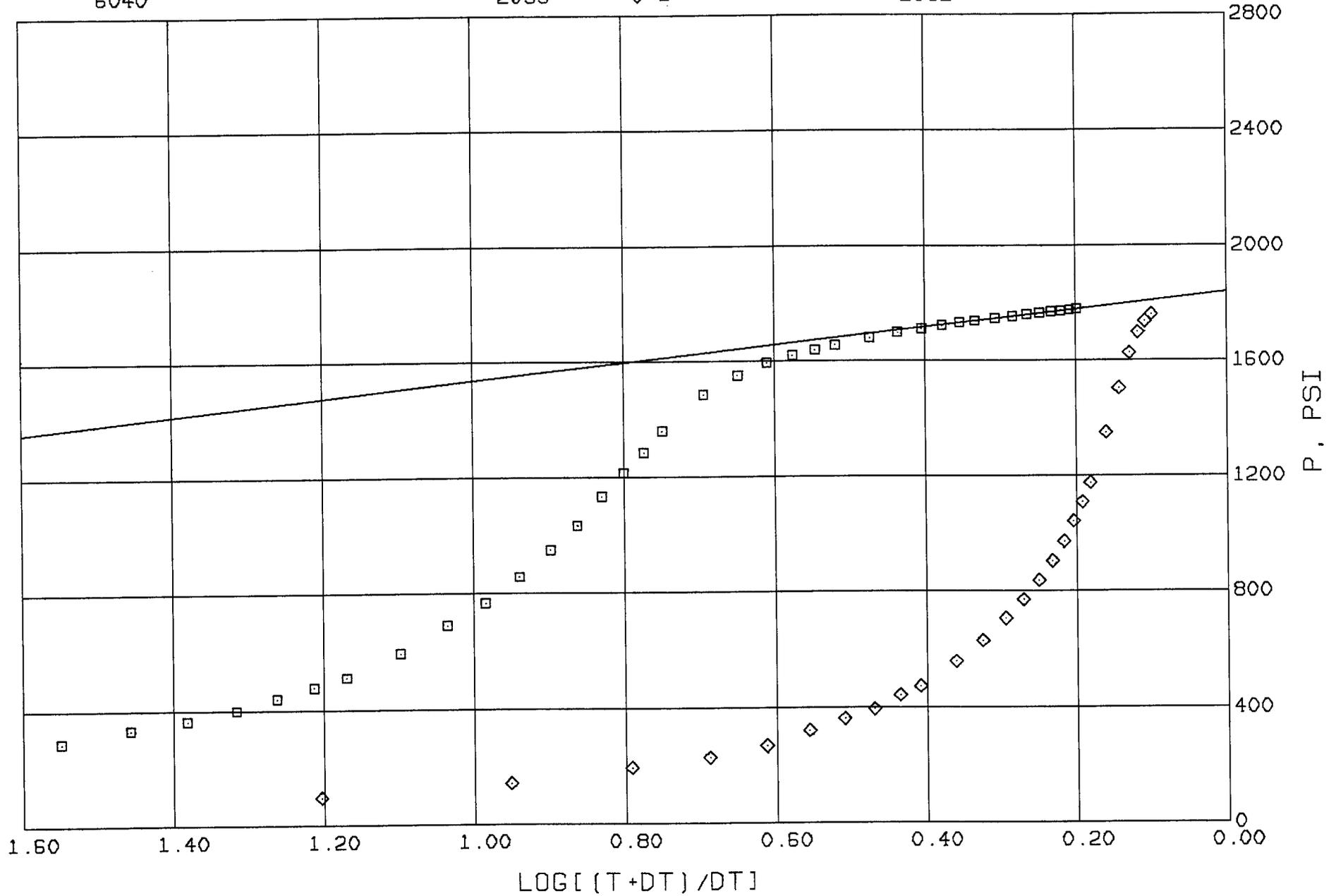
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TICKET NO 74086200

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6040

GAUGE NO CIP 1 2  
2033  $\diamond$   $\square$

GAUGE NO CIP 1 2  
2032

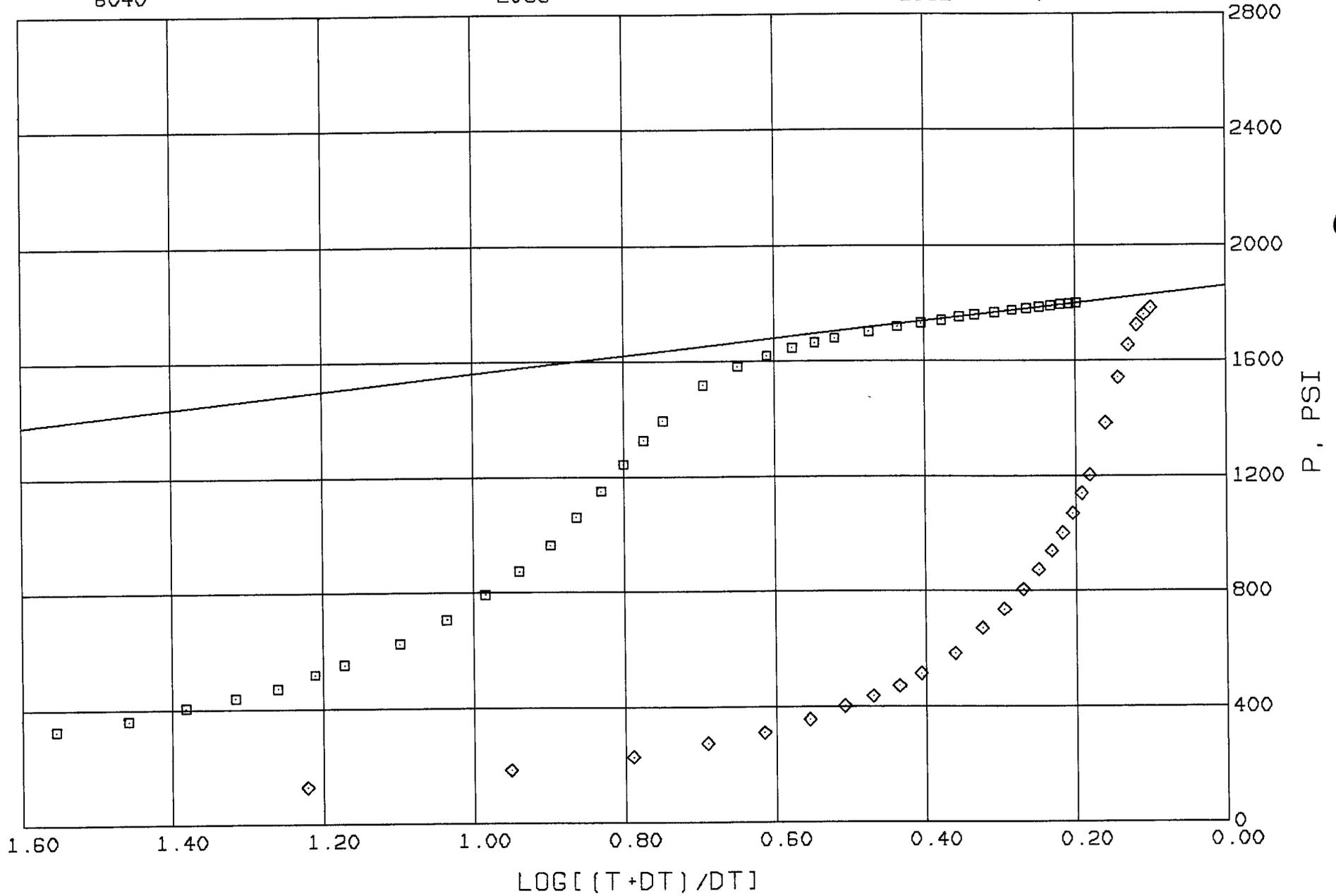


TICKET NO 74086200

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6040

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2033

GAUGE NO CIP 1 2  
2032  $\diamond$   $\square$

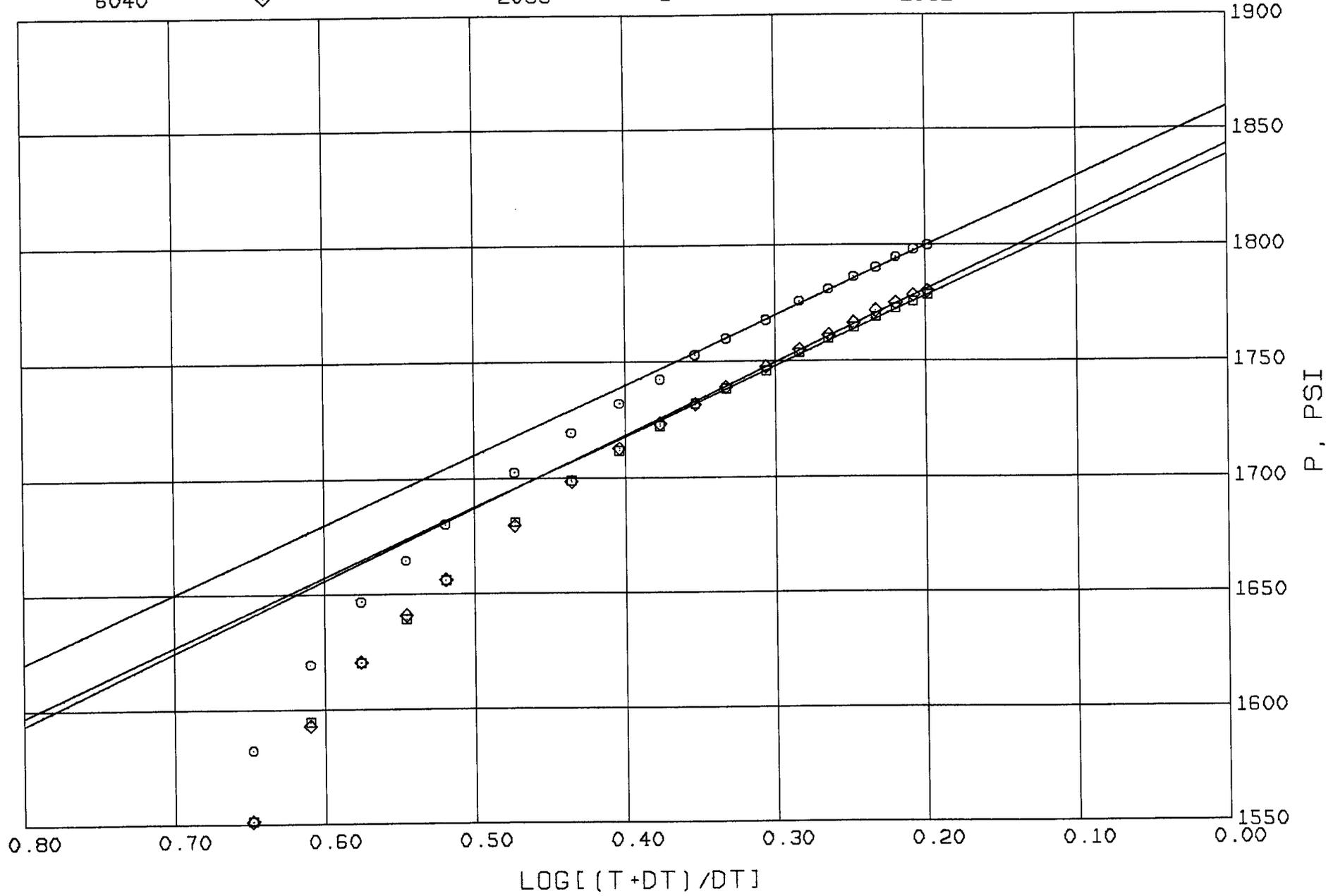


TICKET NO 74086200

GAUGE NO CIP 1 2  
6040      ◇

GAUGE NO CIP 1 2  
2033      □

GAUGE NO CIP 1 2  
2032      ○



## SUMMARY OF RESERVOIR PARAMETERS

### USING HORNER METHOD FOR LIQUID WELLS

OIL GRAVITY <u>46.7</u> °API @ 60 °F	WATER SALINITY <u>0.0</u> % SALT
GAS GRAVITY <u>0.700</u>	FLUID GRADIENT <u>0.3441</u> psi/ft
GAS/OIL RATIO <u>656.1</u> SCF/STB	FLUID PROPERTIES AT <u>1859.6</u> psig
TEMPERATURE <u>118.0</u> °F	VISCOSITY <u>0.522</u> cp
NET PAY <u>6.0</u> ft	FMT VOL FACTOR <u>1.352</u> R <sub>vol</sub> /S <sub>vol</sub>
POROSITY <u>10.0</u> %	SYSTEM COMPRESSIBILITY <u>20.32</u> × 10 <sup>-6</sup> vol/vol/psig
PIPE CAPACITY FACTORS _____	_____ bbl/ft

GAUGE NUMBER	6040	2033	2032				
GAUGE DEPTH	5780.0	5784.0	5829.0				
FLOW AND CIP PERIOD	2	2	2				UNITS
FINAL FLOW PRESSURE P <sub>f</sub>	133.7	133.5	147.8				psig
TOTAL FLOW TIME t	138.2	138.2	138.2				min
EXTRAPOLATED PRESSURE P*	1843.3	1838.6	1859.6				psig
ONE CYCLE PRESSURE	1531.2	1536.7	1560.6				psig
PRODUCTION RATE Q	7.6	7.6	7.6				BPD
TRANSMISSIBILITY kh/μ	5.4	5.6	5.6				md-ft cp
FLOW CAPACITY kh	2.80183	2.89658	2.92484				md-ft
PERMEABILITY k	0.46697	0.48276	0.48747				md
SKIN FACTOR S	2.1	2.3	2.4				
DAMAGE RATIO DR	1.5	1.5	1.6				
POTENTIAL RATE Q <sub>i</sub>	11.4	11.7	11.9				BPD
RADIUS OF INVESTIGATION r <sub>i</sub>	32.2	32.8	32.9				ft

REMARKS: CALCULATIONS ARE BASED ON 100% OIL PRODUCTION FROM THE FORMATION. THE FLOW RATE WAS DETERMINED USING THE PRESSURE CHANGE METHOD WITH DATA FROM THE SECOND FLOW PERIOD AND A COMPOSITE FLUID GRADIENT BASED ON FINAL FLOW PRESSURE.

CALCULATIONS WERE NOT PERFORMED ON THE DATA FROM THE FIRST CLOSED-IN PERIOD DUE TO INSUFFICIENT PRESSURE DEVELOPMENT.

THE LOG-LOG PLOTS OF THE SECOND CIP WERE SUCCESSFULLY MATCHED AGAINST THE RADIAL FLOW TYPE CURVES ON A SKIN FACTOR CURVE OF ZERO, YIELDING RESULTS VERY SIMILAR TO THE SEMILOG RESULTS ABOVE.

**NOTICE:** BECAUSE OF THE UNCERTAINTY OF VARIABLE WELL CONDITIONS AND THE NECESSITY OF RELYING ON FACTS AND SUPPORTING SERVICES FURNISHED BY OTHERS, HRS IS UNABLE TO GUARANTEE THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, JOB RECOMMENDATION OR OTHER DATA FURNISHED BY HRS. HRS PERSONNEL WILL USE THEIR BEST EFFORTS IN GATHERING SUCH INFORMATION AND THEIR BEST JUDGMENT IN INTERPRETING IT BUT CUSTOMER AGREES THAT HRS SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES ARISING FROM THE USE OF SUCH INFORMATION EXCEPT WHERE DUE TO HRS GROSS NEGLIGENCE OR WILLFUL MISCONDUCT IN THE PREPARATION OF FURNISHING OF INFORMATION.

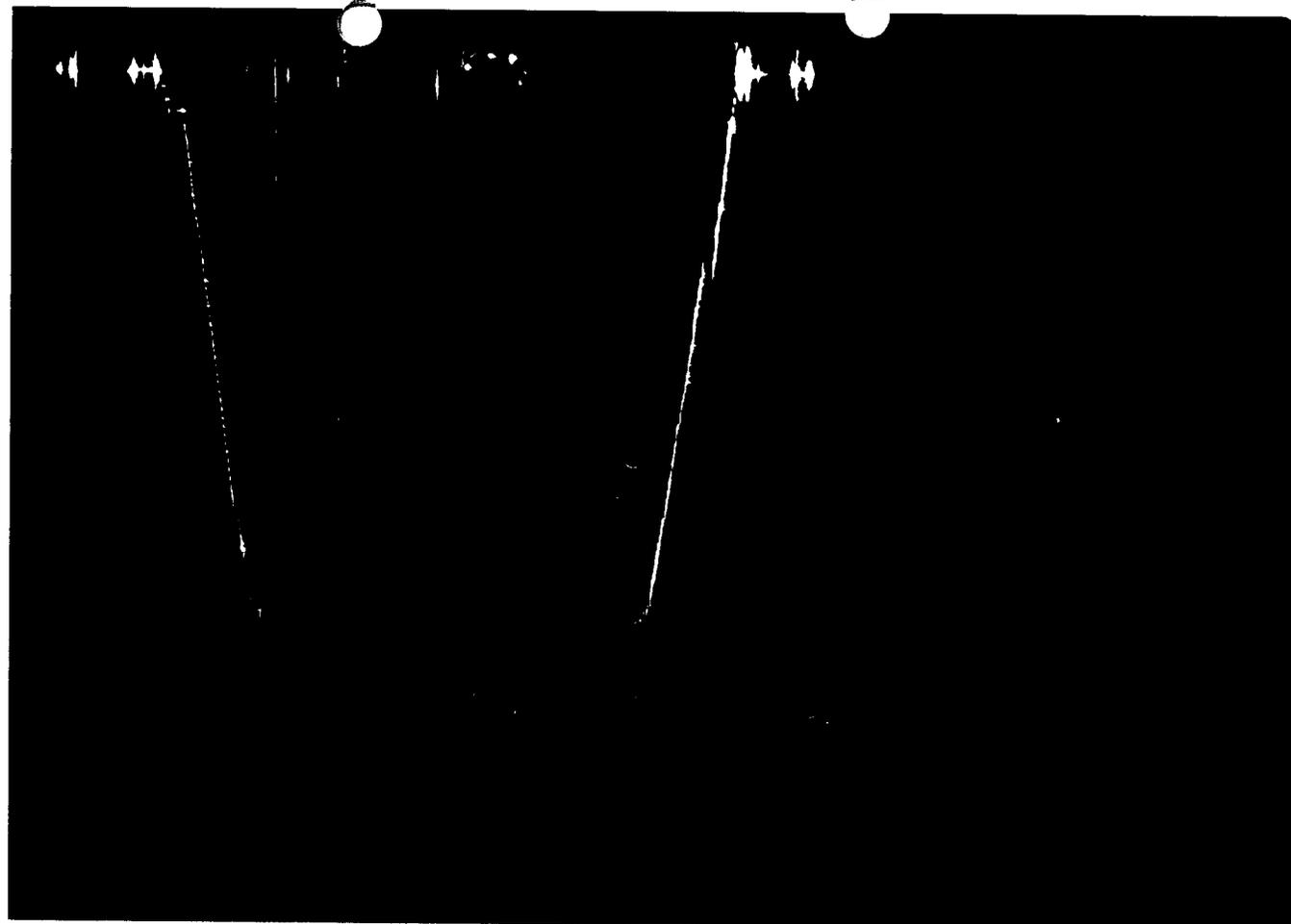
**RECEIVED**  
AUG 10 1989

DIVISION OF  
OIL, GAS & MINING

<p><b>COASTAL OIL AND GAS CORPORATION</b></p> <p><b>LEASE : C.O.G.C.</b></p> <p><b>WELL NO. : 1-35 FEDERAL</b></p> <p><b>TEST NO. : 2</b></p>
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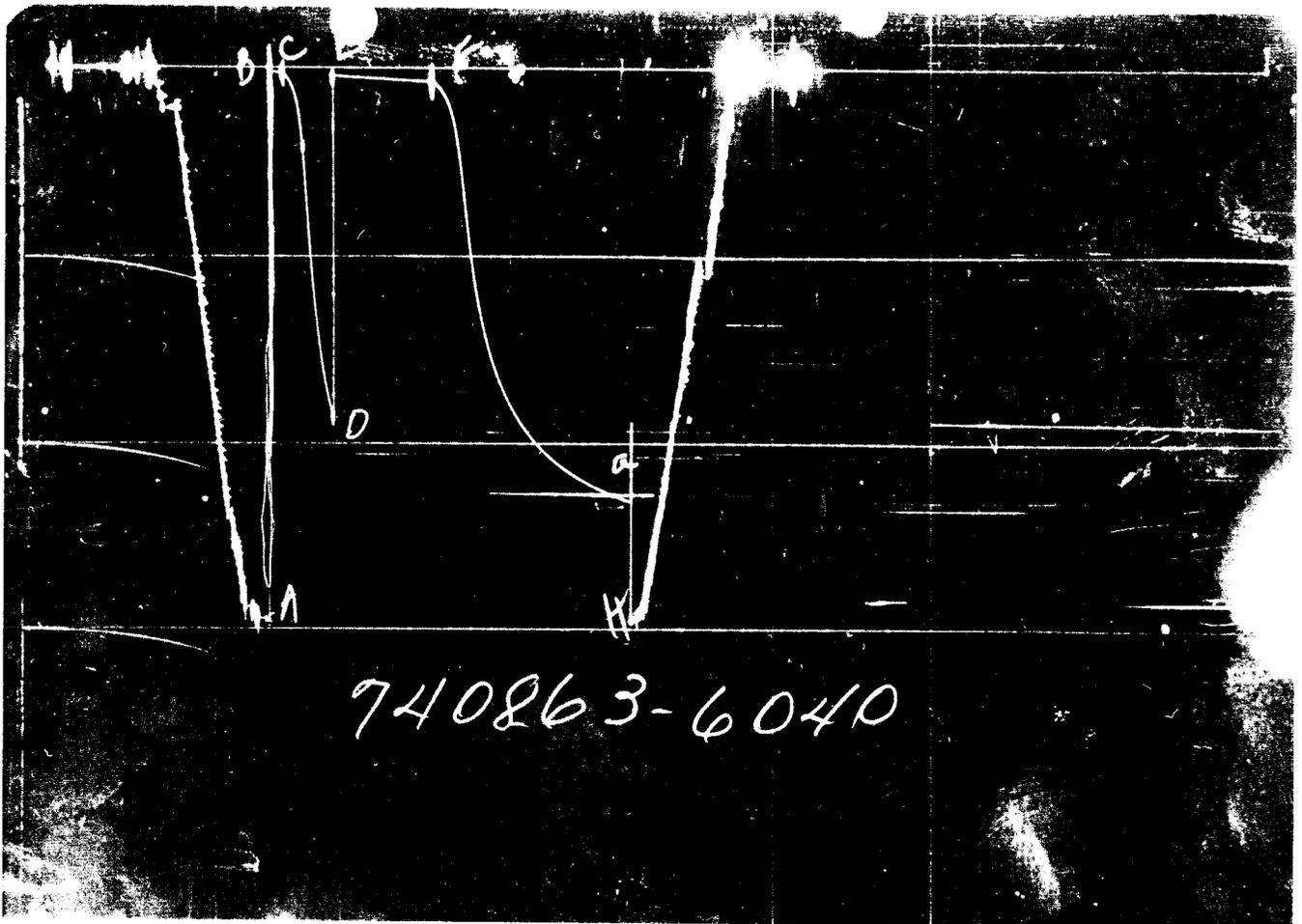
TICKET NO. 74086300  
07-AUG-89  
FARMINGTON

LEGAL LOCATION SEC. - TWP. - RNG.	35 36S-21E	FIELD AREA	WILDCAT	COUNTY	SBN JURN	STATE	UTRH	SM
LEASE NAME	C.O.G.C.		WELL NO.	1-35 FEDERAL		TEST NO.	2	
TESTED INTERVAL	5947.0 - 5972.0		LEASE OWNER/COMPANY NAME	COASTAL OIL AND GAS CORPORATION				

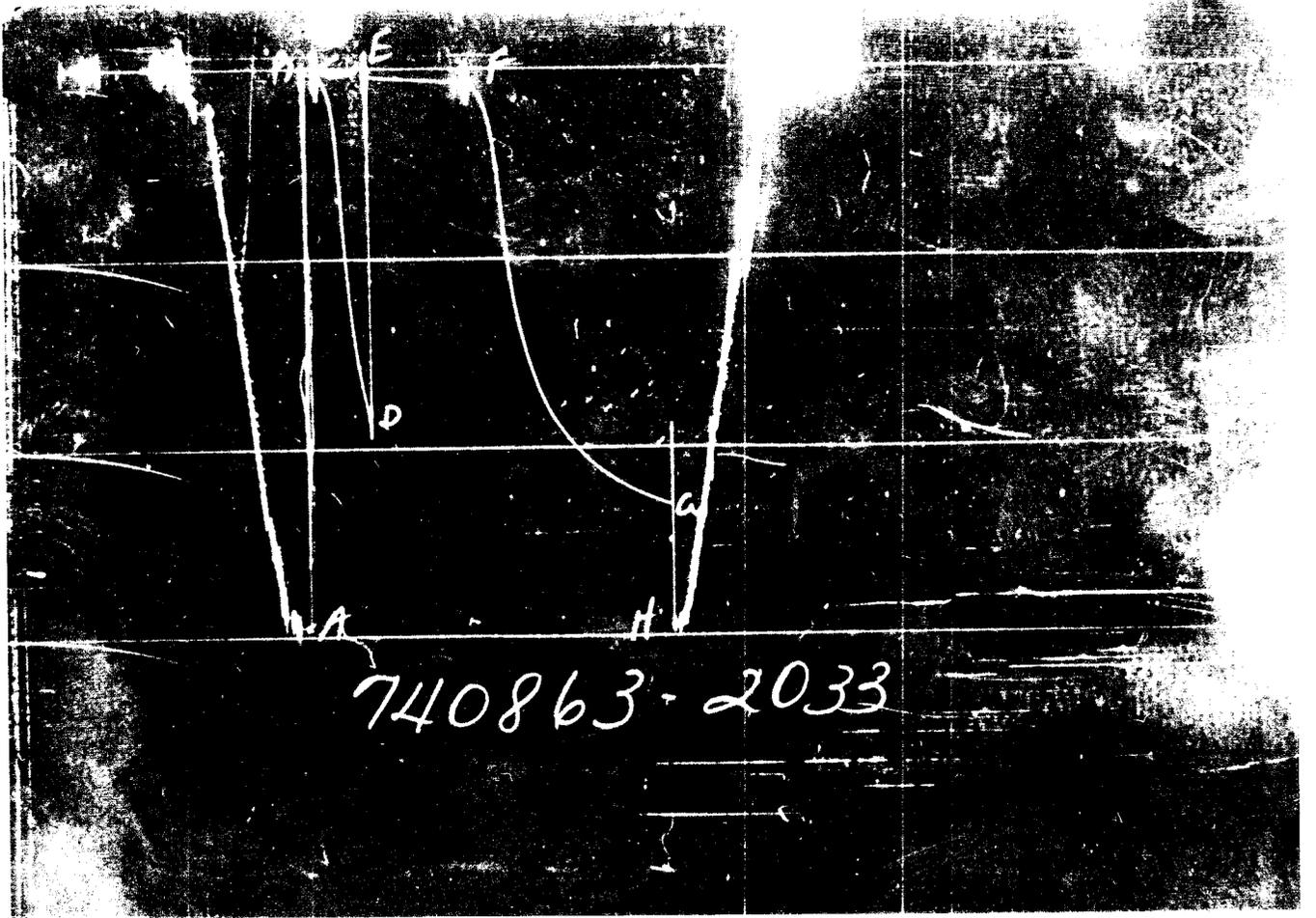


GAUGE NO: 6040 DEPTH: 5932.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2978	2957.7			
B	INITIAL FIRST FLOW	27	22.9			
C	FINAL FIRST FLOW	41	28.5	15.0	16.2	F
C	INITIAL FIRST CLOSED-IN	41	28.5			
D	FINAL FIRST CLOSED-IN	1874	1848.9	60.0	59.9	C
E	INITIAL SECOND FLOW	54	42.4			
F	FINAL SECOND FLOW	67	72.9	120.0	119.7	F
F	INITIAL SECOND CLOSED-IN	67	72.9			
G	FINAL SECOND CLOSED-IN	2277	2316.9	240.0	239.2	C
H	FINAL HYDROSTATIC	2965	2955.3			



740863-6040



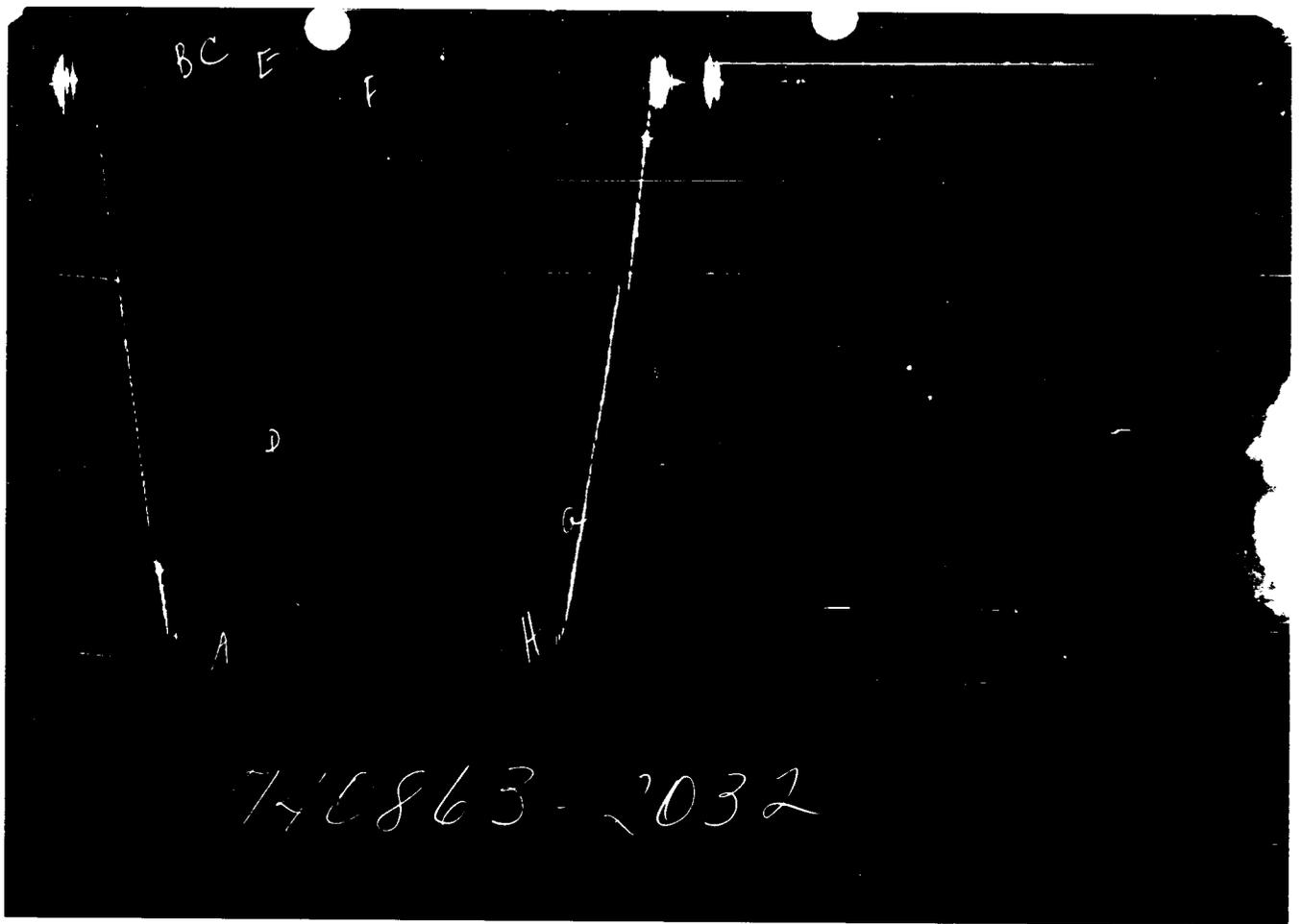
740863-2033

GAUGE NO: 2033 DEPTH: 5936.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2941	2957.6			
B	INITIAL FIRST FLOW	27	24.4	15.0	16.2	F
C	FINAL FIRST FLOW	40	30.4			
C	INITIAL FIRST CLOSED-IN	40	30.4	60.0	59.9	C
D	FINAL FIRST CLOSED-IN	1859	1851.0			
E	INITIAL SECOND FLOW	54	44.2	120.0	119.7	F
F	FINAL SECOND FLOW	80	74.5			
F	INITIAL SECOND CLOSED-IN	80	74.5	240.0	239.2	C
G	FINAL SECOND CLOSED-IN	2255	2314.0			
H	FINAL HYDROSTATIC	2928	2950.8			

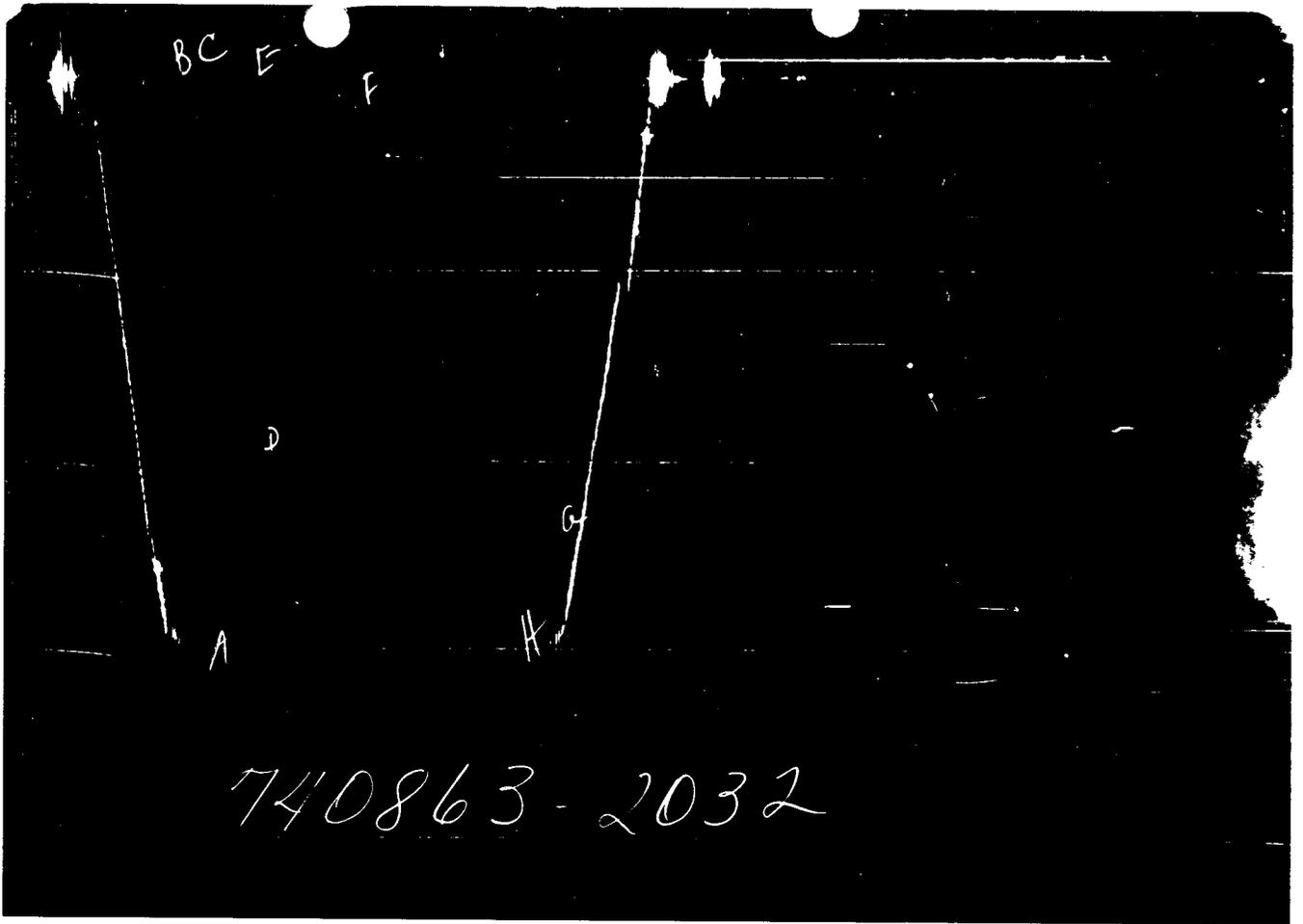
GAUGE NO: 2032 DEPTH: 5969.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2946	2980.2			
B	INITIAL FIRST FLOW	53	45.3			
C	FINAL FIRST FLOW	53	51.8	15.0	16.2	F
C	INITIAL FIRST CLOSED-IN	53	51.8			
D	FINAL FIRST CLOSED-IN	1850	1877.7	60.0	59.9	C
E	INITIAL SECOND FLOW	66	66.7			
F	FINAL SECOND FLOW	79	92.5	120.0	119.7	F
F	INITIAL SECOND CLOSED-IN	79	92.5			
G	FINAL SECOND CLOSED-IN	2284	2338.5	240.0	239.2	C
H	FINAL HYDROSTATIC	2932	2981.0			



GAUGE NO: 2032 DEPTH: 5969.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2946	2980.2			
B	INITIAL FIRST FLOW	53	45.3			
C	FINAL FIRST FLOW	53	51.8	15.0	16.2	F
C	INITIAL FIRST CLOSED-IN	53	51.8			
D	FINAL FIRST CLOSED-IN	1850	1877.7	60.0	59.9	C
E	INITIAL SECOND FLOW	66	66.7			
F	FINAL SECOND FLOW	79	92.5	120.0	119.7	F
F	INITIAL SECOND CLOSED-IN	79	92.5			
G	FINAL SECOND CLOSED-IN	2284	2338.5	240.0	239.2	C
H	FINAL HYDROSTATIC	2932	2981.0			



740863-2032

GAUGE NO: 2032 DEPTH: 1000.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2041	2080.2			
B	INITIAL FIRST FLOOR	53	45.3			
C	FINE FIRST FLOOR	53	51.8	15.0	16.2	F
D	INITIAL FIRST FLOOR IN	53	51.8			
D	FINE FIRST FLOOR IN	1850	1877.7	60.0	59.9	C
E	INITIAL SECOND FLOOR	66	66.7			
F	FINE SECOND FLOOR	79	92.5	120.0	119.7	F
F	INITIAL SECOND FLOOR IN	79	92.5			
G	FINE SECOND FLOOR IN	2034	2081.5	240.0	239.2	C
H	FINE HYDROSTATIC	2032	2081.0			

## EQUIPMENT & HOLE DATA

FORMATION TESTED: DESERT CREEK  
 NET PAY (ft): 11.0  
 GROSS TESTED FOOTAGE: 25.0  
 ALL DEPTHS MEASURED FROM: K.B. (12'AGL)  
 CASING PERFS. (ft): \_\_\_\_\_  
 HOLE OR CASING SIZE (in): 8.750  
 ELEVATION (ft): 5592.0 KELLY BUSHING  
 TOTAL DEPTH (ft): 5972.0  
 PACKER DEPTH(S) (ft): 5941, 5947  
 FINAL SURFACE CHOKE (in): \_\_\_\_\_  
 BOTTOM HOLE CHOKE (in): 0.750  
 MUD WEIGHT (lb/gal): 9.50  
 MUD VISCOSITY (sec): 36  
 ESTIMATED HOLE TEMP. (°F): \_\_\_\_\_  
 ACTUAL HOLE TEMP. (°F): 119 @ 5968.0 ft

TICKET NUMBER: 74086300  
 DATE: 8-3-89 TEST NO: 2  
 TYPE DST: OPEN HOLE  
 FIELD CAMP:  
FARMINGTON  
 TESTER: K.G. TROUTH  
 WITNESS: DON NICHOLS  
 DRILLING CONTRACTOR:  
EXETER RIG #68

## FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
<u>MUD PIT</u>	<u>2.300 @ 75 °F</u>	<u>2500 ppm</u>
<u>TOP</u>	<u>1.700 @ 80 °F</u>	<u>3000 ppm</u>
<u>BOTTOM</u>	<u>1.700 @ 80 °F</u>	<u>3000 ppm</u>
<u>SAMPLER</u>	<u>1.200 @ 80 °F</u>	<u>5300 ppm</u>
_____	_____ @ _____ °F	_____ ppm
_____	_____ @ _____ °F	_____ ppm

## SAMPLER DATA

Psig AT SURFACE: 50.0  
 cu.ft. OF GAS: \_\_\_\_\_  
 cc OF OIL: \_\_\_\_\_  
 cc OF WATER: 2350.0  
 cc OF MUD: 100.0  
 TOTAL LIQUID cc: 2450.0

## HYDROCARBON PROPERTIES

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

## CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

## RECOVERED :

120 FEET OF WATER CUT DRILLING MUD WITH SLIGHT TRACE OF GAS

MEASURED FROM TESTER VALVE

## REMARKS :

TYPE & SIZE MEASURING DEVICE :				CHOKER MANIFOLD		TICKET NO: 74086300
TIME	CHOKER SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS	
8-3-89						
0830					ON LOCATION, TRIPPING OUT OF HOLE	
0910					LOADED BT'S...PREPARED TOOLS	
0945					PICKED UP AND MADE UP TOOLS	
1015					PUT IN CROSSOVER	
1020					PUT IN REVERSING SUB	
1023					TRIPPED IN HOLE	
1240					ON BOTTOM, PICKED UP AND MADE UP CONTROL HEAD	
1245					SET PACKER 27,000# ON TOOL	
1250	1/4" BH				TOOL OPENED WITH A WEAK BLOW, 1/4" IN PAIL...INCREASING SLOWLY	
1255					1" IN PAIL	
1300					2" IN PAIL	
1305					2 3/4" IN PAIL, CLOSED TOOL	
1306					OPEN TO PIT	
1310					DEAD IN 5 MINUTES	
1405	1/4" BH				OPENED TOOL WITH VERY WEAK BLOW	
					1/16" IN PAIL	
1420					3/4" IN PAIL	
1435					1 1/4" IN PAIL	
1450					1 1/4" IN PAIL	
1505					1 1/2" IN PAIL	
1520					1 1/2" IN PAIL	
1535					1 1/2" IN PAIL	
1550					1 1/2" IN PAIL	
1605					1 1/2" IN PAIL, CLOSED TOOL, OPEN TO PIT	
1609					BLOW DEAD IN 4 MINUTES	
2005					PULLED TOOL LOOSE	
2020					LAID DOWN 5 JTS., TRIPPED OUT OF HOLE	
2300					OUT OF HOLE, DRAINING SAMPLER BROKE OUT TOOLS	
2345					LOADED TOOLS	
8-4-89						
0030					JOB COMPLETED	

TICKET NO: 74086300  
 CLOCK NO: 13741 HOUR: 24

GAUGE NO: 6040  
 DEPTH: 5932.0

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
<b>FIRST FLOW</b>					
B	1	0.0	22.9		
	2	3.0	22.7	-0.1	
	3	6.0	24.2	1.5	
	4	9.0	25.6	1.3	
	5	12.0	27.4	1.9	
C	6	16.2	28.5	1.1	
<b>FIRST CLOSED-IN</b>					
C	1	0.0	28.5		
	2	5.0	55.2	26.7	3.8 0.629
	3	10.0	96.3	67.8	6.2 0.419
	4	15.0	166.3	137.7	7.8 0.319
	5	20.0	302.8	274.3	9.0 0.258
	6	25.0	569.1	540.6	9.8 0.217
	7	30.0	880.9	852.3	10.5 0.188
	8	35.0	1159.5	1131.0	11.1 0.165
	9	40.0	1367.1	1338.6	11.5 0.148
	10	45.0	1534.5	1505.9	11.9 0.134
	11	50.0	1671.4	1642.9	12.3 0.122
	12	54.9	1778.0	1749.5	12.5 0.112
D	13	59.9	1848.9	1820.3	12.8 0.104
<b>SECOND FLOW</b>					
E	1	0.0	42.4		
	2	10.0	45.4	3.0	
	3	20.0	48.5	3.1	
	4	30.0	51.1	2.6	
	5	40.0	53.9	2.8	
	6	50.0	56.3	2.4	
	7	60.0	58.6	2.3	
	8	70.0	61.4	2.8	
	9	80.0	63.5	2.0	
	10	90.0	65.9	2.4	
	11	100.0	68.6	2.7	
	12	110.0	70.7	2.2	
F	13	119.7	72.9	2.2	
<b>SECOND CLOSED-IN</b>					
F	1	0.0	72.9		
	2	10.0	111.7	38.8	9.3 1.163
	3	20.0	193.4	120.5	17.5 0.891
	4	30.0	384.7	311.8	24.6 0.743
	5	40.0	749.8	676.9	30.9 0.643
	6	50.0	1097.2	1024.3	36.6 0.570
	7	60.0	1350.7	1277.8	41.6 0.514
	8	70.0	1526.2	1453.3	46.2 0.469

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
<b>SECOND CLOSED-IN - CONTINUED</b>					
9	80.0	1656.8	1583.9	50.3	0.431
10	90.0	1760.8	1687.9	54.1	0.400
11	100.0	1844.4	1771.5	57.6	0.373
12	110.0	1915.3	1842.4	60.8	0.349
13	120.0	1976.3	1903.4	63.7	0.329
14	130.0	2026.9	1954.0	66.4	0.311
15	140.0	2070.4	1997.5	69.0	0.295
16	150.0	2109.5	2036.6	71.3	0.280
17	160.0	2143.2	2070.3	73.5	0.267
18	170.0	2172.7	2099.8	75.5	0.255
19	180.0	2200.9	2128.0	77.4	0.244
20	190.0	2226.1	2153.2	79.2	0.234
21	200.0	2247.5	2174.6	80.9	0.225
22	210.0	2268.3	2195.4	82.5	0.217
23	220.0	2285.8	2212.9	84.0	0.209
24	230.0	2302.1	2229.2	85.4	0.202
G	25	239.2	2316.9	2244.0	86.7 0.195

REMARKS:

TICKET NO: 74086300  
 CLOCK NO: 12118 HOUR: 24

GAUGE NO: 2033  
 DEPTH: 5936.0

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
<b>FIRST FLOW</b>					
B	1	0.0	24.4		
	2	3.0	23.4	-0.9	
	3	6.0	25.8	2.4	
	4	9.0	27.2	1.3	
	5	12.0	29.1	1.9	
C	6	16.2	30.4	1.3	
<b>FIRST CLOSED-IN</b>					
C	1	0.0	30.4		
	2	5.0	56.6	26.2	3.8 0.630
	3	10.0	100.8	70.5	6.2 0.419
	4	15.0	176.7	146.3	7.8 0.319
	5	20.0	329.2	298.8	9.0 0.258
	6	25.0	603.9	573.5	9.8 0.218
	7	30.0	929.4	899.0	10.5 0.188
	8	35.0	1201.3	1170.9	11.1 0.165
	9	40.0	1399.7	1369.4	11.5 0.148
	10	45.0	1552.9	1522.5	11.9 0.134
	11	50.0	1680.5	1650.1	12.3 0.122
	12	55.0	1779.5	1749.2	12.5 0.112
	D	13	59.9	1851.0	1820.6
<b>SECOND FLOW</b>					
E	1	0.0	44.2		
	2	10.0	45.9	1.7	
	3	20.0	50.5	4.5	
	4	30.0	52.1	1.6	
	5	40.0	55.1	3.1	
	6	50.0	57.7	2.5	
	7	60.0	60.3	2.7	
	8	70.0	62.9	2.5	
	9	80.0	65.8	2.9	
	10	90.0	67.2	1.3	
	11	100.0	70.1	2.9	
	12	110.0	72.5	2.4	
	F	13	119.7	74.5	2.0
<b>SECOND CLOSED-IN</b>					
F	1	0.0	74.5		
	2	10.0	113.4	38.9	9.3 1.163
	3	20.0	195.5	121.0	17.4 0.892
	4	30.0	388.2	313.7	24.6 0.742
	5	40.0	779.1	704.5	30.9 0.643
	6	50.0	1133.9	1059.4	36.5 0.571
	7	60.0	1367.4	1292.8	41.6 0.514
	8	70.0	1537.6	1463.0	46.2 0.469

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
<b>SECOND CLOSED-IN - CONTINUED</b>					
G	9	80.0	1667.9	1593.4	50.4 0.431
	10	90.0	1770.4	1695.9	54.2 0.400
	11	100.0	1852.4	1777.9	57.6 0.373
	12	110.0	1916.5	1841.9	60.8 0.349
	13	120.0	1974.1	1899.6	63.7 0.329
	14	130.0	2024.9	1950.3	66.4 0.311
	15	140.0	2069.9	1995.4	68.9 0.295
	16	150.0	2108.2	2033.7	71.3 0.280
	17	160.0	2141.7	2067.1	73.5 0.267
	18	170.0	2170.8	2096.3	75.5 0.255
	19	180.0	2198.9	2124.4	77.4 0.244
	20	190.0	2224.9	2150.4	79.2 0.234
	21	200.0	2246.0	2171.5	80.9 0.225
	22	210.0	2264.6	2190.1	82.5 0.217
	23	220.0	2283.3	2208.8	84.0 0.209
	24	230.0	2299.8	2225.3	85.4 0.202
	25	239.2	2314.0	2239.5	86.7 0.195

REMARKS:

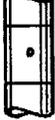
TICKET NO: 74086300  
 CLOCK NO: 9756 HOUR: 24

GAUGE NO: 2032  
 DEPTH: 5969.0

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
<b>FIRST FLOW</b>					
B 1	0.0	45.3			
2	3.0	44.5	-0.8		
3	6.0	46.1	1.6		
4	9.0	47.8	1.7		
5	12.0	49.5	1.7		
C 6	16.2	51.8	2.4		
<b>FIRST CLOSED-IN</b>					
C 1	0.0	51.8			
2	5.0	80.7	28.8	3.8	0.626
3	10.0	120.5	68.7	6.2	0.419
4	15.0	189.2	137.4	7.8	0.319
5	20.0	324.9	273.1	9.0	0.258
6	25.0	564.5	512.7	9.8	0.217
7	30.0	876.9	825.0	10.5	0.188
8	35.0	1168.3	1116.4	11.1	0.165
9	40.0	1381.8	1330.0	11.5	0.148
10	45.0	1558.1	1506.2	11.9	0.134
11	50.0	1694.2	1642.4	12.3	0.122
12	55.0	1799.1	1747.2	12.5	0.112
D 13	59.9	1877.7	1825.9	12.8	0.104
<b>SECOND FLOW</b>					
E 1	0.0	66.7			
2	10.0	66.6	-0.1		
3	20.0	69.2	2.6		
4	30.0	72.5	3.3		
5	40.0	73.8	1.3		
6	50.0	76.7	2.9		
7	60.0	79.1	2.4		
8	70.0	81.6	2.5		
9	80.0	83.8	2.2		
10	90.0	85.8	2.0		
11	100.0	88.3	2.5		
12	110.0	89.9	1.6		
F 13	119.7	92.5	2.6		
<b>SECOND CLOSED-IN</b>					
F 1	0.0	92.5			
2	10.0	138.6	46.1	9.3	1.164
3	20.0	221.4	128.8	17.4	0.892
4	30.0	423.9	331.4	24.6	0.743
5	40.0	795.2	702.7	30.9	0.643
6	50.0	1141.6	1049.0	36.6	0.570
7	60.0	1392.9	1300.4	41.6	0.514
8	70.0	1562.4	1469.8	46.2	0.468

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
<b>SECOND CLOSED-IN - CONTINUED</b>					
9	80.0	1689.9	1597.3	50.4	0.431
10	90.0	1793.8	1701.3	54.1	0.400
11	100.0	1876.6	1784.0	57.6	0.373
12	110.0	1945.0	1852.5	60.8	0.349
13	120.0	2003.4	1910.9	63.7	0.329
14	130.0	2053.4	1960.9	66.4	0.311
15	140.0	2096.5	2003.9	69.0	0.295
16	150.0	2134.2	2041.7	71.3	0.280
17	160.0	2168.6	2076.1	73.5	0.267
18	170.0	2196.9	2104.4	75.5	0.255
19	180.0	2223.8	2131.3	77.4	0.244
20	190.0	2248.8	2156.3	79.2	0.234
21	200.0	2270.7	2178.2	80.9	0.225
22	210.0	2291.0	2198.4	82.5	0.217
23	220.0	2309.3	2216.7	84.0	0.209
24	230.0	2325.7	2233.2	85.4	0.202
G 25	239.2	2338.5	2245.9	86.7	0.195

REMARKS:

		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.825	5495.0	
3		DRILL COLLARS.....	6.250	2.250	336.0	
50		IMPACT REVERSING SUB.....	6.250	2.250	1.0	5831.0
3		DRILL COLLARS.....	6.250	2.250	86.0	
5		CROSSOVER.....	6.000	2.250	1.0	
13		DUAL CIP SAMPLER.....	5.000	0.750	7.0	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	5930.0
80		AP RUNNING CASE.....	5.000	2.250	4.0	5932.0
80		AP RUNNING CASE.....	5.000	2.250	4.0	5936.0
15		JAR.....	5.000	1.750	5.0	
16		VR SAFETY JOINT.....	5.000	1.000	3.0	
70		OPEN HOLE PACKER.....	7.750	1.580	6.0	5941.0
70		OPEN HOLE PACKER.....	7.750	1.580	6.0	5947.0
20		FLUSH JOINT ANCHOR.....	5.750	3.750	19.0	
81		BLANKED-OFF RUNNING CASE.....	5.750		4.0	5969.0
TOTAL DEPTH					5972.0	

EQUIPMENT DATA

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

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

12

5. LEASE DESIGNATION AND SERIAL NO.  
U-57656

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

N/A

7. LEASE AGREEMENT NAME

N/A

8. LEASE OR LEASE NAME

COGC

9. WELL NO.

1-35-36-21 Federal

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

Section 35, T36S, R21E

12. COUNTY OR PARISH

San Juan

13. STATE

UT

19. ELEV. CASINGHEAD

No

27. WAS WELL CORED

yes

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG\***

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

2. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. GENVR.  OTHER

2. NAME OF OPERATOR  
Coastal Oil & Gas Corporation

3. ADDRESS OF OPERATOR  
P.O. Box 749, Denver, CO 80201-0749

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 2175' FSL & 382' FWL NW/SW Section 35

At top prod. interval reported below

At total depth

14. PERMIT NO. 43-037-31465  
DATE ISSUED

15. DATE SPUDDED 7/18/89

16. DATE T.D. REACHED 8/4/89

17. DATE COMPL. (Ready to prod.) 8/6/89

18. ELEVATIONS (DP, RKB, RT, GR, ETC.)\* 5590' GR

20. TOTAL DEPTH, MD & TVD 6049'

21. PLUG BACK T.D., MD & TVD P&A'd 8/6/89

22. IF MULTIPLE COMPL., HOW MANY\*

23. INTERVALS DRILLED BY

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*

None

26. TYPE ELECTRIC AND OTHER LOGS RUN

DILL/MSFL/GR/ Sonic; FDC-CNL/ GR *2 inch*

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

29. LINER RECORD

30. TUBING RECORD

31. PERFORATION RECORD (Interval, size and number)

None

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

None

33. PRODUCTION

DATE FIRST PRODUCTION

PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)

WELL STATUS (Producing or shut-in)  
P&A'd 8/6/89

DATE OF TEST HOURS TESTED CHOKER SIZE PROD'N. FOR TEST PERIOD

FLOW. TUBING PRESS. CASING PRESSURE CALCULATED 24-HOUR RATE

34. DISPOSITION OF GAS (Bold, used for fuel, vented, etc.)

35. LIST OF ATTACHMENTS

Chronological Report

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

SIGNED Brenda W. Swank TITLE Regulatory Analyst DATE 8/23/89

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

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries);

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS		
				NAME	MEAS. DEPTH	TOP
(7) Sidewall Cores	5822'	5815'	Desert Creek	Paradox Shale	5642'	
				Upper Ismay	5648'	
				Hovenweep	5768'	
(3) Sidewall Cores	5970'	5956'	Desert Creek	Lower Ismay	5792'	
				Gothic	5840'	
				Upper Desert Creek	5856'	
DST #1 DST #2	5806'	5832'		Lower Desert Creek	5945'	
	5948'	5972'		Chimney Rock	5987'	
				Akah	6014'	
				Salt	6046'	
			TD	6049'		

CHRONOLOGICAL HISTORY

#1-35-36-21 FEDERAL  
ZEKE'S HOLE PROSPECT  
SAN JUAN COUNTY, UTAH  
CONTR: EXETER #68/MILPARK  
WI: 49.803% COGC AFE: 12235  
ATD: 6100' (DESERT CREEK & ISMAY)  
SD: 7/18/89  
CSG: 13-3/8" @ 40'  
DHC(M\$): 275.0

**RECEIVED**  
SEP 05 1989

3.2' FSL & 381.6' FWL  
SECTION 35-T36S-R21E

DIVISION OF  
OIL, GAS & MINING

- 6/26/89 Bldg location. Expect to spud 7/10/89.
- 7/12/89 Bldg loc. Will complete dirtwork today. Built 1.2 miles access road. Road and location in solid rock, required blasting. Dug pit in dry riverbed for water, making 5 BPH. Exeter rig #68 will be available Sunday, 7/16/89. Will spud Monday, 7/17/89. CC: \$27,420.
- 7/18/89 50' Drlg rathole & mousehole. 50'/3 hrs. MIRU Exeter rig #68. Drill 8-3/4" pilot hole to 50'. Ream out 8-3/4" hole w/17-1/2 bit. RU & cmt 13-3/8" conductor csg w/50 sx Class G w/3% CaCl<sub>2</sub> using DS. Cmt in place @ 12:00 a.m. WO cmt. RU to drill rathole & mousehole. MW 9.1, VIS 31, WL N/C, PV 5, YP 4, 6.1% SOL, PH 10.2, CL 600, CA 440, GELS 2, 10" 3, CAKE 1. CC: \$13,173.
- 7/19/89 1043' Drlg ahead. 993'/17-3/4 hrs. Finish drlg mousehole. NU conductor & flowline, PU BHA. Spud 12-1/4" hole @ 11:30 a.m., 7/18/89. Drill 12-1/4" hole & lost circulation @ 64'. Mix and pump LCM pill & recovered returns. Svys: 3/4 deg @ 300'; 3/4 deg @ 550'; 3/4 deg @ 800'. MW 9.2, VIS 27, WL N/C, PV 4, YP 1, 0% OIL, 0% LCM, 6.9% SOL, PH 8.5, TR ALK, CL 500, CA 800, GELS 0, 10" 1. CC: \$63,818.
- 7/20/89 1632' Drlg 589'/13-1/2 hrs. Drlg, svy 1-1/4 deg @ 1080'. Drlg, svy @ 1450' - misrun. Drlg, svy @ 1501' 4-1/4 deg. Drlg, svy 4-3/4 deg @ 1533'. Circ & svy @ 1563' 5 deg. TOH @ 1578'. LD shock sub. PU mill tooth bit & TIH to 1118'. Ream & wash 1118' to 1578'. Drlg, svy 3-3/4 deg @ 1618'. Drlg. MW 8.7, VIS 27, WL N/C, PV 2, YP 1, 0% OIL, 0% LCM, 2.8% SOL, PH 8.5, ALK 0/.4, CL 450, CA 1200, GELS 0, 10" 1. CC: \$74,281.
- 7/21/89 1883' TOH for bit. Drlg, svy & TOH w/bit @ 1640'. Mix mud, LCM, WO mill tooth bit. TIH w/bit. Ream 90' to btm. Drlg & svys. TOH for bit. SVYS: 3-3/4 deg @ 1640'; 3-3/4 deg @ 1680'; 3 deg @ 1743'; 3-1/4 deg @ 1806'; 3 deg @ 1868'. MW 9.4, VIS 31, WL N/C, PV 6, YP 8, 0% OIL, 12% LCM, 8% SOL, PH 8.9, ALK .1/.3, CL 550, CA 480, GELS 4, 10" 10, CAKE 2. CC: \$82,652.
- 7/22/89 1935' Prep to install csg hd. 52'/3-3/4 hrs. TOH w/bit. TFNB. Drlg, circ & cond. Wireline svy @ 1935'. Circ, TOH to run csg. LD 7" DC's. RU csg crew. Ran 46 jts 9-5/8", 36#, J-55 ST&C csg w/4 centralizers. RU Dowell & circ. Cmt w/575 sx DS Lite w/6% gel, 2% S1, 1/4#/sk D-29, 1/2# sx Blocseal, 12.7 ppg, 1.69 cu ft/sk. 250 sx tail CL "G" w/2% S1, 1/4#/sk D-29, 15.8 ppg, 1.15 cu ft/sk. Drop plug. Bump w/1000# @ 10:45 p.m. 67 bbls cmt returns. WOC, cmt fell 70'. Fill w/40 sx CL "G" w/3% S1 & 3 sx cedar fiber. Cut off HD. Drlg w/wtr. Svy: 2 deg @ 1935'. CC: \$127,608.
- 7/23/89 2037' Drlg 102'/4-1/2 hrs. Weld on csg HD. Test to 1500# - OK. NU BOP's. Test BOPE to 2000# - OK. Test hydril to 1500# - OK. PU bit, 3 DC's, TIH. Cut drlg line, FIH. Drill cmt & FC. Test csg to 2000# - OK. Drlg cmt & shoe. Drlg, svy 1-3/4 deg @ 2017', drlg. MW 8.4, VIS 27, WL N/C, PH 11.0, CL 550, CA 640. CC: \$132,619.
- 7/24/89 2798' Drlg 761'/20-1/2 Hrs. Drlg & svys, RS - ck BOP, drlg. SVYS: 1-1/2 deg @ 2079'; 1-3/4 deg @ 2205'; 2-1/4 deg @ 2330'; 2-1/4 deg @ 2454'; 1-3/4 deg @ 2700'. MW 8.4, VIS 27, PH 8, CL 500. CC: \$145,245.

- 7/25/89 3270' Drlg 472'/17-1/2 hrs. Drlg. RR, pump swab. TOOH for press loss, 14th-15th DC cracked. LD 6 DC's. TIH, PU 8 jts DP. Wash 45' to btm. Drlg, repair kill line valve. Drlg, svy, RS. Drlg, RS, drlg. SVY: 1 deg @ 2938'. MW 8.5, VIS 28, WL N/C, PV 1, 1.3% SOL, PH 8.0, CL 550, CA 620. CC: \$153,196.
- 7/26/89 3615' Drlg 345'/13-1/2 hrs. Work on no. 1 pump. Drlg, svy, drlg. TOOH - hole in DP 14 stds, washed pin & box. TOOH to DC's, PU 2 stds DC, TIH. Wash 40' to btm. Drlg, svy, RS, drlg, svy, TFNB. RS, chg bit, chk BOP. TIH, wash 36' to btm, drlg. SVYS: 1-1/4 deg @ 3252'; 1-1/2 deg @ 3364'; 1-1/2 deg @ 3592'. MW 8.4, VIS 27, WL N/C, PH 7.0, CL 800, CA 640. CC: \$163,464.
- 7/27/89 4202' Drlg 587'/22-3/4 hrs. Drlg, svys, RS, chk BOP, drlg. SVYS: 2-1/2 deg @ 3891'; 2-1/4 deg @ 4143'. MW 8.4, VIS 27, WL N/C, PH 8.2, CL 1200, CA 760. CC: \$174,071.
- 7/28/89 4528' Drlg 326'/22-1/4 hrs. Drlg, RR - #1 pump, broken rod. Drlg, svy, RS, chk BOP, drlg. SVY: 2 deg @ 4393'. MW 8.9, VIS 28, drlg w/wtr, PV 2, YP 2, 4% SOL, PH 7.0, CL 1400, CA 40, GELS 1, 10" 1. CC: \$180,019.
- 7/29/89 4826' Drlg 298'/14-1/2 hrs. RS, chk bop, drlg, svy, drlg. POH w/bit #7, TIH w/bit #8 & IBS. Ream 90' to btm. Drlg, RS, svy, drlg. POH for hoel in DP 7 stds dn. Wash pin & box, TIH w/BHA. Drlg, svy. Hermosa, 60% SH, 20% LS, 20% siltstone, BGG 2 U. SVYS: 2-1/4 deg @ 4517'; 2-1/2 deg @ 4643'; 2-1/4 deg @ 4736'. MW 8.5, VIS 27, PH 8.2, CL 1400, Ca 840. CC: \$192,424.
- 7/30/89 5340' Run WL svy @ 5320'. 514'/22-3/4 hrs. Drlg, svy, RS, chk BOP. Drlg, RS, svy. Honaker Trail @ 4560'. 70% Lime, 20% SH, 10% siltstone, BGG 2-4 U, CG 3-6 U. SVY: 1-3/4 deg @ 5019'. MW 8.4, VIS 27, WL N/C, pH 9.5, ALK 0.16/0.35, CL 2300, CA 40. CC: \$202,346.
- 7/31/89 5610' Drlg 270'/23-1/4 hrs. Drlg, RR - belt on air compressor. Drlg, RS, chk BOP. Drlg, RS. Honaker Trail, 80% LS, 10% SH, 10% siltstone, TR Chert. BGG 4 U, CG 5 U, mud up at 5350'. SVY: 1-3/4 deg @ 5320'. MW 9.3, VIS 33, WL 8.4, PV 7, YP 6, 0% OIL, 0% LCM, 6.4% SOL, PH 11.5, ALK .75/1.2, CL 2600, TR CA, GELS 2, 10" 6, CAKE 1. CC: \$211,005.
- 8/1/89 5830' Drlg 220'/21-1/2 hrs. Drlg, circ samples @ 5736', drlg. Top of Ismay @ 5652'. 60% LS, 30% SH, 10% DOL, TR of siltstone & Anhy. BGG 25 U, CG 10. Drlg brk from 5728'-5734', MPF 5-2-3.5, gas units 6-51-8, limestone, poor fluor, TR of stain, poor cut, poor show. MW 9.6, VIS 37, WL 11.2, PV 8, YP 12, 0% OIL, 0% LCM, 8.5% SOL, PH 11, ALK .3/.55, CL 2400, CA 80, GELS 6, 10" 16, CAKE 2. CC: \$216,651.
- 8/2/89 5832' RD test tools. Circ sample @ 5832'. Circ & WOO. Short trip 15 stds. Circ & cond for DST #1. Drop svy & POH. SLM: 5840.41', strap 5838.39', -2.02 - no correction. PU test tools. TIH. Tstg Lower Ismay from 5806'-5832'. Pull loose and RD head, POH. Drain sampler and RD test tools. SVY: 1 deg @ 5808'. MW 9.4, VIS 36, WL 9.6, PV 8, YP 9, 0% OIL, 0% LCM, 7% SOL, PH 10.5, ALK .25/.45, CL 2300, CA 100, GELS 4, 10" 11, CAKE 2, NITR 100. CC: \$226,883.
- 8/3/89 5972' Circ for DST #2, Desert Creek, 5948-5972'. Load out test tools from DST #1. TIH, wash 50' to btm & circ btm up. Drlg, RS, drlg. RR-drawworks. Drlg, circ samples 5961'; drlg, circ samples 5972'. WOO, short trip 5 stds. OK - no fill. Circ for DST #2. Tops: Gothic @ 5842'; Desert Creek @ 5858'. 40% DOL, 30% SH, 10% LS, 20% Anhy. MW 9.6, VIS 36, WL 9.8, PV 9, YP 10, 0% OIL, 0% LCM, 8.0% SOL, PH 11, ALK .35/.55, CL 2200, CA 220, GELS 3, 10" 8, CAKE 2, NITRATES 100 PPM. CC: \$233,480.

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DIVISION OF  
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CHRONOLOGICAL HISTORY

FEDERAL #1-35  
ZEKE'S HOLE PROSPECT  
SAN JUAN COUNTY, UTAH

- 8/4/89 6016' Drlg 44'/4-1/2 hrs. Circ & cond for DST #2. Drop svy, TOH. PU-MU test tools. TIH w/test tools. Test Desert Creek 5498-5972' w/Halliburton. Pull loose - TOH w/DST #2. Drain sampler, LD tools. TIH w/rerun bit #9. Wash 22' to btm, drlg. Lower Desert Creek, 100% DOL, BGG 66 U, TG 276. SVY: 3/4 deg @ 5972'. MW 9.5, VIS 34, WL 11, PV 8, YP 7, 0% OIL, 0% LCM, 7.7% SOL, PH 10, ALK .25/.35, CL 2500, CA 220, GELS 4, 10" 11, CAKE 2. CC: \$243,581. See attached for DST #2 results.
- 8/5/89 6049' Logging w/HLS. 33'/3 hrs. Drlg, circ & cond for logs. POH for logs. SLM 6044'; TD 6049'-no correction. RU HLS to log. Logging w/HLS: FDC-CNL/GR from TD to 4600'. Log depth 6040'. DILL/MSFL/GR/Sonic from TD to surf csg. GR to surf. Running sidewall cores 5822'-5815', 7 cores, Lower Ismay. 3 cores in Desert Creek. MW 9.6, VIS 36, WL 13, YP 9, 0% OIL, 0% LCM, 8% SOL, PH 10, ALK .25/.35, CL 2500, CA 80, GELS 4, 10" 11, CAKE 2. CC: \$249,025.
- 8/6/89 6049' Plugging & abandoning well. Fin SWC's from 5970'-5956', 3 cores in Desert Creek. RD loggers. WO log eval. LD DC's, RIH OE. Pu 18 jts DP to plug @ 5950'. RU DS. Plug #1 from 5750-5950', 200', 80 sx CL "H", LD DP; plug #2 from 2650-2750', 100', 125 sx CL "H"; plug #3 1882-1982', 100', 60 sx CL "H"; plug #4 from surf to 50', 50', 20 sx CL "H". CC: \$287,962.
- 8/7/89 6049' RDRT. Fin setting plug #4. ND BOP, cut off head, clean mud tanks. Release rig @ 12:00 noon, 8/6/89. Final report. CC: \$295,242.

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## Lithology

4700-4818

Interbedded

Limestone- white to light brown to light grey brown, cryptocrystalline to microcrystalline, micritic to microsparitic, silty (10%), to 10% fine rounded sandstone lenses, grading to shale

Siltstone- light grey to light brown grey brown, moderately firm to firm, occasionally calcitic, silty, grading to shale

4718-4736

Limestone- whitish to light grey to buff to medium brown, cryptosparmicritic, firm to scattered very firm, locally algal, isolated residual stain in more micritic parts, isolated fine sandstone grains within more sparitic parts

4736-4762

Limestone- white to light grey, etc., microsparitic to scattered cryptomicritics, silty (10%) and sandy (10%) - as fine to occasionally medium grained sandstone lenses

4762-4770

Sandstone- white to light grey to clear, fine to medium fine, rounded, slightly to moderately frosted grains in a moderately firm micritic limestone matrix, isolated streaks of fair porosity

4770-4788

Limestone- medium to light grey brown, microcrystalline to microcrystalline cemented, moderately firm to firm, silty, isolated sandstone lenses, sparitic to micritic, isolated organic debris, locally appears to have alteration horizons, faster streaks grades to fine quartz sands

4788-4802

Limestone- as above, with increased light grey earthy to subearthy shale streaks, silty, etc.

4802-4833

Interbedded

Limestone- light to medium grey, crypto to microcrystalline, sparitic to micritic, mostly finely bedded, locally silty and sandy (locally coarse), locally radioactive

Shale- medium grey, subearthy, subplaty, moderately firm, occasionally silty, grades to silty limestone

Siltstone- light grey, moderately firm, calcitic, grades to fine grained sandstone

4833-4866

Interbedded

Limestone- buff to buff brown with lighter grey pats, microsucrosic to microcrystalline, sparmacritic (with clay between crystals), silty, locally sandy, shaley

Sandstone- light brown to grey brown, fine to scattered medium course, rounded to subrounded, medium to poorly sorted, grades to sparitic matrixed limestone

Siltstone- light grey, moderately firm, calcitic, grades to sandstone and to a silty limestone

4866-4890

Interbedded

Limestone- light grey to light grey brown to white to trace pink, microsucrosic (with sandstone grains) to cryptocrystalline, sparitic to micritic, trace oolites, trace pellets, to fair intergranular porosity

Sandstone- light to medium brown to trace clear, very fine (and silty) to medium rounded to subrounded slightly frosted quartz grains in a moderately calcitic, moderately firm matrix, often silty (grades to siltstone)

Shale- medium grey to scattered brown grey, exists mostly as a matrix to the above sandstone and limestone

4890-4930

Limestone- light grey to light grey brown, microcrystalline and fossiliferous in part to cryptomicritic, 5% algal, disseminated chert in part, occasionally sandy

With scattered:

Shale- light to medium grey, earthy to subearthy, moderately firm to firm, silty to sandy, grades to calcarenite

4930-4944

Limestone- light to medium grey brown, microsparitic to biomicritic, to 25% sandy, calcarenitic in part

4944-4948

Sandstone- white to light buff, fine to slightly coarse, rounded, medium sorted, slightly frosted, grains in a moderately calcitic clay to crystalline (limestone) matrix

4948-4976

Limestone- white to light grey buff to transparent, cryptocrystalline to microcrystalline, moderately firm to firm, slightly dolomitic, generally recemented, silty, dense yet often moderately firm

4976-4990

Limestone- light to medium grey to white to buff, cryptocrystalline to microcrystalline, moderately firm, sand rich oxidized streaks as well as recrystallined sparitic streaks, high clay content, with pyrite rich residual stain

4990-5012

Interbedded

Limestone- as above with

Sandstone- white to clear, very fine to scattered medium, rounded to subangular, medium to well sorted grains in a moderately firm and moderately calcitic clay to crystalline matrix

5012-5028

Interbedded

Limestone- light grey to medium grey to light grey brown, mostly microcrystalline, moderately firm to scattered very firm and cherty, silty- often associated with isolated microsucrosic rhombs

Sandstone- light grey to light buff, fine to medium, rounded to subrounded, slightly frosted, medium sorted grains in a moderately firm to firm limestone matrix

Siltstone- light to medium grey to scattered grey brown, moderately firm, moderately calcitic, micaceous in shalier parts

5028-5044

Limestone- light grey to buff to white, microcrystalline to cryptocrystalline, moderately firm to scattered very firm, cherty in part, cleaner than limestone above, reduced sandy and silty components

5044-5048

Coal- dark grey to black, waxy, splintery, occasionally silty (produced coal gas)

5048-5080

Towards top:

Shale- dark grey to grey brown, waxy, splintery, finely bedded, occasionally slightly calcitic, silty in part

Grading to:

Limestone- grey to light grey, microsparitic to cryptomicritic, moderately firm to trace very firm and cherty, rich organic partings, trace anhydrite towards base

5080-5090

Limestone- as in the above description

5090-5118

Limestone- light to medium grey, microcrystalline to trace cryptocrystalline, medium firm to trace very firm, trace pyrite, trace chert (proportional to P-rate), silty in part

Shale- medium to trace dark gray, subwaxy, medium firm, slightly to moderately calcitic, isolated sandstone

5118-5140

The first grading into the second

Limestone- as above with decreasing shale %

Limestone- light grey to white to trace buff with scattered dark brown, cryptocrystalline to microcrystalline, moderately firm, scattered sandy zones (grading to isolated quartz sandstone grains, bioclastic rich layers (grades to biospar-macrite)

And:

Sandstone- white to clear to buff, fine to medium, rounded to subangular, slightly frosted, medium to poorly sorted quartz grains in an often dense limestone matrix

5140-5176

Limestone- as above, possibly slightly darker, with a lower sand content  
Interbedded with

Limestone- white to light grey, microcrystalline matrix, locally grading to a calcarenitic sand, moderately firm to trace very firm, chalky, isolated fine to medium sandstone grains

5176-5206

Interbedded

Limestone- light grey to scattered medium grey browns with decrease white, microcrystalline to cryptocrystalline, moderately firm to trace very firm, generally micritic- grading to shale

Shale- light to medium grey, subearthy to subwaxy, platy to subblocky, moderately firm to soft and in suspension, to strongly calcitic, occasionally silty, scattered mica

5206-5246

Limestone- tan to light buff to light brown grey with scattered white parts, microcrystalline to cryptocrystalline, moderately firm to scattered very firm and and cherty, silty in part, locally anhydritic- likely as vug filling and fracture annealment, occasionally grading to shale

With scattered zones:

Silty Shale- medium grey to grey brown, subearthy to earthy, subplatey to subblocky, occasionally micaceous, grades- as implicated into moderately to slightly calcitic siltstone

5246-5288

Limestone- light brown to white to tan to brown grey, cryptocrystalline to microcrystalline, medium firm to firm with traces of very firm (and algal/cherty), occasionally slightly to moderately dolomitic, micritic- occasionally grading to shale to occasionally sparitic, finely bedded to massive

5288-5318

Interbedded

Limestone- light grey to cream to scattered white, cryptocrystalline to microcrystalline, micritic to sparitic, slight firm and shaley to slightly hard and algal, 10% sandy silt, trace organic debris

With less

Shale- light to medium to trace dark grey, subearthy to subwaxy, subplatey to subblocky, soft and in suspension to firm, slightly to moderately calcitic, grades to siltstone in part, isolated fine sandstone grains

5318-5341

Intergrading and interbedded

Limestone- cream to light brown to scattered white, cryptocrystalline to scattered microcrystalline, slightly firm to firm to trace very firm, grades to a calcarenitic sandstone to pelletoidal, trace oolites, also acts as a matrix for

Sandstone- cream to white, fine to slightly coarse, medium sorted, slightly to moderately frosted quartz grains in a clay to crystalline calcitic matrix

5341-5396

Limestone- tan to cream at top becoming increasingly light grey, cryptocrystalline to microcrystalline with scattered microcrystalline in faster drilling streaks, firm to trace very firm, occasionally dolomitic, numerous thin 2-3% sand streaks, silty in part, micritic to sparitic, grades to shale in part

5396-5418

Interbedded

Limestone- white to cream to tan to light brown, cryptocrystalline to microcrystalline, moderately firm to trace very firm, cryptosparitic to micritic, finely bedded to massive, pyritic in harder parts, scattered organic trash

Limestone/Shale- medium grey to grey, mostly cryptocrystalline, predominantly micritic, moderately firm to firm, sandy (to 10%), thin streaks of chert

5418-5450

Interbedded

Limestone- grey to medium brown grey, cryptocrystalline to microcrystalline, moderately firm to scattered very firm, slightly dolomitic, 10-15% grey calcarenitic sandstone, silty

Limestone- cream to light grey brown, cryptocrystalline to microcrystalline, firm to very firm, cryptosparitic in large part, calcite filled vugs, clean

Shale- medium grey to scattered brown grey, subearthy to subwaxy, subblocky to subplaty, scattered organic stain, calcitic (grades to micrite)

5450-5498

Interbedded

Limestone- light to medium grey to light brown grey, cryptocrystalline to locally microcrystalline, moderately firm locally moderately hard, occasionally dolomitic, finely bedded to massive, occasionally silty, 1-2% fine to medium quartz grained sandstone lent

Shale- light to medium grey, subwaxy to subearthy, subplaty to blocky, soft and in suspension to moderately firm, to strongly calcitic, silty, micaceous in part, calcite rhombs, grades to limestone as above

5498-5520

Limestone- light grey to light grey brown becoming darker, cryptocrystalline to microcrystalline, moderately firm to very firm, micritic to cryptosparite, 20% siltstone (the browner part), trace disseminated chert

5524-5537

Limestone- as above with

Shale- medium brown grey, subearthy to subwaxy, subplaty to subblocky, moderately firm, to strongly calcitic, grades to siltstone, occasionally micaceous

5537-5558

Limestone- cream to light grey to grey brown, microcrystalline to cryptocrystalline, moderately firm scattered medium hard, cryptosparite to dismicritic, scattered chert, fossiliferous, scattered calcite filled vugs

5558-5562

Chert- light grey brown, translucent, with limestone as above

5562-5594

Limestone- buff to cream to light brown, cryptocrystalline to microcrystalline, firm to hard, cryptosparitic, micritic, mostly clean, abundant chert

5594-5620

Limestone- medium brown to brown grey with less cream, microcrystalline with 25% cryptocrystalline, firm to very firm, micritic with scattered dismicrite, wackstone to mudstone, local light grey shale streaks, isolated (1%) anhydrite, silty in part

5620-5624

Limestone- as immediately above, but finely bedded (bed thickness close to shattered depth of drill bit under given set of conditions)

5624-5642

Limestone- cream to light brown to light brown grey to trace white, cryptocrystalline to microcrystalline, 80% micrite and 20% sparite, mudstone to packstone, moderately silty (<5%), trace (.1%) black asphaltic stain, scattered gypsum (likely cavings), tight

## 5642-5648 PARADOX SHALE

Shale- dark brown to dark grey brown to trace black, waxy to subwaxy, platy to subplaty, slightly calcitic, slightly calcitic- grades to dark grey to medium grey calcitic shale, probable limestone streaks, trace calcite clasts, disseminated pyrite

5648

## UPPER ISMAY

5648-5660

Limestone- dark brown grading to cream, microcrystalline to cryptocrystalline, moderately firm and micritic to very firm and sparitic, with scattered dark brown shale streaks, finely bedded to massive

5660-5672

Limestone- tan to light brown to cream, microcrystalline with microsugrosic streaks, in microsugrosic parts- pelmicritic to sparitic, dolomitic in part, tight, no show

5672-5700

Limestone- in general as above, with slow steady darkening, about 30% dolomitic

5700-5710

Limestone- dark brown to brown grey, microcrystalline to cryptocrystalline, firm scattered very firm, occasionally slightly dolomitic, sparitic and micritic mudstone

Grades to:

Shale- dark grey brown to medium grey, subearthy to subwaxy, subplatey to blocky, to moderately calcitic, moderately firm to firm, silty in part, scattered calcite rhombs (grades to sparitic limestone discussed above)

5710-5728

Limestone- cream to buff to light tan grey to grey brown, microcrystalline to cryptocrystalline with 25% microsugrosic, firm to very firm, anhydrite filled clasts, sparitic with scattered chert, sparitic to micritic, 50% bioclastic with both flattened pellets and oolite traces, with increasingly shaley through 5720 then cleaning up

5728-5734      See Show Report #1

5734-5748

Limestone- buff to buff brown, microcrystalline to cryptocrystalline, moderately firm to very firm, locally dolomitic, sparitic with lesser amounts of micrites, isolated anhydrite filling (no massive anhydrite), trace pellets, tight, no show

5748-5768

Limestone- cream to light brown grey and becoming brown grey, microcrystalline to cryptocrystalline, moderately firm and silty to moderately hard and cherty, sparitic with micritic streaks, locally anhydritic, tight, no show

## 5768-5792 HOYENWEEP

Shale- dark grey to grey black to black, waxy to subwaxy, splintery to platy, moderately firm to firm, to moderately calcitic, scattered zones with white calcite "clasts", occasionally silty

Grading into and interbedded with:

Limestone- dark grey, cryptocrystalline to microcrystalline, moderately firm, silty, marley in part, possibly anhydritic

## 5792 LOWER ISMAY

5792-5806

Interbedded

Limestone- light buff grey to tan to cream, cryptocrystalline to trace microcrystalline, sparitic with thin shale streaks, firm to scattered very firm, disseminated pyrite, anhydrite fracture/vug filling (<1 mm), silty and sandy streaks associated with recrystallized- moderately dolomitic streaks, trace mineral fluorescence

Anhydrite- white, goeey, amorphous ("cottage cheese")

5806-5822

Interbedded

Limestone- as above, but considerably more anhydritic

Anhydrite- as above

Dolomite- medium brown grey, cryptocrystalline to microcrystalline, moderately firm to locally very firm, moderately calcitic, massive to finely bedded, trace pellets, anhydritic, mineral fluorescence, no show

## 5822-5832 LOWER ISMAY SHOW (SHOW #2)

5832-5840

Limestone- medium brown grey to grey and shaley, microsugrosic (recemented) to microcrystalline, sparitic with scattered micrites, very firm to firm, scattered dolomite rhombs, isolated fine to very fine sandstone grains, trace chert, scattered mineral fluorescence, no show

## 5840-5856 GOTHIC

Shale- dark grey to scattered brown grey trace black, waxy to subwaxy, splintery to subplatey, soft to firm, sooty in part, calcitic, disseminated pyrite

With:

Shale- light to medium grey, subearthy to waxy, subplatey, moderately firm to firm, calcitic, silty, scattered pyrite

Limestone- medium grey, cryptocrystalline to microcrystalline, moderately firm to occasionally very firm, slightly to moderately dolomitic, occasionally silty and sandy

## 5856 UPPER DESERT CREEK

5856-5873

Dolomite- grey to grey brown, microcrystalline, moderately firm to trace very very, slightly to moderately calcitic, clay matrix in part, thin slightly calcitic shale streaks, anhydritic in part

## 5873-5917 Upper Desert Creek Anhydrite

Anhydrite- white to translucent, gooey, "cottage cheese" type

5917-5928

Interbedded

Shale- medium to dark grey to trace black, subwaxy, soft to firm, gooey, moderately calcitic

Limestone- grey to brown grey, cryptocrystalline to microcrystalline, firm to slightly hard, occasionally dolomitic, micritic (grading to shale as above) to locally cryptosparitic, finely bedded, effectively tight due to matrix clay, slight mineral fluorescence, very weak ring cuts from matrix bound organic material

5928-5950

Interbedded

Dolomite- dark brown to dark grey brown, microcrystalline to cryptocrystalline, firm to very firm, trace to moderately calcitic, scattered oolite and pellet ghosts in the 5940 to 5950 sample, tight (clay plugged matrix), slight ring cuts from tightly bounded intercrystalline organics

Shale- dark brown to dark grey, subwaxy to earthy, subplatey to subblocky, moderately firm, moderately calcitic

Limestone- grey to grey brown, cryptocrystalline  
Anhydrite- white to translucent, goeey, "cottage cheese" type, also as clasts in both  
dolomite and limestone

5950-5962

Limestone- light to medium grey to grey brown, microcrystalline to cryptocrystalline,  
moderately firm to scattered very firm, biomicritic in lighter parts-grading  
to dismicrites in dark parts, moderately dolomitic, tight, no show  
Dolomite- medium to dark brown to brown grey, microsucrosic, firm to very firm,  
abundant matrix clay, silty to sandy, locally pyritic, trace mineral fluorescence,  
weak diffuse ring cut

### 5962-5972 LOWER DESERT CREEK SHOW (SHOW REPORT 3)

5971-5974 (5971 includes the last foot of the show, which drilled slow)

Limestone- light to medium brown grey, cryptocrystalline to scattered microcrystal-  
line, very firm to scattered firm, mostly dismicritic, possibly slightly algal,  
dolomitic in part

5974-5978

Limey Dolomite- light to medium grey brown, microcrystalline, moderately firm,  
biomacritic with fairly developed intercrystalline fabric, possible sand and  
isolated silty partings, calcite villed vugs (to 2 mm), scattered (.2% dark  
brownish black residual stain, fair intercrystalline porosity (hard to separate  
from dolomite of Show Report #3)

5978-5987

Limestone- medium brown grey, cryptocrystalline to microcrystalline, firm to  
scattered hard and cherty, cryptosparitic to scattered micritic, to moderately  
dolomitic, locally anhydritic, no show

5987 CHIMNEY ROCK

5987-6014

More of the first then second:

Shale- black to dark brown grey, waxy to subwaxy, blocky to subplatey, soft and in suspension to very firm and brittle, to strongly calcitic, locally silty, pyritic in part

Limestone- grey to dark grey brown, cryptocrystalline to microcrystalline, moderately firm to trace very firm, micritic (grades to marlstone)

**6014      AKAH**

6014-6046

After a thin transition of siltstone:

Limestone/Dolomite- medium grey brown to dark grey brown, microcrystalline with both microsucrosic parts (6026-6035), and partly cryptocrystalline parts, micritic to biosparitic (when microsucrosic), secondary dolomitization in more porous parts, to fair intercrystalline porosity, no show

Towards base:

Both anhydrite filled vugs and or molds as well as open molds from which salt had been leached.

**6046      SALT**

**6049      TOTAL DEPTH                              (6040 E-LOG DEPTH)**

## Surveys

Deviations (Degrees)	Depth
3/4	300'
3/4	800'
1 1/4	1080'
4 1/4	1501'
4 1/2	1533'
5	1563'
3 3/4	1618'
2 3/4	1690'
3	1743'
3 1/4	1806'
3	1868'
2	1935'
1 3/4	2017'
1 1/2	2079'
1 3/4	2205'
2 1/4	2340'
2 1/4	2454'
1 3/4	2700'
1	2938'
1 1/4	3252'
1 1/4	3364'
1 1/4	3592'
2 1/4	3841'
2 1/4	4114'
2	4393'
2 1/4	4577'
2 1/2	4673'
2 1/4	4736'
1 3/4	5019'
1 3/4	5797'
3/4	5972'

## Drill Bit Record

<b>*</b>	<b>Size</b>	<b>Make</b>	<b>Type</b>	<b>Depth Out</b>	<b>Footage</b>	<b>Hours</b>	<b>Ft/Hour</b>
1RR	17 1/2	Reid	21J	40	40	1 1/2	27
2	12 1/4	Security	S84F	1558	1558	24 1/2	24.5
3RR	12 1/4	Hughes	J2	1640	72	8 1/4	9
4	12 1/4	Security	S44	1883	243	11	22
5	12 1/4	Reid	S216J	1935	52	3 3/4	13
6	8 3/4	Hughes	ATJ22	3602	1667	55 1/2	30.3
7	8 3/4	Security	S85F	4582	980	49 1/2	19.7
8	8 3/4	Security	S86F	5832	1250	77 1/2	16
9RR	8 3/4	Security	S86F	6049	217	21 1/4	10.2

## Hole Chronology

- 7/17/89 Spudded. drilled 50' of 17 1/4" surface and cemented conductor.
- 7/18/89 MND: ~50'. Drilled 640' of 12 1/4" (WOB 48, RPM 100/120, PP100)
- 7/19/89 MND: 640'. Drilled 989'. Ran surveys which increased from 1 1/4 at @ 1080 to 5 at % 1563. Reduced weight from 48K to 35K. After drilling some, tripped out of hole, laid down 5' of shock sub, changed bit, tripped into hole, and reamed 460' to bottom. (WOB 48/35, RPM 95/100, PP 1100, SPM 70)
- 7/20/89 MND: 1589'. Drilled 212'. Reduced pump pressure after mud returns declined @ 30%. tripped out to change bit, tripped in and reamed 90' to bottom. (WOB 10/15, RPM 130, PP 1100/800, SPM 70/63).
- 7/21/89 MND: 1801'. Drilled 134' to surface casing point. Ran 46 jts of 36 lb 9 5/8" set at 1832 (including KB), circulated in preparation for cementing; cemented, and waited on cement. (WOB 14/10, RPM 120/130, PP 1100/ 900, SPM 66/70).
- 7/22/89 MND: 1935'. No drilling. Waited on cement, cut of weld on well head; pressure tested well head to 1500 psi; nipped up BOPS, manifolds; pressure tested pipe, blind/upper/lower/annular rams; pressure tested kelly valves to 2000 psi, drilled to shoe.
- 7/23/89 MND: 1935'. Drilled 653'. Tested casing and shoe to 1500 psi. Drilled and ran surveys (WOB 15/25, RPM 100/110, PP 1050, SPM 70).
- 7/24/89 MND: 2588'. Drilled 524'. Drilled and ran surveys (WOB 20/28, RPM 110/100, PP 1100/100, SPM 70).
- 7/25/89 MND: 3111'. drilled 439'. Hole in pipe at @ 3310' drilling depth. Reamed 40' to bottom and resumed drilling (WOB 32/30. RPM 100/95, PP 1050/1100, SPM 70).
- 7/26/89 MND: 3550'. Drilled 564'. Ran surveys and drilled (WOB 35/32, RPM 95/90, PP 1100/1150, SPM 70).
- 7/27/89 MND: 4114'. Drilled 343'. Ran surveys and drilled (WOB 30/32, RPM 95, PP 1100/1150, SPM 70).

- 7/28/89 MND: 4457'. Drilled 227'. Drilled and tripped for bit. Ran surveys. Tripped part way for hole in string at 4643. Mud loggers rigged up, and went to town to see geologist during trip for hole in pipe and isolated from rig until 5:00 am, 7/29. Commenced logging at 4700 (as instruments were operating, and rig hands had been notified to collect 10' samples). Geologist, company man in same predicament. (WOB 34/43, RPM 90/95, PP 1150/1100, SPM 70).
- 7/29/89 MND: 4684. Drilled 531'. Drilled and ran surveys. Geologist commenced logging at 4700 (WOB 42, 90, PP 100/1200, SPM 70).
- 7/30/89 MND: 5218'. Drilled 238'. Drilled and ran surveys (WOB 42, RPM 90, PP 100/1100, SPM 70).
- 7/31/89 MND: 5556'. Drilled 215'. Circulated samples at @ 5736 (See Show Reports), reviewed samples, phoned in show via land line, resumed drilling (WOB 42, RPM 90, PP 1200, SPM 70)
- 8/01/89 MND: 5771. Drilled 61'. Circulated samples at 5832. Phoned in gas show, circulated, short tripped, and circulated in preparation for DST #1. Dropped survey tool, and tripped out strapping (no correction); assembled test tool, tripped into hole and commenced test (WOB 42, RPM 90, PP 1200, SPM 70)
- 8/02/89 MND: 5832'. Drilled 90'. Completed DST #1 (Mechanically successful), tripped out of hole, broke down tool, tripped into hole with bit, reamed 50' to bottom, and resumed drilling, and circulated samples at @ 5961 (WOB 44, RPM 80, PP 1200, SPM 70).
- 8/03/89 MND: 5961'. Drilled 12'. After circulating samples for 3/4 hour, drilled on to 5972 (second foot after resuming drilling was 1/2 minute per foot) through drilling break (see Show Reports Section). Show reported, circulated bottoms up, short tripped, and tripped out of hole for DST #2. Assembled tool, tripped into hole, ran test, tripped out with test string; began breakdown of tool, drained sample chamber. Test mechanically successful (WOB 42, RPM 80, PP 1200, SPM 70).
- 8/04/89 MND: 5972'. Drilled 78' to Drillers TD at 6049. Finished loading test tools, tripped in with drill string, and TDd well. Mud loggers released to bottoms up. After circulating 3 hours following TDing, tripped out slow in preparation for E-logging. Rigged up E-loggers for Neutron log suite; E-loggers began trip into hole 9WOB 44, RPM 80, PP 1200, SPM 70).

8/05/89 MND: 6049 (Drillers) 6040 (E-log) After unsuccessfully attempting to telecopy neutron log (while E-loggers were assembling long string of SP ((top)) Sonic ((middle)) and Dual Laterolog ((base))), completed long string run and telecopied field copies of same. [All runs were mechanically successful except for MSFL over the top 200' of the run due to parting of a wire resulting from pulling 2000 over to pass ledge @ 250' below base of casing]. Telecopy completed, waited on orders. At 1530 hours, orders were received to Plug And Abandon. Geologist released.

### Mud History

<u>DATE</u> 1989	<u>DEPTH</u> FEET	<u>WT</u> LBS	<u>FV</u>	<u>PV</u>	<u>YP</u>	<u>GEL</u>	<u>WL</u>	<u>FC</u> %	<u>SOL</u> %	<u>SAND</u>	<u>PH</u> ppm	<u>CL</u> ppm equiv	<u>CAL</u> ppm equiv	<u>NITR</u> %	<u>CEDAR</u>
7/17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/18	-	9.1+	31	5	4	2/3	-	-	6.1	1/2+	10.2	600	440		
7/19	1043	9.2+	27	4	1	0/1	-	-	6.9	3/4	8.5	500	800		
7/20	1629	8.7+	27	2	1	0/1	N/C	-	2.8	1/4+	8.5	450	1200		TR
7/21	1630	9.1	31	4	4	3/6	N/C	-	6.1	-	9.2	500	320		3%
7/21	1883	9.4	31	6	8	4/10	4	-	8.1	1	11.3	550	4000		12%
7/22	1935	8.33	27	0	0	0/0	N/C	-	0	0	8.0	450	440		0
7/23	2019	8.33	27	0	0	0/0	N/C	-	-	-	11.0	550	640		
7/24	2774	8.4	27	1	0	0/0	N/C	-	.5	TR	8.0	500	620		
7/25	3263	8.35	28	1	0	0/0	N/C	-	1.3	1/2	8.0	550	620		
7/26	3606	8.33	27	0	0	0/0	N/C	-	0	0	8.0	800	640		
7/27	4190	8.33	27	0	0	0/0	N/C	-	0	0	8.2	1200	760		
7/28	4520	8.9	28	2	2	1/0	-	1/32	4.0	TR	7.0	1400	840		
7/29	4920	8.4	27	0	0	0/0	N/C	-	0.1	0	7.5	800	1120		
7/30	5310	8.4	27	0	0/0	N/C	-	-	0.1	0	9.5	2300	40		
7/31	5600	9.3	33	7	6	2/6	8.4	1/32	6.4	3/4	11.5	2600	TR		
8/1	5815	9.6	37	8	12	6/16	8.5	2/32	8.5	1/4	11.0	2400	80		
8/2	5832	9.4	36	8	9	4/11	11.6	2/32	7.0	TR	10.5	2300	100	100	
8/3	5972	9.5+	36	9	10	3/8	9.8	2/32	8.0	1/4	11.0	2200	220	100	
8/4	6005	9.4+	34	8	7	2/32	11	2/32	7.7	1/4	10.0	250	220		

Note: Mud up commenced 5340



4301530174  
 Amoco #5, NENW 34-17S-11E 5-10-91  
 4303731453  
 Jude 2-17, SESW 17-31S-23E 5-13-91  
 4303731465  
 COG C 1-3536-21, 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-13-126, NWSW 12-36S-25E 5-13-91  
 4303730735  
 Bug 25, NENW 18-36S-26E 5-10-91  
 4303731322  
 Juna 1, NESE 13-37S-23E 5-13-91  
 4303731388  
 Marathon 1-5, NWNE 5-37S-24E 5-13-91

JLT List from BLM showing final  
abandonment notice dates.

DTS

5-28-91

INSPECTOR: GG

DATE ASSIGNED: 890929  
DATE COMPLETE: 000000

DEADLINE: 891229

OPERATOR : NO230 : COASTAL OIL & GAS CORP  
WELL NAME: COGC 1-35-36-21  
S: 35 T: 36.0 S R: 21.0 E  
COUNTY: SAN JUAN

LEASE: U-57656  
API : 43-037-31465

FIELD: 001 : WILDCAT

ACTION TYPE: FOLLOW\*UP\*\*\*

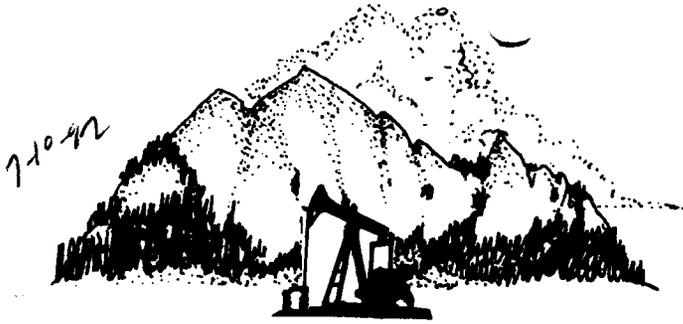
ACTION REQUIRED:

FIELD\*CHECK\*FOR\*THE\*RECLAMATION\*COMPLETION.\*\*\*\*\*  
\*\*\*\*\*  
\*\*\*\*\*

ACTION TAKEN:

*Dry hole P4A Reclamation will be done when  
Pit is dry - sand to top*  
\*\*\*\*\*  
\*\*\*\*\*

PF KEYS: (1) NO UPDT (9) WELL DATA (12) DELETE (16) EXIT



## DOLAR OIL PROPERTIES

9035 South 700 East, Suite 100A  
Sandy, UT 84070-2418  
(801) 561 - 3121

July 2, 1992

Mr. Frank Matthews  
Utah Division of Oil, Gas and Mining  
355 W. North Temple, Suite 350  
Salt Lake City, Utah 84180

Mr. Lynn Jackson  
Utah Bureau of Land Management  
P.O. Box 970  
Moab, Utah 84532

Gentlemen:

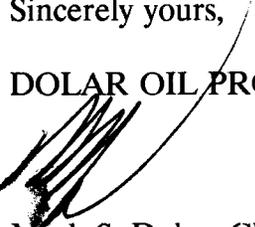
Re: Re-entry of 1-35-36-21 Zeke's Hole well  
Township 36 South, Range 21 East, SLM  
Section 35: NW $\frac{1}{4}$ SW $\frac{1}{4}$   
San Juan County, Utah

Enclosed please find a Notice of Staking Application for the Re-entry of the 1-35-36-21 Zeke's Hole well, as referenced above, being proposed by the Estate of Thelma Ford Simmons. The surveying of the location will be completed in the next couple of days, and we anticipate holding the onsite at the earliest convenience of the Monticello office of the BLM.

Please call should you have any questions.

Sincerely yours,

DOLAR OIL PROPERTIES



Mark S. Dolar, CPL  
MSD/df

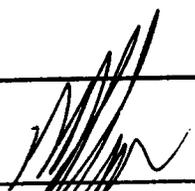
cc: Robert Larsen - Monticello BLM office  
The Estate of Thelma Ford Simmons

**RECEIVED**

JUL 06 1992

DIVISION OF  
OIL GAS & MINING

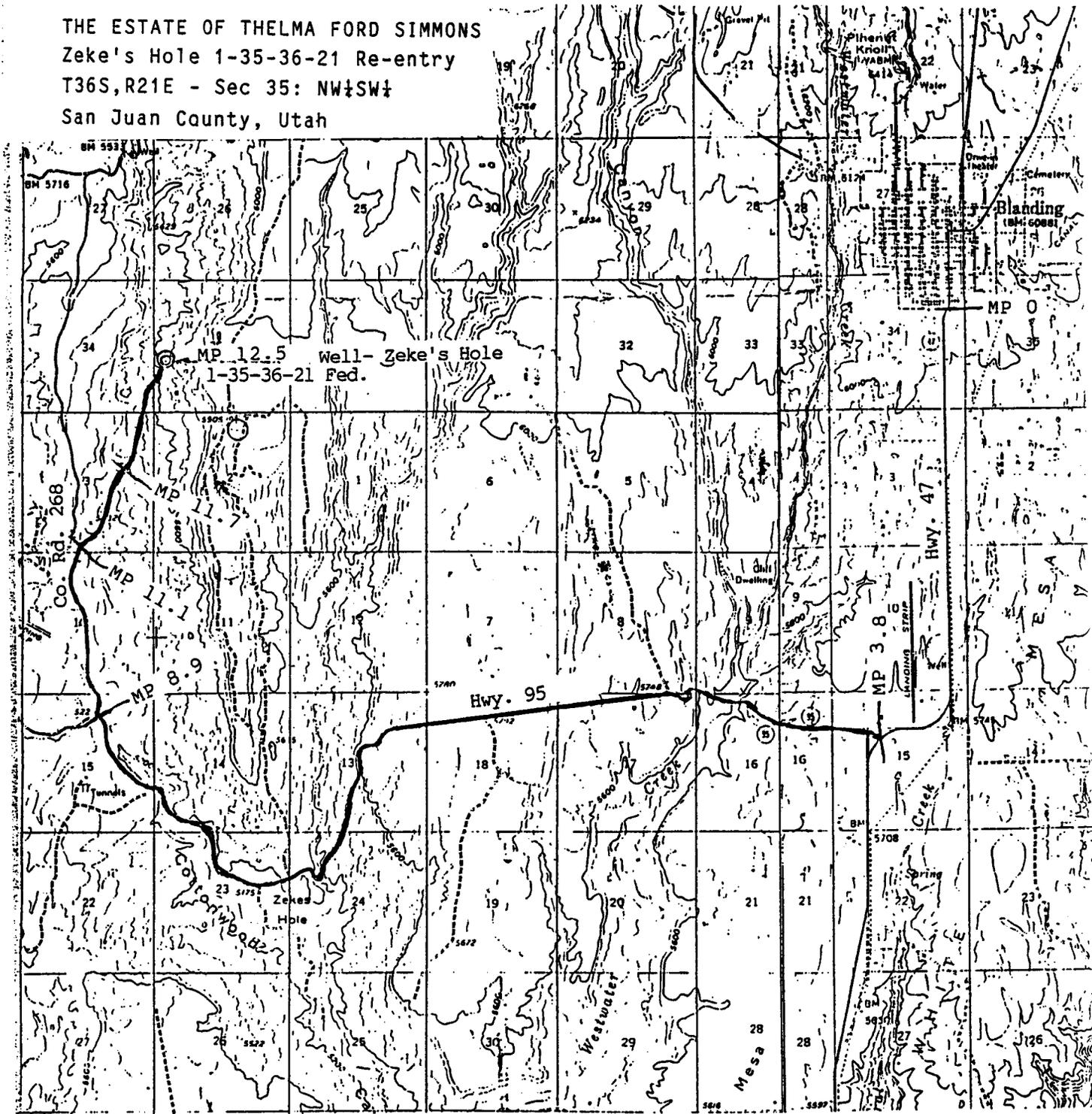
<b>NOTICE OF STAKING</b> Not to be used in place of Application for Permit to Drill (Form 3160-3)		<b>6. Lease Number</b> U-57656	
<b>1. Oil Well</b> <input checked="" type="checkbox"/> <b>Gas Well</b> <input type="checkbox"/> <b>Other (Specify)</b>		<b>7. If Indian, Allottee or Tribe Name</b>	
<b>2. Name of Operator:</b> A. Blanchard Geren, Jr. & John L. Heard, Independent Co-Executors & not individually of the Estate of <del>THELMA FORD SIMMONS.</del>		<b>8. Unit Agreement Name</b> West Blanding	
<b>3. Name of Specific Contact Person:</b> Mark S. Dolar		<b>9. Farm or Lease Name</b>	
<b>4. Address &amp; Phone No. of Operator or Agent</b> 3005 Northridge, Suite L Farmington, N. M. 87401 (505)325-5789		<b>10. Well No.</b> Zeke's Hole 1-35-36-21	
<b>5. Surface Location of Well</b> 2175' FSL & 382' FWL		<b>11. Field or Wildcat Name</b>	
<b>Attach:</b> a) Sketch showing road entry onto pad, pad dimensions, and reserve pit. b) Topographical or other acceptable map showing location, access road, and lease boundaries.		<b>12. Sec., T., R., M., or Blk and Survey or Area</b> NSW-Section 35 Township 36 South; Range 21 East, S.L.M.	
<b>15. Formation Objective(s)</b> <b>CONFIDENTIAL</b>	<b>16. Estimated Well Depth</b> 6400'	<b>13. County, Parish, or Borough</b> San Juan	<b>14. State</b> Utah
<b>17. Additional Information (as appropriate; shall include surface owner's name, address and, if known, telephone number)</b>			

18. Signed  Title landman Date 7/1/92

**Note:** Upon receipt of this Notice, the Bureau of Land Management (BLM) will schedule the date of the onsite predrill inspection and notify you accordingly. The location must be staked and access road must be flagged prior to the onsite.

- Operators must consider the following prior to the onsite:
- a) H<sub>2</sub>S Potential
  - b) Cultural Resources (Archeology)
  - c) Federal Right of Way or Special Use Permit

THE ESTATE OF THELMA FORD SIMMONS  
 Zeke's Hole 1-35-36-21 Re-entry  
 T36S,R21E - Sec 35: NW¼SW¼  
 San Juan County, Utah



PROPOSED ROAD ACCESS

Re-entry of Zeke's Hole 1-35-36-21 well

Follow State Highway No. 47 south out of Blanding, Utah for a distance of 3.8 miles to the intersection of State Highways 47 and 95. Continue westerly along State Highway 95 for 5.1 miles to County Road 268. Exit of County Road 268 and continue northerly for 2.2 miles to a junction for proposed access road (old seismic trail) for 1.4 miles to location. Said proposed access was used in the drilling of the 1-35-36-21 well in 1989.

Well is located in the NW¼SW¼ of Section 35, Township 36 South, Range 21 East, S.L.M., San Juan County, Utah.

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

DATE RECEIVED: 08/03/92

OPERATOR: ESTATE OF THELMA SIMMONS OPERATOR ACCT NO: N-1335  
WELL NAME: ZEKE'S HOLE 1-35-36-21 REENTRY

CONFIDENTIAL

API NO. ASSIGNED: - -

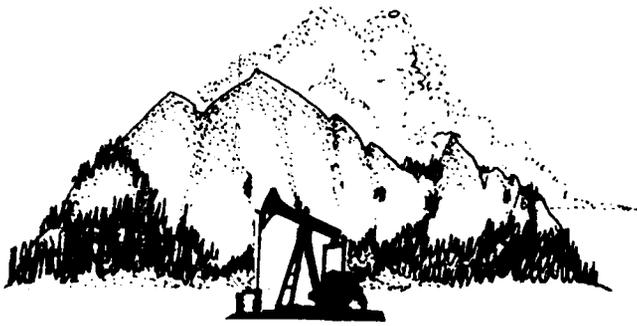
LEASE TYPE: FED LEASE NO: U-57656  
LOCATION: NSW 35 - T36S - R21E SAN JUAN COUNTY  
FIELD: WILDCAT FIELD CODE: 001

RECEIVED AND/OR REVIEWED:  
 Plat  
 Bond  
(Number 1)  
 Potash (Y/N)  
 Oil shale (Y/N)  
 Water permit  
(Number no permit)  
 RDCC Review (Y/N)  
(Date: 8-7-90)

LOCATION AND SITING:  
 R649-2-3. Unit: West Blanding  
 R649-3-2. General.  
 R649-3-3. Exception.  
 Drilling Unit.  
Board Cause no: \_\_\_\_\_  
Date: \_\_\_\_\_

COMMENTS: unit obligation well approved 4-1-90

STIPULATIONS: \_\_\_\_\_  
1. Needs water permit  
\_\_\_\_\_ Well was originally  
\_\_\_\_\_ Drilled & PAD in 1969.  
\_\_\_\_\_ PAD to re-enter |  
\_\_\_\_\_ ~~date~~ approved 10/14/92  
\_\_\_\_\_ PAD 3/3/94. Do not  
\_\_\_\_\_ send file to archives.  
\_\_\_\_\_ DTS  
\_\_\_\_\_ 5-3-94



# DOLAR OIL PROPERTIES

9035 South 700 East, Suite 100A  
Sandy, UT 84070-2418  
(801) 561 - 3121

July 28, 1992

RECEIVED

AUG 03 1992

DIVISION OF  
OIL GAS & MINING

Mr. R. J. Firth  
Utah Division of Oil and Gas  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

RE: Application and Permit to Drill  
1-35-36-21  
Re-entry Well  
West Blanding Unit  
San Juan County, Utah

Dear RJ:

For your records, enclosed please find one fully executed copy of the Estate of Thelma Ford Simmons Application to Re-enter and Drill the above referenced well.

It is the request of the Estate that this well be drilled, completed and produced as a "tite-hole" and that all information submitted herein be maintained confidential until that period required by government statutes to release information.

Please call if you have any questions.

Sincerely,

DOLAR OIL PROPERTIES

  
Mark S. Dolar, CPL

MSD/df

Enclosures

*Need specs. on  
7" 24# csg. not in  
my books.*

*Hard to drill 9 5/8" hole  
in 9 5/8" csg.  
Could be Horizontal hole.  
will need BHL.*

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPPLICATE  
(Other instructions on reverse side)

Form approved.  
Budget Bureau No. 1004-0136  
Expires August 31, 1985

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 A. Blanchard Geren, Jr. and John L. Heard,  
 Independent Co-Executors and not individually of the Estate of

3. ADDRESS OF OPERATOR Thelma Ford Simmons (505) 325-5789  
 3005 Northridge, Suite L, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface 2175 feet from South line, 382 feet from South line  
 WEST 02.

At proposed prod. zone same a short radius hole may be drilled in a northeasterly direction if coring shows to be favorable.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 Blanding, Utah is 5 1/2 miles east of the location.

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 382 feet

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. The well is a re-entry 6400'

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5,649 feet G.R.

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
9 5/8"	7"	24#	1800'-TD	600 Sacks of Class "G"

\*Note - 16" conductor casing is in hole to depth of 60 feet, 9 5/8" K-55, 36# surface casing is set to 1,935 feet.

TITE-HOLE

RECEIVED

AUG 03 1992

DIVISION OF OIL GAS & MINING

CONFIDENTIAL

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.

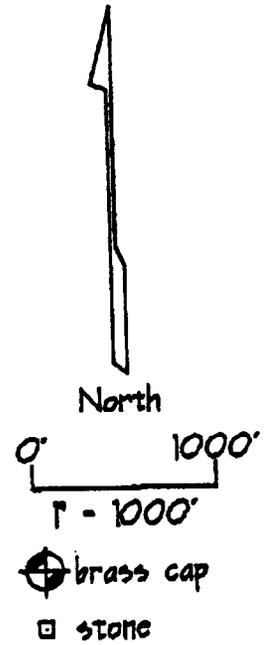
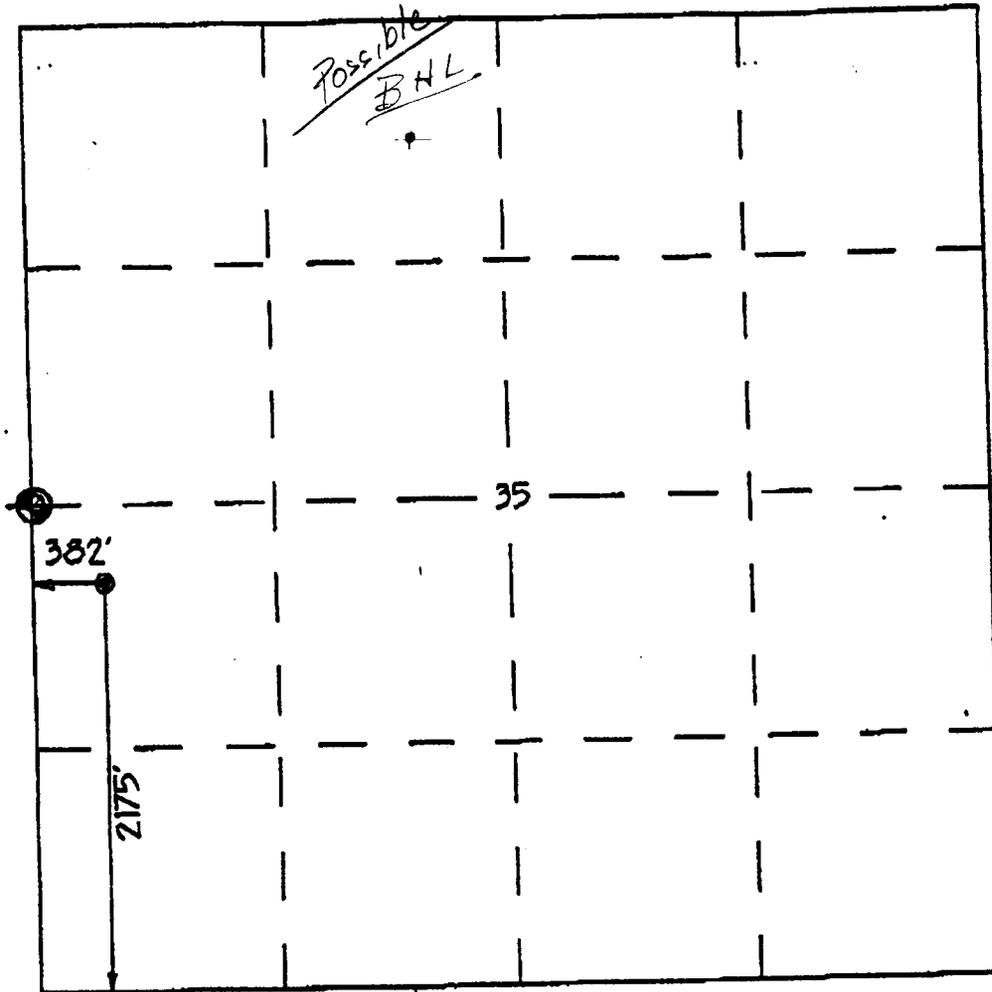
24. SIGNED [Signature] TITLE Landman DATE July 28, 1992

(This space for Federal or State office use)  
 PERMIT NO. 43-037-31465 APPROVAL DATE

APPROVED BY [Signature] TITLE  
 CONDITIONS OF APPROVAL, IF ANY:  
 APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING  
 DATE: 10/16/92  
 BY: [Signature]  
 WELL SPACING: 649-2-3

\*See Instructions On Reverse Side

Well Location Plat



Well Location Description

THE ESTATE OF THELMA FORD-SIMMONS  
Zeks's Hole 1-35-36-21  
2175' FSL & 382' FWL  
Section 35, T36 S., R.21 E., SLM  
San Juan County, Utah  
5649' ground elevation

20 July 1992

*Gerald G. Huddleston*  
Gerald G. Huddleston, LS

The above is true and correct to my knowledge and belief.



Huddleston Land Surveying - Drawer KK - Cortez, CO 81321 - (303) 565-3330

BUREAU OF LAND MANAGEMENT  
MOAB DISTRICT  
CONDITIONS OF APPROVAL FOR PERMIT TO DRILL

Company: A. Blanchard Geren, Jr. and John L. Heard, Independent Co-Executors and not individually, for the Estate of Thelma Ford Simmons.

Well No. 1-35-36-21 Zeke's Hole

Location: Sec 35: NWSW T. 36 South R. 21 East Lease U-57656

Onsite Inspection date: July 24, 1992

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.

A. DRILLING PROGRAM:

1. Surface Formation and Estimated Formation Tops:

Morrison - Surface	Lower Ismay - 5784'
Chinle - 1830'	Gothic - 5832'
Honker Trail - 4565'	Upper Desert Creek -5846'
Paradox Shale - 5633'	Lower Desert Creek - 5936'
Upper Ismay - 5639'	Chimney Rock - 5976'
Hovenweep - 5759'	Akah - 6005'
	Salt - 6037'
	Cycle 13 Shale - 6412'

2. Estimated Depth at Which Oil, Gas, Water or other Mineral-Bearing Zones Are Expected to Be Encountered:

	Formation	Depth
Expected Oil and/or Gas Zones:	Lower Ismay	5784'
	Lower Desert Creek	5846'
	Cycle 13 Shale	6412'
Expected Water Zones:	None.	
Expected Mineral Zones:	None.	

ESTATE OF THELMA FORD SIMMONS  
Re-Entry of 1-35-36-21 well

All fresh water and prospectively valuable minerals (as described by BLM) at onsite encountered during drilling will be recorded by depth, cased and cemented. All oil and gas shows will be tested to determine commercial potential.

3. Pressure Control Equipment:

Bottom Hole Pressures will be checked by pressure method prior to drilling. A Rotating Head will be used and checked.

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 will be recorded on the daily drilling report. The Resource Area will be notified 1 day in advance when pressure tests are to be conducted.

4. Casing Program and Auxiliary Equipment:

Casing Program: The well will be re-entered by drilling a 9 5/8" hole within the existing 16" and 9 5/8" casing to the shoe at approximately 1,935 feet. Drill out plug and weld a 9 5/8" sleeve on the top of existing casing and weld 9 5/8" casing head on the sleeve. After drilling out plugs (at depth of 1,932), an 8 3/4" open hole will be drilled and cleaned out to the original depth of 6049 feet. A new 8 5/8" hole will be drilled to the total depth of 6,550' (+/-), which should be approximately 100 feet below the Cycle 13 shale.

In the event of production, 7" production casing will be set from total depth to 150 feet. The casing used will be new, ~~24#~~, K-55, LT&C.

Cement Program: Approximately 600 sacks of Glass "G" cement with additives will be used, followed by 65/35 Poz to cover all productive zones. Cement will be set from the shoe to approximately 1800 feet. Actual cement volumes will be determined from Caliper Log.

Anticipated cement tops will be reported as to depth, not the expected number of sacks. The Resource Area will be notified 1 day in advance when running casing strings and cement.

ESTATE OF THELMA FORD SIMMONS  
1-35-36-21 Well

5. Mud Program and Circulating Medium:

Fresh water, lightly treated low solids will be used from the shoe to approximately 6,100 feet. From 6,100 feet to total Depth a saturated Salt mixture (10#/gal, 36-40 Viscosity, with 10cc fluid loss).

6. Coring, Logging and Testing Program:

A 30 foot core will be taken in the Cycle 13 shale. No DST will be run unless the show in the shale is good. Logs will include a Dual Induction and Compensated Neutron Density Logs. Logs will be run from the shoe to Total Depth drilled.

In the event core and log data prove favorable but the shale does not produce vertically, a short radius, horizontal drilling plan may be attempted at a later date. Upon coring, the shale casing will be run if the zone is perspective. If not perspective, the well will be plugged back to the Lower Desert Creek, and a cement plug will be set from 6400 ft. to 6100 ft. In the event Lower Desert Creek does not appear productive through vertical completion attempts, the well will be plugged back to the Lower Ismay zone and a horizontal hole will be drilled up to 600 ft. in the Lower Ismay Formation using the Eastman short radius system.

Whether the well is completed as a dry hole or as a producer, a "Well Completion and Recompletion Report and Log" (form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well test data, geological 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.

7. Abnormal Conditions, Bottom Hole Pressures and Potential Hazards:

No abnormal gas pressures or temperatures are expected. Hydrogen Sulfide or other hazardous gases or fluids are not known in the area. Maximum anticipated bottom hole pressures equal approximately 2700 psi. Anticipated surface pressures equal approximately 1350 feet.

8. Anticipated Starting Dates and Notifications of Operations:

Anticipated starting date is October 1, 1992. The Operator will contact the Moab Resource Area at Moab, Utah forty-eight (48) hours prior to beginning any dirt work on this location.

No location will be construed or moved, no well will be plugged, and drilling or workover equipment will not be removed from a well without prior approval of the District Manager. District Manager will also be notified if a well is placed in a suspended status, and approval will be requested from District Manager before resuming operations.

ESTATE OF THELMA FORD SIMMONS  
1-35-26-21 well

The spud date will be reported orally to the Resource Area Manager within a minimum of twenty-four (24) hours prior to spudding. Written notification in the form of a Sundry Notice (form 3160-5) will be submitted to the District Office within twenty-four hours after spudding. If the spudding occurs on a weekend or holiday, the written report will be submitted on the following regular work day.

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 commence and continue each month until drilling is concluded. This report will be filed directly with the BLM District Office, P.O. Box 970, Moab, Utah 84532.

Immediate Reports:

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.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed for prior approval of the District Manager, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig. In emergency situations, verbal approval to bring on a replacement rig will be approved by the District Petroleum Engineer.

Should the well be successfully completed for production, 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 (5) business days following the date on which the well is placed on production.

A first production conference will be scheduled within fifteen (15) days after receipt of the first production report. The Resource Area Office will coordinate the field conference.

No well abandonment operations will be commenced 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 thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area manager or his representative, or the appropriate surface managing agency.

ESTATE OF THELMA FORD SIMMONS  
1-35-36-21 WELL

Approval to vent/flare gas duringr 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.

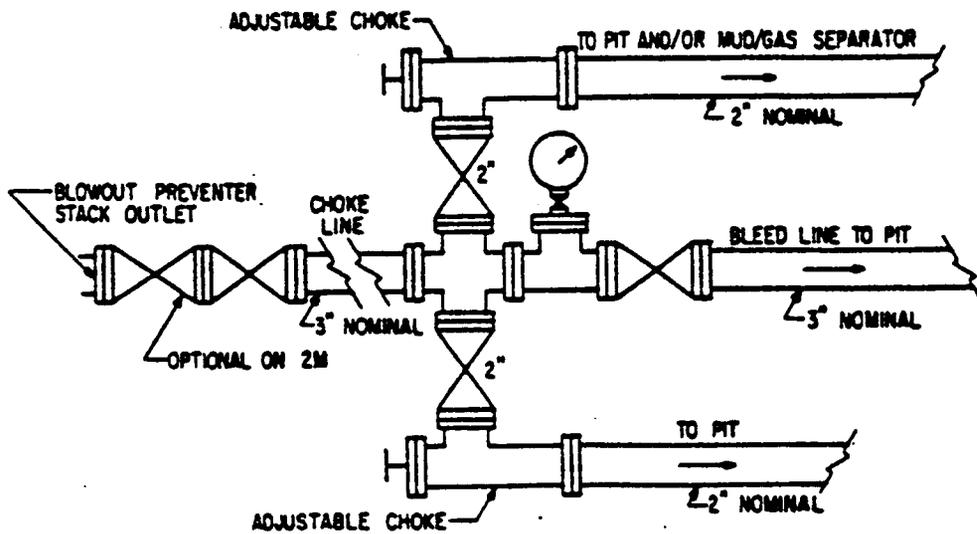
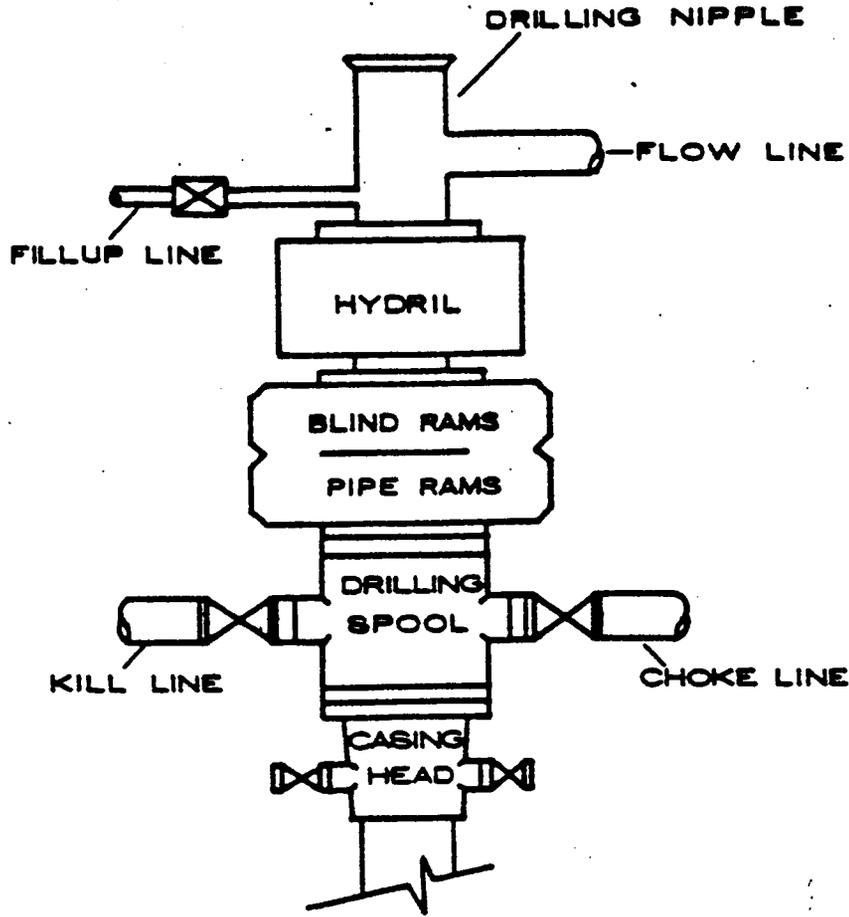
Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. The marker will be constructed as follows:

The top of the marker will be closed or capped.

The following minimum information will be permanently placed on the marker with a plate, cap or beaded-on with a welding torch:

"Fed" or "Ind", as applicable. "Well number, location by  $\frac{1}{4}$ <sup>1</sup>/<sub>4</sub> section, township and range".  
"Lease number".

# BOP STACK



ESTATE OF THELMA FORD SIMMONS  
1-35-36-21 well

**MULTI-POINT SURFACE USE AND OPERATIONS PLAN**

**1. Existing Roads:** Refer to Maps "A" and "B" for access.

a. Location is 5½ miles southwest of Blanding, Utah to planned access road.

b. Access will be obtained by traveling south along Utah State Highway #47 approximately 3.8 to a junction known as "Shirttail Junction", thence generally in a west direction along Utah State Highway #95 for approximately 4.9 miles. Thence, north approximately 3.2 miles on San Juan County Road #268 to the point of turn off for the planned access road.

c. Improvements and/or maintenance of existing state of county roads will not be necessary.

d. A Road Use Encroachment Permit will be obtained from the San Juan County Road & Bridge Department prior to use of County Road #268.

**2. Planned Access Road:**

a. The proposed access road will be the same access used in the original COGC 1-35-36-21 Federal Zekes' Hole well. There will be no additional new disturbance to the surface.

b. The maximum total width of the planned access road will be 18 feet. The road will be flat-bladed for drilling operations. The maximum total disturbed width along the access road will not exceed 50 feet.

c. Maximum grades will not exceed ten percent, unless otherwise necessary to maintain the countour of the surface.

d. Turnouts will be constructed as needed along the planned access road.

e. Drainage, culverts, cuts and fills will be placed as necessary to provide for free flow of water and adequate drainage.

f. If production is established, a pipeline will be layed along the planned access road near San Juan County Highway #268.

g. Surface materials will be purchased from a private source. None will be required for drilling operations.

ESTATE OF THELMA FORD SIMMONS  
1-35-36-21 well

h. Other: In addition to obtaining access on Lease U-57656, right-of-way access will be required across the surface of Federal Lease U-50405.

Surface disturbance and vehicular travel will be limited to the approved location and access road. Any additional area needed will be approved by the Area Manager in advance.

The access road will be rehabilitated or brought to Resource (Class III) Road Standards within sixty (60) days of dismantling of the drilling rig. If this time frame cannot be met, the Area Manager will be notified so that temporary drainage control can be installed along the access road.

**3. Location of Existing Wells:**

- a. Water wells - none known.
- b. Abandoned wells - The proposed well herein is a re-entry of a plugged and abandoned COGC 1-35-36-21 Zeke's Hole well. Another abandoned well is located in the NW/4NE/4 of Section 2, T37S, R21E.
- c. Temporarily abandoned wells - none known.
- d. Disposal wells - none known.
- e. Drilling wells - none known.
- f. Producing wells - none known.
- g. Shut-in wells - none known.
- h. Injection wells - none known.
- i. Monitoring wells - none known.

**4. Location of Tank Batteries and Production Facilities:**

Temporary tank structures constructed or installed (including oil well pump jacks) will be painted a flat, nonreflective, earth tone color to match the standard environmental colors, as determined by the Rocky Mountain Five-State Interagency Committee. All facilities will be painted within six (6) months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded. All fixtures will be painted Juniper green.

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.

All loading lines and valves will be placed inside the berm surrounding the tank battery.

All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.

All off-lease storage, off-lease measurement, or co-mingling on-lease or off-lease will have prior written approval from the District Manager.

ESTATE OF THELMA FORD SIMMONS  
1-35-36-21 well

All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

Gas meter runs for each well will be located within five hundred (500) feet of the wellhead. The gas flowline will be buried from the wellhead to the meter along with any other sections occurring on the pad. Meter runs will be housed and/or fenced.

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 (3) months on new meter installations and at least quarterly thereafter. The 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 Resource Area 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:**

All water needed for drilling purposes will be obtained from the Clyde Watkins Water Well, Permit #307-63784584.

A temporary water use permit for this operation will be obtained from the Utah State Engineer at Price, Utah (801) 637-1303. Water obtained on private land, or land administered by another agency, will require approval from the owner or agency for use of the land.

**6. Source of Construction Material:**

Pad construction material will be obtained from a private source. No material will be used from the location or needed from the B.L.M.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3. Source of construction material will not be located on lease.

**7. Methods of Handling Waste Disposal:**

The reserve pit will be lined with Bentonite.

ESTATE OF THELMA FORD SIMMONS  
1-35-36-21 well

Three sides of the reserve pit will be fenced with fencing material and/or 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.

All trash will be contained in a basket and will be disposed of by hauling it away.

If burning is required, a permit will be obtained from the State Fire Warden.

Produced waste water will be confined to a lined pit for a period not to exceed ninety (90) days after initial production. During the ninety (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:**

Camp facilities will not be required.

**9. Well Site Layout:**

The reserve pit will be located at NE corner of the pad.

The top 6 inches of soil material will be removed from the location and stockpiled separately on Southeast corner. Topsoil along the access road will be reserved in place adjacent to the road.

Access to the well pad will be from the South.

The trash basket will be placed on the Southeast corner of the pad.

**10. Plans for Restoration of Surface:**

Immediately upon completion of drilling, the location and surrounding area will be cleared of all remaining debris, materials, trash and junk not required for production.

Before any dirt work to restore the location takes place, the reserve pit must be completely dry.

ESTATE OF THELMA FORD SIMMONS  
1-35-36-21 well

The operator or his contractor will notify the Monticello, Utah, Resource Area forty-eight (48) hours before starting reclamation work that involves earth moving equipment and upon completion of restoration measures.

All disturbed areas will be recontoured to the approximate natural contours.

The stockpiled topsoil will be evenly distributed over the disturbed areas.

Prior to reseeding, all disturbed areas, including the access roads, will be scarified and left with a rough surface.

Seed will be broadcast or drilled at a time specified by the BLM. If broadcast, a harrow or some other implement will be dragged over the seeded area to assure seed coverage.

The following seed mixture will be used:

<u>Species</u>	<u>lbs. PLS/Acre</u>
Western Wheatgrass	4
Indian Ricegrass	2
Regular Bitterbrush	2
Curly Grass	1

All disturbed surfaces (including the access road and well pad areas) will be reseeded using the seed mixture recommended by the Authorized Officer, Bureau of Land Management as follows:

<u>Species</u>	<u>lbs. PLS/Acre</u>
Cliffrose	1
Four-Wing Saltbush	1

Seed will be broadcast or drilled on the contour to an approximate depth of one-half (1/2) inch. If broadcast, a harrow or some other implement will be dragged over the seeded area to assure seed coverage. Fall seeding will be completed after October 1 and prior to ground frost.

The reserve pit and that portion of the location and access road not needed for production or production facilities will be reclaimed within six months from the date of well completion.

ESTATE OF THELMA FORD SIMMONS  
1-35-36-21 well

11. **Surface and Mineral Ownership:** The Federal Government owns all surface and mineral interests.

12. **Other Information:**

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

"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.

The dirt contractor will be provided with an approved copy of the surface operations in accordance with 43 CFR 3164.

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

A cultural resource clearance (will/will not) be required before any construction begins. If any cultural resources are found during construction, all work will stop and the Area Manager will be notified.

This permit will be valid for a period of one (1) year from the date of approval. After permit termination a new application will be filed for approval for any future operations.

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

Representative:

Name: Mark S. Dolar  
Address: 9035 South 700 East, Suite 100A  
Sandy, Utah 84070-2418  
Phone No.: (801) 561-3121

ESTATE OF THELMA FORD SIMMONS  
1-35-36-21 well

Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by The Estate of Thelma Ford Simmons, and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

July 28, 1992  
Date

A. Blanchard Geren, Jr.  
A. Blanchard Geren, Jr.  
Independent Co-Executor and Not Individually  
of the Estate of Thelma Ford Simmons

ESTATE OF THELMA FORD SIMMONS  
1-35-36-21 well

SELF CERTIFICATION STATEMENT

Under the Federal regulations in effect as of June 15, 1988, designation of operator forms are no longer required when operator is not 100% record title holder. An operator is now required to submit a self-certification statement to the appropriate Bureau office stating that said operator has the right to operate upon the leasehold premises.

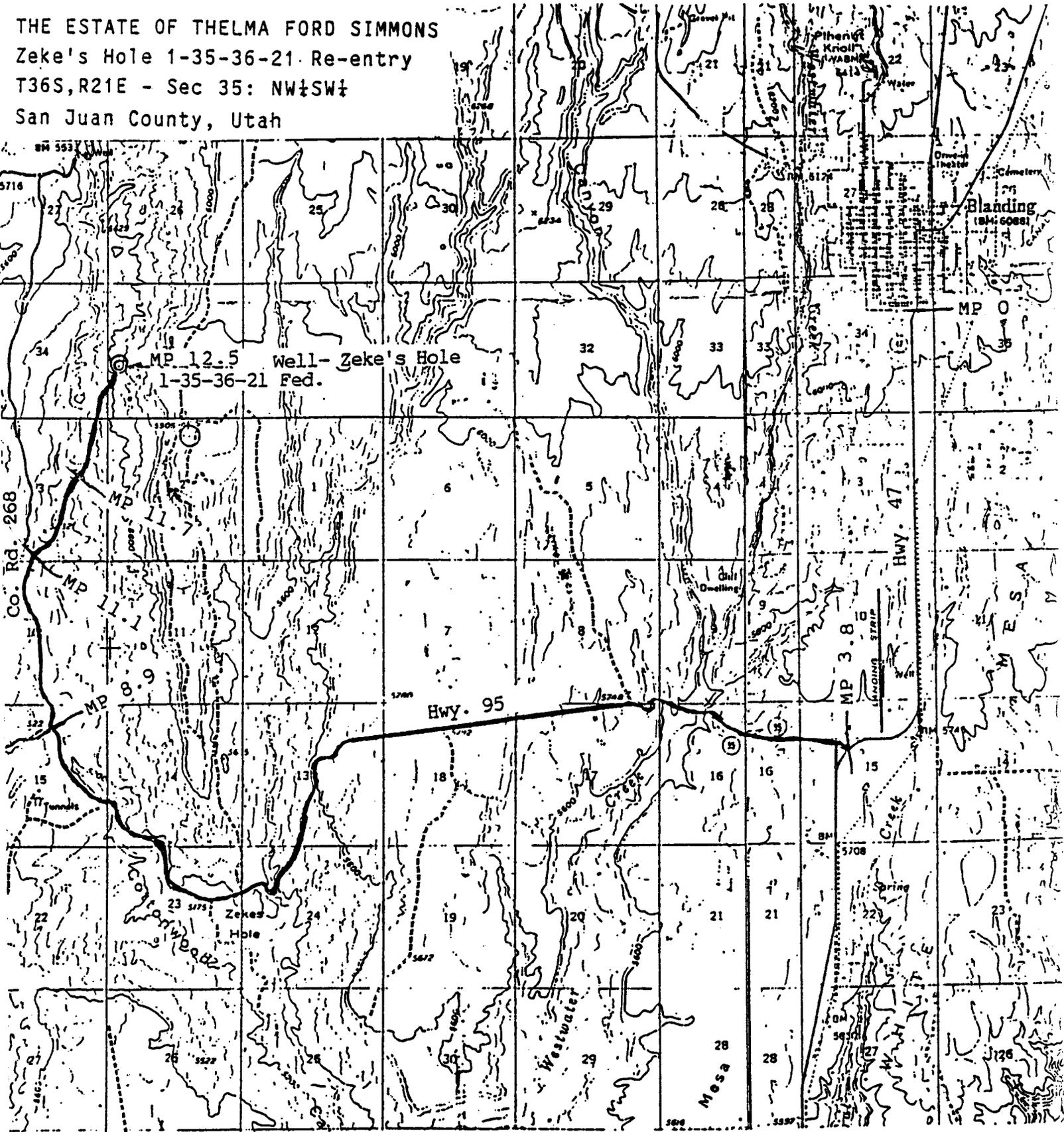
Please be advised that A. Blanchard Geren, Jr. Independent Co-Executor, and not individually, for the Estate of Thelma Ford Simmons, operator of the 1-35-36-21 Zeke's Hole well, located in Section 35: NWSW of Township 36 South, Range 21 East, S.L.M., Lease U-57656, San Juan County, Utah; and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Underwriter's Indemnity under Nationwide BLM Bond # \_\_\_\_\_, address being c/o Johnson & Higgins of Utah, Inc., 8 Greenway Plaza, Suite 400, Houston, TX 77047.

Date: July 28, 1992

A. Blanchard Geren, Jr.  
A. Blanchard Geren, Jr., Independent Co-Executor, and not individually, for the Estate of Thelma Ford Simmons.

MAP A

THE ESTATE OF THELMA FORD SIMMONS  
Zeke's Hole 1-35-36-21 Re-entry  
T36S,R21E - Sec 35: NW¼SW¼  
San Juan County, Utah



R21E

MAP B

#1-35-36-21

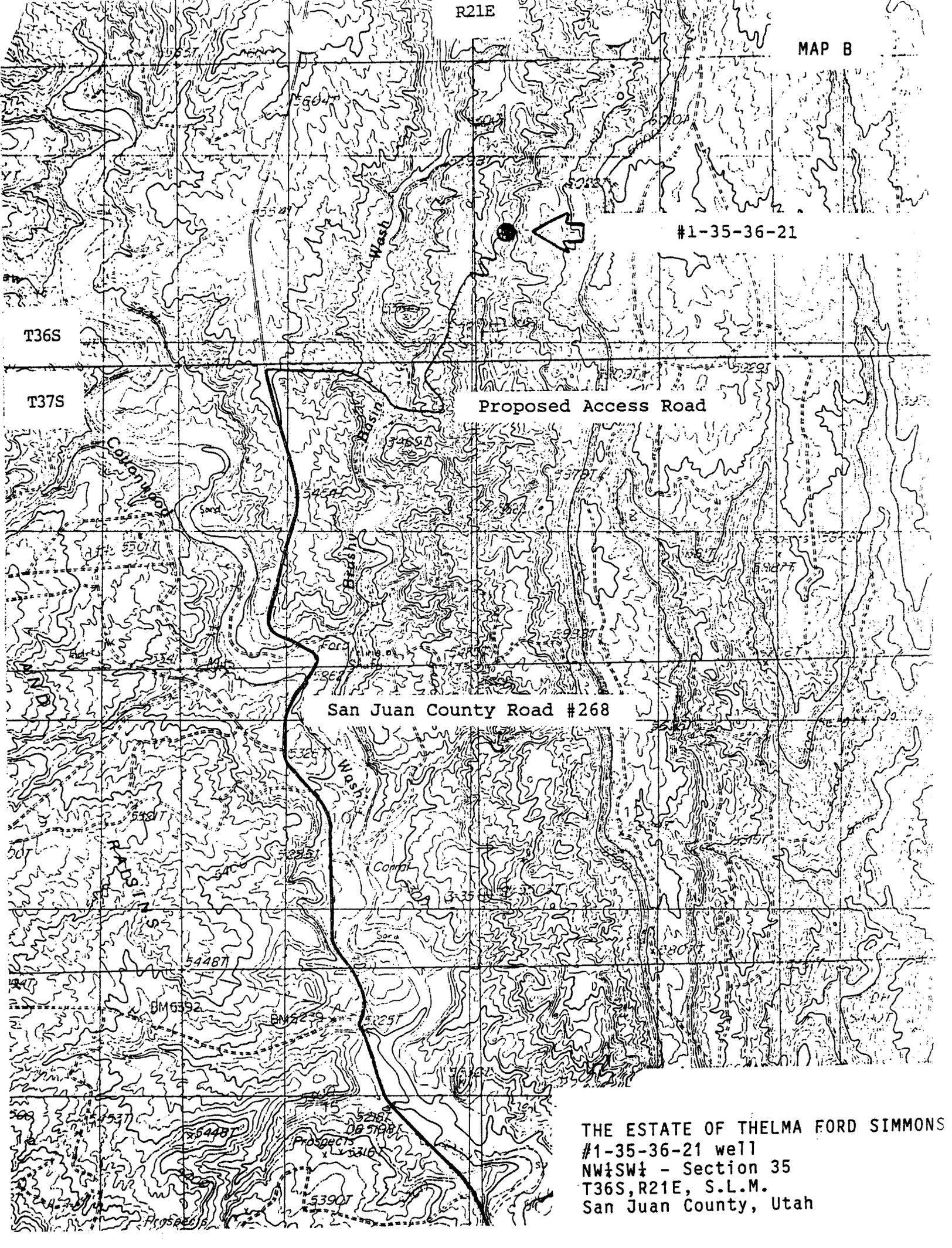
T36S

T37S

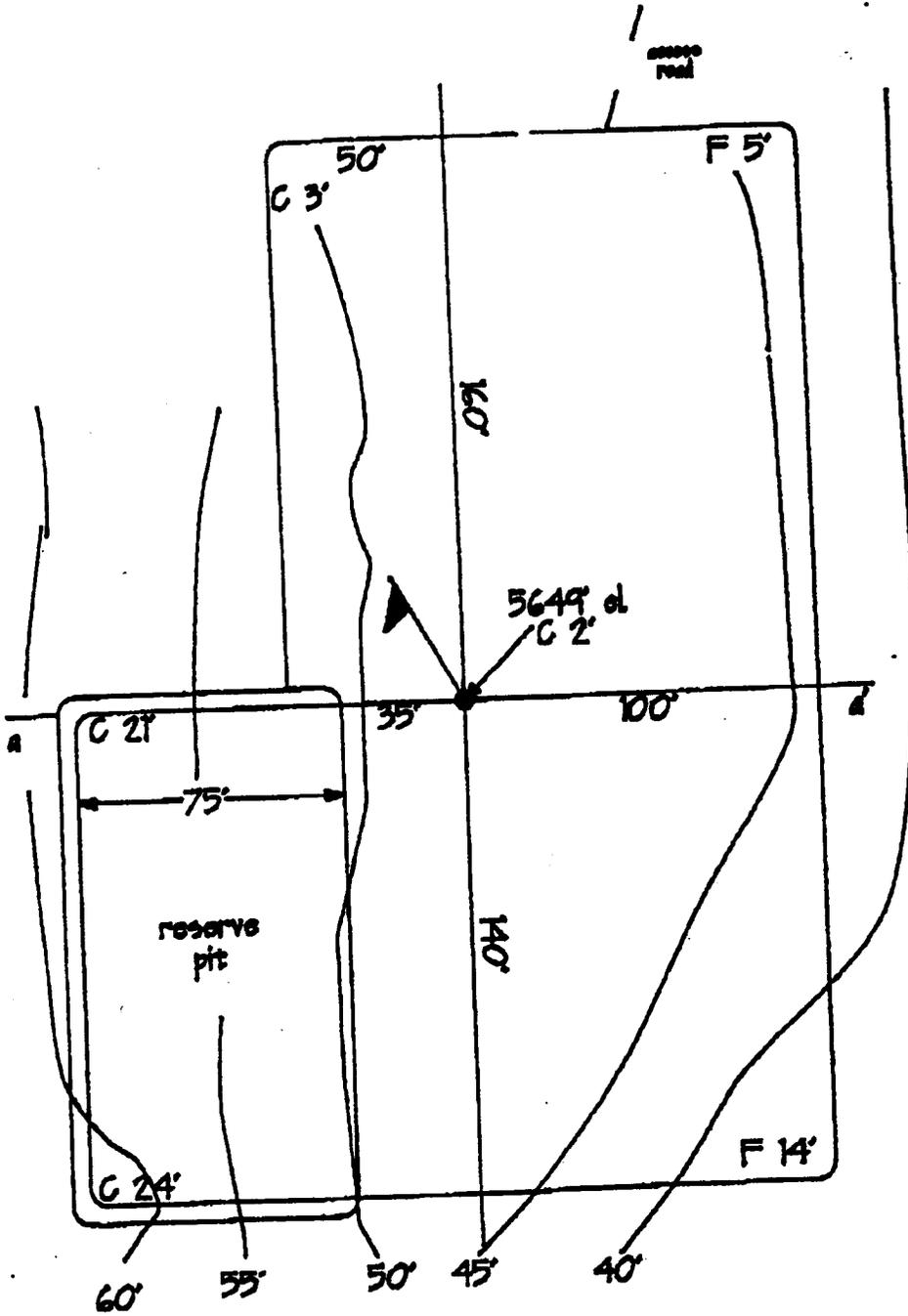
Proposed Access Road

San Juan County Road #268

THE ESTATE OF THELMA FORD SIMMONS  
#1-35-36-21 well  
NW¼SW¼ - Section 35  
T36S, R21E, S.L.M.  
San Juan County, Utah



Zeke's Hole 1-35-36-21



cut   
fill 



cross section

STATE ACTIONS

Mail to:  
RDCC Coordinator  
116 State Capitol  
Salt Lake City, Utah 84114

1. ADMINISTERING STATE AGENCY  
OIL, GAS AND MINING  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

2. STATE APPLICATION IDENTIFIER NUMBER:  
(assigned by State Clearinghouse)

3. APPROXIMATE DATE PROJECT WILL START:  
October 1, 1992

4. AREAWIDE CLEARING HOUSE(S) RECEIVING STATE ACTIONS:  
(to be sent out by agency in block 1)  
Southeastern Utah Association of Governments

5. TYPE OF ACTION:  Lease  Permit  License  Land Acquisition  
 Land Sale  Land Exchange  Other \_\_\_\_\_

6. TITLE OF PROPOSED ACTION:  
Application for Permit to Drill

7. A. Blanchard Geren, Jr. and John L. Heard, Independent Co-Executors and not individually of the Estate of Thelma Ford Simmons proposes to drill the 1-35-36-21 Zeke's Hole well (wildcat) on federal lease U-57656, San Juan County, Utah. This action is being presented to RDCC for consideration of resource issues affecting state interests. The U.S. Bureau of Land Management is the primary administrative agency in this action and must issue approval before operations commence.

8. LAND AFFECTED (site location map required) (indicate county)  
NW/4 SW/4, Section 35, Township 36 South, Range 21 East, San Juan County, Utah

9. HAS THE LOCAL GOVERNMENT(S) BEEN CONTACTED?

10. POSSIBLE SIGNIFICANT IMPACTS LIKELY TO OCCUR:  
See Attachment

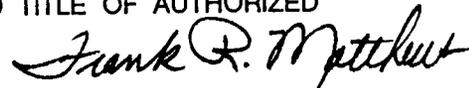
11. NAME AND PHONE NUMBER OF DISTRICT REPRESENTATIVE FROM YOUR AGENCY NEAR PROJECT SITE, IF APPLICABLE:

12. FOR FURTHER INFORMATION, CONTACT:

Frank R. Matthews  
PHONE: 538-5340

13. SIGNATURE AND TITLE OF AUTHORIZED OFFICIAL:

DATE: 8/7/92

  
Petroleum Engineer

# SOUTHEASTERN UTAH ASSOCIATION OF LOCAL GOVERNMENT

WILLIAM D. HOWELL  
Executive Director

P. O. Drawer 1106 • Price, Utah 84501 • Telephone 637-5444

## AREAWIDE CLEARINGHOUSE A-95 REVIEW

14 01 07

NOI \_\_\_ Preapp \_\_\_ App \_\_\_ State Plan \_\_\_ State Action X Subdivision \_\_\_ (ASP # 8-811-12 )

Other (indicate) \_\_\_\_\_ SAI Number UT920810-050

**Applicant (Address, Phone Number):**

Oil, Gas and Mining  
355 West North Temple  
3 Triad center Ste 350  
Salt Lake City, UT 84180-1203

**Federal Funds:**  
**Requested:** \_\_\_\_\_

**Title:**

APPLICATION FOR PERMIT TO DRILL

RECEIVED

SEP 02 1992

DIVISION OF  
OIL GAS & MINING

- No comment
- See comments below
- No action taken because of insufficient information
- Please send your formal application to us for review. Your attendance is requested

The applicant should forward any written review comments to the funding agency. Any written response to those comments should be forwarded to the State Clearinghouse and also to the funding agency.

**Comments:**

  
\_\_\_\_\_  
Authorizing Official

8-31-92  
\_\_\_\_\_  
Date

16. UT920810-060

*PG 4 E*

Division of Oil, Gas & Mining/Carbon County: Application for Permit to Drill - Proposal to drill a wildcat well, the Jensen No. 16-10 well, on a private lease (Sec. 10, T12S, R10E). Comments due 8-25-92.

17. UT920810-050

*ESTATE OF  
THELMA SIMMONS  
(Re-entry)*

Division of Oil, Gas & Mining/San Juan County: Application for Permit to Drill - Proposal to drill a wildcat well, the 1-35-36-21 Zeke's Hole well, on federal lease U-57656 (Sec. 35, T36S R21E). Comments due 8-25-92.

B. Federal

18. UT920817-050

USDA/Forest Service/Beaver County: Fishlake National Forest - North Indian Cattle Allotment Management Plan - Scoping Document. Comments due 8-30-92.

19. UT920817-040

USDA/Forest Service/Beaver County: Fishlake National Forest - North Beaver Cattle Allotment Management Plan - Scoping document. Comments due 8-30-92.

20. UT920817-030

USDA/Forest Service: Fishlake National Forest - Wiffs Salvage Timber Sale (Sec. 34, T27S, R4E). This is not the complete document; if additional information is needed, please contact OPB. Comments due 8-25-92.

FYE - FRM  
~~TAS~~  
- LWP

11. UT910114-010

USDA/Forest Service: Revised Notice of Intent to prepare an environmental impact statement on the Mexican Spotted Owl. Federal Register notice 7-31-92, page 33934.

**V. SHORT TURNAROUND**

**\*Please Note! Due to the short turnaround please comment directly to the Agency with a copy to OPB.**

A. State

12. UT920807-010

PG & E Resources

Division of Oil, Gas & Mining/Carbon County: Application for Permit to Drill - Proposal to drill a wildcat well, the Jensen No. 11-10 well, on a private lease (Sec. 10, T12S, R10E). Comments due 8-25-92.

13. UT920807-020

PG & E

Division of Oil, Gas & Mining/Carbon County: Application for Permit to Drill - Proposal to drill a wildcat well, the Jensen No. 9-10 well, on a private lease (Sec. 10, T12S, R10E). Comments due 8-25-92.

14. UT920807-030

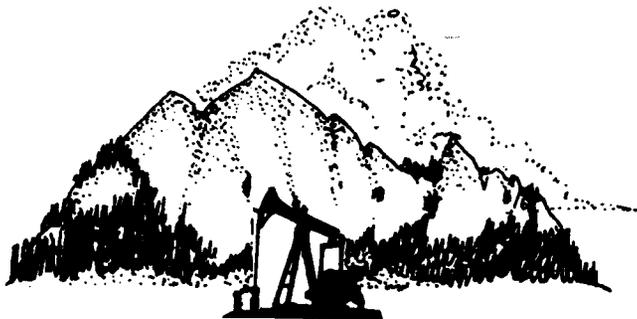
PG & E

Division of Oil, Gas & Mining/Carbon County: Application for Permit to Drill - Proposal to drill a wildcat well, the Jensen No. 5-10 well, on a private lease (Sec. 10, T12S, R10E). Comments due 8-21-92.

15. UT920810-070

PG & E

Division of Oil, Gas & Mining/Carbon County: Application for Permit to Drill - Proposal to drill a wildcat well, the Jensen 7-15 well, on a private lease (Sec. 15, T12S, R10E). Comments due 8-25-92.



# DOLAR OIL PROPERTIES

9035 South 700 East  
Sandy, UT 84070-2418  
(801) 561 - 3121

September 25, 1992

Mr. Dale Manchester  
Moab District Office  
Bureau of Land Management  
Post Office Box 970  
Moab, Utah 84532

RE: Sundry notice for 1-35-36-21 Zekes' Hole well  
West Blanding Unit  
San Juan County, UT

RECEIVED

SEP 30 1992

DIVISION OF  
OIL, GAS & MINING

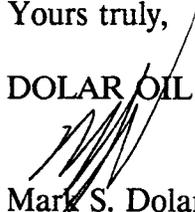
Dear Dale:

Pursuant to your request, enclosed please find three copies of a sundry notice for the above referenced well indicating necessary corrections, clarifications and changes in the proposed program. Attached to the sundry notice is a copy of the down hole horizontal program for the lateral drilling of the Cycle 13 Shale.

Your attention to this matter is appreciated, please call should you have any questions.

Yours truly,

DOLAR OIL PROPERTIES

  
Mark S. Dolar, CPL

cc: A. B. Geren  
Frank Matthews (State of Utah Division of Oil, Gas & Mining)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

CONFIDENTIAL

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.

5. Lease Designation and Serial No.  
U-57656

6. If Indian, Allottee or Tribe Name  
----

7. If Unit or CA, Agreement Designation  
West Blanding Unit

8. Well Name and No.  
Zekes' Hole 1-35-36-21

9. API Well No.

10. Field and Pool, or Exploratory Area  
Exploratory

11. County or Parish, State  
San Juan County, Utah

SUBMIT IN TRIPLICATE

SEP 30 1992

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator A. Blanchard Geren, Jr. and John L. Heard, Independent Co-Executors of the Estate of Thelma Ford Simmons OIL GAS & MINING

3. Address and Telephone No.  
3005 Northridge Drive, Suite L Farmington, NM 87401 (505)325-5789

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
2175 feet from south line; 382 feet from west line  
Section 35  
Township 36 South, Range 21 East, SLM

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>Drilling Program</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

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

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

THIS SUNDRY IS INTENDED TO CLARIFY QUESTIONS REGARDING A.P.D FILED JULY 24, 1992:

DRILLING PROGRAM:

3. Pressure Control Equipment - Blow out preventing equipment will be installed to handle up to 3,000 p.s.i.

4. Casing Program: - Seven inch (7") casing will be 23#, K-55, LT&C. The casing will be set from total depth to the surface in the event of production. Approximately 170 sacks of 65/35 POZ + 10% salt will be used to cover producing zones.

6. Coring, Logging & Testing Program: In the event the core (or DST) proves favorable, a Medium radius horizontal well will be drilled in a N36 1/2°E direction for a length up to 2,800 feet. (Attached is "Proposal listing" for the angle.) At this time a horizontal well in the Lower Ismay formation is not planned.

14. I hereby certify that the foregoing is true and correct  
Signed \_\_\_\_\_ Title Consultant Date 9/25/92

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_  
Conditions of approval, if any:

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

XXXXXXXXXXXX L LCCCCCAB CLC1C1CC0C0C ECC

**VELLSITE ENGINEERING**  
 R. Griffes  
 2/19/82  
 not drawn to scale

13 3/8" .36 ppf CONDUCTOR C90  
 SET AT 48'

8 5/8" .36 ppf SURFACE CASING  
 set at 1935'. cement to  
 surface

1-35-36-21 Federal  
 Previously: Coastal  
 Oil and Gas

2175' FSL x 362' FWL  
 See 36, T369, R21E  
 San Juan County, Utah

P & A on 8/6/88

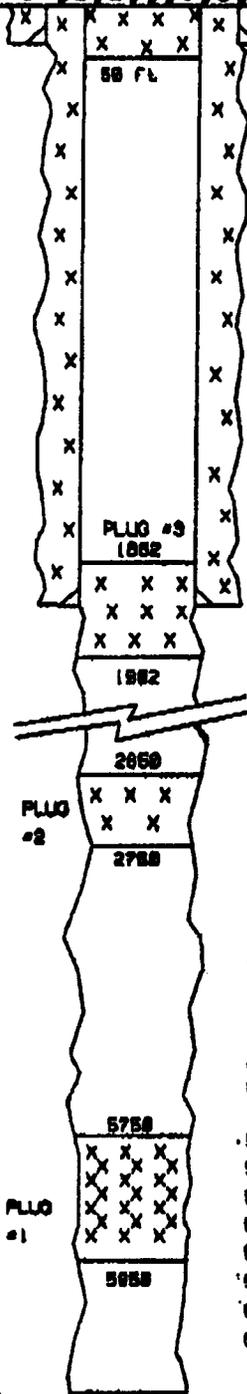
maximum deviation  
 5 degrees at 1583'  
 3 degree dogleg at  
 1888 to 1881'

well mudded up at 5348'

CONFIDENTIAL

cap shoe at 1935'

8 3/4" open hole



- 2958 ----- DeChelly
- 4585 ----- Harker Trail
- 5842 ----- ~~Paradox Shale~~
- 5845 ----- ~~Paradox Shale~~
- 5788 ----- Upper Isney
- 5792 ----- Hovenweep
- 5848 ----- Lower Isney
- 5888 ----- Gethie
- 5845 ----- Upper Desert Creek
- 5887 ----- Lower Desert Creek
- 5814 ----- Chimney Rock
- 5848 ----- Akah
- Salt
- 5412 ----- ~~Arbuckle~~
- Cycle #13 Shale
- ~~Arbuckle~~
- Salt

original TD  
 6848 Ft

New 8 3/4" hole

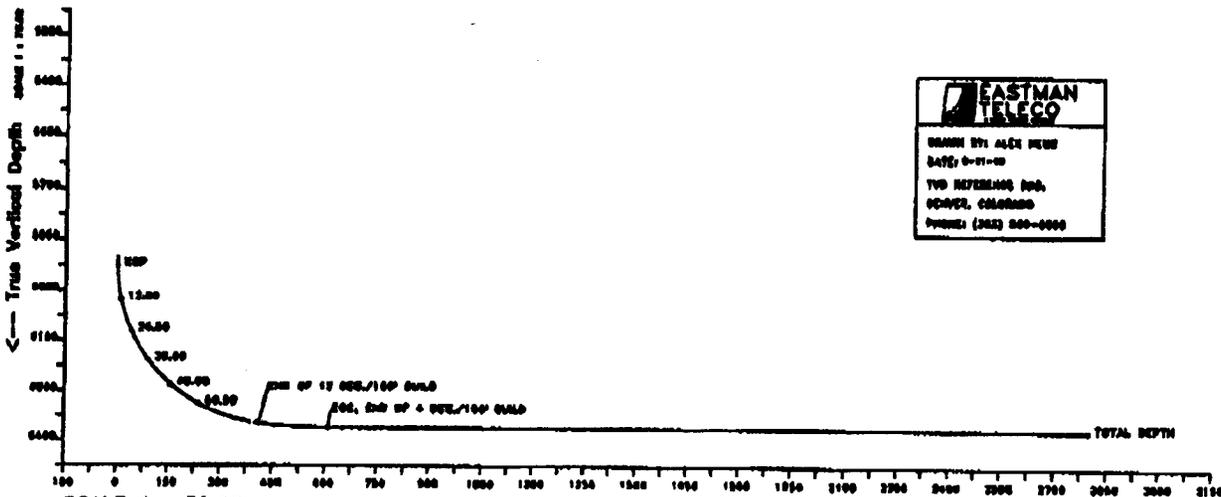
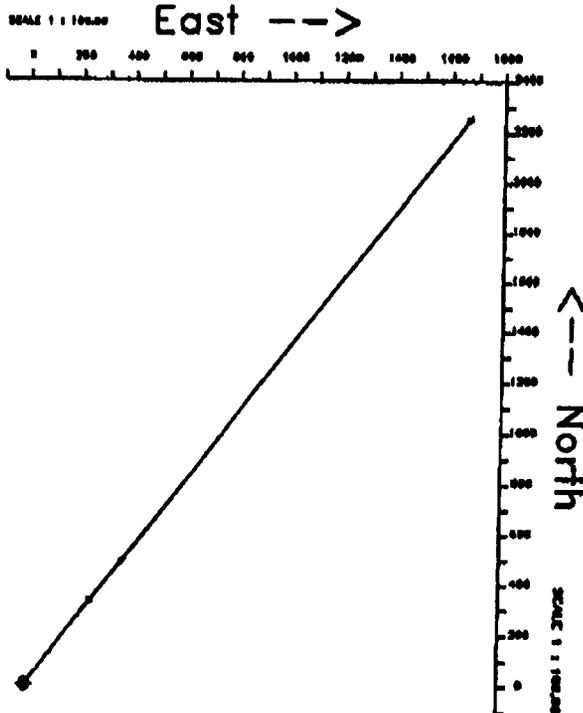
Proposed TD - 6458'

# WELLSITE ENGINEERING

CONFIDENTIAL

Structure : SEC. 35 T36S-R21E Well : 1-35-36-21 FEDERAL  
 Field : WILDCAT Location : San Juan County, Utah

WELL PROFILE DATA						
POINT	NO	INC	DEL	TVD	NORTH	EAST
THE OH	0	0.00	36.50	0	0	0
END OF BULL	1000	0.00	36.50	1000	0	0
END OF BULL	1400	00.00	36.50	1360	330	244
END OF BULL	2000	00.00	36.50	1610	494	309
END OF BULL	3000	00.00	36.50	2110	794	474



**EASTMAN TELECO**  
 DRAWN BY: ALAN REED  
 DATE: 9-21-92  
 TVD REFERENCE: 000  
 SPOYER, COLORADO  
 PHONE: (303) 866-0000

SCALE 1 : 75.00  
 Vertical Section on 36.50 azimuth with reference 0.00 N, 0.00 E from slot #1

CONFIDENTIAL

WELLSITE ENGINEERING  
SEC. 35 T368-R21E

1-35-36-21 FEDERAL  
slot #1  
WILDCAT  
San Juan County, Utah

PROPOSAL LISTING

Your ref : 1-35-36-21 FEDERAL  
Our ref : prop367  
Other ref :

Date printed : 31-Aug-92  
Date created : 31-Aug-92  
Last revised : 31-Aug-92

Field is centred on n37 35 0.000,w109 30 0  
Structure is centred on n37 35 0.000,w109 30 0

WELLSITE ENGINEERING  
 SEC. 35 T36S-R21E, 1-35-36-21 FEDERAL  
 WILDCAT, San Juan County, Utah

PROPOSAL LISTING Page 1  
 Your ref : 1-35-36-21 FEDERAL  
 Last revised : 31-Aug-92

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert. Depth	RECTANGULAR COORDINATES		Dogleg Deg/100ft	Vert Sect
0.00	0.00	36.50	0.00	0.00 N	0.00 E	0.00	0.00
500.00	0.00	36.50	500.00	0.00 N	0.00 E	0.00	0.00
1000.00	0.00	36.50	1000.00	0.00 N	0.00 E	0.00	0.00
1500.00	0.00	36.50	1500.00	0.00 N	0.00 E	0.00	0.00
2000.00	0.00	36.50	2000.00	0.00 N	0.00 E	0.00	0.00
2500.00	0.00	36.50	2500.00	0.00 N	0.00 E	0.00	0.00
3000.00	0.00	36.50	3000.00	0.00 N	0.00 E	0.00	0.00
3500.00	0.00	36.50	3500.00	0.00 N	0.00 E	0.00	0.00
4000.00	0.00	36.50	4000.00	0.00 N	0.00 E	0.00	0.00
4500.00	0.00	36.50	4500.00	0.00 N	0.00 E	0.00	0.00
5000.00	0.00	36.50	5000.00	0.00 N	0.00 E	0.00	0.00
5500.00	0.00	36.50	5500.00	0.00 N	0.00 E	0.00	0.00
5925.24	0.00	36.50	5925.24	0.00 N	0.00 E	0.00	0.00 KOP
6025.24	12.00	36.50	6024.51	8.39 N	6.21 E	12.00	10.43
6125.24	24.00	36.50	6119.44	33.18 N	24.55 E	12.00	41.28
6225.24	36.00	36.50	6205.89	73.30 N	54.24 E	12.00	91.19
6325.24	48.00	36.50	6280.07	126.99 N	93.97 E	12.00	157.98
6425.24	60.00	36.50	6338.74	191.91 N	142.00 E	12.00	238.73
6525.24	72.00	36.50	6379.34	265.21 N	196.24 E	12.00	329.92
6608.58	82.00	36.50	6398.06	330.40 N	244.48 E	12.00	411.01 END OF 12 DEG./100' BUILD
6658.58	84.00	36.50	6404.15	370.29 N	276.00 E	4.00	460.64
6758.58	88.00	36.50	6411.13	450.46 N	333.32 E	4.00	560.38
6808.58	90.00	36.50	6412.00	490.65 N	363.06 E	4.00	610.36 SOC, END OF 4 DEG./100' BUILD
7000.00	90.00	36.50	6412.00	644.52 N	476.92 E	0.00	801.79
7500.00	90.00	36.50	6412.00	1046.45 N	774.33 E	0.00	1301.79
8000.00	90.00	36.50	6412.00	1448.38 N	1071.74 E	0.00	1801.79
8500.00	90.00	36.50	6412.00	1850.31 N	1369.16 E	0.00	2301.79
8999.00	90.00	36.50	6412.00	2251.43 N	1665.97 E	0.00	2800.79 TOTAL DEPTH

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All data is in feet unless otherwise stated  
 Coordinates are from slot #1 and TVDs are from wellhead.  
 Vertical section is from N 0.00 E 0.00 on azimuth 36.50 degrees.  
 Calculation uses the minimum curvature method.

WELLSITE ENGINEERING  
 SEC. 35 T368-R21E, 1-35-36-21 FEDERAL  
 WILDCAT, San Juan County, Utah

PROPOSAL LISTING Page 2  
 Your ref : 1-35-36-21 FEDERAL  
 Last revised : 31-Aug-92

Comments in wellpath  
 -----

MD	TVD	Rectangular Coords.		Comment
5925.24	5925.24	0.00 N	0.00 E	KOP
6608.58	6398.06	330.40 N	244.48 E	END OF 12 DEG./100' BUILD
6808.58	6412.00	490.65 N	343.06 E	EOC, END OF 4 DEG./100' BUILD
8999.00	6412.00	2251.43 N	1645.97 E	TOTAL DEPTH

CONFIDENTIAL

All data is in feet unless otherwise stated  
 Coordinates are from slot #1 and TVDs are from wellhead.  
 Slot coordinates are 0.00 N 0.00 E.  
 Bottom hole distance is 2800.79 on azimuth 36.50 degrees from wellhead.  
 Total Dogleg for wellpath is 90.00 degrees.  
 Vertical section is from N 0.00 E 0.00 on azimuth 36.50 degrees.  
 Calculation uses the minimum curvature method.

**WELLSITE ENGINEERING**  
**BHA#1**



**4-1/2"  
DRILL PIPE  
TO SURFACE**



**4-1/2" NON-MAG  
COMPRESSIVE SERVICE  
DRILL PIPE**



**60 JTS.  
4-1/2"  
HWDP**



**6-3/4"  
NON-MAG DRILL  
COLLAR (MWD)**

CONFIDENTIAL



**6-1/2 X 4-1/2"  
COMPRESSIVE SERVICE  
DRILL PIPE**



**6-3/4"  
ADJUSTABLE  
KICK OFF  
MOTOR**

**8-3/4"  
BIT**



**WELLSITE ENGINEERING**  
**BHA#2**



CONFIDENTIAL



3-1/2"  
 DRILL PIPE  
 TO SURFACE



3-1/2" NON MAG  
 COMPRESSIVE  
 SERVICE  
 DRILL PIPE



75 JTS  
 3-1/2"  
 HWDP



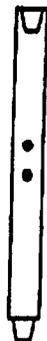
3-1/2" NON MAG  
 COMPRESSIVE  
 SERVICE  
 DRILL PIPE



4-3/4"  
 DTU MOTOR



75 JTS  
 S-135 GRADE  
 3-1/2"  
 DRILL PIPE



• 4-3/4"  
 • NON MAG DRILL  
 COLLAR (MWD)

6-1/8"  
 FIXED CUTTER BIT



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

OCT 07 1992

DIVISION OF  
OIL GAS & MINING

**PROPRIETARY/CONFIDENTIAL  
INFORMATION**

RECORDS CONTAINED HEREIN  
ARE PROPRIETARY/CONFIDENTIAL  
INFORMATION AND MUST BE  
SAFEGUARDED FROM  
UNAUTHORIZED DISCLOSURE

PROPRIETARY/CONFIDENTIAL INFORMATION

COVER MUST BE ATTACHED TO THE  
RECORD AT ALL TIMES WHEN THE  
RECORD IS REMOVED FROM THE FILES.

SEE REVERSE FOR PENALTIES FOR  
UNAUTHORIZED DISCLOSURE  
Form 1273-2 (October 1984)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.  
U-57656

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
West Blanding

8. FARM OR LEASE NAME

9. WELL NO.  
1-35-36-21 Zeke's Hole

10. FIELD AND POOL, OR WILDCAT  
Wildcat

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA  
NW 1/4 SW 1/4 - Sec 35, T36S, R21E SLM

12. COUNTY OR PARISH  
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  
A. Blanchard Geren, Jr. and John L. Heard, Independent Co-Executors and not individually of the Estate of

3. ADDRESS OF OPERATOR  
Thelma Ford Simmons (505) 325-5789  
3005 Northridge, Suite L, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface 2175 feet from South line, 382 feet from South line WEST ~~ADZ~~.  
At proposed prod. zone same a short radius hole may be drilled in a northeasterly direction if coring shows to be favorable.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
Blanding, Utah is 5 1/2 miles east of the location.

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

16. NO. OF ACRES IN LEASE  
2,360.00

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.  
The well is a re-entry

19. PROPOSED DEPTH  
6400'

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
5,649 feet G.R.

22. APPROX. DATE WORK WILL START\*  
October 1, 1992

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
9 5/8"	7"	24#	1800'-TD	600 Sacks of Class "G"

*No ZAT 7' JMA*

RECEIVED

OCT 07 1992

DIVISION OF OIL GAS & MINING

*William C. Stringer*

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 Landman DATE July 28, 1992

(This space for Federal or State office use)

PERMIT NO. 18/ WILLIAM C. STRINGER APPROVAL DATE Assistant District Manager  
APPROVED BY WILLIAM C. STRINGER TITLE for Minerals DATE OCT 5 1992

CONDITIONS OF APPROVAL, IF ANY:  
FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A  
11/1/80

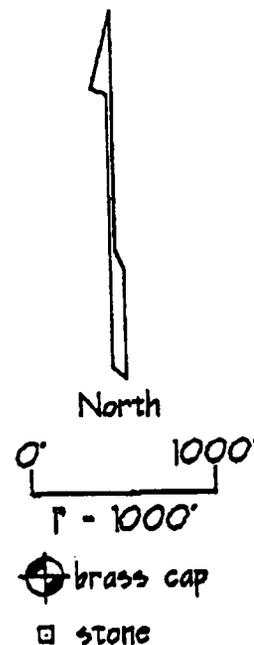
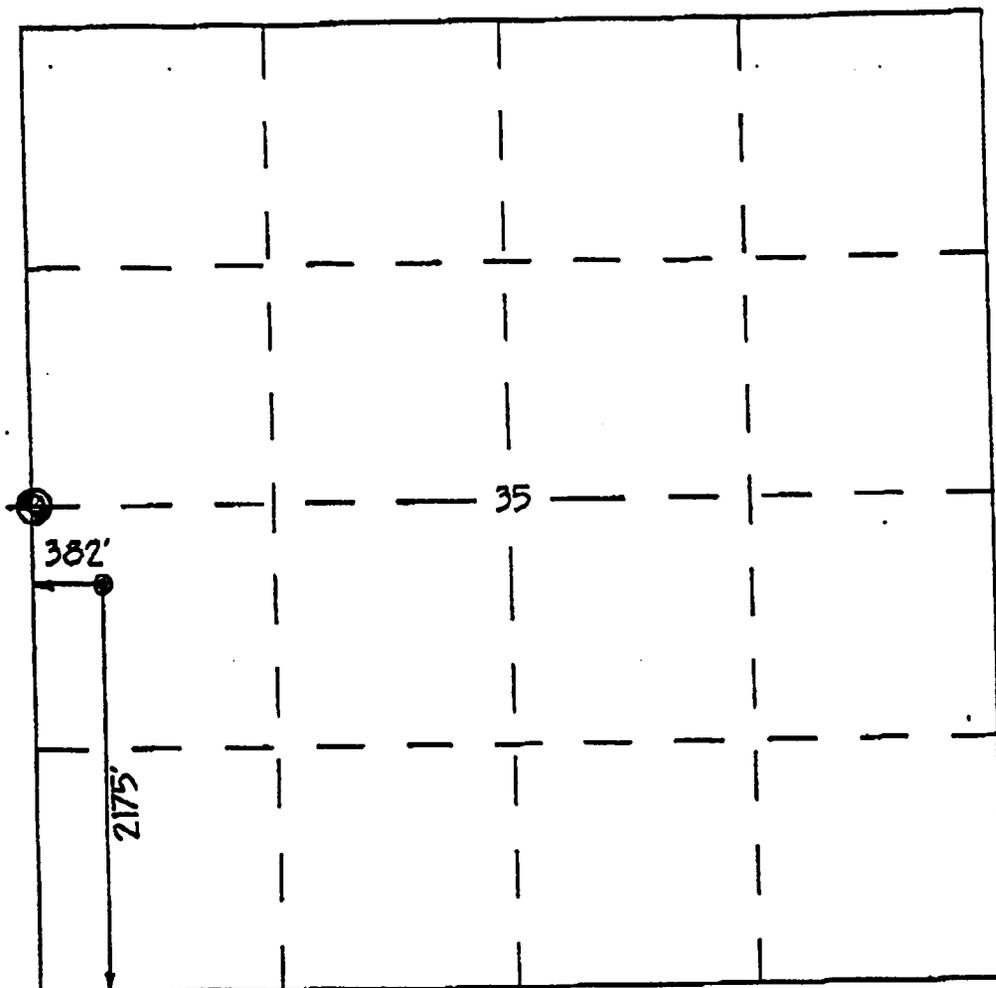
CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the

Dogm

Well Location Plat



Well Location Description

THE ESTATE OF THELMA FORD-SIMMONS  
Zeks's Hole 1-35-36-21  
2175' FSL & 382' FWL  
Section 35, T.36 S., R.21 E., SLM  
San Juan County, Utah  
5649' ground elevation

20 July 1992

*Gerald G. Huddleston*  
Gerald G. Huddleston, LS

The above is true and correct to my knowledge and belief.



Huddleston Land Surveying - Drawer KK - Cortez, CO 81321 - (303) 565-3330

Estate of Thelma Ford Simmons  
Zeke's Hole No. 1-35-36-21 well  
NWSW Sec. 35, T. 36 S., R. 21 E.  
San Juan County, Utah  
Lease U-57656

### **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.

Be advised that Estate of Thelma Ford Simmons, is considered to be the operator of the above well and is responsible under the terms and conditions of the lease for the operations conducted on the leased lands.

Bond coverage for this well is provided by UT0912 (Principal - Estate of Thelma Ford Simmons) via surety consent as provided for in 43 CFR 3104.2.

This office will hold the aforementioned operator and bond liable until the provisions of 43 CFR 3106.7-2 continuing responsibility are met.

This permit will be valid for a period of one year from the date of approval. A one-time, 90 day extension of this period may be granted. After permit termination, a new application must be filed for approval.

All lease operations will be conducted in full compliance with applicable regulations (43 CFR 3100), Onshore Oil and Gas Orders, lease terms, notices to lessees, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions and the approved plan will be made available to field representatives to insure compliance.

#### **A. DRILLING PROGRAM**

1. There will be no deviation from the proposed drilling and/or workover program without prior approval from the Assistant District Manager. "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 3162.3-2. Safe drilling and operating practices must be observed.
2. No trivalent or hexavalent chromate additives shall be used in the mud system. Due to potential for contamination of usable quality water aquifers, chromates are banned from Federal leases.

3. As stated within the sundry notice dated 9/25/92 a 3000 lb. blowout preventer stack and BOP system shall be installed, tested and in working condition prior to drilling through the 9-5/8" casing shoe according to Onshore Order No. 2 specifications.

4. BOP systems shall be consistent with API RP 53 and Onshore Oil and Gas Order No. 2. Pressure tests of the 9-5/8" casing and all BOP equipment potentially subject to pressure will be conducted before drilling the 9-5/8" casing shoe. Blowout preventer controls will be installed prior to drilling the 9-5/8" casing plug and will remain in use until the well is completed or abandoned. Ram preventers shall be inspected and operated each trip (no more than once a day is necessary), and annular preventers shall be inspected and operated weekly to ensure good mechanical working order. These inspections shall be recorded on the daily drilling report.

5. In order to meet the obligations of the West Blanding Unit the operator shall at a minimum deepen the existing hole to below 6400 feet and core the cycle 13 shale zone. In conjunction with this requirement the operator shall conduct one of the following options to complete the requirements of the unit obligation:

A) attempt a vertical completion in the cycle 13 shale zone;

B) drill a horizontal leg in a northeasterly direction a minimum of 100 feet in the cycle 13 Shale zone;

C) plug back and attempt a vertical completion in the lower Desert Creek Formation; or

D) drill a horizontal leg in a northeasterly direction a minimum of 100 feet in the Lower Ismay Formation.

6. To clarify the sundry notice submitted 9/25/92 and the proposed action within the APD, if the 7" production casing is run, it shall be cemented in place with 600 sacks of class "G" cement and 170 sacks of 65/35 pozmix cement.

7. To determine cement bond quality and for plugging requirements, a cement bond log (CBL) or cement evaluation tool (CET) shall be run after the 7" casing is run and cemented in place.

8. As proposed, the horizontal portion of the well is to be drilled in a direction of N 36.5° E (kick-off point to be determined following coring operations). The bearing of the hole shall not deviate more than  $\pm 10^\circ$  without prior approval from the authorized officer.

9. When the completion program is determined, a sundry notice describing the completion shall be submitted to this office for approval.

10. Should the well become productive, the BLM, District Office must be notified no later than five business days after production begins. Notification shall be by letter or sundry notice, or orally to be followed by a letter or sundry notice.

11. Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever comes first, without prior written approval of the Authorized Officer.

B. SURFACE USE PLAN

1. If construction is delayed until February 1, 1993, the wildlife biologist will be notified and a survey would be done to ensure raptor safety during the critical nesting season. All raptor nests will be avoided by one-half mile from construction activities.

## **C. REQUIRED NOTIFICATIONS AND APPROVALS**

Required verbal notifications are summarized in Table 1, attached.

**Spud**- Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District office within twenty-four (24) hours after spudding (regardless of whether spud was made with a dry hole digger or big rig). If the spudding occurs on a weekend or holiday, the written report will be submitted on the following work day.

**Daily Drilling Reports**- Daily drilling reports shall detail the progress and status of the well and shall be submitted to the District office on a weekly basis.

**Undesirable Events/Immediate Reports**- Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be immediately reported to the Resource Area in accordance with requirements of NTL-3A.

**Cultural Resources**- If cultural resources are discovered during construction, work that might disturb the resources is to stop, and the Area Manager is to be notified.

**Drilling Suspensions**- Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the Authorized Officer. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

**First Production**- Should the well be successfully completed for production, the Assistant District Manager, Minerals Division will be notified when the well is placed in producing status. Such notification may be made by phone, but must be followed by a sundry notice or letter not later than five (5) business days following the date on which the well is placed on production.

A first production conference will be scheduled within fifteen (15) days after receipt of the first production report. The Resource Area Office will coordinate the field conference.

**Well Completion Report**- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and /or gas) will be submitted when requested by the Assistant District Manager.

**Plugging and Abandonment**- If the well is completed as a dry hole, plugging instructions must be obtained from the BLM, Moab District Office prior to initiating plugging operations (including plug back operations). Table 1 of this document provides the after-hours phone numbers of personnel who are authorized to give plugging instructions.

The top of the marker will be closed or capped.

The following minimum information will be permanently placed on the marker with a plate, cap, or beaded-on with a welding torch:

"Fed" or "Ind", as applicable. "Well number, location by 1/4 1/4 section, township and range". "Lease number".

A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the Assistant District Manager, Minerals Division within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Manager or his representative, or the appropriate surface managing agency.

**Venting/Flaring of Gas**- NTL-4A allows venting/flaring of gas during the initial well evaluation period not to exceed 30 days or 50 Mmcf. Venting/flaring beyond the initial test period threshold must be approved by the District Office.

**Off-Lease Measurement, Storage, Commingling**- Prior approval must be obtained from the assistant District Manager for off-lease measurement, off-lease storage or commingling (either down-hole or at the surface).

**TABLE 1**

**NOTIFICATIONS**

Notify Bob Turri or Jeff Brown of the San Juan Resource Area, at (801) 587-2141 for the following:

2 days prior to commencement of dirt work, construction or reclamations;

1 day prior to spudding;

3 hours prior to testing BOP's;

50 feet prior to coring operations;

2 hours prior to DST operations;

12 hours prior to reaching kickoff point depth;

24 hours prior to closing the reserve pit.

If the person(s) at the above number cannot be reached, notify the Moab District Office at (801) 259-6111. If unsuccessful, then notify one of the following people listed below.

Well abandonment operations require 24 hour advance notice and prior approval. In the case of newly drilled dry holes, verbal approval can be obtained by calling the Moab District Office, Branch of Fluid Minerals at (801) 259-6111. If approval is needed after work hours you may contact the following:

Dale Manchester,  
Petroleum Engineer

Home Phone: (801) 259-6239

Eric Jones,  
Petroleum Engineer

Home Phone: (801) 259-2214

If unable to reach the above individuals including weekends, holidays, or after hour please call:

Lynn Jackson,  
Chief, Branch of Fluid Minerals

Home Phone: (801) 259-7990

**24 HOURS ADVANCE NOTICE IS REQUIRED FOR ALL ABANDONMENTS**



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter  
Governor

Dee C. Hansen  
Executive Director

Dianne R. Nielson, Ph.D.  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340

October 14, 1992

Estate of Thelma Ford Simmons  
3005 Northridge, Suite L  
Farmington, New Mexico 87401

Gentlemen:

Re: 1-35-36-21 Zeke's Hole Well, 2175 feet from the south line, 382 feet from the west line, NW 1/4 SW 1/4, Section 35, Township 36 South, Range 21 East, San Juan County, Utah

Pursuant to Utah Code Ann. § 40-6-18, (1953, as amended), Utah Admin. R. 649-2-3, Application of Rules to Unit Agreements and R. 649-3-4, Permitting of Wells to be Drilled, Deepened or Plugged-Back, approval to drill the referenced well is hereby granted.

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

1. Submittal to the division of evidence providing assurance of an adequate and approved supply of water as required by Utah Code Ann. § 73-3, Appropriations, prior to commencing drilling operations.
2. Compliance with the requirements of Utah Admin. R. 649-1 et seq., Oil and Gas Conservation General Rules.
3. Notification within 24 hours after drilling operations commence.
4. Submittal of Entity Action Form, Form 6, within five working days following commencement of drilling operations and whenever a change in operations or interests necessitates an entity status change.
5. Submittal of the Report of Water Encountered During Drilling, Form 7.

Page 2  
Estate of Thelma Ford Simmons  
1-35-36-21 Zeke's Hole Well  
October 14, 1992

6. Prompt notification prior to commencing operations, if necessary, to plug and abandon the well. Notify Frank R. Matthews, Petroleum Engineer, (Office) (801)538-5340, (Home) (801)476-8613, or R.J. Firth, Associate Director, (Home) (801)571-6068.
7. Compliance with the requirements of Utah Admin. R. 649-3-20, Gas Flaring or Venting, if the well is completed for production.

Trash and sanitary waste should be properly contained and transported to approved disposal locations, not retained in or disposed of in pits on location or downhole. Prior to the commencement of drilling operations, the operator should consult the local/county sanitarian and/or the Department of Environmental Quality, Division of Drinking Water/Sanitation, regarding appropriate disposal of sanitary waste.

This approval shall expire one year after date of issuance unless substantial and continuous operation is underway or a request for an extension is made prior to the approval expiration date. The API number assigned to this well is 43-037-31465.

Sincerely,



R.J. Firth  
Associate Director, Oil and Gas

ldc  
Enclosures  
cc: Bureau of Land Management  
J.L. Thompson  
WO11

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.  
U-57656

6. If Indian, Allottee or Tribe Name  
-----

7. If Unit or CA, Agreement Designation  
West Blanding

8. Well Name and No.  
1-35-36-21 Zeke's Hole

9. API Well No.  
43-037-31465

10. Field and Pool, or Exploratory Area  
Wildcat

11. County or Parish, State  
San Juan  
Utah

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator A. Blanchard Geren, Jr. and John L. Heard,  
Independent Co-Executors and not individually of the Estate

3. Address and Telephone No. of Thelma Ford Simmons (505) 325-5789  
3005 Northridge, Suite L, Farmington, NM 87401

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Township 36 South, Range 21 East, SLM  
Section 35: 382 fwl 2175 fsl

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other Request for extension
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

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

13. 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.)\*

It is the request of the Operator herein for a one-time 90 day extension of this permit to conduct operations in the re-entry of the well. The request is pursuant to the provisions set forth in conditions of approval dated October 5, 1992. The 90 day extension will extend the permit to the date of January 5, 1994.

**CONFIDENTIAL**

**RECEIVED**

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

OCT 1 1993

DATE: 10-5-93

BY: *[Signature]* DIVISION OF  
OIL, GAS & MINING

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

Signed

Title

contract landman

Date

September 24, 1993

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

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

\*See instruction on Reverse Side

Moab District  
P. O. Box 970  
Moab, Utah 84532

3162  
(U-57656)  
(UT-065)

MAR 31 1994

Estate of Thelma Ford Simmons  
3005 Northridge, Suite L  
Farmington, New Mexico 87401

Re: Rescinding Application for Permit to Drill  
Well No. Zeke's Hole 1-35-36-21 *43-037-31465*  
NWSW Sec. 35, T. 36 S., R. 21 E. *(Re-entry)*  
San Juan County, Utah  
Lease U-57656

Gentlemen:

The Application for Permit to Drill the referenced well was approved on October 5, 1992.

Applications for permit to drill are effective for a period of one year. In view of the foregoing, this office is rescinding the approval of the referenced application.

Should you intend to drill at this location at a future date, a new application for permit to drill must be submitted.

If you have any questions, please contact Verlene Butts, Branch of Fluid Minerals at (801) 259-6111.

Sincerely,

**/S/ WILLIAM C. STRINGER**

Associate District Manager

Enclosure

Application for Permit to Drill

cc: UT-069, San Juan Resource Area (wo/Enclosure)  
State of Utah  
Division of Oil, Gas, and Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203 (wo/Enclosure) ✓

VButts:vb:3/29/94

