

14421 Weld County Rd.10 • Ft. Lupton, Colorado 80621 • (303) 857-9999 • FAX (303) 857-0577 • E-MAIL Permitco 1@aol.com

November 20, 1998

Utah Division of Oil, Gas & Mining  
1594 West North Temple, Suite 1210  
Box 145801  
Salt Lake City, UT 84114-5801

Attn: John Baza

Re: **Rosewood Resources, Inc.**  
**Federal O #33-4**  
**2143' FSL and 1975' FEL**  
**NW SE Sec. 4, T12S - R21E**  
**Uintah County, Utah**

Dear John,

Enclosed please find three copies of the Application for Permit to Drill on the above mentioned well along with one copy of the drilling program and surface use plan which has been filed with the BLM in Vernal, Utah.

Please forward the approved copies Lucy Nemecek of Rosewood Resources, Inc., P.O. Box 1668, Vernal, UT 84078. Thanks for your assistance in this matter. If you have any questions, please don't hesitate to contact me.

Sincerely,

PERMITCO INC.

Lisa L. Smith  
Consultant for:  
Rosewood Resources, Inc.

Enc.

cc: Rosewood Resources, Inc. - Vernal, UT  
Rosewood Resources, Inc. - Dallas, TX



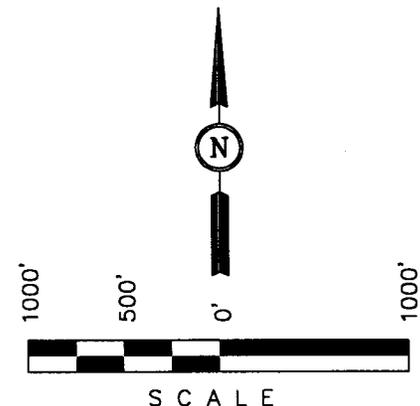
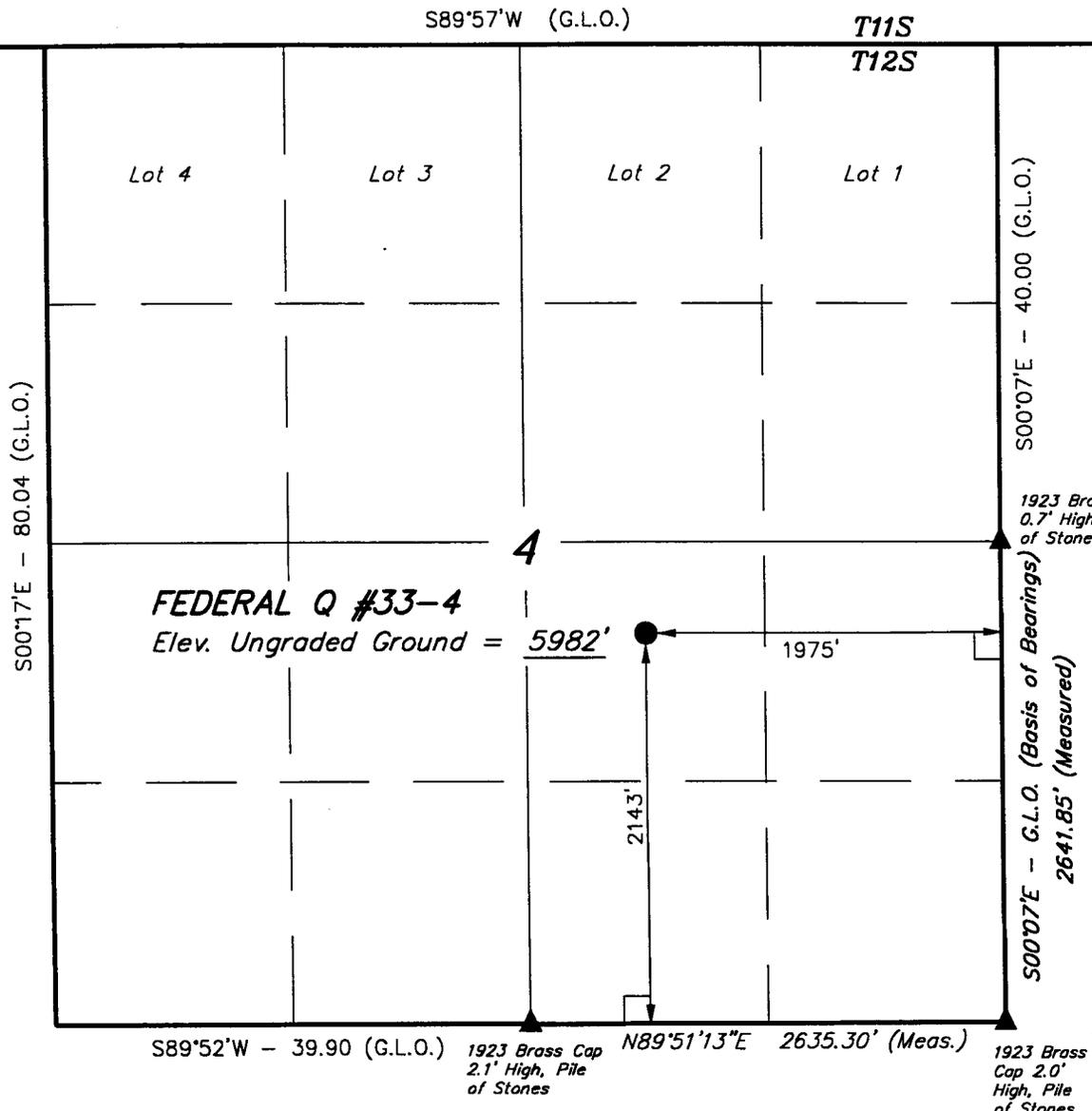
# T12S, R21E, S.L.B.&M.

## ROSEWOOD RESOURCES, INC.

Well location, FEDERAL Q #33-4, located as shown in the NW 1/4 SE 1/4 of Section 4, T12S, R21E, S.L.B.&M. Uintah County, Utah.

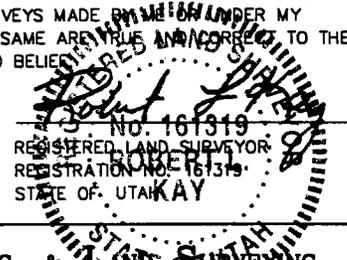
### BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE SOUTHEAST CORNER OF SECTION 22, T12S, R21E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN. SE QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6490 FEET.



### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



<b>UINTAH ENGINEERING &amp; LAND SURVEYING</b>		
85 SOUTH 200 EAST - VERNAL, UTAH 84078		
(435) 789-1017		
SCALE 1" = 1000'	DATE SURVEYED: 10-3-98	DATE DRAWN: 10-12-98
PARTY D.K. D.R. C.B.T.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE ROSEWOOD RESOURCES, INC.	

### LEGEND:

- └─┘ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

Latitude = 39°48'05"  
Longitude = 109°34'10"

**ONSHORE OIL & GAS ORDER NO. 1**

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

**FEDERAL Q #33-4  
2143' FSL and 1975' FEL  
NW SE Sec. 4, T12S - R21E  
Uintah County, Utah**

**Prepared For:**

**ROSEWOOD RESOURCES, INC.**

**By:**

**PERMITCO INC.  
14421 Weld County Road 10  
Ft. Lupton, Colorado 80621  
303/857-9999**

**CONFIDENTIAL - TIGHT HOLE**

**Copies Sent To:**

- 3 - Bureau of Land Management - Vernal, UT**
- 1 - Utah Division of Oil, Gas & Mining - Salt Lake City, UT**
- 3 - Rosewood Resources, Inc. - Vernal, UT**
- 3 - Rosewood Resources, Inc. - Dallas, TX**



October 1, 1998

Bureau of Land Management  
170 South 500 East  
Vernal, UT 84078

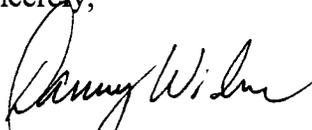
Attention: Minerals

This letter is to inform you that Permitco Inc. is authorized to act as Agent and to sign documents on behalf of Rosewood Resources, Inc. when necessary for filing county, state and federal permits including Onshore Order No. 1, Right of Way applications, etc., for the Federal O #33-4 well, located NW SE Sec. 4, T12S - R21E.

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

Rosewood Resources, Inc. agrees to accept full responsibility for operations conducted in order to drill, complete and produce the above mentioned well. If you have any questions, please feel free to contact me at (435) 789-0414.

Sincerely,



Danny Widner  
Drilling Manager

DW/ln

## TABLE OF CONTENTS

Federal Q #33-4

### DRILLING PROGRAM

### Page No.

1.	Formation Tops	1
2.	Anticipated Depths of Oil, Gas & Water	1
3.	Blow Out Preventor Requirements/Equipment	1-3
4.	Proposed Casing and Cementing Program	3-6
5.	Mud Program	6-7
6.	Evaluation Program - Testing, Logging and Coring	7-9
7.	Abnormal Pressures & H <sub>2</sub> S Gas	9
8.	Anticipated Starting Dates & Notification Requirements	9-11

### SURFACE USE PLAN

1.	Existing Roads	1-2
2.	Access Roads to be Constructed or Reconstructed	2-3
3.	Location of Wells Within 1-Mile	4
4.	Proposed Production Facilities	4-6
5.	Water Supply	6
6.	Construction Materials	6
7.	Waste Disposal	6-7
8.	Ancillary Facilities	7
9.	Wellsite Layout	8-9
10.	Reclamation	9-10
11.	Surface/Mineral Ownership	10
12.	Other Information	11-13
13.	Certification	13



ONSHORE ORDER NO. 1  
Rosewood Resources, Inc.  
Federal Q #33-4  
2143' FSL and 1975' FEL  
NW SE Sec. 4, T12S - R21E  
Uintah County, Utah

CONFIDENTIAL - TIGHT HOLE

Lease No. UTU-72017

DRILLING PROGRAM

Page 1

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

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

1. Formation Tops

<u>Formation</u>	<u>Depth</u>	<u>Subsea</u>
Green River	Surface	+5,982'
Wasatch	3,481'	+2,501'
Mesa Verde	6,681'	- 699'
T.D.	7,400'	-1,418'

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

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Oil/Gas	Wasatch	3,481'-6,681'
Oil/Gas	Mesa Verde	6,681'-7,400'

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

3. Blow Out Preventor Requirements/Equipment

Rosewood's minimum specifications for pressure control equipment are as follows:

Ram Type: 10" Hydraulic double with annular, 3000 psi w.p.



Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10 percent in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.

Annular type preventers (if used) shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.

As a minimum, the above test shall be performed:

- a. when initially installed;
- b. whenever any seal subject to test pressure is broken
- c. following related repairs; and
- d. at 30-day intervals

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.

Annular preventers shall be functionally operated at least weekly.

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.

All of the above described tests and/or drills shall be recorded in the drilling log.



BOP systems shall be consistent with API RP53. Pressure tests will be conducted before drilling out from under casing strings which have been set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

The District Office should be notified, with sufficient lead time, in order to have the BLM representative on location during pressure testing.

- a. The size and rating of the BOP stack is shown on the attached diagram. Although a rig has not been chosen to drill this well, most of the equipment for this depth of hole in the area use a 10", 3000 psi working pressure blowout preventor.
- b. A choke line and a kill line are to be properly installed. The kill line is not to be used as a fill-up line.
- c. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- d. Drill string safety valve(s), to fit all tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.

4. Proposed Casing and Cementing Program

- a. The proposed casing and cementing program shall be conducted as approved to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations.



Determination of casing setting depth shall be based on all relevant factors, including presence/absence of hydrocarbons; fracture gradients; usable water zones; formation pressures; lost circulation zones; other minerals; or other unusual characteristics. All indications of usable water shall be reported.

- b. Casing design shall assume formation pressure gradients of 0.44 to 0.50 psi per foot for exploratory wells (lacking better data).
- c. Casing design shall assume fracture gradients from 0.70 to 1.00 psi per foot for exploratory wells (lacking better data)
- d. Casing collars shall have a minimum clearance of 0.422 inches of all sides in the hole/casing annulus, with recognition that variances can be granted for justified exceptions.
- e. 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.
- f. All casing except the conductor casing, shall be new or reconditioned and tested used casing that meets or exceeds API standards for new casing.
- g. The surface casing shall be cemented back to surface either during the primary cement job or by remedial cementing.
- h. 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.
- i. Three centralizers will be run on the bottom three joints of surface casing with a minimum of one centralizer per joint starting with the shoe joint.
- j. 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.



- k. All casing strings below the conductor shall be pressure tested to 0.22 psi per foot 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.
- l. On all exploratory wells, and on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- m. The proposed casing program will be as follows:

<u>Purpose</u>	<u>Depth</u>	<u>Hole Size</u>	<u>O.D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>	<u>New or Used</u>
Surface	0-500'	12-1/4"	9-5/8"	36#	J/K-55	ST&C	New
Produc.	0-7,400'	7-7/8"	4-1/2"	11.6#	N-80	LT&C	New

- n. Casing design subject to revision based on geologic conditions encountered.
- o. The cement program will be as follows:

Surface  
 0-500'

Type and Amount  
 300 sx Class "G" with 2% CaCl & .25#/sk Cello-Flake, or sufficient to circulate to surface.

Production  
 0-7,400'

Type and Amount  
 1st Stage: 900 sx Class "G" + .3% CFR-3 + .25#/sk Cello-Flake + .5% Halad 9 + 2% Gel + 2% Microbond. The estimated top of the Cement is 2500'.

2nd Stage: 400 sx +/- Halco-Lite + 1% Econolite + .25#/sk Cello-Flake + 2% Microbond + 3% Salt. The estimated top of cement is at the surface.



Anticipated cement tops will be reported as to depth; not the expected number of sacks of cement to be used. The District Office should be notified, with sufficient lead time, in order to have a BLM representative on location while running all casing strings and cementing.

- q. After cementing but before commencing any test, the casing string shall stand cemented until the cement has reached a compressive strength of at least 500 psi at the shoe. WOC time shall be recorded in the driller's log.
  - r. The following reports shall be filed with the District Manager within 30 days after the work is completed.
    - 1. Progress reports, Form 3160-5 (formerly 9-331) "Sundry Notices and Reports on Wells", must include complete information concerning:
      - a. Setting of each string of casing, showing the size, grade, weight of casing set, hole size, setting depth, amounts and type of cement used, whether cement circulated or the top of the cement behind the casing, depth of cementing tools used, casing test method and results, and the date work was done. Show the spud date on the first reports submitted.
      - b. Temperature or bond logs must be submitted for each well where the casing cement was not circulated to the surface.
  - s. Auxiliary equipment to be used is as follows:
    - 1. Kelly cock
    - 2. No bit float is deemed necessary.
    - 3. A sub with a full opening valve.
5. Mud Program
- a. The proposed circulating mediums to be employed in drilling are as follows:



<u>Interval</u>	<u>Mud Type</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>F/L</u>	<u>PH</u>
0-500'	Air/Air Mist	---	---	---	---
500-2,500'	Clear Water	8.4	---	---	---
2,500'-TD	Gel Mud	8.4-9.8	35-45	8-10	9

There will be sufficient mud on location to control a blowout should one occur.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, static filtration loss, and Ph.

- b. Mud monitoring equipment to be used is as follows:
    - 1. Periodic checks will be made each tour of the mud system. The mud level will be checked visually.
  - c. No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.
  - d. No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.
  - e. The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.
6. Evaluation Program - Testing, Logging and Coring

The anticipated type and amount of testing, logging and coring are as follows:

- a. No drill stem tests are anticipated, however, if DST's are run, the following requirements will be adhered to:



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, DST's 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. This would involve provided 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.

- b. The logging program will consist of the following logs: An array Induction log and DCL, CNL, ML will be run from T.D. to 500'.
- c. Selected sidewall cores will be run in the Mesa Verde and Wasatch formations.
- d. 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 not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core 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 (cutting, fluids, and/or gases will be submitted when requested by the authorized officer (AO).
- e. The anticipated completion program will be to test prospective zones in Mesa Verde and Wasatch Formations by perforating and fracture stimulation.



- f. Daily drilling and completion progress reports shall be submitted to the BLM in Vernal on a weekly basis.

7. Abnormal Pressures and H<sub>2</sub>S Gas

- a. The expected bottom hole pressure is 3000 psi.
- b. No hydrogen sulfide gas is anticipated and no abnormal pressures or temperatures are anticipated.

8. Anticipated Starting Dates and Notification Requirements

- a. Drilling will commence upon approval.
- b. It is anticipated that the drilling of this well will take approximately 7-10 days.
- c. The BLM in Vernal, Utah shall be notified of anticipated date of location construction commencement and of anticipated spud date.
- d. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.
- e. The spud date will be reported orally to the AO within 48 hours after spudding. If the spudding occurs on a weekend or holiday, the report will be submitted on the following regular work day. The oral report will be followed up with a Sundry Notice.
- f. In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 3160-6 "Monthly Report of Operations", starting with the month in



which operations commence and continue each month until the well is physically plugged and abandoned. This report will be filed with the Vernal BLM District Office, 170 South 500 East, Vernal, UT 84078.

- g. **Immediate Report:** Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.
- h. 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 AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.
- i. Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communications, not later than 5 days following the date on which the well is placed on production.
- j. Pursuant to Onshore Order No. 7, with the approval of the District Engineer, produced water may be temporarily disposed of into unlined pits for a period of up to 90 days. During the period so authorized, an application for approval of the permanent disposal method, along with the required water analysis and other information, must be submitted to the District Engineer.
- k. Pursuant to NTL-4A, lessees or operators are authorized to vent/flare gas during initial well evaluation tests, not exceeding a period of 30 days or the production of 50 MMCF of gas, whichever occurs first. An application must be filed with the District Engineer and approval received, for any venting/flaring of gas beyond the initial 30 day or authorized test period.
- l. A schematic facilities diagram as required by 43 CFR 3162.7-5 (b.9.d.), shall be submitted to the appropriate District Office within sixty (60) days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-5 (b.4.).



**ONSHORE ORDER No. 1**  
Rosewood Resources, Inc.  
Federal Q #33-4  
2143' FSL and 1975' FEL  
NW SE Sec. 4, T12S - R21E  
Uintah County, Utah

**CONFIDENTIAL - TIGHT HOLE**

Lease No. UTU-72017

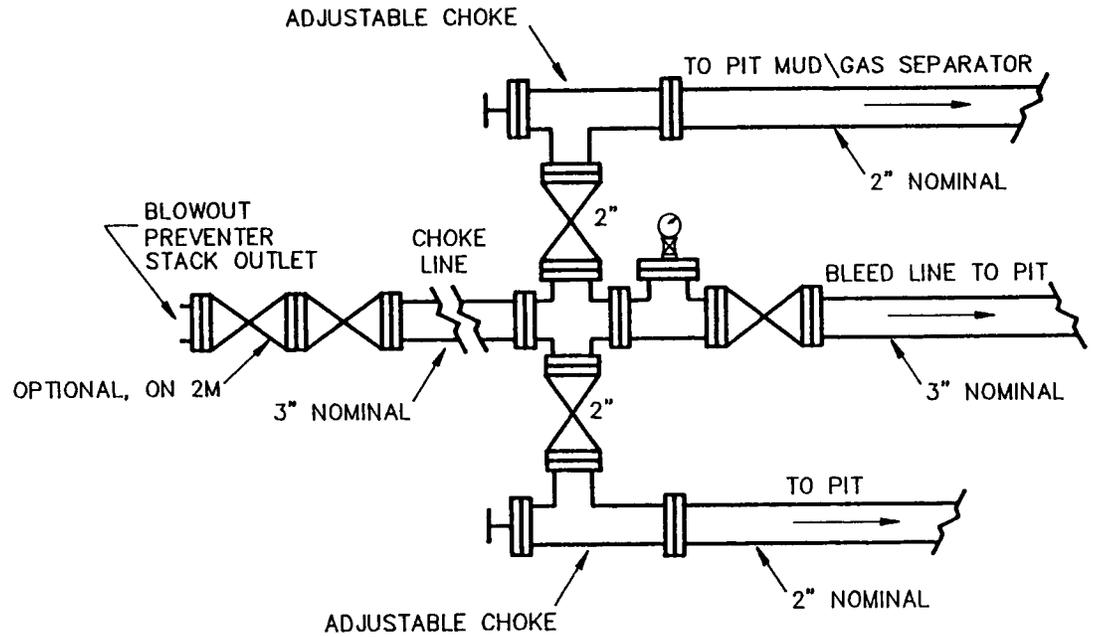
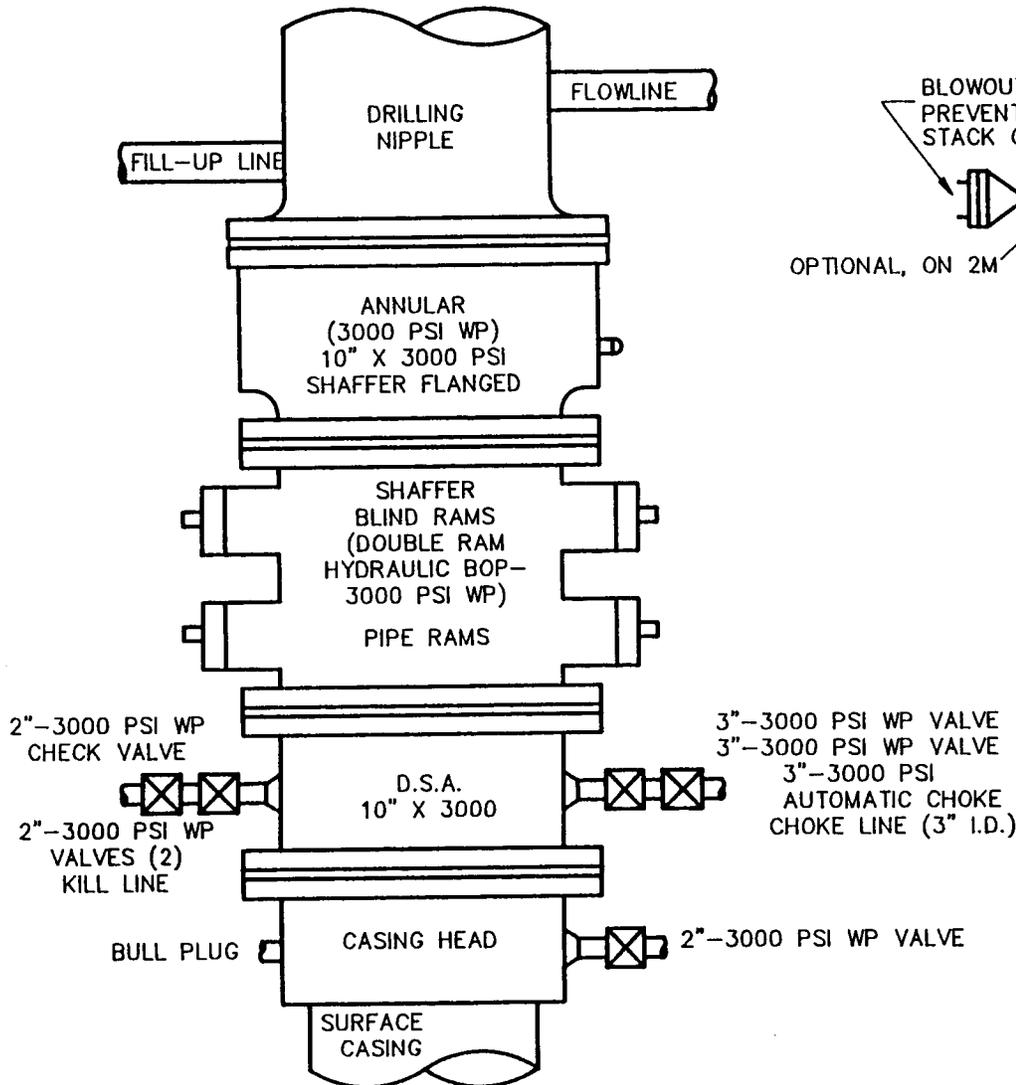
**DRILLING PROGRAM**

Page 11

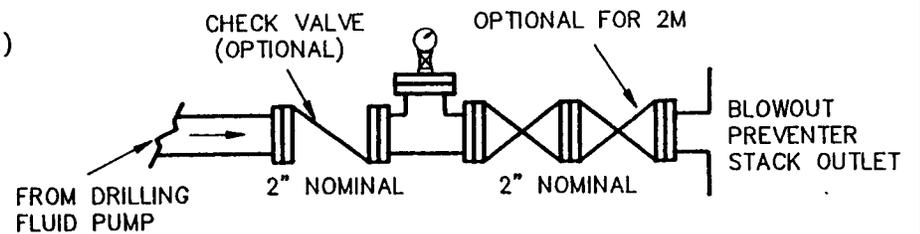
- m. A first production conference will be scheduled within 15 days after receipt of the first production notice.
- n. No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the SO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within 30 days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. 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 AO or his representative, or the appropriate Surface Managing Agency.
- o. Pursuant to Onshore Oil and Gas Order No. 1, lessees and operators have the responsibility to see that their exploration, development, production, and construction operations are conducted in a manner which conforms with applicable Federal laws and regulations and with State and local laws and regulations to the extent that such State and local laws are applicable to operations on Federal or Indian lands.



**BOP SCHEMATIC  
3000 PSI WORKING PRESSURE**



**TYPICAL CHOKE MANIFOLD ASSEMBLY  
FOR 3M RATED WORKING  
PRESSURE SERVICE - SURFACE INSTALLATION**



**TYPICAL KILL LINE ASSEMBLY FOR 3M RATED  
WORKING PRESSURE SERVICE - SURFACE INSTALLATION**

ONSHORE OIL & GAS ORDER NO. 1

NOTIFICATION REQUIREMENTS

- Location Construction - forty-eight (48) hours prior to construction of location and access roads.
- Location Completion - prior to moving on the drilling rig.
- Spud Notice - at least twenty-four (24) hours prior to spudding the well.
- Casing String and Cementing - twenty-four (24) hours prior to running casing and cementing all casing strings.
- BOP and Related Equipment Tests - twenty-four (24) hours prior to initiating pressure tests.
- First Production Notice - within five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

The onsite inspection for the subject wellsite was conducted on Thursday, November 12, 1998 at approximately 11:15 a.m. Weather conditions were cool and cloudy. In attendance at the onsite inspection were the following individuals:

Lisa Smith  
Robert Kay  
Byron Tolman  
Steve Strong  
Danny Widner

Permitco Inc.  
Uintah Engineering and Land Surveying  
Bureau of Land Management  
Bureau of Land Management  
Rosewood Resources, Inc.

1. Existing Roads

- a. The proposed well site is located approximately 23.2 miles south of Ouray, Utah.



- b. Directions to the location from Ouray, Utah are as follows:

From Ouray proceed southerly on the Seep Ridge Road for 20.5 miles. Continue southeasterly an additional 2.6 miles. Turn left onto an existing road and proceed east for 0.1 miles. Turn right onto the new access and proceed south for approximately 80 feet to the location.

- c. For location of access roads within a 2-Mile radius, see Maps A & B.
- d. No improvement of the existing roads will be necessary.
- e. All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.
- f. Existing roads and newly constructed roads on surface under the jurisdiction of any Surface Managing Agency shall be maintained in accordance with the standards of the SMA.

2. Planned Access Roads

- a. The last 80 feet will be new access will be constructed to BLM Class III standards. Water turnouts will be installed as needed.
- b. The maximum grade of the upgrade construction will be approximately 3%.
- c. No turnouts are planned.
- d. No low water crossings will be necessary. There are no major cuts and fills. No culverts and/or bridges will be required.
- e. The last 80 feet of access road was centerline flagged at the time of staking.
- f. The use of surfacing material is not anticipated, however it may be necessary depending on weather conditions.



- g. No cattleguards will be necessary at this time.
- h. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.
- i. Access roads and surface disturbing activities will conform to standards outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development, (1989).
- j. The road will be constructed/upgraded to meet the standards of the anticipated traffic flow and all weather road requirements. Construction/upgrading shall include ditching, draining, graveling, crowing and capping the roadbed as necessary to provide a well constructed safe road. Prior to upgrading, the road shall be cleared of any snow cover and allowed to dry completely. Traveling off the 30 foot right-of-way will not be allowed. Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing nor shall the drainages be blocked by the roadbed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around them avoided.
- k. If the well is productive, additional water drainage will be installed along the new portion of access road to keep the water off the road.
- l. No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.
- m. A road right of way will not be required since all access is located within the lease boundary.



3. Location of Existing Wells Within a 1-Mile Radius of the Proposed Location.

- a. Water wells - none
- b. Injection wells - none
- c. Producing wells - none
- d. Drilling wells - none
- e. Shut-in wells - none
- f. Temporarily abandoned wells - none
- g. Disposal wells - none
- h. Abandoned wells - none
- i. Dry Holes - none

4. Location of Tank Batteries and Production Facilities.

- a. All permanent structures (onsite for six months or longer) constructed or installed (including oil well pump jacks) will be painted Carlsbad Canyon. All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded.
- b. If storage facilities/tank batteries are constructed on this lease, the facility/battery or the wellpad shall be surrounded by a containment dike of sufficient capacity to contain at a minimum, the entire contents of the largest tank within the facility/battery, unless more stringent protective requirements are deemed necessary by the authorized officer.
- c. A typical production layout is attached. If at the time of production it is determined that an alternate layout is necessary, a Sundry Notice will be submitted showing placement of all production facilities prior to construction.



- d. All loading lines will be placed inside the berm surrounding the tank battery.
- e. Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried or anchored down from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.
- f. The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three months on new meter installations and at least quarterly thereafter. The AO 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 Vernal District Office. All meter measurement facilities will conform with Onshore Oil and Gas Order No. 4 for liquid hydrocarbons and Onshore Oil and Gas Order No. 5 for natural gas measurement.
- g. If at any time the facilities located on public land and authorized by the terms of the lease are no longer included in the lease (due to a contraction in the unit or other lease or unit boundary change), BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental or other financial obligation as determined by the authorized officer.
- h. Any necessary pits will be properly fenced to prevent any wildlife entry.
- i. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.
- j. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.
- k. All access roads will be maintained as necessary to prevent erosion and accommodate year-round traffic.



- l. The road will be maintained in a safe useable condition.
- m. The surface pipeline will be 4" welded steel and will be 140 feet in length. The pipeline will follow the route shown on Map "C". A pipeline right of way will not be required since the pipeline is located on lease.

5. Location and Type of Water Supply

- a. The proposed water source is the USGS Water Well GT125 which is located in the NW NW Sec. 1, T12S - R22E. Permit No. #49-1620. An alternate source of water will be Willow Creek. All permits for the alternate source will be filed by Dalbo, Inc.
- b. Water will be hauled to location over the access roads shown on Maps A and B.
- c. No water well will be drilled on this lease.

6. Source of Construction Material

- a. Surface and subsoil materials in the immediate area will be utilized.
- b. Any gravel used will be obtained from a commercial source.
- c. The use of materials under BLM jurisdiction will conform with 43 CFR 3610.2.3. Construction material will not be located on lease.
- d. No construction materials will be removed from Federal land.

7. Methods of Handling Waste Disposal

- a. The reserve pit will be constructed so as not to leak, break, or allow discharge.



- b. If it is necessary to blast the pit area during construction, an inspection of the pit will be made by a representative of the BLM with a representative of Rosewood Resources, Inc. and it will be determined if a reserve pit liner is necessary. If fractured rock is encountered, the pit will be first lined with sufficient bedding (either straw or dirt) to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner will be disposed of in the pit. More stringent protective requirements may be deemed necessary by the A.O.
- c. Burning will not be allowed. All trash will be contained in a trash cage and its contents removed at the end of drilling operations and hauled to an approved disposal sight.
- d. After first production, produced waste water will be confined to a unlined pit or storage tank for a period not to exceed ninety (90) days. During the 90-day period, in accordance with Onshore Order No. 7, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the AO's approval. Failure to file an application within the time allowed will be considered an incident of noncompliance.
- e. Drill cuttings are to be contained and buried in the reserve pit.
- f. Any salts and/or chemicals which are an integral part of the drilling system will be disposed of in the same manner as the drilling fluid.
- g. A chemical porta-toilet will be furnished with the drilling rig.
- h. The produced fluids will be produced into a test tank until such time as construction of production facilities is completed. Any spills of oil, gas salt water or other produced fluids will be cleaned up and removed.

8. Ancillary Facilities

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



9. Well Site Layout

- a. The operator or his/her contractor shall contact the BLM Office at 435/789-1362 forty-eight (48) hours prior to construction activities.
- b. The reserve pit will be located on the southwest side of the location.
- c. The flare pit will be located downwind of the prevailing wind direction on the west side, a minimum of 100 feet from the well head and 30 feet from the reserve pit fence.
- d. The stockpiled topsoil (first six inches) will be stored on the north and south ends of the location and on the north end of the reserve pit as shown on the Pit & Pad Layout. Topsoil along the access route will be windrowed on the uphill side.
- e. Access to the wellpad will be from the north as shown on the Pit & Pad Layout.
- f. See Location Layout for orientation of rig, cross section of drill pad and cuts and fills.
- g. The location of mud tanks: reserve pit, trash cage; pipe racks; living facilities and soil stockpiles will be shown on the Location Layout.
- h. All pits will be fenced according to the following minimum standards:
  1. 39 inch net wire shall be used with at least one strand or barbed wire on top of the net wire (barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence).
  2. The net wire shall be no more than 2-inches above the ground. The barbed wire shall be 3-inches above the net wire. Total height of the fence shall be at least 42-inches.



3. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
4. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 feet.
5. All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.
  - i. The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off the location. Pits will be fenced and maintained until cleanup.
  - j. Water drainage onto the location from the uphill side will be re-routed around the pad, after construction, to the most feasible directions.

10. Plans for Restoration of Surface

Producing Location

- a. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash and junk not required for production.
- b. Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with 43 CFR 3162.7-1.
- c. If a plastic nylon reinforced liner is used it shall be torn and perforated before backfilling of the reserve pit.
- d. The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 120 days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed and all cans, barrels, pipe, etc., will be removed.



- e. After the reserve pit is reclaimed, the water diversion structure will be constructed on previously disturbed soil to divert runoff water around the location to the east.
- f. Reclamation of unused disturbed areas on the well pad/access road no longer needed for operations, such as cut slopes, and fill areas will be accomplished by grading, leveling and seeding as recommended by the Authorized Officer.

The seed mixture requested by the BLM for reclamation of the drillsite is as follows:

<u>Species</u>	<u>Lbs. PLS/Acre</u>
Fourwing Saltbush	4
Shadscale	2
Needle and Thread	3
Indian Ricegrass	3

Seeding will be performed immediately after the location has been reclaimed and the pit has been backfilled, regardless of the time of year. Seed will be broadcast and walked in with a dozer.

- g. The topsoil stockpile will be seeded as soon as the location has been constructed with the seed mix recommended above. The seed will be walked in with a cat.

Dry Hole

- h. At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and BLM will attach the appropriate surface rehabilitation conditions of approval.

11. Surface Ownership

Access Roads - All roads are County maintained or managed by the Bureau of Land Management.

Wellpad - The well pad is located on lands managed by the BLM.



12. Other Information

- a. A Class III archeological survey has been conducted by Grand River Institute. No significant cultural resources were found and clearance has been recommended. A copy of this report will be submitted to the appropriate agencies by Grand River Institute.
  
- b. The operator is responsible for informing all persons in the areas who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:
  - whether the materials appear eligible for the National Register of Historic Places;
  
  - the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and
  
  - a time frame for the AO to complete and expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that required mitigation has been completed, the operator will then be allowed to resume construction.
  
- c. The operator will control noxious weeds along rights-of-way for roads, pipelines, well sites, or other applicable facilities. A list of noxious weeds may be obtained from the BLM, or the appropriate County Extension Office. On BLM administered land it is required that a Pesticide Use Proposal shall be submitted, and given approval, prior to the application of herbicides or other pesticides or possible hazardous chemicals.



- d. Drilling rigs and/or equipment used during drilling operations on this wellsite will not be stacked or stored on Federal Lands after the conclusion of drilling operations or at any other time without BLM authorization. However, if BLM authorization is obtained, it is only a temporary measure.
- e. 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 and Gas Orders, the approved plan of operations, and any applicable Notice to Lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.
- f. A complete copy of the approved APD shall be on location during construction of the location and drilling activities.
- g. There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. 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.
- h. "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.
- i. This permit will be valid for a period of one year from the date of approval. An extension period may be granted, if requested, prior to the expiration of the original approval period. After permit termination, a new application will be filed for approval for any future operations.
- j. The operator or his contractor shall contact the BLM Offices at 435/789-1362 48 hours prior to construction activities.
- k. The BLM Office shall be notified upon site completion prior to moving on the drilling rig.



- I. In the event after-hours approvals are necessary, please contact one of the following individuals:

Ed Forsman  
Wayne Bankert  
BLM Fax Machine

Petroleum Engineer 435/789-7077  
Petroleum Engineer 435/789-4170  
435/789-3634

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

Permit Matters

PERMITCO INC.  
Lisa L. Smith  
14421 Weld County Rd. 10  
Ft. Lupton, Co 80621  
303/857-9999

Drilling & Completion Matters

ROSEWOOD RESOURCES, INC.  
P.O. Box 1668  
Vernal, UT 84078  
435/789-0414 (O)  
435/828-6100 (M) - Danny Widner  
435/828-6438 (M) - Salty Miller  
435/789-0823 (H)

Certification

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

November 20, 1998  
Date:

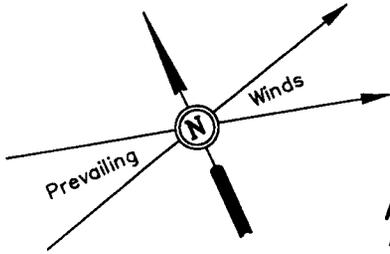
  
\_\_\_\_\_  
Lisa L. Smith, PERMITCO INC.  
Authorized Agent for:  
ROSEWOOD RESOURCES, INC.



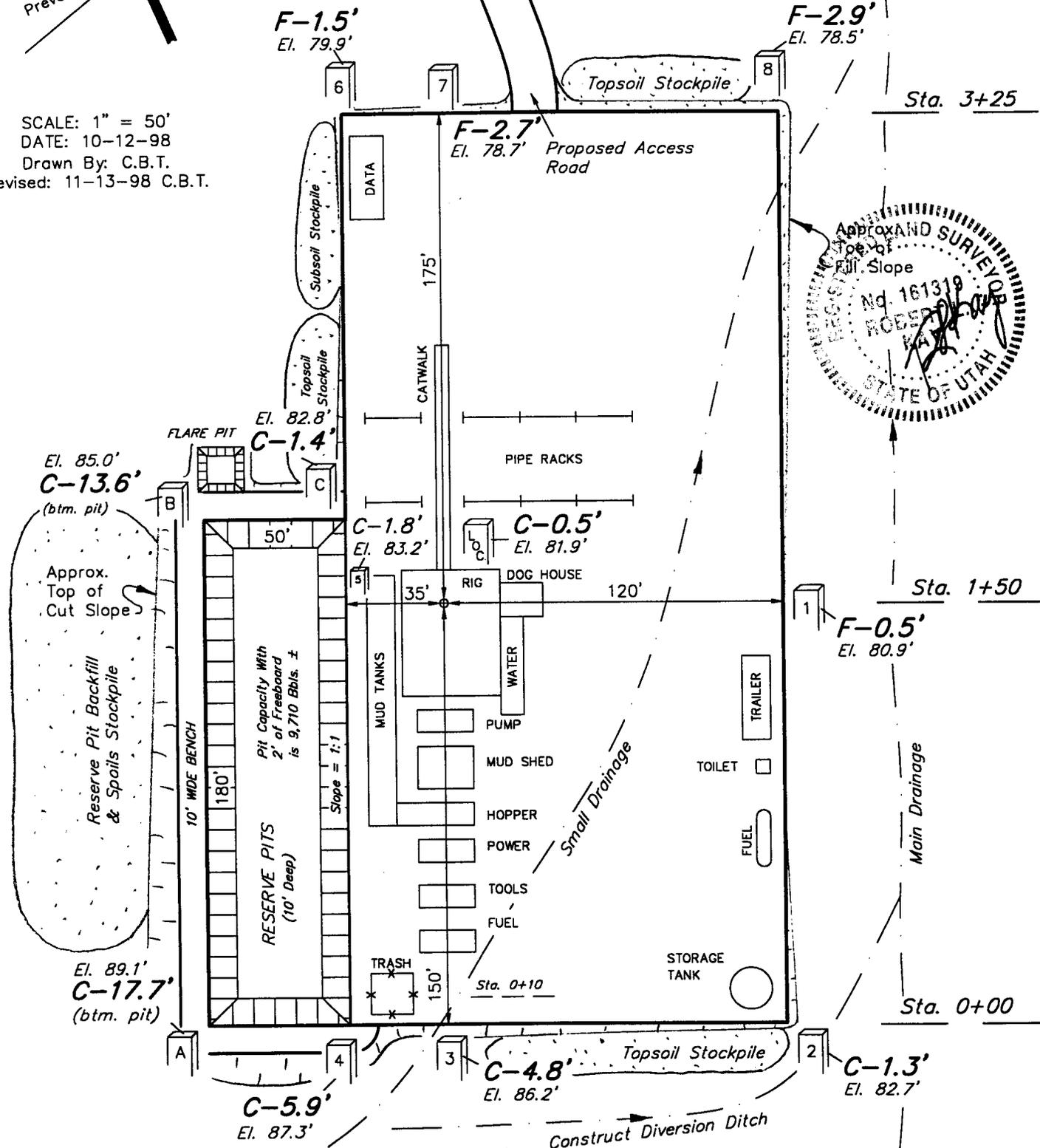
ROSEWOOD RESOURCES, INC.

LOCATION LAYOUT FOR

FEDERAL Q #33-4  
SECTION 4, T12S, R21E, S.L.B.&M.  
2143' FSL 1975' FEL



SCALE: 1" = 50'  
DATE: 10-12-98  
Drawn By: C.B.T.  
Revised: 11-13-98 C.B.T.



Elev. Ungraded Ground at Location Stake = 5981.9'

Elev. Graded Ground at Location Stake = 5981.4'

UINTAH ENGINEERING & LAND SURVEYING  
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

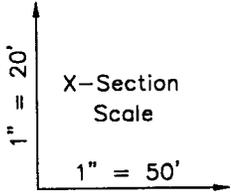
**ROSEWOOD RESOURCES, INC.**

**TYPICAL CROSS SECTIONS FOR**

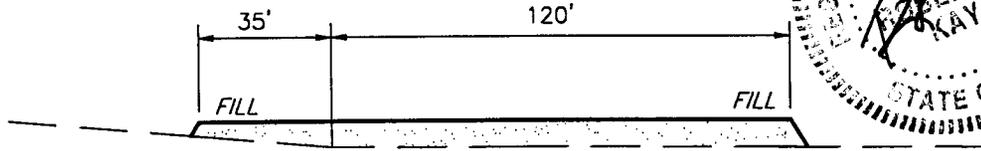
FEDERAL Q #33-4

SECTION 4, T12S, R21E, S.L.B.&M.

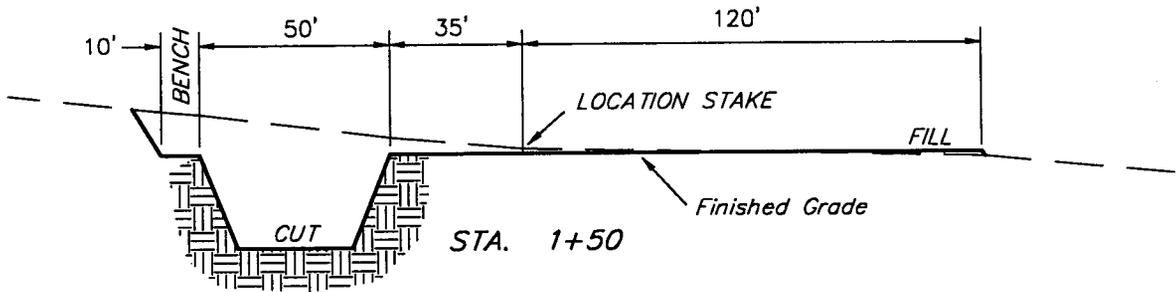
2143' FSL 1975' FEL



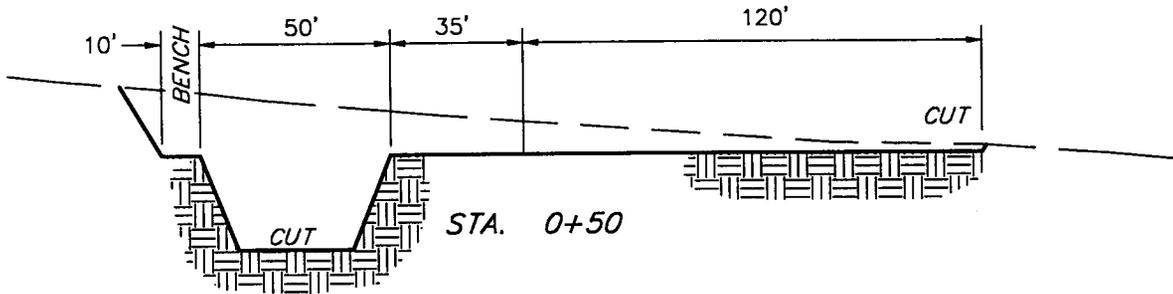
DATE: 10-12-98  
Drawn By: C.B.T.



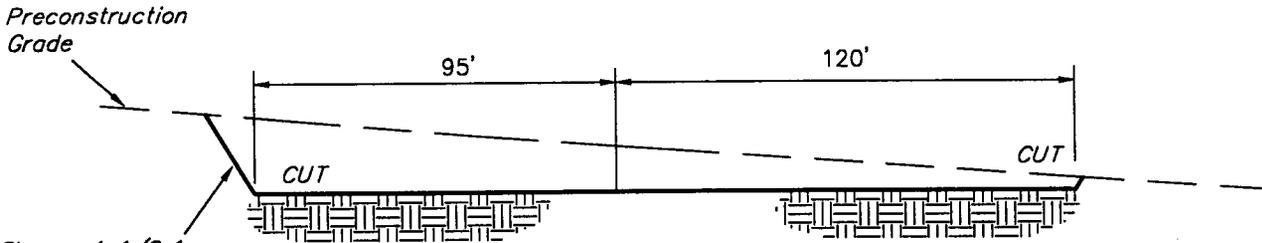
STA. 3+25



STA. 1+50



STA. 0+50



STA. 0+00

Slope = 1 1/2:1  
(Typ. except pit)

**APPROXIMATE YARDAGES**

(6") Topsoil Stripping	= 1,100 Cu. Yds.
Remaining Location	= 5,660 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 6,760 CU.YDS.</b>
<b>FILL</b>	<b>= 1,800 CU.YDS.</b>

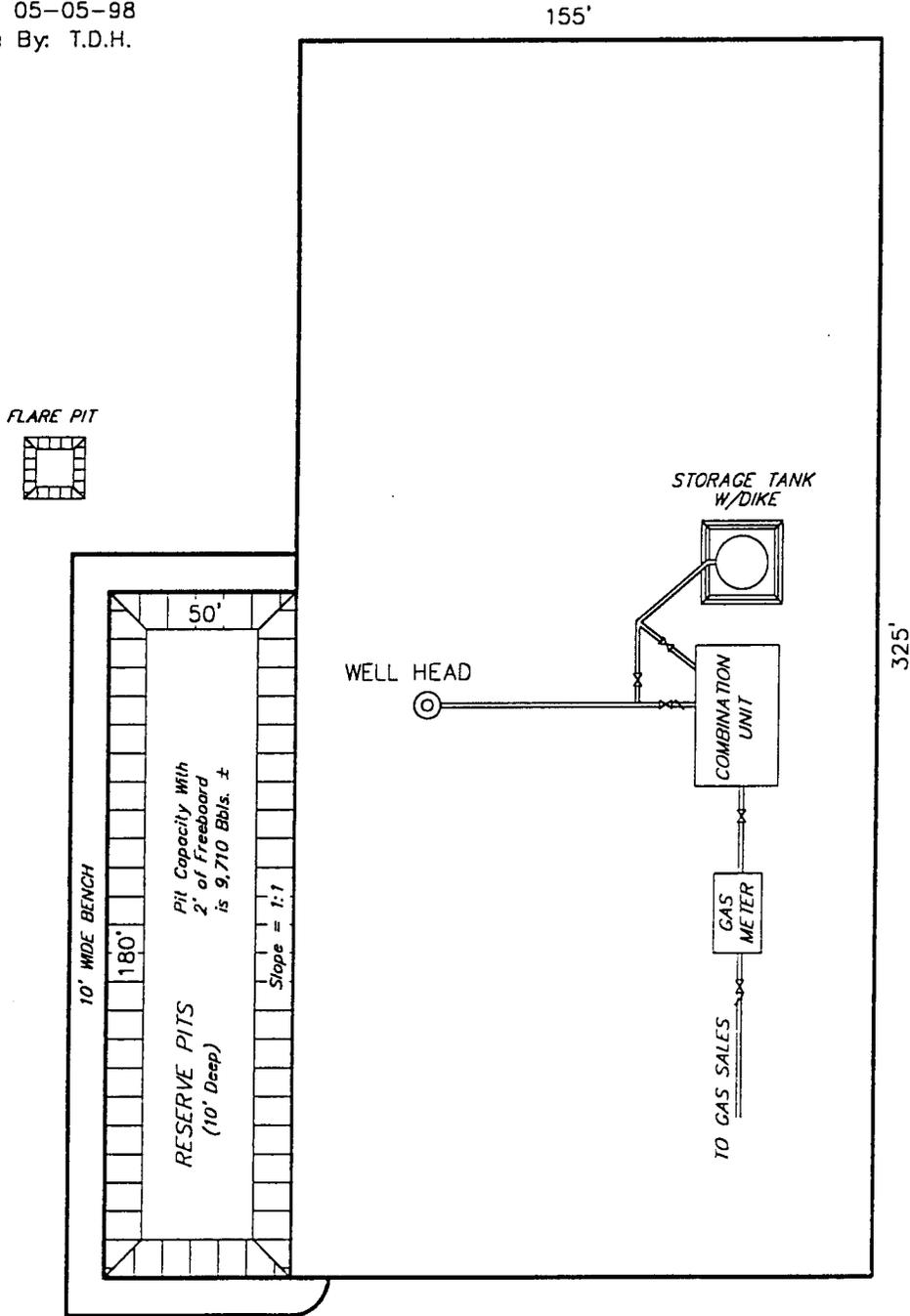
EXCESS MATERIAL AFTER 5% COMPACTION	= 4,870 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 2,360 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	= 2,510 Cu. Yds.

**UINTAH ENGINEERING & LAND SURVEYING**  
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

ROSEWOOD RESOURCES, II  
TYPICAL PRODUCTION FACILITY LAYOUT

Federal Q #33-4  
NW SE Sec 4, T12S - R21E  
2143' FSL and 1975' FEL

SCALE: 1" = 50'  
DATE: 05-05-98  
Drawn By: T.D.H.

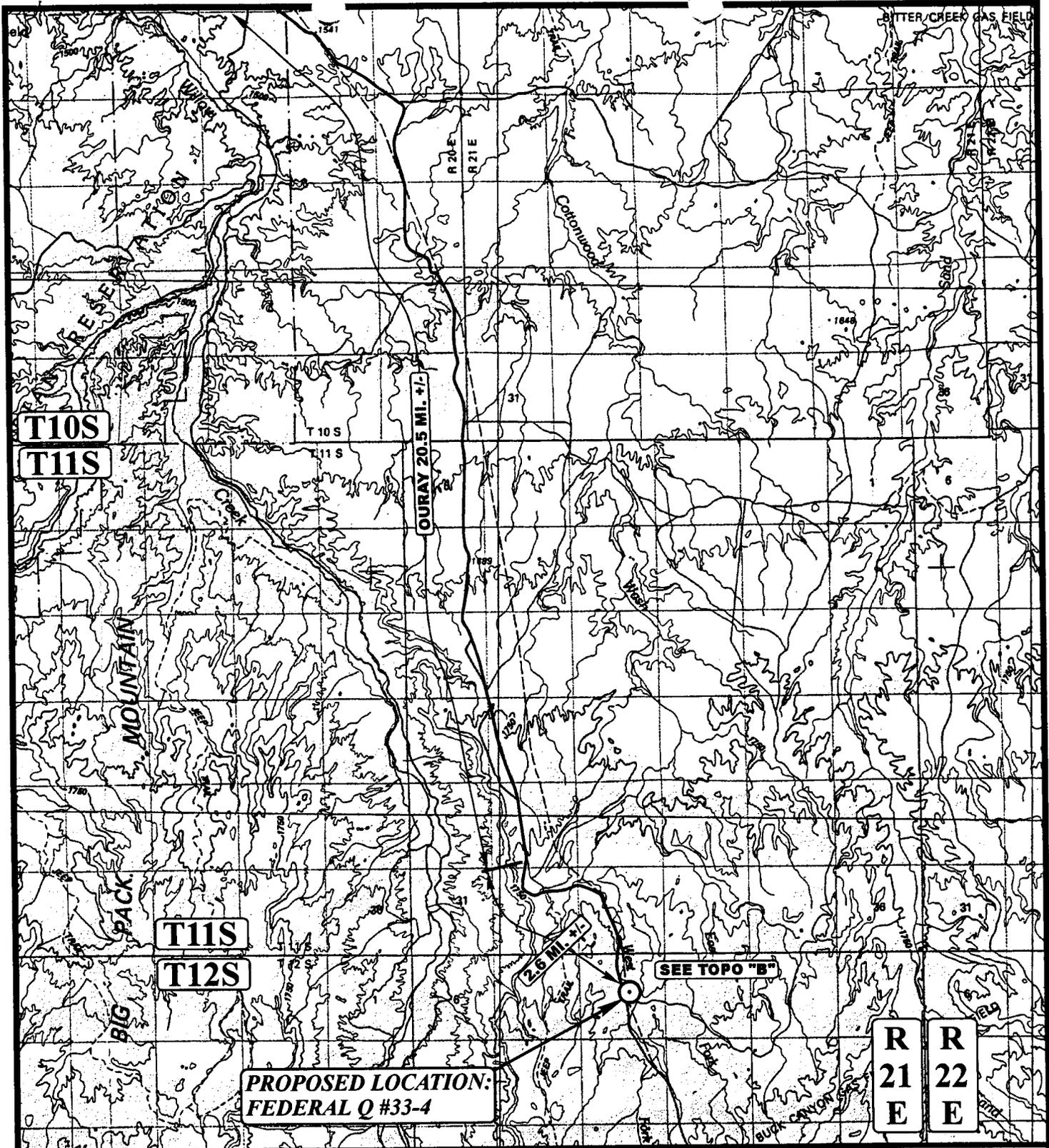


**There are no federal stipulations at this time.**



**A Class III Archeological Survey has been conducted by Grand River Institute. No significant cultural resources were found and clearance has been recommended. A copy of this report will be submitted directly to the appropriate agencies by Grand River Institute.**





**PROPOSED LOCATION:**  
**FEDERAL Q #33-4**

**SEE TOPO "B"**

<b>R</b>	<b>R</b>
<b>21</b>	<b>22</b>
<b>E</b>	<b>E</b>

**LEGEND:**

⊙ PROPOSED LOCATION

**ROSEWOOD RESOURCES, INC.**

**FEDERAL Q #33-4**  
**SECTION 4, T12S, R21E, S.L.B.&M.**  
**2143' FSL 1975' FWL**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813



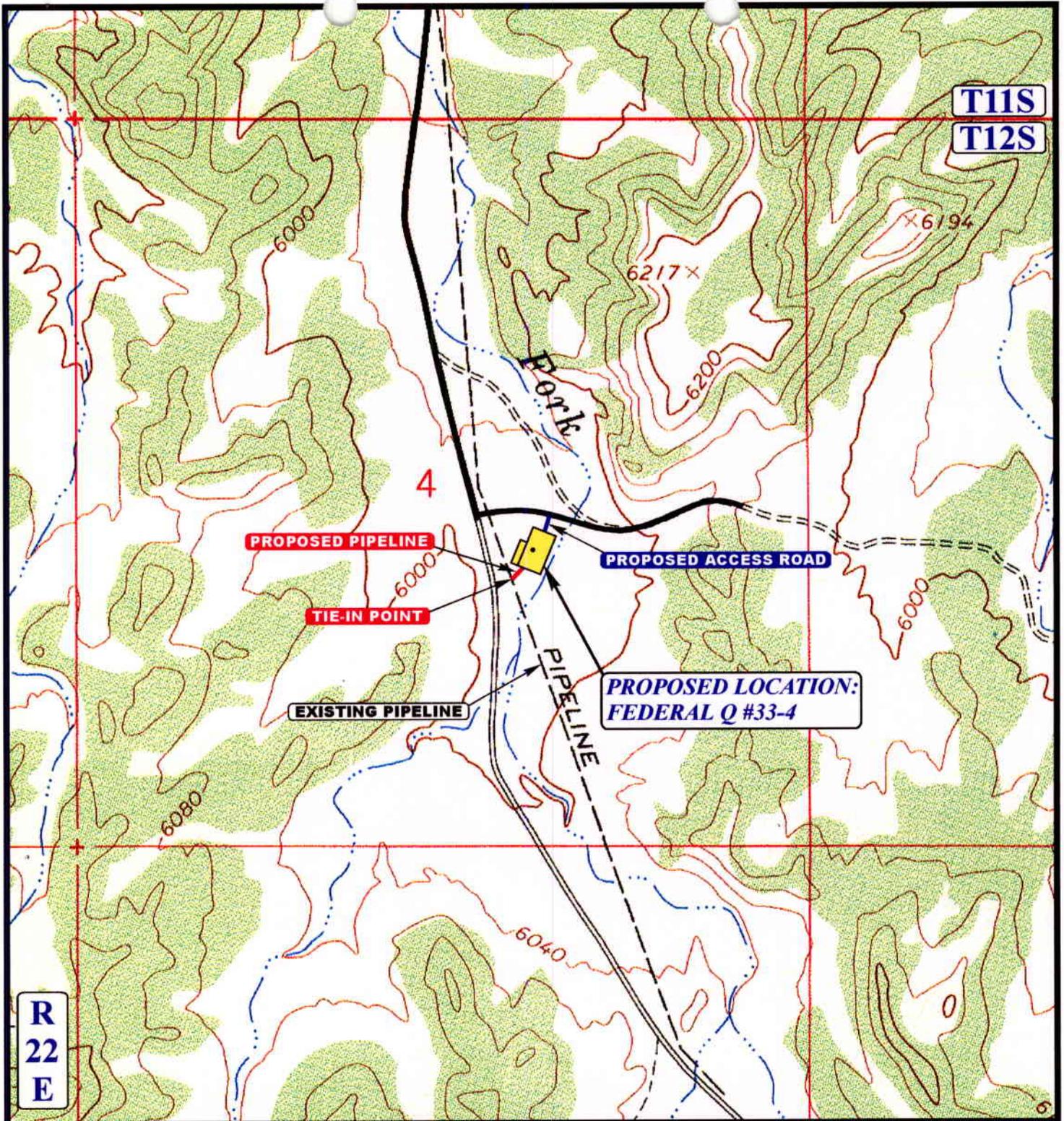
**TOPOGRAPHIC**  
**MAP**

<b>10</b>	<b>8</b>	<b>98</b>
MONTH	DAY	YEAR

SCALE: 1 : 100,000 DRAWN BY: C.G. REVISED: 00-00-00







**APPROXIMATE TOTAL PIPELINE DISTANCE = 140' +/-**

**LEGEND:**

- EXISTING PIPELINE
- PROPOSED PIPELINE
- PROPOSED ACCESS



**ROSEWOOD RESOURCES, INC.**

**FEDERAL Q #33-4**  
**SECTION 4, T12S, R21E, S.L.B.&M.**  
**2143' FSL 1975' FEL**



**Uintah Engineering & Land Surveying**  
 85 South 200 East Vernal, Utah 84078  
 (435) 789-1017 \* FAX (435) 789-1813

**TOPOGRAPHIC**  
**MAP**

<b>10</b>	<b>8</b>	<b>98</b>
MONTH	DAY	YEAR

SCALE: 1" = 1000' DRAWN BY: C.G. REVISED: 00-00-00



WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 11/23/98

API NO. ASSIGNED: 43-047-33243

WELL NAME: FEDERAL Q 33-4  
 OPERATOR: ROSEWOOD RESOURCES INC (N7510)  
 CONTACT: Lise Smith (303) 857-9999

PROPOSED LOCATION:  
 NWSE 04 - T12S - R21E  
 SURFACE: 2143-FSL-1975-FEL  
 BOTTOM: 2143-FSL-1975-FEL  
 UINTAH COUNTY  
 UNDESIGNATED FIELD (002)

INSPECT LOCATION BY: / /		
TECH REVIEW	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: FED  
 LEASE NUMBER: UTU-72017  
 SURFACE OWNER: Federal

PROPOSED FORMATION: WSMVD

RECEIVED AND/OR REVIEWED:

Plat

Bond: Federal  State[] Fee[]  
 (No. MT-0627)

Potash (Y/N)

Oil Shale (Y/N) \*190-5(B)

Water Permit  
 (No. 49-1620)

RDCC Review (Y/N)  
 (Date: \_\_\_\_\_)

N/A Fee Surf Agreement (Y/N)

LOCATION AND SITING:

\_\_\_ R649-2-3. Unit \_\_\_\_\_

R649-3-2. General

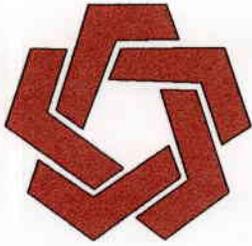
\_\_\_ R649-3-3. Exception

\_\_\_ Drilling Unit  
 Board Cause No: \_\_\_\_\_  
 Date: \_\_\_\_\_

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

STIPULATIONS: ① FEDERAL APPROVAL

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



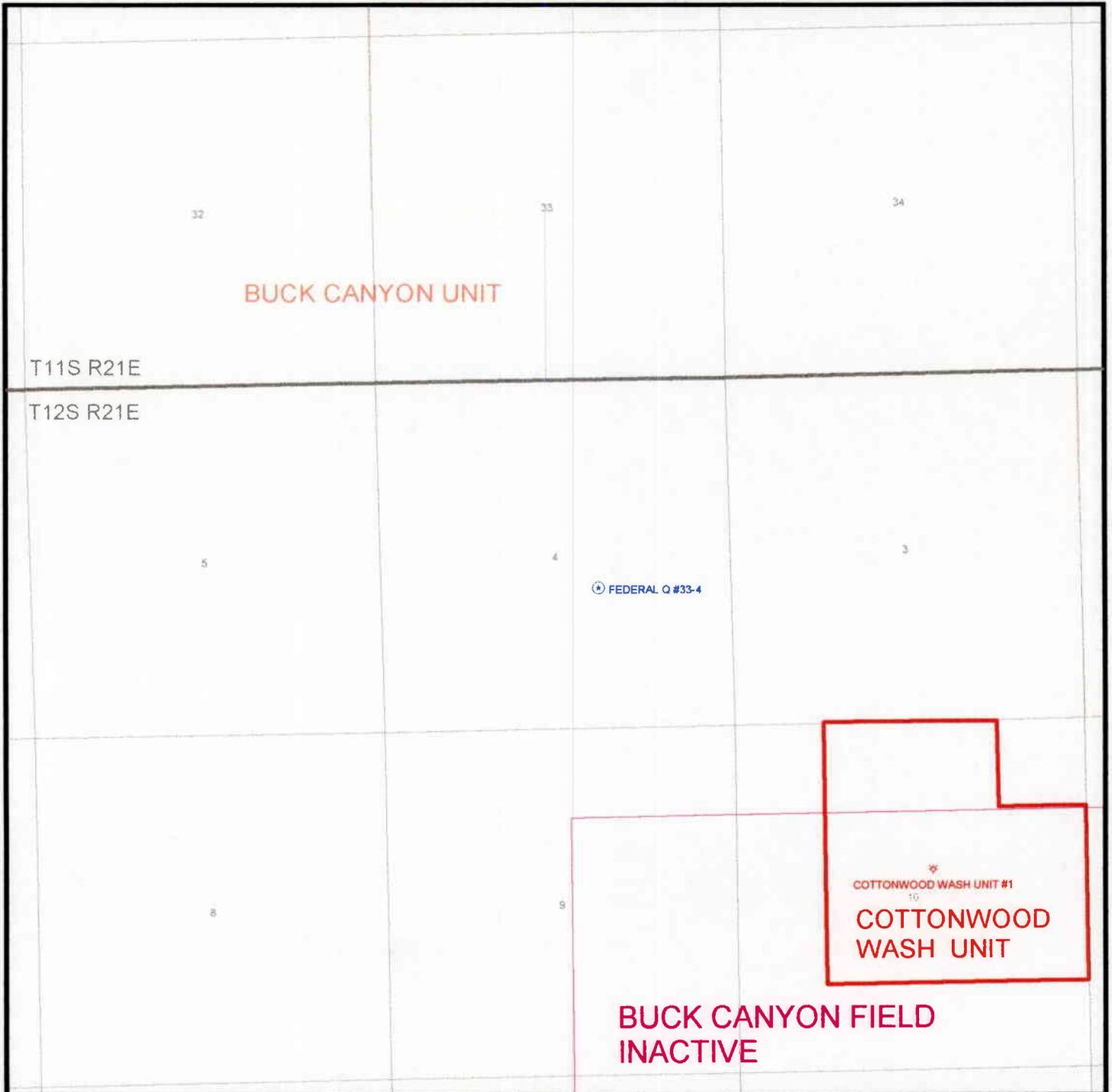
DIVISION OF OIL, GAS & MINING

OPERATOR: ROSEWOOD RESOURCES (N7510)

FIELD: UNDESIGNATED (002)

SEC. 4 TWP 12S, RNG 21E

COUNTY: UINTAH UNIT: BUCK CANYON UNIT



DATE PREPARED:  
7-DEC-1998



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Ted Stewart  
Executive Director

Lowell P. Braxton  
Division Director

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

December 10, 1998

Rosewood Resources, Inc.  
265 East 100 South  
Vernal, Utah 84078

Re: Federal Q 33-4 Well, 2143' FSL, 1975' FEL, NW SE, Sec. 4, T. 12 S., R. 21 E.,  
Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-33243.

Sincerely,

A handwritten signature in black ink that reads "John R. Baza".

John R. Baza  
Associate Director

lwp

Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal District Office

**Operator:** Rosewood Resources, Inc.  
**Well Name & Number:** Federal Q 33-4  
**API Number:** 43-047-33243  
**Lease:** Federal      **Surface Owner:** Federal  
**Location:** NW SE      **Sec.** 4      **T.** 12 S.      **R.** 21 E.

### Conditions of Approval

**1. General**

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

**2. Notification Requirements**

Notify the Division within 24 hours of spudding the well. Contact Carol Daniels at (801)538-5284.

Notify the Division prior to commencing operations to plug and abandon the well. Contact Dan Jarvis at (801) 538-5338 or Robert Krueger at (801) 538-5274.

**3. Reporting Requirements**

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

**4. State approval of this well does not supersede the required federal approval which must be obtained prior to drilling.**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. TYPE OF WORK DRILL  DEEPEN

2. TYPE OF WELL OIL WELL  GAS WELL  **CONFIDENTIAL** SINGLE ZONE  MULTIPLE ZONE

3. NAME OF OPERATOR **Rosewood Resources, Inc.** Phone: 435/789-0414 265 East 100 South Vernal, UT 84078 Fax: 435/789-0497

4. ADDRESS AND TELEPHONE NO. **PERMITCO INC.** Phone: 303/857-9999 14421 Weld County Road 10 Ft. Lupton, CO 80621 Fax: 303/857-0577

5. LEASE DESIGNATION AND SERIAL NO. **UTU-72017**

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

7. UNIT AGREEMENT NAME **N/A**

8. FARM OR LEASE NAME, WELL NO. **Federal Q**

9. API WELL NO. **#33-4**

10. FIELD AND POOL, OR WILDCAT **Wildcat**

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA **Sec. 4, T12S - R21E**

12. COUNTY OR PARISH **Uintah** 13. STATE **Utah**

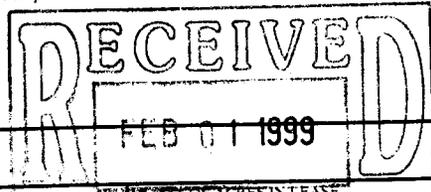
14. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At Surface **2143' FSL and 1975' FEL**  
At proposed prod. zone **NW SE Sec. 4, T12S - R21E**

15. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\* **Approximately 23.3 miles south of Ouray, Utah**

16. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) **499'**

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

18. ELEVATIONS (Show whether DF, RT, GK, etc.) **5,982' ungraded**



23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36#	500'	300 sx to circulate surface
7-7/8"	4-1/2"	11.6#	7,400'	Stage 1: 900 sx top of cmt @ 2500'
				Stage 2: 400 sx - top of cmt @ surf.

Rosewood Resources, Inc. proposes to drill a well to 7,400' to test the Wasatch and Mesa Verda Formations. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

**CONFIDENTIAL - TIGHT HOLE**

See Onshore Order No. 1 attached.

Please be advised that Rosewood Resources, Inc. is considered to be the Operator of the above mentioned well. Rosewood Resources, Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond coverage for this well is provided by Nationwide Bond No. MT-0627. The principal is Rosewood Resources, Inc. via surety consent as provided for in 43 CFR 3104.2.

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

SIGNED *Sean G. Smith* TITLE Consultant For: Rosewood Resources, Inc. DATE 11/20/98

PERMIT NO. \_\_\_\_\_

APPROVED BY *Thomas B. Clearing* TITLE Assistant Field Manager Mineral Resources DATE JAN 21 1999

**CONDITIONS OF APPROVAL ATTACHED**

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.

CONDITIONS OF APPROVAL  
APPLICATION FOR PERMIT TO DRILL

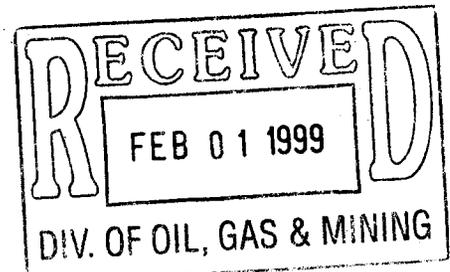
Company/Operator: Rosewood Resources, Inc.

Well Name & Number: Rosewood Federal Q 33-4

API Number: 43-047-33243

Lease Number: U - 72107

Location: NWSE Sec. 04 T.12S R. 21E



For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

## CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

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 aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

### A. DRILLING PROGRAM

#### 1. Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are Expected to be Encountered

Report ALL water shows and water-bearing sands to Tim Ingwell of this office **prior to setting the next casing or requesting plugging orders**. Faxed copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

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

#### 2. Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a **3M** system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

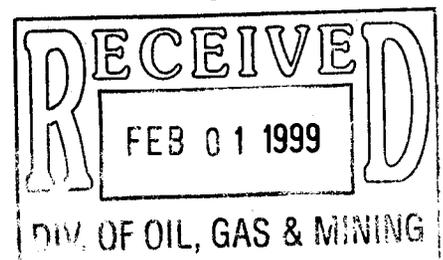
Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

#### 3. Casing Program and Auxiliary Equipment

As a minimum, the usable water and oil shale resources shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the top of the Mahogany oil shale zone, identified at 912 ft. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

#### 4. Mud Program and Circulating Medium

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.



5. Coring, Logging and Testing Program

A cement bond log (CBL) will be run from the production casing shoe to the top of the cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

6. Notifications of Operations

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

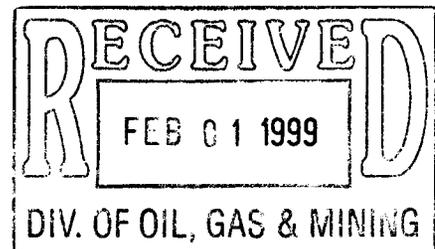
The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

7. Other Information

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).



**EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES**

While the following wastes are nonexempt, they are not necessarily hazardous.

Unused fracturing fluids or acids

Gas plant cooling tower cleaning wastes

Painting wastes

Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spent solvents, spilled chemicals, and waste acids

Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste

Refinery wastes

Liquid and solid wastes generated by crude oil and tank bottom reclaimers

Used equipment lubrication oils

Waste compressor oil, filters, and blowdown

Used hydraulic fluids

Waste solvents

Waste in transportation pipeline-related pits

Caustic or acid cleaners

Boiler cleaning wastes

Boiler refractory bricks

Incinerator ash

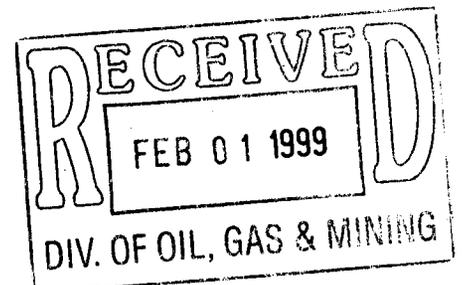
Laboratory wastes

Sanitary wastes

Pesticide wastes

Radioactive tracer wastes

Drums, insulation and miscellaneous solids.



**SURFACE USE PROGRAM**  
**Conditions of Approval (COAs)**

-The access road shall be crowned at between 2 to 3%. When snow is removed from the road during the winter months, the snow shall be pushed outside of the burrow ditches and the turn outs shall be kept clear so that when the snow melts the water will be channeled away from the road.

-The water diversion structure mention on page 10 of the APD Section 10 (e), will not be necessary.

-If a pumping unit were to be installed on this well, a hospital type muffler will be installed.

-If the well is to be drilled during the period of Feb. 1 to May 31, the BLM wildlife biologist will need to make another inspection of the area to determine if any raptor species have established nests. If nests are found, drilling will be delayed until after July 15, when nesting is over. If no nests are found, drilling may proceed as planned.

DIVISION OF OIL, GAS AND MINING

**CONFIDENTIAL**

SPUDDING INFORMATION

Name of Company: ROSEWOOD RESOURCES

Well Name: FEDERAL Q 33-4

Api No. 43-047-33243 Lease Type: FEDERAL

Secton 4 Township 12S Range 21E County UINTAH

Drilling Contractor \_\_\_\_\_ RIG # \_\_\_\_\_

SPUDDED:

Date 04/13/99

Time 2:00 PM

How DRY HOLE

Drilling will commence \_\_\_\_\_

Reported by LUCY NEMEC

Telephone # 1-435-789-0414

Date 4/13/99 Signed: JLT

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 reenter a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

5. Lease Designation and Serial No.  
**UTU-77378**

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

7. If Unit or CA, Agreement Designation  
**BUCK CANYON UNIT**

8. Well Name and No.  
**Federal Q #33-4**

9. API Well No.  
**43-047-3324<sup>3</sup>**

10. Field and Pool, or Exploratory Area

11. County or Parish, State  
**UINTAH CO., UTAH**

**SUBMIT IN TRIPLICATE**

**CONFIDENTIAL**

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

**LONE MOUNTAIN PRODUCTION COMPANY**

3. Address and Telephone No.

**P.O. Box 1668, Vernal, UT 435-789-0414**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**2143' FSL 1975' FEL, NW/SE Section 4, T12S, R21E**

12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

Notice of Intent  
 Subsequent Report  
 Final Abandonment Notice

Abandonment  
 Recompletion  
 Plugging Back  
 Casing Repair  
 Altering Casing  
 Other SPUD

Change of Plans  
 New Construction  
 Non-Routine Fracturing  
 Water Shut-Off  
 Conversion to Injection  
 Dispose Water

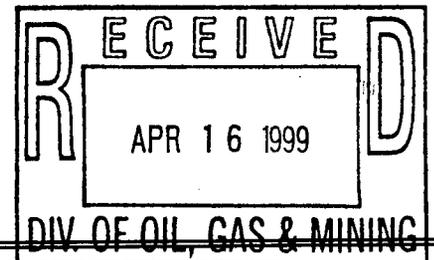
(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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.)\*

Operator reports that the above well was spud @ 2:00 p.m. 4/13/99 with Bill Martin's dry hole digger.

If you require additional information please feel free to contact Rosewood Resources @ 435-789-0414.

Lucy Nemeč  
Agent for Lone Mountain Production Company



COPIES: ORIG. & 2-BLM; DIV. OG&M; J MCQUILLEN

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

Signed Lucy Nemeč Title Agent Date 04/14/99

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Conditions of approval, if any:

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 reenter a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

5. Lease Designation and Serial No.  
UTU-77378

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

**CONFIDENTIAL**

**SUBMIT IN TRIPLICATE**

**RECEIVED**  
APR 26 1999

7. If Unit or CA, Agreement Designation  
BUCK CANYON UNIT

1. Type of Well

Oil Well  Gas Well  Other

8. Well Name and No.

Federal Q #33-4

2. Name of Operator

LONE MOUNTAIN PRODUCTION COMPANY

DIV. OF OIL, GAS & MINING

9. API Well No.

43-047-332423

3. Address and Telephone No.

P.O. Box 1668, Vernal, UT 435-789-0414

10. Field and Pool, or Exploratory Area

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2143' FSL 1975' FEL, NW/SE Section 4, T12S, R21E

11. County or Parish, State

UINTAH CO., UTAH

12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

Notice of Intent  
 Subsequent Report  
 Final Abandonment Notice

TYPE OF ACTION

Abandonment  
 Recompletion  
 Plugging Back  
 Casing Repair  
 Altering Casing  
 Other \_\_\_\_\_  
 Change of Plans  
 New Construction  
 Non-Routine Fracturing  
 Water Shut-Off  
 Conversion to Injection  
 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.)\*

Operator respectfully requests permission to change surface casing to 9 5/8" 36# J-55 and surface depth from 300' to 500'. Operator also requests permission to change the cement for the surface casing. Cement would be as follows:

350 sx Class "G" containing 2% CaCl2 and 1/4# sk Cello-flake or sufficient to circulate to surface.

If you require additional information please feel free to contact Rosewood Resources @ 435-789-0414.

Lucy Nemece  
Agent for Lone Mountain Production Company

COPIES: ORIG. & 2-BLM; DIV. OG&M; J MCQUILLEN

**Accepted by the  
Utah Division of  
Oil, Gas and Mining**

COPY SENT TO OPERATOR  
Date: 4-28-99  
Initials: [Signature]

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

**FOR RECORD ONLY**

Signed

[Signature]

Title Agent

Date 04/14/99

(This space for Federal or State office use)

Approved by \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Conditions of approval, if any:



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

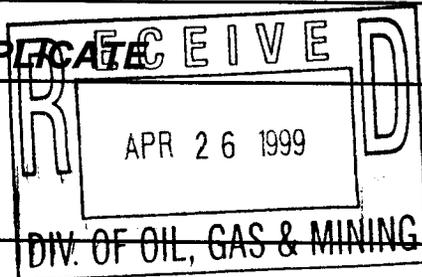
SUNDRY NOTICES AND REPORTS ON WELLS

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

5. Lease Designation and Serial No.  
UTU-77378

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

**SUBMIT IN TRIPLICATE**



7. If Unit or CA, Agreement Designation  
BUCK CANYON UNIT

1. Type of Well

Oil Well  Gas Well  Other

8. Well Name and No.  
Federal Q #33-4

2. Name of Operator

LONE MOUNTAIN PRODUCTION COMPANY

9. API Well No.  
43-047-332423

3. Address and Telephone No.

P.O. Box 1668, Vernal, UT 435-789-0414

10. Field and Pool, or Exploratory Area

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2143' FSL 1975' FEL, NW/SE Section 4, T12S, R21E

11. County or Parish, State  
UINTAH CO., UTAH

12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

Notice of Intent  
 Subsequent Report  
 Final Abandonment Notice

TYPE OF ACTION

Abandonment  
 Recompletion  
 Plugging Back  
 Casing Repair  
 Altering Casing  
 Other Cement Surf Casing  
 Change of Plans  
 New Construction  
 Non-Routine Fracturing  
 Water Shut-Off  
 Conversion to Injection  
 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.)\*

Operator reports that the above well was drilled to 524' GL with Bill Martin's dry hole digger. See attached rig report for surface casing cementing information.

If you require additional information please feel free to contact Rosewood Resources @ 435-789-0414.

Lucy Nemec  
Agent for Lone Mountain Production Company

COPIES: ORIG. & 2-BLM; DIV. OG&M; J MCQUILLEN

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

Signed Lucy Nemec Title Agent Date 04/22/99

(This space for Federal or State office use)

Approved by \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Conditions of approval, if any:



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 reenter a different reservoir.  
Use "APPLICATION FOR PERMIT -" for such proposals

5. Lease Designation and Serial No.  
UTU-77378

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

7. If Unit or CA, Agreement Designation  
BUCK CANYON UNIT

8. Well Name and No.  
Federal Q #33-4

9. API Well No. <sup>3</sup>  
43-047-33247

10. Field and Pool, or Exploratory Area

11. County or Parish, State  
UINTAH CO., UTAH

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Well  Gas Well  Other

**CONFIDENTIAL**

2. Name of Operator

LONE MOUNTAIN PRODUCTION COMPANY

3. Address and Telephone No.

P.O. Box 1668, Vernal, UT 435-789-0414

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2143' FSL 1975' FEL, NW/SE Section 4, T12S, R21E

12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

Notice of Intent  
 Subsequent Report  
 Final Abandonment Notice

TYPE OF ACTION

Abandonment  
 Recompletion  
 Plugging Back  
 Casing Repair  
 Altering Casing  
 Other weekly status  
 Change of Plans  
 New Construction  
 Non-Routine Fracturing  
 Water Shut-Off  
 Conversion to Injection  
 Dispose Water

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

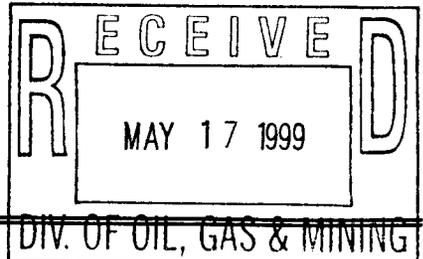
13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

See attached rig reports for drilling information. Well was plugged and abandoned on 5/8/99. See attached rig reports for plugging information.

If you require additional information please feel free to contact Rosewood Resources @ 435-789-0414.

Lucy Nemec

Agent for Lone Mountain Production Company



COPIES: ORIG. & 2-BLM; DIV. OG&M; J MCQUILLEN

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

Signed Lucy Nemec Title Agent

Date 05/13/99

(This space for Federal or State office use)

Approved by

Conditions of approval, if any:

**Accepted by the  
Utah Division of  
Oil, Gas and Mining**

COPY SENT TO OPERATOR

Date: 5-26-99

Initials: CAO

Date

Federal Approval of this  
Action is Necessary

**FOR RECORD ONLY**











INSPECTION FORM 1 STATE OF UTAH  
DIVISION OF OIL GAS AND MINING

**DRILLING OPERATIONS**

Well Name: <u>Fed Q 33-4</u>	API Number: <u>43-047-33243</u>	①
Qtr/Qtr: <u>NW/SE</u>	Section: <u>4</u>	Township: <u>12S</u> Range: <u>21E</u>
Company Name: <u>Rosewood Resources</u>		
Lease: State _____	Fee _____	Federal <u>X</u> Indian _____
Inspector: <u>David W. Hackford</u>		Date: <u>5/6/99</u>

Inspection made in accordance with Division Inspection Standards and Procedures for drilling operations, any exceptions noted in comments.

Depth at time of visit: 6500' Last BOPE test recorded: 4/29/99  
Drilling Contractor: Chandler Drilling Co. Rig No. 1

COMMENTS: Survey at 6202' was 11/2 degrees. Well is td'd. Nippled up with double gate, annular and rotating head.

RECEIVED  
MAY 26 1999  
DIV. OF OIL, GAS & MINING

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

FORM APPROVED  
OMB NO. 1004-0137  
Expires: February 28, 1995

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.  
UTU-72017

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

7. UNIT AGREEMENT NAME  
N/A

8. LEASE OR WELL NAME, WELL NO.  
FEDERAL Q #33-4

9. API WELL NO.  
43-047-33243

10. FIELD AND POOL OR WILDCAT  
WILDCAT

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA  
SEC. 4, T12S, R21E

Block & Survey: S.L.B. & M

12. COUNTY OR PARISH  
UINTAH

13. STATE  
UTAH

1a. TYPE OF WORK

OIL WELL  GAS WELL  DRY

1b. TYPE OF WELL

NEW WELL  WORK OVER  DEEP EN  FLUG BACK  DIFF. RESVR.  Other \_\_\_\_\_

CONFIDENTIAL

2. NAME OF OPERATOR

ROSEWOOD RESOURCES, INC.

3. ADDRESS AND TELEPHONE NO.

P.O. BOX 1668, VERNAL, UT 84078

435-789-0414

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

At Surface

2143' FSL 1975' FEL SW/SE SEC. 4 T12S R21E

At top prod. Interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

1/21/99

17. DATE COMPL. (Ready to prod.)

P&A'D 5/8/99

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\*

5982' GL

19. ELEV. CASINGHEAD

5997' KB

15. DATE SPUNDED  
4/13/99

16. DATE T.D. REACHED  
5/5/99

20. TOTAL DEPTH, MD & TVD

6500' MD TVD

21. PLUG, BACK T.D., MD & TVD

TD TVD

22. IF MULTIPLE COMPL., HOW MANY?

CONFIDENTIAL

23. INTERVALS DRILLED BY

ROTARY TOOLS

524' - 6500'

CABLE TOOLS

NA

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

P & A'D

25. WAS DIRECTIONAL SURVEY MADE

NO

26. TYPE ELECTRIC AND OTHER LOGS RUN

MUD LOG; CNLD/GR; AI/LC/GR; CMRT/QUICK LOOK

27. WAS WELL CORED

NO

28. CASING RECORD (Report all strings set in well)					
CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
9-5/8" K-55	36#	539' KB	12-1/4"	SURF-300 SX PREM + ADD	NONE

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)  
INTERVAL NEW SIZE NUMBER  
FOR PLUGGING INFORMATION SEE PAGE 2

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

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 5/8/99						P & A'D	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL--BBL.	GAS--MCF.	WATER--BBL.	GAS-OIL RATIO
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL--BBL.	GAS--MCF.	WATER--BBL.	OIL GRAVITY-API (CORR.)	

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

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  
SIGNED Lucy Neman TITLE ADMINISTRATIVE ASISTANT DATE 5/25/99

\*(See Instructions and Spaces for Additional Data 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 mater within its jurisdiction.

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	TRUE VERT. DEPTH
			<b>PLUGGING INFORMATION</b> Plug #1 5500' - 5300' 90 sks Plug #2 3500' - 3300' 78 sks Plug #3 1300' - 1100' 66 sks Plug #4 550' - 365' 77 sks Plug #5 50' - surf 96 sks Re-Plug #3 1250' - 1050' 66 sks Re-Plug #4 550' - 450' 66 sks Re-Plug #5 50' - surf 75 sks  Prem 300 3% CaCl 15.8	<b>WASATCH TOP</b> <b>MESA VERDE TOP</b>	3460' 5400'	

38.

COPIES: BLM - VERNAL/ORIG. & 2 COPIES; DIV. OG&M - DALLAS 1 COPY;