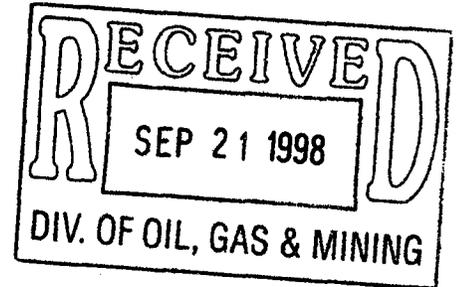


LAW OFFICES OF  
VAN COTT, BAGLEY, CORNWALL & MCCARTHY  
A PROFESSIONAL CORPORATION  
SUITE 1600  
50 SOUTH MAIN STREET  
SALT LAKE CITY, UTAH 84144-0450  
TELEPHONE (801) 532-3333  
FACSIMILE (801) 534-0058

ADDRESS ALL CORRESPONDENCE TO  
POST OFFICE BOX 45340  
84145-0340

(801) 237-0352

September 21, 1998



**VIA HAND DELIVERY**

Mr. John Baza  
Associate Director, Oil and Gas  
Utah Division of Oil, Gas & Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, Utah 84180

Re: *Petral Exploration LLC Dalmore - Federal #44-23*  
*Section 23, Township 37 South, Range 23 East*  
*San Juan County, Utah*

Dear Mr. Baza:

On behalf of Petral Exploration LLC, I am delivering three (3) original Utah state Applications for Permit to Drill or Deepen ("APD") and one (1) original federal APD for the above-referenced well located in San Juan County, Utah. While E.K. Bostick of ENMARC, Inc. should be your contact regarding the technical aspects of the enclosed APD, I would appreciate being informed if there are any objections or protests to the APD lodged with the Division.

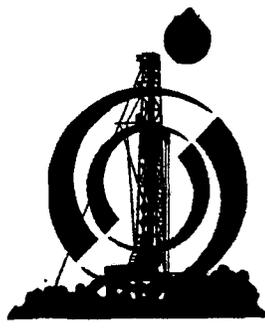
Thank you for your consideration of this matter. If you have any questions or further instructions, please do not hesitate to contact me.

Very truly yours,

A handwritten signature in cursive script that reads "Thomas W. Clawson".

Thomas W. Clawson

TWC:cw  
Enclosures  
cc: Mr. Anthony Mayer  
Mr. E.K. Bostick

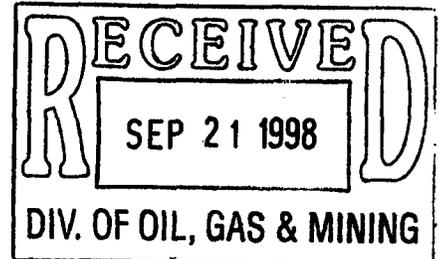


# ENMARC

Wellsite Consulting, Property Management and  
Petroleum Engineering Services for the Energy Industry

September 17, 1998

Mr. John Baza  
Utah Division of Oil, Gas, and Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, Utah 84180



Re: Application for Directional Drilling Permit  
Petral Exploration LLC Dalmore-Federal #44-23  
SE SE Section 23 T37S R23E, San Juan County, UT

Dear Sir:

On behalf of our client, Petral Exploration LLC, we hereby request a permit for an intentionally deviated well per regulation R649-3-11.

General plan: The Petral Exploration Dalmore-Federal #44-23 will be drilled from a new drill site at a surface location 230 ft FSL and 280 ft FEL Section 23 T37S R23E, San Juan County, Utah, north-northwest approximately 298 ft at an azimuth of 322 degrees. No potentially hydrocarbon bearing beds will be penetrated by the well bore until it has been drilled more than 460 feet beyond the east line of Section 23 and south line of Section 23. The bore hole location at the top of the Upper Ismay reservoir is legal, that is, it does not require an exception location. The proposed directional drilling plan is attached.

The following information is provided in support of the request per R649-3-11:

- 2.1 Operator: Petral Exploration LLC  
Address: c/o ENMARC, Inc.  
P.O. Box 7638 Loveland, CO 80537  
(970) 663-7576 or (303) 825-7061 (Denver office)  
Contact: E. K. Bostick
- 2.2 Lease Name: Dalmore-Federal Well No.: 44-23  
Lease No.: Federal UTU-041085 API No.: (to be assigned)  
Field Name: Deadman Canyon Reservoir Name: Upper Ismay  
County: San Juan
- 2.3 A plat at a scale of 1 inch = 2,000 feet is attached which shows the distance from the surface location to the section line (230' FSL and 280' FEL) and lease line (856' to the north).

The target horizon (Upper Ismay) will be encountered 464' FSL and 464' FEL Section 23 T37S R23E. At Measured Total Depth the well bore will be 598' FSL and 569' FEL Section 2~~3~~<sub>3</sub> T37S R23E.

A letter of non-opposition to the directional drilling plan from the leasehold owners is not required as this well (surface and bottom hole location) is in a communitized lease with a Joint Operating Agreement. The planned trajectory of the well bore is attached. The well bore does not penetrate outside of the communitized leasehold.

Working Interest Owners in the Surface Location (SE SE Sec. 23) are:

|                            |                         |                           |
|----------------------------|-------------------------|---------------------------|
| Petral Exploration LLC     | Dalmore LLC             | Grynberg Petroleum        |
| 1700 Lincoln Street, #4750 | 2597 East Bridger Blvd. | 5000 S. Quebec, Suite 500 |
| Denver, CO 80203           | Sandy, UT 84093         | Denver, CO 80237          |
| WI 43.75%                  | WI 6.25%                | WI 50.00%                 |

Working Interest Owners in the Bottom Hole Location (SE SE Sec. 23) are:

|                            |                         |                           |
|----------------------------|-------------------------|---------------------------|
| Petral Exploration LLC     | Dalmore LLC             | Grynberg Petroleum        |
| 1700 Lincoln Street, #4750 | 2597 East Bridger Blvd. | 5000 S. Quebec, Suite 500 |
| Denver, CO 80203           | Sandy, UT 84093         | Denver, CO 80327          |
| WI 43.75%                  | WI 6.25%                | WI 50.00%                 |

2.4 The well must be directionally drilled because topography and cultural resources (archaeology) prevent the drilling of a vertical hole.

If this request is administratively approved, please notify Mr. Gary Torres, Bureau of Land Management, 82 Dogwood - Suite M, Moab, UT 84532. If administrative approval of this request cannot be granted, it is requested that the application be set for the next available hearing before the Division of Oil, Gas, and Mining.

Sincerely,

ENMARC, Inc.



E. K. Bostick, President  
Agent for Petral Exploration LLC

Attachments

cc: Petral Exploration LLC

5. Lease Designation and Serial Number:

UTU-041085

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

6. If Indian, Allottee or Tribe Name:

N/A

1A. Type of Work:

DRILL

DEEPEN

7. Unit Agreement Name:

N/A

B. Type of Well: OIL  GAS  OTHER:

SINGLE ZONE  MULTIPLE ZONE

8. Farm or Lease Name:

Dalmore - Federal

2. Name of Operator:

Petral Exploration, LLC C/O ENMARC, INC. (E.K. Bostick)

9. Well Number:

#44-23

3. Address and Telephone Number:

P.O. Box 7638, Loveland, CO 80537-7638 (970) 663-7576

10. Field and Pool, or Wildcat:

Deadman Canyon

4. Location of Well (Footages)

BHL 598 FSL 569 FEL

11. Qtr/Qtr, Section, Township, Range, Meridian:

At Surface: 90 85

230' FSL & 280' FEL Sec. 23 - T37S - R23E

CONFIDENTIAL

SE SE  
Sec. 23 - T37S - R23E

At Proposed Producing Zone: E

464' FSL & 464' FEL Sec. 23 - T37S - R23E

14. Distance in miles and direction from nearest town or post office:

12 miles SE of Blanding, Utah

12. County:

San Juan

13. State:

UTAH

15. Distance to nearest property or lease line (feet):

856'

16. Number of acres in lease:

920

17. Number of acres assigned to this well:

40

18. Distance to nearest well, drilling, completed, or applied for, on this lease (feet):

BHL 1104'

19. Proposed Depth:

6240'(TVD) 6325'(MD)

20. Rotary or cable tools:

Rotary

21. Elevations (show whether DR, RT, GR, etc.):

5575' GR

22. Approximate date work will start:

November 1, 1998

23. PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | GRADE, SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT          |
|--------------|-----------------------|-----------------|---------------|-----------------------------|
| 20"          | 16"                   | .25" Wall       | 80'           | To surface w/ ready-mix     |
| 12 1/4"      | 9 5/8"                | 36#             | 2175'         | Cemented to surface         |
| 8 3/4"       | 5 1/2"                | 15.5#           | 6325'         | 424sx 50/50 Std. Pozmix "H" |
|              |                       |                 |               |                             |
|              |                       |                 |               |                             |

DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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.

Petral Exploration LLC intends to directionally drill to a legal bottom hole location in the SE SE Section 26 T37S R23I. A directional hole is required because topography and cultural resources (archaeology) prevent a vertical hole at the desired location. This approach causes minimal disturbance of the environment. The details of the proposed work plan and supporting data are attached.

645801.70  
4156870.28  
  
645750.99  
4156928.66

24. E.K. Bostick

Agent for

Name & Signature:

*E.K. Bostick*

Title: Petral Exploration LLC

Date:

9/16/98

(This space for State use only)

API Number Assigned:

43-037-31801

Approval:

(1/93)

Approved by the  
Utah Division of  
Oil, Gas and Mining

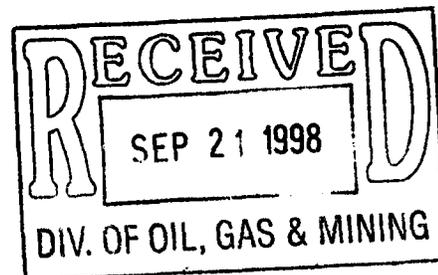
(See instructions on Reverse Side)

Date:

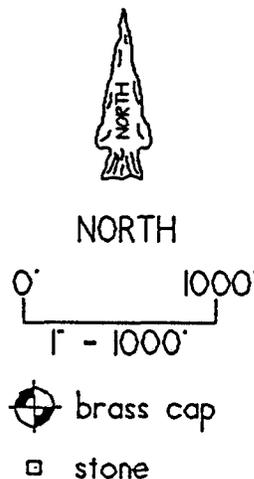
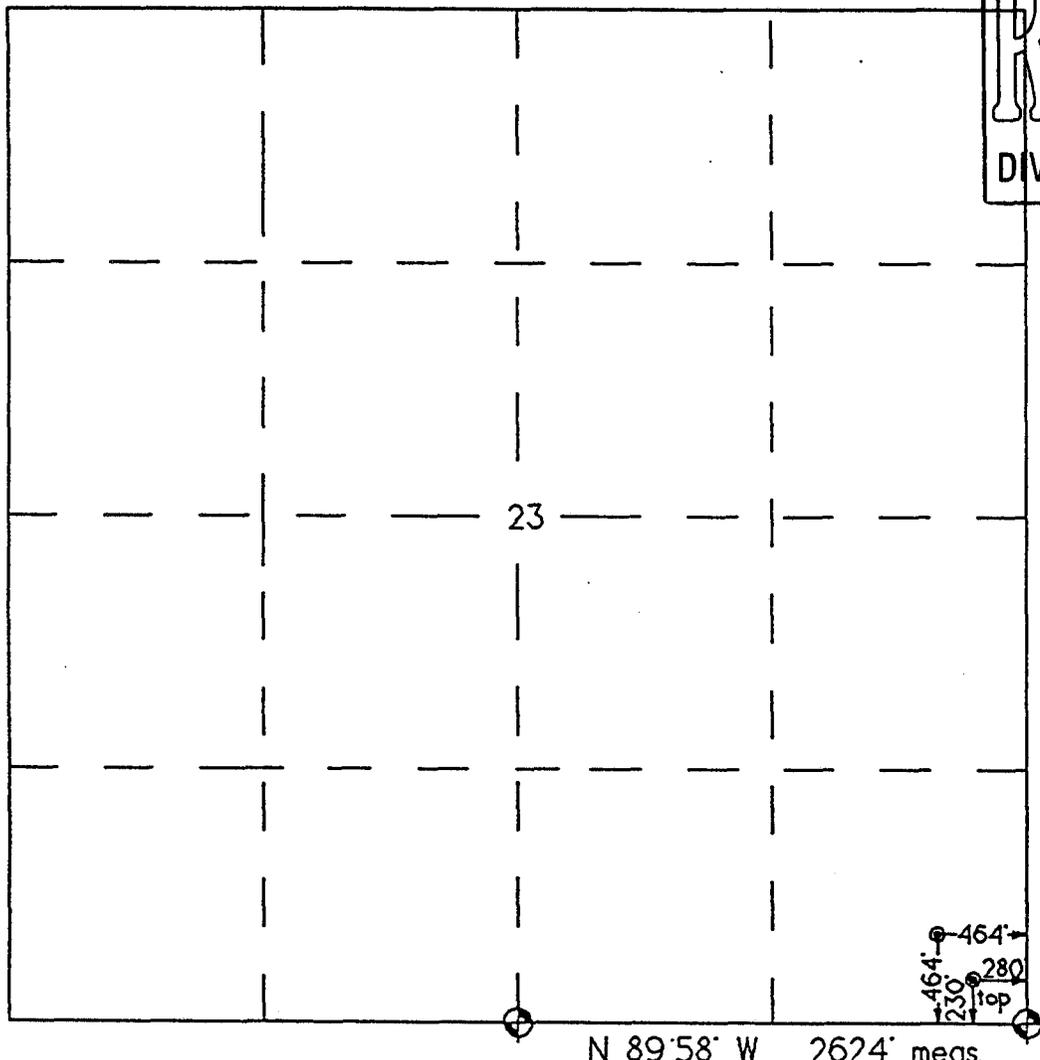
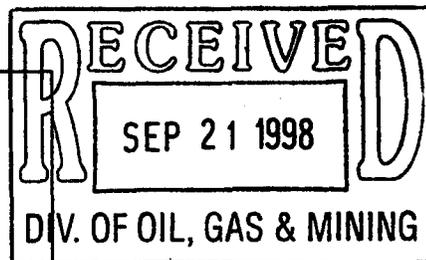
By:

8/15/99  
*[Signature]*

Federal Approval of this  
Action is Necessary



Well Location Plat



N 89°58' W 2624' meas.

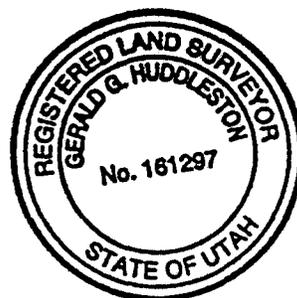
464' →  
230' →  
280' →  
top

Well Location Description

PETRAL EXPLORATION  
Dalmore # 44 - 23  
230' FSL & 280' FEL (top)  
464' FSL & 464' FEL (bottom)  
Section 23, T.37 S., R.23 E., SLM  
San Juan County, UT  
5575' grd. el. (from GPS)

Description - NAD 27

328.483 N state plane  
2.623.426 E state plane  
( from GPS )  
328.713 N state plane  
2.623.237 E state plane bottom



rev: 4 Aug. 1998

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

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

**FILED**

JUL 30 1999

SECRETARY, BOARD OF  
OIL, GAS & MINING

**BEFORE THE BOARD OF OIL, GAS AND MINING**

**DEPARTMENT OF NATURAL RESOURCES**

**STATE OF UTAH**

**IN THE MATTER OF THE REQUEST )**  
**FOR AGENCY ACTION OF )**  
**GRYNBERG PETROLEUM COMPANY )**  
**FOR AN ORDER ESTABLISHING A 50 )**  
**ACRE DRILLING AND SPACING )**  
**UNIT IN SECTIONS 23, 24, 25 AND 26 )**  
**IN TOWNSHIP 37 SOUTH, RANGE 23 )**  
**EAST, SLM, SAN JUAN COUNTY, )**  
**UTAH )**  
**)**  
**)**  
**)**

**FINDINGS OF FACT,**  
**CONCLUSIONS OF LAW, AND**  
**ORDER DENYING REQUEST FOR**  
**AGENCY ACTION**

**Docket No. 98-024**

**Cause No. 244-1**

This cause came on regularly for hearing before the Utah Board of Oil, Gas and Mining (the "Board") on Wednesday, April 28, 1999, at the hour of 10:00 a.m. in the Board Room of the Department of Natural Resources, 1594 West North Temple, Suite 1040A, Salt Lake City, Utah. The following Board members were present at the hearing: Thomas B. Faddies, Acting Chairman; Raymond Murray; Elise L. Eler; W. Allan Mashburn; Stephanie Cartwright; and Jim Peacock. Lowell Braxton, Director, and John Baza, Associate Director of Oil and Gas, were present for the Division of Oil, Gas and Mining (the "Division"). Patrick J. O'Hara, Assistant Attorney General, counsel for the Division, and Phillip C. Pugsley and Thomas A. Mitchell, Assistant Attorneys General and counsel to the Board, were also present. Petitioner Celeste Grynberg, d/b/a Grynberg Petroleum Company ("Grynberg"), was represented by Michael S. Johnson of Pruitt, Gushee & Bachtell. Jack J. Grynberg, Petroleum Engineer,

testified on behalf of Grynberg. Respondent Petral Exploration LLC ("Petral") was represented by Thomas W. Clawson of Van Cott, Bagley, Cornwall & McCarthy. David A. Norby, Engineer, testified on behalf of Petral. John Baza testified on behalf of the Division. Jimmy Raffoul, Petroleum Engineer, appeared on behalf of the BLM. After considering the testimony, exhibits, and arguments received at the April 28, 1999 hearing, the Board denied Grynberg's Request for Agency Action and also denied Jack J. Grynberg's oral motion as presented at the hearing to represent Celeste Grynberg d/b/a Grynberg Petroleum Company in this Cause. The Board's vote to deny the Request for Agency Action was unanimous.

NOW, THEREFORE, the Board having fully considered the testimony adduced and the exhibits and arguments presented at the April 28, 1999 hearing, being fully advised, and good cause appearing, hereby makes the following Findings of Fact, Conclusions of Law, and Order:

#### FINDINGS OF FACT

1. Notices of the time, place, and purposes of the April 28, 1999 hearing were mailed to all interested parties by first-class mail, postage prepaid, and were duly published in the Salt Lake Tribune, Deseret News, and the San Juan Record pursuant to the requirements of Utah Administrative Code (hereinafter "U.A.C.") Rule R641-106-100 (1997). Copies of Grynberg's Request for Agency Action were mailed to all interested parties pursuant to U.A.C. Rule R641-104-135.

2. Grynberg is not a corporation or any other form of business entity in any state, but is a d/b/a for Jack J. Grynberg and Celeste C. Grynberg as individuals. Jack J. Grynberg is not an attorney licensed to practice law.

3. On or about November 9, 1998, Grynberg filed its Request for Agency Action ("Request") seeking Board approval of a 50-acre drilling (spacing) unit encompassing certain lands in San Juan County, Utah (hereinafter the "Subject Lands"), more fully described as:

Township 37 South, Range 23 East, S.L.M.

Section 23: S $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$   
Section 24: W $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$   
Section 25: W $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$   
Section 26: N $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$

Attached hereto as Exhibit "A" is a copy of Petral's Exhibit No. 6, as offered and admitted into the record at the hearing, which graphically illustrates the relationship between the Subject Lands, the existing well, and the surrounding leases and sections of land.

4. As proposed, Grynberg's 50-acre drilling (spacing) unit would cross numerous section lines and incorporate portions of four contiguous quarter-quarter sections.

5. Although Grynberg's Request was filed in November 1998, the evidentiary hearing regarding the Request was continued by motion or stipulation of the parties until the Board's April 28, 1999 hearing.

6. Celeste C. Grynberg is the lessee of record of United States Oil and Gas Lease No. UTU-046825, which affects, among other lands, the N $\frac{1}{2}$  of subject Section 23. Celeste C. Grynberg was not present at the April 28, 1999 hearing.

7. Immediately preceding the April 28, 1999 hearing on Grynberg's Request, Jack J. Grynberg, by and through Grynberg's counsel of record, Michael S. Johnson (making a limited appearance on behalf of Grynberg after having previously withdrawn as Grynberg's counsel), orally moved the Board to waive the requirement under U.A.C. Rule R641-102 that parties appearing at hearings before the Board be represented by licensed Utah attorneys (or their

equivalent). Mr. Gynberg's motion was made pursuant to U.A.C. Rule R641-100-400, which allows the Board to deviate from its rules "when good cause appears." The purpose of Mr. Gynberg's motion was to allow Jack Gynberg, an individual, to represent Celeste Gynberg, another individual and the lessee of record of federal lease UTU-046825. The stated bases for Mr. Gynberg's motion included: (1) the federal oil and gas lease held by Celeste Gynberg is marital property that Jack Gynberg deals with as his own; (2) Celeste Gynberg provided Jack Gynberg with a Power-of-Attorney authorizing Mr. Gynberg to represent her interests in this matter; and (3) Celeste Gynberg was excusably unavailable to be present at the April 28, 1999 hearing. After deliberating on Mr. Gynberg's motion, the Board determined that good cause to deviate from its rules had not been shown, and therefore, the Board denied the motion. The Board's vote was not unanimous.

8. After the Board denied Mr. Gynberg's motion, Mr. Johnson reappeared as counsel on behalf of Celeste Gynberg, d/b/a Gynberg Petroleum Company. Based on the motion of the Board, which was seconded and approved, Gynberg was allowed to proceed to the evidentiary hearing on its Request.

9. Petral timely filed a response to Gynberg's Request opposing the formation of the proposed 50-acre drilling (spacing) unit. Petral is a Wyoming limited liability company in good standing, having its principal place of business in Denver, Colorado. Petral is qualified to do business in Utah. Petral is an owner of record of United States Oil and Gas Leases Nos. UTU-041499, which affects the SW $\frac{1}{4}$  and N $\frac{1}{2}$ SE $\frac{1}{4}$  of Section 23 and UTU-041085, which affects, among other Subject Lands, the S $\frac{1}{2}$ SE $\frac{1}{4}$  of Section 23.

10. All of the Subject Lands, and the minerals embraced within those lands, are owned by the United States of America and are currently subject to United States Oil and Gas

Lease No. UTU-041085. The Subject Lands and federal oil and gas lease covering those lands are administered by the United States Department of the Interior, Bureau of Land Management ("BLM"). As the owner of the surface of the Subject Lands, the BLM must approve any surface disturbing uses of those public lands, all of which must conform with federal (and state) environmental statutes and regulations.

11. None of the Subject Lands is covered by an existing spacing order issued by the Board. Accordingly, well locations for the Subject Lands are determined in accordance with U.A.C. Rule R649-3-2. As provided by that rule, each well is to be located in the center of a 40-acre quarter-quarter section with a tolerance of 200 feet in any direction from the center location. Approving the drilling (spacing) unit as proposed would leave certain lands adjacent to the Subject Lands without a legal drilling location unless the Board takes further action. Grynberg's Request does not address this issue.

12. All of Section 23 is subject to Communitization Agreement No. MO49P-84690C dated December 21, 1983. The Communitization Agreement has been approved by the BLM. Both Grynberg and Petral own mineral interests in said Section 23 and both are parties to the Communitization Agreement.

13. Petral operates the Dalmore Federal #1-A (RD) Well (hereinafter the "existing well") located in the NE $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 26. The existing well is the only producing well located within the Subject Lands, and its bottom-hole location is located in close proximity to the southern boundary of the Subject Lands. The existing well was completed in a legal location under the Board's well-siting rules. The existing well went on production in or around April 1998, and has been in continuous production since then. Accordingly, there is approximately one year of production data for the existing well. Grynberg is not an owner or

participant in the existing well, although Petral did provide Grynberg an opportunity to participate in the well.

14. The stratigraphic interval or unit being produced by the existing well is an algal mound feature. Such algal mound features are relatively common in the area near the existing well and Subject Lands. Each algal mound feature or field may be composed of one or more algal mounds, each containing a separate pool.

15. The existing well was originally drilled as a vertical well, which resulted in a dry hole. The existing well was subsequently re-drilled by Petral as a directional well to its current bottom-hole location. In connection with re-entering and re-drilling the original dry hole, Petral, at its own expense, conducted a 3-D seismic survey, a portion of which covers the Subject Lands. Grynberg did not participate in any manner with the acquisition of the 3-D seismic survey, although Petral did provide Grynberg with an opportunity to participate in the survey.

16. At its February 24, 1999 hearing, the Board denied Grynberg's Motion for Order Allowing Production of Documents. Grynberg's motion sought to compel Petral to provide the 3-D seismic survey to Grynberg for the purposes of the evidentiary hearing on Grynberg's Request. Petral's 3-D seismic survey was not admitted as evidence at the April 28, 1999 hearing.

17. Petral has proposed drilling two new wells to be located in the vicinity of the existing well on or near the Subject Lands: the Dalmore Federal #44-23, to be located in the SE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 23; and the Dalmore Federal #11-25, the bottom-hole location of which is to be located in the NW $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 25, outside of the Subject Lands. Both of the proposed wells, if successful, will produce from the same stratigraphic interval or unit as the existing well,

although not necessarily the same pool. Petral has submitted Applications for Permit to Drill ("APD") with the Division for both of the proposed wells.

18. Petral offered Grynberg an opportunity to participate in the proposed Dalmore Federal #44-23 well to be located on lands that are subject to the Communitization Agreement. Grynberg declined to participate in the well.

19. In factual support of its Request, Grynberg offered the following evidence:

- (a) Grynberg's volumetric analysis or drainage area calculation indicating a drainage area of approximately 53 acres for the existing well;
- (b) Grynberg's economic calculations indicating that the expected profit (on a one-well basis) for the production from the pool being drained by the existing well will be approximately \$337,000 and the expected loss (on a three-well basis) if Petral's proposed wells are drilled would be greater than \$812,000; and
- (c) Testimony that similar algal mound fields in the vicinity of the Subject Lands demonstrate an east-to-west orientation of algal mound features.

20. In support of its Request, Grynberg also argued that:

- (a) The existing well is efficiently draining the pool that it is producing;
- (b) The pool being drained by the existing well is 50-acres in areal extent;
- (c) Petral's two proposed wells would penetrate into and drain the pool being drained by the existing well;
- (d) It is unnecessary to drill any additional wells to drain that pool, and therefore, the drilling of additional wells would cause economic waste; and

(e) Drilling additional wells will cause unnecessary ecologic and environmental damage in the area.

21. In opposition to Grynberg's Request, Petral presented its volumetric analysis or drainage area calculation, which indicates a drainage area for the existing well of approximately 34 to 39 acres, depending on the recovery factor used. Petral provided proper evidentiary foundation for the data that it used in its volumetric analysis, and used data from the existing well where possible. Petral offered evidence that similar algal mound features or fields in the area have a tendency to be northwest to southeast trending and are quite narrow. Petral also offered its expert witness' opinion that the existing well will not efficiently and economically drain the proposed 50-acre drilling (spacing) unit, that the proposed unit will not serve to prevent waste or protect correlative rights, and that additional wells are necessary to drain the proposed 50-acre drilling unit.

22. In opposition to the Request, Petral also argued that:

(a) The production data from the existing well does not support approval of the proposed 50-acre drilling (spacing) unit;

(b) Approving the proposed unit essentially would modify the Communitization Agreement into a unit agreement, which would be contrary to the BLM's intentions;

(c) Approving the proposed unit would leave lands adjacent to the Subject Lands without legal drilling locations, requiring further action by the Board, and that notice of such a result had not been provided to the owners of those lands in connection with Grynberg's Request;

(d) Approval of the proposed unit would likely result in a forced-pooling situation because the parties would be unable to resolve the issues involving the sharing of costs for the existing well.

23. In opposition to the Request, the Division provided testimony indicating that the bottom-hole location for the Dalmore-Federal #11-25 well is outside of the Subject Lands, and that the APD for that well has been approved by the Division. The Division also provided its volumetric analysis, which, it was admitted, relied on insufficient production data to establish a reliable estimate of the area being drained by the existing well. In addition, the Division argued that the Request should be denied because (1) the proposed unit is irregular in size and shape and that drilling units should be based on the established convention of using 40-acre blocks of land (standard quarter-quarter sections); (2) the proposed unit will adversely affect the administration of the Communitization Agreement; (3) Petral's proposed wells will allow the orderly development of the resources in the vicinity of the Subject Lands and existing well; and (4) the existing well has been on production for about one year, and therefore, there is limited production data that can be used to predict future production.

24. The BLM also expressed its opposition to the proposed drilling (spacing) unit. The BLM stated that it disagreed with the results of Grynberg's volumetric analysis and that it basically concurred with the results of Petral's volumetric analysis, although, the BLM did not provide any actual computations or explain the assumptions that it used to make its determinations.

25. The Board is not persuaded by Grynberg's evidence or arguments. Grynberg has not shown that the proposed 50-acre drilling (spacing) unit satisfies the criteria specified in Section 40-6-6 of the Utah Code that are necessary to be established by a

preponderance of the evidence before the Board can establish such a drilling (spacing) unit. Furthermore, Grynberg has not shown that establishing the proposed unit will prevent waste or protect correlative rights.

### CONCLUSIONS OF LAW

26. Due and regular notice of the time, place, and purposes of the April 28, 1999 hearing was given to all interested parties in the form and manner and within the time required by law and the Rules and Regulations of the Board. Due and regular notice of the filing of the Request for Agency Action was given to all interested parties in the form and manner and within the time required by law and the Rules and Regulations of the Board.

27. The Board has jurisdiction of the parties and subject matter of this Request for Agency Action pursuant to Sections 40-6-5 and 40-6-6 of the Utah Code, and has the power and authority to make and promulgate the order herein set forth.

28. U.A.C. Rule R641-100-400 provides:

When good cause appears, the Board may permit a deviation from these rules insofar as it may find compliance therewith to be impractical or unnecessary or in the furtherance of justice or the statutory purposes of the Board. Notwithstanding this, in no event may the Board permit a deviation from a rule when such rule is mandated by law.

29. U.A.C. Rule R641-102-100 provides:

A natural person may appear on his or her own behalf and represent himself or herself at hearings before the Board.

30. U.A.C. Rule R641-102-200 provides:

Except as provided in R641-102-100, representation at hearings before the Board will be by attorneys licensed to practice law in the state of Utah or attorneys licensed to practice law in another jurisdiction which meet the rules of the Utah State Bar for practicing law before the courts of the State of Utah.

31. Neither Grynberg nor Jack J. Grynberg established good cause for the Board to deviate from its rule regarding the representation of parties at hearings before the Board.

32. Section 40-6-6 of the Utah Code provides, in relevant part:

(1) The board may order the establishment of drilling units for any pool.

(2) Within each drilling unit, only one well may be drilled for production from the common source of supply . . . .

(3) A drilling unit may not be smaller than the maximum area that can be efficiently and economically drained by one well.

(4) (a) Each drilling unit within a pool shall be of uniform size and shape, unless the board finds that it must make an exception due to geologic, geographic, or other factors.

. . . .

(5) An order of the board that establishes drilling units for a pool shall:

(a) be made upon terms and conditions that are just and reasonable;

(b) include all lands determined by the board to overlay the pool[.]

33. Section 40-6-2(18) of the Utah Code provides:

“Pool” means an underground reservoir containing a common accumulation of oil or gas or both. Each zone of a general structure that is completely separated from any other zone in the structure is a separate pool. “Common source of supply” and “reservoir” are synonymous with “pool.”

34. As the proponent of the proposed 50-acre drilling (spacing) unit, Grynberg is required to demonstrate by the preponderance of the evidence that the proposed unit satisfies the statutory criteria and purposes of the Utah Oil and Gas Conservation Act (the “Act”) regarding the establishment of drilling units. *See e.g., Harken Southwest Corp. v. Board of Oil, Gas and Mining, et al.*, 920 P.2d 1176, 1182 (Utah 1996). Grynberg has failed to meet its burden to show that the establishment of the proposed 50-acre drilling (spacing) unit will satisfy the necessary statutory criteria and purposes of the Act.

## ORDER

Based on the evidence contained in the record and the arguments of counsel,

IT IS THEREFORE ORDERED that:

1. Grynberg's Request for Agency Action is denied.
2. Jack C. Grynberg's motion to represent Celeste Grynberg d/b/a Grynberg

Petroleum Company in this Cause is denied.

3. Pursuant to U.A.C. Rule R641 and Utah Code Ann. § 63-46b-6 to -10 (1997), the Board has considered and decided this matter as a formal adjudication.

4. This Findings of Fact, Conclusion of Law and Order ("Order") is based exclusively on evidence of record in the adjudicative proceeding or on facts officially noted, and constitutes the signed written order stating the Board's decision and the reasons for the decision, all as required by the Utah Administrative Procedures Act, Utah Code Ann. § 63-46b-10, and U.A.C. Rule R641-109.

5. Notice re Right to Seek Judicial Review by the Utah Supreme Court or to Request Board Reconsideration: As required by Utah Code Ann. § 63-46b-10(e) to -10(g) (1997), the Board hereby notifies all parties in interest that they have the right to seek judicial review of this final Board Order in this formal adjudication by filing a timely appeal with the Utah Supreme Court within 30 days after the date that this Order issued. Utah Code Ann. § 63-46b-14(3)(a) and -16 (1997). As an alternative to seeking immediate judicial review, and not as a prerequisite to seeking judicial review, the Board also hereby notifies parties that they may elect to request that the Board reconsider this Order, which constitutes a final agency action of the Board. Utah Code Ann. § 63-46b-13, entitled, "Agency review - Reconsideration," states:

- (1) (a) Within 20 days after the date that an order is issued for which review by the agency or by a superior agency under Section 63-46b-12 is

unavailable, and if the order would otherwise constitute final agency action, any party may file a written request for reconsideration with the agency, stating the specific grounds upon which relief is requested.

(b) Unless otherwise provided by statute, the filing of the request is not a prerequisite for seeking judicial review of the order.

(2) The request for reconsideration shall be filed with the agency and one copy shall be sent by mail to each party by the person making the request.

(3) (a) The agency head, or a person designated for that purpose, shall issue a written order granting the request or denying the request.

(b) If the agency head or the person designated for that purpose does not issue an order within 20 days after the filing of the request, the request for reconsideration shall be considered to be denied.

*Id.* The Board also hereby notifies the parties that U.A.C. Rule R641-110-100, which is part of a group of Board rules entitled, "Rehearing and Modification of Existing Orders," states:

Any person affected by a final order or decision of the Board may file a petition for rehearing. Unless otherwise provided, a petition for rehearing must be filed no later than the 10th day of the month following the date of signing of the final order or decision for which the rehearing is sought. A copy of such petition will be served on each other party to the proceeding no later than the 15th day of that month.

*Id.* See U.A.C. Rule R641-110-200 for the required contents of a petition for rehearing. If there is any conflict between the deadline in Utah Code Ann. § 63-46b-13 (1997) and the deadline in U.A.C. Rule R641-110-100 for moving to rehear this matter, the Board hereby rules that the later of the two deadlines shall be available to any party moving to rehear this matter. If the Board later denies a timely petition for rehearing, the party may still seek judicial review of the Order by perfecting a timely appeal with the Utah Supreme Court within 30 days thereafter.

6. The Board retains continuing jurisdiction over all the parties and over the subject matter of this Cause, except to the extent said jurisdiction may be divested by the filing of a timely appeal to seek judicial review of this Order by the Utah Supreme Court.

7. For all purposes, the Chairman's signature on a faxed copy of this Order shall be deemed the equivalent of a signed original.

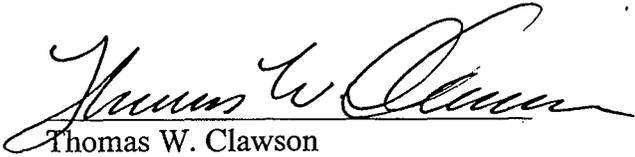
ISSUED this 30 day of July, 1999.

STATE OF UTAH  
BOARD OF OIL, GAS AND MINING

By:   
Thomas B. Faddies, Acting Chairman

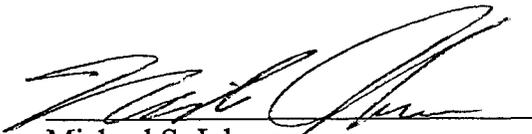
APPROVED AS TO FORM:

VAN COTT, BAGLEY, CORNWALL & McCARTHY



Thomas W. Clawson  
Attorneys for Respondent Petral Exploration, LLC

PRUITT, GUSHEE & BACHTTELL



Michael S. Johnson  
Attorneys for Petitioner Grynberg Petroleum Company

Lisha

**FILED**

JUL 30 1999

SECRETARY, BOARD OF  
OIL, GAS & MINING

**BEFORE THE BOARD OF OIL, GAS AND MINING**

**DEPARTMENT OF NATURAL RESOURCES**

**STATE OF UTAH**

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**IN THE MATTER OF THE REQUEST )**  
**FOR AGENCY ACTION OF )**  
**GRYNBERG PETROLEUM COMPANY )**  
**FOR AN ORDER ESTABLISHING A 50 )**  
**ACRE DRILLING AND SPACING )**  
**UNIT IN SECTIONS 23, 24, 25 AND 26 )**  
**IN TOWNSHIP 37 SOUTH, RANGE 23 )**  
**EAST, SLM, SAN JUAN COUNTY, )**  
**UTAH )**  
**)**  
**)**  
**)**

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**ORDER DENYING  
MOTION FOR ORDER ALLOWING  
PRODUCTION OF DOCUMENTS**

**Docket No. 98-024**

**Cause No. 244-1**

Grynerg Petroleum Company's ("Grynerg") Motion for Order Allowing Production of Documents came on regularly for hearing before the Utah Board of Oil, Gas and Mining (the "Board") on Wednesday, February 24, 1999, at the hour of 10:00 a.m. in the Board Room of the Department of Natural Resources, 1594 West North Temple, Suite 1040A, Salt Lake City, Utah. The following Board members were present at the hearing: Dave D. Lauriski, Chairman; Jay L. Christensen; Raymond Murray; Thomas B. Faddies; Elise L. Erler; W. Allan Mashburn; and Stephanie Cartwright. Lowell P. Braxton, Director, and John Baza, Associate Director of Oil and Gas, were present for the Division of Oil, Gas and Mining (the "Division"). Patrick J. O'Hara and Daniel G. Moquin, Assistant Attorneys General and counsel to the Division and the Board, respectively, were also present. Petitioner and movant Grynerg was represented by Michael S. Johnson of Pruitt, Gushee & Bachtell. Respondent Petral Exploration

LLC ("Petral") was represented by Thomas W. Clawson of Van Cott, Bagley, Cornwall & McCarthy. Anthony R. Meyer, President of Captiva Resources Inc., testified on behalf of Petral. After considering the testimony and arguments received at the February 24, 1999 hearing, the Board denied Grynberg's Motion for Order Allowing Production of Documents.

NOW, THEREFORE, the Board having fully considered the testimony adduced and the arguments presented at the February 24, 1999 hearing, being fully advised, and good cause appearing, hereby makes the following Findings of Fact, Conclusions of Law, and Order:

### FINDINGS OF FACT

1. Notices of the time, place, and purpose of the February 24, 1999 hearing were mailed to all interested parties by first-class mail, postage prepaid, and were duly published in the Salt Lake Tribune, Deseret News, and the San Juan Record pursuant to the requirements of Utah Administrative Code (hereinafter "U.A.C.") Rule R641-106-100 (1997). Copies of Grynberg's Request for Agency Action and Motion for Order Allowing Production of Documents were mailed to all interested parties pursuant to U.A.C. Rules R641-104-135 and R641-105-300, respectively.

2. Grynberg is not a corporation or any other form of business entity in any state, but is a d/b/a for Jack J. Grynberg and Celeste Grynberg as individuals.

3. On or about November 9, 1998, Grynberg filed its Request for Agency Action ("Request") seeking Board approval of a 50-acre drilling (spacing) unit encompassing certain lands in San Juan County, Utah (hereinafter the "Subject Lands"), more fully described as:

Township 37 South, Range 23 East, S.L.M.

Section 23: S $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$

Section 24: W $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$   
Section 25: W $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$   
Section 26: N $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$

4. Petral timely filed a response to Grynberg's Request opposing the formation of the proposed 50-acre drilling and spacing unit. Petral is a Wyoming limited liability company in good standing, having its principal place of business in Denver, Colorado. Petral is qualified to do business in Utah. Petral is an owner of record of United States Oil and Gas Leases Nos. UTU-041499, which affects the SW $\frac{1}{4}$  and N $\frac{1}{2}$ SE $\frac{1}{4}$  of subject Section 23 and UTU-041085, which affects, among other Subject Lands, the S $\frac{1}{2}$ SE $\frac{1}{4}$  of Section 23.

5. Celeste C. Grynberg is the lessee of record of United States Oil and Gas Lease No. UTU-046825, which affects, among other lands, the N $\frac{1}{2}$  of subject Section 23

6. All of the Subject Lands, and the minerals embraced within those lands, are owned by the United States of America and are currently subject to United States Oil and Gas Lease No. UTU-041085. The Subject Lands and the federal oil and gas lease covering those lands are administered by the United States Department of the Interior, Bureau of Land Management ("BLM").

7. All of subject Section 23 is subject to Communitization Agreement No. MO49P-84690C dated December 21, 1983. The Communitization Agreement has been approved and is administered by the BLM. Both Grynberg and Petral own mineral interests in said Section 23 and both are parties to the Communitization Agreement.

8. Petral operates the Dalmore Federal #1-A (RD) Well (hereinafter the "existing well") located in the NE $\frac{1}{4}$ NE $\frac{1}{4}$  of subject Section 26. The existing well is the only producing well located within the Subject Lands. Grynberg is not an owner or participant in the existing well, although Petral did provide Grynberg an opportunity to participate in the well.

9. The stratigraphic interval being produced by the existing well is contained within the Deseret Creek/Ismay Formations. In connection with other Board proceedings, the Board has previous experience regarding that producing interval.

10. The existing well was originally drilled as a vertical well, which resulted in a dry hole. The existing well was subsequently re-entered and re-drilled by Petral as a directional well. In connection with re-entering and re-drilling the original dry hole, Petral, at its own expense, conducted and acquired a 3-D seismic survey over the area near the existing well, a portion of which covers the Subject Lands. Grynberg did not participate in any manner with the acquisition of the 3-D seismic survey, although Petral did provide Grynberg with an opportunity to participate in the survey.

11. The 3-D seismic survey is owned exclusively by Petral, and Petral uses the seismic survey to its competitive advantage with respect to the algal mound play in the Paradox Basin. The 3-D seismic survey is proprietary information that is not otherwise available for sale, trade, or use within the industry. Petral has protected, and continues to protect the seismic survey's confidential and proprietary nature by taking whatever reasonable and necessary steps that are required to protect its secrecy.

12. A seismic survey obtained at the owner's expense is proprietary information that is entitled to trade secret protection; Petral's 3-D seismic survey constitutes such a trade secret. Grynberg admitted that the 3-D seismic survey is confidential and proprietary information that constitutes a trade secret.

13. Petral has proposed drilling two new wells to be located in the vicinity of the existing well on or near the Subject Lands: the Dalmore Federal #44-23, to be located in the SE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 23; and the Dalmore Federal #11-25, the bottom-hole location of which is to

be located in the NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> of Section 25. Both of the proposed wells, if successful, are intended to produce from the same stratigraphic interval as the existing well, although not necessarily the same pool. Petral has submitted Applications for Permit to Drill ("APD") with the Division for both of the proposed wells.

14. Petral offered Grynberg an opportunity to participate in the proposed Dalmore Federal #44-23 well to be located on lands that are subject to the existing Communitization Agreement. In connection with that offer, Petral allowed Jack J. Grynberg to view limited portions of Petral's 3-D seismic survey at Petral's offices. Grynberg was not allowed to copy or remove the 3-D seismic survey from Petral's offices. Petral did not indicate to Grynberg that it intended to waive the confidential nature of its seismic data. Grynberg declined to participate in the well.

15. In its Request, Grynberg states:

Petral has conducted and completed a 3-D seismic study of the subject lands. Jack J. Grynberg, a registered petroleum engineer, was allowed to view the results of this study on behalf of Petitioner in July of this year at Petral's offices.

Based on his review of Petral's seismic data, Mr. Grynberg determined that the existing Federal #1-A well drains [the Subject Lands], all in the same producing horizon. Petral's 3-D seismic data therefore demonstrates the existence of a pool underlying the 50 acres which comprise the subject lands.

16. Grynberg requested Petral to provide the 3-D seismic survey to Grynberg for the purposes of the public hearing on Grynberg's Request. Petral refused to provide the seismic survey on the basis that the 3-D seismic survey is propriety and confidential information that is owned exclusively by Petral.

17. To compel Petral to provide the 3-D seismic survey to Grynberg, Grynberg filed with the Board a Motion for Order Allowing Production of Documents (the

“Motion”). In response to the Motion, Petral filed its Memorandum in Opposition to Petitioner’s Motion Seeking Discovery.

18. In its Motion, Grynberg states:

After submitting an Authority For Expenditure (“AFE”) to Petitioner soliciting Petitioner’s participation in the drilling of the Dalmore Federal #44-23 well to be located in the SE¼ of Section 23, Township 37 South, Range 23 East, SLM, Petral allowed Jack Grynberg, a petroleum engineer, to review on behalf of Petitioner the results of Petral’s 3D seismic study of the acreage at issue. Mr. Grynberg’s review of this 3D seismic data forms the scientific underpinning of Petitioner’s Request for Agency Action in this case, and such data is therefore of the utmost relevance. By allowing Mr. Grynberg to review the 3D seismic data, Petral waived any claim of privilege or confidentiality it had with respect to such data vis-a-vis Mr. Grynberg.

19. By stipulation, the parties agreed that Grynberg’s Motion would be heard and argued at the Board’s February 24, 1999 hearing.

20. At the February 24, 1999 hearing, Grynberg essentially repeated the assertions contained in its Request and Motion, including that the 3-D seismic survey is discoverable despite its trade secret status, and that the confidentiality of the seismic could be protected under a suitable protective order. Grynberg also argued that the 3-D seismic survey is the most direct and best evidence of the existence of the claimed pool and that the information is necessary to the presentation of its case.

21. Grynberg has not shown that Petral’s 3-D seismic data is necessary to demonstrate the existence, nature, or areal extent of an isolated pool underlying Grynberg’s proposed 50-acre drilling (spacing) unit.

22. Grynberg has not shown that it cannot acquire its own 3-D seismic survey.

## CONCLUSIONS OF LAW

23. Due and regular notice of the time, place, and purpose of the February 24, 1999 hearing was given to all interested parties in the form and manner and within the time required by law and the Rules and Regulations of the Board. Due and regular notice of the filing of the Request for Agency Action and Grynberg's Motion for Order Allowing Production of Documents was given to all interested parties in the form and manner and within the time required by law and the Rules and Regulations of the Board.

24. The Board has jurisdiction of the parties and subject matter of this Request for Agency Action pursuant to Sections 40-6-5 and 40-6-6 of the Utah Code, and has the power and authority to make and promulgate the order herein set forth.

25. U.A.C. Rule R641-109-200 requires that the Chairman of the Board sign an order on any matter no later than 30 days following the end of the hearing on that matter. Board's counsel was requested to prepare the order regarding the Board's decision at the February 24, 1999 hearing. Due to the change of Board counsel after the February 24, 1999 hearing, Board's counsel was unable to prepare the order. At the Board's April 28, 1999 hearing, counsel for Petral was asked to prepare the proposed findings of fact, conclusions of law, and orders for the Board's decisions at the February 24, 1999 hearing and the April 28, 1999 hearing. Based on the stipulation of the parties, the Board extended the time for the preparation of the draft order memorializing the Board's decision in this Cause until June 11, 1999. U.A.C. Rule R641-100-400 provides that, for good cause appearing, the Board may deviate from its Rules of Practice and Procedure. The issuance and entry of this order, in that it is an interlocutory order involving only discovery matters, was not a prerequisite for Grynberg to proceed to the hearing on its Request, which, based on Grynberg's Motion for Continuance, was fully heard at the

Board's April 28, 1999 regularly scheduled hearing. Therefore, the entry of this Order within the time frame specified in Rule R641-109-200 was unnecessary.

26. Pursuant to Section 63-46b-7(1) of the Utah Code and U.A.C. Rule R641-108-900, discovery in formal adjudicative proceedings before the Board is allowed on motion and for good cause shown.

27. Pursuant to Section 63-46b-8(1)(b)(ii) of the Utah Code and U.A.C. Rule R641-108-202, the Board shall exclude evidence that is privileged in the courts of Utah. Trade secrets are protected under Utah law, *see e.g., J & K Computer Systems, Inc. v. Parrish*, 642 P.2d 732, 735 (Utah 1982), and thus, trade secrets are subject to a limited or qualified evidentiary privilege. *See e.g., James J. Watson, Annotation, "Discovery of Trade Secret in State Court Action,"* 75 A.L.R. 4th 1009, 1015 (1990) (hereinafter "Watson, Discovery of Trade Secret").

28. Because Petral's 3-D seismic survey constitutes a trade secret, it is protected from discovery in a formal adjudicative proceeding before the Board by a qualified evidentiary privilege under Utah law.

29. In the context of a motion filed pursuant to U.A.C. Rule R641-108-900, the party seeking disclosure of a trade secret must demonstrate that (1) the evidence sought is relevant or material and (2) necessary to the presentation of the party's case. *See generally* Watson, Discovery of Trade Secret, at 1016, 1028-32. *See also* *Bridgestone/Firestone, Inc. v. Superior Court*, 9 Cal.Rptr.2d 709, 713 (Cal. Ct. App. 1 Dist. 1992); *Rare Coin-It, Inc. v. I.J.E., Inc.*, 625 So.2d 1277, 1278-79, (Fla. Dist. Ct. App. 3d 1993). In addition, the Board may consider whether the proprietary evidence being sought is available from other sources. *See generally* Watson, Discovery of Trade Secret, at 1032-34. *See also* *Curtis v. Complete Foam Insul. Corp.*, 498 N.Y.S.2d 216, 217 (N.Y. App. Div. 3d 1986). Under the circumstances

presented by Grynberg's Request for Agency Action, the Board is persuaded that all three factors must be established by the proponent of discovery to make the requisite showing of good cause.

30. While trade secrets, such as Petral's 3-D seismic survey, are subject to a qualified privilege, and therefore, may be obtained by discovery upon a proper showing of good cause, Grynberg's arguments are unpersuasive, and therefore, Grynberg failed to carry its burden to show good cause why the Board should order Petral to provide its 3-D seismic survey to Grynberg in this Cause.

31. Section 40-6-6 of the Utah Code provides, in part:

(1) The board may order the establishment of drilling units for any pool.

(2) Within each drilling unit, only one well may be drilled for production from the common source of supply . . . .

(3) A drilling unit may not be smaller than the maximum area that can be efficiently and economically drained by one well.

. . . .

(5) An order of the board that establishes drilling units for a pool shall:

. . . .

(b) include all lands determined by the board to overlay the pool[.]

32. Section 40-6-2(18) of the Utah Code provides:

"Pool" means an underground reservoir containing a common accumulation of oil or gas or both. Each zone of a general structure that is completely separated from any other zone in the structure is a separate pool. "Common source of supply" and "reservoir" are synonymous with "pool."

33. Granting Grynberg's Request for Agency Action requires that the Board determine, among other facts, that the proposed 50-acre unit overlays a pool that will be efficiently and economically drained by one well. For the Board to make such determinations, it is necessary that the proponent of the drilling unit demonstrate by a preponderance of the evidence the existence, nature, and areal extent of the common accumulation of hydrocarbons

contained in the producing stratigraphic interval or unit to be spaced. The Board is not persuaded by Grynberg's arguments, and therefore, Grynberg has not shown that the production of Petral's trade secrets in this Cause is necessary for the Board to make the factual determinations as required by Grynberg's Request for Agency Action.

34. Because Grynberg has not made the requisite showing, the Board declines to consider the issues regarding a protective order regarding Petral's trade secrets.

### ORDER

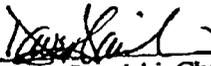
Based on the evidence contained in the record and the arguments of counsel,

IT IS THEREFORE ORDERED that:

1. Grynberg's Motion for an Order Allowing Production of Documents is denied.
2. The requirement in Rule R641-109-200 regarding the signing and entry of the Order within 30 days of the hearing in this matter (involving Grynberg's Motion for Order Allowing Production of Documents) is suspended.
3. Pursuant to U.A.C. Rule R641 and Utah Code Ann. § 63-46b-6 to -10 (1997), the Board has considered and decided this matter as a formal adjudication.
4. This Order is based exclusively on evidence of record in the adjudicative proceeding or on facts officially noted, and constitutes the signed written order stating the Board's decision and the reasons for the decision, all as required by the Utah Administrative Procedures Act, Utah Code Ann. § 63-46b-10, and U.A.C. Rule R641-109.
5. For all purposes, the Chairman's signature on a faxed copy of this Order shall be deemed the equivalent of a signed original.

ISSUED this 30<sup>th</sup> day of July, 1999.

STATE OF UTAH  
BOARD OF OIL, GAS AND MINING

By:   
Dave D. Lauriski, Chairman

APPROVED AS TO FORM:

VAN COTT, BAGLEY, CORNWALL & McCARTHY

  
Thomas W. Clawson  
Attorneys for Respondent Petral Exploration, LLC

PRUITT, GUSHEE & BACHTELL

  
Michael S. Johnson  
Attorneys for Petitioner Grynberg Petroleum Company

COMMUNITIZATION AGREEMENTS  
UTAH STATE OFFICE  
BY LOCATION

| COMM AGREEMENT NO. | CRS NUMB. | OPERATOR   | ACRES      | SEC            | DESCRIP. | SEC | TWN | RNG | EFFECTIVE DATE | COUNTY   | FORMATION  |
|--------------------|-----------|--|------------|----------------|----------|-----|-----|-----|----------------|----------|------------|
| UTU77085           | UTU77085  | ANADARKO PETROLEUM CORP  | 160.000000 | NW             |          | 8   | 14S | 10E | 01/02/98       | CARBON   | FERRON     |
| UTU60734           | UTU60734  | BEARTOOTH OIL & GAS CO   | 320.000000 | E2             |          | 30  | 15S | 23E | 10/14/82       | UINTAH   | DKOT-MRSN  |
| CR-195             | UTU60758  | BEARTOOTH OIL & GAS CO   | 320.240000 | N2             |          | 31  | 15S | 23E | 06/01/82       | UINTAH   | DKOT       |
| NRM-1036           | UTU60795  | BEARTOOTH OIL & GAS CO   | 320.000000 | E2             |          | 11  | 16S | 24E | 09/01/76       | GRAND    | BCKR       |
| M049P-84701C       | UTU60792  | NORTHSTAR GAS COMPANY, INC                                     | 320.000000 | E2             |          | 35  | 16S | 24E | 11/01/79       | GRAND    | DKOT-MRSN  |
| M049P-84700C       | UTU60791  | BEARTOOTH OIL & GAS CO   | 274.690000 | IRR            |          | 7   | 16S | 25E | 12/13/82       | GRAND    | DKOT-MRSN  |
| UT060P49-84C719    | UTU60845  | BEARTOOTH OIL & GAS CO   | 320.000000 | E2             |          | 8   | 16S | 25E | 09/28/83       | GRAND    | DKOT-MRSN  |
| NW-115             | UTU60818  | ENOGEX EXPLORATION CORP  | 320.000000 | W2             |          | 11  | 16S | 25E | 03/03/65       | GRAND    | DKOT       |
| CR-94              | UTU60777  | LONE MOUNTAIN PROD CO  | 320.000000 | N2             |          | 14  | 16S | 25E | 01/01/80       | GRAND    | DKOT       |
| CR-48              | UTU60773  | LONE MOUNTAIN PROD CO  | 280.000000 | SENE, W2NE, SE |          | 28  | 16S | 25E | 06/01/80       | GRAND    | DKOT-MRSN  |
| UTU73963           | UTU73963  | LONE MOUNTAIN PROD CO  | 320.000000 | W2             |          | 28  | 16S | 25E | 03/07/83       | GRAND    | DKOT-MRSN  |
| UT060P49-84C710    | UTU60844  | LONE MOUNTAIN PROD CO  | 320.000000 | W2             |          | 29  | 16S | 25E | 12/01/83       | GRAND    | DKOT-MRSN  |
| UT060P49-85C688    | UTU60846  | LONE MOUNTAIN PROD CO  | 320.000000 | E2             |          | 29  | 16S | 25E | 08/01/83       | GRAND    | DKOT       |
| CR-173             | UTU60750  | LONE MOUNTAIN PROD CO  | 310.140000 | N2             |          | 30  | 16S | 25E | 03/01/82       | GRAND    | DKOT       |
| M049P-84696C       | UTU60790  | LONE MOUNTAIN PROD CO  | 310.260000 | S2             |          | 30  | 16S | 25E | 01/10/83       | GRAND    | DKOT       |
| CR-92              | UTU60776  | NORTHSTAR GAS COMPANY, INC                                     | 300.880000 | W2             |          | 31  | 16S | 25E | 01/01/80       | GRAND    | DKOT-MRSN  |
| M049P-84706C       | UTU60794  | BEARTOOTH OIL & GAS CO   | 320.000000 | S2             |          | 33  | 16S | 25E | 08/08/82       | GRAND    | DKOT       |
| CR-38              | UTU60769  | LONE MOUNTAIN PROD CO  | 320.000000 | W2             |          | 34  | 16S | 25E | 06/23/80       | GRAND    | DKOT-MRSN  |
| CR-40              | UTU60771  | LONE MOUNTAIN PROD CO  | 320.000000 | E2             |          | 34  | 16S | 25E | 06/17/80       | GRAND    | DKOT       |
| CR-41              | UTU60772  | LONE MOUNTAIN PROD CO  | 320.000000 | S2             |          | 35  | 16S | 25E | 06/16/80       | GRAND    | DKOT-MRSN  |
| UT06049P-84C727    | UTU60843  | CSV OIL EXPLORATION CO   | 240.000000 | S2NW, SW       |          | 31  | 16S | 26E | 02/08/81       | GRAND    | DKOT-MRSN  |
| UTU70408           | UTU70408  | CSV OIL EXPLORATION CO   | 240.000000 | S2NE, SE       |          | 31  | 16S | 26E | 09/09/92       | GRAND    | DKOT-MRSN  |
| UTU73965           | UTU73965  | TEXACO EXPLOR & PROD INC.                                      | 160.000000 | SE             |          | 10  | 17S | 08E | 01/04/95       | EMERY    | FRRN       |
| CR-109             | UTU60742  | LONE MOUNTAIN PROD CO  | 320.000000 | W2             |          | 15  | 17S | 23E | 07/01/81       | GRAND    | DKOT       |
| CR-222             | UTU60764  | NORTHSTAR GAS COMPANY, INC                                     | 320.000000 | S2             |          | 4   | 17S | 24E | 08/01/80       | GRAND    | DKOT-MRSN  |
| UT060P49-85C711    | UTU60850  | J.C. THOMPSON  | 360.550000 | W2             |          | 6   | 17S | 24E | 06/01/85       | GRAND    | DKOT-MRSN  |
| CR-161             | UTU60745  | LONE MOUNTAIN PROD CO  | 320.000000 | N2             |          | 11  | 17S | 24E | 01/01/81       | GRAND    | MRSN, DKOT |
| CR-176             | UTU60752  | LONE MOUNTAIN PROD CO  | 320.000000 | S2             |          | 12  | 17S | 24E | 01/08/81       | GRAND    | DKOT       |
| UT060P49-88C684    | UTU60860  | CREDO PETROLEUM CORP   | 160.000000 | NE             |          | 13  | 17S | 24E | 10/07/87       | GRAND    | DKOT-MRSN  |
| UT060P49-86C702    | UTU60852  | LONE MOUNTAIN PROD CO  | 320.000000 | S2             |          | 14  | 17S | 24E | 09/01/82       | GRAND    | MRSN       |
| CR-226             | UTU60766  | LONE MOUNTAIN PROD CO  | 240.000000 | S2NE, SE       |          | 15  | 17S | 24E | 11/01/82       | GRAND    | DKOT       |
| UT060P49-85C694    | UTU60848  | BEARTOOTH OIL & GAS CO   | 503.520000 | N2, N2S2       |          | 1   | 17S | 25E | 04/30/84       | GRAND    | DKOT-MRSN  |
| 14-08-0001-7474    | UTU60735  | BURTON W. HANCOCK  | 499.440000 | IRR            |          | 2   | 17S | 25E | 06/30/59       | GRAND    | SUR-ENTR   |
| NRM-1235           | UTU60800  | BURTON W. HANCOCK  | 499.620000 | IRR            |          | 4   | 17S | 25E | 11/01/76       | GRAND    | DKOT-ENTR  |
| 14-08-001-4727     | UTU60737  | CSV OIL EXPLORATION CO   | 480.000000 | E2W2, E2       |          | 10  | 17S | 25E | 07/31/57       | GRAND    | DKOT       |
| NRM-1689           | UTU60806  | LONE MOUNTAIN PROD CO  | 359.900000 | N2             |          | 5   | 17S | 26E | 03/01/79       | GRAND    | DKOT       |
| UT060P49-85C693    | UTU60847  | BEARTOOTH OIL & GAS CO   | 501.840000 | N2, N2S2       |          | 6   | 17S | 26E | 11/01/84       | GRAND    | DKOT-MRSN  |
| NRM-1641           | UTU60805  | PETRO-X CORPORATION  | 640.000000 | ALL            |          | 26  | 20S | 21E | 03/01/79       | GRAND    | DKOT       |
| NRM-1546           | UTU60803  | GENERAL MINERLS CORP   | 160.000000 | SE             |          | 9   | 20S | 23E | 01/01/77       | GRAND    | MRSN       |
| NRM-1188           | UTU60796  | GENERAL MINERALS CORP  | 160.000000 | SW             |          | 10  | 20S | 23E | 10/01/76       | GRAND    | BRSE       |
| NRM-1209           | UTU60797  | GENERAL MINERALS CORP  | 160.000000 | NW             |          | 10  | 20S | 23E | 10/01/76       | GRAND    | BRSE       |
| NW-155             | UTU60823  | UNIVERSAL RESOURCES CORP                                       | 321.100000 | W2             |          | 3   | 21S | 07E | 02/01/66       | EMERY    | FRRN       |
| 14-08-0001-7771    | UTU60736  | UNIVERSAL RESOURCES CORP                                       | 321.150000 | E2             |          | 4   | 21S | 07E | 08/01/61       | EMERY    | FRRN       |
| UTU67000           | UTU67000  | WALTER D. BROADHEAD  | 80.000000  | SENW, NESW     |          | 7   | 21S | 24E | 05/08/90       | GRAND    | DKOT-MRSN  |
| NRM-1879           | UTU60810  | INTEGRITY FINANCIAL <sup>Daler Oil</sup> <sub>Properties</sub> | 320.000000 | N2             | 8-20-98  | 17  | 26S | 07E | 03/01/80       | EMERY    | MNKP       |
| SRM-1212           | UTU60838  | UNION OIL COMPANY OF CA  | 640.000000 | IRR            |          | 36  | 29S | 23E | 07/01/77       | SAN JUAN | MSSP       |
| M049P-84690C       | UTU60789  | DJ SIMMONS COMPANY LP  | 640.000000 | ALL            |          | 23  | 37S | 23E | 12/21/83       | SAN JUAN | ISMY       |
| UT-000232          | UTU60839  | P&M PETROLEUM MGMT, LLC  | 80.000000  | S2NW           |          | 25  | 40S | 22E | 08/01/83       | SAN JUAN | ISMY-DCEK  |

## REQUEST FOR DIRECTIONAL DRILLING PERMIT

Petral Exploration LLC requests a permit for a directional well per regulation R649-3-11.

The Petral Exploration Dalmore-Federal #44-23 will be drilled from a new drill site at a surface location 230 ft FSL and 280 ft FEL Section 23 T37S R23E, San Juan County, Utah, north-northwest approximately 298 ft at an azimuth of 322 degrees to a Bottom Hole Location 598 ft FSL and 569 ft FEL Section 23 T37S R23E. At the Upper Ismay reservoir horizon, the well bore will be 464 ft FNL and 464 ft FEL of Section 23.

The well must be directionally drilled because the topography and cultural resources (archaeology) prevent the drilling of a vertical hole.

No potentially hydrocarbon bearing beds will be penetrated by the well bore until it has been drilled more than 460 feet beyond the lease line. The bore hole location at the top of the Upper Ismay reservoir is legal, that is, it does not require an exception location.

|           |                         |             |                    |
|-----------|-------------------------|-------------|--------------------|
| Operator: | Petral Exploration LLC  | Lease Name: | Dalmore-Federal    |
|           |                         | Lease No.:  | Federal UTU-041085 |
| Address:  | c/o ENMARC, Inc.        | Well No.:   | 44-23              |
| (Agent)   | P.O. Box 7638           | API:        | (to be assigned)   |
|           | Loveland, CO 80537      |             |                    |
|           | (970) 663-7576          |             |                    |
|           | (303) 825-7061 (Denver) |             |                    |

|                 |             |             |                |
|-----------------|-------------|-------------|----------------|
| Reservoir Name: | Upper Ismay | Field Name: | Deadman Canyon |
|                 |             | County:     | San Juan, Utah |

### Working Interest Owners in the Surface Location (SE SE Sec. 23) are:

|                            |                         |                           |
|----------------------------|-------------------------|---------------------------|
| Petral Exploration LLC     | Dalmore LLC             | Grynberg Petroleum        |
| 1700 Lincoln Street, #4750 | 2597 East Bridger Blvd. | 5000 S. Quebec, Suite 500 |
| Denver, CO 80203           | Sandy, UT 84093         | Denver, CO 80237          |
| WI 43.75%                  | WI 6.25%                | WI 50.00%                 |

All entities are participants in the well by Communitization and Joint Operating Agreements. Letters of non-opposition are not required.

### Working interest owners in the Bottom Hole Location (SE SE Sec. 23) are:

|                            |                         |                           |
|----------------------------|-------------------------|---------------------------|
| Petral Exploration LLC     | Dalmore LLC             | Grynberg Petroleum        |
| 1700 Lincoln Street, #4750 | 2597 East Bridger Blvd. | 5000 S. Quebec, Suite 500 |
| Denver, CO 80203           | Sandy UT 84093          | Denver, CO 80237          |
| WI 43.75%                  | WI 6.25%                | WI 50.00%                 |

All entities are participants in the well by Communitization and Joint Operating Agreements. Letters of non-opposition are not required.

The plat required by Utah regulation R649-3-11 and the proposed directional drilling plan are attached.

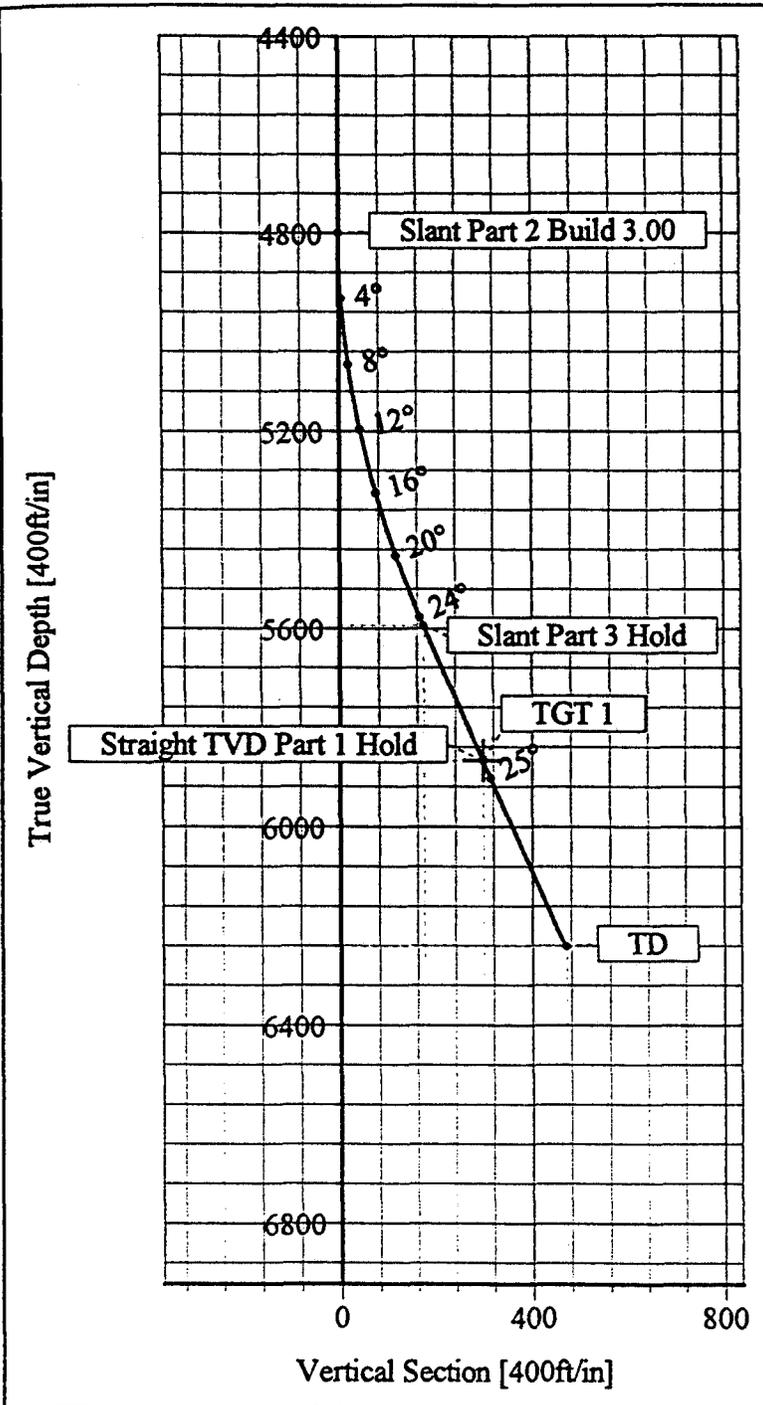


Scientific  
Drilling

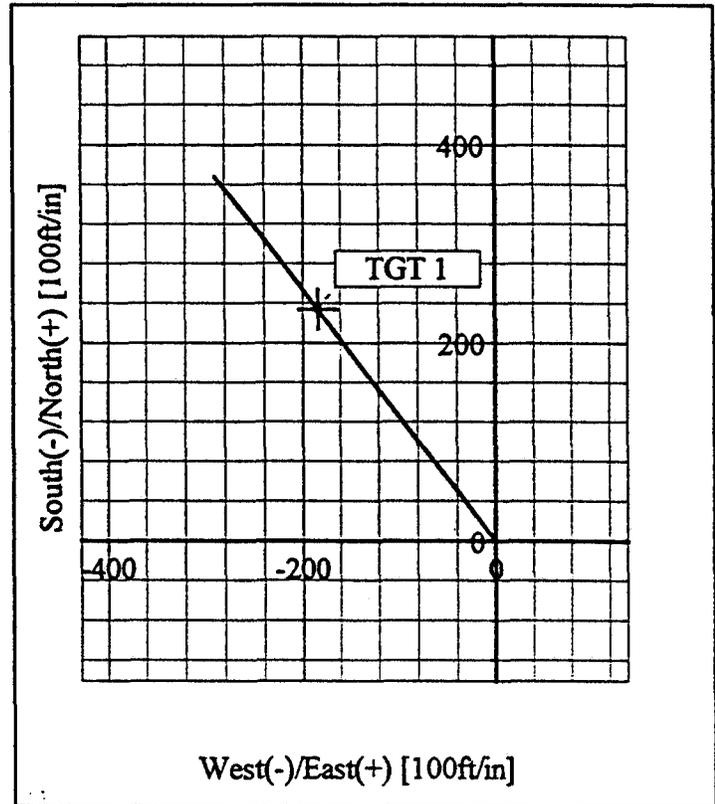
Petra Exploration LLC  
Field: San Juan County, UT  
Site: Dalmora #44-23  
Well: #44-23  
Wellbore: OH Original Hole  
Plan: Plan #1



All Angles Relative  
To Local North  
True North: 0.00  
Magnetic North: 12.31



PLAN OF VIEW SEC. 321.82 AZIMUTH



Plan: Plan #1 (#44-23/OH)  
Created By: Judi Moore Date: 8/12/98  
Checked: B.C. Date: 8/12/98  
Approved: \_\_\_\_\_ Date: \_\_\_\_\_

**TARGET DETAILS**

| No. | TVD     | N/S    | E/W     | Target |
|-----|---------|--------|---------|--------|
| 1   | 5967.00 | 234.00 | -184.00 | TGT 1  |

**SECTION DETAILS**

| Sec | MD      | Inc   | As     | TVD     | N/S    | E/W     | DLog | IFace | VSec   | Target |
|-----|---------|-------|--------|---------|--------|---------|------|-------|--------|--------|
| 1   | 0.00    | 0.00  | 321.82 | 0.00    | 0.00   | 0.00    | 0.00 | 0.00  | 0.00   |        |
| 2   | 4800.03 | 0.00  | 321.82 | 4800.03 | 0.00   | 0.00    | 0.00 | 0.00  | 0.00   |        |
| 3   | 5619.04 | 24.57 | 321.82 | 5594.16 | 135.94 | -106.89 | 3.00 | 0.00  | 172.90 |        |
| 4   | 5919.04 | 24.57 | 321.82 | 5967.00 | 234.00 | -184.00 | 0.00 | 0.00  | 297.68 | TGT 1  |
| 5   | 6329.17 | 24.57 | 321.82 | 6240.00 | 368.06 | -289.41 | 0.00 | 0.00  | 468.22 |        |



# Scientific Drilling International Planning Report

|                                 |                            |                                  |         |
|---------------------------------|----------------------------|----------------------------------|---------|
| Company: Petral Exploration LLC | Date: 8/12/98              | Time: 14:51:04                   | Page: 1 |
| Field: San Juan County, UT      | Co-ordinate(NE) Reference: | Site: Dalmore #44-23, True North |         |
| Site: Dalmore #44-23            | Vertical (TVD) Reference:  | Field: Mean Sea Level            |         |
| Well: #44-23                    | Section (VS) Reference:    | Slot (0.0E,0.0N,321.8Az)         |         |
| Wellpath: OH Original hole      | Plan:                      | Plan #1                          |         |

|                             |                             |                |
|-----------------------------|-----------------------------|----------------|
| Field: San Juan County, UT  | Local Coordinate Reference: | Site Centre    |
|                             | Location of Field Centre:   | N/A            |
|                             | Field Centre Map Easting:   | ft             |
|                             | Field Centre Map Northing:  | ft             |
| Map Projection & Zone:      | Direction of Local North:   | True           |
| Ellipsoid:                  | Local Vertical Reference:   | Wellpath Datum |
| Field Datum: Mean Sea Level | Geomagnetic Model:          | IGRF95         |

Site: Dalmore #44-23  
 SHL SEC.23,T37S,R23E 230'FSL, 280'FEL  
 PBHL SEC.23,T37S,R23E 464'FSL, 464'FEL

|              |      |           |  |
|--------------|------|-----------|--|
| Site Centre: | ft E | Latitude  |  |
|              | ft N | Longitude |  |

Site Water Depth: 0.0 ft

Magnetic Declination: 12.31 deg  
 Grid Convergence: 0.00 deg

Measured Depths Referenced To: Mean Sea Level      0.0 ft above      Mean Sea Level

Well: #44-23

|                   |             |               |         |
|-------------------|-------------|---------------|---------|
| Originating From: | 0.0 ft +N-S | Map Easting : | 0.00 ft |
|                   | 0.0 ft +E-W | Map Northing: | 0.00 ft |

Wellpath: OH Original hole

|                                  |             |  |
|----------------------------------|-------------|--|
| Origin of Vertical Section: Slot | 0.0 ft +N-S |  |
|                                  | 0.0 ft +E-W |  |

Direction of Vertical Section: 321.82 deg

|                |                        |
|----------------|------------------------|
| Plan: Plan #1  | Date Composed: 7/30/98 |
|                | Version: 1             |
| Principal: Yes | Locked: No             |

**Plan Section Information**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | DLS<br>d/100ft | Build<br>d/100ft | Turn<br>d/100ft | TFO<br>deg | Target |
|----------|-------------|-------------|-----------|-------------|-------------|----------------|------------------|-----------------|------------|--------|
| 0.0      | 0.00        | 321.82      | 0.0       | 0.0         | 0.0         | 0.00           | 0.00             | 0.00            | 0.00       |        |
| 4800.0   | 0.00        | 321.82      | 4800.0    | 0.0         | 0.0         | 0.00           | 0.00             | 0.00            | 0.00       |        |
| 5619.0   | 24.57       | 321.82      | 5594.2    | 135.9       | -106.9      | 3.00           | 3.00             | 0.00            | 0.00       |        |
| 5919.0   | 24.57       | 321.82      | 5867.0    | 234.0       | -184.0      | 0.00           | 0.00             | 0.00            | 0.00       | TGT 1  |
| 6329.2   | 24.57       | 321.82      | 6240.0    | 368.1       | -289.4      | 0.00           | 0.00             | 0.00            | 0.00       |        |

**Section 1 : Slant Part 1 Hold**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>d/100ft | Build<br>d/100ft | Turn<br>d/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|----------------|------------------|-----------------|------------|
| 0.0      | 0.00        | 321.82      | 0.0       | 0.0         | 0.0         | 0.0      | 0.00           | 0.00             | 0.00            | 0.00       |
| 4600.0   | 0.00        | 321.82      | 4600.0    | 0.0         | 0.0         | 0.0      | 0.00           | 0.00             | 0.00            | 0.00       |
| 4700.0   | 0.00        | 321.82      | 4700.0    | 0.0         | 0.0         | 0.0      | 0.00           | 0.00             | 0.00            | 0.00       |
| 4800.0   | 0.00        | 321.82      | 4800.0    | 0.0         | 0.0         | 0.0      | 0.00           | 0.00             | 0.00            | 0.00       |

**Section 2 : Slant Part 2 Build 3.00**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>d/100ft | Build<br>d/100ft | Turn<br>d/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|----------------|------------------|-----------------|------------|
| 4900.0   | 3.00        | 321.82      | 4900.0    | 2.1         | -1.6        | 2.6      | 3.00           | 3.00             | 0.00            | 0.00       |
| 5000.0   | 6.00        | 321.82      | 4999.6    | 8.2         | -6.5        | 10.5     | 3.00           | 3.00             | 0.00            | 0.00       |
| 5100.0   | 9.00        | 321.82      | 5098.8    | 18.5        | -14.5       | 23.5     | 3.00           | 3.00             | 0.00            | 0.00       |



# Scientific Drilling International Planning Report

Company: Petral Exploration LLC  
 Field: San Juan County, UT  
 Site: Daimore #44-23  
 Well: #44-23  
 Wellpath: OH Original hole

Date: 8/12/98 Time: 14:51:04 Page: 2  
 Co-ordinates(NE) Reference: Site: Daimore #44-23, True North  
 Vertical (TVD) Reference: Field: Mean Sea Level  
 Section (VS) Reference: Slot (0.0E,0.0N,321.8Azi)  
 Plan #1

**Section 2 : Slant Part 2 Build 3.00**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N-S<br>ft | +E-W<br>ft | VS<br>ft | DLS<br>d/100ft | Build<br>d/100ft | Turn<br>d/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|------------|------------|----------|----------------|------------------|-----------------|------------|
| 5200.0   | 12.00       | 321.82      | 5197.1    | 32.8       | -25.8      | 41.7     | 3.00           | 3.00             | 0.00            | 0.00       |
| 5300.0   | 15.00       | 321.82      | 5294.3    | 51.2       | -40.2      | 65.1     | 3.00           | 3.00             | 0.00            | 0.00       |
| 5400.0   | 18.00       | 321.82      | 5390.2    | 73.5       | -57.8      | 93.5     | 3.00           | 3.00             | 0.00            | 0.00       |
| 5500.0   | 21.00       | 321.82      | 5484.4    | 99.7       | -78.4      | 126.8    | 3.00           | 3.00             | 0.00            | 0.00       |
| 5600.0   | 24.00       | 321.82      | 5576.8    | 129.8      | -102.1     | 165.1    | 3.00           | 3.00             | 0.00            | 0.00       |
| 5619.0   | 24.57       | 321.82      | 5594.2    | 135.9      | -106.9     | 172.9    | 3.00           | 3.00             | 0.00            | 0.00       |

**Section 3 : Slant Part 3 Hold**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N-S<br>ft | +E-W<br>ft | VS<br>ft | DLS<br>d/100ft | Build<br>d/100ft | Turn<br>d/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|------------|------------|----------|----------------|------------------|-----------------|------------|
| 5700.0   | 24.57       | 321.82      | 5667.8    | 162.4      | -127.7     | 206.6    | 0.00           | 0.00             | 0.00            | 180.00     |
| 5800.0   | 24.57       | 321.82      | 5758.7    | 195.1      | -153.4     | 248.2    | 0.00           | 0.00             | 0.00            | 180.00     |
| 5900.0   | 24.57       | 321.82      | 5849.7    | 227.8      | -179.1     | 289.8    | 0.00           | 0.00             | 0.00            | 180.00     |
| 5919.0   | 24.57       | 321.82      | 5867.0    | 234.0      | -184.0     | 297.7    | 0.00           | 0.00             | 0.00            | 180.00     |

**Section 4 : Straight TVD Part 1 Hold**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N-S<br>ft | +E-W<br>ft | VS<br>ft | DLS<br>d/100ft | Build<br>d/100ft | Turn<br>d/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|------------|------------|----------|----------------|------------------|-----------------|------------|
| 6000.0   | 24.57       | 321.82      | 5940.6    | 260.5      | -204.8     | 331.3    | 0.00           | 0.00             | 0.00            | 180.00     |
| 6100.0   | 24.57       | 321.82      | 6031.6    | 293.1      | -230.5     | 372.9    | 0.00           | 0.00             | 0.00            | 180.00     |
| 6200.0   | 24.57       | 321.82      | 6122.5    | 325.8      | -256.2     | 414.5    | 0.00           | 0.00             | 0.00            | 180.00     |
| 6300.0   | 24.57       | 321.82      | 6213.5    | 358.5      | -281.9     | 456.1    | 0.00           | 0.00             | 0.00            | 180.00     |
| 6329.2   | 24.57       | 321.82      | 6240.0    | 368.1      | -289.4     | 468.2    | 0.00           | 0.00             | 0.00            | 180.00     |

**Dalmore Federal #44-23**

Petral Exploration  
Sec. 23-T37S-R23E  
San Juan Co., UT

Surface location: 230' FSL 280' FEL  
Bottom Hole location: 464' FSL 464' FEL

KB = 5595'

| <u>Formation</u>  | <u>Depth</u>           |
|-------------------|------------------------|
| Morrison          | Spud                   |
| Chinle            | 2075                   |
| De Chelly         | 2960"                  |
| Honaker Trail     | 4805'                  |
| La Sal            | 5514'                  |
| Upper Ismay       | 5822'                  |
| Upper Ismay Mound | 5867'                  |
| Hovensweep        | 5958'                  |
| Lower Ismay       | 5989'                  |
| Gothic            | 6047'                  |
| Desert Creek      | 6071'                  |
| Chimney Rock      | 6157'                  |
| Akah              | 6215'                  |
| TOTAL DEPTH       | 6240' (TVD) 6325' (MD) |

Geologist comments:

- Possible salt wat flows from Cutler and Honaker Trail
- Possible over pressure in the Lower Desert Creek
- If no water flows, drill Ismay as light as possible
- Add Magma fiber to system prior to and during conventional coring operations

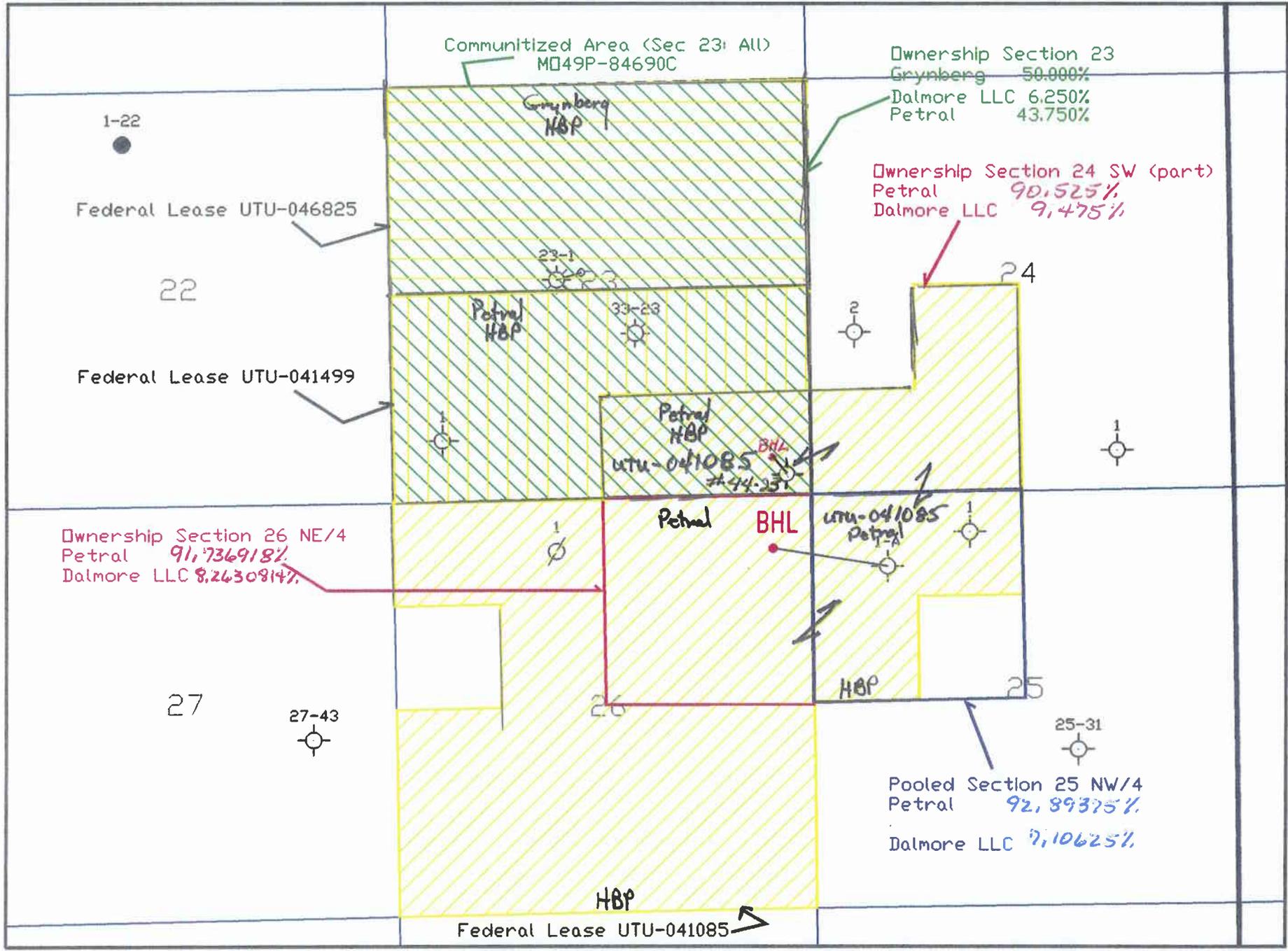
Drilling Plan

- ◆ Surface Hole 12 1/4" bit 2175' (MD) 9 5/8" 36# K-55 csg
- ◆ Production hole 8 3/4" bit 6240' (TVD) 5 1/2" 15.5# K-55 csg  
6325' (MD)

Note: Surface casing must be set through the Chinle

R 23 E

T 37 S



Communitized Area (Sec 23: All)  
M049P-84690C

Ownership Section 23  
Grynberg 50.000%  
Dalmore LLC 6.250%  
Petral 43.750%

Ownership Section 24 SW (part)  
Petral 90.525%  
Dalmore LLC 9.475%

Federal Lease UTU-046825

Federal Lease UTU-041499

Ownership Section 26 NE/4  
Petral 91.736918%  
Dalmore LLC 8.2630814%

Pooled Section 25 NW/4  
Petral 92.89375%  
Dalmore LLC 7.10625%

Federal Lease UTU-041085

Petral 90.525%  
Dalmore LLC 9.475%



## SUPPORTING DATA FOR SUNDRY NOTICE

### PETRAL EXPLORATION LLC Dalmore- FEDERAL #44-23

#### Form 3160-3 Supporting Data (Not requested in Sundry Notice)

2. Petral Exploration LLC. Contact Person is E.K. Bostick of ENMARC, INC. (see below)
3. Agent is: ENMARC, INC., P.O. Box 7638, Loveland, CO 80537. Phone is (970) 663-7576 or (303) 825-7061 (Denver office).
4. Location of Well: The surface location is 230' FSL and 280' FEL Section 23 T37S R23E (Dalmore #44-32). The location of the wellbore at the top of the prospective Upper Ismay horizon is 464' FSL and 464' FEL Section 23 T37S R23E (a lateral distance of 298' on a bearing of 322 degrees from the surface location). The location of the wellbore at Measured Total Depth will be 598' FSL and 569' FEL Section 23 T37S R23E.
14. The well will be approximately 9 miles southeast of Blanding, Utah.
15. The wellbore at the top of the Upper Ismay reservoir is 856' from the nearest lease line and is 464' from the communitized lease line. Part of lease UTU-041085 is communitized and part is not. See the plat with lease information which is provided in the request for a directional drilling permit for details.
16. Lease UTU-041085 contains 920 acres.
17. Forty (40) acres are assigned to this well.
18. The wellbore at the top of the Upper Ismay reservoir is 1104' from the nearest well drilling, completed or applied for on this lease.
19. The proposed True Vertical Depth Total Depth is 6240'. The Measured Total Depth will be 6325'.
20. Rotary tools will be used to drill this well.
21. The Kelly Bushing elevation at surface location is estimated at 5595'.
22. Work will start in early November 1998.

## SUPPORTING DATA FOR SUNDRY NOTICE

### PETRAL EXPLORATION LLC Dalmore-Federal #44-23

#### NOS Supporting Data (Not Requested in Sundry Notice)

4. A topographic map showing the access road, location and lease boundary is attached. Additional detailed lease information is shown on the plat accompanying the request for a permit for a directional well.
  
14. The objective formation is the Upper Ismay.
  
15. The estimated TVD TD at bottom hole location is 6240 ft., the MD TD is 6325 ft.
  
16. Completed actions are:
  - a. The location is staked as the Petral Exploration LLC Dalmore #44-23. A survey plat showing the surface location and bottom hole location at the Upper Ismay target horizon is attached.
  - b. The access road is staked as the Dalmore #44-23.
  - c. Attached is a map of the access road, location, pad dimensions, reserve pit and cut/fill.
  
17. The following issues have been addressed:
  - a. H2S potential: Drilling and testing of the Upper Ismay in the immediate area by Petral and others have shown that there is no H2S potential.
  - b. Private Surface Ownership: Title research for the Dalmore-Federal #44-23 revealed no patented lands (either surface or minerals) are involved in the bottom hole location, access road or drillsite.
  - c. Cultural Resources (archaeology): The access road and drillsite were previously recommended for approval by 4 Corners Archaeological Services Report 95-1316 at the time of original staking. Please refer to the original report (attached).
  - d. Federal Right of Way: A right of way (UTU-73169) was previously obtained for the drilling of the #1-A Dalmore Federal. It is current and the fee is paid. A copy is attached.
  
18. Additional Information: A directional drilling permit will be required for the State of Utah. Information in support of this is presented with the next section of this notice.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Utah State Office  
324 South State, Suite 301  
Salt Lake City, Utah 84111-2303

RECEIVED  
NOV 10 1995

BY REPLY REFER TO:  
3104  
(UT-923)

NOV 7 1995

DECISION

|                             |   |                  |             |
|-----------------------------|---|------------------|-------------|
| Obligor                     | : | Bond Amount:     | \$25,000    |
| Patrol Exploration LLC      | : |                  |             |
| P.O. Box 5083               | : | Bond Type:       | Statewide   |
| Denver, CO 80217-5083       | : |                  | Oil and Gas |
| Financial Institution:      | : |                  |             |
| Norwest Bank Colorado, N.A. | : | BLM Bond Number: | UT 1040     |
| 1740 Broadway               | : |                  |             |
| Denver, CO 80274            | : |                  |             |

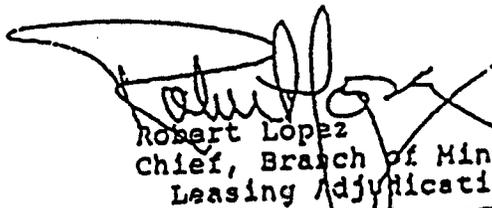
Statewide Oil and Gas Personal Bond and Certificate of Deposit Accepted

On November 6, 1995; this office received Bond Form 3000-4 together with Investment Deposit Agreement (Book Entry) No. 101741006 evidencing the purchase of a \$25,000 Certificate of Deposit (CD) in the amount of \$25,000 to secure a statewide oil and gas bond for the above obligor. Both documents have been examined and are accepted effective November 6, 1995.

The CD will be retained by the Bureau of Land Management (BLM) and will automatically renew annually until all terms and conditions of the leases have been fulfilled or until a satisfactory replacement bond has been accepted by the BLM.

The bond will be maintained by this office. The bond constitutes coverage of all operations conducted by or on behalf of the obligor on Federal leases in the State of Utah. The bond provides coverage of the obligor where that obligor has interest in, and/or responsibility for operations on, leases issued under the authority of any of the Acts cited on the bond form. Please note that Federal leases do not include Indian leases.

If you have any questions, please contact Irene Anderson of this office at (801) 539-4108.

  
Robert Lopez  
Chief, Branch of Mineral  
Leasing Adjudication

cc: All Districts

FORM 2800-14  
(August 1985)

Issuing Office  
Moab District  
San Juan Resource Area

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
RIGHT-OF-WAY GRANT

SERIAL NUMBER UTU-74169

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1. A right-of-way is hereby granted pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761).

2. Nature of Interest:

a. By this instrument, the holder..

Petral Exploration, LLC  
1700 Lincoln Street, Suite 4750  
Denver, Colorado 80203

receives a right to construct, operate, maintain, and terminate a road to the Dalmore well site (Oil & Gas Lease UTU-41085) on public lands described as follows:

Salt Lake Meridian  
T. 37 S., R. 23 E.,  
sec. 14, All;  
sec. 23, NE $\frac{1}{4}$ NE $\frac{1}{4}$ ;  
sec. 24, W $\frac{1}{2}$ ;  
and sec. 25, NW $\frac{1}{4}$ NW $\frac{1}{4}$

- b. The right-of-way area granted herein is 30 feet wide, 19,008 feet long (3.6 miles), with a surface width of 16 feet. The right-of-way contains 13.1 acres, more or less.
- c. This instrument shall terminate on December 31, 2027, unless prior thereto, it is relinquished, abandoned, terminated, or modified pursuant to the terms and conditions of this instrument or of any applicable Federal law or regulation.
- d. This instrument may be renewed. If renewed, the right-of-way shall be subject to the regulations existing at the time of renewal and any other terms and conditions that the authorized officer deems necessary to protect the public interest.
- e. Notwithstanding the expiration of this instrument or any renewal thereof, early

relinquishment, abandonment, or termination, the provisions of this instrument, to the extent applicable, shall continue in effect and shall be binding on the holder, its successors, or assigns, until they have fully satisfied the obligations and/or liabilities accruing herein before or on account of the expiration, or prior termination, of the grant.

3. **Rental:** Waived as provided in 43 CFR 2803.1-2.

For and in consideration of the rights granted, the holder agrees to pay the Bureau of Land Management fair market value rental as determined by the authorized officer unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted by the authorized officer, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and so far as practicable and feasible, in accordance with comparable commercial practices.

4. **Terms and Conditions:**

- a. This grant or permit is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations part 2800.
- b. Upon grant termination by the authorized officer, all improvements shall be removed from the public lands within 90 days, or otherwise disposed of as provided in paragraph (4)(d) or as directed by the authorized officer.
- c. Each grant issued for a term of 20 years or more shall, at a minimum, be reviewed by the authorized officer at the end of the 20th year and at regular intervals thereafter not to exceed 10 years. Provided, however, that a right-of-way or permit granted herein may be reviewed at any time deemed necessary by the authorized officer.
- d. The stipulations, plans, maps, or designs set forth in Exhibits A and B, dated July 5, 1996, and attached hereto, are incorporated into and made a part of this grant instrument.
- e. Failure of the holder to comply with applicable law or any provision of this right-of-way grant or permit shall constitute grounds for suspension or termination thereof.
- f. The holder shall perform all operations in a good and workmanlike manner so as to ensure protection of the environment and the health and safety of the public.
- g. No surface disturbing activities shall take place on the subject right-of-way until the associated APD is approved. The holder will adhere to special stipulations in the Surface Use Program of the approved APD, relevant to any right-of-way facilities.
- h. The holder shall construct, operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with the project description which

was received with the application on March 12, 1997. Any relocation, additional construction, or use that is not in accord with the approved project description, shall not be initiated without the prior written approval of the authorized officer. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or to the environment.

- i. No surface disturbing activities shall take place on the subject right-of-way until the associated APD is approved. The holder will adhere to special stipulations in the Surface Use Program of the approved APD, relevant to any right-of-way facilities.
- j. As directed by the authorizing officer, all road segments shall be winterized by providing a well-drained roadway by water baring, maintaining drainage, and any additional measures necessary to minimize erosion and other damage to the roadway or the surrounding public lands.
- k. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates excessive ruts, the soil shall be deemed too wet to adequately support construction equipment.
- l. The San Juan Resource Area Manager will be notified 24 hours in advance of road construction, so that the BLM may arrange to have a resource specialist on-site to monitor for paleontological resources.
- m. During construction a cultural resource monitor will be utilized to ensure that all cultural resources are avoided during activities associated with the proposed action. The cultural resource monitor must be an individual qualified and permitted to work on BLM lands.
- n. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.
- o. For the purpose of determining joint maintenance responsibilities, the holder shall make road use plans known to all other authorized users of the road. Holder shall provide the authorized officer, within 30 days from the date of the grant, with the names and addresses of all parties notified, dates of notification, and method of notification. Failure of the holder to share proportionate maintenance costs on the common use access road in dollars, equipment, materials, or manpower with other authorized users may be adequate grounds to terminate the right-of-way grant. The determination as to whether this has occurred and

the decision to terminate shall rest with the authorized officer. Upon request, the authorized officer shall be provided with copies of any maintenance agreement entered into.

IN WITNESS WHEREOF, The undersigned agrees to the terms and conditions of this right-of-way grant or permit.

PETRAL EXPLORATION LLC, Petrooro Corp.,  
Manager

Anthony R. Mayer  
(Signature of Holder)

Anthony R. Mayer, President  
(Title)

March 20, 1997  
(Date)

Sherwin N. Sandberg  
(Signature of Authorized Officer)

acting Area Manager  
(Title)

4-3-97  
(Effective Date of Grant)

## DESIGNATION OF AGENT

The undersigned is, on the records of the Bureau of Land Management, Unit Operator under the Communitization Agreement # MO-49P-8469OC and does hereby designate:

Petral Exploration LLC  
P.O. Box 5083  
Denver, Colorado 80217

As its Agent, with full authority to act on its behalf in complying with the terms of the Communitization Agreement and regulations applicable thereto and on whom the Authorized Officer or his representative may serve written or oral instructions in securing compliance with the Oil and Gas Operating Regulations with respect to drilling, testing, and completing the Dalmore Federal 44-23 well in the SESE of Section 23, Township 37S., R. 23 E., San Juan County, Utah. Bond coverage will be provided under Cash Bond #1040 filed with Utah BLM Office in Salt Lake City, Utah.

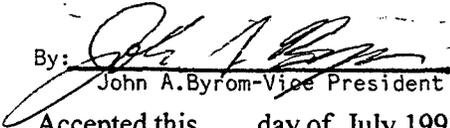
It is understood that this Designation of Agent does not relieve the Communitized Area Operator of responsibility for compliance with the terms of the Communitization Agreement and the Oil and Gas Operating regulations. It is also understood that this Designation of Agent does not constitute an assignment of any interest under the Communitization Agreement or any lease committed thereto.

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

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

This designation is given only to enable the agent herein designated to drill the above specified well. It is understood that this designation of Agent is limited to the field operations performed while drilling and completing the specified well and does not include administrative actions requiring specific authorization of the Communitized Area Operator. This designation in no way will serve as authorization for the agent to conduct field operations for the specific well after it has been completed for production. Unless sooner terminated, this designation shall terminate when there is filed in the appropriate office of the Bureau of Land Management all reports and a Well Completion Report and Log (Form 3160-4) as required by the approved Application for Permit to Drill for the specified well.

D.J.Simmons Company/Limited Partnership  
By: D.J.Simmons, Inc.,It's G.P.

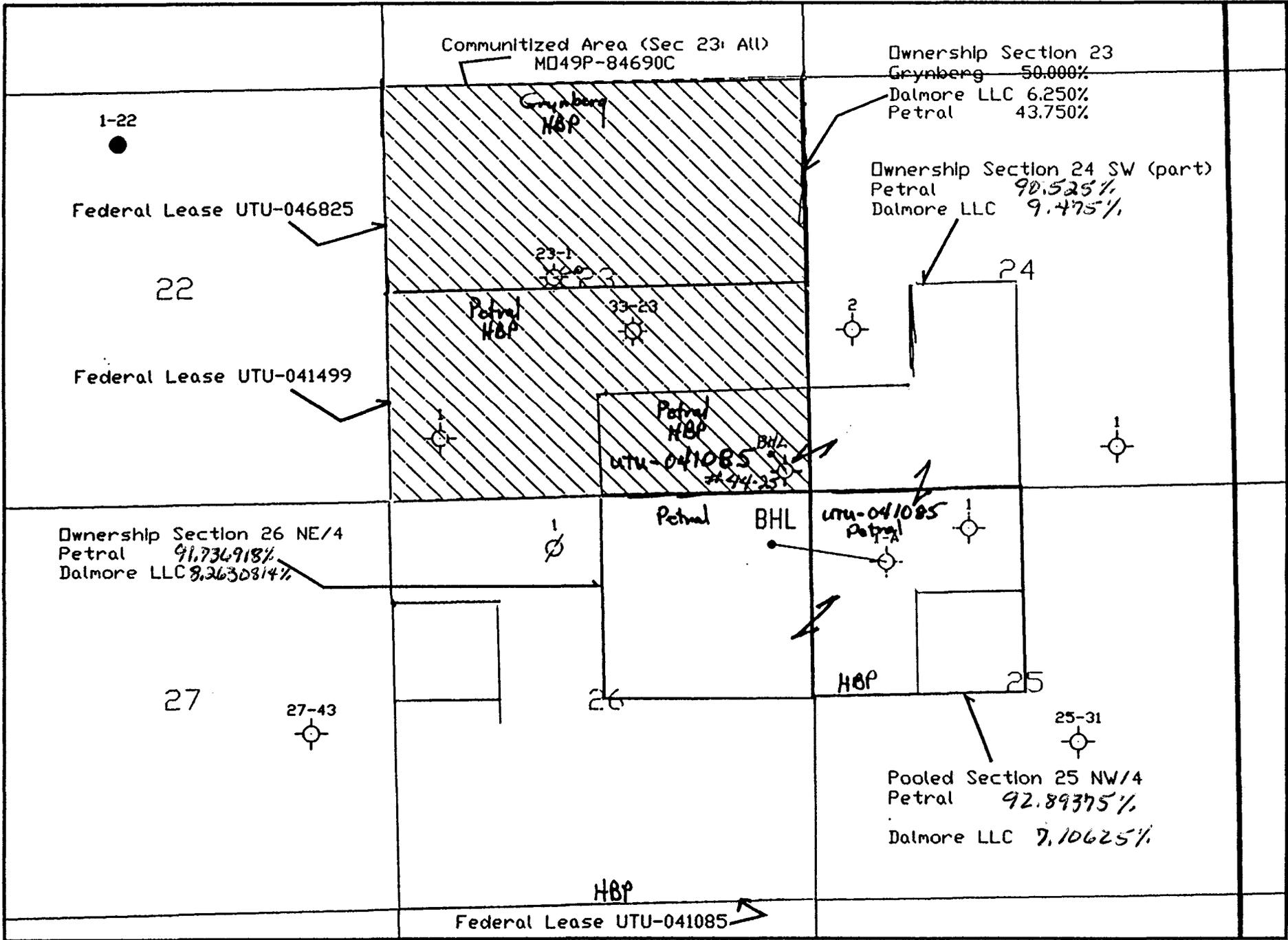
By:   
John A. Byrom-Vice President

Accepted this \_\_\_ day of July, 1998  
Petral Exploration LLC

By   
Its

R 23 E

T  
37  
S



PANEL 6 Lease Ownership

Petral 90.525%  
Dalmore 9.475%

# DRILLING PROGRAM

Petral Exploration, LLC  
Dalmore-Federal #44-23  
SE SE Sec. 23 – T37S – R23E  
San Juan Co., UT  
Lease # UTU – 041085

A. Surface Formation:  
Morrison

B. Estimated Formation Tops (KB Measurements):

| <u>Formation</u>       | <u>TVD Depth (KB)</u> | <u>Subsea</u> |
|------------------------|-----------------------|---------------|
| Morrison .....         | Spud                  |               |
| Chinle.....            | 2075                  | + 3520        |
| De Chelly.....         | 2960                  | + 2635        |
| Honaker Trail.....     | 4805                  | + 790         |
| La Sal.....            | 5514                  | + 81          |
| Upper Ismay.....       | 5822                  | - 227         |
| Upper Ismay Mound..... | 5867                  | - 272         |
| Hovenweep.....         | 5958                  | - 336         |
| Lower Ismay .....      | 5989                  | - 394         |
| Gothic .....           | 6047                  | - 452         |
| Desert Creek .....     | 6071                  | - 476         |
| Chimney Rock .....     | 6157                  | - 562         |
| Akah.....              | 6215                  | - 620         |
| Total Depth .....      | 6240(TVD) 6335(MD)    |               |

C. Estimated Depths at which Anticipated Water, Oil, Gas or other Mineral-bearing Formations are Expected to be Encountered.

Hydrocarbon bearing zones may be found from 5867' (Upper Ismay Mound) to 6157'. Commercial water zones are not anticipated. All formations below surface may contain water. Fresh water zones will be protected through casing and cementing programs (see parts E & F).

D. Minimum Pressure Control Equipment & Auxiliary Equipment (see attached diagram):

1. One 11' – 3000 psig annular preventer. One 11" – 3000 psig double ram blowout preventer with blind rams and one set of 4 ½" drill pipe rams (above blind ram) will be installed and utilized prior to drilling below 9 5/8" surface casing. Flow sensors and PVT will be installed prior to drilling below surface casing and utilized to TD.
2. Blowout preventer or drilling spool will be equipped with one 3" and one 2" side outlet.

3. A 3000 psig choke manifold with two (2) adjustable chokes will be installed prior to drilling below surface casing. The choke line will be as straight as possible and turns, if required, will have a targeted T block.
4. An accumulator rated at 3000psig W.P. with a minimum of three (3) hydraulic control stations will be utilized. One for annular, one for blind rams and one for pipe rams. Remote controls will be located at the accumulator house at G.L. and on the floor. Manual controls (e.g. - hand wheels) will be located at G.L. near the substructure. A valve shall be installed in the hydraulic closing line to serve as a locking device when the accumulator system is inoperative.
5. Pressure testing procedures and requirements. Prior to drilling out below the 9 5/8" surface casing, surface casing will be tested to 0.22 psi per foot of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of minimum internal yield of the 9 5/8", 36#/ft., J-55 surface casing for a minimum of 10 minutes. BOP stack and associated equipment (e.g. - choke manifold, lower and upper kelly cocks, valves, etc.) will be tested to 3000 psig for 15 minutes utilizing a test plug. The annular preventer will be tested to 1500 psig for 15 minutes. A certified BOP testing service company will be utilized for pressure testing. All pressure testing operations must be witnessed by Petral's well site representative (ENMARC, Inc.).
6. Drilling contractor will perform a daily operational check of all BOP equipment (e.g. - includes associated equipment). Pipe and blind rams shall be activated each trip, annular BOP activated weekly
7. All BOP pressure testing & operational checks to be recorded in the daily "tour" book.
8. A BOP and pit level drill will be conducted by the drilling contractor weekly and noted in the "tour" report book.
9. 24 hours prior to pressure testing notify the BLM, and the Utah Division of Oil, Gas & Mining.

Every 30 days, BOP and accessory equipment must be pressure tested to 3000 psig. Notify the BLM and Utah Division of Oil, Gas & Mining prior to test.

E. Casing Program:

Conductor Casing:

80' of 16" pipe cemented in place to surface

Surface Casing:

54 jts. - 2175', 9 5/8", 36 #/ft, J-55, ST&C, "A" Grade (new)

Accessory Equipment:

- 1 9 5/8" Guide Shoe
- 1 9 5/8" Insert Float
- 1 9 5/8" Centralizer placed middle of shoe joint
- 1 9 5/8" Centralizer at collar above shoe joint
- 1 9 5/8" Centralizer thereafter on every second collar for 6 centralizers
- 1 9 5/8" Centralizer thereafter on every fourth collar for 7 centralizers
- 1 9 5/8" Centralizer on third collar below surface
- 15 Centralizers Total

Production Casing (New):

| Interval   | Net-Ft. | Gross-Ft. | Specifications                |
|------------|---------|-----------|-------------------------------|
| 0 - 6,325' | 6,325'  | 6,325'    | 5 1/2", 15.5#/ft., J-55, ST&C |

Accessory Equipment:

To be determined at time of need.

Testing Procedure:

At time of BOP testing and prior to drilling out, surface casing will be tested to 0.22 psi per foot of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of burst pressure for new casing. Production casing will be pressure tested to a minimum of 3000 psig prior to commencement of completion.

F. Cementing Program: Check water quality for all cementing slurries.

Conductor: Cement to surface

Surface Casing: (Tentative - volumes and types may be changed. Designed to circulate cement to surface - 100% excess.)

Spacer: 30 Bbls. fresh water

Lead Slurry: 576 sks. BJ 35/65 Class H Poz cement/ 6% Bentonite, & 1/4#/sk. Cellophane Flakes. Slurry yield - 2.09 CF/sk

Tail Slurry: 150 sks. Class "H" cement w/2% CaCl<sub>2</sub>  
Slurry yield - 1.20 CF/sk

Note: If cement does not circulate to surface, utilize 1" to bring to surface.

Production Casing: (Cemented minimum of 1000' fillup above potential pay zone(s))

Preflush: 10 Bbls. Fresh water  
20 Bbls. mud flush (or equivalent)

Primary Slurry: 424 sks. 50/50 Std. Pozmix H, w/0.4% FL 52, 2% Bentonite & ¼#sk. Cellophane Flakes. Slurry Yield – 1.16 CF/sk

Note: Slurry volume to be recalculated based on hole caliper and number and depth of zones. 25% excess and 8 3/4" hole used for initial calculations.

G. Drilling Fluids:

| Depth          | 0-2175'   | 1515' – 5000'       | 5000' – 5989' | 5989' – TD (6) |
|----------------|-----------|---------------------|---------------|----------------|
| Wt. - #/gal    | 8.3 – 8.9 | 8.7 – 8.9           | 9.0 – 10+ (1) | 9.0 – 12+ (5)  |
| Vis. – sec.qt. | 27 – 40   | 30 – 35             | 34 – 40 (2)   | 34 – 40 (2)    |
| WL – cc        | NC        | NC                  | 10 Max (3)    | 8 – 10         |
| PH             | NC        | NC                  | 9.0 – 10 (4)  | 9.5            |
| PV/YP          | -         | -                   | 6-10/8-16     | 6-10/8-16      |
| Gels (sec/min) | -         | -                   | 1-4/3-9       | 1-4/3-9        |
| Type System    | FWG       | FWG/SDF 2000 Sweeps | LSND          | LSND           |

- (1) Drill Upper Ismay mound with as low a mud weight that can be achieved. May require weighting up to kill water flows. Pretreat mud with 10 sks. Of Magmafiber loss circulation material prior to drilling or coring the Upper Ismay Mound.
- (2) Recommended viscosity:
  - Coring 42-44 sec./qt.
  - Logging 50 sec./qt/
  - DST's 42-44 sec./qt/
- (3) Prior to penetrating the Upper Ismay Mound
- (4) Raise PH to 10 prior to drilling anhydrites
- (5) The Lower Desert Creek may be overpressured and require a weighted mud system. Prior to penetrating the Upper Ismay Mound @ 5867' TVD or the Lower Desert Creek Mound add 100 ppm nitrates to the mud system.

Sufficient mud materials to maintain mud requirements and meet minor lost circulation and excessive pressure problems will be at the wellsite. The pits will be monitored on trips to assure that the hole is kept full while tripping the drilling string. A pit volume totalizer (PVT), stroke counter & flow sensor will be utilized below surface casing setting depth to TD.

H. Coring, Testing, Logging and Tentative Completion Program:

1. Two 60' cores of Upper Ismay mound at estimated depth of 5867' TVD. On site geologist to pick core point and samples for analyses. One possible 60' core of the Lower Desert Creek Mound at estimated depth of 6071' TVD.
2. Drill stem tests will be at the discretion of the operator and will be based on shows, logs, hole conditions, etc.
3. If a completion attempt is to be made, 5 ½" casing will be cemented into place. The following presents a summary of tentative completion procedures.
  - a. Perforate pay zones with approximately 4 shots/ft.
  - b. Perforations may be stimulated w/HCl acid
  - c. A Sundry Notice will be filed with the final completion plan.

Note: All perforations and the size of stimulation jobs are tentative and final design will be based on electric logs, cores, and drill stem test data.

4. Logging:
  - GR-DLL-MSFL (min) – Base surface casing to TD
  - GR-BHCS (long spaced integrated) w/Cal – Base surface casing to TD
  - GR-FDC-CNL-w/PE (min) – Base surface casing to TD
  - SHDT - Minimum run
5. Samples:
  - 10' samples 4,500' TVD to TD
  - All cutting samples are to be washed and stored in properly marked cloth bags. Tie the sample bags in 100' depth groups to dry. Store in a clean, dry place. Sample depth intervals may be changed at the discretion of the geologist.

I. Abnormal Conditions or Potential Hazards:

Potential problems include possible water flows to 5822' TVD; abnormal pressure in Lower Desert Creek Carbonate (3500 psig); lost circulation and seepage, surface to TD w/possible differential sticking. Estimated temperature at TD 140 F. Hydrogen sulfide gas is not anticipated.

J. Auxiliary Equipment Required: See Paragraph D.

K. Anticipated Starting Date of Drilling Operations:  
November 1, 1998

L. Additional Considerations:  
None

THREE PREVENTER HOOKUP  
 CLASS III  
 (MEETS 43 CFR, PARTS 3160, 3M SPECIFICATIONS)

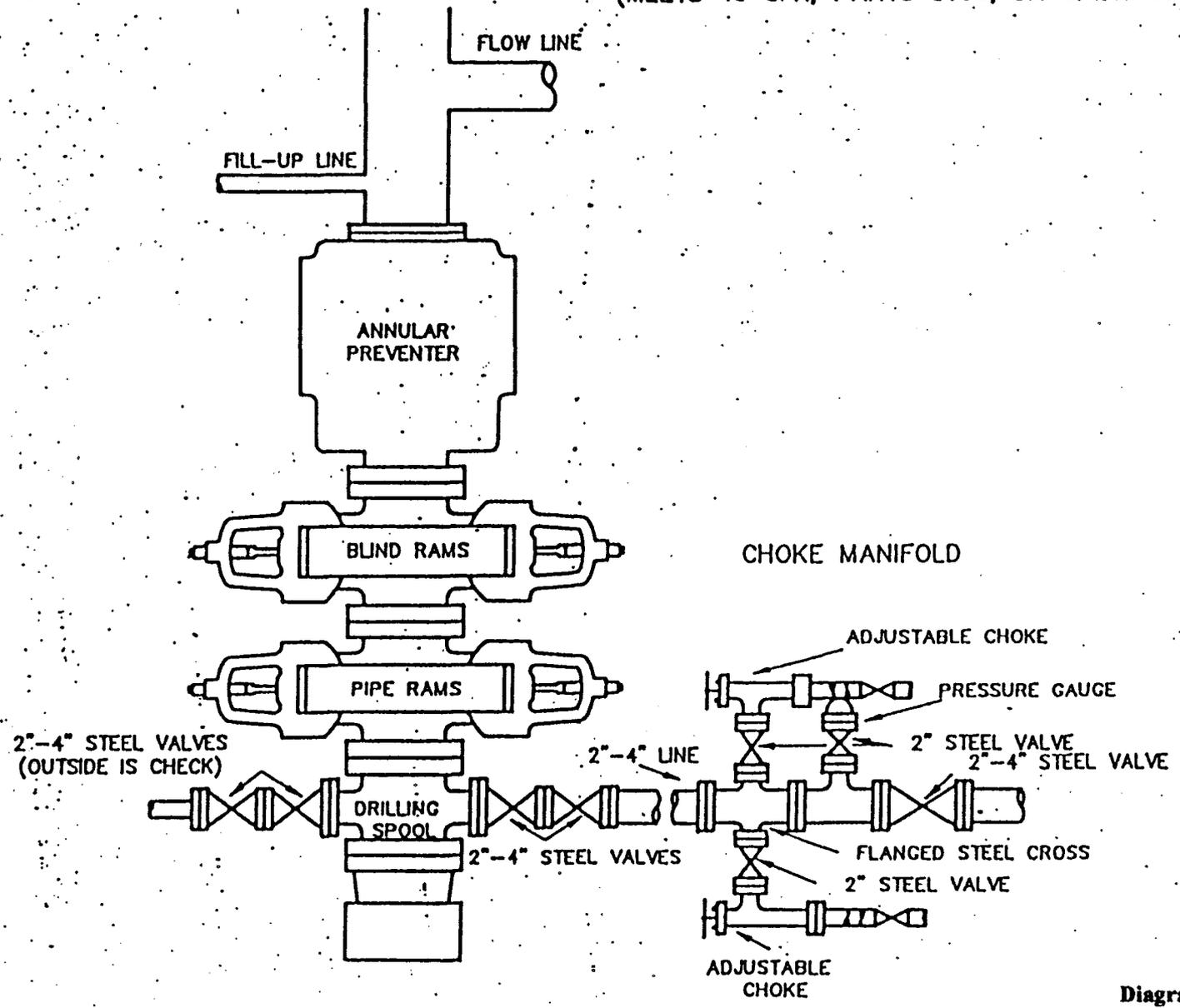


Diagram 2



**Scientific  
Drilling**

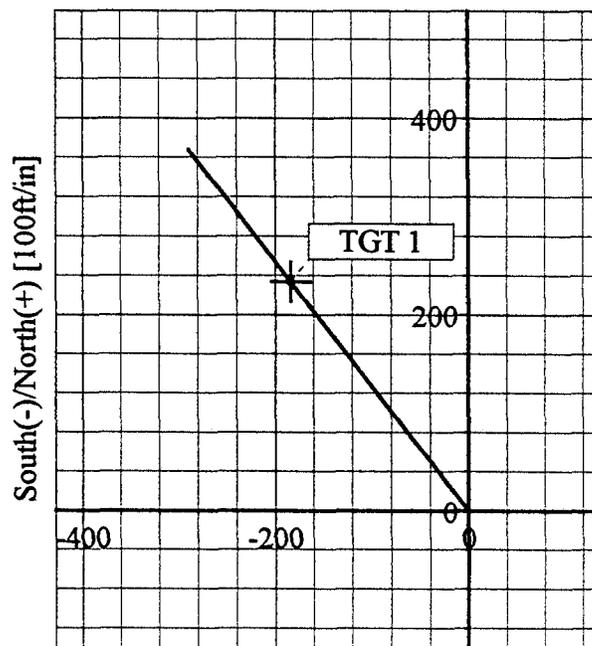
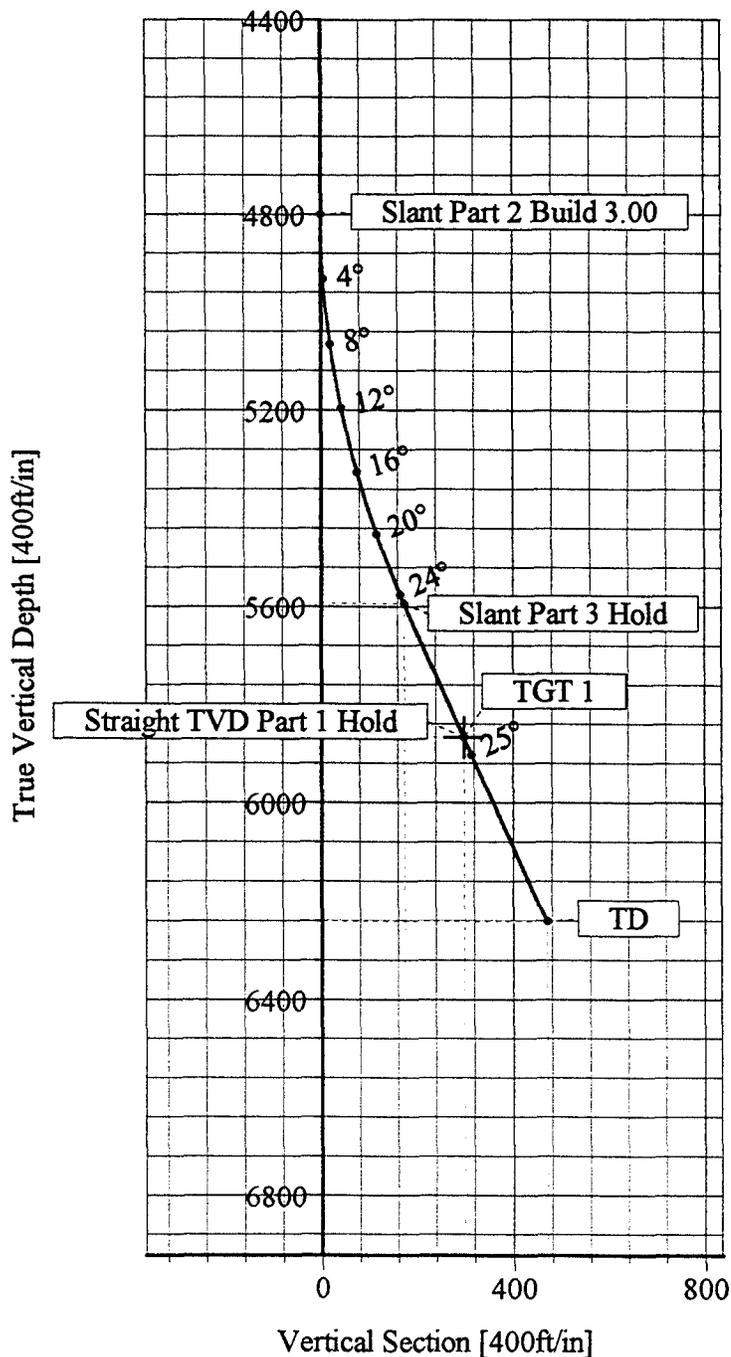
**Petral Exploration LLC**  
**Field: San Juan County, UT**  
**Site: Dalmore #44-23**  
**Well: #44-23**  
**Wellpath: OH Original hole**  
**Plan: Plan #1**



All Angles Relative  
To Local North

True North: 0.00  
Magnetic North: 12.31

**PLANE OF VERT SEC 321.82° AZIMUTH**



West(-)/East(+) [100ft/in]

Plan: Plan #1 (#44-23/OH)

Created By: Judi Moore

Date: 8/12/98

Checked: B.L.

Date: 8/12/98

Approved:

Date:

**TARGET DETAILS**

| No. | TVD     | N/S    | E/W     | Target |
|-----|---------|--------|---------|--------|
| 1   | 5867.00 | 234.00 | -184.00 | TGT 1  |

**SECTION DETAILS**

| Sec | MD      | Inc   | Az     | TVD     | N/S    | E/W     | DLog | TFace | VSec   | Target |
|-----|---------|-------|--------|---------|--------|---------|------|-------|--------|--------|
| 1   | 0.00    | 0.00  | 321.82 | 0.00    | 0.00   | 0.00    | 0.00 | 0.00  | 0.00   |        |
| 2   | 4800.03 | 0.00  | 321.82 | 4800.03 | 0.00   | 0.00    | 0.00 | 0.00  | 0.00   |        |
| 3   | 5619.04 | 24.57 | 321.82 | 5594.16 | 135.94 | -106.89 | 3.00 | 0.00  | 172.93 |        |
| 4   | 5919.04 | 24.57 | 321.82 | 5867.00 | 234.00 | -184.00 | 0.00 | 0.00  | 297.68 | TGT 1  |
| 5   | 6329.17 | 24.57 | 321.82 | 6240.00 | 368.06 | -289.41 | 0.00 | 0.00  | 468.22 |        |



# Scientific Drilling International Planning Report

|  |  |   |
|--|--|---|
| <b>Company:</b> Petral Exploration LLC<br><b>Field:</b> San Juan County, UT<br><b>Site:</b> Dalmore #44-23<br><b>Well:</b> #44-23<br><b>Wellpath:</b> OH Original hole | <b>Date:</b> 8/12/98<br><b>Co-ordinate(NE) Reference:</b> Site: Dalmore #44-23, True North<br><b>Vertical (TVD) Reference:</b> Field: Mean Sea Level<br><b>Section (VS) Reference:</b> Slot (0.0E,0.0N,321.8Azi)<br><b>Plan:</b> Plan #1 | <b>Time:</b> 14:51:04<br><b>Page:</b> 1 |
|--|--|---|

|   |   |
|---|---|
| <b>Field:</b> San Juan County, UT<br><br><b>Map Projection &amp; Zone:</b><br><br><b>Ellipsoid:</b><br><b>Field Datum:</b> Mean Sea Level | <b>Local Coordinate Reference:</b> Site Centre<br><b>Location of Field Centre:</b> N/A<br><b>Field Centre Map Easting:</b> ft<br><b>Field Centre Map Northing:</b> ft<br><b>Direction of Local North:</b> True<br><br><b>Local Vertical Reference:</b> Wellpath Datum<br><br><b>Geomagnetic Model:</b> IGRF95 |
|---|---|

**Site:** Dalmore #44-23  
 SHL SEC.23,T37S,R23E 230°FSL, 280°FEL  
 PBHL SEC.23,T37S,R23E 464°FSL, 464°FEL

|                                  |  |                                     |
|----------------------------------|--|-------------------------------------|
| <b>Site Centre:</b> ft E<br>ft N |  | <b>Latitude</b><br><b>Longitude</b> |
|----------------------------------|--|-------------------------------------|

**Site Water Depth:** 0.0 ft

**Magnetic Declination:** 12.31 deg  
**Grid Convergence:** 0.00 deg

**Measured Depths Referenced To:** Mean Sea Level      0.0 ft above      Mean Sea Level

**Well:** #44-23

|                          |                              |                      |   |
|--------------------------|------------------------------|----------------------|---|
| <b>Originating From:</b> | 0.0 ft +N/-S<br>0.0 ft +E/-W | <b>Map Easting :</b> | 0.00 ft<br><b>Map Northing:</b> 0.00 ft |
|--------------------------|------------------------------|----------------------|---|

**Wellpath:** OH Original hole

|  |                              |
|--|------------------------------|
| <b>Origin of Vertical Section:</b> Slot          | 0.0 ft +N/-S<br>0.0 ft +E/-W |
| <b>Direction of Vertical Section:</b> 321.82 deg |                              |

|                       |  |
|-----------------------|--|
| <b>Plan:</b> Plan #1  | <b>Date Composed:</b> 7/30/98<br><b>Version:</b> 1 |
| <b>Principal:</b> Yes | <b>Locked:</b> No                                  |

**Plan Section Information**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | DLS<br>d/100ft | Build<br>d/100ft | Turn<br>d/100ft | TFO<br>deg | Target |
|----------|-------------|-------------|-----------|-------------|-------------|----------------|------------------|-----------------|------------|--------|
| 0.0      | 0.00        | 321.82      | 0.0       | 0.0         | 0.0         | 0.00           | 0.00             | 0.00            | 0.00       |        |
| 4800.0   | 0.00        | 321.82      | 4800.0    | 0.0         | 0.0         | 0.00           | 0.00             | 0.00            | 0.00       |        |
| 5619.0   | 24.57       | 321.82      | 5594.2    | 135.9       | -106.9      | 3.00           | 3.00             | 0.00            | 0.00       |        |
| 5919.0   | 24.57       | 321.82      | 5867.0    | 234.0       | -184.0      | 0.00           | 0.00             | 0.00            | 0.00       | TGT 1  |
| 6329.2   | 24.57       | 321.82      | 6240.0    | 368.1       | -289.4      | 0.00           | 0.00             | 0.00            | 0.00       |        |

**Section 1 : Slant Part 1 Hold**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>d/100ft | Build<br>d/100ft | Turn<br>d/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|----------------|------------------|-----------------|------------|
| 0.0      | 0.00        | 321.82      | 0.0       | 0.0         | 0.0         | 0.0      | 0.00           | 0.00             | 0.00            | 0.00       |
| 4600.0   | 0.00        | 321.82      | 4600.0    | 0.0         | 0.0         | 0.0      | 0.00           | 0.00             | 0.00            | 0.00       |
| 4700.0   | 0.00        | 321.82      | 4700.0    | 0.0         | 0.0         | 0.0      | 0.00           | 0.00             | 0.00            | 0.00       |
| 4800.0   | 0.00        | 321.82      | 4800.0    | 0.0         | 0.0         | 0.0      | 0.00           | 0.00             | 0.00            | 0.00       |

**Section 2 : Slant Part 2 Build 3.00**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>d/100ft | Build<br>d/100ft | Turn<br>d/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|----------------|------------------|-----------------|------------|
| 4900.0   | 3.00        | 321.82      | 4900.0    | 2.1         | -1.6        | 2.6      | 3.00           | 3.00             | 0.00            | 0.00       |
| 5000.0   | 6.00        | 321.82      | 4999.6    | 8.2         | -6.5        | 10.5     | 3.00           | 3.00             | 0.00            | 0.00       |
| 5100.0   | 9.00        | 321.82      | 5098.8    | 18.5        | -14.5       | 23.5     | 3.00           | 3.00             | 0.00            | 0.00       |



# Scientific Drilling International

## Planning Report

|  |  |                       |                |
|--|--|-----------------------|----------------|
| <b>Company:</b> Petral Exploration LLC | <b>Date:</b> 8/12/98   | <b>Time:</b> 14:51:04 | <b>Page:</b> 2 |
| <b>Field:</b> San Juan County, UT      | <b>Co-ordinate(NE) Reference:</b> Site: Dalmore #44-23, True North |                       |                |
| <b>Site:</b> Dalmore #44-23            | <b>Vertical (TVD) Reference:</b> Field: Mean Sea Level             |                       |                |
| <b>Well:</b> #44-23                    | <b>Section (VS) Reference:</b> Slot (0.0E,0.0N,321.8Azi)           |                       |                |
| <b>Wellpath:</b> OH Original hole      | <b>Plan:</b>   | <b>Plan #1</b>        |                |

**Section 2 : Slant Part 2 Build 3.00**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>d/100ft | Build<br>d/100ft | Turn<br>d/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|----------------|------------------|-----------------|------------|
| 5200.0   | 12.00       | 321.82      | 5197.1    | 32.8        | -25.8       | 41.7     | 3.00           | 3.00             | 0.00            | 0.00       |
| 5300.0   | 15.00       | 321.82      | 5294.3    | 51.2        | -40.2       | 65.1     | 3.00           | 3.00             | 0.00            | 0.00       |
| 5400.0   | 18.00       | 321.82      | 5390.2    | 73.5        | -57.8       | 93.5     | 3.00           | 3.00             | 0.00            | 0.00       |
| 5500.0   | 21.00       | 321.82      | 5484.4    | 99.7        | -78.4       | 126.8    | 3.00           | 3.00             | 0.00            | 0.00       |
| 5600.0   | 24.00       | 321.82      | 5576.8    | 129.8       | -102.1      | 165.1    | 3.00           | 3.00             | 0.00            | 0.00       |
| 5619.0   | 24.57       | 321.82      | 5594.2    | 135.9       | -106.9      | 172.9    | 3.00           | 3.00             | 0.00            | 0.00       |

**Section 3 : Slant Part 3 Hold**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>d/100ft | Build<br>d/100ft | Turn<br>d/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|----------------|------------------|-----------------|------------|
| 5700.0   | 24.57       | 321.82      | 5667.8    | 162.4       | -127.7      | 206.6    | 0.00           | 0.00             | 0.00            | 180.00     |
| 5800.0   | 24.57       | 321.82      | 5758.7    | 195.1       | -153.4      | 248.2    | 0.00           | 0.00             | 0.00            | 180.00     |
| 5900.0   | 24.57       | 321.82      | 5849.7    | 227.8       | -179.1      | 289.8    | 0.00           | 0.00             | 0.00            | 180.00     |
| 5919.0   | 24.57       | 321.82      | 5867.0    | 234.0       | -184.0      | 297.7    | 0.00           | 0.00             | 0.00            | 180.00     |

**Section 4 : Straight TVD Part 1 Hold**

| MD<br>ft | Incl<br>deg | Azim<br>deg | TVD<br>ft | +N/-S<br>ft | +E/-W<br>ft | VS<br>ft | DLS<br>d/100ft | Build<br>d/100ft | Turn<br>d/100ft | TFO<br>deg |
|----------|-------------|-------------|-----------|-------------|-------------|----------|----------------|------------------|-----------------|------------|
| 6000.0   | 24.57       | 321.82      | 5940.6    | 260.5       | -204.8      | 331.3    | 0.00           | 0.00             | 0.00            | 180.00     |
| 6100.0   | 24.57       | 321.82      | 6031.6    | 293.1       | -230.5      | 372.9    | 0.00           | 0.00             | 0.00            | 180.00     |
| 6200.0   | 24.57       | 321.82      | 6122.5    | 325.8       | -256.2      | 414.5    | 0.00           | 0.00             | 0.00            | 180.00     |
| 6300.0   | 24.57       | 321.82      | 6213.5    | 358.5       | -281.9      | 456.1    | 0.00           | 0.00             | 0.00            | 180.00     |
| 6329.2   | 24.57       | 321.82      | 6240.0    | 368.1       | -289.4      | 468.2    | 0.00           | 0.00             | 0.00            | 180.00     |

## SURFACE USE PROGRAM

Petral Exploration, LLC  
Dalmore-Federal #44-23  
Sec. 23 – T37S – R23E  
San Juan Co., UT  
Lease # UTU-072656

The onsite inspection for the subject well was conducted on July 2, 1998. In attendance were the following individuals:

|   |                    |                                   |
|---|--------------------|-----------------------------------|
| Gerald Huddleston                               | Surveyor           | Gerald Huddleston Land Surveyor   |
| Carol De Francia                                | Archaeologist      | 4 Corners Archaeological Services |
| (had been out and observed the site previously) |                    |                                   |
| Lowell Larson                                   | Dirt Contractor    | Triad Construction                |
| Tammy Fletcher                                  | Wildlife Biologist | Bureau of Land Management         |
| Jeff Brown                                      | Field Supervisor   | Bureau of Land Management         |
| Randy Shelton                                   | Pumper             | Petral Exploration LLC            |

### 1. Existing Roads

- a. To visit the wellsite, at Ameri-Gas located ½ mile south of Blanding, Utah on Utah Highway 191, turn west on County Road 219. Go 1 mile and turn right (south) on County Road 206 total of 8.5 miles to a Y and the intersection of County Road 207. Turn left on County Road 207 and proceed North 1.5 miles to the intersection of County Road 265. Turn Right (east) on County Road 265 and proceed southeasterly 3 miles to the lease access road on the right. Follow the flagged access road southwesterly .4 mile to the location.
- b. For access roads, see Maps A and B
- c. All existing roads within a 2-mile radius are shown on Maps A and B.
- d. Vehicles will travel only on designated travelways shown on the map.
- e. Existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.
- f. Signs will be installed along the county road warning of trucks entering the roadway if required by the San Juan County Road Department.

### 2. Access Roads to be Constructed and Reconstructed

- a. The well site will be accessed through an existing ranch road. No new access roads will be built.
- b. Culverts and low water crossings will be necessary.
- c. The use of surfacing material is not anticipated at this time.

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

- a. Water Wells – None
- b. Injection or Disposal Wells – None
- c. Producing Wells – One approximately ½ mile to the south  
Petral Exploration LLC, #1-A (RD) Dalmore Federal  
Surface Loc.: 930' FNL & 938' FEL Sec. 25 – T37S – R23E  
BHL: 640' FNL & 683' FEL Sec 26 – T37S – R23E
- d. Drilling Wells – None

4. Location of Existing and/or Proposed Facilities if the Well is Productive

- a. If production is established, a Sundry Notice will be submitted showing the location of the proposed facilities.
- b. All production facilities, including the pump, pump house, storage tanks, and treater will be painted an earthtone color to blend with the environment.
- c. All flowlines from the well site to battery site will be buried below frost line depth.
- d. A dike will be constructed completely around the production facilities (i.e. production tanks, water tanks, and/or heater-treater). The dikes for the production facilities will be constructed of compacted subsoil and hold the capacity of the largest tank. Any production pits will be fenced to prevent wildlife entry.
- e. Produced hydrocarbons shall be put in test tanks on location during completion work.
- f. Produced waste water will be confined to an unlined pit for a period not to exceed 90 days after initial production. During that 90 day period an application for approval of a permanent disposal method and location (Onshore Order No. 7), along with the required water analysis will be submitted.
- g. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.
- h. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

5. Location and Type of Water Supply

- a. Water will be trucked from an artesian well located in Section 1-T38S-R24E. Permits will be obtained from the State Engineer.
- b. The water source is not located on State land. Water will not be obtained from Indian projects.

- c. A water well will not be drilled.

6. Construction Materials

- a. Native soil will be utilized in the drilling site and access road. Additional gravel may be needed for the pulling unit pad and well site if the well is found to be productive.
- b. There will be no construction material from Indian lands.
- c. Crushed rock, if necessary, will be purchased from construction contractors in the area from existing gravel pits and hauled over access roads shown in Maps A & B.

7. Methods for Handling Waste Disposal

- a. Drill cuttings are to be contained and buried in the reserve pit. A pit 40' x 140' x 80' x 150' x 10' deep (3:1 slope) will be fenced on three sides during the drilling operations. The pit will be lined with 24 tons of bentonite worked in with a cat. The fourth side will be fenced when the rig moves out.
- b. The reserve pit and drilling fluids contained in the pit will be allowed to dry before backfilling, or pits will be siphoned out and disposed of in a manner approved by the authorized officer of the BLM before the reserve pit is backfilled. Pit walls will not be breeched so as to drain fluids to the surrounding surface.
- c. All wastes that accumulate during the drilling operations will be contained in a trash cage or dumpster. Wastes will be removed periodically from the location and taken to an approved landfill.
- d. Immediately after removal of the drilling rig, all garbage (metal containers, etc.) and debris on the site will be removed from the site. The reserve pit will not be utilized for trash disposal.
- e. No burning of trash will be allowed.
- f. Chemical toilets with holding tanks will be utilized. All sewage will be disposed of in accordance with county and state regulations. Petral will comply with all state laws and regulations pertaining to disposal of human waste.
- g. 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 waste or other produced fluids will be cleaned up and removed.

8. Ancillary Facilities

None

9 Wellsite Layout

- a. See diagram #2 for elevations and cross sections. Maximum cut is approximately 18' at the northwest corner of the reserve pit. Maximum fill is 3' at the southwest corner of the drilling pad.
- b. See diagram 4 for orientation of rig, pits and associated equipment.
- c. Six inches of topsoil will be removed from the location (drilling pad) including areas of cut and fill. Soil will be stockpiled adjacent to the wellsite pad.
- d. No reserve pit liner will be required. No hazardous chemical additives will be used in the mud system.
- e. The fresh water pit if needed, will be lined with a plastic liner. The liner will be removed from the pit at the end of drilling operations.
- f. For the protection of livestock and wildlife, all pits containing toxic liquids will be fenced and covered with netting.

10 Reclamation of Surface

- a. All pits will be backfilled, leveled and contoured to as near the current conditions as is practical.
- b. Reclamation of the entire disturbed area will be accomplished by grading the area to approximately the natural contour and spreading the top soil evenly as possible over the area. The entire disturbed area will be scarified with a 6' or less distance between ripped surfaces. The soil surface will be dry and loose prior to seeding and will broadcast seeded between September 1, 1999 and July 1, 2000 with the following mixture of pure live seed:

|                   |               |
|-------------------|---------------|
| Fourwing saltbush | 2 pounds/acre |
| Wild sunflower    | 1 pound/acre  |
| Mormon tea        | 1 pound/acre  |
| Galleta           | 1 pound/acre  |
| Sand dropseed     | 1 pound/acre  |
| Indian ricegrass  | 1 pound/acre  |
| Cliffrose         | 1 pound/acre  |

- c. All pits will be fenced and netted until dry and then backfilled
- d. If oil is present on the reserve pit, it will be removed.
- e. Rehabilitation will be commenced when the rig moves out, with the location restored by September 30, 1999. Rehabilitation will be completed by July 1, 2000.

- f. A Notice of Intent to Abandon and a Subsequent Report of Abandonment will be submitted for abandonment approval. A Final Abandonment Notice must be submitted when the rehabilitation is complete and the new vegetation is established.
- g. If the well is plugged and abandoned, the surface casing will be cut off three (3) feet below reclaimed ground surface with a metal plate affixed to the top. The metal plate will be inscribed with the operator's name, well number, well location (1/4 1/4, Section, Township, Range, etc.) and federal lease number.

11. Surface Ownership

Wellsite – Bureau of Land Mangement

Lease Access Road – Bureau of Land Management

12. Other Information

- a. An archaeological study was conducted by 4 Corners Archaeoligal Services. Four archaeological sites were found. Protective measures have been prescribed and archaeological clearance is recommended. A copy of the report is attached.
- b. If sub-surface cultural materials are found during any work phase, the BLM must be notified immediately. Construction will cease until the resource has been properly investigated and mitigated.
- c. The BLM is to be notified 5 days prior to starting dirtwork for the BLM biologist to conduct a deer survey.
- d. Wellsite and access road are located in arid, sandy, hilly terrain. Soil is shallow, sandy and silty. Vegetation consists of very sparse native grasses and sparse sagebrush, and small trees. The area is a natural habitat for wildlife.
- e. Sundry Notice and Report of Wells (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 32 CFR 3164.
- f. The dirt contractor will be provided with an approved copy of the surface use plan.

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

**Operator:**  
 Petral Exploration, LLC  
 1700 Lincoln Street, Ste. 4750  
 Denver, CO 80203  
 (303) 832-3131

**Representative**  
 ENMARC, INC.  
 P.O. Box 7638  
 Loveland, CO 80537  
 (970) 663-7576

**Certification:**

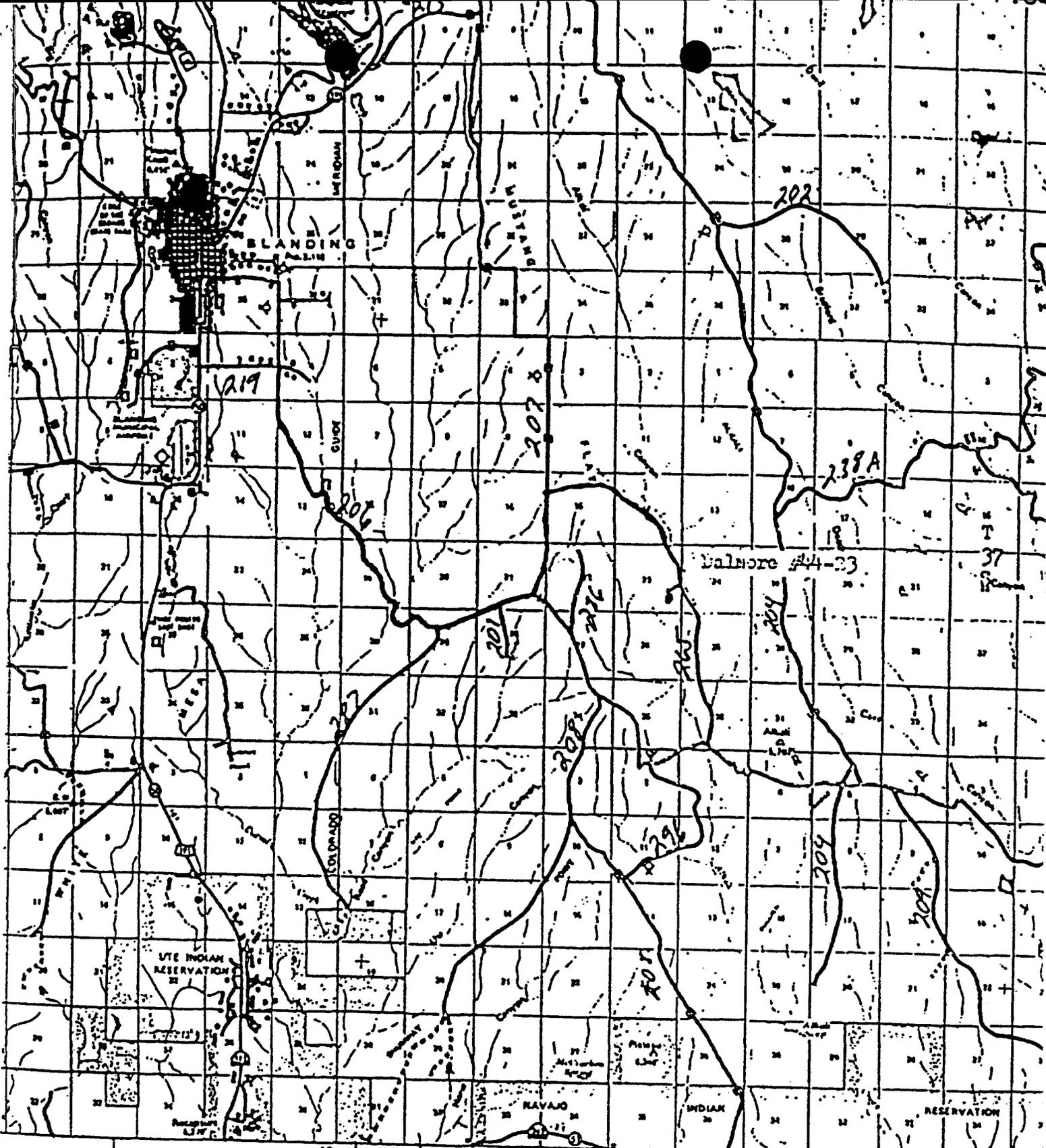
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Petral Exploration LLC, 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.

9-16-98

Date

E. K. Bostick

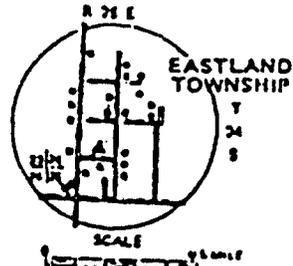
E. K. Bostick  
ENMARC, Inc.  
Authorized Agent for:  
Petral Exploration, LLC



**ROAD MAP OF THE AREA**

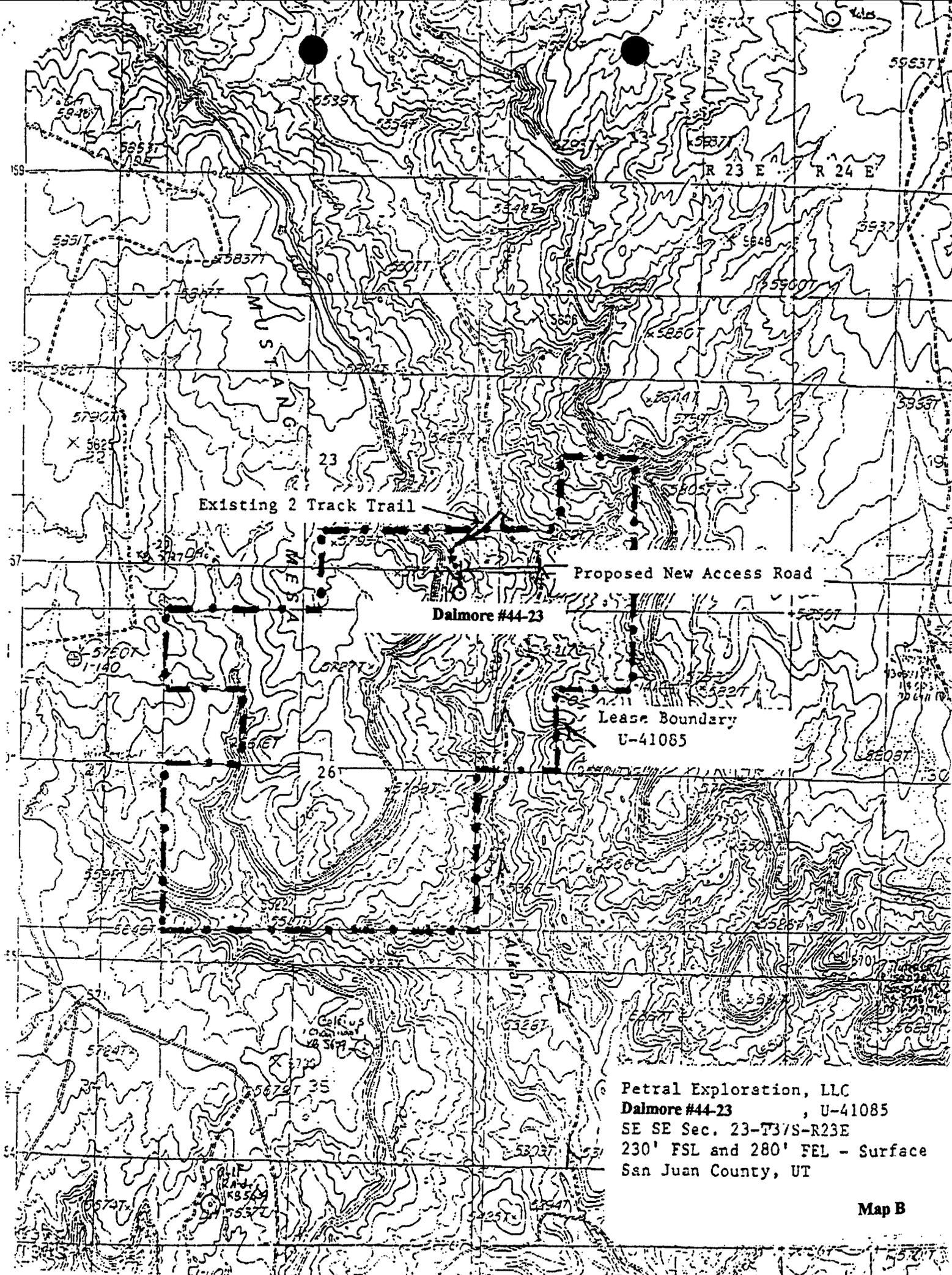
AETRAL EXPLORATION LLC  
 DALMORE #44-23  
 SE SE Sec. 24-T37S-R23W  
 San Juan Co, Utah  
 Loase # UTU 041085

Copies of this map are available  
 for public use at nominal cost  
 U.S.G.T.  
 Office of Community Relations  
 U.S.G.T. - B.P.S. Complex  
 6284 South 3700 West  
 San Lake Cal, Utah 84119



FOR VOLUME PROJECTS  
 See Map Book 9 of Series on 1  
 Coordinate System, Section  
 as Occupied by the B.P.S.

Map A



Existing 2 Track Trail

Proposed New Access Road

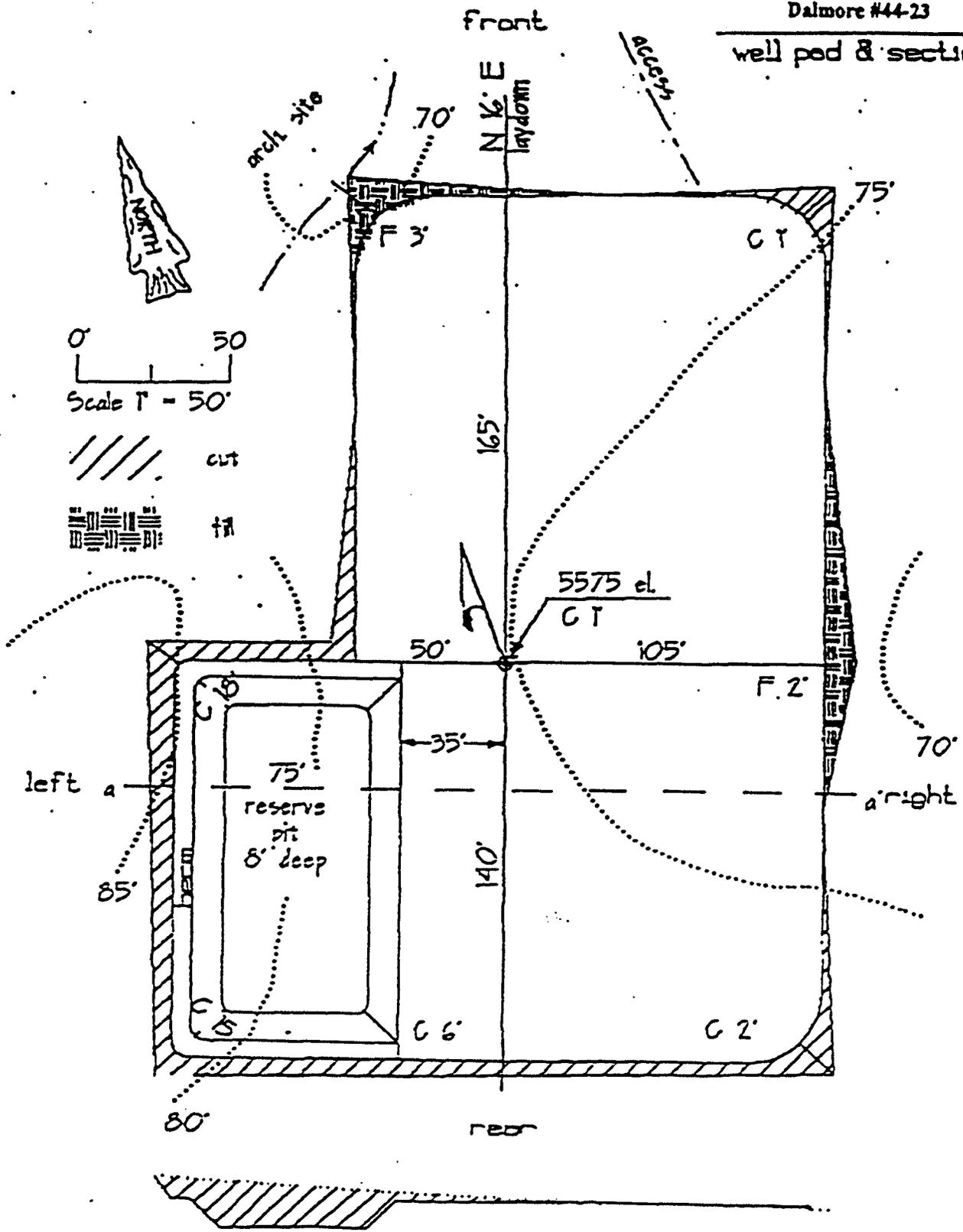
Dalmore #44-23

Lease Boundary  
U-41085

Petral Explorstion, LLC  
Dalmore #44-23 , U-41085  
SE SE Sec. 23-T3/5-R23E  
230' FSL and 280' FEL - Surface  
San Juan County, UT

Map B

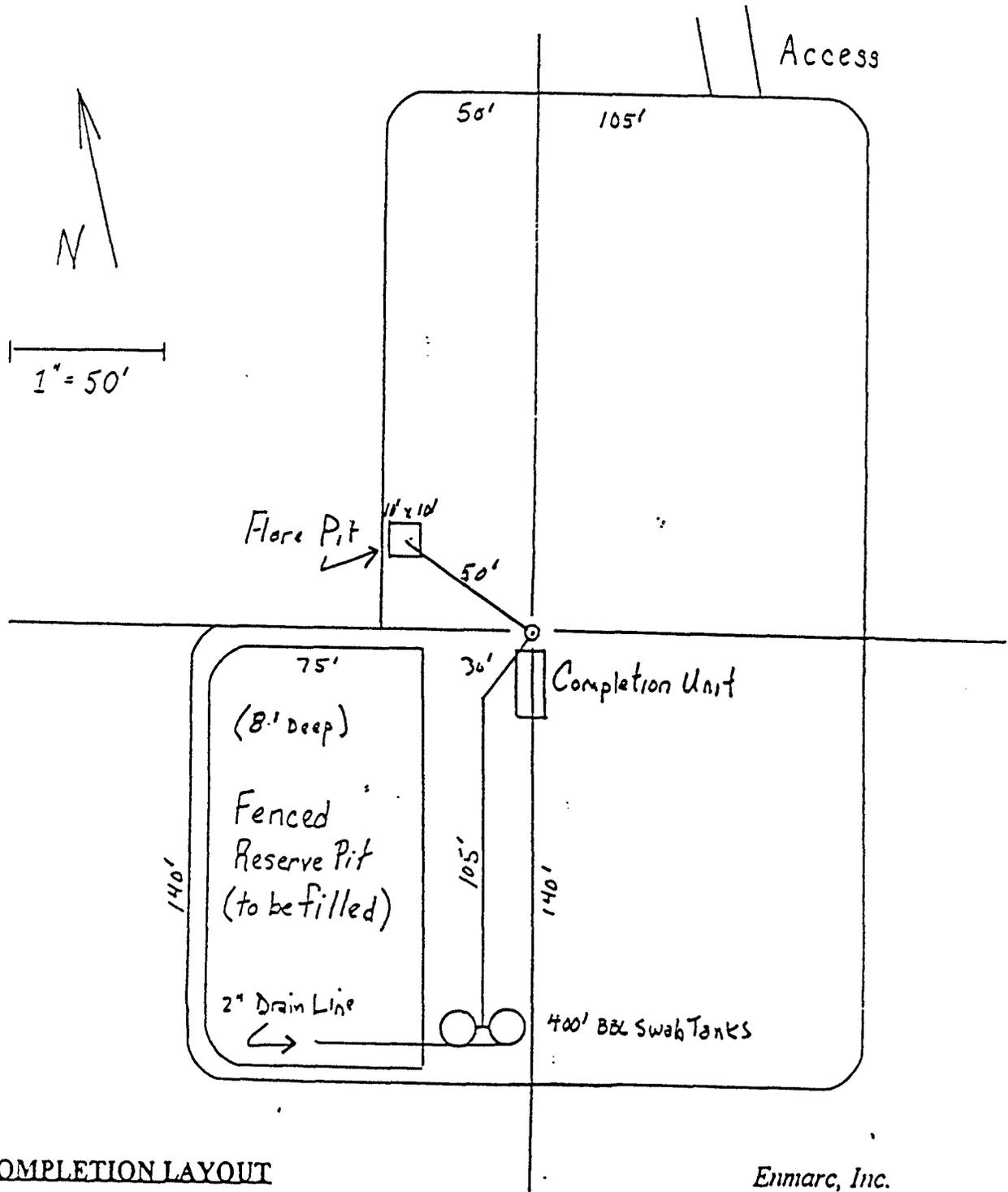
well pod & section



Cross section



Dalmore # 44-23  
Petral Exploration, LLC  
Sec. 23 - T37S - R23E  
San Juan Co., Utah

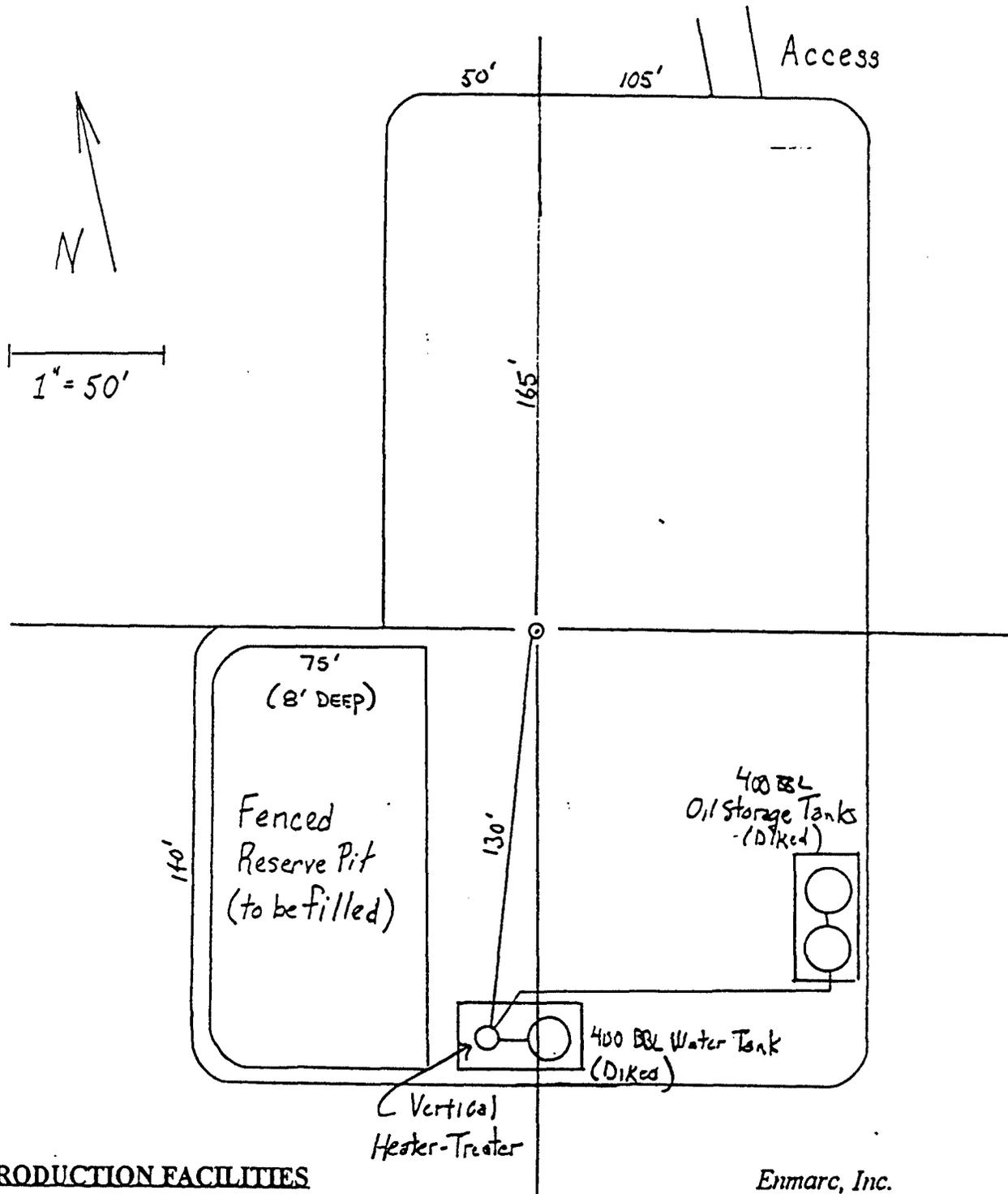


COMPLETION LAYOUT

Diagram 5

Enmarc, Inc.  
P.O. Box 7638  
Loveland, CO 80537  
(970) 667-9734

Dalmore # 44-23  
Petral Exploration, LLC  
Sec. 23 - T37S - R23E  
San Juan Co., Utah



**PRODUCTION FACILITIES**

Diagram 6

Enmarc, Inc.  
P.O. Box 7638  
Loveland, CO 80537  
(970) 667-9734

 CORNERS  
ARCHAEOLOGICAL SERVICES

P.O. Box 418  
Moab, UT 84532  
(435) 259-2777

Ms. Nancy Shearin, Archaeologist  
Bureau of Land Management  
San Juan Resource Area  
P.O. Box 7  
Monticello, Utah 84535

July 21, 1998

Dear Nancy:

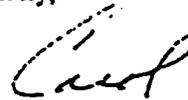
The archaeological survey of Petral's Exploration Company's #1 Dalmore Federal well pad and 1900' of an access route was surveyed by personnel of 4-Corners Archaeological Services between August 22, and August 28, 1995. A total of 16.5 acres were inventoried for cultural resources on lands administered by the Bureau of Land Management, San Juan Resource Area. The survey report was submitted to the Utah Division of State History and to the BLM - San Juan Resource Area office on August 30, 1995.

Because our client (Petral Expl.) decided not to continue with the project following the land and cultural survey, an APD was not submitted to the BLM Oil & Gas Division, and the BLM Archaeologist did not conduct the Section 106 compliance proceedings. The cultural report (and attendant site forms) were sent to the Utah SHPO (by 4-CAS\*) and no comment was made on the effect of the undertaking (Case No. 95-1316) since the APD was not initiated in the first place by our client, & sent through via the BLM. \*(At that time the contracting archaeologists sent reports directly to the SHPO).

To date, Petral is now requesting to drill this previously surveyed location, and will submit their APD to the BLM under a different well name - now referred to as the Dalmore #44-23 well pad. The center stake will be re-set, as it was in 1995, and the access will be flagged following the same route previously surveyed. The well pad layout may differ slightly from the previous submitted plat, however the initial cultural survey in 1995 included a 10 acre area surrounding the well center, and the newly proposed well pad will cover less than 1.5 acres.

Please find enclosed a copy of the 1995 archaeological report for your review. Four archaeological sites were found in the survey area at that time. Two of the four sites, 42Sa22799 and 42Sa22800, are situated several hundred feet north of the proposed well location and will not be effected by project activities. One archaeological site, 42Sa22798, was found to be located less than 35' from the edge of the northwest corner of the proposed well location. One other site, 42Sa22819, was found to be located less than 60' west from the flagged access centerline. At that time it was recommended to fence the northwest corner of the well location to provide protection to site 42Sa22798, and to monitor construction activities along the proposed access route. Because of the time lag between the original 1995 survey and our client's recent request, it will be necessary to re-flag the site locations and submit future recommendations based on the new well location design to ensure that the sites will not be effected by the project activities.

Sincerely,



Carol S. DeFrancia  
Principal Investigator

CSD/distribution:

E.K. Bosuck, - for Petral Expl., Denver



# State of Utah



Department of Community & Economic Development  
Division of State History  
Utah State Historical Society

Michael O. Leavitt  
Governor  
Max J. Evans  
Director

300 Rio Grande  
Salt Lake City, Utah 84101-1162  
(801) 533-3500 • FAX: 533-3503 • TDD: 533-3502  
cehistory.ushs@email.state.ut.us

October 5, 1995

Carol S. DeFrancia  
4-Corners Archaeological Services  
858 East Oak Street  
Moab, Utah 84532

RE: Archaeological Survey of Petral Exploration Company's #1 Dalmore Federal Well Pad & Access Route, San Juan County, Utah U-95-FE-476b

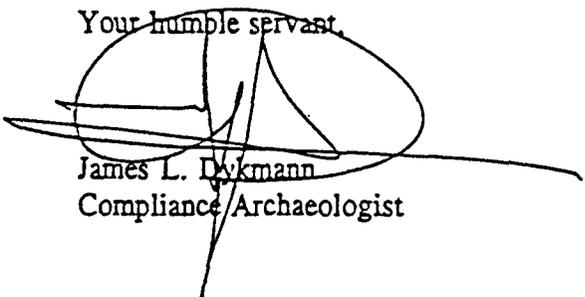
In Reply Please Refer to Case No. 95-1316

Dear Ms. DeFrancia:

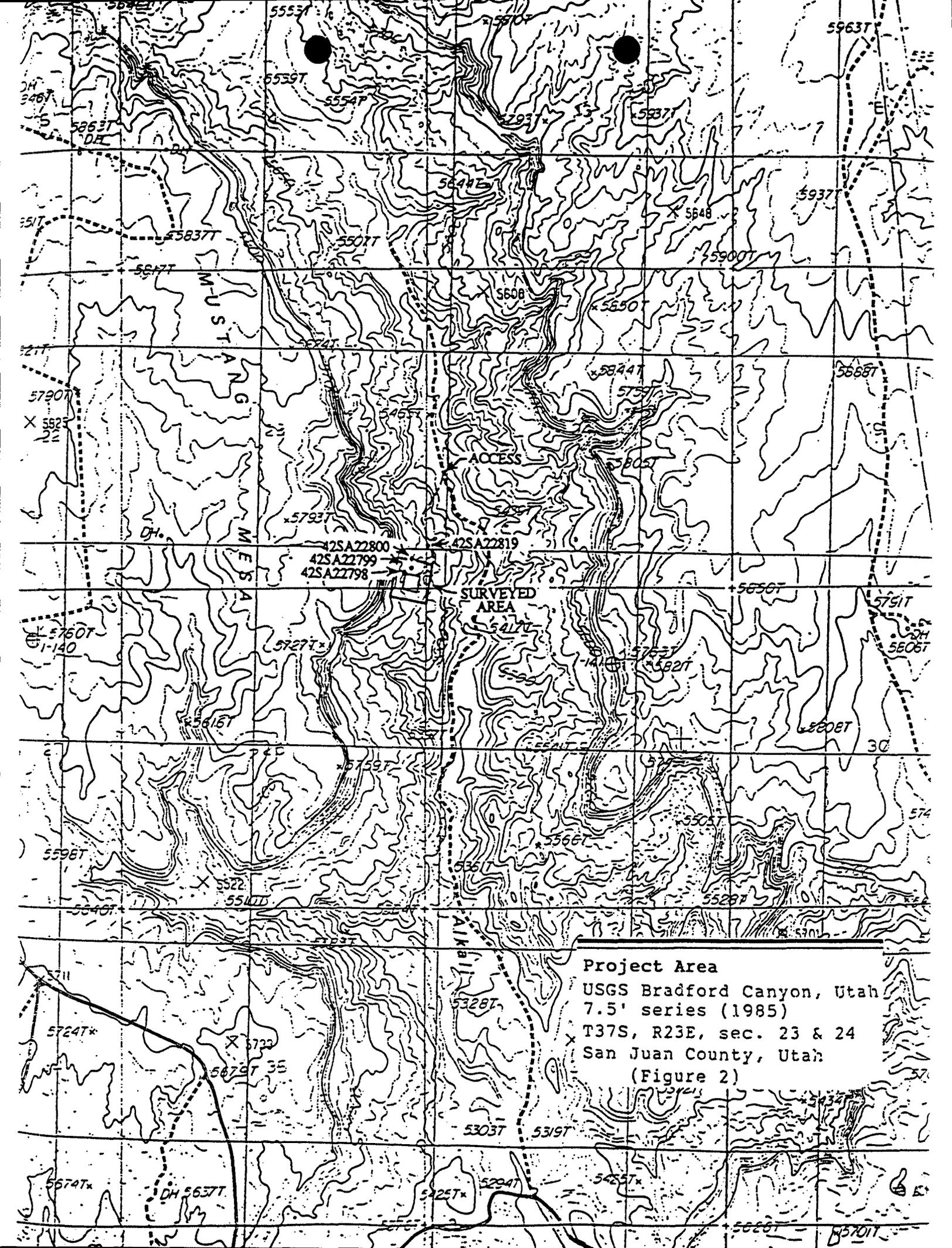
The Utah State Historic Preservation Office received the above referenced cultural resources report on October 2, 1995. We have not received a request for Section 106 consultation from the involved federal or state agency. Therefore, we cannot comment on the effect of the undertaking on historic properties.

The report and any accompanying forms have been placed in our files. Additional requests for information or assistance on the data contained in the report or forms can be directed to the Regulation Section at (801) 533-3500. My computer address on internet is:  
jdykman@email.state.ut.us

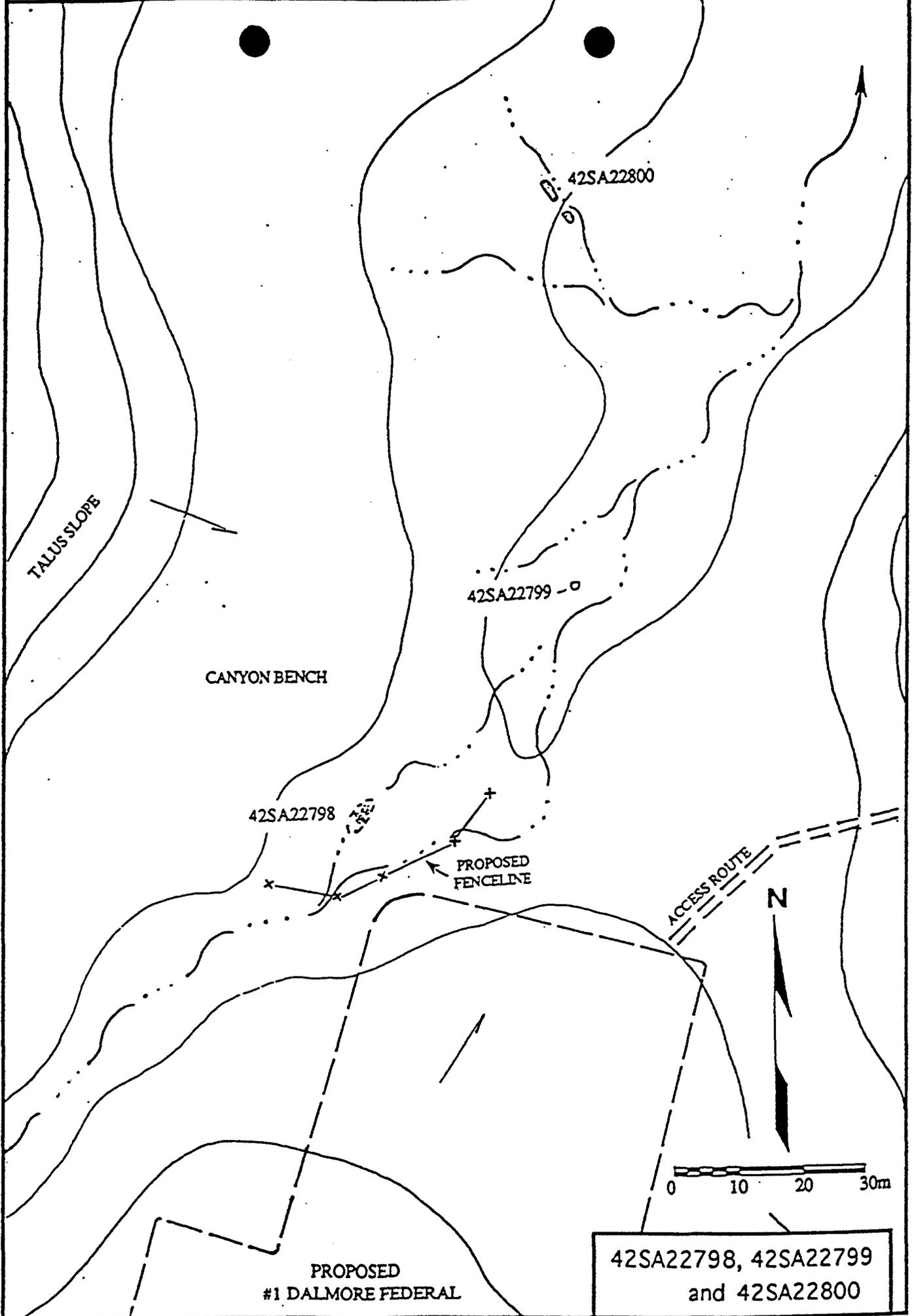
Your humble servant,

  
James L. Dykman  
Compliance Archaeologist

JLD:95-1316 BLM

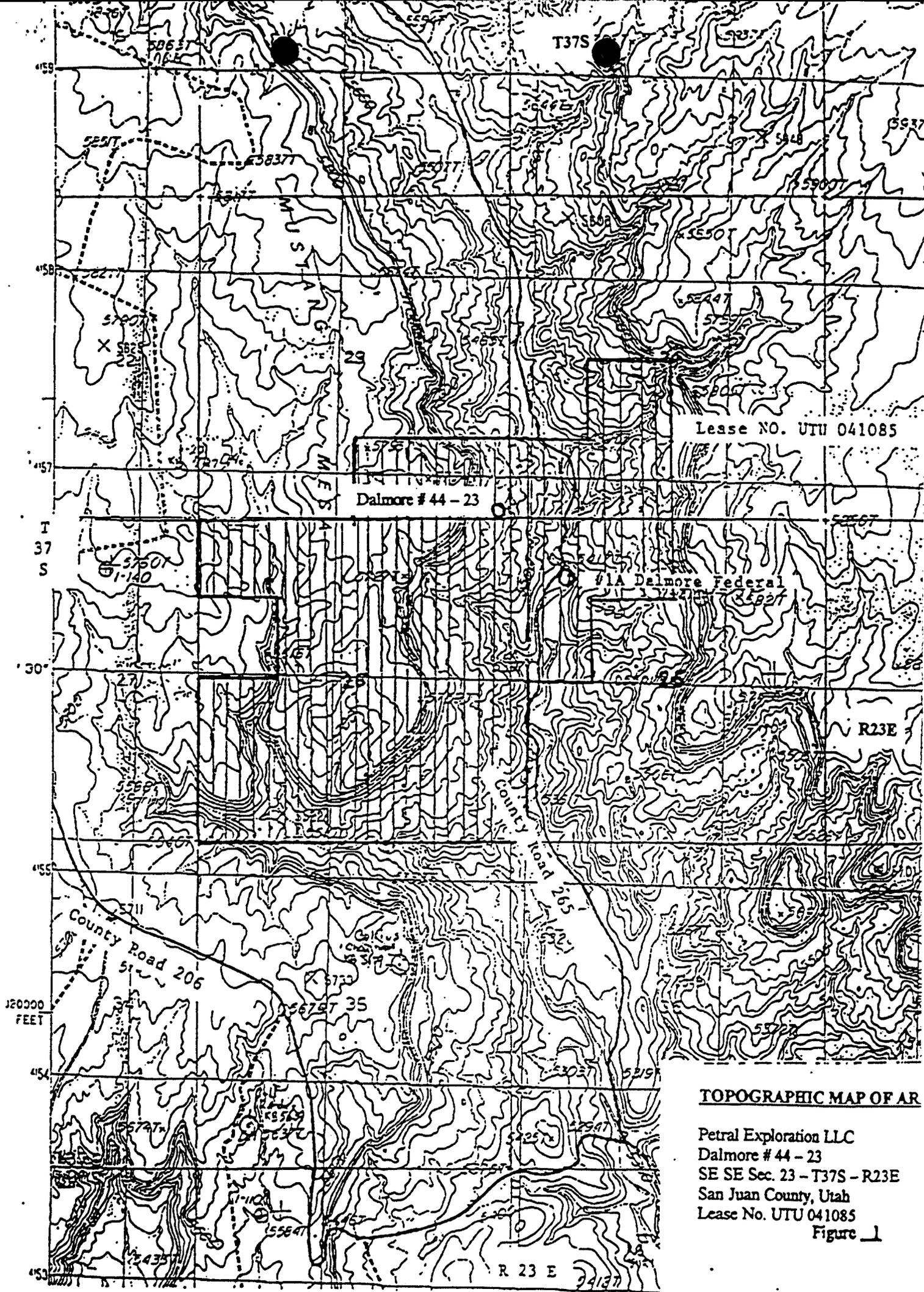


**Project Area**  
USGS Bradford Canyon, Utah  
7.5' series (1985)  
T37S, R23E, sec. 23 & 24  
San Juan County, Utah  
(Figure 2)



(Figure 4)





Lease NO. UTU 041085

Dalmore # 44 - 23

VIA Dalmore Federal

County Road 206

**TOPOGRAPHIC MAP OF AR**

Petral Exploration LLC  
Dalmore # 44 - 23  
SE SE Sec. 23 - T37S - R23E  
San Juan County, Utah  
Lease No. UTU 041085

Figure 1

R 23 E

ARCHAEOLOGICAL SURVEY OF  
PETRAL EXPLORATION COMPANY'S  
#1 DALMORE FEDERAL WELL PAD & ACCESS ROUTE  
SAN JUAN COUNTY, UTAH

4-CAS REPORT 9518

by  
Carol S. DeFrancia

4-CORNERS ARCHAEOLOGICAL SERVICES  
858 E. Oak St.  
Moab, Utah 84532  
(801) 259-2777

August 29, 1995

FEDERAL ANTIQUITIES PERMIT 94UT62712  
Utah State Permit No. U-94-0476b

Prepared For:  
Petral Exploration  
1700 Lincoln, Suite 5000  
Denver, CO 80203

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## ABSTRACT

The archaeological survey of Petral Exploration Company's #1 Dalmore Federal well pad and access route was conducted by personnel of 4-Corners Archaeological Services between August 22 and August 28, 1995. The project is located along a canyon bench above Alkali Creek in San Juan County, Utah, approximately six to eight miles southeast of the town of Blanding. A total of 16.5 acres were inventoried for cultural resources on lands administered by the Bureau of Land Management, San Juan Resource Area.

Four archaeological sites were found in the survey area. Two of the four sites, 42Sa22799 and 42Sa22800, are situated several hundred feet north of the proposed well location and will not be impacted from project activities. One archaeological site, 42Sa22798, is located less than 35' from the edge of the northwest corner of the proposed well location and one other site, 42Sa22819, is located less than 60' west from the flagged access centerline. Because of certain limitations imposed by rough terrain, and that these sites are in close proximity to proposed construction zones, it is recommended that a protective fence be placed between the northwest corner of the well location and site 42Sa22798, as well as an archaeological monitor present during construction activities of both the well location and the access route. If these protective measures are taken than archaeological clearance would be the recommended procedure.

## INTRODUCTION

The archaeological survey of Petral Exploration Company's #1 Dalmore Federal well pad and access route was conducted by Carol DeFrancia of 4-Corners Archaeological Services between August 22, and August 28, 1995. The project is located in Alkali Canyon, San Juan County, Utah (Figure 1), and is occupies lands that are administered by the Bureau of Land Management, San Juan Resource Area. The survey was requested by Mr. Ed McInay, of McInay & Associates. Huddleston Surveying personnel staked and flagged the well pad and access route prior to the survey. The surveyed access route extends approximately 1900' east and northeast of the proposed well pad to an existing county road in Alkali Canyon. A total of 16.5 acres were inventoried for cultural resources (Figure 2).

Federal and state governments have enacted legislation that is designed to conserve and protect cultural resources. The principal federal legislation includes the Antiquities Act of 1906 (PL 52-209), the National Historic Preservation Act of 1966 (PL 89-665), the National Environmental Policy Act of 1969 (PL 91-190), the 1971 Executive Order No. 11593, the Archeological and Historical Conservation Act of 1974 (PL 93-291), and the Archaeological Resource Protection Act (ARPA) of 1979 (PL 95-96).

Four archaeological sites were found in the survey area. Two of the four sites, 42Sa22799 and 42Sa22800, are situated several hundred feet north of the proposed well location. One archaeological site, 42Sa22798, is located less than 35' from the edge of the northwest corner of the proposed well location and one other site, 42Sa22819, was found less than 60' west of the flagged access centerline.

## PROJECT AREA

Map Reference: Bradford Canyon, Utah 1985 (7.5' series)

Total Project Area: 3.5 acres; area surveyed 16.5 acres

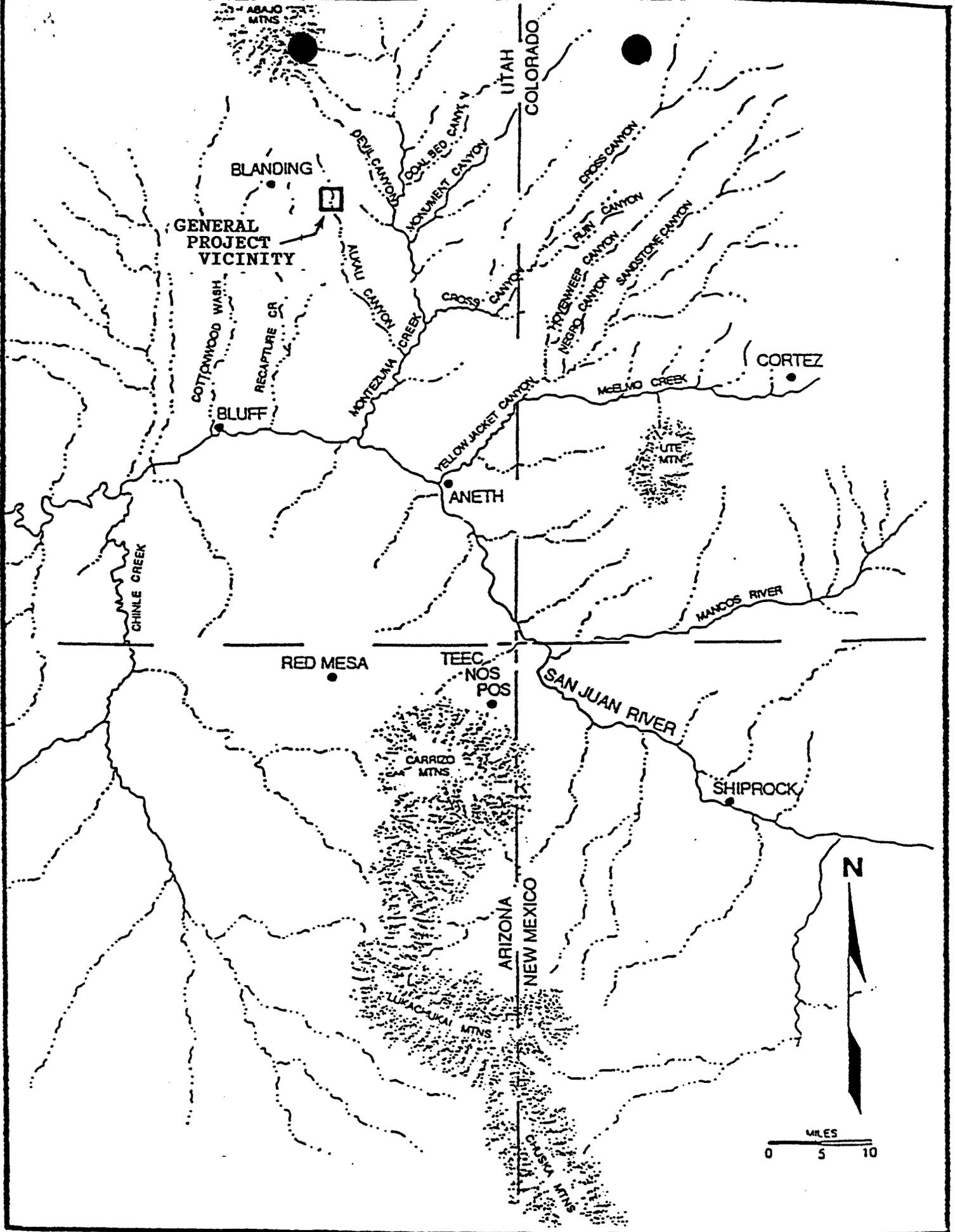


Figure 1. Project Area



#1 Dalmore Federal well pad

Legal Description: T37S, R23E: SE, SE, SE Section 23  
Center Stake: 230' FSL, 280' FEL; T37S, R23E, Section 23

|                                     |           |         |          |
|-------------------------------------|-----------|---------|----------|
| UTM Coordinates:<br>(Surveyed Area) |           | Easting | Northing |
|                                     | NW Corner | 645710  | 4156960  |
|                                     | NE Corner | 645910  | 4156900  |
|                                     | SE Corner | 645860  | 4156710  |
|                                     | SW Corner | 645660  | 4156780  |

Project Area: Well Pad 210 x 305'; (1.4 acres)

Surveyed Area: 660 x 660' (10 acres)

Results: Three archaeological sites found within well pad survey area; (42Sa22798, 42Sa22799, & 42Sa22800).

#1 Dalmore Federal access route

Legal Description: T37S, R23E: SE, SE, SE of section 23  
SW, SW; NW, SW of section 24

|                  |      |         |                           |
|------------------|------|---------|---------------------------|
| UTM Coordinates: |      | Easting | Northing                  |
|                  | BOL  | 645820  | 4156880 (right front pad) |
|                  | bend | 645930  | 4156900                   |
|                  | bend | 645920  | 4157000                   |
|                  | bend | 645880  | 4157080                   |
|                  | bend | 645860  | 4157150                   |
|                  | EOL  | 645990  | 4157380 (road tie)        |

Project Area: 1900' long, maximum 60' wide (2.1 acres)

Surveyed Area: 1900' x 150' (6.5 acres)

Results: One archaeological site found west of access centerline (42Sa22819).

**PHYSIOGRAPHY AND ENVIRONMENT**

The project area is located along an east facing canyon bench above Alkali Creek, in San Juan County, Utah, approximately six to eight miles southeast of the town of Blanding. The area lies in the Colorado Plateau physiographic province and is a structural element of the Blanding Basin (Stokes 1977). The proposed well pad occupies a relatively flat east-aspect colluvial bench situated several hundred feet east of a steep talus slope that flanks Mustang Mesa. The access route begins at the northeast front corner of the proposed well pad and extends east, north, then northeast around the base of the canyon bench to an existing dirt road along the floodplain of Alkali Canyon. Terrain in the area is generally flat to gently undulating hills and ridges with aeolian deposits and colluvial sediments across the face of the canyon bench. Colluvial talus boulders and large blocks of dark 'desert varnished' sandstone are scattered throughout the area. Sandy alluvium is found along Alkali Creek.

Throughout the Blanding Basin are numerous sources of lithic material important to the areas' prehistory. These resources were utilized for manufacture of tools and other implements, as well as local outcrops of clay deposits and iron minerals that were suitable for ceramic construction and design.

Vegetation on the canyon bench is a pinyon-juniper woodland association consisting of sagebrush, bitterbrush, euphedra, shadscale, rabbitbrush, cedarweed, prickly pear and narrow leaf yucca. Lower elevations along the floodplain of Alkali Canyon contain occasional juniper, greasewood, sagebrush, cheatgrass and other grasses.

Permanent water sources are available in numerous springs and seeps in the heads of Alkali Canyon. Alkali Creek, less than 1000 feet east of the canyon bench, holds water for a few months throughout the late winter/spring season.

Reptilian, avian, and mammalian associations are consistent with those of the Upper Sonoran Life Zone throughout the Colorado Plateau.

## PREVIOUS RESEARCH

A file search was conducted on August 22, 1995 at the BLM San Juan Resource Area Office in Monticello, and with the Utah State Historic Preservation Department in Salt Lake. The results of the review indicated that a number of oil and gas related surveys (well pad and seismic programs) have been conducted in the general vicinity over the past decade and two archaeological sites (42Sa8785 and 42Sa11089) were documented less than one-half mile to the west of the project area near the eastern edge of Mustang Mesa.

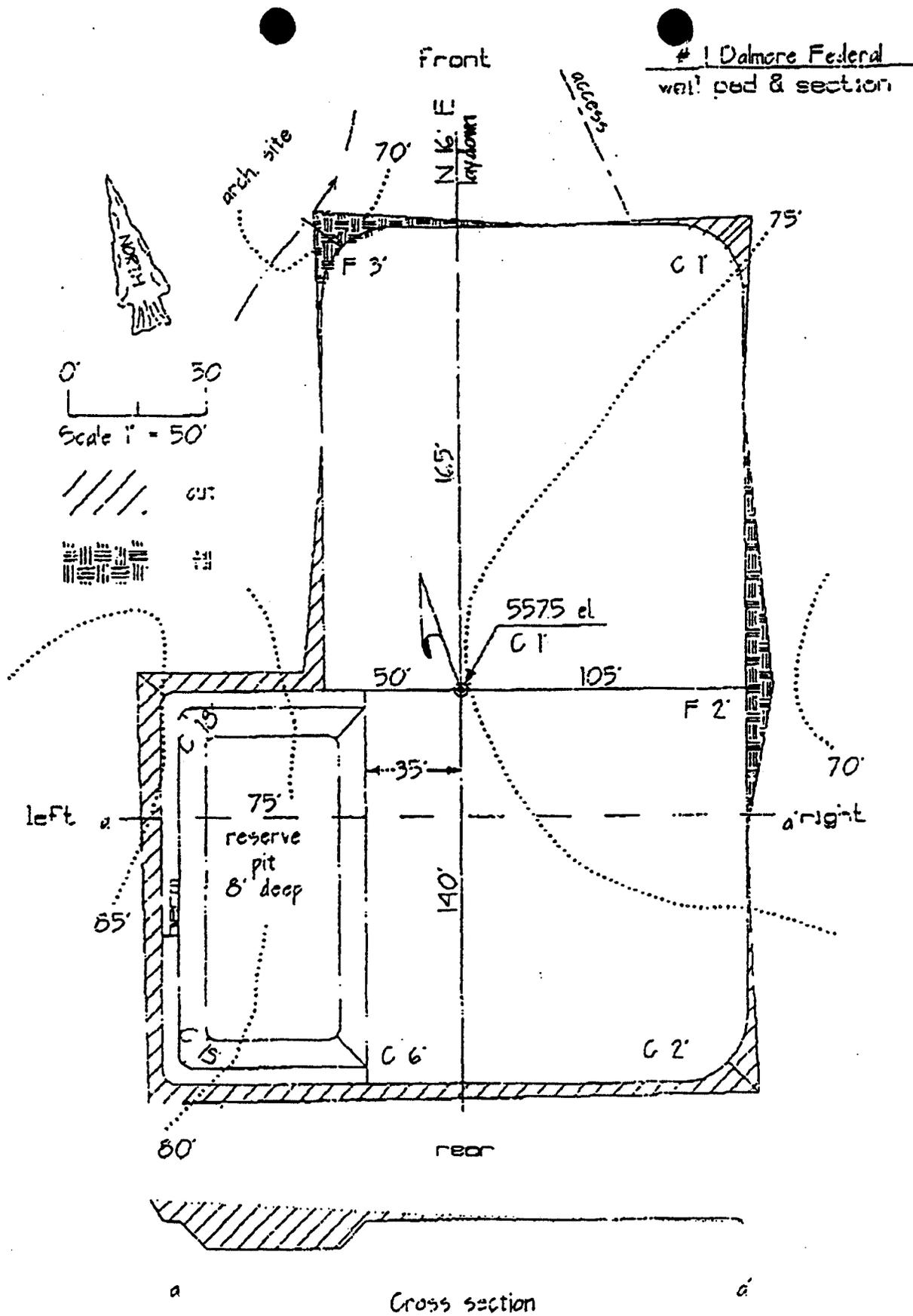
## EXAMINATION PROCEDURES

Prior to the field investigations the well pad (Figure 3) and access route were staked and flagged. A 660 x 660' area surrounding the well center stake (10 acres) was inventoried by walking a series of parallel transects spaced 15m apart. Two parallel zig-zag transects were walked along the 1900' of access route, covering a 150' wide corridor.

## PROJECT ACTIVITIES AND IMPACTS

Impacts to archaeological sites can potentially occur during well pad construction activities if dozing or grading operations accidentally cross site surfaces, either by driving over sensitive cultural features with heavy equipment, or by down cutting or pushing backfill into the site area. To avoid any adverse affects or potential impacts to the sites, the archaeologist flagged all sites with visible blue flagging around the perimeters to indicate places where no vehicular traffic or construction is allowed.

Additional protection to cultural resources should be implemented by constructing a protective barrier fence between any archaeological site and construction zone that lie in close proximity to one another, as well as providing an archaeological monitor to be present during the construction phase of project activities.



(adapted from Huddleston Land Surveying 8-25-95)

(Figure 3)

## SURVEY RESULTS

Four archaeological sites were found in the survey area (42Sa22798, 42Sa22799, 42Sa22800, and 42Sa22819) and represent prehistoric Anasazi limited use areas. Three of the four sites (42Sa22798 - 42Sa22800) exhibit upright slab construction and are located along an east-aspect colluvial bench above the floodplain of Alkali Canyon. All four sites contain ashy deposits and oxidized sandstone debris. One potential ceramic kiln site, 42Sa22798, is indicated by a scatter of burned rock and upright slab remnants, several early grayware sherds (Chapin Gray), and an ashy matrix covering an 8 x 3m area. No artifacts were found in association with two of the sites, however, based on their locational context in relation to other sites along the bench area, a temporal placement anywhere from Basketmaker III/Pueblo I through late Pueblo III times is probable. Because the sites' potential for subsurface deposits, all four are considered significant and eligible for a NRHP listing. General site descriptions are presented below in Appendix A.

## CONCLUSION AND RECOMMENDATIONS

The archaeological survey of Petral Exploration Company's #1 Dalmore Federal well pad and access route was conducted by personnel of 4-Corners Archaeological Services between August 22 and August 28, 1995. The project is located along a canyon bench above Alkali Creek in San Juan County, Utah, approximately six to eight miles southeast of the town of Blanding. A total of 16.5 acres were inventoried for cultural resources on lands administered by the Bureau of Land Management, San Juan Resource Area.

Four archaeological sites were found in the survey area. Two of the four sites, 42Sa22799 and 42Sa22800, are situated several hundred feet north of the proposed well location and will not require any further management considerations. One archaeological site, 42Sa22798, is located less than 35' from the edge of the northwest corner of the proposed well location. Another site, 42Sa22819, is located less than 60' west from the flagged access centerline. Because of certain limitations imposed by rough terrain in the area, and that these sites are in close proximity to proposed construction zones, it is recommended that a protective fence be placed between the northwest corner of the well location and site 42Sa22798, as well as an archaeological monitor present during construction activities of both the well location and the access route. If these protective measures are taken than archaeological clearance would be the recommended procedure.

## REFERENCES

- Stokes, William Lee  
1987 Geology of Utah. Occasional Paper Number 6. Utah  
Museum of Natural History, University of Utah, Salt Lake City.

## APPENDIX A

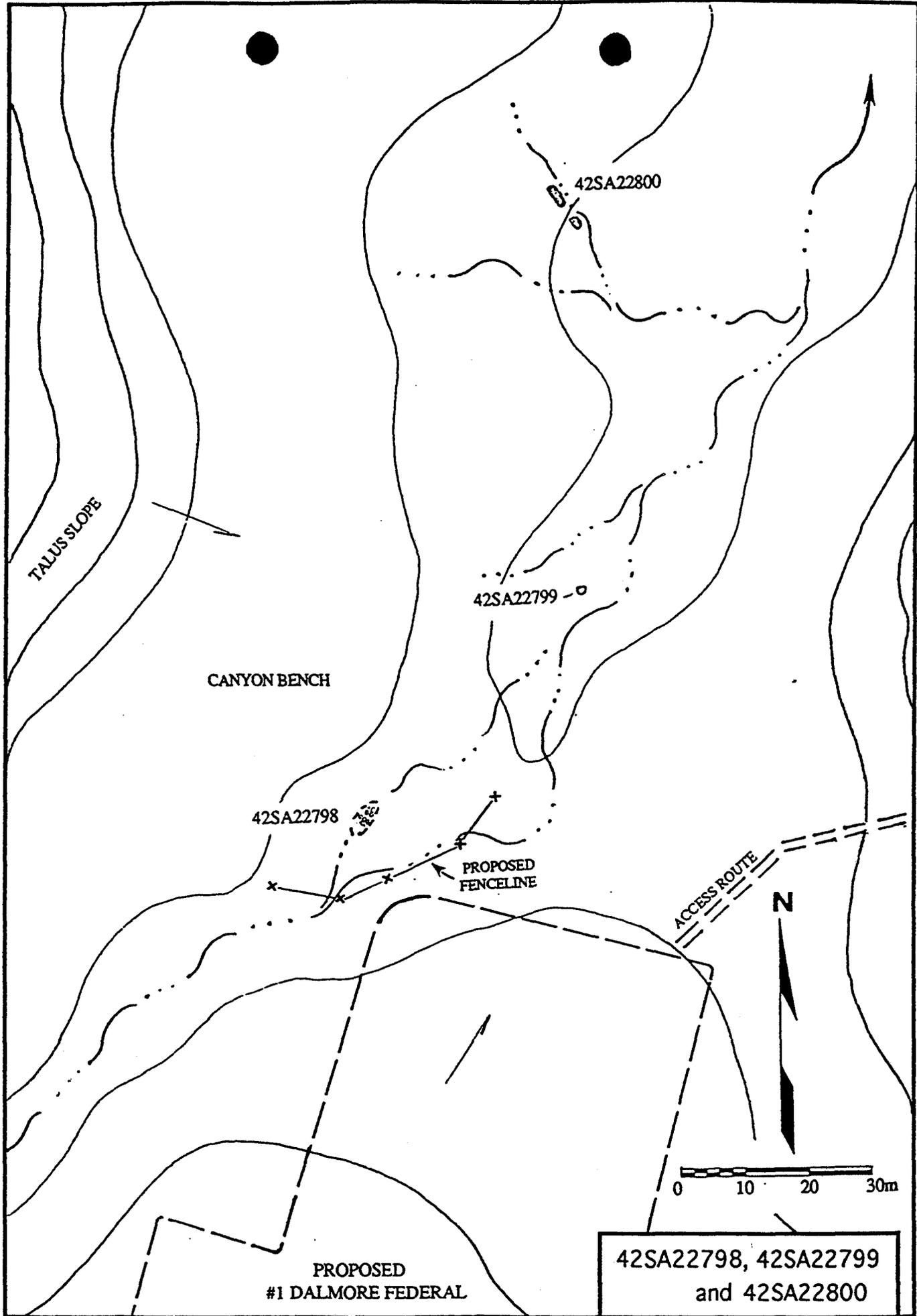
### Site descriptions:

42Sa22798: The site occupies an east-facing slope of a canyon bench above the floodplain of Alkali Creek and is positioned adjacent to a small ephemeral drainage. It consists of a probable BMIII-PI ceramic kiln site covering an 8 x 3m area. Interior fill contains oxidized angular and tabular sandstone debris, a dense ashy matrix, and atleast 25 Chapin grayware sherds present within the feature. No intact upright slabs are apparent along the surface. Based on the probability of subsurface deposits that could yield important information to the areas' prehistory, the site is considered significant and eligible for a NRHP listing. The site may be associated with other similar sites (42Sa22799 and 42Sa22800) along the bench area.

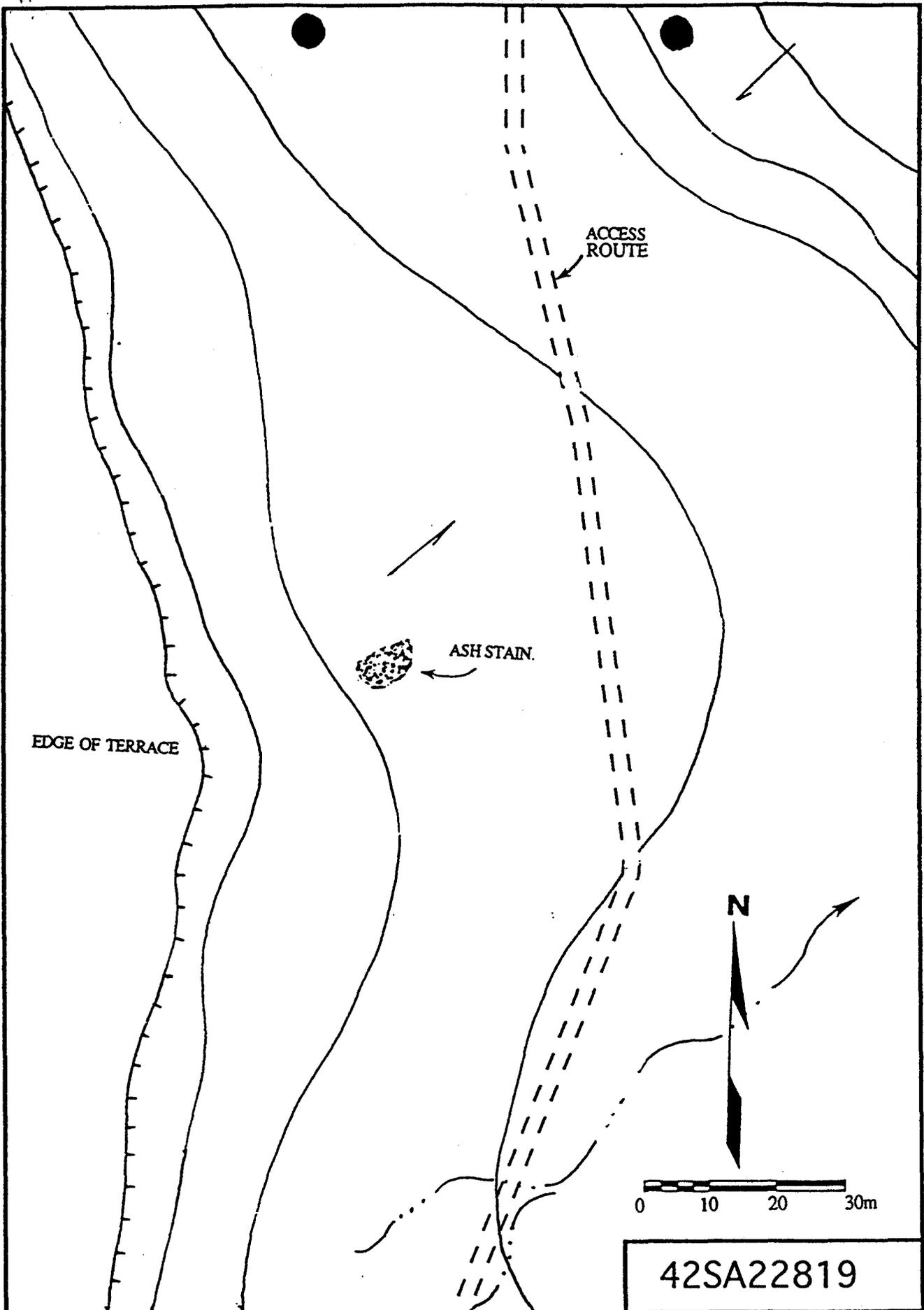
42SA22799: The site consists of a single upright slab feature that occupies an east-facing slope on a canyon bench above the floodplain of Alkali Creek. The isolated feature lies adjacent to an ephemeral drainage and measures roughly 85 x 90cm . Atleast seven oxidized sandstone slabs are intact and average 15 x 7 x 3cm. There is no apparent soil discoloration within the fill and no artifacts were found in association. A temporal placement is unknown. Because of the possibility of subsurface deposits that could yield datable material and important information to the areas' prehistory, the site is considered significant and eligible for a NRHP listing. The site lies 45m northeast of site 42Sa22798 and 55m south of site 42Sa22800.

42SA22800: The site occupies a southeast-facing slope of a canyon bench above Alkali Creek. It consists of two rectangular upright slab features that are oriented along the edge of an ephemeral drainage. The northern-most feature covers a 4 x 1.50m area and contains atleast twelve insitu slabs that are heavily oxidized. Upright slabs average 20 x 10 x 5cm and are eroded to the southeast of the feature. Numerous small angular and fire-altered sandstone fragments lie within an ashy fill that extends four meters northwest to southeast. A few meters southeast of this feature is a smaller 1.75 x 2m upright slab feature containing slightly larger oxidized slabs and an ashy matrix. Atleast nine upright slabs are intact and average 25 x 12 x 7cm. The feature is open on the southeast side and scattered oxidized sandstone remnants flank the west edge outside of the fill. No artifacts were found in association with these features; a temporal placement is unknown. The site lies 55m north of another upright slab site -42Sa22799. Because the site contains probable subsurface integrity, testing could provide important information to the areas' prehistory and provide information concerning site function and use, as well as possible datable materials. Based on this information potential, the site is considered significant and eligible for nomination to the National Register of Historic Places.

42SA22819: The site occupies the base of a canyon bench talus slope above the floodplain of Alkali Creek. It consists of a 5 x 8m dense accumulation of ashy soil, including a few fragments of oxidized angular sandstone debris. The ash stain is slightly mounded downslope and appears to contain subsurface deposits. Two corrugated grayware body sherds were found in the fill. The site is tenuously dated as a middle to late prehistoric Anasazi affiliation. Because of the possibility of subsurface deposits that could yield important information to the areas' prehistory, the site is considered significant and eligible for a NRHP listing.



(Figure 4)



(Figure 5)  
-10-

SAN JUAN COUNTY ROAD DEPARTMENT  
835 East Highway 686  
Post Office Box 188  
Monticello, Utah 84535  
(801) 687-3230

Application for Right-of-Way Encroachment Permit

Date 8-24-98

TO: San Juan County Surveyor/Engineer  
Post Office Box 188  
Monticello, Utah 84535

Application is hereby made by: (1) PETRAL EXPLORATION LLC  
Address (2) C/O ENMARC, INC., P.O. Box 7638, Loveland, CO 80537  
Telephone Number: (970)663-7576 for permission to do the  
following: (3) Use county roads 206 & 207 & 265 for access  
to a drilling site in Section 23-T37S-R23E. Drilling  
equipment and crews will be using the roads.

(4) Location: Section 23-T37S-R23E

City Blanding County San Juan State Utah  
or U.S. Highway No. N/A Milepost No. N/A In accordance  
with the attached plan. (5)

(6) Construction will begin on or about N/A 19     and  
will be completed on or before N/A 19    .

If the proposed installation requires breaking of the  
pavement, give the following information:

- a. Type of pavement: N/A
- b. The opening to be made will be N/A feet long by  
N/A feet wide and N/A feet deep.
- c. A bond in the amount of \$      has been posted with  
     Telephone No.

to run of a term of three (3) years after completion of work to  
guarantee satisfactory performance.

(7) If this permit is granted, we agree to comply with all  
conditions, restriction, and regulations as contained in the  
"Regulations for the Control and Protection of State Highway

Rights-of-Way", approved by the Utah State Road Commission of October 8, 1962, and all revisions thereto or Regulations adopted by the San Juan County Commission.

(8) In approving this application and locations of utilities, and effort will be made to approve only locations that will not be affected in the event that San Juan County changes the roadway. But, in situations in which the utility has to be moved, this moving shall be done by the utility company or paid for by the company.

(9) For any and all applications requesting authority to use vibratory equipment, applicants shall:

- a. Provide map showing where vibrations will take place.
- b. Agree to repair any damages or replace any property damaged.
- c. Take full responsibility for proper flagging and traffic control.
- d. Agree that vibrating done in the area of dirt roads shall be done on the dirt road rather than in the bar ditch to minimize damage.
- e. Provide a schedule of the planned work and estimated dates of completion.
- f. Attach written permission from all adjacent fee-title owners.
- g. The San Juan County commission has authorized the San Juan County Surveyor/Engineer (or his Assignees) to issue permits.

(10) San Juan County can only grant permission to the extent that the County has the authority to do so and the permission granted hereunder is limited to the interest of authority actually owned by San Juan County and no warranties of ownership or authority to grant permission is expressed or implied by the granting of this permit.

*E.K. Bostick*

BY: E.K. Bostick  
Agent for PETRAL EXPLORATION LLC  
TITLE

To be filled in by San Juan County Surveyor/Engineer.

(1) Permit should be granted Yes  
Permit should not be granted \_\_\_\_\_

(2) Additional requirements which should be imposed None.

*Don Peterson*  
SAN JUAN COUNTY SURVEYOR/ENGINEER



# NOTICE OF STAKING

|   |  |  |                          |
|---|--|--|--------------------------|
| NOTICE OF STAKING<br>(Not to be used in place of<br>Application for Permit to Drill Form 3160-3)  |  | 6. Lease Number<br><i>Federal UTU-041085</i>                                   |                          |
| 1. Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other (Specify)   |  | 7. If Indian, Allottee or Tribe Name<br><i>N/A</i>                             |                          |
| 2. Name of Operator<br><i>PETRAL EXPLORATION LLC</i>  |  | 8. Unit Agreement Name<br><i>N/A</i>   |                          |
| 3. Name of Specific Contact Person<br><i>E.K. Bostick (970)667-9734</i>   |  | 9. Farm or Lease Name<br><i>Dalmore</i>  |                          |
| 4. Address & Phone No. of Operator or Agent<br><i>C/O ENMARC, INC., P.O. Box 7638, Loveland, CO 80537-7638</i>  |  | 10. Well No.<br><i>44-23</i>   |                          |
| 5. Surface Location of Well<br><b>Approx. 464' FEL &amp; 463' FSL</b><br>Attach: a) Sketch showing road entry onto pad, pad dimensions, and reserve pit.<br>b) Topographical or other acceptable map showing location, access road, and lease boundaries. |  | 11 Field or Wildcat Name<br><i>Deadman Canyon</i>                              |                          |
| 15. Formation Objective(s)<br><i>Upper Ismay</i>  |  | 12. Sec., T., R., M., or Blk. and Survey or Area<br><i>Sec. 23, T37S, R23E</i> |                          |
| 16. Estimated Well Depth<br><i>6000'</i>  |  | County or Parish or Borough<br><i>San Juan</i>                                 | 14. State<br><i>Utah</i> |

17. Additional Information (as appropriate; shall include surface owner's name, address and, if known, telephone number)  
*H2S Potential Drilling in the immediate area has shown that H2S is not present.*  
*Private Surface Ownership No patented lands are involved in access road or drill pad.*  
*Cultural Resources (Archaeology) Archaeological survey completed at the time of staking.*  
*Federal Right of Way None required*

*Attachments*

13. Signed *E.K. Bostick* Title *Agent For Petral Exploration LLC* Date *7/15/98*

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

IMPORTANT: SEE REVERSE SIDE FOR INSTRUCTIONS  
 BILLING CODE 4310-54-C

R 23 E

Communitized Area (Sec 23) All)  
MD49P-84690C

Ownership Section 23

Grynberg 50.000%  
Dalmore LLC 6.250%  
Petral 43.750%

Ownership Section 24 SW (part)

Petral 89.25%  
Dalmore LLC 10.75%

1-22

Federal Lease UTU-046825

22

Federal Lease UTU-041499

T  
37  
S

Ownership Section 26 NE/4

Petral 90.625%  
Dalmore LLC 9.375%

27

27-43

HBP

BHL

UTU-041085

Petral  
HBP

Petral  
UTU-041085  
HBP

Petral  
1-A

HBP

26

25

Pooled Section 25 NW/4

Petral 66.938%  
Grynberg 25.000%  
Dalmore LLC 8.062%

25-31

Federal Lease UTU-041085



WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 09/21/1998

API NO. ASSIGNED: 43-037-31801

WELL NAME: DALMORE-FEDERAL 44-23  
 OPERATOR: PETRAL EXPLORATION LLC (N7700)  
 CONTACT: David Norby (303) 864-2303

AMENDED

PROPOSED LOCATION:  
 SESE 23 - T37S - R23E  
 SURFACE: 0230-FSL-0280-FEL  
*Prod Zn.* BOTTOM: 0464-FSL-0464-FEL *246 FEL 3-21-01*  
 SAN JUAN COUNTY *BHL 598 FSL 569 FEL...*  
 DEADMAN CANYON FIELD (345)

|                        |          |      |
|------------------------|----------|------|
| INSPECT LOCATN BY: / / |          |      |
| TECH REVIEW            | Initials | Date |
| Engineering            |          |      |
| Geology                |          |      |
| Surface                |          |      |

LEASE TYPE: FED  
 LEASE NUMBER: UTU-041085  
 SURFACE OWNER: Federal

PROPOSED FOR:

RECEIVED AND

Dalmore Fed. 44-23

*4/3/01  
JRB*

- Plat
- Bond: Fe (No. \_\_\_\_\_)
- Potash (\_\_\_\_\_)
- Oil Shal (\_\_\_\_\_)
- Water Pe (No. 0')
- RDCC Rev (Date: \_\_\_\_\_)

BHL @ TD

*Obtained from Baker Hughes Integ  
dated 3/19/70 (?)*

N/A Fee Surf

*TD (MD) = 6249'*

*TD (TVD) = 6240'*

COMMENTS: -

*BHL: 250' N, 40' E*

*Surf. location: 230' FSL, 280' FEL*

STIPULATION:

*BHL: 480' FSL, 240' FEL*

*4-4-01  
Updated by  
JC*

ING: \_\_\_\_\_  
 it \_\_\_\_\_  
 neral \_\_\_\_\_  
 ception \_\_\_\_\_  
 t \_\_\_\_\_  
 No: \_\_\_\_\_  
 Directional Drill \_\_\_\_\_

*JRB 8/10/99*

WORKSHEET  
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 09/21/1998

API NO. ASSIGNED: 43-037-31801

WELL NAME: DALMORE-FEDERAL 44-23  
 OPERATOR: PETRAL EXPLORATION LLC (N7700)  
 CONTACT: David Norby (303) 864-2303

AMENDED

PROPOSED LOCATION:  
 SESE 23 - T37S - R23E  
 SURFACE: 0230-FSL-0280-FEL  
*Prod Zn.* BOTTOM: 0464-FSL-0464-FEL *246 FEL 3-21-01*  
 SAN JUAN COUNTY *BHL 598 FSL 569 FEL...*  
 DEADMAN CANYON FIELD (345)

|                        |          |      |
|------------------------|----------|------|
| INSPECT LOCATN BY: / / |          |      |
| TECH REVIEW            | Initials | Date |
| Engineering            |          |      |
| Geology                |          |      |
| Surface                |          |      |

LEASE TYPE: FED  
 LEASE NUMBER: UTU-041085  
 SURFACE OWNER: Federal

PROPOSED FORMATION: ISMY

RECEIVED AND/OR REVIEWED:

Plat

Bond: Fed  Ind[] Sta[] Fee[]  
 (No. KT-1040)

Potash (Y/N)

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

Water Permit  
 (No. 09-637)

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

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: \_\_\_\_\_

R649-3-11. Directional Drill

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

\_\_\_\_\_

STIPULATIONS: ① FEDERAL APPROVAL

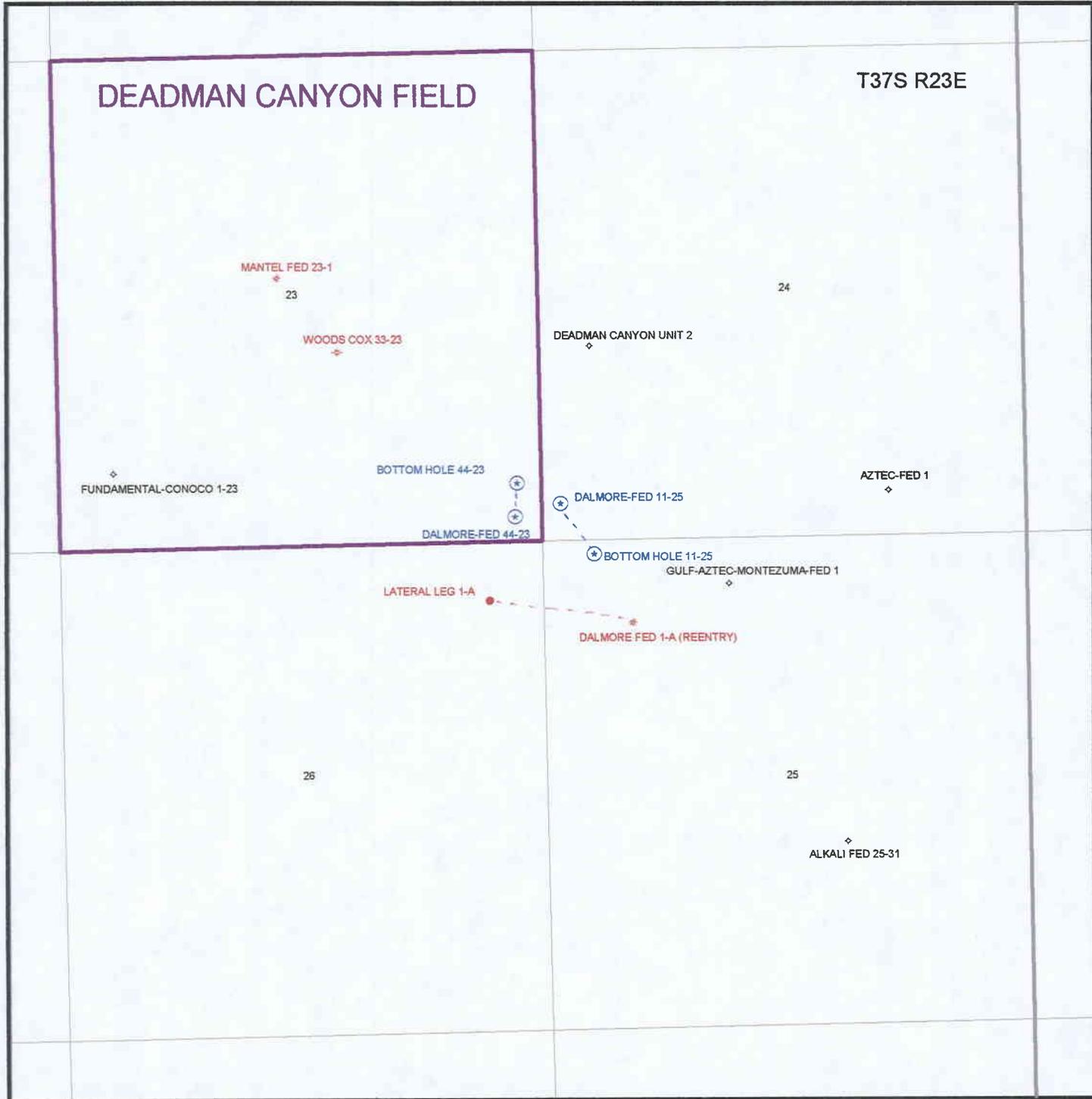
② Directional drilling .. JRB 8/10/99

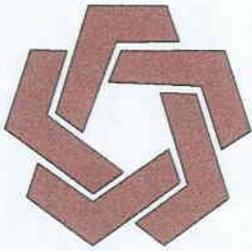
\_\_\_\_\_

\_\_\_\_\_



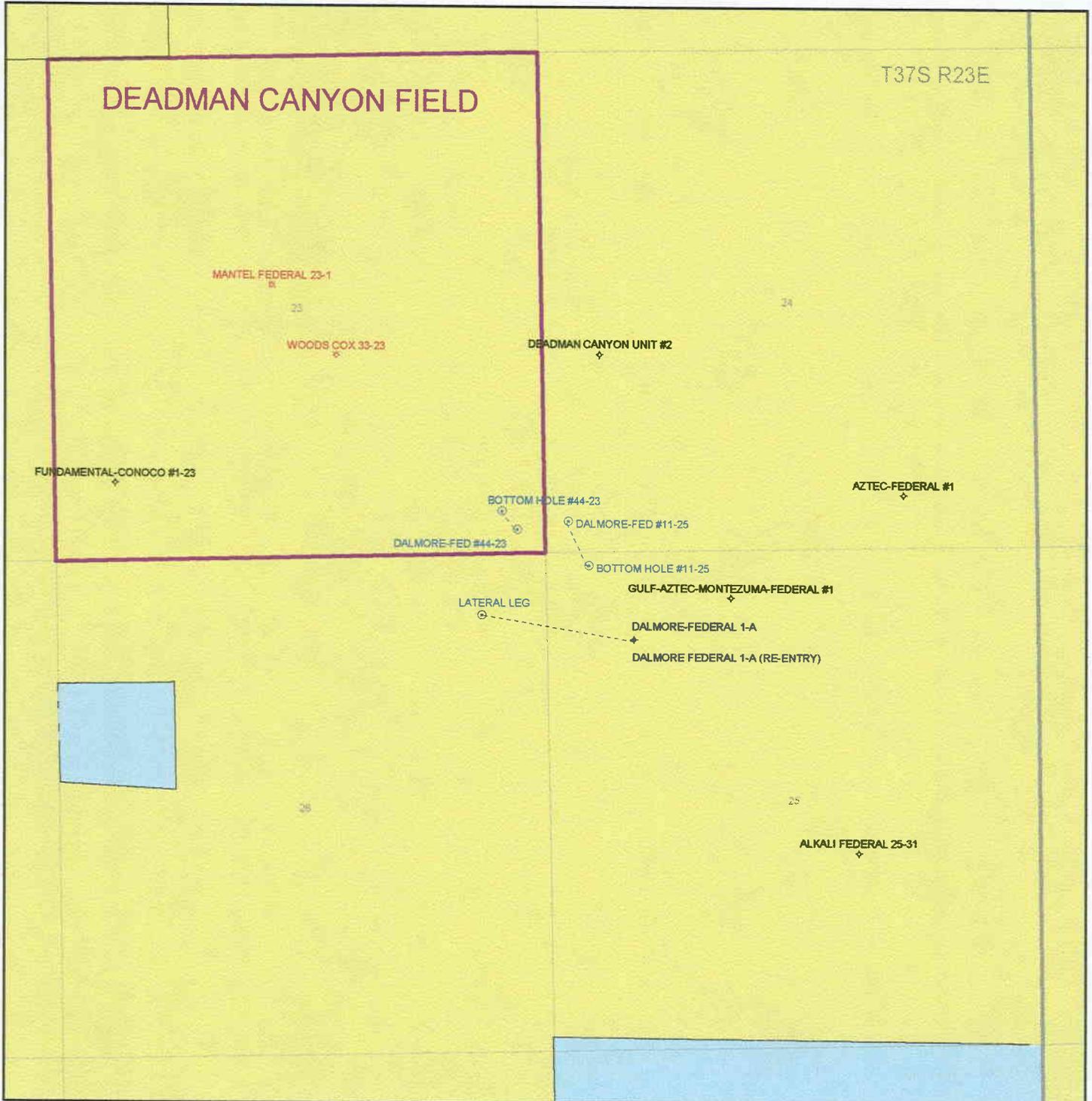
OPERATOR: PETRAL EXPLOR LLC (N7700)  
 SEC. 23, T37S, R23E  
 FIELD: DEADMAN CANYON (345)  
 COUNTY: SAN JUAN SPACING: R649-3-11  
 DIRECT/DRL





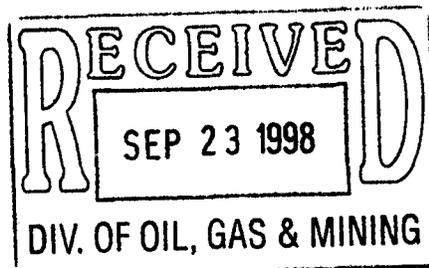
DIVISION OF OIL, GAS & MINING

OPERATOR: PETRAL EXPLORATION (N7700)  
FIELD: UNDESIGNATED (002)  
SEC. 23.24.25. & 26, TWP 37S, RNG 23E  
COUNTY: SAN JUAN



DATE PREPARED:  
23-OCT-1998

DALMORE, LLC  
2597 East Bridger Blvd.  
Sandy, Utah 84093  
801-942-0525  
(fax 942-8472)



September 17, 1998

Re: Dalmore Federal #44-23  
T 37 S, R 23 E, Section 23: SESE  
Dalmore Federal #11-25  
T 37 S, R 23 E, Section 25: NWNW  
San Juan County, Utah

Gary Torres  
BLM Moab District Office  
82 Dogwood, Ste. M  
Moab, UT 84532

Dear Mr. Torres:

This letter is to inform you that E. K. Bostick of Enmarc, Inc. is authorized to act as Agent and to sign documents on behalf of Dalmore LLC when necessary for filing count, state and federal permits including Onshore Order No. , Right of Way application, etc., for the above captioned wells.

Dalmore LLC, as a working interest owner in the above captioned wells, agrees to accept full responsibility for operations conducted by Petral Exploration LLC, as operator of the above captioned wells, pursuant to the Operating Agreement between Dalmore and Petral for operations conducted in order to drill, complete, produce and comply with regulations in the above-mentioned wells with E. K. Bostick and Enmarc, Inc., acting as Agent only.

Very truly yours,

A handwritten signature in black ink, appearing to read "Lane Lasrich".

Lane Lasrich  
Managing Member

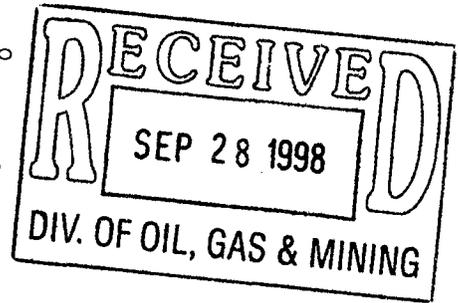
cc: ~~Jeff~~ Brown, BLM Monticello  
John Baza, DOGM

LAW OFFICES OF  
VAN COTT, BAGLEY, CORNWALL & MCCARTHY  
A PROFESSIONAL CORPORATION

SUITE 1600  
50 SOUTH MAIN STREET  
SALT LAKE CITY, UTAH 84144-0450  
TELEPHONE (801) 532-3333  
FACSIMILE (801) 534-0058

ADDRESS ALL CORRESPONDENCE TO  
POST OFFICE BOX 45340  
84145-0340

(801) 237-0352



September 25, 1998

**VIA HAND DELIVERY**

Mr. John Baza  
Associate Director, Oil and Gas  
Utah Division of Oil, Gas & Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, Utah 84180

Re: *Petral Exploration, LLC*  
*Dalmore - Federal #44-23*  
*Section 23, Township 37 South, Range 23 East*  
*San Juan County, Utah*

Dear Mr. Baza:

On behalf of Petral Exploration, LLC, I am delivering an original Sundry Notice for the Dalmore-Federal #44-23 Well that should be attached to the federal Application for Permit to Drill ("APD") for the well, which I filed with the Division of Oil, Gas and Mining on Monday, September 21, 1998, along with the Utah State APD Form 3s. Apparently, there was an error in the Surface Use Plan with the Federal APD.

Thank you for your assistance with this matter. If you have any questions or further instructions, please do not hesitate to contact me.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Thomas W. Clawson".

Thomas W. Clawson

TWC:cw  
Enclosures  
cc: Mr. Anthony Mayer  
Mr. E.K. Bostick

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires July 31, 1996

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

1.  Oil Well  Gas Well  Other

2. Name of Operator  
Petral Exploration LLC c/o ENMARC, INC. (E.K. Bostick)

3a. Address  
P.O. Box 7638, Loveland, CO 80537-7638

3b. Phone No. (include area code)  
(970) 663-7576

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Surface: 230' FSL & 280' FEL Sec. 23 - T37S - R23E  
  
BHL: 464' FSL & 464' FEL Sec. 23 - T37S - R23E

5. Lease Serial No.  
UTU-041085

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

7. If Unit or CA/Agreement, Name and/or No.  
N/A

8. Well Name and No.  
Dalmore-Federal #44-23

9. API Well No.

10. Field and Pool, or Exploratory Area  
Deadman Canyon

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

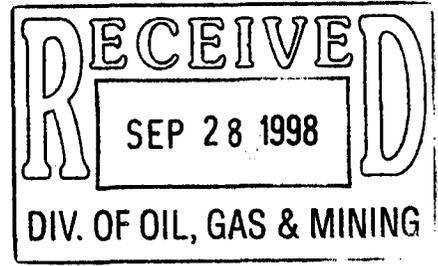
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION                                    | TYPE OF ACTION                                     |
|---|--|
| <input type="checkbox"/> Notice of Intent             | <input type="checkbox"/> Acidize                   |
| <input checked="" type="checkbox"/> Subsequent Report | <input type="checkbox"/> Deepen                    |
| <input type="checkbox"/> Final Abandonment Notice     | <input type="checkbox"/> Fracture Treat            |
|   | <input type="checkbox"/> New Construction          |
|   | <input type="checkbox"/> Plug and Abandon          |
|   | <input type="checkbox"/> Plug Back                 |
|   | <input type="checkbox"/> Production (Start/Resume) |
|   | <input type="checkbox"/> Reclamation               |
|   | <input type="checkbox"/> Recomplete                |
|   | <input type="checkbox"/> Temporarily Abandon       |
|   | <input type="checkbox"/> Water Disposal            |
|   | <input type="checkbox"/> Water Shut-Off            |
|   | <input type="checkbox"/> Well Integrity            |
|   | <input type="checkbox"/> Other <u>Corrected</u>    |
|   | <u>Surface Use Plan</u>                            |
|   | <u>for APD (9-16-98)</u>                           |

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once Testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

See attached Surface Use Plan

- CC: 3 - BLM, Moab  
1 - BLM, Monticello  
1 - Utah Division of Oil, Gas and Mining



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

|                                     |   |
|-------------------------------------|---|
| Name (Printed/Typed)<br>E.K Bostick | Title<br>Agent for Petral Exploration LLC |
| Signature<br><i>E.K. Bostick</i>    | Date<br>September 23, 1998                |

THIS SPACE FOR FEDERAL OR STATE USE

## SURFACE USE PROGRAM

Petral Exploration, LLC  
Dalmore-Federal #44-23  
Sec. 23 - T37S - R23E  
San Juan Co., UT  
Lease # UTU-041085

The onsite inspection for the subject well was conducted on July 2, 1998. In attendance were the following individuals:

|   |                    |                                   |
|---|--------------------|-----------------------------------|
| Gerald Huddleston                               | Surveyor           | Gerald Huddleston Land Surveyor   |
| Carol De Francia                                | Archaeologist      | 4 Corners Archaeological Services |
| (had been out and observed the site previously) |                    |                                   |
| Lowell Larson                                   | Dirt Contractor    | Triad Construction                |
| Tammy Fletcher                                  | Wildlife Biologist | Bureau of Land Management         |
| Jeff Brown                                      | Field Supervisor   | Bureau of Land Management         |
| Randy Shelton                                   | Pumper             | Petral Exploration LLC            |

### 1. Existing Roads

- a. To visit the wellsite, at Ameri-Gas located ½ mile south of Blanding, Utah on Utah Highway 191, turn west on County Road 219. Go 1 mile and turn right (south) on County Road 206 total of 8.5 miles to a Y and the intersection of County Road 207. Turn left on County Road 207 and proceed North 1.5 miles to the intersection of County Road 265. Turn Right (east) on County Road 265 and proceed southeasterly 3 miles to the lease access road on the right. Follow the flagged access road southwesterly .4 mile to the location.
- b. For access roads, see Maps A and B
- c. All existing roads within a 2-mile radius are shown on Maps A and B.
- d. Vehicles will travel only on designated travelways shown on the map.
- e. Existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.
- f. Signs will be installed along the county road warning of trucks entering the roadway if required by the San Juan County Road Department.

### 2. Access Roads to be Constructed and Reconstructed

- a. The well site will be accessed via a new (to be constructed) road.
- b. Culverts and low water crossings will be necessary.
- c. The use of surfacing material is not anticipated at this time.

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

- a. Water Wells – None
- b. Injection or Disposal Wells – None
- c. Producing Wells – One approximately ½ mile to the south  
Petral Exploration LLC, #1-A (RD) Dalmore Federal  
Surface Loc.: 930' FNL & 938' FEL Sec. 25 – T37S – R23E  
BHL: 640' FNL & 683' FEL Sec 26 – T37S – R23E
- d. Drilling Wells – None

4. Location of Existing and/or Proposed Facilities if the Well is Productive

- a. If production is established, a Sundry Notice will be submitted showing the location of the proposed facilities.
- b. All production facilities, including the pump, pump house, storage tanks, and treater will be painted an earthtone color to blend with the environment.
- c. All flowlines from the well site to battery site will be buried below frost line depth.
- d. A dike will be constructed completely around the production facilities (i.e. production tanks, water tanks, and/or heater-treater). The dikes for the production facilities will be constructed of compacted subsoil and hold the capacity of the largest tank. Any production pits will be fenced to prevent wildlife entry.
- e. Produced hydrocarbons shall be put in test tanks on location during completion work.
- f. Produced waste water will be confined to an unlined pit for a period not to exceed 90 days after initial production. During that 90 day period an application for approval of a permanent disposal method and location (Onshore Order No. 7), along with the required water analysis will be submitted.
- g. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.
- h. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

5. Location and Type of Water Supply

- a. Water will be trucked from an artesian well located in Section 1-T38S-R24E. Permits will be obtained from the State Engineer.
- b. The water source is not located on State land. Water will not be obtained from Indian projects.

- c. A water well will not be drilled.

6. Construction Materials

- a. Native soil will be utilized in the drilling site and access road. Additional gravel may be needed for the pulling unit pad and well site if the well is found to be productive.
- b. There will be no construction material from Indian lands.
- c. Crushed rock, if necessary, will be purchased from construction contractors in the area from existing gravel pits and hauled over access roads shown in Maps A & B.

7. Methods for Handling Waste Disposal

- a. Drill cuttings are to be contained and buried in the reserve pit. A pit 40' x 140' x 80' x 150' x 10' deep (3:1 slope) will be fenced on three sides during the drilling operations. The pit will be lined with 24 tons of bentonite worked in with a cat. The fourth side will be fenced when the rig moves out.
- b. The reserve pit and drilling fluids contained in the pit will be allowed to dry before backfilling, or pits will be siphoned out and disposed of in a manner approved by the authorized officer of the BLM before the reserve pit is backfilled. Pit walls will not be breeched so as to drain fluids to the surrounding surface.
- c. All wastes that accumulate during the drilling operations will be contained in a trash cage or dumpster. Wastes will be removed periodically from the location and taken to an approved landfill.
- d. Immediately after removal of the drilling rig, all garbage (metal containers, etc.) and debris on the site will be removed from the site. The reserve pit will not be utilized for trash disposal.
- e. No burning of trash will be allowed.
- f. Chemical toilets with holding tanks will be utilized. All sewage will be disposed of in accordance with county and state regulations. Petral will comply with all state laws and regulations pertaining to disposal of human waste.
- g. 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 waste or other produced fluids will be cleaned up and removed.

8. Ancillary Facilities

None

9 Wellsite Layout

- a. See diagram #2 for elevations and cross sections. Maximum cut is approximately 18' at the northwest corner of the reserve pit. Maximum fill is 3' at the southwest corner of the drilling pad.
- b. See diagram 4 for orientation of rig, pits and associated equipment.
- c. Six inches of topsoil will be removed from the location (drilling pad) including areas of cut and fill. Soil will be stockpiled adjacent to the wellsite pad.
- d. No reserve pit liner will be required. No hazardous chemical additives will be used in the mud system.
- e. The fresh water pit if needed, will be lined with a plastic liner. The liner will be removed from the pit at the end of drilling operations.
- f. For the protection of livestock and wildlife, all pits containing toxic liquids will be fenced and covered with netting.

10 Reclamation of Surface

- a. All pits will be backfilled, leveled and contoured to as near the current conditions as is practical.
- b. Reclamation of the entire disturbed area will be accomplished by grading the area to approximately the natural contour and spreading the top soil evenly as possible over the area. The entire disturbed area will be scarified with a 6' or less distance between ripped surfaces. The soil surface will be dry and loose prior to seeding and will broadcast seeded between September 1, 1999 and July 1, 2000 with the following mixture of pure live seed:

|                   |               |
|-------------------|---------------|
| Fourwing saltbush | 2 pounds/acre |
| Wild sunflower    | 1 pound/acre  |
| Mormon tea        | 1 pound/acre  |
| Galleta           | 1 pound/acre  |
| Sand dropseed     | 1 pound/acre  |
| Indian ricegrass  | 1 pound/acre  |
| Cliffrose         | 1 pound/acre  |

- c. All pits will be fenced and netted until dry and then backfilled
- d. If oil is present on the reserve pit, it will be removed.
- e. Rehabilitation will be commenced when the rig moves out, with the location restored by September 30, 1999. Rehabilitation will be completed by July 1, 2000.

- f. A Notice of Intent to Abandon and a Subsequent Report of Abandonment will be submitted for abandonment approval. A Final Abandonment Notice must be submitted when the rehabilitation is complete and the new vegetation is established.
- g. If the well is plugged and abandoned, the surface casing will be cut off three (3) feet below reclaimed ground surface with a metal plate affixed to the top. The metal plate will be inscribed with the operator's name, well number, well location (1/4 1/4, Section, Township, Range, etc.) and federal lease number.

11. Surface Ownership

Wellsite -- Bureau of Land Management

Lease Access Road -- Bureau of Land Management

12. Other Information

- a. An archaeological study was conducted by 4 Corners Archaeological Services. Four archaeological sites were found. Protective measures have been prescribed and archaeological clearance is recommended. A copy of the report is attached.
- b. If sub-surface cultural materials are found during any work phase, the BLM must be notified immediately. Construction will cease until the resource has been properly investigated and mitigated.
- c. The BLM is to be notified 5 days prior to starting dirtwork for the BLM biologist to conduct a deer survey.
- d. Wellsite and access road are located in arid, sandy, hilly terrain. Soil is shallow, sandy and silty. Vegetation consists of very sparse native grasses and sparse sagebrush, and small trees. The area is a natural habitat for wildlife.
- e. Sundry Notice and Report of Wells (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 32 CFR 3164.
- f. The dirt contractor will be provided with an approved copy of the surface use plan.

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

**Operator:**  
 Petral Exploration, LLC  
 1700 Lincoln Street, Ste. 4750  
 Denver, CO 80203  
 (303) 832-3131

**Representative**  
 ENMARC, INC.  
 P.O. Box 7638  
 Loveland, CO 80537  
 (970) 663-7576

**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 Petral Exploration LLC, 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.

9-23-98

Date

E. K. Bostick

E. K. Bostick

ENMARC, Inc.

Authorized Agent for:

Petral Exploration, LLC

cc: Gil Hunt  
Brad Hill  
~~orig~~ John Baza  
orig: well file

LAW OFFICES  
PRUITT, GUSHEE & BACHTELL

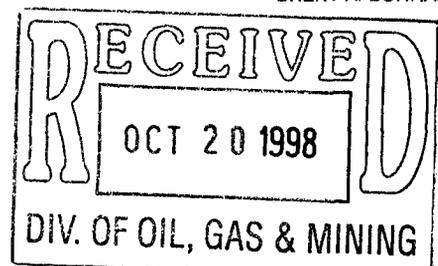
ROBERT G. PRUITT, JR.  
OLIVER W. GUSHEE, JR.  
THOMAS W. BACHTELL  
A. JOHN DAVIS, III  
JOHN W. ANDERSON  
FREDERICK M. MACDONALD  
GEORGE S. YOUNG  
JOHN F. WALDO  
ANGELA L. FRANKLIN  
JOHN S. FLITTON  
MICHAEL S. JOHNSON  
CHRISTOPHER J. CASTILLO

SUITE 1850 BENEFICIAL LIFE TOWER  
SALT LAKE CITY, UTAH 84111-1405  
(801) 531-8446  
E-mail: pgb.law@mcl2000.com

TELECOPIER (801) 531-8468

OF COUNSEL  
ROBERT G. PRUITT, III  
BRENT A. BOHMAN

October 19, 1998



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

Eric Jones  
Bureau of Land Management  
Moab District Office  
82 East Dogwood  
Moab, Utah 84532

Re: *Opposition to APDs filed by Petral Exploration LLC on the Dalmore Federal #44-23 and #11-25 Wells*

Gentlemen:

This office represents Grynberg Petroleum Company, owner of a 50% working interest in Federal Oil and Gas Lease UTU-041085 covering the SE ¼ of Section 23, Township 37 South, Range 23 East, SLB&M (the record owner is actually Celeste C. Grynberg d/b/a Grynberg Petroleum). Grynberg Petroleum wishes to oppose two APDs recently filed by Petral Exploration LLC in the area of this leasehold. A brief description of the recent history of development in the vicinity is necessary to an explanation of Grynberg Petroleum's objections.

A producing well was recently drilled by Petral immediately south of the SE ¼ of Section 23 in the NE ¼ NE ¼ of Section 26. This well is not an oil well, but is a gas well that has been producing approximately 1 million cubic feet of gas per day with minimal condensate for approximately six months. Jack Grynberg, upon being informed by Petral in July that it wanted to drill another well immediately to the north in the SE ¼ of Section 23, examined Petral's 3-D seismic data and the logs and core analysis of the well in the NE ¼ NE ¼ of Section 26 (copies of these documents were not provided to Mr. Grynberg). Mr. Grynberg is a reservoir engineer and geophysicist professionally registered in five states. Petral's data revealed that the producing horizons of the Section 26 well are common to the SE ¼ of Section 23 and portions of the SW ¼ of Section 24 and NW ¼ of Section 25. Based upon his review of this data, Mr. Grynberg determined that if production from the Section 26 well held up, it would indicate that such well was draining the additional acreage in adjacent sections. This has indeed proven to be the case.

Mr. John Baza  
Mr. Eric Jones  
October 19, 1998  
Page 2

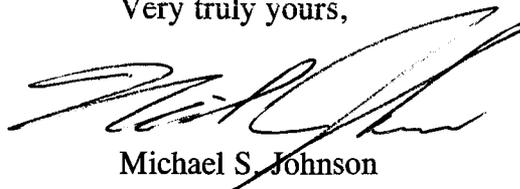
Mr. Grynberg's analysis also revealed that only the existing gas well in the NE $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 26 well is necessary to efficiently drain the acreage involved. Petral, however, has now filed APDs for two additional wells in this area. One well, the Dalmore Federal #44-23, is to be located in the SE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 23. The other well, the Dalmore Federal #11-25, is to be drilled in the SW $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 24 with a bottom-hole location in the NW $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 26 (see attached plat). As noted above, these wells will drain the same horizons in the same formations already being efficiently drained by the Section 26 well. Consequently, the proposed wells will not only result in wasteful rates of production, but will never reach payout as they will not access any additional gas reserves or condensate to offset the costs of drilling, completion and operation. Additionally, the proposed wells will unnecessarily impact the ecology of a pristine canyon area.

Rather than approving the APDs for the two proposed wells, the lands upon which those wells are to be located should be communitized with the lands in the NE $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 26 and all interest owners within the 3-D seismic area should share in the cost of the existing Section 26 well and the production therefrom.

For the reasons stated above, Grynberg Petroleum and Celeste C. Grynberg request that the BLM and the Division of Oil, Gas and Mining deny the two APDs identified above which were recently filed by Petral Exploration LLC. Jack Grynberg would welcome the opportunity to meet with BLM and/or Division staff to discuss in greater depth his opposition to these APDs.

If you have any questions about Grynberg Petroleum's opposition to these APDs, or want to arrange a meeting with Mr. Grynberg, please feel free to give me a call. Thank you for your attention to this matter.

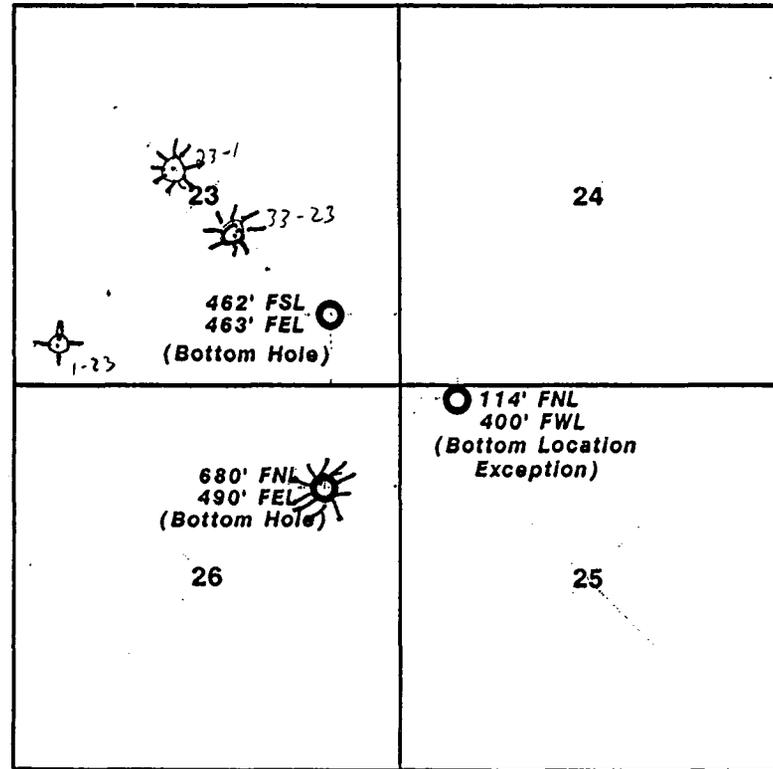
Very truly yours,

A handwritten signature in black ink, appearing to read "Michael S. Johnson", written in a cursive style.

Michael S. Johnson

MSJ:nw  
0808.07  
cc: Petral Exploration LLC

R 23 E

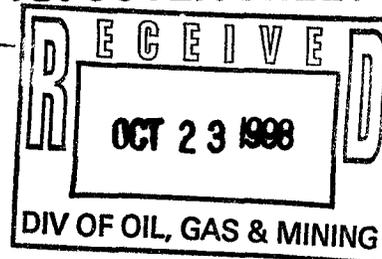


T  
37  
S

FAX COVER SHEET

ENMARC, INC.  
Corporate Office  
P.O. Box 7638  
Loveland, Co 80537

(970) 663-7576 phone  
(970) 663-7567 fax



TO: Ms. Lisha Cordova Utah Div. Oil, Gas & Mining

DATE: 10-23-98 (801) 359-3940

SUBJECT: Letter of Consent for Exception location Dalmore Federal # 11-25 (Petra Exploration LLC)

Urgent     Reply ASAP     Please comment     Please review     For your information

Total pages, including cover: 2

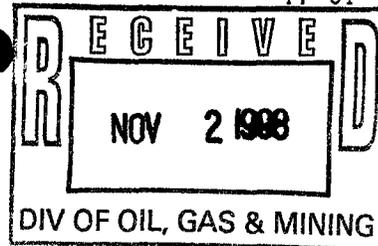
COMMENTS

Ms. Cordova,  
Included with this fax is Dalmore LLC's approval for Exception location as you requested. (Dalmore Fed. 11-25)  
A signed original will be sent to you via US Mail.

Permits for water use are being applied for. (for both wells)  
The BLM in Salt Lake is being sent the Designation of Agent letter today.

Please do not hesitate to call me if there is anything else I can do to help expedite these permits

E K. Bostick



DESIGNATION OF AGENT

The undersigned is, on the records of the Bureau of Land Management, Unit Operator under the Communitization Agreement # MO-49P-8469OC and does hereby designate:

Petral Exploration LLC  
P.O. Box 5083  
Denver, Colorado 80217

As its Agent, with full authority to act on its behalf in complying with the terms of the Communitization Agreement and regulations applicable thereto and on whom the Authorized Officer or his representative may serve written or oral instructions in securing compliance with the Oil and Gas Operating Regulations with respect to drilling, testing, and completing the Dalmore Federal 44-23 well in the SESE of Section 23, Township 37S., R. 23 E., San Juan County, Utah. Bond coverage will be provided under Cash Bond #1040 filed with Utah BLM Office in Salt Lake City, Utah.

It is understood that this Designation of Agent does not relieve the Communitized Area Operator of responsibility for compliance with the terms of the Communitization Agreement and the Oil and Gas Operating regulations. It is also understood that this Designation of Agent does not constitute an assignment of any interest under the Communitization Agreement or any lease committed thereto.

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

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

This designation is given only to enable the agent herein designated to drill the above specified well. It is understood that this designation of Agent is limited to the field operations performed while drilling and completing the specified well and does not include administrative actions requiring specific authorization of the Communitized Area Operator. This designation in no way will serve as authorization for the agent to conduct field operations for the specific well after it has been completed for production. Unless sooner terminated, this designation shall terminate when there is filed in the appropriate office of the Bureau of Land Management all reports and a Well Completion Report and Log (Form 3160-4) as required by the approved Application for Permit to Drill for the specified well.

D.J. Simmons Company/Limited Partnership  
By: D.J. Simmons, Inc., It's G.P.

By: [Signature]  
John A. Byrom - Vice President

Accepted this \_\_\_ day of July, 1998  
Petral Exploration LLC

By [Signature]  
Its

APPROVED REPRESENTATIVE NOV 02 1998

[Signature]

CHIEF, DIVISION OF FLUID MINERALS  
BUREAU OF LAND MANAGEMENT

|                   |               |      |         |            |   |
|-------------------|---------------|------|---------|------------|---|
| Post-It™ Fax Note | 7671          | Date | 11-2    | # of pages | ▶ |
| To                | Lisha Cordova | From | Lisha T |            |   |
| Co./Dept.         |               | Co.  | RLM     |            |   |

BGH

LAW OFFICES

**PRUITT, GUSHEE & BACHTELL**

SUITE 1850 BENEFICIAL LIFE TOWER

SALT LAKE CITY, UTAH 84111-1495

(801) 531-8446

E-mail: pgb.law@mci2000.com

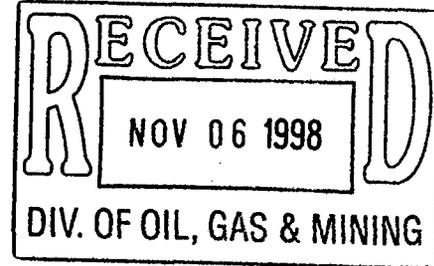
TELECOPIER (801) 531-8468

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JOHN S. FLITTON  
MICHAEL S. JOHNSON  
CHRISTOPHER J. CASTILLO

OF COUNSEL

ROBERT G. PRUITT, III  
BRENT A. BOHMAN

November 4, 1998



Mr. John Baza  
Associate Director, Oil and Gas  
Utah Division of Oil, Gas & Mining  
1594 W. North Temple, Suite 1210  
Salt Lake City, UT 84114-5801

*RE: Object of Grynberg Petroleum Company to APDs  
filed by Petral Exploration, LLC*

Dear John:

Enclosed please find a letter and attachments prepared by Grynberg Petroleum Company regarding the APDs filed by Petral Exploration LLC. These documents were prepared in anticipation of my possibly filing a Request for Agency Action on October 22, 1998 for the upcoming December Board hearing. As you are aware, I did not file a petition on behalf of Grynberg Petroleum for the December hearing. I am forwarding these materials to you now, however, in anticipation of my filing a petition on Grynberg's behalf for the hearing to be held on January 10, 1999.

Please review the enclosed materials and contact me with any additional questions or concerns you might have or additional materials you may wish to see. Thank you for your attention to this matter.

Very truly yours,

Michael S. Johnson

MSJ/pk  
Enclosure  
0808.07

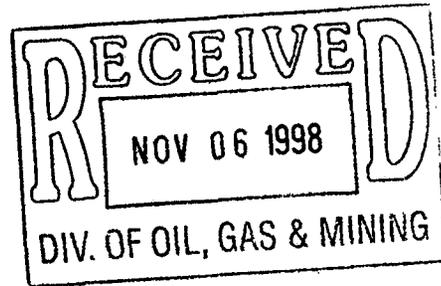
**GRYNBERG PETROLEUM COMPANY**

5000 SOUTH QUEBEC ● SUITE 500 ● DENVER, COLORADO 80237-2707, USA ● PHONE 303-850-7490

SPRINTMAIL X.400 (C:USA,A:TELEMAIL,O:MER1,UN:GRYN.DENVER) FAX: 303-850-7498

October 22, 1998

Utah Division of Oil, Gas & Mining  
1594 North Temple  
Suite 1210 West  
Salt Lake City, Utah 84114



Attn: John Baza, Associate Director

Dear Mr. Baza:

Reference is made to Petral Exploration, L.L.C.'s application to drill two (2) wells--- one in the SE/4SE/4 of Section 23 and another in the NW/4NW/4NW/4 of Section 25, both in Township 37 South-Range 23 East, San Juan County, Utah. Petral's goal in both well applications is to test the Desert Creek/Ismay formations at an approximate depth of 6,070 feet.

The undersigned is acting here in his capacity as a petroleum reservoir engineer and geophysicist, and not as the husband of the owner of 50% of the oil and gas lease covering Section 23, Township 37 South-Range 23 East. To that extent, my professional résumé, including registration information as a Professional Engineer in five (5) states, is attached to this letter.

I have known Mr. Tony Mayer, the president and owner of Petral Exploration, L.L.C., since his childhood. He and my son were classmates and graduated from high school together, and I have known Mr. Mayer since his graduation and have done business with him. The problem lies in the fact that Mr. Mayer has no technical education nor background, and unfortunately, does not rely on competent petroleum reservoir engineering and economic assistance that he could easily make available to himself.

Utah Division of  
Oil, Gas & Mining  
October 22, 1998  
Page 2

Attached as Figure 1, please find the outline which was given to me by Petral of their 3-D seismic program which they have conducted and completed. Figure 2 is a plat from Petral Exploration also given to me showing their proposed two (2) locations as well as the one location in the SE/4NE/4NE/4 of Section 26 which has been drilled and completed and is known as the #1-A Dalmore-Federal well. The description of the results of that well are attached to this letter as Figure 6. In July of 1988, I was informed by Petral that the subject well had been on production for the previous three (3) months at approximately 1,000 MCFPD and small amounts of distillate/oil. As of today, October 22, 1998, your Division could find no monthly reported production records for this well.

Attached hereto is Figure 3, a location map prepared under the supervision of the undersigned, where the same Petral footage descriptions are present as on Figure 2 except the locations are properly spotted in my Figure 3, while the locations in Figure 2 are mis-spotted in each case in spite of the fact that in Figure 2 the stated footage distances are correct.

I have prepared two reservoir analyses for the Division's consideration. One analysis, presented in Figures 4, 5 and 7 (6 pages), is based on information without availability or knowledge of 3-D seismic. The other reservoir analysis, presented in Figure 8 (6 pages), is based on information given to the undersigned by Petral from the results of their 3-D seismic program, which the undersigned personally examined in Petral's offices in July of this year. The first case is based on published information in the Utah Geologic Publication No. 22 of the Cherokee Field, which the undersigned was instrumental in discovering and in which the undersigned and his wife, Celeste C. Grynberg, have a significant interest. That field is located approximately one mile to the north of the subject area.

The information dealing with the subject reservoir in the first scenario is presented in Figures 4 and 5, and the detailed analysis using 160-acre spacing is presented in Figure 7 (6 pages). This presentation is based on two cases---a one-well case, namely the #1-A Dalmore-Federal well---which would afford a working interest profit of \$481,298. The second scenario---namely, a three-well case which is proposed by Petral including the existing #1-A Dalmore-Federal well---would result in the loss of (\$782,412) for each one of the three (3) wells drilled and completed, which would include the existing well and the two proposed locations.

The scenario based on Petral's 3-D seismic results and the results from drilling and testing the existing #1-A Dalmore-Federal well are presented in Figure 8 (6 pages).

The existing #1-A Dalmore-Federal well in the SE/4NE/4NE/4 of Section 23, if left alone, will result in a profit of \$400,732, which is presented under the one-well case scenario in Figure 8. The three (3)-well case scenario, which would include the existing well and the two (2) proposed locations in Sections 23 and 25, would result in a loss of (\$865,978) for each one of the three (3) wells.

The last scenario is based on the fact that I have carefully examined the results of Petral's 3-D seismic and have established that the NE/4NE/4 of Section 23 contributes 20 acres of reservoir towards the drainage area of the existing #1-A Dalmore-Federal well. The 3-D seismic further supports that an additional 20 acres of this reservoir is present in the same producing horizon in the SE/4SE/4 of Section 23 and five (5) acres each is present in the SW/4SW/4 of Section 24 and NW/4NW/4 of Section 25, for a total of 50 acres attributable to the subject reservoir within the producing area of the subject #1-A Dalmore-Federal well. While the electric logs run in the subject well indicate 34 feet of producing horizon, that well was drilled directionally, and in my opinion, the net pay is only 27 feet. I have calculated an average porosity of 17% as the very maximum porosity attributable to the producing horizons in the #1-A Dalmore-Federal well, and an average water saturation of 35% of pore space. All that information is contained in Figure 8 (6 pages).

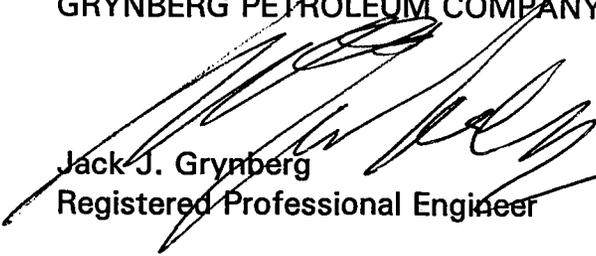
Based on careful petroleum reservoir analysis, geophysical analysis, and economic evaluation, it makes no sense to grant permission to drill the additional two (2) offset wells in the SE/4SE/4 of Section 23 and the NW/4NW/4NW/4 of Section 25, which will also disturb the pristine ecological environment of the area, cause unnecessary disturbances to the surface, create unnecessary location pads and roads, and take money away from exploration and development in other Utah areas, all of which should be to the advantage of all the working interest owners as well as the State of Utah.

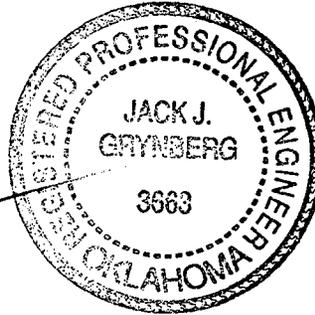
Based on the above, the best solution is to communitize the 50 acres in the SE/4SE/4 of Section 23, the SW/4SW/4 in Section 24, the NW/4NW/4 in Section 25, and the NE/4NE/4 of Section 26 in accordance with available 3-D seismic data and in the proportion described above, order the working interest owners to pay their pro rata costs and operating expenses of the existing #1-A Dalmore-Federal well and receive pro rata revenues.

Utah Division of  
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October 22, 1998  
Page 4

Sincerely yours,

GRYNBERG PETROLEUM COMPANY

  
Jack J. Grynberg  
Registered Professional Engineer



Attachments

JJG/lv

## RESUME OF JACK J. GRYNBERG

### EDUCATION

#### Colorado School of Mines

##### Professional Degrees:

- 1/1950-5/1952 Master of Engineering\* (Petroleum Refining  
(Chemical) Engineer)
- 8/1952-5/1953 Completed Graduate Studies for a Doctor of  
Science in Geophysical Engineering except  
thesis
- 1/1959-5/1959 Master of Engineering\* (Professional Degree  
as Petroleum (Production) Engineer)
- 5/1976 Honorary Degree and Distinguished Achievement  
Medal in the Field of Mineral Engineering
- 3/1976-3/1981 Member Board of Trustees, Colorado School of  
Mines, Golden, Colorado

\*Formerly Professional Engineer's Degree

### REGISTERED PROFESSIONAL ENGINEER

#### Active and in Good Standing

- Colorado - Registration No. 29586  
New Mexico - Registration No. 12297  
Oklahoma - Registration No. 3663  
South Dakota - Registration No. 5581  
Texas - Registration No. 14578

### PROFESSIONAL EXPERIENCE

- 1993-Present Partner with Asarco, Inc. in  
KAMGOLD (Kamchatka-American Gold Company)
- 1990-Present Founder and Partner in a number of oil &  
gas and gold ventures in the former  
Soviet Union
- 1988-Present Active in international oil and gas and gold  
exploration and development in the former  
Soviet Union, Middle East, Africa, Far East  
and Latin America.
- 1985-Present President/CEO, Grynberg Production Corporation
- 1980-Present Chairman/CEO, Transworld Resources Corporation

- 1962-Present Independent Oil, Gas, and Mineral Operator, U.S.A. Domestic operations within the continental United States with oil and gas production and exploration in California, Colorado, Louisiana, Michigan, Mississippi, South Dakota, Montana, New Mexico, North Dakota, Oklahoma, Texas, Utah and Wyoming.
- 1954-Present President/CEO, Grynberg Petroleum Company and its predecessor, Jack Grynberg and Associates
- 1976-1982 President/CEO, Olympic Uranium Company. Uranium exploration and development, U.S.A.
- 1974-1981 Founder, Chairman, and CEO, Universal Drilling Company and Universal Drilling Services, Inc., a six-rig drilling contractor with 10,000 to 22,000-foot rigs. Companies sold in 1981.
- 1974-1981 President/CEO, Universal Drilling S.A., Panama
- 1969-1976 Founder and Principal Stockholder (76%), Chairman, President and Chief Executive Officer of Oceanic Exploration Company, a public company whose stock is traded over-the-counter. The company is engaged in off-shore and onshore oil, gas and mineral exploration and production in the following areas outside the continental United States: British North Sea, Dutch North Sea, Cameroon, Greece, Madagascar, Malaysia, Nicaragua, Peru, Timor and Taiwan. Company sold in 1981.
- 1954-1962 Partner (60%-owner) in Pirson-Grynberg Associates. Through this partnership with Dr. Sylvain J. Pirson, jointly conducted two-week intensive well log interpretation and four-week advanced reservoir engineering courses in the U.S.A. (Austin, Texas and Denver, Colorado), Canada, Venezuela, England, France, Italy and the Middle East.
- 1954-1962 Owner, Jack Grynberg and Associates, consulting petroleum, petrophysical, geological and geophysical engineers.
- 1953-1954 Research Engineer, Research and Development Department, Continental Oil Company, Ponca City, Oklahoma.

PROFESSIONAL ATTAINMENTS, MEMBERSHIPS, AWARDS AND APPOINTMENTS

National Society of Professional Engineers  
Society of Exploration Geophysicists (SEG)  
American Association of Petroleum Geologists (AAPG)  
American Institute of Mining and Engineers (AIME)  
Society of Petroleum Engineers (SPE)  
Association of International Petroleum Negotiators  
European Society of Exploration Geophysicists (ESEG)\*  
Rocky Mountain Association of Geologists (RMAG)  
American Petroleum Institute (API)\*  
Appointed by Colorado Governor Richard Lamm to the Board of Trustees, Colorado School of Mines, March 1975 to March 1981  
Appointed to the International Board of Advisors, Gubkin State Oil and Gas University, Moscow, Russia-1992  
Appointed to the Presidential Council, Colorado School of Mines, 1989-Present  
Member Board of Trustees, Colorado Energy Research Institute, March 1975 to March 1981  
Honorary Consul, Republic of Panama, 1974-1986  
Member, Uranium Subpanel of Supply and Delivery Panel, Committee on Nuclear and Alternative Energy Systems of the National Academy of Sciences and National Academy of Engineering -- Presidential Appointments by President Gerald Ford (1974-1976) and President Jimmy Carter (1976-1980)  
Holder of a U.S. patent #4,492,862 (1/8/85) for "The Application of Laser Beams for the Continuous Detection and Identification of Hydrocarbons in the Mud Stream Coming Out of a Bore Hole While Drilling."  
Appointed by President Bill Clinton to panel consisting of chief executives of American oil and gas companies to represent the American oil and gas industry in the Russian Republic in order to enhance American-Russian oil and gas joint ventures - 1994

\*Member Emeritus

LANGUAGES

English, French, German, Polish, Russian

MILITARY SERVICE

U.S. Army Corps of Engineers; U.S. Army Research and Development Command, Radioactive Warfare Section, 1956-1957  
Honorable discharge.

PERSONAL

U.S. Citizen, born January 21, 1932, Brest, Poland  
Married June, 1959, to Celeste Constance Bachove; three  
grown children.

PUBLICATIONS

"Induction Log Departure Curves for No Invasion" (Oil Base Mud or  
Air)

By Jack J. Grynberg - 1953

"The Microlog - Its Application and Interpretation"

By Jack J. Grynberg and Leendert de Witte - 1954

"Quantitative Electric Log Interpretation of "D" and "J" Sands--  
Denver Basin"

By: Jack J. Grynberg - 1956

"The Continuous Dipmeter"

Articles in April 1 and 22, 1957, The Oil and Gas Journal

By: Jack J. Grynberg and Morris I. Etinger

"Log Interpretation Charts"

By: Sylvain J. Pirson and Jack J. Grynberg - 1958

"Selected Well Logging Problems for Geologists and Petroleum  
Engineers"

By Sylvain J. Pirson and Jack J. Grynberg - 1958

"DST - Success or Failure?"

Article in June 22, 1959, The Oil and Gas Journal

By: Jack J. Grynberg

"Log Interpretation Manual Number 2"

Supplement-A-Ri-Rt Conversion Charts

Based on Lectures by Jack J. Grynberg and  
Sylvain J. Pirson - 1960

"Handbook of Well Log Analysis"

McGraw-Hill - 1964

Based on Lectures by Sylvain J. Pirson and Jack J. Grynberg

"Application of Water Resistivity Data"

By Jack J. Grynberg and B.L. Carlberg - 1974

Study of Nuclear and Alternative Energy Systems  
Supporting Paper 1 - 1978

"Problems of U.S. Uranium Resources and Supply to the Year 2010"  
By The National Research Council, The National Academy of  
Science

By: Leon T. Silver, Jack J. Grynberg, David S. Robertson,  
Joseph B. Rosenbaum and Arnold J. Silverman

Study of Nuclear and Alternative Energy Systems

"U.S. Energy Supply Prospects to 2010" - 1979

By the National Research Council, National Academy  
of Science

By: Jack J. Grynberg and others.

United States Patent #4,492,862 - January 8, 1985

"Method and Apparatus for Analyzing Components of Hydrocarbon  
Gases Recovered From Oil, Natural Gas and Coal Drilling  
Operations"

Invented by: Jack J. Grynberg, Leonard Y. Nelson and  
Stephen E. Moody

Attached to this resume is a Partial List of Clients  
of Jack J. Grynberg and Associates.

PARTIAL LIST OF CLIENTS  
OF  
JACK CRYNBERG AND ASSOCIATES

U. S. A. & CANADA

Allied Chemical Company  
Amerada Petroleum Corporation  
American Metal Climax - Oil Division  
American Petrofina  
Anadarko Production Company  
Arabian American Oil Company  
Argo Oil Corporation  
Blackwell Zinc Company  
British-American Oil Company, Limited  
British American Oil Producing Company  
Canadian Pacific Oil & Gas Limited  
Canadian Pacific Railroad  
Canpet Exploration Limited  
Charter Oil Company  
Cities Service Oil Company  
Consumers Cooperative Association  
Continental Oil Company  
Cooperative Refinery Association  
Cosden Petroleum Corporation  
Eason Oil Company  
El Paso Natural Gas Company  
Fargo Oil Company  
French Petroleum Company of Canada, Ltd.  
Frontier Refining Company  
General Crude Oil Corporation  
Gulf Oil Corporation  
Gulf States Oil Company  
Hess Oil & Chemical Corporation  
Home Oil Company  
Humble Oil and Refining Company  
Kern County Land Company  
Lane Wells  
Lewis, James Engineering Co.  
Lion Oil Company  
Loeb (Carl M.), Rhoades & Co.  
Midwest Oil Corporation  
Monsanto Company  
Monterey Oil Company  
Mountain Fuel Supply Company

Mule Creek Oil Company  
Nebraska Oil & Gas Conservation Commission  
Northern Natural Gas Company  
Northern Natural Gas Producing Company  
Oil and Gas Futures, Ltd.

Pacific Petroleum Limited  
Pamoil Limited  
Panamerican Petroleum Corporation  
Panhandle Eastern Pipeline Company  
Pure Oil Company  
Royalite Oil Company, Limited  
Schlumberger Well Surveying Corporation  
Sharpless Oil Corporation  
Signal Oil and Gas Company  
Sohio Petroleum Corporation  
Stauffer Chemical Company  
Standard Oil Company of California  
Standard Oil Company of Indiana  
Standard Oil Company of New Jersey  
Standard Oil Company of Ohio  
Sun Oil Company  
The Superior Oil Company  
Tenneco Oil Company  
Tennessee Gas Transmission Company  
Texas Gulf Sulphur Company  
Texas Pacific Oil Company  
Trigood Oil Company  
Union Pacific Railroad - Oil Division  
Union Texas Petroleum Corporation  
United Canso Oil & Gas Limited  
United Carbon Company  
United Fuel Gas Company  
United Producing Company, Inc.  
Well Survey's, Inc.  
Western Canadian Venture  
Western Leasehold Limited  
Western Minerals, Limited  
Western Natural Gas Company, Inc.  
Wintershall Oil of Canada

EUROPE & MIDDLE EAST

Agip Mineraria  
Arabian American Oil Company  
Assan Oil Company  
Ausonia Mineraria  
Bahrain Petroleum Company  
Belgian Petrofina  
British Petroleum Company Limited  
Burmah Oil Company  
Caltex Petroleum  
Compagnie Francaise des Petroles Algerie  
Cupefa  
Copesep  
Deutsche Erdöl  
Ente Nazionale Idrocarburi  
Esso Standard (Turkey) Inc.  
Francarep  
Gewerkschaft Elverath  
Gulf Eastern Oil Company  
Gulf Italia Oil Company  
Gulf Libya Oil Company  
Iran Oil Company

Iran Pan American Oil Corporation  
Iraq Petroleum Company  
Kuwait Oil Company  
Montecatini  
National Iranian Oil Company  
Osterreichische Mineralverwaltung A.G.  
Pakistan Petroleum Corporation  
Pan American Libya Oil Company  
Partex (Gulbenkian) Ltd.  
Petrol Dairesi  
Petrorep  
Petrofrance  
Prepa  
Qatar Petroleum Company  
S.N.P.A.  
S.N.Repal  
S.P.E.P.A.  
S.P.V.  
Seismograph Service Limited  
Wintershall Aktiengesellschaft

SOUTH AMERICA

Corporacion Venezolana Del Petroleo  
Creole Petroleum Corporation  
Hene Grande Oil Company

Mobil Oil Company of Venezuela  
Texas Petroleum Corporation  
Venezuelan Ministry of Mines and

DUT-07096  
10/01/1997  
PTOTAL 123X  
559 E  
559 E  
FED

DUT-06923  
GRYNBERG C LLC  
1000  
1000  
FED

All of sec 23 contained  
and hereinafter  
50% Grynberg and 50% Petral

DUT-07044  
10/01/1997  
PTOTAL 123X  
559 E  
559 E  
FED

# DALMORE-97 3-D OUTLINE (1,758 sq. mi.)

19

22

880 Gross Acres

Petral: 546.7 net, 62.125%  
Grynberg: 260.0 net, 29.545%  
Dalmore LLC: 73.3 net, 8.330%

DUT-06149  
HBP  
PETRAL 67.5%  
540  
540  
FED

50/50 WITH GRYNBERG  
Petral 87.5%  
Dalmore LLC 12.5%

DUT-04155  
HBP  
PETRAL 67.5%  
540  
540  
FED  
Petral 87.5%  
Dalmore LLC 12.5%  
50/50 WITH GRYNBERG

DUT-06083  
HBP  
PETRAL 67.5%  
540  
540  
FED

Petral 89.25%  
Dalmore LLC 10.75%

DUT-04103  
HBP  
PETRAL 65.625%  
540  
540  
FED

Petral 85.625%  
Grynberg 25%  
Dalmore LLC 9.375%

DUT-14103  
HBP  
PETRAL 67.5%  
540  
540  
FED

Petral 89.25%  
Dalmore LLC 10.75%

DUT-04103  
LASIRICH MCX  
40  
40  
FED

DUT-06259  
HBP  
PETRAL 67.5%  
540  
540  
FED

27

DUT-06102  
GRYNBERG C LLC  
1000  
1000  
FED

Petral 43.75%  
Grynberg 16.66%  
Dalmore LLC 6.25%  
Cox 33.33%

DUT-07023  
DUT-07023  
PTOTAL 123X  
559 E  
559 E  
FED  
SHIMONS EST 50%

DUT-06159  
GRYNBERG C LLC  
1000  
1000  
FED

DUT-07023  
PTOTAL 123X  
559 E  
559 E  
FED  
SHIMONS EST 50%

DUT-07023  
PTOTAL 123X  
559 E  
559 E  
FED  
SHIMONS EST 50%

34

DUT-06159  
GRYNBERG C LLC  
1000  
1000  
FED

35

36

T37S-R23E

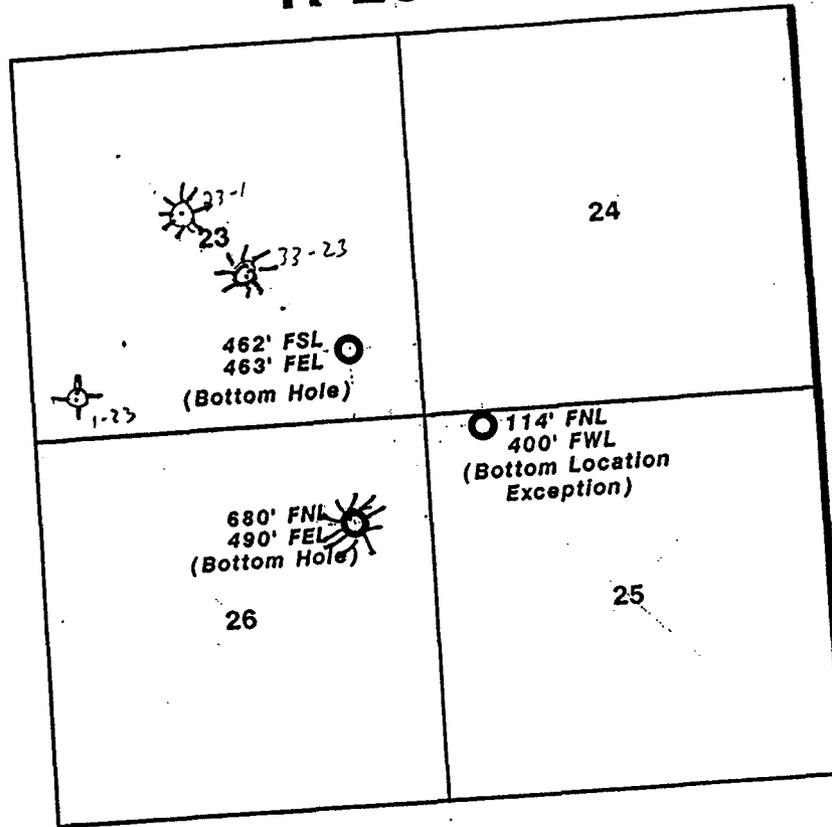
San Juan County, UT

30

31

FIGURE 1

R 23 E



T  
37  
S

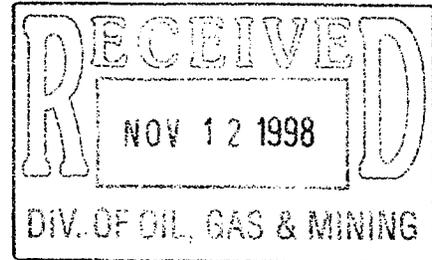
FIGURE 2

PETRAL EXPLORATION LLC

SAN JUAN COUNTY, UTAH  
LOCATION MAP

LAW OFFICES OF  
VAN COTT, BAGLEY, CORNWALL & McCARTHY  
A PROFESSIONAL CORPORATION  
SUITE 1600  
50 SOUTH MAIN STREET  
SALT LAKE CITY, UTAH 84144-0450  
TELEPHONE (801) 532-3333  
FACSIMILE (801) 534-0058

ADDRESS ALL CORRESPONDENCE TO  
POST OFFICE BOX 45340  
84145-0340  
November 12, 1998



**VIA HAND DELIVERY**

Mr. John Baza  
Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, Utah 84114-5801

Mr. Eric Jones  
Bureau of Land Management  
Moab District Office  
82 East Dogwood  
Moab, Utah 84532

Re: *Dalmore-Federal #44-23 and #11-25 Wells  
San Juan County, Utah*

Gentlemen:

We represent Petral Exploration, LLC ("Petral") regarding Petral's Applications for Permit to Drill ("APDs") for the above-referenced wells. The subject APDs were recently filed in your offices. Petral has asked us to respond to the letter dated October 19, 1998, addressed to you from Michael S. Johnson regarding Grynberg Petroleum Company's ("Grynberg Petroleum") opposition to the subject APDs. Grynberg Petroleum alleges that the Dalmore-Federal #1-A(RD) Well located in the NE $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 26, Township 37 South, Range 23 East, is efficiently draining the area encompassing the four contiguous quarter-corners of Sections 23-25, Grynberg Petroleum's so-called "3-D seismic area." Therefore, Grynberg Petroleum suggests, any additional wells in that area are unnecessary and the mineral interests in that area should be pooled or "communitized." Grynberg Petroleum's allegations and suggestions, however, are based on a faulty interpretation of the available information.

Mr. John Baza  
Mr. Eric Jones  
November 12, 1998  
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As the attached decline curve and production data demonstrate, the #1-A(RD) Well has not "been producing approximately 1 million cubic feet of gas per day with minimal condensate for approximately six months" as claimed by Grynberg Petroleum. Although the well originally produced gas at such a rate (or better), more recently the rate has dropped off significantly. The attached data show that, since before the first of July 1998, the gas production from the well has been below a million cubic feet of gas per day, and that as of October 1, 1998, the well was producing at only approximately 600 thousand cubic feet of gas per day. Also, you should note that the liquids associated with the well are not condensate, but 46.5 API gravity crude oil (condensate in this area is typically about 65 API gravity), and that the oil production from the well also has declined; at the beginning of October 1998, it was producing only about eleven barrels of oil per day.

Grynberg Petroleum's objections are based on Mr. Grynberg's faulty interpretation that the entire "3-D seismic area" is underlain by common "producing horizons" that are presently efficiently drained by the #1-A(RD) Well. Petral's production data (as well as its seismic data) indicate otherwise. Based on the producing well's chokes, records of actual daily production, and an evaluation of the producing formation's characteristics, Petral believes that the #1-A (RD) Well is draining an area less than encompassed within the legal 40-acre drilling unit, not a 160-acre (or larger) area as suggested by Grynberg Petroleum. Moreover, Mr. Grynberg's interpretation ignores the fundamental nature of the producing pools in this area. The prospective targets for the proposed wells are small, isolated and distinct lobes of a larger algal mound feature that has been identified on Petral's high quality seismic data. Based on Petral's seismic data and the production history from the #1-A(RD) Well, which demonstrate the limited size of the producing geologic feature, Petral is convinced that the producing well is not draining the prospective targets Petral has identified to the north and east.

Grynberg Petroleum further states that Mr. Grynberg was not provided copies of Petral's 3-D seismic data and logs and core analysis of the #1-A(RD) Well. Neither Mr. Grynberg nor Grynberg Petroleum is entitled to such copies because neither party contributed to the costs and expenses involved in drilling the well and the acquisition of the seismic data. Although Petral extended an opportunity to Mr. Grynberg to participate in the #1-A(RD) Well and the acquisition of the 3-D seismic data, he elected not to participate. Without paying for their fair share of the costs and expenses, neither Mr. Grynberg nor Grynberg Petroleum is entitled to Petral's proprietary information.

Finally, neither Grynberg Petroleum nor Celeste C. Grynberg, d/b/a Grynberg Petroleum is a "record owner" of any interest in Federal Oil and Gas Lease UTU-41085. According to the

Mr. John Baza  
Mr. Eric Jones  
November 12, 1998  
Page 3

lease file Serial Register Pages for UTU-41085 located in the Utah BLM State Office in Salt Lake City, the working interest in that lease in the SE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 23 is owned by Petral (92.08334%) and Dalmore LLC (7.91666%). The only "working interest" that Grynberg Petroleum "owns" in the SE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 23 (the legal 40-acre drilling unit for the proposed Dalmore-Federal #44-23 Well) arises under two voluntary pooling agreements: (1) that certain Communitization Agreement No. MO49P-84690C dated December 21, 1983, between Woods Petroleum Corporation, Edwin L. Cox and Berry R. Cox, and Celeste C. Grynberg (communitizing the natural gas and associated hydrocarbons produced from the Ismay Formation); and (2) that certain Operating Agreement also dated December 21, 1983, between the same parties (the "Operating Agreement"). Both agreements affect all of said Section 23 and effectively pool Grynberg Petroleum's 100% working interest in Federal Oil and Gas Lease UTU-46825 (covering the N $\frac{1}{2}$  of Section 23) with the interests in federal leases UTU-41499 and UTU-41085 (covering the SW $\frac{1}{4}$  and N $\frac{1}{2}$ SE $\frac{1}{4}$ , and S $\frac{1}{2}$ SE $\frac{1}{4}$  of Section 23, respectively). Thus, under the Communitization Agreement and Operating Agreement, Grynberg Petroleum has a contractual right to 50% of the production of natural gas and associated hydrocarbons from the Ismay Formation from Section 23. However, the Operating Agreement expressly provides that the parties to the agreement have not assigned or cross assigned their interests covered by the agreement.

Grynberg Petroleum also has other rights under the Operating Agreement. For example, the right to propose to drill a well to test the Ismay Formation within Section 23, the "Contract Area." That right, however, is contingent upon Grynberg Petroleum first providing notice of such a proposal to all of the other parties to the Operating Agreement. As of this date, Petral is unaware of any proposal of Grynberg Petroleum to drill a well in the SE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 23. In fact, Grynberg Petroleum's opposition letter evidences exactly the contrary.

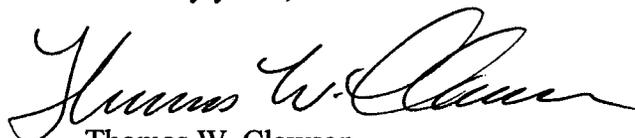
Grynberg Petroleum's correlative rights will not be adversely affected by the proposed wells. As to the #44-23 Well, Grynberg Petroleum can participate in the well as a "consenting party," or go "non-consent," as provided under Operating Agreement. In either case, Grynberg Petroleum's correlative rights are protected based on the terms and provisions of the Operating Agreement. With respect to the #11-25 Well, Grynberg Petroleum has no interest in those portions of UTU-41085 affected by the proposed well, and as previously discussed, the #11-25 Well will not drain the same geologic features presently being drained by the #1-A(RD) Well, or that will be drained by the #44-23 Well.

Petral appreciates your consideration of these matters and respectfully requests that you process (and approve) its APDs for the subject wells. If you have any questions, or need further

Mr. John Baza  
Mr. Eric Jones  
November 12, 1998  
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information, please do hesitate to contact either myself (at (801) 237-0352) or E.K. Bostick (at (970) 663-7576).

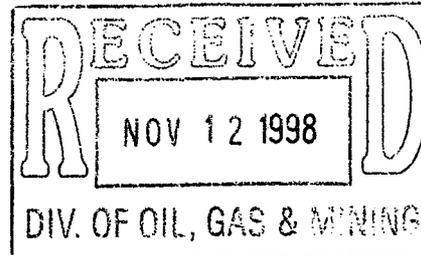
Sincerely yours,



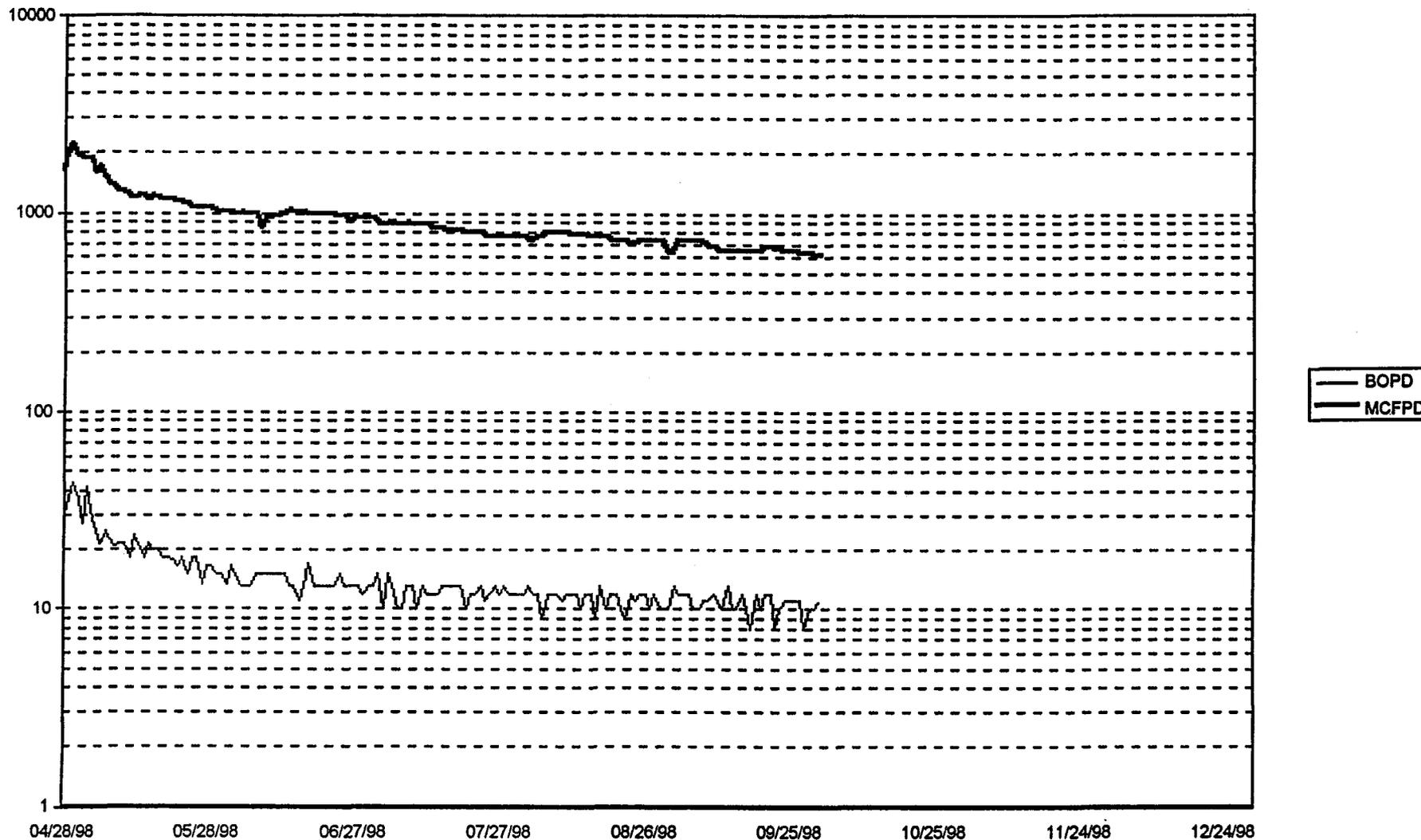
Thomas W. Clawson

TWC:klw  
Enclosures

cc: Michael S. Johnson, Esq. (w/encl.)



### Dalmore #1-A (RD)



Dalmore # 1-A (RD)

| SEQ NO | DATE     | BOPD | MCFPD | BWPD | HOURS | TP   | CP   | REMARK |
|--------|----------|------|-------|------|-------|------|------|--------|
| 99     | 04/28/98 | 31   | 1614  | 0    | 17.5  | 1220 | 1300 | None   |
| 99     | 04/29/98 | 37   | 2056  | 0    | 24    | 1120 | 1200 | None   |
| 99     | 04/30/98 | 43   | 2213  | 2    | 24    | 820  | 900  | None   |
| 99     | 05/01/98 | 36   | 1906  | 2    | 24    | 800  | 900  | None   |
| 99     | 05/02/98 | 27   | 1906  | 1    | 24    | 700  | 820  | None   |
| 99     | 05/03/98 | 42   | 1897  | 1    | 24    | 660  | 800  | None   |
| 99     | 05/04/98 | 28   | 1897  | 1    | 24    | 660  | 760  | None   |
| 99     | 05/05/98 | 25   | 1576  | 1    | 24    | 680  | 800  | None   |
| 99     | 05/06/98 | 22   | 1722  | 0    | 24    | 850  | 950  | None   |
| 99     | 05/07/98 | 25   | 1509  | 1    | 24    | 700  | 800  | None   |
| 99     | 05/08/98 | 23   | 1387  | 0    | 24    | 750  | 800  | None   |
| 99     | 05/09/98 | 21   | 1373  | 1    | 24    | 740  | 800  | None   |
| 99     | 05/10/98 | 22   | 1276  | 0    | 24    | 720  | 800  | None   |
| 99     | 05/11/98 | 22   | 1276  | 0    | 24    | 710  | 800  | None   |
| 99     | 05/12/98 | 18   | 1242  | 0    | 24    | 700  | 800  | None   |
| 99     | 05/13/98 | 23   | 1207  | 0    | 24    | 680  | 780  | None   |
| 99     | 05/14/98 | 22   | 1216  | 1    | 24    | 680  | 780  | None   |
| 99     | 05/15/98 | 18   | 1216  | 0    | 24    | 680  | 780  | None   |
| 99     | 05/16/98 | 22   | 1182  | 0    | 24    | 660  | 760  | None   |
| 99     | 05/17/98 | 20   | 1216  | 0    | 24    | 660  | 740  | None   |
| 99     | 05/18/98 | 20   | 1197  | 0    | 24    | 640  | 720  | None   |
| 99     | 05/19/98 | 18   | 1185  | 0    | 24    | 630  | 700  | None   |
| 99     | 05/20/98 | 18   | 1185  | 0    | 24    | 620  | 700  | None   |
| 99     | 05/21/98 | 18   | 1185  | 1    | 24    | 600  | 700  | None   |
| 99     | 05/22/98 | 17   | 1149  | 0    | 24    | 600  | 690  | None   |
| 99     | 05/23/98 | 18   | 1149  | 0    | 24    | 600  | 680  | None   |
| 99     | 05/24/98 | 15   | 1126  | 0    | 24    | 600  | 660  | None   |
| 99     | 05/25/98 | 18   | 1056  | 0    | 24    | 590  | 660  | None   |
| 99     | 05/26/98 | 18   | 1056  | 1    | 24    | 590  | 650  | None   |
| 99     | 05/27/98 | 13   | 1056  | 0    | 24    | 590  | 650  | None   |
| 99     | 05/28/98 | 17   | 1056  | 0    | 24    | 600  | 640  | None   |
| 99     | 05/29/98 | 17   | 1056  | 0    | 24    | 590  | 650  | None   |
| 99     | 05/30/98 | 15   | 1021  | 0    | 24    | 590  | 650  | None   |
| 99     | 05/31/98 | 15   | 1021  | 2    | 24    | 590  | 650  | None   |
| 99     | 06/01/98 | 13   | 1021  | 0    | 24    | 590  | 660  | None   |
| 99     | 06/02/98 | 17   | 1021  | 1    | 24    | 590  | 660  | None   |
| 99     | 06/03/98 | 15   | 986   | 0    | 24    | 580  | 650  | None   |
| 99     | 06/04/98 | 13   | 1021  | 1    | 24    | 580  | 650  | None   |
| 99     | 06/05/98 | 13   | 986   | 0    | 24    | 580  | 650  | None   |
| 99     | 06/06/98 | 13   | 986   | 0    | 24    | 580  | 640  | None   |
| 99     | 06/07/98 | 15   | 990   | 0    | 24    | 580  | 640  | None   |
| 99     | 06/08/98 | 15   | 848   | 0    | 24    | 610  | 640  | None   |
| 99     | 06/09/98 | 15   | 953   | 0    | 24    | 560  | 650  | None   |
| 99     | 06/10/98 | 15   | 971   | 0    | 24    | 560  | 640  | None   |
| 99     | 06/11/98 | 15   | 971   | 0    | 24    | 560  | 640  | None   |
| 99     | 06/12/98 | 15   | 997   | 0    | 24    | 550  | 650  | None   |
| 99     | 06/13/98 | 15   | 1016  | 0    | 24    | 550  | 625  | None   |
| 99     | 06/14/98 | 13   | 1044  | 0    | 24    | 550  | 625  | None   |
| 99     | 06/15/98 | 13   | 1026  | 0    | 24    | 550  | 630  | None   |
| 99     | 06/16/98 | 11   | 1028  | 0    | 24    | 550  | 630  | None   |

Dalmore # 1-A (RD)

|    |          |    |      |   |    |     |     |      |
|----|----------|----|------|---|----|-----|-----|------|
| 99 | 06/17/98 | 13 | 1024 | 0 | 24 | 580 | 650 | None |
| 99 | 06/18/98 | 17 | 998  | 0 | 24 | 530 | 630 | None |
| 99 | 06/19/98 | 13 | 998  | 0 | 24 | 540 | 640 | None |
| 99 | 06/20/98 | 13 | 993  | 0 | 24 | 530 | 620 | None |
| 99 | 06/21/98 | 13 | 993  | 1 | 24 | 530 | 620 | None |
| 99 | 06/22/98 | 13 | 993  | 0 | 24 | 530 | 620 | None |
| 99 | 06/23/98 | 13 | 985  | 0 | 24 | 530 | 610 | None |
| 99 | 06/24/98 | 15 | 973  | 0 | 24 | 520 | 610 | None |
| 99 | 06/25/98 | 13 | 961  | 0 | 24 | 520 | 610 | None |
| 99 | 06/26/98 | 13 | 898  | 0 | 24 | 520 | 610 | None |
| 99 | 06/27/98 | 13 | 973  | 0 | 24 | 520 | 610 | None |
| 99 | 06/28/98 | 13 | 942  | 0 | 24 | 520 | 610 | None |
| 99 | 06/29/98 | 12 | 942  | 1 | 24 | 510 | 600 | None |
| 99 | 06/30/98 | 13 | 942  | 0 | 24 | 510 | 590 | None |
| 99 | 07/01/98 | 13 | 942  | 0 | 24 | 500 | 580 | None |
| 99 | 07/02/98 | 15 | 910  | 0 | 24 | 500 | 590 | None |
| 99 | 07/03/98 | 10 | 892  | 0 | 24 | 500 | 580 | None |
| 99 | 07/04/98 | 15 | 910  | 0 | 24 | 500 | 575 | None |
| 99 | 07/05/98 | 13 | 910  | 0 | 24 | 500 | 575 | None |
| 99 | 07/06/98 | 10 | 892  | 1 | 24 | 500 | 575 | None |
| 99 | 07/07/98 | 10 | 892  | 0 | 24 | 500 | 575 | None |
| 99 | 07/08/98 | 13 | 910  | 0 | 24 | 500 | 575 | None |
| 99 | 07/09/98 | 13 | 879  | 1 | 24 | 500 | 575 | None |
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| 99 | 07/12/98 | 12 | 879  | 1 | 24 | 500 | 575 | None |
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| 99 | 07/15/98 | 13 | 847  | 0 | 24 | 490 | 570 | None |
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| 99 | 07/19/98 | 13 | 831  | 1 | 24 | 490 | 550 | None |
| 99 | 07/20/98 | 10 | 800  | 0 | 24 | 490 | 550 | None |
| 99 | 07/21/98 | 12 | 800  | 0 | 24 | 490 | 550 | None |
| 99 | 07/22/98 | 12 | 800  | 0 | 24 | 490 | 550 | None |
| 99 | 07/23/98 | 13 | 800  | 0 | 24 | 490 | 550 | None |
| 99 | 07/24/98 | 11 | 769  | 0 | 24 | 490 | 550 | None |
| 99 | 07/25/98 | 12 | 769  | 0 | 24 | 490 | 550 | None |
| 99 | 07/26/98 | 13 | 769  | 0 | 24 | 490 | 550 | None |
| 99 | 07/27/98 | 12 | 769  | 0 | 24 | 480 | 545 | None |
| 99 | 07/28/98 | 13 | 769  | 0 | 24 | 480 | 545 | None |
| 99 | 07/29/98 | 12 | 769  | 0 | 24 | 470 | 540 | None |
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| 99 | 08/02/98 | 13 | 738  | 0 | 24 | 455 | 520 | None |
| 99 | 08/03/98 | 12 | 769  | 0 | 24 | 455 | 520 | None |
| 99 | 08/04/98 | 12 | 769  | 0 | 24 | 455 | 520 | None |
| 99 | 08/05/98 | 9  | 800  | 0 | 24 | 440 | 510 | None |
| 99 | 08/06/98 | 12 | 800  | 0 | 24 | 430 | 510 | None |

Dalmore # 1-A (RD)

|    |          |    |     |   |    |     |     |      |
|----|----------|----|-----|---|----|-----|-----|------|
| 99 | 08/07/98 | 12 | 800 | 1 | 24 | 430 | 510 | None |
| 99 | 08/08/98 | 12 | 800 | 0 | 24 | 425 | 50  | None |
| 99 | 08/09/98 | 11 | 800 | 0 | 24 | 420 | 500 | None |
| 99 | 08/10/98 | 12 | 800 | 0 | 24 | 415 | 500 | None |
| 99 | 08/11/98 | 12 | 785 | 1 | 24 | 415 | 500 | None |
| 99 | 08/12/98 | 12 | 785 | 0 | 24 | 410 | 495 | None |
| 99 | 08/13/98 | 10 | 785 | 0 | 24 | 410 | 495 | None |
| 99 | 08/14/98 | 12 | 785 | 0 | 24 | 405 | 495 | None |
| 99 | 08/15/98 | 12 | 769 | 0 | 24 | 405 | 495 | None |
| 99 | 08/16/98 | 9  | 769 | 1 | 24 | 400 | 510 | None |
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| 99 | 08/20/98 | 12 | 738 | 0 | 24 | 400 | 490 | None |
| 99 | 08/21/98 | 10 | 738 | 0 | 24 | 400 | 490 | None |
| 99 | 08/22/98 | 9  | 738 | 1 | 23 | 600 | 650 | None |
| 99 | 08/23/98 | 12 | 707 | 0 | 24 | 400 | 490 | None |
| 99 | 08/24/98 | 11 | 738 | 0 | 24 | 400 | 500 | None |
| 99 | 08/25/98 | 12 | 738 | 0 | 24 | 400 | 500 | None |
| 99 | 08/26/98 | 12 | 738 | 0 | 24 | 375 | 500 | None |
| 99 | 08/27/98 | 10 | 737 | 1 | 24 | 375 | 500 | None |
| 99 | 08/28/98 | 12 | 737 | 0 | 24 | 375 | 500 | None |
| 99 | 08/29/98 | 10 | 725 | 0 | 24 | 375 | 500 | None |
| 99 | 08/30/98 | 10 | 667 | 0 | 24 | 375 | 500 | None |
| 99 | 08/31/98 | 10 | 640 | 0 | 24 | 420 | 510 | None |
| 99 | 09/01/98 | 13 | 737 | 0 | 24 | 380 | 415 | None |
| 99 | 09/02/98 | 12 | 737 | 1 | 24 | 375 | 475 | None |
| 99 | 09/03/98 | 12 | 722 | 0 | 24 | 360 | 460 | None |
| 99 | 09/04/98 | 12 | 722 | 0 | 24 | 350 | 460 | None |
| 99 | 09/05/98 | 10 | 722 | 0 | 24 | 350 | 460 | None |
| 99 | 09/06/98 | 10 | 722 | 0 | 24 | 350 | 440 | None |
| 99 | 09/07/98 | 11 | 708 | 1 | 24 | 350 | 440 | None |
| 99 | 09/08/98 | 11 | 677 | 0 | 24 | 350 | 440 | None |
| 99 | 09/09/98 | 12 | 677 | 0 | 24 | 350 | 440 | None |
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| 99 | 09/11/98 | 10 | 646 | 0 | 24 | 340 | 40  | None |
| 99 | 09/12/98 | 13 | 646 | 1 | 24 | 340 | 430 | None |
| 99 | 09/13/98 | 10 | 646 | 0 | 24 | 350 | 450 | None |
| 99 | 09/14/98 | 10 | 646 | 0 | 24 | 350 | 440 | None |
| 99 | 09/15/98 | 12 | 646 | 0 | 24 | 350 | 440 | None |
| 99 | 09/16/98 | 10 | 646 | 0 | 24 | 350 | 440 | None |
| 99 | 09/17/98 | 8  | 646 | 0 | 24 | 350 | 440 | None |
| 99 | 09/18/98 | 12 | 646 | 0 | 24 | 350 | 440 | None |
| 99 | 09/19/98 | 10 | 672 | 0 | 24 | 330 | 420 | None |
| 99 | 09/20/98 | 12 | 672 | 1 | 24 | 330 | 440 | None |
| 99 | 09/21/98 | 12 | 672 | 0 | 24 | 330 | 440 | None |
| 99 | 09/22/98 | 8  | 663 | 0 | 24 | 330 | 440 | None |
| 99 | 09/23/98 | 10 | 663 | 1 | 24 | 330 | 430 | None |
| 99 | 09/24/98 | 11 | 651 | 0 | 24 | 330 | 440 | None |
| 99 | 09/25/98 | 11 | 651 | 0 | 24 | 330 | 440 | None |
| 99 | 09/26/98 | 11 | 651 | 0 | 24 | 320 | 440 | None |



# FAX COVER SHEET

PETRAL EXPLORATION, LLC  
1700 LINCOLN STREET  
SUITE 4750  
DENVER, CO 80203  
PO BOX 5083  
DENVER, CO 80217-5083

TELEPHONE: (303) 832-3131

FAX NUMBER: (303) 894-9088



DATE: 3/10/99

TO: Ms. CORDOVA

FROM: DAVID NORBY

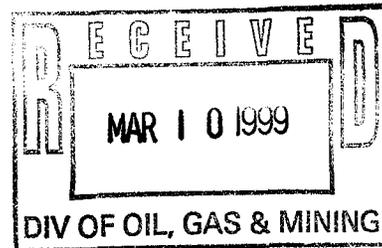
FAX NUMBER: 301-359-3940

# OF PAGES (Including Cover Sheet): 7

MESSAGE:

Ms. Cordova,

I tracked down the water permit for the Dalmore  
44-23 HZS. If you have any other questions, please  
feel free to call. 303-864-2303 or my cell  
phone is 303-886-9432.



David Norby

**PLEASE CALL IF YOU DID NOT RECEIVE ALL PAGES**



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WATER RIGHTS

Michael O. Leavitt  
Governor

*Tim Stuard*  
Executive Director  
Michael L. Morgan  
State Engineer

Southeastern Area  
453 South Carbon Avenue  
PO Box 718  
PITKIN, COLORADO 81251  
801-637-1300  
AD16327937 (Fax)

November 24, 1998

R.W. Trucking  
Attn: Robert McDaniel  
P.O. Box 1208  
Cortez, Colorado 81321

Re: Temporary Change Application Number 22727 (09-637)

1) Dalmore Federal 44-23: SW $\frac{1}{4}$ SW $\frac{1}{4}$  Section 23, T37N, R23E, SLD&M - - - - -

2) Dalmore Federal 11-25: SW $\frac{1}{4}$ SW $\frac{1}{4}$  Section 24, T37S, R23E, SLD&M - - - - -

Expiration Date: November 23, 1999

Dear Mr. McDaniel:

The above referenced Temporary Change application is hereby approved. A copy is enclosed for your information and records.

If you have any questions, please feel free to contact me.

Sincerely,

Mark P. Page  
Regional Engineer

Enclosures  
MPP/mjk

# APPLICATION FOR TEMPORARY CHANGE OF WATER RECEIVED

## STATE OF UTAH

NOV 19 1998

WATER RIGHTS PRICE

Rec. by \_\_\_\_\_  
Fee Paid \$ \_\_\_\_\_  
Receipt # \_\_\_\_\_  
Microfilmed \_\_\_\_\_  
Roll # \_\_\_\_\_

For the purpose of obtaining permission to make a temporary change of water in 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 Section 73-5-3 Utah Code Annotated 1953, as amended.

\*WATER RIGHT NO. 09 637 \*APPLICATION NO. 122727

Changes are proposed in (check those applicable)

\_\_\_\_\_ point of diversion.  place of use.  nature of use.  period of use.

### 1. OWNER INFORMATION

Name: R.W. Trucking \*Interest: \_\_\_\_\_%

Address: P.O. Box 1208

City: Cortez State: CO Zip Code: 81321

2. \*PRIORITY OF CHANGE: November 19, 1998 \*FILING DATE: November 19, 1998

\*Is this change amendatory? (Yes/No): No

3. RIGHT EVIDENCED BY: 09-637 (A45847)

Prior Approved Temporary Change Applications for this right: \_\_\_\_\_

\*\*\*\*\* HERETOFORE \*\*\*\*\*

4. QUANTITY OF WATER: 0.20 cfs and/or \_\_\_\_\_ ac-ft.

5. SOURCE: Underground Water Well

6. COUNTY: San Juan

7. POINT(S) OF DIVERSION: \_\_\_\_\_

S. 2722 ft. & E. 10 ft. from NW Cor. Sec. 1, T37S, R22E, S1B6M

Description of Diverting Works: 6-5/8 inch well, 185 feet deep

### 8. POINT(S) OF REDIVERSION

The water has been reddiverted from \_\_\_\_\_ at a point: \_\_\_\_\_

Description of Diverting Works: \_\_\_\_\_

### 9. POINT(S) OF RETURN

The amount of water consumed is 0.20 cfs or \_\_\_\_\_ ac-ft.

The amount of water returned is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.

The water has been returned to the natural stream/source at a point(s): \_\_\_\_\_

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

Temporary Change

10. NATURE AND PERIOD OF USE

Irrigation: From April 1 to October 31  
 Stockwatering: From January 1 to December 31  
 Domestic: From \_\_\_\_\_ to \_\_\_\_\_  
 Municipal: From \_\_\_\_\_ to \_\_\_\_\_  
 Mining: From \_\_\_\_\_ to \_\_\_\_\_  
 Power: From \_\_\_\_\_ to \_\_\_\_\_  
 Other: From \_\_\_\_\_ to \_\_\_\_\_

11. PURPOSE AND EXTENT OF USE

Irrigation: 23.5 acres. Soil supply of 15.0 acres.  
 Stockwatering (number and kind): 65 Cattle  
 Domestic: \_\_\_\_\_ Families and/or \_\_\_\_\_ Persons.  
 Municipal (name): \_\_\_\_\_  
 Mining: \_\_\_\_\_ Mining District in the \_\_\_\_\_ Mine.  
 Ores mined: \_\_\_\_\_  
 Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_  
 Other (describe): \_\_\_\_\_

12. PLACE OF USE

Legal description of place of use by 40 acre tract(s): SE 1/4 Sec. 1, T37S, R22E, SLB&M

13. STORAGE

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

\*\*\*\*\* THE FOLLOWING CHANGES ARE PROPOSED \*\*\*\*\*

14. QUANTITY OF WATER: \_\_\_\_\_ cfs and/or 5.0 ac-ft.

15. SOURCE: Underground Water Well (Existing)  
 Balance of the water will be abandoned: \_\_\_\_\_ or will be used as heretofore: X

16. COUNTY: San Juan

17. POINT(S) OF DIVERSION: \_\_\_\_\_  
S. 2722 ft. & E. 10 ft. from NW Cor. Sec. 1, T37S, R22E, SLB&M

Description of Diverting Works: Pumped to tank truck and hauled to place of use  
 COMMON DESCRIPTION: 2 miles SE of Blanding

18. POINT(S) OF REDIVERSION  
 The water will be rediverted from \_\_\_\_\_ at a point: \_\_\_\_\_

Description of Diverting Works: \_\_\_\_\_

19. POINT(S) OF RETURN  
 The amount of water to be consumed is \_\_\_\_\_ cfs or 5.0 ac-ft.  
 The amount of water to be returned is \_\_\_\_\_ cfs or \_\_\_\_\_ ac-ft.  
 The water will be returned to the natural stream/source at a point(s): \_\_\_\_\_

20. NATURE AND PERIOD OF USE

Irrigation: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_  
 Stockwatering: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_  
 Domestic: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_  
 Municipal: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_  
 Mining: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_  
 Power: From \_\_\_/\_\_\_/\_\_\_ to \_\_\_/\_\_\_/\_\_\_  
 Other: From 11/01/98 to 10/31/99

21. 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 of the \_\_\_\_\_ Mine.  
 Ores mined: \_\_\_\_\_  
 Power: Plant name: \_\_\_\_\_ Type: \_\_\_\_\_ Capacity: \_\_\_\_\_  
 Other (describe): Exploration drilling, road construction & maintenance, and other related use

22. PLACE OF USE

Legal description of place of use by 40 acre tract(s): \_\_\_\_\_  
Dalmore Federal 44-23: SE1/4 Sec. 23, T37S, R23E, SLB&M;  
Dalmore Federal 11-25: SW1/4 Sec. 24, T37S, R23E, SLB&M.

23. STORAGE

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

24. EXPLANATORY

The following is set forth to define more clearly the full purpose of this application. Include any supplemental water rights used for the same purpose. (Use additional pages of same size if necessary): \_\_\_\_\_  
The applicant will purchase this water from the owner of the water right, Mr. Clyde Watkins.

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).

x Robert McDonald  
 Signature of Applicant(s)

STATE ENGINEER'S ENDORSEMENT

TEMPORARY CHANGE APPLICATION NUMBER: 122727

WATER RIGHT NUMBER: 09-637

- 1. November 19, 1998 Change Application received by MP.
- 2. November 24, 1998 Application designated for APPROVAL by MP.
- 3. Comments:

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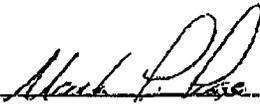
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Conditions:

This application is hereby APPROVED, dated November 24, 1998, subject to prior rights and this application will expire on November 23, 1998.



\_\_\_\_\_  
 Mark Page, Regional Engineer  
 for  
 Robert L. Morgan, State Engineer

**PETRAL EXPLORATION**

P.O. Box 5088 • Denver, CO 80217  
1700 Lincoln Street, Suite 4750 • Denver, CO 80203  
(303) 832-3131 • Fax (303) 894-9088

July 29, 1999

Utah Board of Oil, Gas and Mining  
1594 W. North Temple, Suite 1210  
Salt Lake City, Utah 84114-5801

Attn: Lisha Cordova

Re: Rule R649-3-11 – Request for Approval  
Dalmore #44-23  
SESESE Section 23-T37S-R23E  
San Juan County, Utah

Dear Ms. Cordova:

Petral Exploration, LLC hereby applies for and requests approval of its application to drill an intentionally deviated well bore in the drilling of the above subject well.

The Oil and Gas Conservation General Rules, R649-3 Drilling and Operational Practices, Rule R649-3-11, states that: "Except for the tolerances allowed in R649-3-10, no well may be intentionally deviated unless the operator shall first file application and obtain approval from the division. An application for directional drilling may be approved by the division without notice and hearing when the applicant is the owner of all the oil and gas within a radius of 460 from all points along the intended well bore, or the applicant has obtained written permission of the owner to the proposed directional drilling program. An application for directional drilling may be included as part of the initial APD for a proposed well."

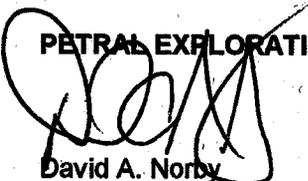
As evidenced by the attached Well Location Plat, the Dalmore #44-23 well be a directionally drilled well, however there are no other owners of oil and gas rights with a 460' radius of the proposed well bore. Petral Exploration, LLC is the "owner" of the Federal leases that comprise the SE/4 of Section 23, the SW/4 of Sec. 24, the NW/4 of Sec. 25 and the NE/4 of Sec. 26-T37S-R23E, San Juan County, Utah.

Therefore, we respectfully request the Division approve the application for this directional well.

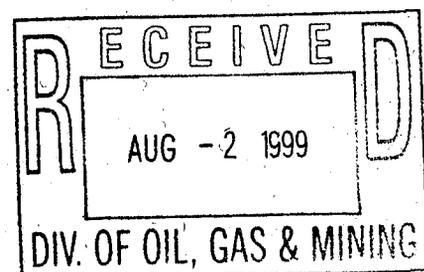
Please contact the undersigned should you have any questions.

Sincerely,

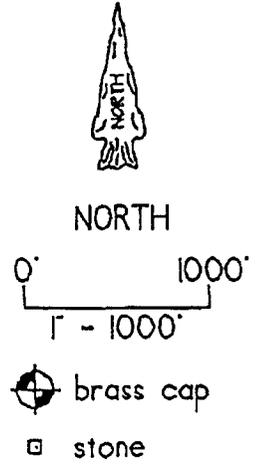
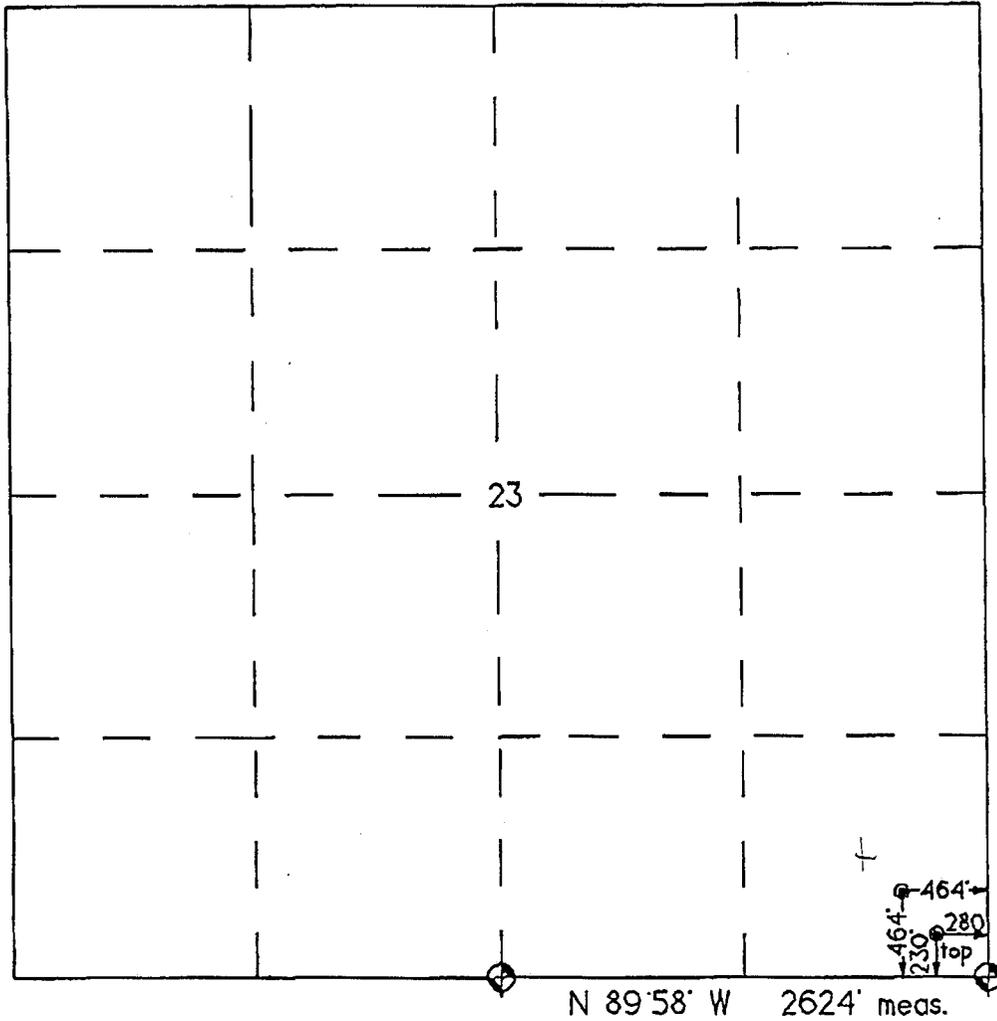
**PETRAL EXPLORATION, LLC**

  
David A. Norby  
Operations Manager

/dan  
attachment



Well Location Plat



37.549779  
109.350064

Well Location Description

PETRAL EXPLORATION  
Dalmore # 44 - 23  
230' FSL & 280' FEL (top)  
464' FSL & 464' FEL (bottom)  
Section 23, T.37 S., R.23 E., SLM  
San Juan County, UT  
5575' grd. el. ( from GPS)

Description - NAD 27

328.483 N state plane 37.54914  
2.623.426 E state plane -109.34943  
( from GPS )  
328.713 N state plane 37.54977  
2.623.237 E state plane bottom -109.35006



rev: 4 Aug. 1998

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

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



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

Michael O. Leavitt  
Governor  
Kathleen Clarke  
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)

August 5, 1999

Petral Exploration, LLC  
P.O. Box 7638  
Loveland, Colorado 80537-7638

Re: Dalmore-Federal 44-23 Well, 230' FSL, 280' FEL, SE SE, Sec. 23, T. 37 S., R. 23 E.,  
San Juan 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 43-037-31801.

Sincerely,

A handwritten signature in cursive script that reads "John R. Baza".

John R. Baza  
Associate Director

lwp

Enclosures

cc: San Juan County Assessor  
Bureau of Land Management, Moab District Office

Operator: Petral Exploration, LLC

Well Name & Number: Dalmore-Federal 44-23

API Number: 43-037-31801

Lease: Federal Surface Owner: Federal

Location: SE SE Sec. 23 T. 37 S. R. 23 E.

Permitted Bottom Hole Location: 598' FSL, 569' FEL

### Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R649-1 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.

5. In accordance with Utah Admin. R649-3-11, Directional Drilling, submittal of a complete angular deviation and directional survey report is required.

PETRAL EXPLORATION LLC  
P.O. BOX 5083  
DENVER, COLORADO 80217  
(303) 832-3131  
(FAX) 303-894-9088

October 13, 2000

Division of Oil, Gas and Mining  
Suite 1210  
1594 W. North temple  
Salt Lake City, Utah 84114-5801

**CONFIDENTIAL**

Attn: Lisha Cordova

Ladies and Gentlemen;

Pursuant to our recent telephone conversation please let this letter represent the request of Petral Exploration LLC to extend the following permits to drill:

1. Dalmore Federal 11-25 *43-037-31802*  
NW4- Section 25- Township 37 South, Range 23 East
2. Dalmore Federal 44-23 *43-037-31801*  
SE4- Section 23- Township 37 South, Range 23 East

Additionally Petral Exploration LLC wishes to drop or not extend the following permits to drill:

1. Aultmore Federal 1-24X *43-037-31781*  
SWNESW-Sec. 24- Township 37 south, Range 24 East
2. Knockdu Unit #8 *43-037-31791*  
NESW-Section 33, Township 37 south, Range 25 East

Please confirm the extension of the Dalmore permits to attn: Dennis W. Yockim  
C/o Petral Exploration LLC, P.O. Box 5083, Denver, Colorado 80217.

Thank you.

Sincerely

*Dennis W. Yockim*  
Dennis W. Yockim

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: *10/24/00*

By: *[Signature]*

COPY SENT TO OPERATOR  
Date: *10-25-00*  
Initials: *CHD*

**RECEIVED**

OCT 19 2000

DIVISION OF  
OIL, GAS AND MINING

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

FORM 3

AMENDED REPORT   
(highlight changes)

|   |   |  |  |                    |
|---|---|--|--|--------------------|
| <b>APPLICATION FOR PERMIT TO DRILL</b>  |   |  | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br>UTU-041085                  |                    |
| 1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>  |   |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:<br>N/A                           |                    |
| B. TYPE OF WELL: OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/> |   |  | 7. UNIT or CA AGREEMENT NAME:  |                    |
| 2. NAME OF OPERATOR:<br>Petral Exploration LLC  |   |  | 8. WELL NAME and NUMBER:<br>Dalmore-Federal #44-23                     |                    |
| 3. ADDRESS OF OPERATOR:<br>P. O. Box 5083 CITY Denver STATE CO ZIP 80217  |   |  | 9. FIELD AND POOL, OR WILDCAT:<br>Deadman Canyon                       |                    |
| 4. LOCATION OF WELL (FOOTAGES):<br>AT SURFACE: 230' FSL & 280' FEL Section 23-T37S-R23E<br>AT PROPOSED PRODUCING ZONE: 464' FSL & 240' FEL Section 23-T37S-R23E   |   |  | 10. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br>SESE 23 37S 23E UT |                    |
| 13. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE:<br>12 miles SE of Blanding, Utah  |   |  | 11. COUNTY:<br>San Juan  | 12. STATE:<br>UTAH |
| 14. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET):<br>464' to the South   | 15. NUMBER OF ACRES IN LEASE:<br>920              | 16. NUMBER OF ACRES ASSIGNED TO THIS WELL:<br>40 |  |                    |
| 17. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET):<br>BHL 1104'   | 18. PROPOSED DEPTH:<br>6240 (TVD) 6325' (MD)      | 19. BOND DESCRIPTION:<br>BLM Bond #UT1040        |  |                    |
| 20. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.):<br>5575' GR   | 21. APPROXIMATE DATE WORK WILL START:<br>4-1-2001 | 22. ESTIMATED DURATION:<br>2 weeks               |  |                    |

23. PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | CASING SIZE, GRADE, AND WEIGHT PER FOOT | SETTING DEPTH | CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT |
|--------------|---|---------------|---|
| 20"          | 16" .25" wall                           | 80'           | to surface w/ready mix                          |
| 12-1/4"      | 9-5/8" 36#                              | 2175'         | Cemented to surface                             |
| 8-3/4"       | 5-1/2" 15.5#                            | 6325'         | 424 sx 50/50 std Pozmix "H"                     |
|              |   |               |   |
|              |   |               |   |
|              |   |               |   |

24. ATTACHMENTS

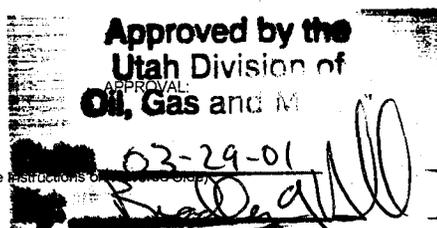
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

- |   |   |
|---|---|
| <input type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER     | <input type="checkbox"/> COMPLETE DRILLING PLAN   |
| <input type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER | <input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER. |

NAME (PLEASE PRINT) Dennis W. Yockum TITLE Landman  
SIGNATURE Dennis W. Yockum DATE 2-21-2001

(This space for State use only)

API NUMBER ASSIGNED: 43-037-31801



**RECEIVED**  
MAR 22 2001  
DIVISION OF  
OIL, GAS AND MINING

Federal Approval of this  
Action is Necessary

**GEOLOGICAL PROGNOSIS/EVALUATION PROGRAM**  
(3/15/2001)

**WELL:** PETRAL EXPLORATION LLC #44-23 Dalmore - Federal

Surface Location being **approximately** 230 ft FSL & 280 ft FEL Section 23, T37S R23E,  
San Juan Co., UT

|                         |                    |
|-------------------------|--------------------|
| <b>UTAH STATE PLANE</b> | <b>328,483 N</b>   |
| <b>UTAH STATE PLANE</b> | <b>2,623,426 E</b> |

Bottom Hole Location being **approximately** 464 ft FSL & 240 ft FEL Section 23, T37S R23E,  
San Juan Co., UT

|                         |                    |
|-------------------------|--------------------|
| <b>UTAH STATE PLANE</b> | <b>328,713 N</b>   |
| <b>UTAH STATE PLANE</b> | <b>2,623,466 E</b> |

**ELEVATION:** 5595 KB estimated from topographic map

| <b>FORMATION</b>           | <b>DEPTH</b> | <b>DATUM</b> | <b>COMMENTS</b>                  |
|----------------------------|--------------|--------------|----------------------------------|
| <b>TRUE VERTICAL DEPTH</b> |              |              |                                  |
| Morrison                   | Spud         |              |                                  |
| Chinle                     | 2075         | + 3520       |                                  |
| De Chelly                  | 2960         | + 2635       |                                  |
| Honaker Trail              | 4805         | + 790        |                                  |
| La Sal                     | 5514         | + 81         |                                  |
| Upper Ismay                | 5822         | - 227        |                                  |
| Upper Ismay mound          | 5867         | - 240        | <b>TARGET, 1 60' core, 1 DST</b> |
| Hovenweep                  | 5958         | - 363        |                                  |
| Lower Ismay                | 5989         | - 394        |                                  |
| Gothic                     | 6047         | - 452        |                                  |
| Desert Creek               | 6071         | - 476        |                                  |
| Chimney Rock               | 6157         | - 562        |                                  |
| Akah                       | 6215         | - 620        | <b>DO NOT DRILL INTO SALT</b>    |
| <b>TOTAL DEPTH</b>         | <b>6240</b>  |              |                                  |

**Area Drilling Problems:** Possible salt water flows from the Cutler and/or Honaker Trail. Our files are incomplete in the area. The limited data do not reflect shallow salt water flows but this doesn't mean they don't exist. Possible over pressure in the Lower Desert Creek mound.

**Mud:** Weight: If there are no salt water flows from the Cutler or Honaker Trail, drill at or under balance for the Upper Ismay. If there are salt water flows from the Cutler or Honaker Trail use minimum weight possible to control them. **Possible over pressure in Lower Desert Creek mound.** Do not automatically mud up for Lower Desert Creek pressure - we will know before reaching any Lower Desert Creek porosity if it is present by stratigraphic thickness in overlying units. Water loss: should be kept in 6 to 10 per previous discussions.

**Log Suite:** Schlumberger Platform Express, Borehole Compensated Sonic Log (long spaced), Compensated Neutron/Formation Density w/Photoelectric Effect, High Resolution stratigraphic

dip meter. Run all logs to base of surface casing. We want the digital data for **all** logs on disk in LAS format. Mud logger with QFT capability on location from 4800 feet to Total Depth.

**Core Handling:** Use Precision Core Analysis in Denver for core analysis. Precision to pick up the core at the location and take it to Denver as soon as possible. Precision should have a rock saw at the location so the core can be cut and examined and the information used in test/no test decisions. The core gamma should be faxed to the field as soon as available.

**Miscellaneous:** Recover samples and analyze fluids recovered from any zone tested. Add ammonium nitrate (concentration approximately 100 ppm) to the mud system prior to running any DST. Just prior to breaking off the kelly to trip out for cores, tests or logs, catch a mud sample from the flow line in a clean five gallon bucket. Frequent pipe straps to ensure good accurate drilling depths.

**Completion:** Extreme caution should be exercised to ensure a good casing cement job. Large volumes of acid and high pressure should be avoided if at all possible, especially if there is bottom water.

Leo C. Gerard  
Geologist

DALMORE, LLC  
2597 East Bridger Blvd.  
Sandy, Utah 84093  
801-942-0525  
(fax 942-8472)

March 14, 2001

Re: Dalmore Federal #43-23  
T 37 S, R 23 E, Section 23: SESE  
San Juan County, Utah

John Baza  
Division of Oil, Gas, & Mining  
594 West North Temple  
Salt Lake City, Utah 84114

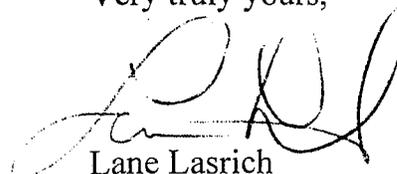
Dear Mr. Baza:

Dalmore, LLC is a working interest owner in the lease on which the above location has been filed. In addition, Dalmore, LLC is a working interest in the leasehold surrounding the captioned location.

Dalmore, LLC supports Petral Exploration LLC's application for a non-standard location, moving the bottom hole location to 464 from the south line and 240 from the east line of said section 23.

Should you need further verification or have any questions, please contact me at the number shown above.

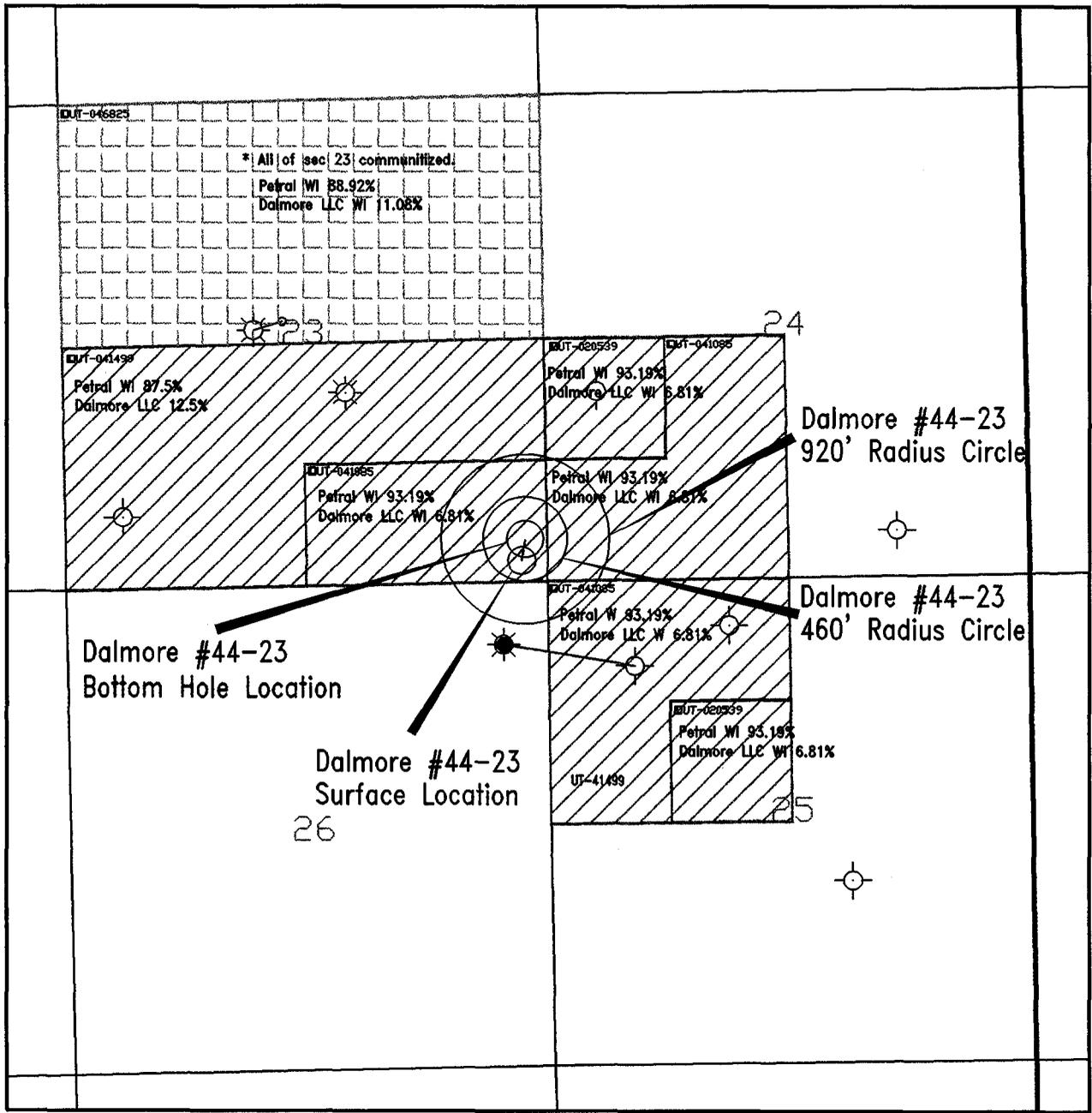
Very truly yours,



Lane Lasrich  
Managing Member

cc: Dennis Yockim, Petral Exploration

R 23 E



T  
37  
S

T  
37  
S

R 23 E

**PETRAL  
EXPLORATION  
LLC**

4750 United Bank Center - 1700 Lincoln Street - Denver, Colorado 80217 - (303) 832-3131

**DALMORE PROSPECT  
EXCEPTION LOCATION REQUEST**

|                   |     |                  |                      |
|-------------------|-----|------------------|----------------------|
| Geologist:        | LCG | Date Created:    | 03/15/2001 Modified: |
| Geophysicist:     | MAP | State:           | UTAH                 |
| Engineer:         |     | County:          | San Juan             |
| Drawn By:         | LCG | Geological Play: |                      |
| Contour Interval: |     | File:            |                      |

# PETRAL EXPLORATION LLC

Structure : SEC.23-T37S-R23E Well : 44-23 DALMORE FEDERAL

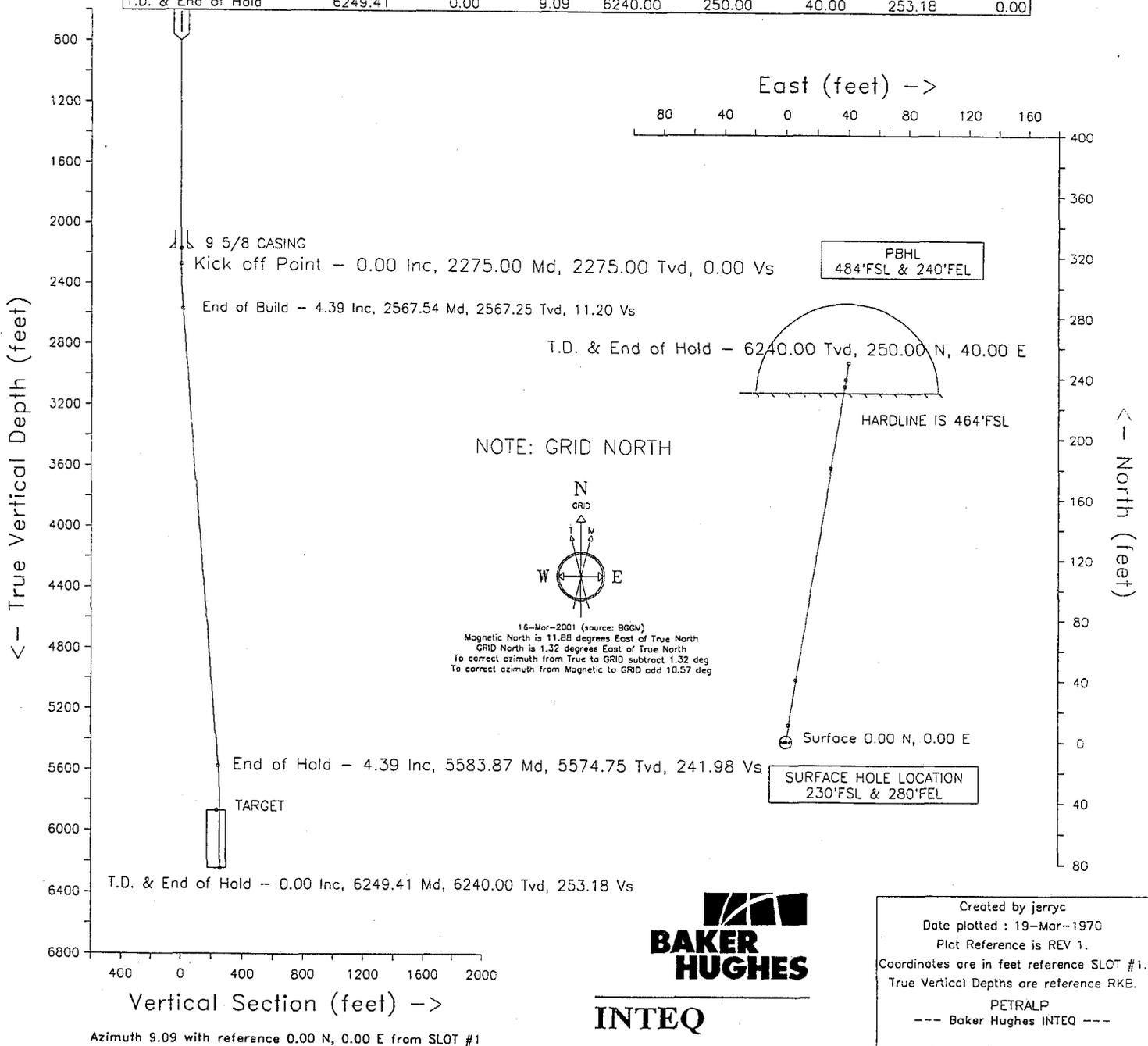
Field : SAN JUAN COUNTY

Location : UTAH

----- APPROVAL -----  
 CUSTOMER \_\_\_\_\_  
 GEOLOGIST \_\_\_\_\_  
 ENGINEER \_\_\_\_\_  
 COORD. \_\_\_\_\_

## WELL PROFILE DATA

| Point              | MD      | Inc  | Dir  | TVD     | North  | East  | V. Sect | Deg/100 |
|--------------------|---------|------|------|---------|--------|-------|---------|---------|
| Tie on             | 0.00    | 0.00 | 9.09 | 0.00    | 0.00   | 0.00  | 0.00    | 0.00    |
| KOP                | 2275.00 | 0.00 | 9.09 | 2275.00 | 0.00   | 0.00  | 0.00    | 0.00    |
| End of Build       | 2567.54 | 4.39 | 9.09 | 2567.25 | 11.06  | 1.77  | 11.20   | 1.50    |
| End of Hold        | 5583.87 | 4.39 | 9.09 | 5574.75 | 238.94 | 38.23 | 241.98  | 0.00    |
| Target             | 5876.41 | 0.00 | 9.09 | 5867.00 | 250.00 | 40.00 | 253.18  | 1.50    |
| T.D. & End of Hold | 6249.41 | 0.00 | 9.09 | 6240.00 | 250.00 | 40.00 | 253.18  | 0.00    |



INTEQ

Created by jerry  
 Date plotted : 19-Mar-1970  
 Plot Reference is REV 1.  
 Coordinates are in feet reference SLOT #1.  
 True Vertical Depths are reference RKB.  
 PETRALP  
 --- Baker Hughes INTEQ ---

Azimuth 9.09 with reference 0.00 N, 0.00 E from SLOT #1

PETRAL EXPLORATION LLC  
SEC.23-T37S-R23E

44-23 DALMORE FEDERAL  
SLOT #1  
SAN JUAN COUNTY  
UTAH

P R O P O S A L L I S T I N G

by  
Baker Hughes INTEQ

Your ref : REV 1  
Our ref : prop2155  
License :

Date printed : 19-Mar-1970  
Date created : 29-Aug-1995  
Last revised : 19-Mar-1970

Field is centred on n37 40 0.000,w109 15 0  
Structure is centred on 2623426.000,328483.000,999.00000,N

Slot location is n37 32 56.888,w109 20 57.951  
Slot Grid coordinates are N 328483.000, E 2623426.000  
Slot local coordinates are 0.00 N 0.00 E

Projection type: lambert - Utah South (4303), Spheroid: Clarke - 1866

Reference North is Grid North

PETRAL EXPLORATION LLC  
 SEC.23-T37S-R23E,44-23 DALMORE FEDERAL  
 SAN JUAN COUNTY,UTAH

PROPOSAL LISTING Page 1  
 Your ref : REV 1  
 Last revised : 19-Mar-1970

| Measured<br>Depth | Inclin.<br>Degrees | Azimuth<br>Degrees | True Vert<br>Depth | R E C T A N G U L A R<br>C O O R D I N A T E S |         | Dogleg<br>Deg/100ft | Vert<br>Sect |                   |
|-------------------|--------------------|--------------------|--------------------|--|---------|---------------------|--------------|-------------------|
| 0.00              | 0.00               | 9.09               | 0.00               | 0.00 N   | 0.00 E  | 0.00                | 0.00         |                   |
| 500.00            | 0.00               | 9.09               | 500.00             | 0.00 N   | 0.00 E  | 0.00                | 0.00         |                   |
| 1000.00           | 0.00               | 9.09               | 1000.00            | 0.00 N   | 0.00 E  | 0.00                | 0.00         |                   |
| 1500.00           | 0.00               | 9.09               | 1500.00            | 0.00 N   | 0.00 E  | 0.00                | 0.00         |                   |
| 2000.00           | 0.00               | 9.09               | 2000.00            | 0.00 N   | 0.00 E  | 0.00                | 0.00         |                   |
| 2075.00           | 0.00               | 9.09               | 2075.00            | 0.00 N   | 0.00 E  | 0.00                | 0.00         | CHINLE            |
| 2275.00           | 0.00               | 9.09               | 2275.00            | 0.00 N   | 0.00 E  | 0.00                | 0.00         |                   |
| 2375.00           | 1.50               | 9.09               | 2374.99            | 1.29 N   | 0.21 E  | 1.50                | 1.31         |                   |
| 2475.00           | 3.00               | 9.09               | 2474.91            | 5.17 N   | 0.83 E  | 1.50                | 5.23         |                   |
| 2567.54           | 4.39               | 9.09               | 2567.25            | 11.06 N  | 1.77 E  | 1.50                | 11.20        |                   |
| 2961.44           | 4.39               | 9.09               | 2960.00            | 40.82 N  | 6.53 E  | 0.00                | 41.34        | DE CHELLY         |
| 3000.00           | 4.39               | 9.09               | 2998.45            | 43.73 N  | 7.00 E  | 0.00                | 44.29        |                   |
| 3500.00           | 4.39               | 9.09               | 3496.98            | 81.50 N  | 13.04 E | 0.00                | 82.54        |                   |
| 4000.00           | 4.39               | 9.09               | 3995.52            | 119.28 N                                       | 19.08 E | 0.00                | 120.80       |                   |
| 4500.00           | 4.39               | 9.09               | 4494.05            | 157.06 N                                       | 25.13 E | 0.00                | 159.05       |                   |
| 4811.86           | 4.39               | 9.09               | 4805.00            | 180.62 N                                       | 28.90 E | 0.00                | 182.91       | HONAKER TRAIL     |
| 5000.00           | 4.39               | 9.09               | 4992.58            | 194.83 N                                       | 31.17 E | 0.00                | 197.31       |                   |
| 5500.00           | 4.39               | 9.09               | 5491.12            | 232.61 N                                       | 37.22 E | 0.00                | 235.57       |                   |
| 5522.95           | 4.39               | 9.09               | 5514.00            | 234.34 N                                       | 37.49 E | 0.00                | 237.32       | LA SAL            |
| 5583.87           | 4.39               | 9.09               | 5574.75            | 238.94 N                                       | 38.23 E | 0.00                | 241.98       |                   |
| 5676.41           | 3.00               | 9.09               | 5667.09            | 244.83 N                                       | 39.17 E | 1.50                | 247.94       |                   |
| 5776.41           | 1.50               | 9.09               | 5767.01            | 248.71 N                                       | 39.79 E | 1.50                | 251.87       |                   |
| 5831.41           | 0.68               | 9.09               | 5822.00            | 249.74 N                                       | 39.96 E | 1.50                | 252.91       | UPPER ISMAY       |
| 5876.41           | 0.00               | 9.09               | 5867.00            | 250.00 N                                       | 40.00 E | 1.50                | 253.18       | UPPER ISMAY MOUND |
| 5967.41           | 0.00               | 9.09               | 5958.00            | 250.00 N                                       | 40.00 E | 0.00                | 253.18       | HOVENWEEP         |

All data is in feet unless otherwise stated.  
 Coordinates from SLOT #1 and TVD from RKB (5570.00 Ft above wellhead).  
 Bottom hole distance is 253.18 on azimuth 9.09 degrees from wellhead.  
 Vertical section is from N 0.00 E 0.00 on azimuth 9.09 degrees.  
 Calculation uses the minimum curvature method.  
 Presented by Baker Hughes INTEQ

| Measured<br>Depth | Inclin.<br>Degrees | Azimuth<br>Degrees | True Vert<br>Depth | R E C T A N G U L A R<br>C O O R D I N A T E S |         | Dogleg<br>Deg/100ft | Vert<br>Sect |              |
|-------------------|--------------------|--------------------|--------------------|--|---------|---------------------|--------------|--------------|
| 5998.41           | 0.00               | 9.09               | 5989.00            | 250.00 N                                       | 40.00 E | 0.00                | 253.18       | LOWER ISMAY  |
| 6000.00           | 0.00               | 9.09               | 5990.59            | 250.00 N                                       | 40.00 E | 0.00                | 253.18       |              |
| 6056.41           | 0.00               | 9.09               | 6047.00            | 250.00 N                                       | 40.00 E | 0.00                | 253.18       | GOTHIC       |
| 6080.41           | 0.00               | 9.09               | 6071.00            | 250.00 N                                       | 40.00 E | 0.00                | 253.18       | DESERT CREEK |
| 6166.41           | 0.00               | 9.09               | 6157.00            | 250.00 N                                       | 40.00 E | 0.00                | 253.18       | CHIMNEY ROCK |
| 6224.41           | 0.00               | 9.09               | 6215.00            | 250.00 N                                       | 40.00 E | 0.00                | 253.18       | AKAH         |
| 6249.41           | 0.00               | 9.09               | 6240.00            | 250.00 N                                       | 40.00 E | 0.00                | 253.18       |              |

All data is in feet unless otherwise stated.  
 Coordinates from SLOT #1 and TVD from RKB (5570.00 Ft above wellhead).  
 Bottom hole distance is 253.18 on azimuth 9.09 degrees from wellhead.  
 Vertical section is from N 0.00 E 0.00 on azimuth 9.09 degrees.  
 Calculation uses the minimum curvature method.  
 Presented by Baker Hughes INTEQ

PETRAL EXPLORATION LLC  
P.O. BOX 5083  
DENVER, COLORADO 80217  
(303) 832-3131  
(FAX-303-894-9088)

March 26, 2001

State of Utah  
Division of Oil & Mining  
Suite 1210  
1594 West North Temple  
Salt Lake City, Utah 84180

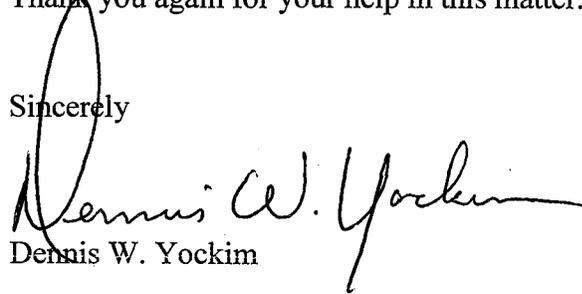
Attn: Lisha Cordova

Dear Lisha;

Pursuant to your instructions of last Friday, please find enclosed a revised letter requesting the exception to location and the right to drill the requested well as a deviated hole. Note that I have included the deviation request in the first paragraph of the letter. Please remove the previous letter and attached this revision to the revised APD. Please advise if you need anything else.

Thank you again for your help in this matter.

Sincerely

  
Dennis W. Yockim

**RECEIVED**  
MAR 27 2001  
DIVISION OF  
OIL, GAS AND MINING

PETRAL EXPLORATION LLC  
P.O. BOX 5083  
DENVER, COLORADO 80217  
(303) 832-3131  
(FAX-303-894-9088)

March 13, 2001

State of Utah  
Division of Oil & Mining  
Suite 1210  
1594 West North Temple  
Salt lake City, Utah 84180

Attn: Mr John Baza

RE: Dalmore 44-23  
SESE Sec 23-T.37S,R23E  
San Juan county, Utah  
Request for Exception to R649-2

Ladies and Gentlemen:

Petral has been previously issued an Approved Permit to drill the Dalmore 44-23 exploratory well to be located in the SESE of Section 23, T. 37S., R.23 E, San Juan County, Utah, with a bottom hole location to be sited 464 'FSL & 464' FEL. Petral respectfully requests approval to change the bottom hole location and additionally that the Dalmore 44-23 well be approved as an exception to R649-2 and that the test well be approved as a deviated hole per 649-3-11.

The Oil and Gas Conservation Act, 40-6-1 Et.Seq. Utah Code Annotated 1953 (As Amended 1993), Paragraph R649-3-2, Location and Siting of Wells, states that in the absence of special orders to the contrary, each oil and gas well shall be located in the center of a 40 acre quarter-quarter section with a tolerance of 200' in any direction from the center location, a "window" 400 feet square.

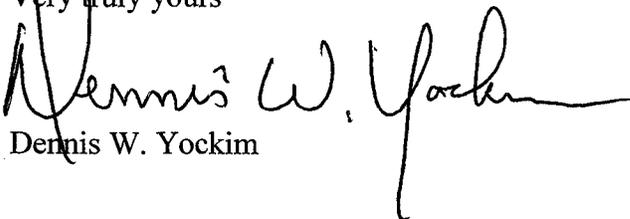
The change in location requested for this well does not meet these qualifications, and therefore an exception is required. Paragraph R649-3-3 allows for the exception requested to be granted administratively if certain information is provided with form 3.

The following information is provided in support of the requested exception.

- 1.1- Petral Exploration LLC and Dalmore LLC., respectfully requests that under the provisions of R649-3-3, an exception to R649-3-2 to be granted and the State grant this change to the existing permit issued for the planned Dalmore 44-23 well in the SESE, to a bottom hole location of 464' FSL and 245' FEL of Section 23, T.37S, R. 23E., San Juan County, Utah. This well will be directionally drilled due to topographic considerations and will have a surface location of 230' FSL and 280' FEL of Section 23, T.37S., R.23 E., San Juan County, Utah. The surface location is unchanged from the approved permit.
- 1.2 There are no other owners within a 460 foot radius of the proposed location. Petral Exploration LLC. and Dalmore LLC are joint owners of Federal Lease # 41085, #41499 and #020539 comprising 600 acres, more or less. In addition to other acreage this leasehold encompasses the SE4 of Section 23, SW4 of Section 24, NW4 of Section 25, all in T.37S. R.23E, San Juan County, Utah.
- 3.0 The producing formation has been targeted utilizing 3D seismic technology. In order to penetrate the potentially productive horizon, an exception is necessary.
- 3.1,3.2,3.3- Attached is a plat showing locations at which an oil and gas well could be drilled in compliance with R649-3-2 (LL-legal location, the requested exception location [REL], legal direct and diagonal offsets to the requested location [LOL Legal Offset Location] and a circle having a radius of 920 feet around the requested exception location. The only producing well in the immediate area is the Dalmore #1-A(RD), located in the NENE of Section 26, T.37S., R. 23 E.,. This well is more than 920 feet from the requested exception location.
- 3.4- There are no other owners within a 460' radius of the requested exception to location.

If administratively approved, please notify Mr. Gary Torres, Bureau of Land Management, 82 East Dogwood, Suite M, Moab, Utah 84532.

Very truly yours

  
Dennis W. Yockim



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

Michael O. Leavitt  
Governor  
Kathleen Clarke  
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)

March 29, 2001

Petral Exploration, LLC  
PO Box 5083  
Denver, CO 80217

Re: Dalmore-Federal 44-23 Well, (Bottom Hole) 480' FSL 240' FEL and, (Surface) 230' FSL 280' FEL, SE SE, Sec. 23, T. 37 South, R. 23 East, San Juan 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 43-037-31801.

Sincerely,

John R. Baza  
Associate Director

er

Enclosures

cc: San Juan County Assessor  
Bureau of Land Management, Moab District Office

**Operator:** Petral Exploration, LLC  
**Well Name & Number** Dalmore-Federal 44-23  
**API Number:** 43-037-31801  
**Lease:** UTU-041085

**Location:** SE SE      **Sec.** 23      **T.** 37 South      **R.** 23 East

### 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

3. Reporting Requirements

All required reports, forms and submittals will 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.

5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

**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**

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

2. NAME OF OPERATOR  
**Petral Exploration LLC C/O ENMARC, INC. (E.K. Bostick)**

3. ADDRESS AND TELEPHONE NO.  
**P.O. Box 7638, Loveland, CO 80537-7638 (970) 663-7576**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)  
 At Surface  
**230' FSL & 280' FEL Sec. 23 - T37S - R23E**  
 At proposed prod. zone **240'**  
**464' FSL & 464' FEL Sec. 23 - T37S - R23E**

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
**12 miles SE of Blanding, Utah**

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)      **856'**

16. NO. OF ACRES IN LEASE      **920**

17. NO. OF ACRES ASSIGNED TO THIS WELL      **40**

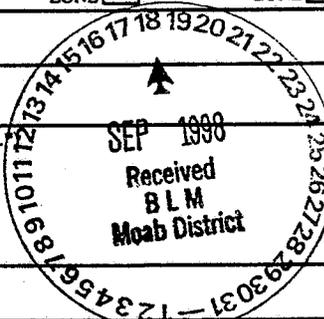
18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.      **BHL 1104'**

19. PROPOSED DEPTH

20. ROTARY OR CABLE TOOLS  
**Rotary**

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**55 75' GR**      x DF      x GR

22. APPROX. DATE WORK WILL START\*  
**November 1, 1998**



5. LEASE DESIGNATION AND SERIAL NO.  
**UTU-041085**

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

7. UNIT AGREEMENT NAME  
**N/A CA# 101100789**

8. FARM OR LEASE NAME, WELL NO.  
**Dalmore-Federal #44-23**

9. API WELL NO.

10. FIELD AND POOL, OR WILDCAT  
**Deadman Canyon**

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
**Sec. 23 - T37S - R23E**

12. COUNTY OR PARISH  
**San Juan County**

13. STATE  
**Utah**

23. PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | GRADE, SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT         |
|--------------|-----------------------|-----------------|---------------|----------------------------|
| 20"          | 16"                   | .25" Wall       | 80'           | To surface w/ ready-mix    |
| 12 1/4"      | J-55, 9 5/8"          | 36#             | 2175'         | Cemented to surface        |
| 8 3/4"       | J-55, 5 1/2"          | 15.5#           | 6325'         | 424sx 50/50 Std.Pozmix "H" |

Request is made for all information to be held CONFIDENTIAL.

It is proposed to directionally drill from the above surface location to the BHL with the primary zone of interest the Upper Ismay Mound at 5867' TVD. If the well proves productive, 5 1/2" casing will be cemented in place and the well completed. If the well is found non-productive, it will be plugged and abandoned and the surface restored as per BLM specifications.

See attached "Drilling Program" summary, "Surface Use Program" and "Directional Drilling Program" planning report (Scientific Drilling) for details. I hereby certify that Petral, Exploration LLC is responsible under the terms and conditions of the lease to conduct lease operations in conjunction with the application. Bond Coverage pursuant to 43 CFR 3104 for lease activities is provided by BLM Bond # UT 1040.

See attachments. Application has been made to the Utah Board of Oil, Gas & Mining for APD. 100 1/1/80  
 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 E.K. Bostick      TITLE Petral Exploration, LLC      DATE 9/16/98  
 E.K. Bostick      Agent for

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
 Application approval 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.  
 CONDITIONS OF APPROVAL, IF ANY:  
 APPROVED BY /S/ WILLIAM C. STRINGER      TITLE Assistant Field Manager, Division of Resources      DATE REC APR 30 2001

\*See Instructions On Reverse Side

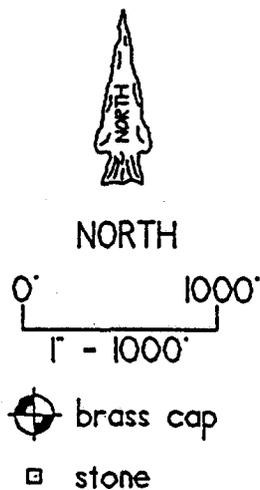
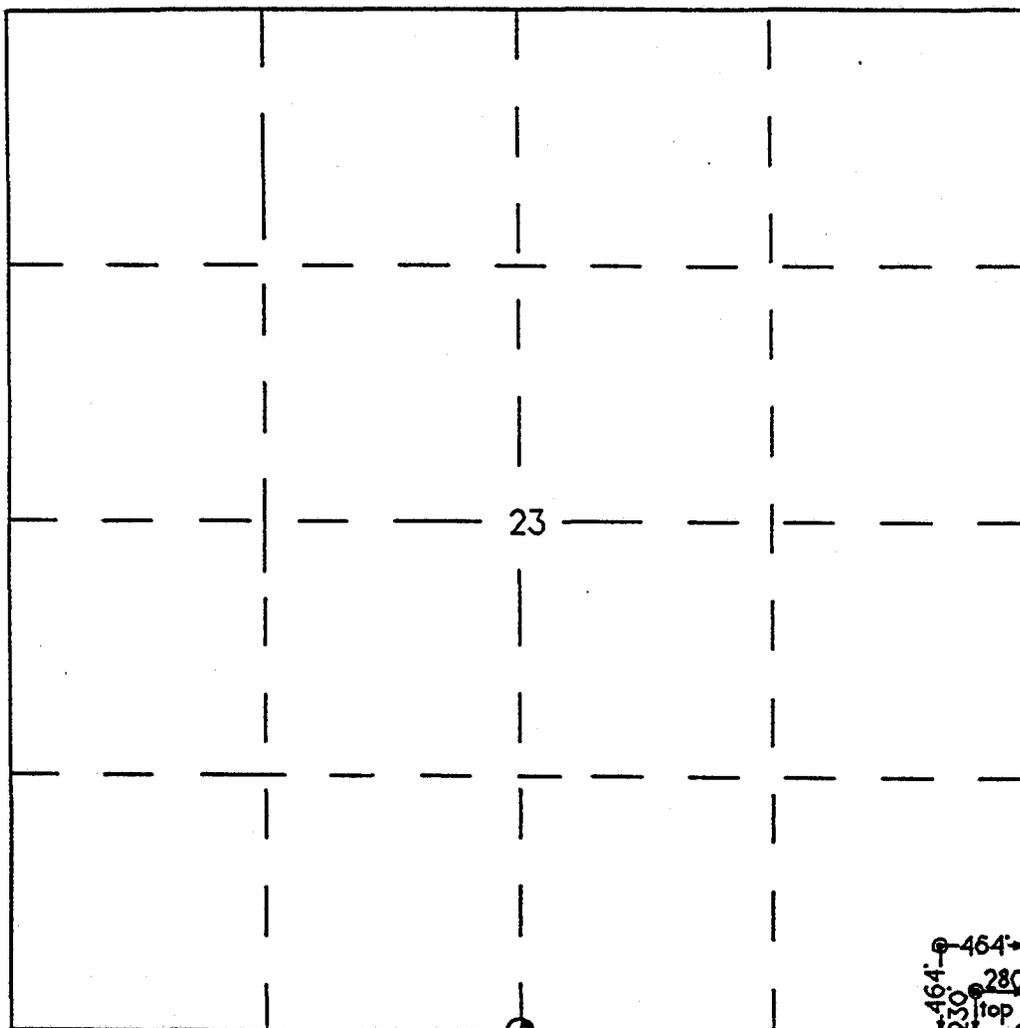
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

CONDITIONS OF APPROVAL ATTACHED

CONFIDENTIAL

DIVISION OF OIL, GAS AND MINING

Well Location Plat



N 89°58' W 2624' meas.

Well Location Description

PETRAL EXPLORATION  
 Dalmore # 44 - 23  
 230' FSL & 280' FEL (top)  
 464' FSL & 464' FEL (bottom)  
 Section 23, T.37 S., R.23 E., SLM  
 San Juan County, UT  
 5575' grd. el. ( from GPS)

Description - NAD 27

328.483 N state plane  
 2.623.426 E state plane  
 ( from GPS )  
 328.713 N state plane  
 2.623.237 E state plane bottom



rev: 4 Aug. 1998

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

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



|         | INIT/DATE |
|---------|-----------|
| DM      |           |
| RES     |           |
| L/M     |           |
| R/C     |           |
| RR      |           |
| SUP SER |           |
| Admin   |           |
| Fire    |           |
| PRICE   |           |
| SJ      |           |
| Ac      |           |
| Info    |           |
| Disc    |           |

**DESIGNATION OF AGENT**

The undersigned is, on the records of the Bureau of Land Management, Unit Operator under the Communitization Agreement # MO-49P-8469OC and does hereby designate:

Petral Exploration LLC  
 P.O. Box 5083  
 Denver, Colorado 80217

As its Agent, with full authority to act on its behalf in complying with the terms of the Communitization Agreement and regulations applicable thereto and on whom the Authorized Officer or his representative may serve written or oral instructions in securing compliance with the Oil and Gas Operating Regulations with respect to drilling, testing, and completing the Dalmore Federal 44-23 well in the SESE of Section 23, Township 37S., R. 23 E., San Juan County, Utah. Bond coverage will be provided under Cash Bond #1040 filed with Utah BLM Office in Salt Lake City, Utah.

It is understood that this Designation of Agent does not relieve the Communitized Area Operator of responsibility for compliance with the terms of the Communitization Agreement and the Oil and Gas Operating regulations. It is also understood that this Designation of Agent does not constitute an assignment of any interest under the Communitization Agreement or any lease committed thereto.

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

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

This designation is given only to enable the agent herein designated to drill the above specified well. It is understood that this designation of Agent is limited to the field operations performed while drilling and completing the specified well and does not include administrative actions requiring specific authorization of the Communitized Area Operator. This designation in no way will serve as authorization for the agent to conduct field operations for the specific well after it has been completed for production. Unless sooner terminated, this designation shall terminate when there is filed in the appropriate office of the Bureau of Land Management all reports and a Well Completion Report and Log (Form 3160-4) as required by the approved Application for Permit to Drill for the specified well.

D.J. Simmons Company/Limited Partnership  
 By: D.J. Simmons, Inc., It's G.P.

By: John A. Byrom  
 John A. Byrom - Vice President

Accepted this 31<sup>st</sup> day of July, 1998  
 Petral Exploration LLC

By: [Signature]  
 Its

**APPROVED - EFFECTIVE NOV 02 1998**

CHIEF, BRANCH OF FLUID MINERALS  
 BUREAU OF LAND MANAGEMENT

*Am-Moab*

Petral Exploration, LLC  
Dalmore-Federal 44-23  
Lease U-041085

Spud Location: SESE, Section 23, T. 37 S., R. 23 E.  
Bottom Hole Location: SESE, Section 23, T. 37 S., R. 23 E.  
San Juan County, Utah

#### 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 Petral Exploration, LLC 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 UT-1040 (Principal - Petral Exploration, LLC) 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. 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. The proposed 3M BOP system is adequate. Installation, testing and operation of the system shall be in conformance with Onshore Oil and Gas Order No. 2.
2. Any fluid bearing zones or lost circulation zones encountered while drilling will be isolated behind casing and cement.
3. If a gas meter run is constructed, it will be located on lease within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and will be buried downstream of the meter until it leaves the pad. Meter runs will be housed and/or fenced. The gas meter shall be calibrated prior to first sales and shall be calibrated quarterly thereafter. All gas production and measurement shall comply with the provisions of 43 CFR § 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3.

B. SURFACE USE PLAN

1. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the operator, or any person working on his behalf, on public or Federal land shall be immediately reported to the San Juan Resource Area Manager. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the San Juan Resource Area Manager. An evaluation of the discovery will be made by the San Juan Resource Area Manager to determine appropriate action to prevent the loss of significant cultural or scientific values. The operator will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the operator.
2. Deer winter range restrictions from December 15, through April 30 will be imposed for well location preparation and drilling operations unless an exception is granted by the Area Manager.
3. A raptor survey and clearance of the affected area surrounding the proposed drilling site will be completed prior to work initiation if the proposed well is drilled between February 1, and August 31. If the raptor survey locates an active raptor nesting territory which will be affected by this proposal, no work will be allowed until nestlings have fledged. This will apply to peregrine falcons found to be nesting within one mile, golden eagles and all other raptors found to be nesting within 0.5 mile of the proposed site. Discussion will be entered into by the San Juan Resource Area with the U.S. Fish & Wildlife Service to determine the feasibility of allowing drilling of said well closer (0.25 mile) of the proposed action site if it can be proven that activity (noise and visual impacts) can take place without impacting the nesting birds and their offspring. The U.S. Fish & Wildlife Service will be fully consulted if peregrine falcon or golden eagle nesting becomes an issue and given updates on the nesting status of these birds.
4. The reserve pit shall remain free of hydrocarbons at all times. Any hydrocarbons entering the reserve pit will be removed promptly.
5. The reserve pit fence shall be kept in good repair and maintained in a tight condition. The reserve pit fence shall be constructed as follows:
  - 32" high woven wire fence, with 2 smooth wire stands set 4" and 16" above the woven wire. Total fence height will be 48".
  - posts will be set no farther apart than 16.5'
  - corners will consist of posts that are at least 6" in diameter (h-brace construction will not be required due to the short distance between corners and temporary nature of the fence. All corners will be stabilized with a "deadman".
  - steel t-posts will be placed between corner posts
  - wire stays will be installed between T-posts
  - there will be a 10 wide distance between the top lip of the reserve pit and reserve pit fence.
6. The netting material used to protect wildlife resources from the reserve pit shall be installed and maintained in a manner to prevent access of birds or small mammals into the reserve pit or contact with the reserve pit fluids.
7. All above the ground production facilities shall be painted juniper green.
8. The diked containment area to be constructed around production tanks shall have a capacity of 1.5 times the volume of the largest vessel.

### C. REQUIRED APPROVALS, REPORTS AND NOTIFICATIONS

Required verbal notifications are summarized in Table 1, enclosed.

Building Location- Contact the BLM Petroleum Engineering Technician at the Monticello BLM Field Office at least 48 hours prior to commencing construction of location.

Spud- The spud date will be reported to BLM 24 hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the Moab BLM Field Office within 24 hours after spudding, regardless of whether spud was made with a dry hole digger or big rig.

Daily Drilling Reports- Daily drilling reports shall detail the progress and status of the well and shall be submitted to the Moab BLM Field Office on a weekly basis.

Monthly Reports of Operations- In accordance with Onshore Oil and Gas Order No. 1, this well shall be reported on Minerals Management Service (MMS) Form 3160, "Monthly Report of Operations," starting 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 MMS.

Sundry Notices- There will be no deviation from the proposed drilling and/or workover program without prior approval. "Sundry Notices and Reports 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.

Drilling Suspensions- Operations authorized by this permit shall not be suspended for more than 30 days without prior approval of the Moab BLM Field Office. All conditions of this approval shall be applicable during any operations conducted with a replacement rig.

Undesirable Events- Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be immediately reported to the BLM 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 BLM is to be notified.

First Production- Should the well be successfully completed for production, the Moab BLM Field Office 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 into production.

A first production conference will be scheduled as soon as the productivity of the well is apparent. This conference should be coordinated through the Monticello BLM Field Office. The Monticello BLM Field Office shall be notified prior to the first sale.

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 Moab BLM Field 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. When requested, samples (cuttings and/or samples) will be submitted to the Moab BLM Field Office.

Venting/Flaring of Gas- Gas produced from this well may not be vented/flared beyond an initial, authorized test period of 30 days or 50 MMcf, whichever occurs first, without the prior, written approval of the BLM. Should gas be vented or flared without approval beyond the authorized test period, the well may be ordered shut-in until the gas can be captured or approval to continue the venting/flaring as uneconomic is granted. In such case, compensation to the lessor shall be required for that portion of the gas that is vented/flared without approval and which is determined to have been avoidably lost.

Produced Water- Produced waste water may be confined to an unlined pit for a period not to exceed 90 days after initial production. During the 90 day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted to the Moab BLM Field Office for approval pursuant to Onshore Oil and Gas Order No. 7.

Off-Lease Measurement, Storage, Commingling- Prior approval must be obtained from the Moab BLM Field Office for off-lease measurement, off-lease storage and/or commingling (either down-hole or at the surface).

Plugging and Abandonment- If the well is completed as a dry hole, plugging instructions must be obtained from the Moab BLM Field Office prior to initiating plugging operations.

A "Subsequent Report of Abandonment" (Form 3160-5) shall be filed with the Moab BLM Field Office 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 BLM, or the appropriate surface managing agency.

### TABLE 1. NOTIFICATIONS

Notify Jeff Brown of the Monticello BLM Field Office in Monticello, Utah, at (435) 587-1525, or at home (435) 587-2046 for the following:

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

1 day prior to spudding;

50 feet prior to reaching each casing setting depth;

3 hours prior to testing BOPE

If the person at the above number cannot be reached, notify the Moab BLM Field Office at (435) 259-2100. If unsuccessful, contact one of the 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 Field Office at (435) 259-2100. If approval is needed after work hours, you may contact the following:

|                                 |         |                |
|---------------------------------|---------|----------------|
| Gary Torres, Petroleum Engineer | Office: | (435) 587-1524 |
|                                 | Home:   | (435) 587-2705 |

|                                |         |                |
|--------------------------------|---------|----------------|
| Eric Jones, Petroleum Engineer | Office: | (435) 259-2117 |
|                                | Home:   | (435) 259-2214 |

SPUDDING INFORMATION

Name of Company: PETRAL EXPLORATION LLC

Well Name: DALMORE FED 44-23

Api No. 43-037-31801 LEASE TYPE: FEDERAL

Section 23 Township 37S Range 23E County SAN JUAN

Drilling Contractor CATFISH DRILLING CO RIG # 1

SPUDDED:

Date 05//31/2001

Time 11:00 AM

How DRY

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

Reported by RAY ROSENTHAL

Telephone # 1-307-350-7408

Date 06/01/2001 Signed: CHD

CONFIDENTIAL



**sperry-sun**  
**DRILLING SERVICES**

**Downhole Motor Limited Liability Coverage**

A Halliburton Company

Date 06/07/2001 Customer Petral Exploration Job No. CA-MJ-10102

Well Name 44-23Dalmore-Fed County San Juan State Utah

Rig Name Catfish Rig No. 1

**Is Lost-In-Hole Limited Liability Coverage for DownHole Motor required for this service?**

Yes  x

No

Customer Rep. Richard Oaks DD

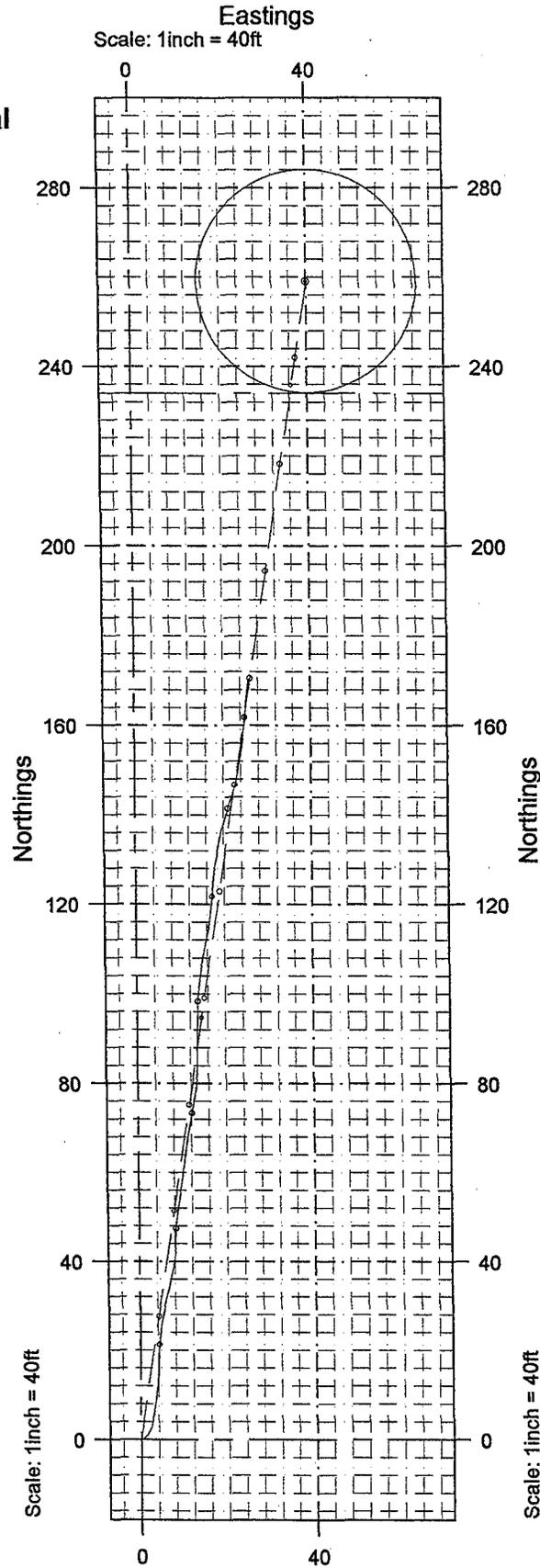
Date 06/07/2001

**If a motor is lost-in-hole, Limited Liability Coverage is not continued without approval from Sperry-Sun management.**

**Please fill out this form accurately and obtain a dated signature from customer's representative accepting or declining this Limited Liability Coverage**

**BEFORE TOOLS ARE PICKED UP!**

Dalmore-Federal  
San Juan County  
Sec 23-T37S-R23E  
#44-23 Dalmore - Federal



Prepared by:  
richard

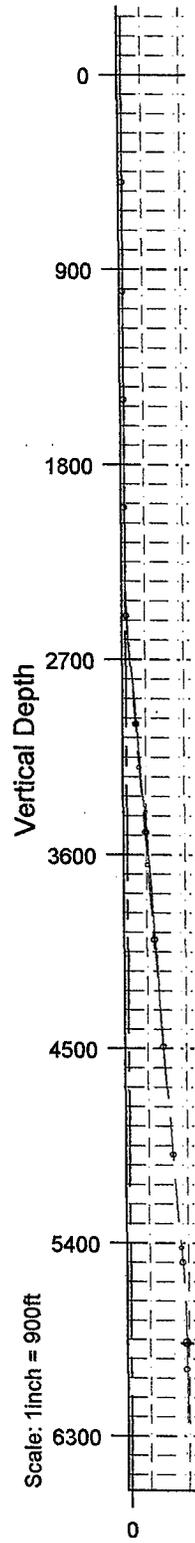
Date/Time:  
Eastings June, 2001 - 11:07

Checked:

Approved:

*Handwritten signature or initials*

Dalmore-Federal  
San Juan County  
Sec 23-T37S-R23E  
#44-23 Dalmore - Federal



Scale: 1 inch = 900ft  
**Vertical Section**

Prepared by:  
richard

Date/Time:  
11 June, 2001 - 11:04

Checked:

Approved:

# Sperry-Sun Drilling Services

Survey Report for #44-23 Dalmore - Federal - MWD Survey  
Your Ref: Richard Oaks



**Petral Exploration LLC  
Dalmore-Federal**

**San Juan County  
Sec 23-T37S-R23E**

| Measured Depth (ft) | Incl. | Azim.   | Vertical Depth (ft) | Northings (ft) | Eastings (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) |
|---------------------|-------|---------|---------------------|----------------|---------------|-----------------------|-----------------------|
| 0.00                | 0.000 | 0.000   | 0.00                | 0.00 N         | 0.00 E        | 0.00                  |                       |
| 2173.00             | 0.000 | 0.000   | 2173.00             | 0.00 N         | 0.00 E        | 0.00                  | 0.00                  |
| 2281.00             | 0.440 | 80.400  | 2281.00             | 0.07 N         | 0.41 E        | 0.13                  | 0.41                  |
| 2313.00             | 0.880 | 48.060  | 2313.00             | 0.25 N         | 0.71 E        | 0.36                  | 1.75                  |
| 2345.00             | 1.100 | 40.780  | 2344.99             | 0.65 N         | 1.10 E        | 0.81                  | 0.79                  |
| 2375.00             | 1.390 | 28.690  | 2374.98             | 1.19 N         | 1.46 E        | 1.40                  | 1.30                  |
| 2406.00             | 1.810 | 31.480  | 2405.97             | 1.94 N         | 1.90 E        | 2.20                  | 1.38                  |
| 2436.00             | 2.200 | 21.340  | 2435.95             | 2.88 N         | 2.35 E        | 3.20                  | 1.75                  |
| 2468.00             | 2.640 | 12.370  | 2467.93             | 4.17 N         | 2.73 E        | 4.54                  | 1.81                  |
| 2500.00             | 2.900 | 9.030   | 2499.89             | 5.69 N         | 3.02 E        | 6.08                  | 0.96                  |
| 2530.00             | 3.520 | 10.260  | 2529.84             | 7.34 N         | 3.30 E        | 7.76                  | 2.08                  |
| 2560.00             | 3.870 | 7.450   | 2559.78             | 9.25 N         | 3.60 E        | 9.69                  | 1.31                  |
| 2590.00             | 4.220 | 6.220   | 2589.70             | 11.35 N        | 3.85 E        | 11.81                 | 1.20                  |
| 2621.00             | 4.920 | 2.530   | 2620.61             | 13.82 N        | 4.03 E        | 14.27                 | 2.45                  |
| 2651.00             | 5.450 | 2.530   | 2650.48             | 16.52 N        | 4.15 E        | 16.96                 | 1.77                  |
| 2683.00             | 5.450 | 2.880   | 2682.34             | 19.56 N        | 4.29 E        | 19.99                 | 0.10                  |
| 2745.00             | 5.540 | 8.330   | 2744.05             | 25.46 N        | 4.87 E        | 25.91                 | 0.85                  |
| 2840.00             | 5.010 | 16.940  | 2838.65             | 33.97 N        | 6.75 E        | 34.60                 | 1.00                  |
| 2931.00             | 4.750 | 3.410   | 2929.33             | 41.53 N        | 8.13 E        | 42.28                 | 1.29                  |
| 2961.00             | 4.750 | 0.070   | 2959.22             | 44.01 N        | 8.20 E        | 44.75                 | 0.92                  |
| 3024.00             | 4.920 | 6.750   | 3022.00             | 49.30 N        | 8.53 E        | 50.03                 | 0.93                  |
| 3054.00             | 4.830 | 9.210   | 3051.89             | 51.83 N        | 8.88 E        | 52.58                 | 0.76                  |
| 3117.00             | 4.920 | 7.800   | 3114.66             | 57.12 N        | 9.67 E        | 57.93                 | 0.24                  |
| 3212.00             | 5.100 | 8.860   | 3209.30             | 65.33 N        | 10.87 E       | 66.22                 | 0.21                  |
| 3304.00             | 5.190 | 10.620  | 3300.93             | 73.46 N        | 12.27 E       | 74.47                 | 0.20                  |
| 3364.00             | 5.100 | 8.680   | 3360.69             | 78.76 N        | 13.17 E       | 79.85                 | 0.33                  |
| 3428.00             | 4.750 | 359.720 | 3424.45             | 84.23 N        | 13.59 E       | 85.31                 | 1.32                  |
| 3458.00             | 4.570 | 0.420   | 3454.35             | 86.66 N        | 13.59 E       | 87.72                 | 0.63                  |
| 3490.00             | 4.310 | 0.600   | 3486.26             | 89.14 N        | 13.61 E       | 90.17                 | 0.81                  |
| 3520.00             | 4.570 | 1.650   | 3516.17             | 91.46 N        | 13.66 E       | 92.48                 | 0.91                  |
| 3551.00             | 4.660 | 0.240   | 3547.07             | 93.96 N        | 13.70 E       | 94.95                 | 0.47                  |
| 3581.00             | 4.660 | 0.240   | 3576.97             | 96.39 N        | 13.71 E       | 97.36                 | 0.00                  |
| 3642.00             | 4.830 | 6.750   | 3637.76             | 101.42 N       | 14.02 E       | 102.37                | 0.93                  |
| 3734.00             | 4.750 | 11.850  | 3729.44             | 109.00 N       | 15.26 E       | 110.05                | 0.47                  |
| 3795.00             | 4.390 | 11.850  | 3790.24             | 113.75 N       | 16.26 E       | 114.90                | 0.59                  |
| 3856.00             | 4.130 | 5.520   | 3851.07             | 118.22 N       | 16.95 E       | 119.43                | 0.88                  |
| 3949.00             | 3.870 | 4.290   | 3943.85             | 124.69 N       | 17.51 E       | 125.90                | 0.29                  |
| 4041.00             | 3.870 | 11.670  | 4035.64             | 130.82 N       | 18.37 E       | 132.09                | 0.54                  |
| 4133.00             | 3.690 | 13.080  | 4127.44             | 136.75 N       | 19.66 E       | 138.15                | 0.22                  |
| 4196.00             | 4.130 | 19.760  | 4190.29             | 140.86 N       | 20.89 E       | 142.40                | 1.00                  |

Continued...

# Sperry-Sun Drilling Services

Survey Report for #44-23 Dalmore - Federal - MWD Survey  
Your Ref: Richard Oaks



**Petral Exploration LLC  
Dalmore-Federal**

**San Juan County  
Sec 23-T37S-R23E**

| Measured Depth (ft) | Incl. | Azim.  | Vertical Depth (ft) | Northings (ft) | Eastings (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) |
|---------------------|-------|--------|---------------------|----------------|---------------|-----------------------|-----------------------|
| 4259.00             | 3.870 | 18.170 | 4253.14             | 145.01 N       | 22.32 E       | 146.72                | 0.45                  |
| 4322.00             | 3.860 | 8.820  | 4316.00             | 149.13 N       | 23.31 E       | 150.94                | 1.00                  |
| 4414.00             | 3.960 | 9.030  | 4407.78             | 155.33 N       | 24.28 E       | 157.21                | 0.11                  |
| 4476.00             | 4.040 | 5.870  | 4469.63             | 159.61 N       | 24.84 E       | 161.53                | 0.38                  |
| 4570.00             | 3.960 | 5.690  | 4563.40             | 166.14 N       | 25.50 E       | 168.08                | 0.09                  |
| 4630.00             | 4.390 | 8.860  | 4623.24             | 170.47 N       | 26.06 E       | 172.45                | 0.81                  |
| 4722.00             | 4.310 | 11.320 | 4714.98             | 177.34 N       | 27.28 E       | 179.42                | 0.22                  |
| 4784.00             | 4.570 | 11.490 | 4776.79             | 182.04 N       | 28.23 E       | 184.22                | 0.42                  |
| 4814.00             | 4.480 | 10.970 | 4806.70             | 184.36 N       | 28.69 E       | 186.58                | 0.33                  |
| 4903.00             | 5.450 | 4.460  | 4895.36             | 191.99 N       | 29.68 E       | 194.27                | 1.26                  |
| 4996.00             | 5.270 | 4.990  | 4987.96             | 200.65 N       | 30.40 E       | 202.94                | 0.20                  |
| 5119.00             | 4.830 | 4.820  | 5110.48             | 211.43 N       | 31.32 E       | 213.74                | 0.36                  |
| 5212.00             | 4.750 | 4.990  | 5203.15             | 219.17 N       | 31.99 E       | 221.49                | 0.09                  |
| 5242.00             | 4.660 | 5.690  | 5233.05             | 221.62 N       | 32.22 E       | 223.94                | 0.36                  |
| 5303.00             | 4.660 | 11.140 | 5293.85             | 226.52 N       | 32.94 E       | 228.89                | 0.73                  |
| 5396.00             | 4.570 | 14.310 | 5386.55             | 233.81 N       | 34.59 E       | 236.35                | 0.29                  |
| 5489.00             | 4.310 | 13.780 | 5479.27             | 240.80 N       | 36.33 E       | 243.52                | 0.28                  |
| 5581.00             | 3.780 | 13.080 | 5571.04             | 247.11 N       | 37.84 E       | 249.99                | 0.58                  |
| 5674.00             | 3.250 | 12.550 | 5663.87             | 252.67 N       | 39.11 E       | 255.68                | 0.57                  |
| 5704.00             | 3.160 | 11.490 | 5693.82             | 254.31 N       | 39.46 E       | 257.35                | 0.36                  |
| 5735.00             | 3.250 | 11.320 | 5724.77             | 256.01 N       | 39.80 E       | 259.08                | 0.29                  |
| 5766.00             | 2.810 | 13.600 | 5755.73             | 257.61 N       | 40.15 E       | 260.72                | 1.47                  |
| 5797.00             | 2.460 | 10.790 | 5786.70             | 259.00 N       | 40.46 E       | 262.14                | 1.20                  |
| 5829.00             | 1.930 | 8.680  | 5818.67             | 260.21 N       | 40.67 E       | 263.37                | 1.68                  |
| 5894.00             | 0.800 | 7.000  | 5883.65             | 261.74 N       | 40.89 E       | 264.92                | 1.74                  |
| 6000.00             | 0.000 | 0.000  | 5989.65             | 262.48 N       | 40.98 E       | 265.65                | 0.75                  |
| 6350.00             | 0.000 | 0.000  | 6339.65             | 262.48 N       | 40.98 E       | 265.65                | 0.00                  |

All data is in feet unless otherwise stated. Directions and coordinates are relative to Grid North. Vertical depths are relative to Well Head. Northings and Eastings are relative to Well Head.

The Dogleg Severity is in Degrees per 100 feet.

Vertical Section is from Well Head and calculated along an Azimuth of 8.779° (Grid).

Based upon Minimum Curvature type calculations, at a Measured Depth of 6350.00ft., The Bottom Hole Displacement is 265.66ft., in the Direction of 8.873° (Grid).

Continued...

**Sperry-Sun Drilling Services**  
Survey Report for #44-23 Dalmore - Federal - MWD Survey  
Your Ref: Richard Oaks



Petral Exploration LLC  
Dalmore-Federal

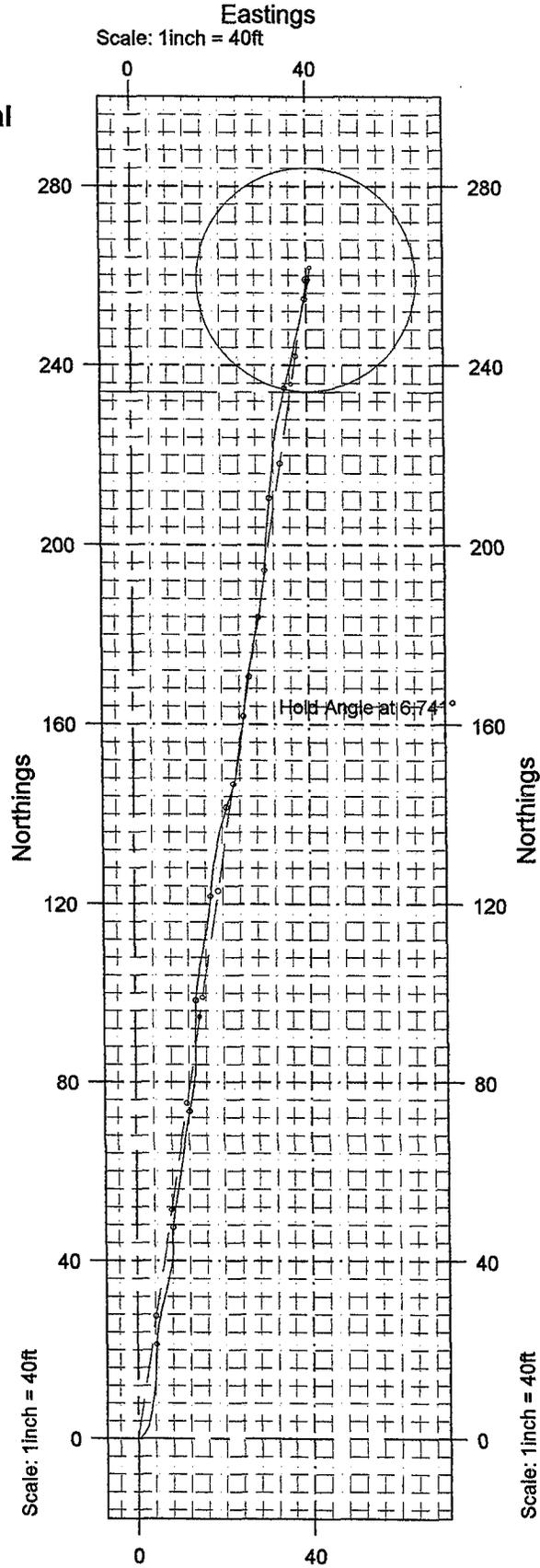
San Juan County  
Sec 23-T37S-R23E

**Comments**

| Measured<br>Depth<br>(ft) | Station Coordinates |                   |                  | Comment             |
|---------------------------|---------------------|-------------------|------------------|---------------------|
|                           | TVD<br>(ft)         | Northings<br>(ft) | Eastings<br>(ft) |                     |
| 5894.00                   | 5883.65             | 261.74 N          | 40.89 E          | Extrapolated Survey |
| 6000.00                   | 5989.65             | 262.48 N          | 40.98 E          | Extrapolated Survey |
| 6350.00                   | 6339.65             | 262.48 N          | 40.98 E          | Extrapolated Survey |

47-037-31801

**Dalmore-Federal**  
**San Juan County**  
**Sec 23-T37S-R23E**  
**#44-23 Dalmore - Federal**



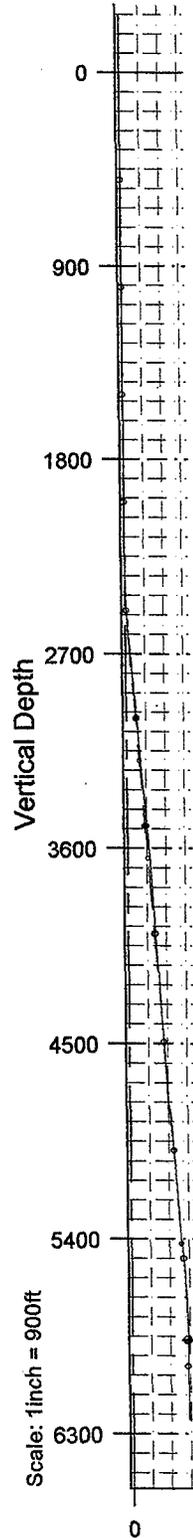
Prepared by:  
richard

Date/Time:  
14 June, 2001 - 7:42

Checked:

Approved:

**Dalmore-Federal  
San Juan County  
Sec 23-T37S-R23E  
#44-23 Dalmore - Federal**



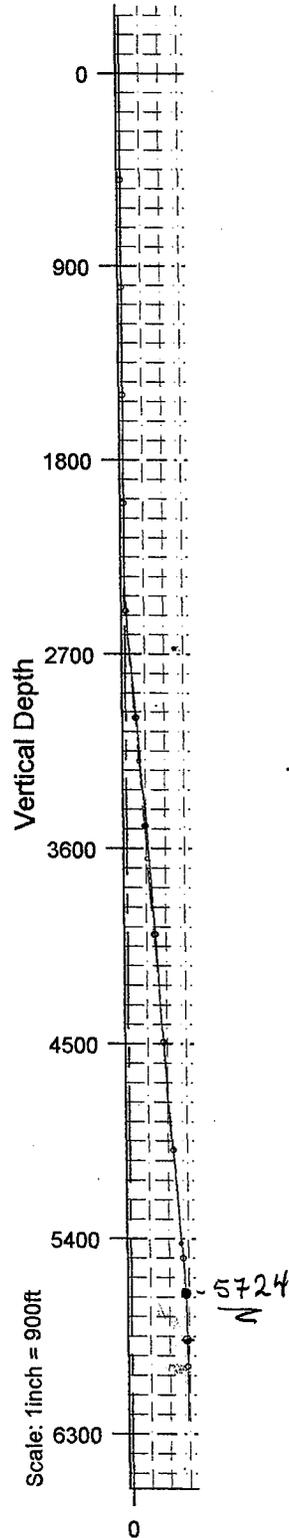
Prepared by:  
richard

Date/Time:  
14 June, 2001 - 7:21

Checked:

Approved:

**Dalmore-Federal  
San Juan County  
Sec 23-T37S-R23E  
#44-23 Dalmore - Federal**



**Vertical Section**

Prepared by:  
richard

Date/Time:  
13 June, 2001 - 10:14

Checked:

Approved:

CONFIDENTIAL

# Petral Exploration

Dalmore Federal 44-23

San Juan County, Utah

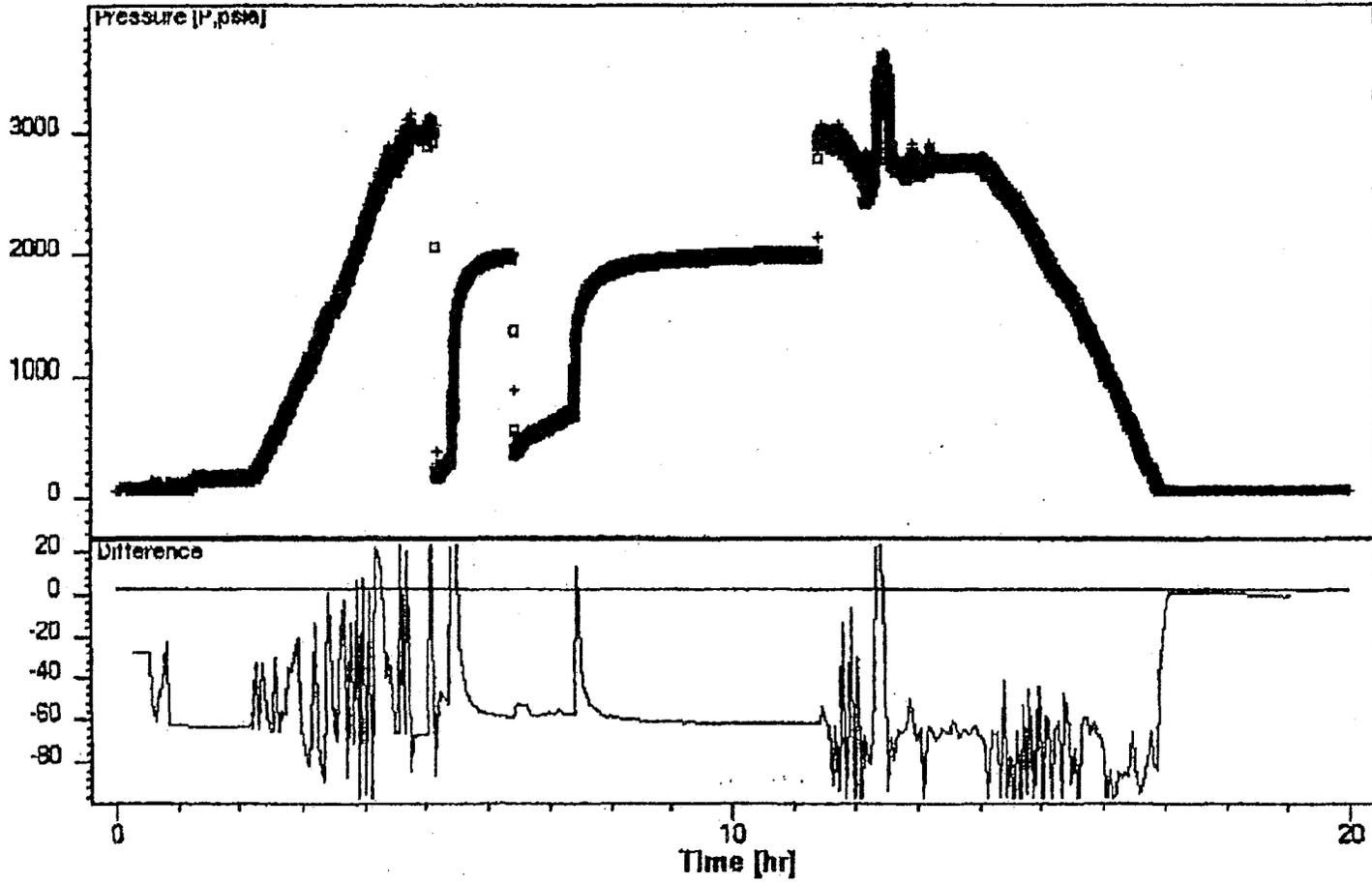
**CUSTOMER:** PETRAL EXPLORATION  
**WELL:** DALMORE FEDERAL 44-23  
**LOCATION:** S23 T37S R23E  
**FIELD:** BLANDING, UT

**TEST DATES:** JUNE 16, 2001  
**INTERVALS:** 5,844' - 5,953'  
**TYPE TEST:** OPEN HOLE ON BOTTOM DST  
**TICKET:** 1349338

HES REPORT COPIES HAVE BEEN SENT TO THE FOLLOWING COMPANIES AND/OR INDIVIDUALS:

| <u># COPIES</u> | <u>RECIPIENT(S)</u>  |
|-----------------|--|
| 4               | PETRAL EXPLORATION   |
| 1               | HALLIBURTON ENERGY SERVICES<br>PO BOX 369, 1709 ELK STREET<br>ROCK SPRINGS, WY 82902 |

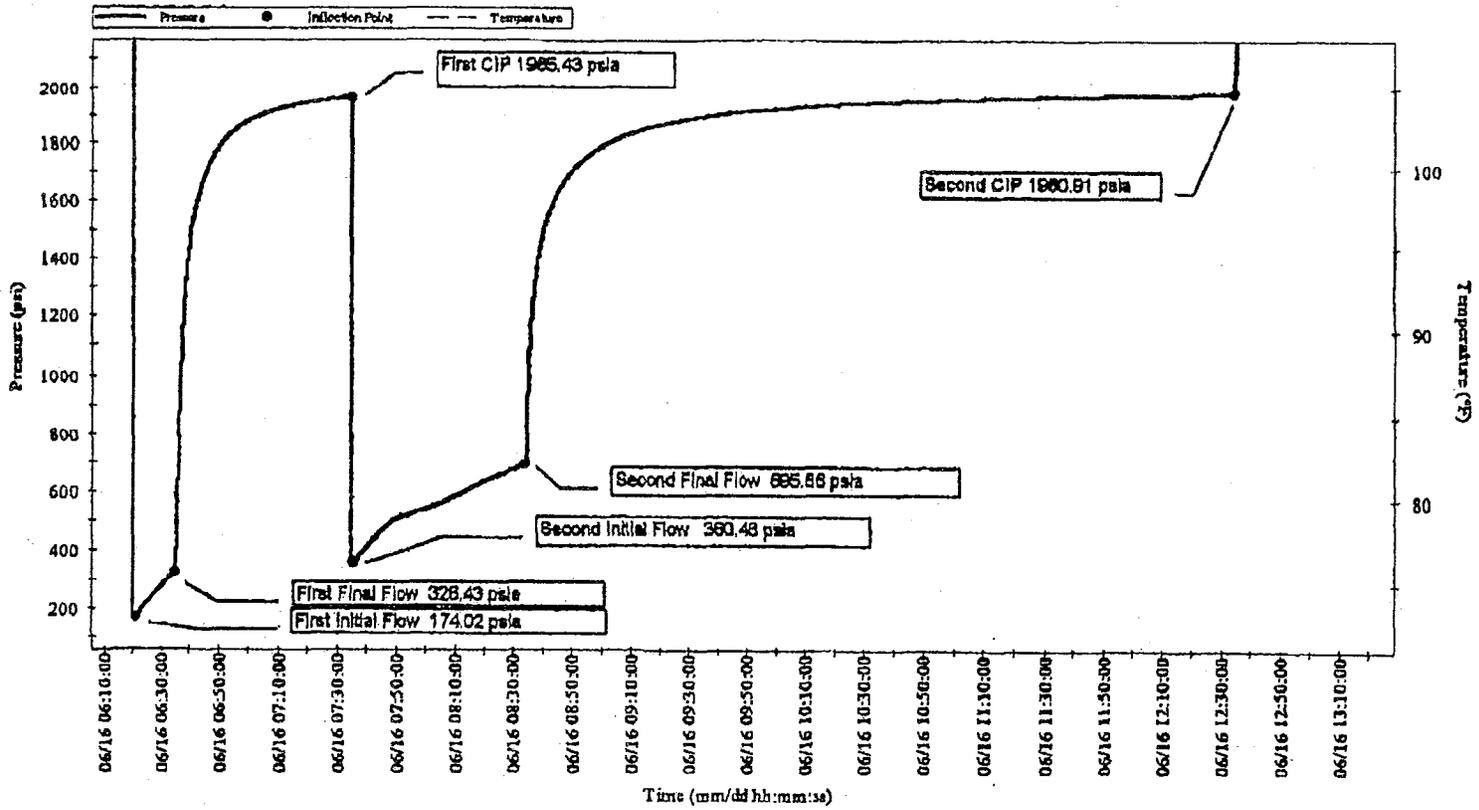
The above report is based on sound engineering practices, but because of variable well conditions and other information which must be relied upon, Halliburton makes no warranty, express or implied, as to the accuracy of the data or any calculations or opinions expressed herein. You agree that Halliburton shall not be liable for any loss of damage whether due to negligence or otherwise arising out of or in connection with such data, calculations, or opinion.



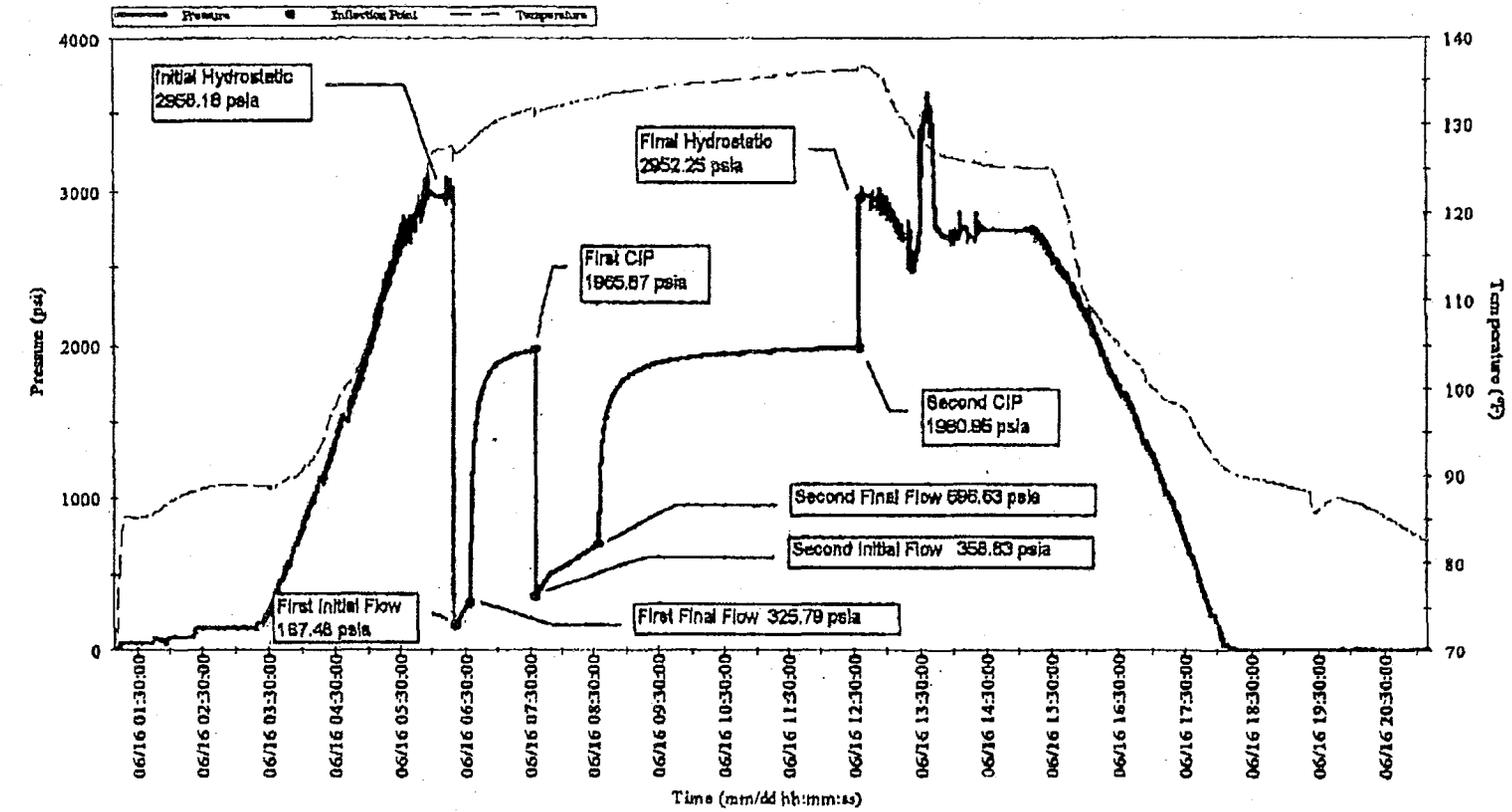
**Petral Exploration**  
**Daimore Federal 44-23**  
**San Juan County, Utah**

**DST June, 2001**  
**Data Quality Plot**  
 Gauge 75435 data in red, gauge 75901 data in blue.

**Petral Exploration  
Dalmore Federal 44-23  
San Juan County, Utah**

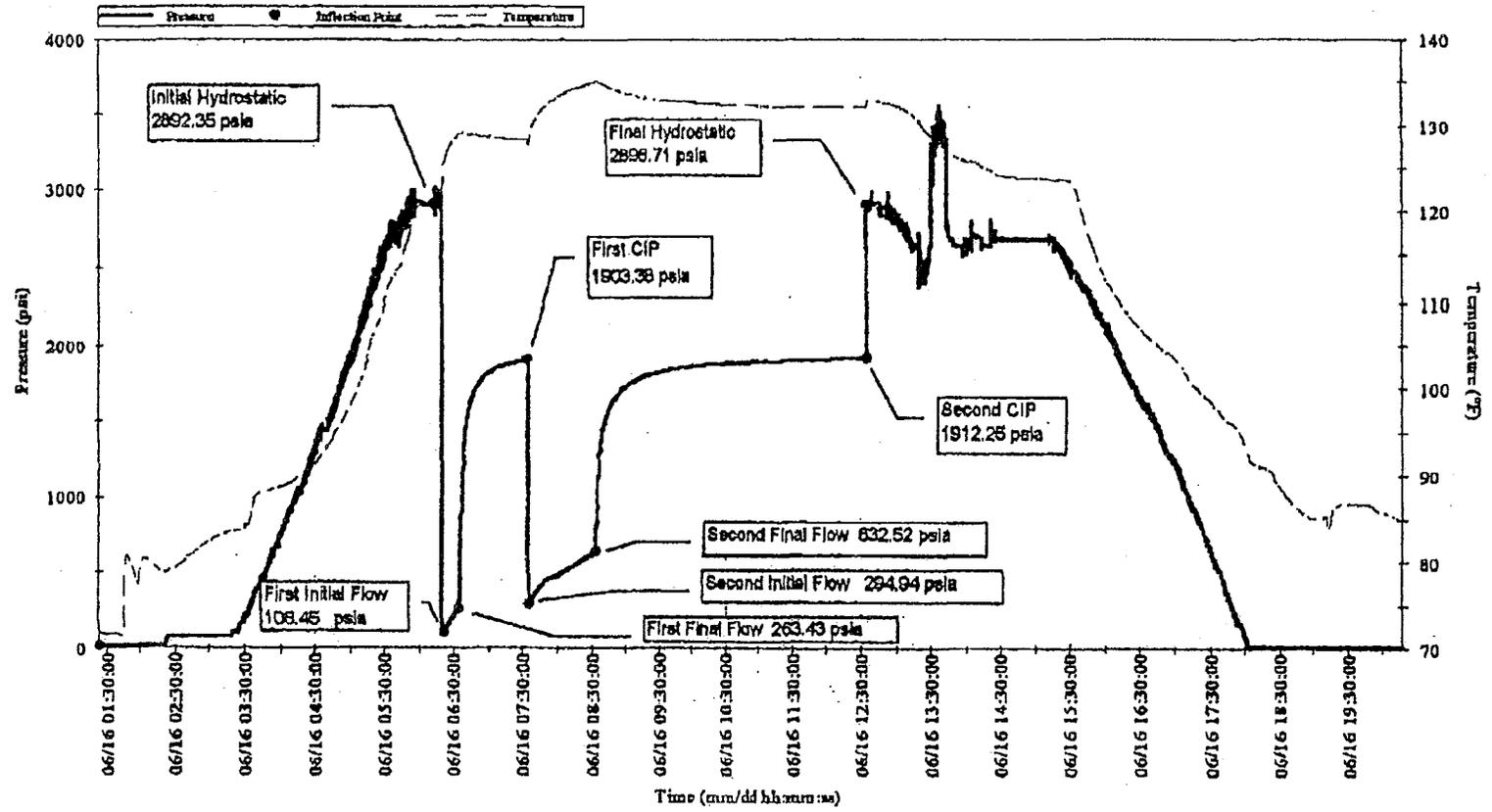


**All pressures are psia  
DST June 16, 2001  
Bottom Gauge 75435  
Depth: 5,952 feet**



**Petral Exploration**  
**Dalmore Federal 44-23**  
**San Juan County, Utah**

**All pressures are psia**  
**DST June 16, 2001**  
**Bottom Gauge 75435**  
**Depth: 5,952 feet**



**Petral Exploration**  
**Dalmore Federal 44-23**  
**San Juan County, Utah**

*All pressures are psia*  
**DST June 16, 2001**  
**Top Gauge 75901**  
**Depth: 5,824 feet**





|   |             |                     |                                 |                  |               |
|---|-------------|---------------------|---------------------------------|------------------|---------------|
| TICKET NO.                              | 1349338     | DATE                | 06/16/01                        | ELEV. (ft)       | 5578 FT.      |
| TOP OF TESTED INTERVAL (ft.)            | 5844 FT.    |                     | BOTTOM OF TESTED INTERVAL (ft.) | 5,953            |               |
| NET PAY (ft.)                           | 75 FT.      |                     | TOTAL DEPTH (ft.)               | 5,953            |               |
| HOLE OR CASING SIZE (in.)               | 7 7/8       |                     | MUD WEIGHT (lb/gal)             | 9.1              | VIS (sec) 45  |
| SURFACE CHOKE (in.)                     | 1/8"        |                     | BOTTOM CHOKE (in.)              | 0.75             |               |
| OIL GRAVITY                             |             | @                   |                                 | GAS GRAVITY-EST. |               |
| <b>SAMPLER DATA</b>                     |             |                     | <b>TEMPERATURE (F)</b>          |                  |               |
| PRESSURE (P.S.I.)                       | 1200        | CUBIC FT. OF GAS    | 0.849                           | ESTIMATE         |               |
| C.C.'s OF OIL                           | 20          | C.C.'s OF WATER     | 1980                            | ACTUAL           | 136.59 DEG. F |
| C.C.'s OF MUD                           |             | TOTAL LIQUID C.C.'s | 2000                            | DEPTH (ft.)      | 5954          |
| <b>GAS/OIL RATIO (cu. ft. per bbl.)</b> |             |                     |                                 |                  |               |
| FROM SAMPLER                            | 1% OIL      | OTHER               |                                 |                  |               |
| <b>RECORDER AND PRESSURE DATA</b>       |             |                     |                                 |                  |               |
| CHARTS READ BY                          | BRYAN SMITH |                     | DATA APPROVED BY                |                  |               |
| <b>RECORDERS</b>                        |             |                     | <b>TIMES</b>                    |                  |               |
| GAUGE NUMBER                            | 75435       | 75901               |                                 | (00:00-24:00)    |               |
| GAUGE TYPE                              | BLANK       | INSTREAM            |                                 | TOOL OPEN        | 6:20          |
| GAUGE DEPTH (ft.)                       | 5,952       | 5,824               |                                 | DATE             | 06/16/01      |
| CLOCK NUMBER                            |             |                     |                                 | BYPASS OPN       | 12:35         |
| CLOCK RANGE (HR.)                       |             |                     |                                 | DATE             | 06/16/01      |
| <b>PRESSURES</b>                        |             |                     |                                 |                  |               |
| INITIAL HYDROSTATIC                     | 2958.18     | 2892.35             |                                 | PERIOD           | MINUTES       |
| 1st INITIAL FLOW                        | 174.02      | 106.45              |                                 | XXX              | XXX           |
| 1st FINAL FLOW                          | 326.43      | 263.43              |                                 | 1st.FLOW         | 15            |
| 1st CLOSED-IN                           | 1965.43     | 1903.38             |                                 | 1st. C.I.P.      | 60            |
| 2nd INITIAL FLOW                        | 380.48      | 294.94              |                                 | XXX              | XXX           |
| 2nd FINAL FLOW                          | 695.86      | 632.52              |                                 | 2nd.FLOW         | 60            |
| 2nd CLOSED-IN                           | 1980.91     | 1912.25             |                                 | 2nd. C.I.P.      | 240           |
| 3rd INITIAL FLOW                        |             |                     |                                 | XXX              | XXX           |
| 3rd FINAL FLOW                          |             |                     |                                 | 3rd.FLOW         |               |
| 3rd CLOSED-IN                           |             |                     |                                 | 3rd. C.I.P.      |               |
| FINAL HYDROSTATIC                       | 2952.25     | 2898.71             |                                 | XXX              | XXX           |
| <b>FORMATION TEST DATA (SHEET 2)</b>    |             |                     |                                 |                  |               |

|                                       |   |                    |                              |                 |                 |
|---------------------------------------|---|--------------------|------------------------------|-----------------|-----------------|
| TICKET NO.                            | 1349338   | DATE               | 06/18/01                     | HES CAMP        | VERNAL UT.      |
| LEASE OWNER                           | PETRAL EXP.   |                    |                              | API NUMBER      |                 |
| LEASE NAME                            | DALMORE FEDERAL   | WELL NO.           | 44-23                        | TEST NO.        | 1               |
| LEGAL LOCATION                        | S-23 T-37S. R-23E   | FORMATION TESTED   | UPPER ISMAY MOUND, HOVENWEEP |                 |                 |
| FIELD AREA                            | BLANDING UT.  | COUNTY             | SAN JUAN                     | STATE           | UT.             |
| TYPE OF D.S.T.                        | OPEN HOLE   |                    |                              |                 |                 |
| TESTER(S)                             | BRYAN SMITH   |                    |                              |                 |                 |
| WITNESS                               | RAY ROSENTHAL   | DRILL CONTRACTOR   | CATFISH                      |                 |                 |
| DEPTHS MEASURED FROM                  | KB  | CASING PERFS (FT.) |                              |                 |                 |
| TYPE AND SIZE OF GAS MEASURING DEVICE |   |                    |                              |                 |                 |
| <b>CUSHION DATA</b>                   |   |                    |                              |                 |                 |
| TYPE                                  | NONE  | AMOUNT             |                              | WEIGHT          |                 |
| TYPE                                  |   | AMOUNT             |                              | WEIGHT          |                 |
| RECOVERY (R. or bbl.)                 | 3150 FEET GAS CUT MUD/FORMATION FLUIDS  |                    |                              |                 |                 |
| <b>FLUID PROPERTIES</b>               |   |                    |                              |                 |                 |
| source                                | resistivity   | chlorides (ppm)    | source                       | resistivity     | chlorides (ppm) |
| MUD PITS                              | 10 @ 85 DEG. F  | 500                | DCIP SAMPLER                 | .42 @ 84 DEG. F | 12000           |
| BOTTOMS UP                            | .7 @ 90 DEG. F  | 7,000              |                              |                 |                 |
| 1.5 BB PUMPED                         | .02 @ 86 DEG. F   | 260,000            |                              |                 |                 |
| REMARKS:                              | BOTTOMS UP SAMPLE CAUGHT WHEN FIRST BROKE CIRCULATION<br>2 ND SAMPLE CAUGHT W/ 1.5 BBLs. REVERSED OUT |                    |                              |                 |                 |
| <b>FORMATION DATA (SHEET 1)</b>       |   |                    |                              |                 |                 |

CONFIDENTIAL



Petral Exploration, LLC  
Dalmore-Federal #44-23  
Sec. 23 T37S R23E  
San Juan County, Utah

Job: 21037  
Date: 17-Jun-2001

| Reference Number | Depth (ft) | Permeability Air (md) | Permeability K <sub>hak</sub> (md) | Helium Porosity (%) | Grain Density (g/cc) | Sample Description |
|------------------|------------|-----------------------|------------------------------------|---------------------|----------------------|--------------------|
| 1                | 5894.1     | 18.6                  | 15.1                               | 26.2                | 2.82                 |                    |
| 2                | 5895.6     | 11.1                  | 8.02                               | 18.3                | 2.88                 |                    |
| 3                | 5896.5     | 38.8                  | 32.8                               | 24.9                | 2.81                 |                    |
| 4                | 5897.8     | 0.157                 | 0.095                              | 5.4                 | 2.80                 |                    |
| 5                | 5898.6     | 1.18                  | 0.821                              | 7.4                 | 2.79                 |                    |
| 6                | 5899.4     | 26.5                  | 23.4                               | 17.9                | 2.81                 |                    |
| 7                | 5900.7     | 4.70                  | 3.68                               | 13.3                | 2.74                 |                    |
| 8                | 5901.7     | 2.45                  | 1.93                               | 12.1                | 2.78                 |                    |
| 9                | 5902.6     | 0.444                 | 0.311                              | 5.4                 | 2.76                 |                    |
| 10               | 5903.5     | 0.023                 | 0.010                              | 2.9                 | 2.78                 |                    |
| 11               | 5904.5     | 0.450                 | 0.318                              | 1.5                 | 2.78                 |                    |
| 12               | 5905.3     | 0.380                 | 0.244                              | 1.0                 | 2.75                 |                    |
| 13               | 5906.4     | 0.061                 | 0.031                              | 1.0                 | 2.78                 |                    |
| 14               | 5907.5     | 0.231                 | 0.148                              | 1.3                 | 2.80                 |                    |
| 15               | 5908.3     | 0.285                 | 0.173                              | 1.5                 | 2.83                 |                    |
| 16               | 5909.8     | 0.108                 | 0.082                              | 1.3                 | 2.84                 |                    |
| 17               | 5910.5     | 0.059                 | 0.030                              | 1.1                 | 2.78                 |                    |
| 18               | 5911.5     | 0.026                 | 0.011                              | 1.3                 | 2.82                 |                    |
| 19               | 5912.6     | 0.015                 | 0.006                              | 1.1                 | 2.83                 |                    |
| 20               | 5913.8     | 0.284                 | 0.187                              | 7.1                 | 2.83                 |                    |
| 21               | 5914.8     | 0.045                 | 0.022                              | 1.0                 | 2.77                 |                    |
| 22               | 5915.4     | 0.014                 | 0.005                              | 2.1                 | 2.82                 |                    |
| 23               | 5916.4     | 0.031                 | 0.014                              | 5.4                 | 2.85                 |                    |
| 24               | 5917.2     | 3.08                  | 2.39                               | 9.7                 | 2.88                 |                    |
| 25               | 5918.5     | 0.577                 | 0.418                              | 17.1                | 2.80                 |                    |
| 26               | 5919.8     | 0.275                 | 0.180                              | 14.5                | 2.81                 |                    |
| 27               | 5920.5     | 0.874                 | 0.488                              | 18.3                | 2.81                 |                    |
| 28               | 5921.1     | 0.802                 | 0.603                              | 13.6                | 2.83                 |                    |



Petral Exploration, LLC  
Dalmore-Federal #44-23  
Sec. 23 T37S R23E  
San Juan County, Utah

Job: 21037  
Date: 17-Jun-2001

| Reference Number | Depth (ft) | Permeability |                       | Return Porosity (%) | Grain Density (g/cc) | Sample Description |
|------------------|------------|--------------|-----------------------|---------------------|----------------------|--------------------|
|                  |            | Air (md)     | K <sub>lak</sub> (md) |                     |                      |                    |
| 29               | 5922.6     | 0.264        | 0.128                 | 3.8                 | 2.85                 |                    |
| 30               | 5923.4     | 0.271        | 0.177                 | 4.3                 | 2.85                 |                    |
| 31               | 5924.4     | 0.011        | 0.004                 | 6.3                 | 2.83                 |                    |
| 32               | 5925.7     | 0.00         | 0.00                  | 8.9                 | 2.79                 |                    |

JUN-17-01 11:54 AM PRECISION CORE

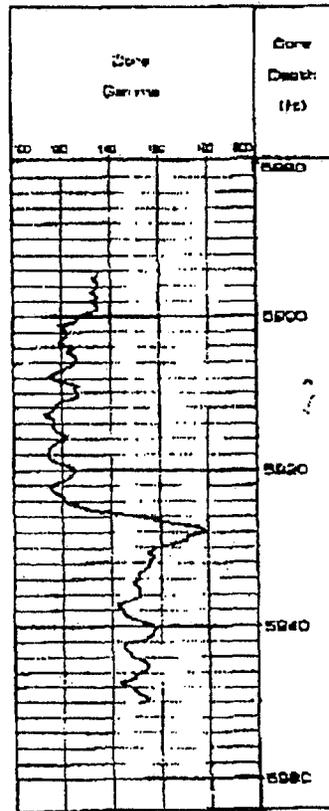
T205322665

P.02



Dalmore-Federal #44-23

Scale 10:1



## CORE DESCRIPTIONS

## PETRAL EXPLORATION, LLC

#44-23 DALMORE  
SE/SE SEC. 23-T37S-R23E  
SAN JUAN COUNTY, UTAH

- Cut 60'      Recovered 56'
- 5894-5497    **DOLOMITE** medium to dark gray, brown, calcite blebs, fossil fragments @ base, massive, limy, greasy surface texture, scattered shale partings, very fine to fine crystalline, limy, 8-10% pin point & moldic porosity, strong hydrocarbon odor, milky cut fluorescence, yellow-gold residual ring cut.
- 5897-5902.3 **LIMESTONE**    light to medium gray brown, very fine to fine crystalline, fossil fragments, calcite inclusions, 6-8% moldic & pin point porosity, brown oil stain, strong hydrocarbon odor, flash cut with thick yellow gold residual ring cut.
- 5902.3-5915.5 **LIMESTONE**    light to medium gray brown, microcrystalline, mottled with algal mats, burrowed texture, hard, tight, calcite blebs, scattered fossil fragments, weak show @ base.
- 5915.5-5926.2 **LIMESTONE**    light to medium gray brown, medium to dark gray @ base, very fine to microcrystalline, earthy in part, shell fragments, fossil hash, algal fabric @ base, gas odor through out, scattered pin point porosity, hard tight, hydrocarbon show @ top and base, milky cut fluorescence, yellow gold residual ring.
- 5926.2-5950 **SHALE** black, limy, scattered fossil fragments, massive, inclined depositional laminations, silty and sandy cross laminations, milky cut fluorescence, residual ring.

# Petral Exploration

Dalmore Federal 44-23

San Juan County, Utah

CUSTOMER: PETRAL EXPLORATION  
WELL: DALMORE FEDERAL 44-23  
LOCATION: S23 T37S R23E  
FIELD: BLANDING, UT 43-037-31801

TEST DATES: JUNE 16, 2001  
INTERVALS: 5,844' - 5,953'  
TYPE TEST: OPEN HOLE ON BOTTOM DST  
TICKET: 1349338

**CONFIDENTIAL**

HES REPORT COPIES HAVE BEEN SENT TO THE  
FOLLOWING COMPANIES AND/OR INDIVIDUALS:

| <u># COPIES</u> | <u>RECIPIENT(S)</u>  |
|-----------------|--|
| 2               | MR. LEO GERARD<br>PETRAL EXPLORATION, LLC<br>PO BOX 5083<br>DENVER, CO 80217   |
| 1               | MR. GEORGE WATTERS<br>MARSHALL & WINSTON, INC<br>PO BOX 50880<br>MIDLAND, TX 79710-0880                                |
| 1               | MR. LANE LASRICH<br>DALMORE LLC<br>2597 E. BRIDGER BLVD<br>SANDY, UT 84093   |
| 1               | BUREAU OF LAND MANAGEMENT<br>82 DOGWOOD, SUITE M<br>MOAB, UT 84532   |
| 2               | MR. JOHN BAZA<br>DIVISION OF OIL, GAS, & MINING<br>1594 WEST NORTH TEMPLE, SUITE 1210<br>SALT LAKE CITY, UT 84180-1203 |
| 1               | HALLIBURTON ENERGY SERVICES<br>PO BOX 369, 1709 ELK STREET<br>ROCK SPRINGS, WY 82902                                   |

The above report is based on sound engineering practices, but because of variable well conditions and other information which must be relied upon, Halliburton makes no warranty, express or implied, as to the accuracy of the data or any calculations or opinions expressed herein. You agree that Halliburton shall not be liable for any loss of damage whether due to negligence or otherwise arising out of or in connection with such data, calculations, or opinion.

**RECEIVED**

JUN 28 2001

DIVISION OF  
OIL, GAS AND MINING

**Halliburton Energy Services**  
**Applied Formation Evaluation**  
**Well Test Analysis Report**

**FOR**

**PETRAL EXPLORATION, LLC**

**DALMORE FEDERAL No. 44-23**

**DST DATE: 16 JUNE 2001**  
**INTERVAL TESTED: 5,844 – 5,953 FT MD**  
**(UPPER ISMAY MOUND, HOVENWEEP)**

**20 June 2001**

**Paul Winslow**  
**Principle Technical Professional**  
**Telephone # 303-899-4728**  
**paul.winslow@halliburton.com**

Mr. Leo Gerard  
Petral Exploration, LLC  
P.O. Box 5083  
Denver, CO 80217

June 21, 2001

RE: Well Test Analysis Report  
Dalmore Federal 44-23  
Test Date: June 16, 2001  
Interval Tested: 5,844 – 5,953 ft (Upper Ismay Mound)

Dear Mr. Gerard,

This report contains the analysis results for the referenced well test on the Dalmore Federal 44-23 well, conducted June 16, 2001. This test was conducted on the Upper Ismay Mound formation, over the interval 5,844 – 5,953 ft MD.

#### **Conclusion and Summary:**

The June 16<sup>th</sup> test on the Dalmore Federal 44-23 well, tested the Upper Ismay Mound formation over the interval 5,844 to 5,953 ft. Log analysis of this test interval shows two potentially productive intervals, 5,876 – 5,895' (which contains approximately 17 ft of 22% porosity net dolomite pay) and 5,912 – 5,923' (which contains approximately 5 ft of 17.5% porosity net dolomite pay).

Analysis of the bottom hole pressure data, taken on the Dalmore Federal 44-23, shows an Upper Ismay Mound formation permeability to water of 2.7 md, a formation skin damage of -0.7 and an initial reservoir pressure of 2,026 psia (at a gauge depth of 5,951.9 ft). Analyses were conducted on both the initial and final pressure buildups, with similar results.

#### **Discussion:**

The open hole DST on the Dalmore Federal 44-23 well, consisted of two consecutive drawdown (flowing) and shut-in periods. The initial flow period lasted 15 minute and was followed by an initial shut-in period of 1 hour. The well was then opened up for the main flow period, which lasted 1 hour and finally was shut in for a 4 hour final buildup.

Two electronic pressure gauges were placed in the testing string, below the tester valve. Both gauges successfully recorded the entire test and had identical pressure response profiles (see the attached gauge report). Since the two pressure gauges recorded the same response, the data from gauge #75435 were arbitrarily chosen to be used for this analysis. Gauge #75435 had a gauge depth of 5,951.9 ft.

During the initial flow period, formation water and/or drilling fluids entered into the drill pipe causing an increase in bottom hole gauge pressure from approximately 167.5 psia to 326.4 psia. Assuming a fluid gradient of 0.45 psi/ft, this 158.9 psi pressure gain equates to 353 ft of pipe fill-up. Using the drill pipe I.D. of 3.64", which equates to a pipe capacity of 0.01287 bbl/ft, 353 ft of pipe fill-up is equal to 4.54 bbls of fluid. These 4.54 bbls of fluid (water/mud) were produced over a 15 minute (0.2478 hr) period, yielding an initial flow rate of 440 bwpd.

The well was then shut-in for one hour and had a final buildup pressure of 1,965.7 psia. Analysis of the first buildup period yielded an initial reservoir pressure of 2,049 psia, a reservoir permeability of 2.3 md, and a skin damage of -1.65. This analysis (as well as the analysis of the final buildup data) was done using Kappa Engineering's SAPHIR software.

During the main flow period, fluid fill-up within the drill pipe increase the bottom hole gauge pressure from approximately 358.8 psia to 697.3 psia. This 338.5 psi pressure gain equates to 752 ft of pipe fill-up, or 9.68 bbls. These 9.68 bbls of fluid (water/mud) were produced over a one hour (0.9922 hr) period, yielding a flow rate of 234 bwpd.

The four hour final buildup had a final shut-in pressure of 1,980.9 psia. Analysis of this final shut-in pressure data yielded a reservoir transmissibility of 60.1 md-ft. Using a net pay thickness of 22 ft, this transmissibility equates to a reservoir permeability of 2.7 md. The buildup analysis also yields an extrapolated pressure ( $p^*$ ) of 2,026 psia and a skin damage of  $-0.75$ . The following three figures show the history, semi-log, and derivative log-log plots of the final shut-in period.

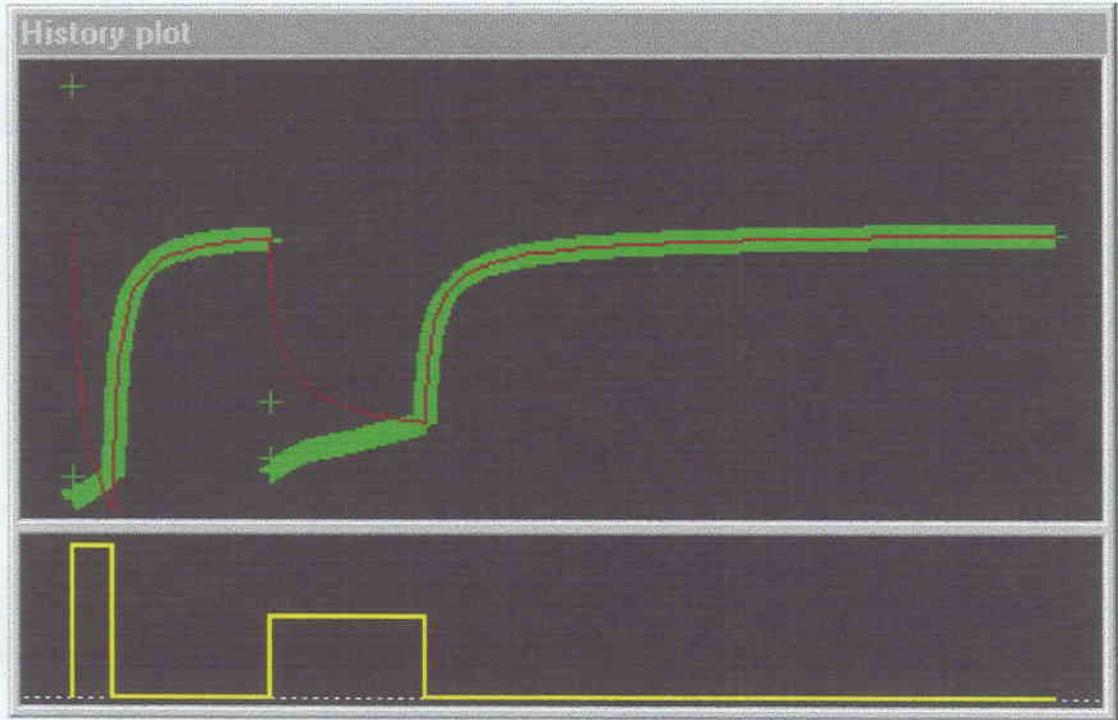


Figure 1 – History Plot

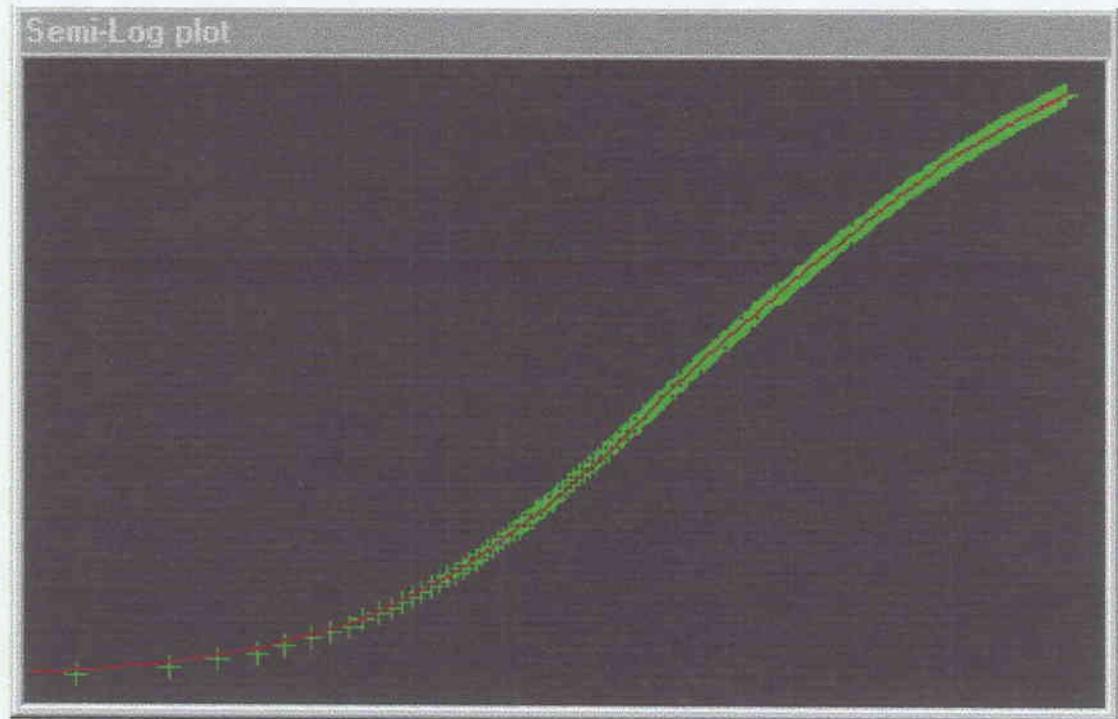
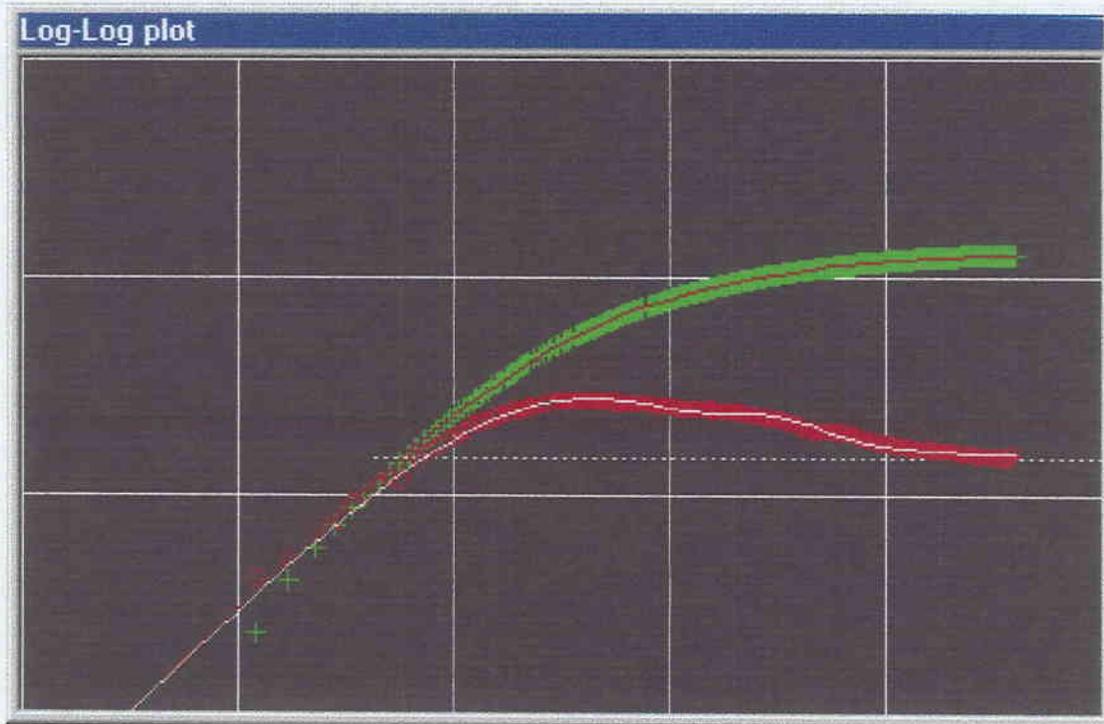


Figure 2 – Semi-Log Plot (Buildup #2)



**Figure 3 – Derivative Log-Log Plot (Buildup #2)**

The following table summarises the analysis results for the two pressure buildups periods. Due to the length and quality of the data during the final shut-in period, these results are a better estimate of true reservoir properties.

|  | <b>Buildup #1</b> | <b>Buildup #2</b> |
|--|-------------------|-------------------|
| <b>Transmissibility (kh), md-ft</b>    | <b>50.2</b>       | <b>60.1</b>       |
| <b>Permeability (k), md</b>            | <b>2.28</b>       | <b>2.73</b>       |
| <b>Skin damage (S)</b>                 | <b>-1.65</b>      | <b>-0.75</b>      |
| <b>Reservoir Pressure (p*), psia</b>   | <b>2,049.1</b>    | <b>2,026.2</b>    |
| <b>Radius of Investigation (r), ft</b> | <b>53.4</b>       | <b>117</b>        |

**Table 1 – Summary of Analysis Results**

It has been a pleasure for Halliburton to conduct this drill stem test for Petral Exploration, LLC. If you have any questions regarding the test or the analysis of the data, please do not hesitate to contact us.

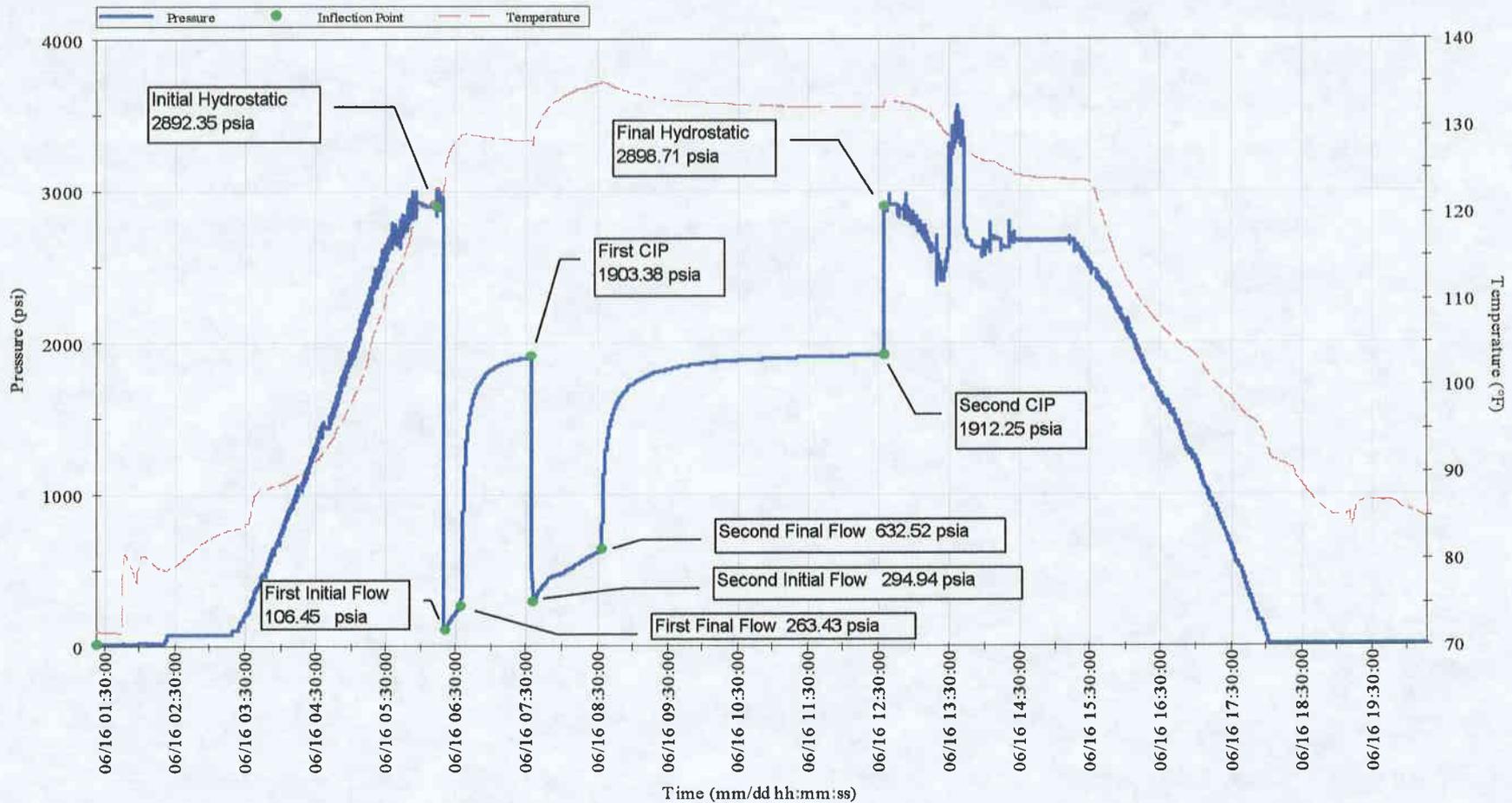
Sincerely,  
 Paul Winslow  
 Halliburton Energy Services  
 Denver, CO  
 Tel # 303-899-4728



|   |             |                     |                                 |                        |               |         |
|---|-------------|---------------------|---------------------------------|------------------------|---------------|---------|
| TICKET NO.                              | 1349338     | DATE                | 06/16/01                        | ELEV. (ft)             | 5578 FT.      |         |
| TOP OF TESTED INTERVAL (ft.)            | 5844 FT.    |                     | BOTTOM OF TESTED INTERVAL (ft.) | 5,953                  |               |         |
| NET PAY (ft.)                           | 75 FT.      |                     | TOTAL DEPTH (ft.)               | 5,953                  |               |         |
| HOLE OR CASING SIZE (in.)               | 7 7/8       |                     | MUD WEIGHT (lb./gal.)           | 9.1                    | VIS (sec)     | 45      |
| SURFACE CHOKE (in.)                     | 1/8 "       |                     | BOTTOM CHOKE (in.)              | 0.75                   |               |         |
| OIL GRAVITY                             |             | @                   |                                 | GAS GRAVITY--EST.      |               |         |
| <b>SAMPLER DATA</b>                     |             |                     |                                 | <b>TEMPERATURE (F)</b> |               |         |
| PRESSURE (P.S.I.)                       | 1200        | CUBIC FT. OF GAS    | 0.849                           | ESTIMATE               |               |         |
| C.C.'s OF OIL                           | 20          | C.C.'s OF WATER     | 1980                            | ACTUAL                 | 136.59 DEG. F |         |
| C.C.'s OF MUD                           |             | TOTAL LIQUID C.C.'s | 2000                            | DEPTH (ft.)            | 5954          |         |
| <b>GAS/OIL RATIO (cu. ft. per bbl.)</b> |             |                     |                                 |                        |               |         |
| FROM SAMPLER                            | 1% OIL      | OTHER               |                                 |                        |               |         |
| <b>RECORDER AND PRESSURE DATA</b>       |             |                     |                                 |                        |               |         |
| CHARTS READ BY                          | BRYAN SMITH |                     | DATA APPROVED BY                |                        |               |         |
| <b>RECORDERS</b>                        |             |                     |                                 | <b>TIMES</b>           |               |         |
| GAUGE NUMBER                            | 75435       | 75901               |                                 |                        | (00:00-24:00) |         |
| GAUGE TYPE                              | BLANK       | INSTREAM            |                                 | TOOL OPEN.             | 6:20          |         |
| GAUGE DEPTH (ft.)                       | 5,952       | 5,824               |                                 | DATE                   | 06/16/01      |         |
| CLOCK NUMBER                            |             |                     |                                 | BYPASS OPN             | 12:35         |         |
| CLOCK RANGE (HR.)                       |             |                     |                                 | DATE                   | 06/16/01      |         |
| <b>PRESSURES</b>                        |             |                     |                                 |                        |               |         |
| INITIAL HYDROSTATIC                     | 2958.18     | 2892.35             |                                 |                        | PERIOD        | MINUTES |
| 1st INITIAL FLOW                        | 174.02      | 106.45              |                                 |                        | XXX           | XXX     |
| 1st FINAL FLOW                          | 326.43      | 263.43              |                                 |                        | 1st.FLOW      | 15      |
| 1st CLOSED-IN                           | 1965.43     | 1903.38             |                                 |                        | 1st. C.I.P.   | 60      |
| 2nd INITIAL FLOW                        | 360.48      | 294.94              |                                 |                        | XXX           | XXX     |
| 2nd FINAL FLOW                          | 695.86      | 632.52              |                                 |                        | 2nd.FLOW      | 60      |
| 2nd CLOSED-IN                           | 1980.91     | 1912.25             |                                 |                        | 2nd. C.I.P.   | 240     |
| 3rd INITIAL FLOW                        |             |                     |                                 |                        | XXX           | XXX     |
| 3rd FINAL FLOW                          |             |                     |                                 |                        | 3rd.FLOW      |         |
| 3rd CLOSED-IN                           |             |                     |                                 |                        | 3rd. C.I.P.   |         |
| FINAL HYDROSTATIC                       | 2952.25     | 2898.71             |                                 |                        | XXX           | XXX     |
| <b>FORMATION TEST DATA (SHEET 2)</b>    |             |                     |                                 |                        |               |         |

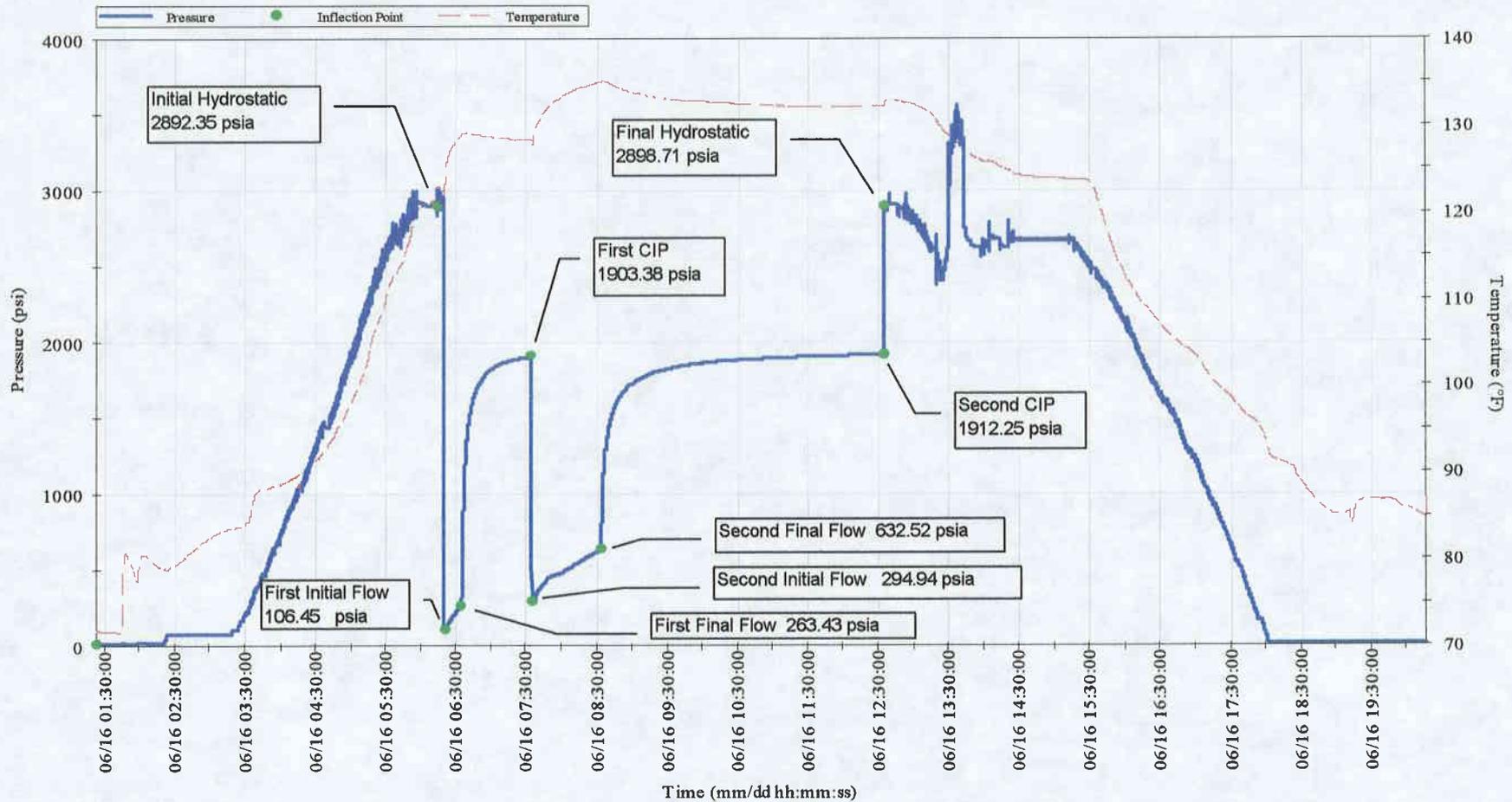






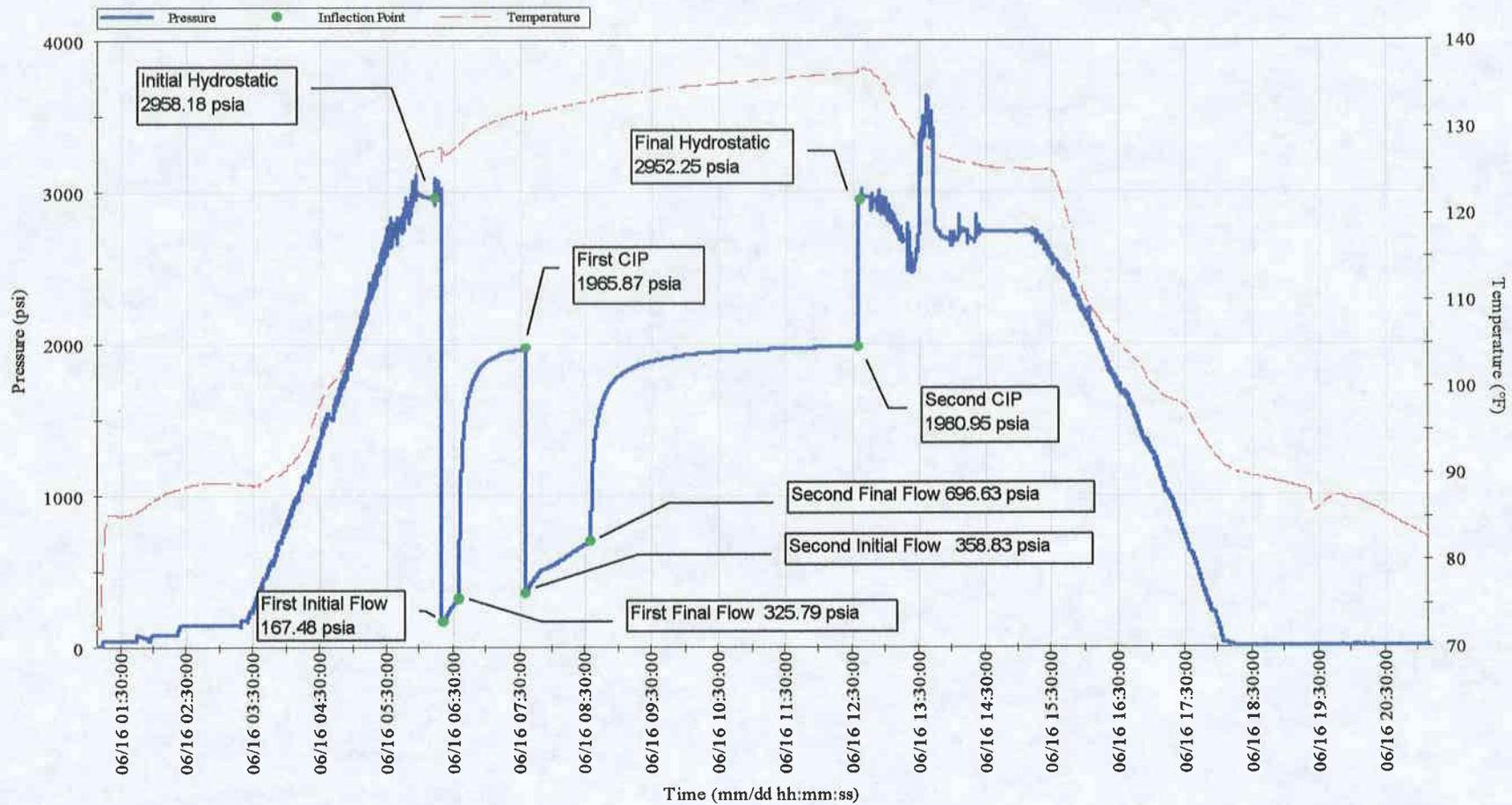
**Petral Exploration**  
**Dalmore Federal 44-23**  
**San Juan County, Utah**

*All pressures are psia*  
**DST June 16, 2001**  
**Top Gauge 75901**  
**Depth: 5,824 feet**



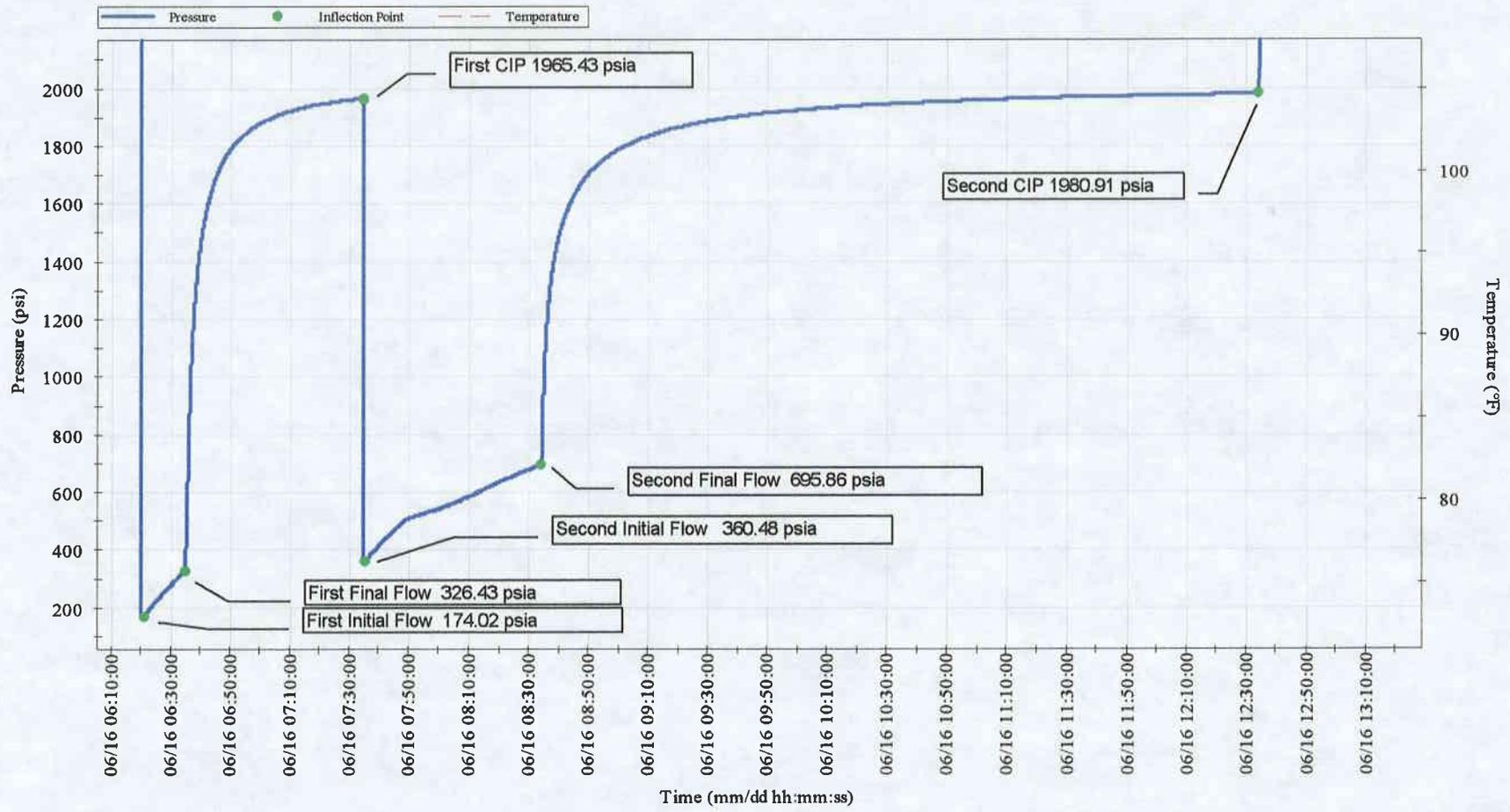
**Petral Exploration**  
**Dalmore Federal 44-23**  
**San Juan County, Utah**

*All pressures are psia*  
**DST June 16, 2001**  
**Top Gauge 75901**  
**Depth: 5,824 feet**



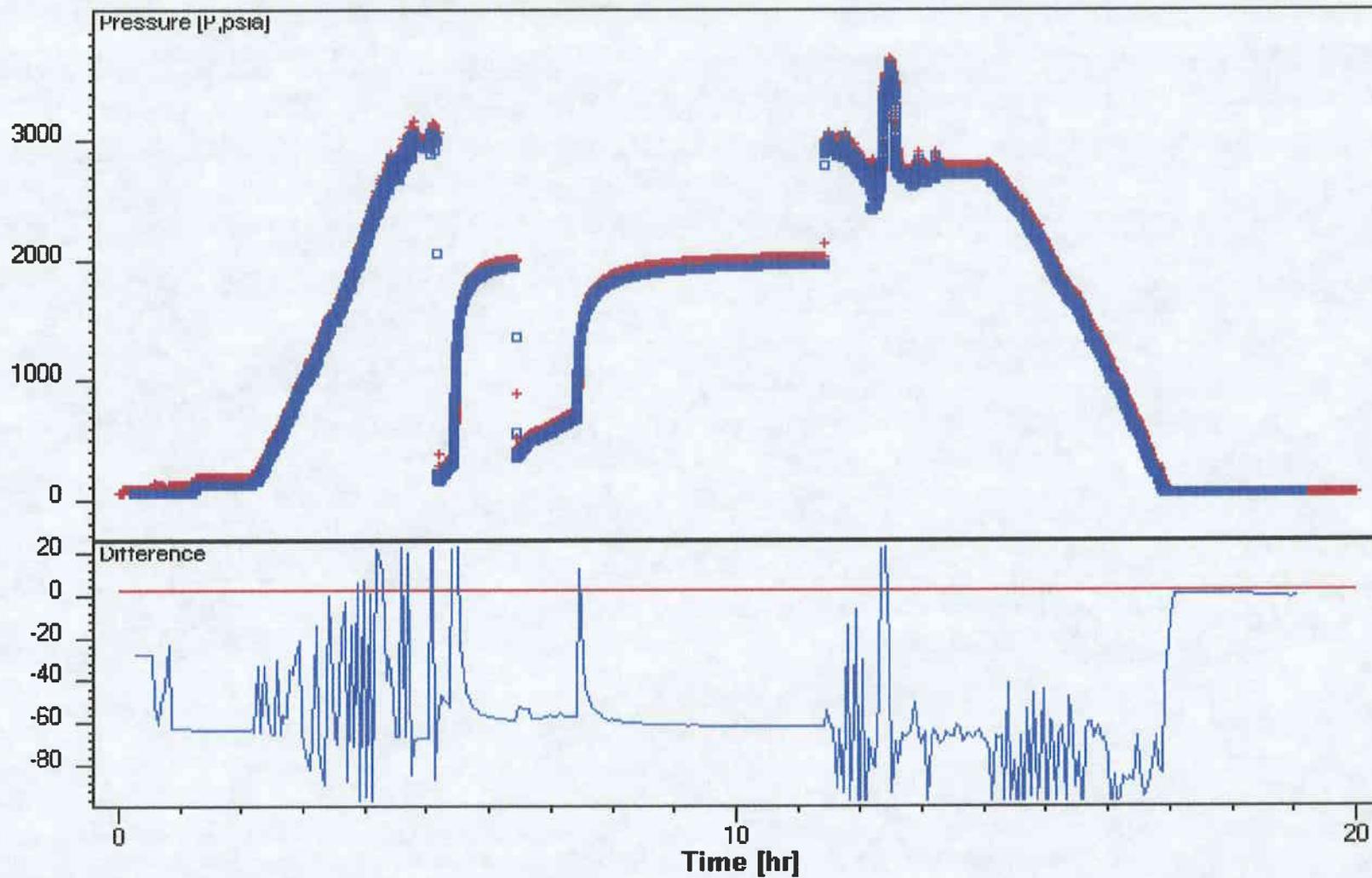
**Petral Exploration**  
**Dalmore Federal 44-23**  
**San Juan County, Utah**

*All pressures are psia*  
**DST June 16, 2001**  
**Bottom Gauge 75435**  
**Depth: 5,952 feet**



**Petral Exploration**  
**Dalmore Federal 44-23**  
**San Juan County, Utah**

*All pressures are psia*  
**DST June 16, 2001**  
**Bottom Gauge 75435**  
**Depth: 5,952 feet**



**Petral Exploration**  
**Dalmore Federal 44-23**  
**San Juan County, Utah**

**DST June, 2001**  
**Data Quality Plot**

Gauge 75435 data in red, gauge 75901 data in blue.



**CONFIDENTIAL**

***Core Analysis Report***

***For***

***Petral Exploration, LLC***

**Dalmore-Federal #44-23**

**Sec. 23 T37S R23E**

**San Juan County, Utah**

**43-037-3180**

PRECISION CORE  
ANALYSIS  
REPORT  
DATE: 01/14/08



**Field and Laboratory Procedures – Dalmore-Federal #44-23 Well**

On June 14<sup>th</sup>, 2001 a representative of Precision Core Analysis, Inc. was dispatched to the Dalmore-Federal #44-23 well per instructions from a representative of Petral Exploration, LLC. Our field technician was assigned the task of retrieving any core material recovered from this well and transporting the core into our Denver, Colorado facility for analysis. One conventional core (60') was cut with approximately fifty-six feet (56') recovered. The core was processed at the well site by marking the cored interval with depths and placing the material carefully into plastic bags and core boxes for transport. The core material was expeditiously transported back to our Denver, Colorado facility.

Upon arrival at our Denver facility, the core was carefully removed from the core boxes, re-assembled, and a complete surface Core Gamma was performed. The results of the Core Gamma were transmitted to representatives of Petral Exploration, LLC.

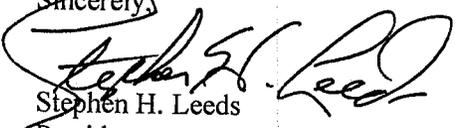
One-inch diameter core plugs were obtained throughout the cored interval as noted on the attached data sheets. The core plugs to be analyzed were trimmed to right cylinders utilizing a diamond-tipped trim saw and water as the blade coolant. The trimmed samples were placed into a Soxhlet Reflux core cleaner and flushed with solvent for a total of twelve hours. The cleaned samples were then placed into a conventional drying oven for four hours at 180° F. The samples were removed from the oven and allowed to cool within a sealed glass desiccator until reaching room temperature.

Specific physical properties (length, diameter, weight and bulk volume) of each plug sample were measured and recorded. The samples were individually placed into a Coberly-Stevens Boyle's Law porosimeter and injected with helium at approximately 100 psig. Corresponding pressures and volumes were measured and utilized in the Boyle's Law equation to calculate sample grain volume. Pore volume was determined by subtracting the calculated grain volume from the measured bulk volume (determined by Archimedes Principal using mercury immersion). Grain density was calculated by dividing the calculated grain volume into the measured sample weight.

The samples were next placed individually into a Hassler-Sleeve core holder. The annulus of the core holder was pressurized to a pre-determined value (400 psig minimum) to seal the sample. Nitrogen gas was forced through the sample at a given pressure under steady-state conditions, flow rate was measured and permeability to air was calculated. Utilizing the parameters thus measured, a Klinkenberg-corrected permeability value was calculated and reported.

It has been our pleasure to perform this study for Petral Exploration, LLC. Please feel free to contact us should any questions arise or if we may be of further assistance.

Sincerely,

  
Stephen H. Leeds

President

Precision Core Analysis, Inc.



Petral Exploration, LLC  
 Dalmore-Federal #44-23  
 Sec. 23 T37S R23E  
 San Juan County, Utah

Job: 21037  
 Date: 26-Jun-2001

| Reference Number   | Depth (ft) | Permeability Air (md) | Permeability Klink (md) | Helium Porosity (%) | Grain Density (g/cc) | Sample Description             |
|--|------------|-----------------------|-------------------------|---------------------|----------------------|--------------------------------|
| <i>Core No. 1 Ismay Fm. 5894.0'-5954.0' Rec. 56.0'/60.0'</i> |            |                       |                         |                     |                      |                                |
| 1  | 5894.1     | 18.6                  | 15.1                    | 26.2                | 2.82                 | Dol suc anhy nod pp vug        |
| 2  | 5895.6     | 11.1                  | 9.02                    | 18.3                | 2.86                 | Dol suc lge anhy nod pp vug    |
| 3  | 5896.5     | 38.8                  | 32.6                    | 24.9                | 2.81                 | Dol suc anhy nod pp vug foss   |
| 4  | 5897.6     | 0.157                 | 0.095                   | 5.4                 | 2.80                 | Ls f xln anhy styls pp vug     |
| 5  | 5898.6     | 1.18                  | 0.921                   | 7.4                 | 2.79                 | Ls f xln anhy vug sl foss      |
| 6  | 5899.4     | 28.5                  | 23.4                    | 17.9                | 2.81                 | Ls f xln anhy vug foss         |
| 7  | 5900.7     | 4.70                  | 3.66                    | 13.3                | 2.74                 | Ls f xln anhy pp vug foss      |
| 8  | 5901.7     | 2.45                  | 1.93                    | 12.1                | 2.78                 | Ls f xln anhy vug foss         |
| 9  | 5902.6     | 0.444                 | 0.311                   | 5.4                 | 2.76                 | Ls f xln abd anhy tr vug       |
| 10   | 5903.5     | 0.023                 | 0.010                   | 2.9                 | 2.76                 | Ls f xln abd anhy tr vug styls |
| 11   | 5904.5     | 0.450                 | 0.316                   | 1.5                 | 2.78                 | Ls f xln abd anhy tr vug       |
| 12   | 5905.3     | 0.360                 | 0.244                   | 1.0                 | 2.75                 | Ls f xln anhy nod styls        |
| 13   | 5906.4     | 0.061                 | 0.031                   | 1.0                 | 2.78                 | Ls f xln abd anhy              |
| 14   | 5907.5     | 0.231                 | 0.148                   | 1.3                 | 2.80                 | Ls f xln abd anhy sl foss      |
| 15   | 5908.3     | 0.265                 | 0.173                   | 1.5                 | 2.83                 | Ls f xln anhy nod microstyl    |
| 16   | 5909.6     | 0.108                 | 0.062                   | 1.3                 | 2.84                 | Ls f xln anhy nod styls        |
| 17   | 5910.5     | 0.059                 | 0.030                   | 1.1                 | 2.78                 | Ls f xln abd anhy              |
| 18   | 5911.5     | 0.026                 | 0.011                   | 1.3                 | 2.82                 | Ls f xln abd anhy              |
| 19   | 5912.6     | 0.015                 | 0.006                   | 1.1                 | 2.83                 | Ls f xln abd anhy              |
| 20   | 5913.8     | 0.284                 | 0.187                   | 7.1                 | 2.83                 | Dol anhy nod pp vug foss       |
| 21   | 5914.6     | 0.045                 | 0.022                   | 1.0                 | 2.77                 | Ls f xln anhy styl             |
| 22   | 5915.4     | 0.014                 | 0.005                   | 2.1                 | 2.82                 | Ls f xln anhy styl             |
| 23   | 5916.4     | 0.031                 | 0.014                   | 5.4                 | 2.85                 | Dol anhy pp vug tr foss        |
| 24   | 5917.2     | 3.08                  | 2.39                    | 9.7                 | 2.88                 | Dol abd anhy vug               |
| 25   | 5918.5     | 0.577                 | 0.418                   | 17.1                | 2.80                 | Dol suc anhy nod vug           |
| 26   | 5919.6     | 0.275                 | 0.180                   | 14.5                | 2.81                 | Dol suc anhy nod vug           |
| 27   | 5920.5     | 0.674                 | 0.498                   | 16.3                | 2.81                 | Dol anhy nod pp vug tr org     |
| 28   | 5921.1     | 0.802                 | 0.603                   | 13.6                | 2.83                 | Dol anhy nod pp vug tr org     |



Petral Exploration, LLC  
Dalmore-Federal #44-23  
Sec. 23 T37S R23E  
San Juan County, Utah

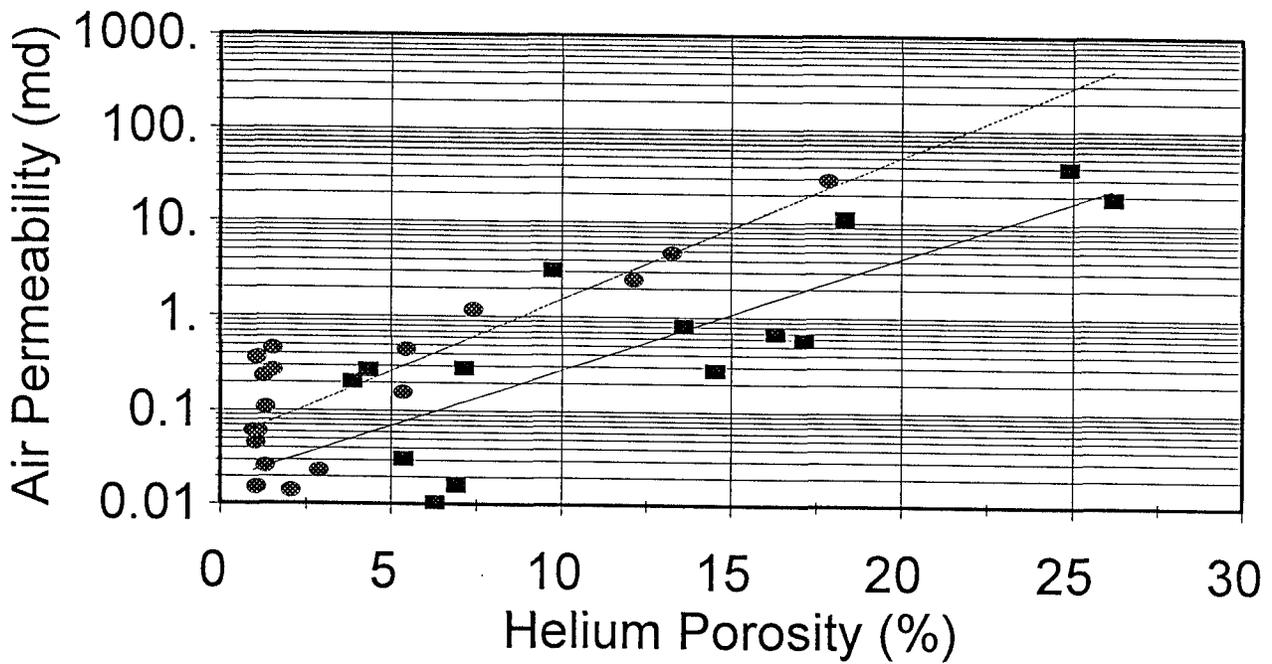
Job: 21037  
Date: 26-Jun-2001

| Reference Number | Depth (ft) | Permeability |            | Helium Porosity (%) | Grain Density (g/cc) | Sample Description         |
|------------------|------------|--------------|------------|---------------------|----------------------|----------------------------|
|                  |            | Air (md)     | Klink (md) |                     |                      |                            |
| 29               | 5922.6     | 0.204        | 0.128      | 3.8                 | 2.85                 | Dol/Ls anhy nod tr pp vug  |
| 30               | 5923.4     | 0.271        | 0.177      | 4.3                 | 2.85                 | Dol/Ls anhy nod tr pp vug  |
| 31               | 5924.4     | 0.011        | 0.004      | 6.3                 | 2.83                 | Dol anhy nod hor microfrac |
| 32               | 5925.7     | 0.016        | 0.006      | 6.9                 | 2.79                 | Dol anhy sl lam            |

Petral Exploration, LLC  
 Dalmore-Federal #44-23  
 Sec. 23 T37S R23E  
 San Juan County, Utah

Job: 21037  
 Date: 26-Jun-2001

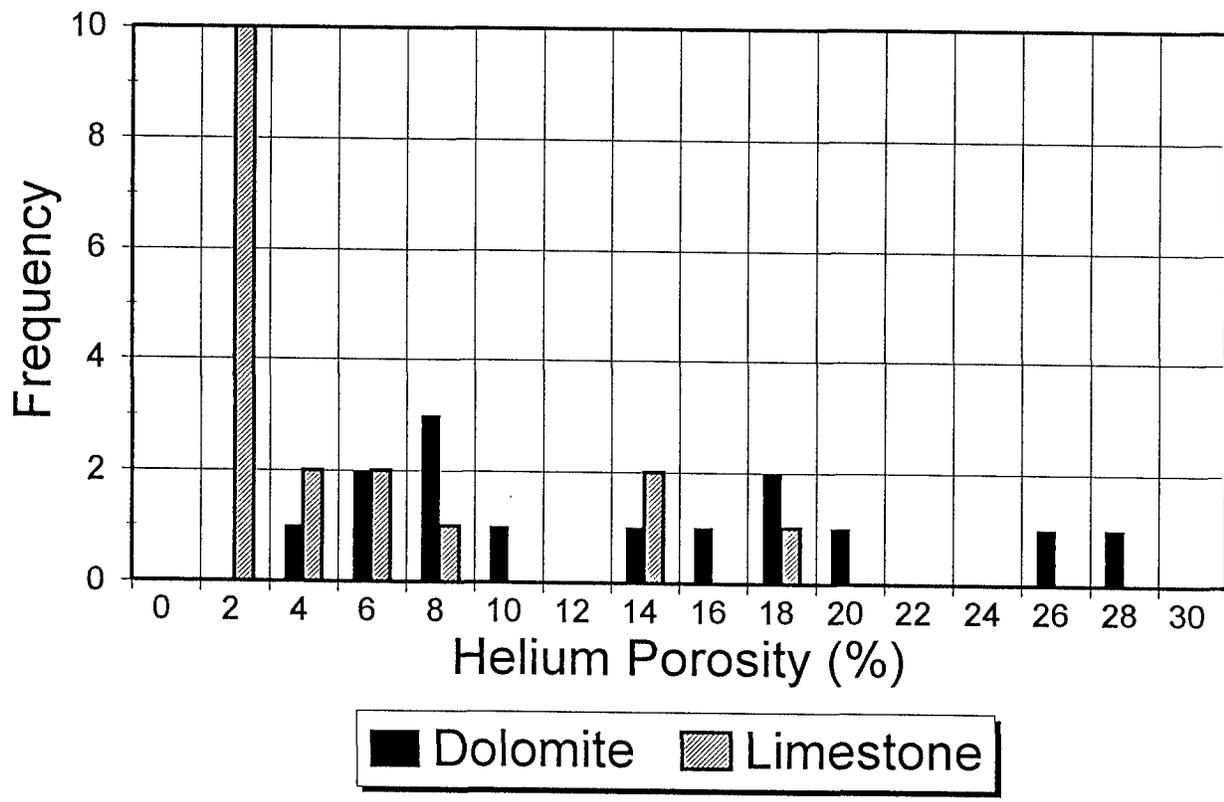
## Air Permeability vs Helium Porosity



Petral Exploration, LLC  
 Dalmore-Federal #44-23  
 Sec. 23 T37S R23E  
 San Juan County, Utah

Job: 21037  
 Date: 26-Jun-2001

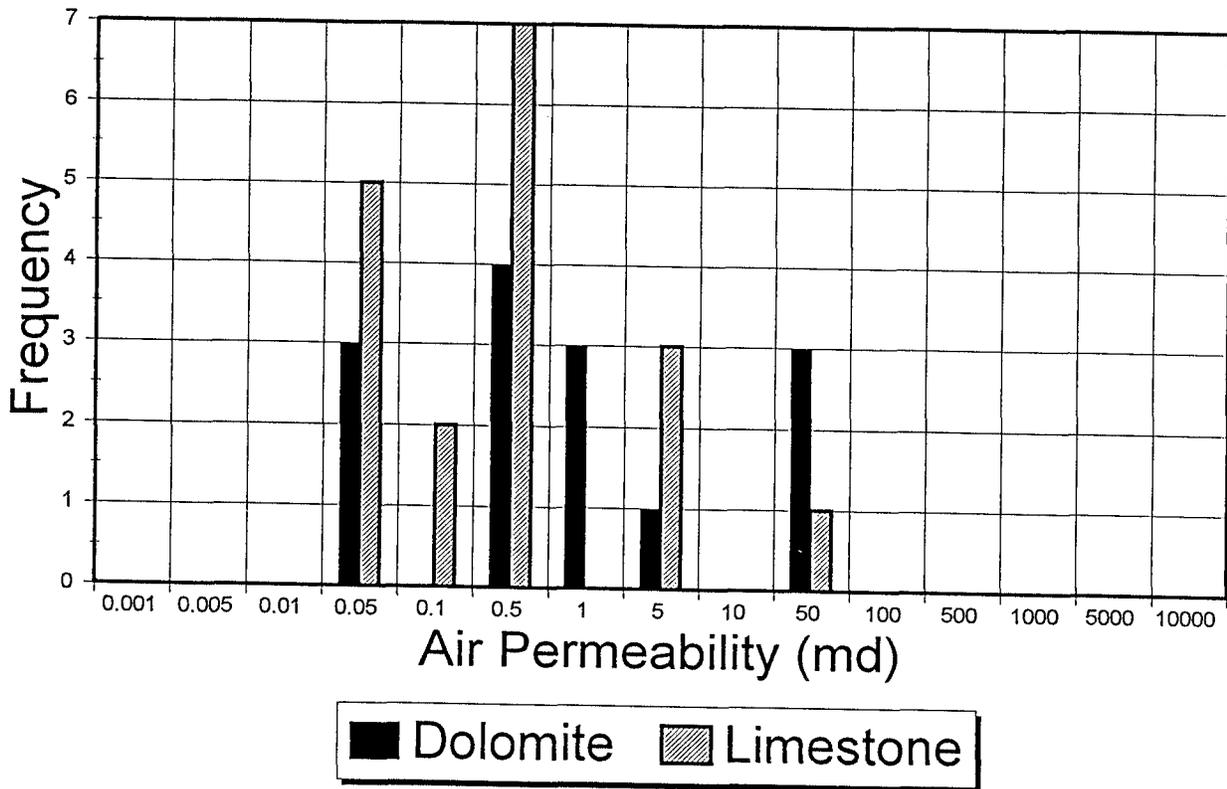
***Helium Porosity  
 Frequency Distribution***



Petral Exploration, LLC  
 Dalmore-Federal #44-23  
 Sec. 23 T37S R23E  
 San Juan County, Utah

Job: 21037  
 Date: 26-Jun-2001

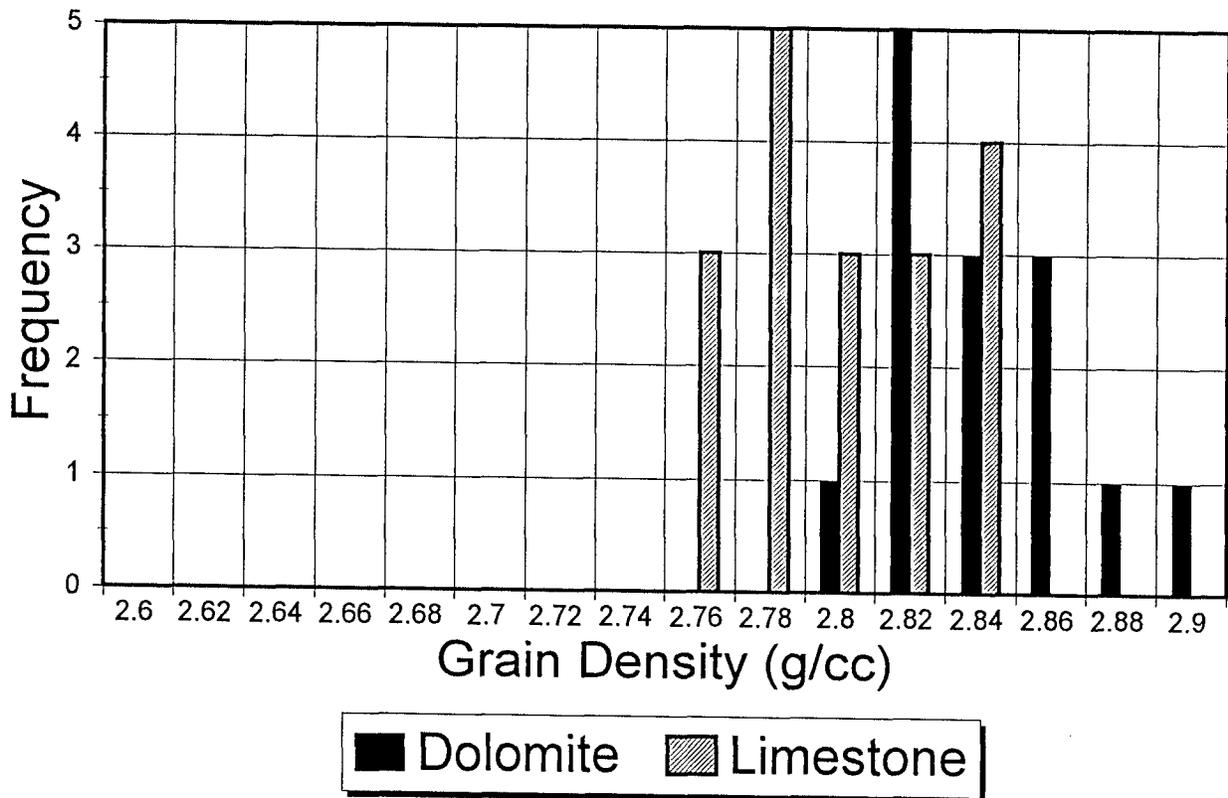
***Air Permeability  
 Frequency Distribution***



Petral Exploration, LLC  
 Dalmore-Federal #44-23  
 Sec. 23 T37S R23E  
 San Juan County, Utah

Job: 21037  
 Date: 26-Jun-2001

**Grain Density  
 Frequency Distribution**



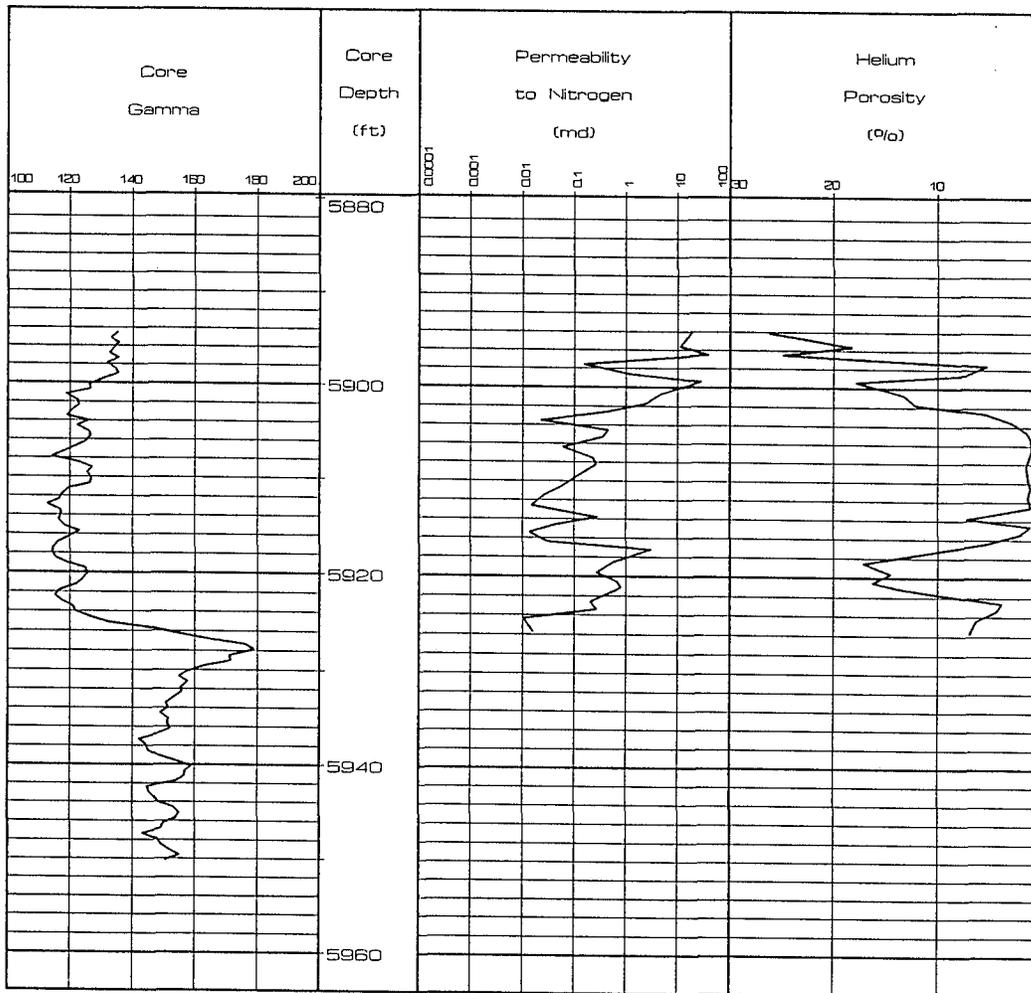


Petral Exploration, LLC  
Dalmore-Federal #44-23  
Sec. 23 T37S R23E  
San Juan County, Utah

Job: 21037  
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PETRO-LOG

Scale 1:240





Petral Exploration, LLC  
Dalmore-Federal #44-23  
Sec. 23 T37S R23E  
San Juan County, Utah

Job: 21037  
Date: 26-Jun-2001

| Zone      | Permeability (md)* |             |            | Porosity (%)** |             |            |
|-----------|--------------------|-------------|------------|----------------|-------------|------------|
|           | Median             | Arith. Mean | Geom. Mean | Median         | Arith. Mean | Geom. Mean |
| Dolomite  | 0.431              | 5.341       | 0.540      | 11.689         | 12.478      | 10.425     |
| Limestone | 0.194              | 2.171       | 0.209      | 1.520          | 4.362       | 2.560      |

\* Values above 0.00 md

\*\* Values above 0.00 %

CONFIDENTIAL

**PETRAL EXPLORATION, LLC**

**#44-23 DALMORE FEDERAL  
SE/SE SEC. 23, T36S, 23E  
SAN JUAN, UTAH**

**GEOLOGICAL REPORT**

**ON**

**#44-23 DALMORE FEDERAL  
SE/SE Sec. 23, T36S, R23E  
SAN JAUN CO., UTAH**

**FOR**

**PETRAL EXPLORATION, LLC**

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June 2001

Roger D. Charbonneau, B.Sc.  
Wellsite Geologist  
**Decollemnt Consulting**

### WELL DATA SUMMARY

|                           |                           |
|---------------------------|---------------------------|
| WELL NAME                 | DALMORE #44-23            |
| OPERATOR                  | PETRAL EXPLORATION, LLC   |
| SURFACE LOCATION          | SE/SE SEC. 23, T37S, R23E |
| BOTTOM HOLE LOCATION      | 261.74' N; 40.9' E        |
| WELL LIESENCE #           | UTH-041085                |
| WELL CLASSIFICATION       | DEVELOPMENT               |
| DRILLING CONTRACTOR       | CATFISH #1                |
| API #                     | 43-037-31801              |
| AFE NUMBER                | DALMORE #44-23            |
| ELEVATIONS - GROUND LEVEL | 5575'                     |
| - KELLY BUSHING           | 5592'                     |
| SPUD DATE                 | 5-31-01                   |
| T.D. DATE                 | 6-17-01                   |
| RIG RELEASE DATE          | 6-22-01                   |
| SURFACE CASING            | 2177' of 9 5/8"           |
| INTERMEDIATE CASING       | NIL                       |
| HOLE SIZE                 | 7 7/8"                    |
| SAMPLE INTERVAL           | 4800'-6200'               |
| GAS DETECTION INTERVAL    | 4800'-6200'               |

WELL DATA SUMMARY (Continued)

OPEN HOLE LOGS

DENSITY/NEUTRON-GR-CAL

DLL-MSFL-GR

LS-SONIC-GR

DIP METER-GR

DRILL STEM TESTS

#1 5844'-5950' UPPER ISMAY

CORES

#1 5893'-5950' UPPER ISMAY

MUD TYPE

LSND

WELL STATUS

P & A

## DEVIATION SURVEYS

DEPTH   SURVEY  
(ft)   (degrees)

|      |     |
|------|-----|
| 100  | 1/4 |
| 1361 | 3/4 |
| 2133 | 1   |
| 6200 | 3/4 |

**Sperry-Sun Drilling Services**  
 Survey Report for #44-23 Dalmore - Federal - MWD Survey  
 Your Ref: Richard Oaks



**Petral Exploration LLC**  
**Dalmore-Federal**

**San Juan County**  
**Sec 23-T37S-R23E**

| Measured Depth (ft) | Incl. | Azim.   | Vertical Depth (ft) | Northings (ft) | Eastings (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) |
|---------------------|-------|---------|---------------------|----------------|---------------|-----------------------|-----------------------|
| 0.00                | 0.000 | 0.000   | 0.00                | 0.00 N         | 0.00 E        | 0.00                  |                       |
| 2173.00             | 0.000 | 0.000   | 2173.00             | 0.00 N         | 0.00 E        | 0.00                  | 0.00                  |
| 2281.00             | 0.440 | 80.400  | 2281.00             | 0.07 N         | 0.41 E        | 0.13                  | 0.41                  |
| 2313.00             | 0.880 | 48.060  | 2313.00             | 0.25 N         | 0.71 E        | 0.36                  | 1.75                  |
| 2345.00             | 1.100 | 40.780  | 2344.99             | 0.65 N         | 1.10 E        | 0.81                  | 0.79                  |
| 2375.00             | 1.390 | 28.690  | 2374.98             | 1.19 N         | 1.46 E        | 1.40                  | 1.30                  |
| 2406.00             | 1.810 | 31.480  | 2405.97             | 1.94 N         | 1.90 E        | 2.20                  | 1.38                  |
| 2436.00             | 2.200 | 21.340  | 2435.95             | 2.88 N         | 2.35 E        | 3.20                  | 1.75                  |
| 2468.00             | 2.640 | 12.370  | 2467.93             | 4.17 N         | 2.73 E        | 4.54                  | 1.81                  |
| 2500.00             | 2.900 | 9.030   | 2499.89             | 5.69 N         | 3.02 E        | 6.08                  | 0.96                  |
| 2530.00             | 3.520 | 10.260  | 2529.84             | 7.34 N         | 3.30 E        | 7.76                  | 2.08                  |
| 2560.00             | 3.870 | 7.450   | 2559.78             | 9.25 N         | 3.60 E        | 9.69                  | 1.31                  |
| 2590.00             | 4.220 | 6.220   | 2589.70             | 11.35 N        | 3.85 E        | 11.81                 | 1.20                  |
| 2621.00             | 4.920 | 2.530   | 2620.61             | 13.82 N        | 4.03 E        | 14.27                 | 2.45                  |
| 2651.00             | 5.450 | 2.530   | 2650.48             | 16.52 N        | 4.15 E        | 16.96                 | 1.77                  |
| 2683.00             | 5.450 | 2.880   | 2682.34             | 19.56 N        | 4.29 E        | 19.99                 | 0.10                  |
| 2745.00             | 5.540 | 8.330   | 2744.05             | 25.46 N        | 4.87 E        | 25.91                 | 0.85                  |
| 2840.00             | 5.010 | 16.940  | 2838.65             | 33.97 N        | 6.75 E        | 34.60                 | 1.00                  |
| 2931.00             | 4.750 | 3.410   | 2929.33             | 41.53 N        | 8.13 E        | 42.28                 | 1.29                  |
| 2961.00             | 4.750 | 0.070   | 2959.22             | 44.01 N        | 8.20 E        | 44.75                 | 0.92                  |
| 3024.00             | 4.920 | 6.750   | 3022.00             | 49.30 N        | 8.53 E        | 50.03                 | 0.93                  |
| 3054.00             | 4.830 | 9.210   | 3051.89             | 51.83 N        | 8.88 E        | 52.58                 | 0.76                  |
| 3117.00             | 4.920 | 7.800   | 3114.66             | 57.12 N        | 9.67 E        | 57.93                 | 0.24                  |
| 3212.00             | 5.100 | 8.860   | 3209.30             | 65.33 N        | 10.87 E       | 66.22                 | 0.21                  |
| 3304.00             | 5.190 | 10.620  | 3300.93             | 73.46 N        | 12.27 E       | 74.47                 | 0.20                  |
| 3364.00             | 5.100 | 8.680   | 3360.69             | 78.76 N        | 13.17 E       | 79.85                 | 0.33                  |
| 3428.00             | 4.750 | 359.720 | 3424.45             | 84.23 N        | 13.59 E       | 85.31                 | 1.32                  |
| 3458.00             | 4.570 | 0.420   | 3454.35             | 86.66 N        | 13.59 E       | 87.72                 | 0.63                  |
| 3490.00             | 4.310 | 0.600   | 3486.26             | 89.14 N        | 13.61 E       | 90.17                 | 0.81                  |
| 3520.00             | 4.570 | 1.650   | 3516.17             | 91.46 N        | 13.66 E       | 92.48                 | 0.91                  |
| 3551.00             | 4.660 | 0.240   | 3547.07             | 93.96 N        | 13.70 E       | 94.95                 | 0.47                  |
| 3581.00             | 4.660 | 0.240   | 3576.97             | 96.39 N        | 13.71 E       | 97.36                 | 0.00                  |
| 3642.00             | 4.830 | 6.750   | 3637.76             | 101.42 N       | 14.02 E       | 102.37                | 0.93                  |
| 3734.00             | 4.750 | 11.850  | 3729.44             | 109.00 N       | 15.26 E       | 110.05                | 0.47                  |
| 3795.00             | 4.390 | 11.850  | 3790.24             | 113.75 N       | 16.26 E       | 114.90                | 0.59                  |
| 3856.00             | 4.130 | 5.520   | 3851.07             | 118.22 N       | 16.95 E       | 119.43                | 0.88                  |
| 3949.00             | 3.870 | 4.290   | 3943.85             | 124.69 N       | 17.51 E       | 125.90                | 0.29                  |
| 4041.00             | 3.870 | 11.670  | 4035.64             | 130.82 N       | 18.37 E       | 132.09                | 0.54                  |
| 4133.00             | 3.690 | 13.080  | 4127.44             | 136.75 N       | 19.66 E       | 138.15                | 0.22                  |
| 4196.00             | 4.130 | 19.760  | 4190.29             | 140.86 N       | 20.89 E       | 142.40                | 1.00                  |

Continued...

**Sperry-Sun Drilling Services**  
 Survey Report for #44-23 Dalmore - Federal - MWD Survey  
 Your Ref: Richard Oaks



**Petral Exploration LLC**  
**Dalmore-Federal**

**San Juan County**  
**Sec 23-T37S-R23E**

| Measured Depth (ft) | Incl. | Azim.                      | Vertical Depth (ft) | Northings (ft) | Eastings (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) |
|---------------------|-------|----------------------------|---------------------|----------------|---------------|-----------------------|-----------------------|
| 4259.00             | 3.870 | 18.170                     | 4253.14             | 145.01 N       | 22.32 E       | 146.72                | 0.45                  |
| 4322.00             | 3.860 | 8.820                      | 4316.00             | 149.13 N       | 23.31 E       | 150.94                | 1.00                  |
| 4414.00             | 3.960 | 9.030                      | 4407.78             | 155.33 N       | 24.28 E       | 157.21                | 0.11                  |
| 4476.00             | 4.040 | 5.870                      | 4469.63             | 159.61 N       | 24.84 E       | 161.53                | 0.38                  |
| 4570.00             | 3.960 | 5.690                      | 4563.40             | 166.14 N       | 25.50 E       | 168.08                | 0.09                  |
| 4630.00             | 4.390 | 8.860                      | 4623.24             | 170.47 N       | 26.06 E       | 172.45                | 0.81                  |
| 4722.00             | 4.310 | 11.320                     | 4714.98             | 177.34 N       | 27.28 E       | 179.42                | 0.22                  |
| 4784.00             | 4.570 | 11.490                     | 4776.79             | 182.04 N       | 28.23 E       | 184.22                | 0.42                  |
| 4814.00             | 4.480 | 10.970                     | 4806.70             | 184.36 N       | 28.69 E       | 186.58                | 0.33                  |
| 4903.00             | 5.450 | 4.460                      | 4895.36             | 191.99 N       | 29.68 E       | 194.27                | 1.26                  |
| 4996.00             | 5.270 | 4.990                      | 4987.96             | 200.65 N       | 30.40 E       | 202.94                | 0.20                  |
| 5119.00             | 4.830 | 4.820                      | 5110.48             | 211.43 N       | 31.32 E       | 213.74                | 0.36                  |
| 5212.00             | 4.750 | 4.990                      | 5203.15             | 219.17 N       | 31.99 E       | 221.49                | 0.09                  |
| 5242.00             | 4.660 | 5.690                      | 5233.05             | 221.62 N       | 32.22 E       | 223.94                | 0.36                  |
| 5303.00             | 4.660 | 11.140                     | 5293.85             | 226.52 N       | 32.94 E       | 228.89                | 0.73                  |
| 5396.00             | 4.570 | <del>14.410</del><br>14.31 | 5386.55             | 233.81 N       | 34.59 E       | 236.35                | 0.30                  |
| 5489.00             | 4.310 | 13.780                     | 5479.27             | 240.80 N       | 36.35 E       | 243.52                | 0.28                  |
| 5581.00             | 3.780 | 13.080                     | 5571.04             | 247.11 N       | 37.86 E       | 249.99                | 0.58                  |
| 5674.00             | 3.250 | 12.550                     | 5663.87             | 252.67 N       | 39.12 E       | 255.68                | 0.57                  |
| 5704.00             | 3.160 | 11.490                     | 5693.82             | 254.31 N       | 39.47 E       | 257.35                | 0.36                  |
| 5735.00             | 3.250 | 11.320                     | 5724.77             | 256.01 N       | 39.82 E       | 259.08                | 0.29                  |
| 5766.00             | 2.810 | 13.600                     | 5755.73             | 257.61 N       | 40.17 E       | 260.72                | 1.47                  |
| 5797.00             | 2.460 | 10.790                     | 5786.70             | 259.00 N       | 40.47 E       | 262.14                | 1.20                  |
| 5829.00             | 1.930 | 8.680                      | 5818.67             | 260.21 N       | 40.68 E       | 263.37                | 1.68                  |
| 5894.00             | 0.800 | 7.000                      | 5883.65             | 261.74 N       | 40.90 E       | 264.91                | 1.74                  |

All data is in feet unless otherwise stated. Directions and coordinates are relative to Grid North. Vertical depths are relative to Well Head. Northings and Eastings are relative to Well Head.

The Dogleg Severity is in Degrees per 100 feet. Vertical Section is from Well Head and calculated along an Azimuth of 8.779° (Grid).

Based upon Minimum Curvature type calculations, at a Measured Depth of 5894.00ft., The Bottom Hole Displacement is 264.91ft., in the Direction of 8.881° (Grid).

Continued...

**Sperry-Sun Drilling Services**  
Survey Report for #44-23 Dalmore - Federal - MWD Survey  
Your Ref: Richard Oaks



**Petral Exploration LLC**  
**Dalmore-Federal**

**San Juan County**  
**Sec 23-T37S-R23E**

**Comments**

| Measured<br>Depth<br>(ft) | Station Coordinates |                   |                  | Comment             |
|---------------------------|---------------------|-------------------|------------------|---------------------|
|                           | TVD<br>(ft)         | Northings<br>(ft) | Eastings<br>(ft) |                     |
| 5894.00                   | 5883.65             | 261.74 N          | 40.90 E          | Extrapolated Survey |



**FORMATION TOPS**

Kelly Bushing (ft) 5592

| FORMATION      | Prognosis | SAMPLE TOP |      | E LOG TOP |      |        |
|----------------|-----------|------------|------|-----------|------|--------|
|                | TVD       | M.D.       | TVD  | MD        | TVD  | SS TVD |
| Morrison       | Surface   |            |      |           |      |        |
| Chinle         | 2075      |            |      |           |      |        |
| De Chelly      | 2960      |            |      |           |      |        |
| Honiker Trail  | 4805      | 4823       | 4806 | 4822.0    | 4814 | 778    |
| La Sal         | 5514      | 5518       | 5504 | 5508.0    | 5498 | 94     |
| Upper Ismay    | 5822      | 5818       | 5807 | 5820.0    | 5809 | -217   |
| U. Ismay Mound | 5867      | 5884       | 5873 | 5876.0    | 5865 | -273   |
| Hovenweep      | 5989      | 5926       | 5915 | 5922.0    | 5911 | -319   |
| Lower Ismay    | 5989      | 5972       | 5961 | 5968.0    | 5957 | -367   |
| Gothic         | 6047      | 6036       | 6025 | 6030.0    | 6019 | -427   |
| Desert Creek   | 6071      | 6054       | 6043 | 6064.0    | 6053 | -461   |
| Chimney Rock   | 6157      | 6158       | 6147 | 6142.0    | 6131 | -539   |
| Akah           | 6215      | 6180       | 6169 | 6168.0    | 6157 | -565   |
| TD             | 6235      | 6200       | 6189 | 6193.0    | 6182 | -590   |

### DAILY DRILLING SUMMARY

| Date    | Depth | Progress | Hours<br>Drlg. | Mud<br>Mass | Visc. | W.L. | pH   | Activity              |
|---------|-------|----------|----------------|-------------|-------|------|------|-----------------------|
| 5-31-01 | 90.0  | 90.0     | 4.0            | water       |       |      |      | Rig up,spud           |
| 6-1-01  | 140.0 | 50.0     | 4.0            | water       |       |      |      | Run conductor         |
| 6-2-01  | 710.0 | 570.0    | 17.0           | water       |       |      |      | Drill surface         |
| 6-3-01  | 1799  | 1089.0   | 23.0           | water       |       |      |      | Drill surface         |
| 6-4-01  | 2173  | 374.0    | 15 1/2         | water       |       |      |      | Drill surface,POOH    |
| 6-5-01  | 2173  | Nil      | Nil            | water       |       |      |      | Set surface           |
| 6-6-01  | 2173  | Nil      | Nil            | water       |       |      |      | Nipple up,pres. test  |
| 6-7-01  | 2173  | Nil      | Nil            | water       |       |      |      | Replace leaking valve |
| 6-8-01  | 2889  | 716.0    | 13 1/2         | water       |       |      |      | Drill out             |
| 6-9-01  | 3692  | 803.0    | 22 1/2         | water       |       |      |      | Drilling              |
| 6-10-01 | 4309  | 617.0    | 20 1/2         | water       |       |      |      | Drill,bit trip        |
| 6-11-01 | 4976  | 667.0    | 21.0           | water       |       |      |      | Drilling              |
| 6-12-01 | 5470  | 494.0    | 21.0           | 8.9         | 35    | 10.0 | 10.2 | Drilling              |
| 6-13-01 | 5764  | 294.0    | 16 1/2         | 8.9         | 34    | 7.0  | 10.1 | Drilling,bit trip     |
| 6-14-01 | 5894  | 130.0    | 9.0            | 8.9         | 37    | 7.2  | 9.9  | Drilling,core #1      |
| 6-15-01 | 5954  | 60.0     | 11.0           | 9.4         | 47    | 5.8  | 9.2  | Lay down core,RIH     |
| 6-16-01 | 5954  | Nil      | Nil            | 9.5         | 95    | 5.3  | 9.5  | DST #1                |
| 6-17-01 | 6200  | 246.0    | 16.0           | 9.7         | 48    | 11.0 | 8.0  | Drilling,CO logs      |
| 6-18-01 | 6200  | Nil      | Nil            |             |       |      |      | Logging               |

### QFT DATA

DALMORE #44-23

| Depth   | QFT | Depth   | QFT | Depth       | QFT        | Depth   | QFT  |
|---------|-----|---------|-----|-------------|------------|---------|------|
| 4800-20 | 149 | 5320-40 | 110 | 5840-60     | 368        | 60-70   | 990  |
| 20-40   | 45  | 40-60   | 156 | 60-80       | 711        | 5970-80 | 488  |
| 40-60   | 105 | 60-80   | 186 | 80-5900     | 632        | 80-6000 | 222  |
| 60-80   | 105 | 80-5400 | 164 | <b>CORE</b> | <b>#1</b>  | 6000-10 | 255  |
| 80-4900 | 483 | 5400-20 | 143 | 5985        | 342        | 10-20   | 683  |
| 4900-20 | 157 | 20-40   | 145 | 5896        | 570        | 20-30   | 1300 |
| 20-40   | 86  | 40-60   | 263 | 5897        | 1750       | 30-40   | 2120 |
| 40-60   | 238 | 60-80   | 145 | 5899        | 776        | 40-50   | 2340 |
| 60-80   | 41  | 80-5500 | 342 | 5901        | 794        | 50-60   | 843  |
| 80-5000 | 122 | 5500-20 | 282 | 5905        | 111        | 60-70   | 1370 |
| 5000-20 | 141 | 20-40   | 190 | 5907        | 134        | 70-80   | 1130 |
| 20-40   | 117 | 40-60   | 166 | 5910        | 107        | 80-90   | 2150 |
| 40-60   | 285 | 60-80   | 415 | 5914        | 1890       | 90-6100 | 589  |
| 60-80   | 139 | 80-5600 | 600 | 5915        | 267        | 6100-10 | 575  |
| 80-5100 | 169 | 5600-20 | 203 | 5918        | 313        | 10-20   | 710  |
| 5100-20 | 220 | 5620-40 | 242 | 5920        | 225        | 20-30   | 477  |
| 20-40   | 161 | 40-60   | 176 | 5922        | 140        | 30-40   | 504  |
| 40-60   | 170 | 60-80   | 274 | 5924        | 940        | 40-50   | 446  |
| 60-80   | 163 | 80-5700 | 169 | 5927        | 699        | 50-60   | 1120 |
| 80-5200 | 162 | 5700-20 | 219 | 5930        | 380        | 60-70   | 1030 |
| 5200-20 | 95  | 20-40   | 194 | 5937        | 889        | 70-80   | 318  |
| 20-40   | 121 | 40-60   | 711 | 5943        | 643        | 80-90   | 538  |
| 40-60   | 133 | 60-80   | 215 | 5948        | 666        | 90-6200 | 296  |
| 60-80   | 166 | 80-5800 | 229 | <b>CORE</b> | <b>END</b> |         |      |
| 80-5300 | 193 | 5800-20 | 375 | 5950        | 232        |         |      |
| 5300-20 | 210 | 20-40   | 465 | 5950-60     | 950        |         |      |
|         |     |         |     |             |            |         |      |

**CORE DESCRIPTIONS**

**PETRAL EXPLORATION, LLC**

**#44-23 DALMORE  
SE/SE SEC. 23-T37S-R23E  
SAN JUAN COUNTY, UTAH**

- Cut 60'      Recovered 56'
- 5894-5497      **DOLOMITE** medium to dark gray, brown, calcite blebs, fossil fragments @ base, massive, limy, greasy surface texture, scattered shale partings, very fine to fine crystalline, limy, 8-10% pin point & moldic porosity, strong hydrocarbon odor, milky cut fluorescence, yellow-gold residual ring cut.
- 5897-5902.3      **LIMESTONE** light to medium gray brown, very fine to fine crystalline, fossil fragments, calcite inclusions, 6-8% moldic & pin point porosity, brown oil stain, strong hydrocarbon odor, flash cut with thick yellow gold residual ring cut.
- 5902.3-5915.5      **LIMESTONE** light to medium gray brown, microcrystalline, mottled with algal mats, burrowed texture, hard, tight, calcite blebs, scattered fossil fragments, weak show @ base.
- 5915.5-5926.2      **LIMESTONE** light to medium gray brown, medium to dark gray @ base, very fine to microcrystalline, earthy in part, shell fragments, fossil hash, algal fabric @ base, gas odor through out, scattered pin point porosity, hard tight, hydrocarbon show @ top and base, milky cut fluorescence, yellow gold residual ring.
- 5926.2-5950      **SHALE** black, limy, scattered fossil fragments, massive, inclined depositional laminations, silty and sandy cross laminations, milky cut fluorescence, residual ring.

### DRILL STEM TEST REPORT

Well Name and Location: DALMORE #44-23  
Test Number and Interval: #5 5845-5950  
Date: 6-15-01  
Formation: UPPER ISMAY  
Test Type: Bottom Hole Conventional  
Hole Size: 7 7/8"  
Testing Company: Haliburton

#### Mud Properties

Mud Weight: 9.5                      Viscosity: 35  
pH 9.2                                  Water Loss: 8  
Water Cushion (if any): \_\_\_\_\_

#### Times and Pressures

Time and Date Tool Opened: 6-16-01; 6:20 a.m.

|         | Time (min) | Pressure (psi) | Bottom Hole Temperature (degrees F) |
|---------|------------|----------------|-------------------------------------|
| I.H.    |            | 2892           | 136                                 |
| PREFLOW | 10 min     | 106-263        |                                     |
| I.S.I.  | 1 hr       | 1903           |                                     |
| F.F.    | 1 hr       | 294-632        |                                     |
| F.S.I.  | 4 hr       | 1912           |                                     |
| F.H.    |            | 2898           |                                     |

#### Recovery and Description

Preflow Description: Opened w/strg blow incr to 18.5 oz. in 5 min; 31 oz in 15 min  
Valve Open Description: Opened w/6.5 oz in 5 min; incr to 7 lbs in 60 min  
Fluid Recovery: Rec. 3150' gcm  
Splr. .849 cf gas@1200 psi, 20cc oil, 1980 cc water  
Salinity: Splr. 12,000 Chlorides (ppm) \_\_\_\_\_

## FORMATION EVALUATION

### PETRAL #44-23 DALMORE FEREDAL SE/SE SEC. 23.T36S,R23E SAN JAUN CO. UTAH

The 44-23 DALMORE Federal was directionally drilled from the above surface location to a bottom hole location 264.96 feet on an azimuth of 8.779 degrees (Grid). An "S" curve was drilled and at a depth of approximately 5894 feet the hole was again nearly vertical. Below approximately 5674'MD, a uniform correction of -11 feet is required to determine TVD. Decollement Consulting rigged up on Catfish Rig #1 and began logging on June 9, 2001 at a depth 4800'MD. The primary objective was the Upper Ismay Algal Mound with secondary interest in the Lower Desert Creek Porosity. Samples were collected from 4800-6200 feet and Mud Gas and QFT analyses were conducted over the interval. E-logs were run to total depth with BHCS & Hi Res. Induction, Neutron-Density, and Dip Meter. Cores and Tests were run over the Upper Ismay formation.

#### UPPER ISMAY MOUND 5876MD 5865TVD -273SS

The rabbit ears anhydrite zone was partially absent in the upper section being only 6 foot thick. This allowed for a 100 foot Upper Ismay thickness. The mound in the upper section had increasing hydrocarbon show with depth. The samples had strong odor, black flecks of oil on the wash water, and excellent sample shows. QFT's were up to 1890 units and mud gas as high as 356 units. The upper dolomite section was generally tight, but the lower dolomite section has very good porosity. The upper cored interval (Core #1) had excellent porosity and permeability from lab analysis over this zone. DST #1 recovered 3150 feet gas cut mud, .849 cubic feet gas @ 1200 psi, and 20 cc oil. E-logs showed 14 feet of porous section in the tested interval. The pipe recovery and surface indicators from the DST were very disappointing and did not reflect other show indicators. The lower dolomite was 10 to 14 feet high to off set wells (generally flat to others) and salt water was recovered on tests in those off set wells.

**CONCLUSION:** The Ismay showed formation damage based on poor DST results

#### LOWER DESERT CREEK 6122MD 6111TVD -519SS

The Lower Desert Creek mound had a poor development. A fair drilling break was noted from 6132-6138. The samples were brown, finely crystalline dolomitic limestone with good fluorescence, good streaming cut, excellent residual ring cut. A 160 unit total gas show was recorded by the Hot Wire, and heavier hydrocarbons up to iso-butane were detected by the chromatograph. Mud weight at the time of penetration was 9.4 pounds per gallon. QFT values ranging from 446 to 504 units. No tests or cores were run.

**CONCLUSION:** Zone of little or no interest.

## SAMPLE DESCRIPTIONS

**DALMORE #44-23**  
**SE/SE Sec. 23, T36S, R23E**  
**San Juan County, Utah**

- 4800-20      SHALE-80% varied colored, gray, red, red brown, silty, dolomitic, scattered shell fragments.  
                 LIMESTONE-10% white, chalky, mudstone.  
                 DOLOMITE-10% medium to dark gray, argillaceous, mudstone.
- 4820-40      LIMESTONE-80% white, light gray, sandy, mottled, granular.  
                 SHALE-20% varied color, as above.
- 4840-60      LIMESTONE-70% white, gray, lithographic, sandy inpart, mudstone.  
                 SANDSTONE-20% white, fine grained, subangular, fair sorted, calcareous matrix & cement.  
                 SHALE-10% brown, waxy, blocky.
- 4860-80      LIMESTONE-70% white, gray, gray brown, lithographic, sandy inpart, chalky, mudstone.  
                 SANDSTONE-20% white, light gray, very fine to fine grained, sub angular, fair to well sorted, calcareous matrix & cement, tight.
- 4880-4900    SHALE-20% varied color, soft to firm, blocky, calcareous, waxy.  
                 LIMESTONE-80% white, gray, lithographic, argillaceous, sandy, mudstone to packstone.
- 4900-20      LIMESTONE-80% white, light gray, dark gray, chalky, lithographic, argillaceous, sandy inpart, earthy, silty inpart, mudstone to packstone.  
                 SHALE-20% varied color, calcareous, dolomitic, waxy, blocky, firm.
- 4920-40      LIMESTONE-90% white, gray, chalky, lithographic, crystalline, sandy, earthy, mudstone.  
                 SANDSTONE-10% white, fine to medium grained, subangular, fair to poor sorted, calcareous matrix & cement, friable, tight, no show.
- 4940-60      LIMESTONE-70% white, light gray, silty, sandy, lithographic, mottled, crystalline, chalky, occasional dark gray, argillaceous, mudstone to packstone.  
                 SHALE-30% varied colored, red orange, blocky, waxy, dolomitic, sandy, silty.

- 4960-80 Limestone-80% white, light to medium gray, chalky, lithographic, crystalline, mottled, sandy, mudstone to packstone.  
Shale-20% red orange, dolomitic, sandy, silty.
- 4980-5000 Limestone-90% white, light gray, sandy, lithographic, crystalline, mudstone to packstone.  
Shale-10% red orange, waxy, silty.
- 5000-20 Limestone-90% white, chalky, light gray, sandy, very fine to fine crystalline, argillaceous, lithographic in part, microcrystalline in part, tight, no show.  
Shale-10% red orange, waxy, blocky.
- 5020-40 Limestone-80% As Above  
Shale-20% As Above
- 5040-60 Limestone-100% white, chalky, crystalline, light gray, mottled, argillaceous, lithographic, mudstone to packstone.
- 5060-80 Limestone-100% As Above
- 5080-5100 Limestone-90% white, chalky, gray, sandy, crystalline, dense.  
Shale-10% red orange, waxy, firm, dolomitic.
- 5100-20 Limestone-70% gray, argillaceous, lithographic, crystalline, mudstone.
- 5120-40 Limestone-80% white, light gray, mottled, fossil fragments, crystalline, mudstone.  
Shale-20% varied color mottled, silty, red orange.
- 5140-60 Limestone-100% white, chalky, crystalline, tan, microcrystalline, sandy in part, fossil fragments, mudstone.

- 5160-80 Limestone-80% light gray, sandy, crystalline, argillaceous, lithographic, mudstone.  
SANDSTONE-10% light gray, very fine to fine grained, subangular, fair to well sorted, calcareous matrix & cement, tight, no show.  
SHALE-10% varied color, red orange, gray, brown, blocky, waxy, silty, calcareous.
- 5180-5200 SHALE-80% brown, blocky, dolomitic, firm, waxy.  
Limestone-20% As Above
- 5200-20 SHALE-60% brown, red, mottled with white limestone, blocky, firm.  
SANDSTONE-20% white, brown, fine grained, subangular, fair to well sorted, micaceous, calcareous matrix & cement, tight, no show.  
Limestone-20% white, chalky, crystalline, light gray, lithographic, brown, microcrystalline, dense, hard, tight.
- 5220-40 SHALE-70% light to medium gray, dolomitic, silty in part, blocky, splintery, firm-hard.  
Limestone-30% white, chalky, mudstone to wackestone.
- 5240-60 Limestone-70% white, tan, chalky, silty, crystalline, mudstone to wackestone.  
SHALE-30% varied color, red orange, brown, gray, blocky, dolomitic, silty in part.
- 5260-80 Limestone-50% white, light gray, chalky, lithographic, crystalline, lithographic, crystalline, silty & sandy in part, mudstone to wackestone.  
SHALE-40% varied color, dolomitic, silty, copper flecks.  
SANDSTONE-10% white, fine grained, fair to poor sorted, sub angular, calcareous matrix & cement, tight.
- 5280-5300 Limestone-30% white, light gray, chalky, lithographic, sandy, mudstone.  
SHALE-40% varied color, dolomitic, waxy, silty.  
SANDSTONE-30% white, light gray, fine grained, subangular, fair to well sorted, calcareous matrix & cement, tight, friable.

- 5300-20 SHALE-30% red orange, blocky, splintery, dolomitic, silty.  
LIMESTONE-60% white, light gray, sandy, chalky, mudstone.  
SANDSTONE-10% white, light gray, as above.
- 5320-40 SHALE-20% As Above.  
LIMESTONE-80% light gray, brown, white, silty, sandy, crystalline,  
chalky, mudstone to wackestone.
- 5340-60 SHALE-40% varied color, becoming medium to dark gray, blocky,  
dolomitic.  
LIMESTONE-40% white, light gray, chalky, lithographic, silty, sandy,  
mottled.  
SANDSTONE-20% white, fine grained, sub angular, fair to well sorted,  
calcareous matrix & cement, tight, friable.
- 5360-80 SHALE-100% medium to dark gray, dolomitic, waxy, fissile.
- 5380-5400 SHALE-20% as above, micaaceous, copper flecks.  
LIMESTONE-80% white to light gray, granular, very fine to fine  
crystalline, chalky, shell fragments, microcrystalline inpart, wackestone to  
packstone.
- 5400-20 SHALE-10% varied colored, red orange, dark gray, dolomitic, blocky.  
LIMESTONE-90% light gray, chalky, lithographic, mottled, sandy inpart,  
crystalline, earthy inpart.
- 5420-40 SHALE-80% red orange, dark gray, dolomitic, blocky, silty, firm to hard.  
LIMESTONE-20% As above.
- 5440-60 LIMESTONE-100% white, tan, very fine to microcrystalline, granular  
texture inpart, chalky inpart, mudstone, tight, no show.
- 5460-80 SHALE-20% red orange, dark gray, dolomitic, blocky, firm.  
LIMESTONE-80% As Above, becoming gray, lithographic.

- 5480-5500 SHALE-90% medium to dark gray, dolomitic, petroliferous, sooty, occasionally limy, slow milky cut fluorescence, thin yellow gold residual ring.  
LIMESTONE-10% light gray, tan, white, lithographic, chalky, crystalline, dense, hard, tight.
- 5500-20 SHALE-60% varied color, red orange, dark gray, dolomitic, silty, blocky, platy.  
LIMESTONE-40% white, tan, very fine to microcrystalline, lithographic, chalky, mudstone.
- 5520-40 SHALE-10% varied color, as above.  
LIMESTONE-90% white, cream, tan, very fine to microcrystalline, chalky, dense, hard, tight, no show.
- 5540-60 SHALE-30% medium to dark gray, dolomitic, petroliferous, milky cut.  
LIMESTONE-70% gray, lithographic, crystalline, tan, microcrystalline, white, chalky, soft, tight, no show.
- 5560-80 SHALE-90% medium to dark gray, sooty, petroliferous blocky, greasy texture, milky cut fluorescence, thin residual ring.  
LIMESTONE-10% light brown, very fine to microcrystalline, hard, tight, no show.
- 5580-5600 SHALE-90% As Above, black, soft to firm.  
LIMESTONE-80% light brown, cream, chalky, occasionally sandy, very fine to microcrystalline, mudstone.
- 5600-20 SHALE-20% As Above  
LIMESTONE-80% light brown, cream, chalky, occasionally sandy, very fine to microcrystalline, mudstone.
- 5620-40 LIMESTONE-100% white, cream, light brown, very fine to microcrystalline, wackestone to packstone, granular texture in part, tight, no show.

- 5640-60 Limestone-70% light to medium gray, tan, lithographic, argillaceous, dolomitic inpart, very fine to microcrystalline, mudstone.  
Shale-30% medium to dark gray, dolomitic, milky cut.
- 5660-80 Shale-70% varied color, brown, red orange, dark gray, as above.  
Limestone-30% light gray, tan, lithographic, chalky, very fine to fine crystalline, microcrystalline inpart, granular texture inpart, tight, no show.
- 5680-5700 Limestone-100% white, light gray, brown, very fine to fine crystalline, microcrystalline inpart, lithographic, sucrosic texture inpart, sandy inpart, tight, no show.
- 5700-20 Shale-30% red orange, floating red quartz grains, dolomitic, blocky, waxy, firm.  
Limestone-70% As Above, becoming light to medium gray, lithographic, argillaceous, earthy, dirty, sandy inpart.
- 5720-40 Shale-20% varied color, red orange, brown, dark gray, dolomitic, silty inpart, petroliferous inpart, blocky, firm.  
Limestone-80% gray, white, cream, mottled, very fine to microcrystalline, chalky inpart, lithographic, mudstone to wackestone.
- 5740-60 Shale-30% varied colored, red orange, dark gray, dolomitic, blocky, silty.  
Limestone-70% white, chalky, light gray, lithographic, tan, very fine to microcrystalline, hard, tight, dense.
- 5760-80 Limestone-100% light gray brown, very fine to microcrystalline, hard, tight, dense, sucrosic texture inpart, mudstone to wackestone.
- 5780-5800 Shale-100% medium to dark gray, black, dolomitic, sooty, petroliferous, milky cut, thin ring, red orange, brown, blocky, waxy, silty.
- 5800-20 Shale-100% As Above

- 5820-40 SHALE-20% As Above.  
LIMESTONE-80% light gray brown, mottled, light brown, very fine to microcrystalline, granular texture in part, mudstone to grainstone.
- 5840-60 LIMESTONE-100% white, chalky, soft to firm, cream, mottled, crystalline, fossil fragments, mudstone to wackestone, weak show.
- 5860-80 LIMESTONE-100% light gray brown, mottled, grainstone, sucrosic texture, granular, brown oil stain, white streaming cut, yellow gold residual ring.
- 5880-94 DOLOMITE-100% brown, sucrosic texture, very fine to fine crystalline, brown oil stain, 8-10% intercrystalline porosity, earthy porosity, argillaceous, pin point porosity, black oil floating on wash water, strong hydrocarbon odor, limy in part.
- 5894-5954 CORE # 1 see core descriptions
- 5950-60 SHALE-100% black, dark gray, dolomitic, greasy texture, milky cut, residual ring.
- 5960-70 SHALE-70% As Above.  
LIMESTONE-30% light gray brown, argillaceous, lithographic, earthy.
- 5970-80 SHALE-30% varied color, blocky, silty.  
LIMESTONE-70% white, sandy, very fine to fine crystalline, dolomitic, tight, no show.
- 5980-90 LIMESTONE-100% light gray, sandy, argillaceous, earthy, lithographic, very fine crystalline.
- 5990-6000 ANHYDRITE-100% white, soft, chalky.

- 6000-10 ANHYDRITE-50% white, soft, chalky.  
SHALE-50% medium to dark gray, dolomitic, earthy, soft to firm, blocky, platy, sooty, petroliferous.
- 6010-20 SHALE-20% As Above.  
LIMESTONE-80% light to medium gray brown, earthy, lithographic, argillaceous, sucrosic texture, very fine crystalline, tight, no show.
- 6020-30 SHALE-100% dark gray, black, dolomitic, petroliferous, sooty.
- 6030-40 SHALE-100% As Above.
- 6040-50 SHALE-100% As Above.
- 6050-60 SHALE-80% As Above.  
LIMESTONE-20% light gray, earthy, sandy, argillaceous, lithographic, soft, mudstone.
- 6060-70 SHALE-70% As Above.  
LIMESTONE-30% As Above.
- 6070-80 SHALE-50% As Above.  
LIMESTONE-50% As Above.
- 6080-90 ANHYDRITE-10% white, soft, chalky.  
SHALE-90% dark gray, black, dolomitic, medium gray brown, soft, earthy.
- 6090-6100 ANHYDRITE-50% white, soft, chalky.  
SHALE-30% dark gray, black, dolomitic, platy.  
LIMESTONE-20% light gray brown, sandy, earthy, lithographic, very fine crystalline.

- 6100-10 SHALE-10% dark gray, black, dolomitic, earthy, petroliferous.  
LIMESTONE-90% light to medium gray, gray brown, granular, sucrosic texture, very fine to fine crystalline, argillaceous, lithographic, mudstone to packstone.
- 6110-20 SHALE-10% As Above.  
LIMESTONE-90% As Above, sandy inpart.
- 6120-30 ANHYDRITE-30% white, soft, chalky.  
SHALE-10% As Above.  
LIMESTONE-60% As Above.
- 6130-40 ANHYDRITE-10% As Above.  
LIMESTONE-90% light brown, silty, sandy, sucrosic texture, very fine to fine crystalline, argillaceous, dolomitic, slow milky cut, thin residual ring.
- 6140-50 LIMESTONE-100% light gray brown, silty, sucrosic texture, very fine to fine crystalline, argillaceous, dolomitic, light brown oil stain, 6-8% intercrystalline porosity, milky cut fluorescence, yellow gold residual ring.
- 6150-60 SHALE-100% dark gray, black, soft to firm, sooty, petroliferous, carbonaceous, dolomitic, milky cut, residual ring.
- 6160-70 SHALE-100% As Above.
- 6170-80 SHALE-30% dark gray, black, blocky, dolomitic, soft.  
LIMESTONE-70% light brown, sucrosic texture, argillaceous, fine to microcrystalline, tight, no show.
- 6180-90 SHALE-60% black, a/a, becoming red, brown, dolomitic, blocky.  
LIMESTONE-40% light gray, argillaceous, lithographic, very fine to microcrystalline, mottled, sucrosic texture inpart, tight, no show.

6190-6200 SHALE-60% varied color, blocky, calcareous.  
LIMESTONE-40% As Above.

ENTITY ACTION FORM

Operator: Petral Exploration LLC  
Address: P. O. Box 5083  
city Denver  
state CO zip 80217

Operator Account Number: N - 7700  
Phone Number: 303-832-3131

Well 1

| API Number                       | Well Name              | QQ                  | Sec       | Twp | Rng                              | County   |
|----------------------------------|------------------------|---------------------|-----------|-----|----------------------------------|----------|
| 43-037-31801                     | Dalmore Federal #44-23 | SESE                | 23        | 37S | 23E                              | San Juan |
| Action Code                      | Current Entity Number  | New Entity Number   | Spud Date |     | Entity Assignment Effective Date |          |
| A                                | <del>NA</del> 99999    | <del>NA</del> 13350 | 5-31-01   |     | <del>5-31-01</del> 10-22-01      |          |
| Comments:<br><b>CONFIDENTIAL</b> |                        |                     |           |     |                                  |          |

Well 2

| API Number  | Well Name             | QQ                | Sec       | Twp | Rng                              | County |
|-------------|-----------------------|-------------------|-----------|-----|----------------------------------|--------|
|             |                       |                   |           |     |                                  |        |
| Action Code | Current Entity Number | New Entity Number | Spud Date |     | Entity Assignment Effective Date |        |
|             |                       |                   |           |     |                                  |        |
| Comments:   |                       |                   |           |     |                                  |        |

Well 3

| API Number  | Well Name             | QQ                | Sec       | Twp | Rng                              | County |
|-------------|-----------------------|-------------------|-----------|-----|----------------------------------|--------|
|             |                       |                   |           |     |                                  |        |
| Action Code | Current Entity Number | New Entity Number | Spud Date |     | Entity Assignment Effective Date |        |
|             |                       |                   |           |     |                                  |        |
| Comments:   |                       |                   |           |     |                                  |        |

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

**RECEIVED**

OCT 19 2001

DIVISION OF  
OIL, GAS AND MINING

Dennis W. Yockim  
Name (Please Print)  
*Dennis W. Yockim*  
Signature  
Landman  
Title  
10/16/01  
Date

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

CONFIDENTIAL FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

|   |  |  |
|---|--|--|
| 1. TYPE OF WELL<br>OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____                                   |  | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br>UTU- 041085 |
| 2. NAME OF OPERATOR:<br>PETRAL EXPLORATION LLC  |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:                  |
| 3. ADDRESS OF OPERATOR:<br>PO BOX 5083<br>CITY DENVER STATE CO ZIP 80217  |  | 7. UNIT or CA AGREEMENT NAME:<br>M049P-84690C          |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE: 230' FSL & 280' FEL<br>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 23 37 <sup>3</sup> 23E SLM |  | 8. WELL NAME and NUMBER:<br>DALMORE 44-23              |
| PHONE NUMBER: 303-832-3131  |  | 9. API NUMBER:<br>43-037-31801                         |
| COUNTY: SAN JUAN  |  | 10. FIELD AND POOL, OR WILDCAT:<br>WILDCAT             |
| STATE: UTAH   |  |  |

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION  | TYPE OF ACTION  |   |  |
|---|---|---|--|
| <input type="checkbox"/> NOTICE OF INTENT<br>(Submit in Duplicate)<br>Approximate date work will start:<br>_____          | <input type="checkbox"/> ACIDIZE                        | <input type="checkbox"/> DEEPEN                           | <input type="checkbox"/> REPERFORATE CURRENT FORMATION |
|   | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> FRACTURE TREAT                   | <input type="checkbox"/> SIDETRACK TO REPAIR WELL      |
|   | <input type="checkbox"/> CASING REPAIR                  | <input type="checkbox"/> NEW CONSTRUCTION                 | <input type="checkbox"/> TEMPORARILY ABANDON           |
|   | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS       | <input type="checkbox"/> OPERATOR CHANGE                  | <input type="checkbox"/> TUBING REPAIR                 |
|   | <input type="checkbox"/> CHANGE TUBING                  | <input checked="" type="checkbox"/> PLUG AND ABANDON      | <input type="checkbox"/> VENT OR FLARE                 |
| <input checked="" type="checkbox"/> SUBSEQUENT REPORT<br>(Submit Original Form Only)<br>Date of work completion:<br>_____ | <input type="checkbox"/> CHANGE WELL NAME               | <input type="checkbox"/> PLUG BACK                        | <input type="checkbox"/> WATER DISPOSAL                |
|   | <input type="checkbox"/> CHANGE WELL STATUS             | <input type="checkbox"/> PRODUCTION (START/RESUME)        | <input type="checkbox"/> WATER SHUT-OFF                |
|   | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> RECLAMATION OF WELL SITE         | <input type="checkbox"/> OTHER: _____                  |
|   | <input type="checkbox"/> CONVERT WELL TYPE              | <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION |  |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

6-19-01 - TIH OPEN ENDED TO SET PLUG. CIRC AND CONDITION MUD FOR 5 HRS IN PREP TO SET PLUG. RIG UP HALLIBURTON & PRESSURE TEST - SET 1st PLUG 6070-5720 130 SKS. POOH WITH CEMENTED STRING - 38 STDS - 6' STANDS PLUGGED SOLID. LAID DOWN CEMENTED DRILL PIPE & CLEANED. RIH AND TAGGED CEMENT @ 5709'.

6-20-01 - WAIT ON HALLIBURTON

6-21-01 - CIRCULATE & BREAK KELLY & RIG UP HALLIBURTON - PREP TO SET PLUG #2  
SET PLUG #2 3035-2885 W 70 SKS  
PREP TO SET PLUG #3  
CEMENT PLUG #3 2223' to 1998' - 108 SKS. PLUG #4 -50' PLUG AT SURFACE -15 SKS  
RIG DOWN DRLG RIG & MOVE OFF LOC  
CUT OFF DRILL PIPE 3FT BELOW GROUND & WELDED ON PLATE FENCED IN LOCATION  
WILL RECLAIM SURFACE AFTER ALLOWING PIT TO EVAPORATE.

NAME (PLEASE PRINT) DENNIS W. YOCKIM TITLE LANDMAN  
SIGNATURE *Dennis W. Yockim* DATE 11-8-01

RECEIVED

(This space for State use only)

NOV 13 2001

DIVISION OF  
OIL, GAS AND MINING

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

AMENDED REPORT  FORM 8  
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NUMBER:  
UTU-041085

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT OR CA AGREEMENT NAME  
M049P-84690C

8. WELL NAME and NUMBER:  
DALMORE 44-23

9. API NUMBER:  
43-037-31801

10. FIELD AND POOL, OR WILDCAT  
WILDCAT

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:  
SESE 23 37S 23E

12. COUNTY SAN JUAN 13. STATE UTAH

17. ELEVATIONS (DF, RKB, RT, GL):  
GL-5578 KB-5592

21. DEPTH BRIDGE MD TVD  
PLUG SET:

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  OTHER   
1b. TYPE OF WORK: NEW WELL  HORIZ. LATS.  DEEP-EN  RE-ENTRY  DIFF. RESVR.  OTHER

2. NAME OF OPERATOR:  
PETRAL EXPLORATION LLC

3. ADDRESS OF OPERATOR: PO BOX 5083 CITY DENVER STATE CO ZIP 80217 PHONE NUMBER: 303-832-3131

4. LOCATION OF WELL (FOOTAGES)  
AT SURFACE: 230' FSL & 280' FEL  
AT TOP PRODUCING INTERVAL REPORTED BELOW:  
AT TOTAL DEPTH: 261.74' N, 40.9' E

14. DATE SPUDDED: 5-31-01 15. DATE T.D. REACHED: 6-17-01 16. DATE COMPLETED: 6-22-01  
ABANDONED  READY TO PRODUCE

18. TOTAL DEPTH: MD 6200 TVD 6189 19. PLUG BACK T.D.: MD TVD 20. IF MULTIPLE COMPLETIONS, HOW MANY? \*

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)  
DLL-LSS-DS-SDL/DSN-11-11-19-01  
MUD LOG-11-19-01

23. WAS WELL CORED? NO  YES  (Submit analysis)  
WAS DST RUN? NO  YES  (Submit report)  
DIRECTIONAL SURVEY? NO  YES  (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

| HOLE SIZE | SIZE/GRADE | WEIGHT (#/ft.) | TOP (MD) | BOTTOM (MD) | STAGE CEMENTER DEPTH | CEMENT TYPE & NO. OF SACKS | SLURRY VOLUME (BBL) | CEMENT TOP ** | AMOUNT PULLED |
|-----------|------------|----------------|----------|-------------|----------------------|----------------------------|---------------------|---------------|---------------|
| 17 1/2"   | 13 3/8K-55 | 54.50#         | SURFACE  | 88'         |                      | 1100 520 sks               | 12.1 lb/gal         | 440'          | -0-           |
| 12 1/2"   | 9 5/8K-55  | 36#            | SURFACE  | 2177        |                      |                            |                     |               | -0-           |
| 7 7/8     |            |                |          |             |                      |                            |                     |               |               |

25. TUBING RECORD

| SIZE | DEPTH SET (MD) | PACKER SET (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) |
|------|----------------|-----------------|------|----------------|-----------------|------|----------------|-----------------|
|      |                |                 |      |                |                 |      |                |                 |

26. PRODUCING INTERVALS 27. PERFORATION RECORD

| FORMATION NAME | TOP (MD) | BOTTOM (MD) | TOP (TVD) | BOTTOM (TVD) | INTERVAL (Top/Bot - MD) | SIZE | NO. HOLES | PERFORATION STATUS  |
|----------------|----------|-------------|-----------|--------------|-------------------------|------|-----------|---|
| (A)            |          |             |           |              |                         |      |           | Open <input type="checkbox"/> Squeezed <input type="checkbox"/> |
| (B)            |          |             |           |              |                         |      |           | Open <input type="checkbox"/> Squeezed <input type="checkbox"/> |
| (C)            |          |             |           |              |                         |      |           | Open <input type="checkbox"/> Squeezed <input type="checkbox"/> |
| (D)            |          |             |           |              |                         |      |           | Open <input type="checkbox"/> Squeezed <input type="checkbox"/> |

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

| DEPTH INTERVAL | AMOUNT AND TYPE OF MATERIAL |
|----------------|-----------------------------|
|                |                             |

29. ENCLOSED ATTACHMENTS:  ELECTRICAL/MECHANICAL LOGS  GEOLOGIC REPORT  DST REPORT  DIRECTIONAL SURVEY  SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION  CORE ANALYSIS  OTHER: \_\_\_\_\_

30. WELL STATUS: P&A

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31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

|                      |             |             |             |               |               |                           |            |            |              |                  |
|----------------------|-------------|-------------|-------------|---------------|---------------|---------------------------|------------|------------|--------------|------------------|
| DATE FIRST PRODUCED: |             | TEST DATE:  |             | HOURS TESTED: |               | TEST PRODUCTION RATES: →  | OIL - BBL: | GAS - MCF: | WATER - BBL: | PROD. METHOD:    |
| CHOKE SIZE:          | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU - GAS     | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL - BBL: | GAS - MCF: | WATER - BBL: | INTERVAL STATUS: |

INTERVAL B (As shown in item #26)

|                      |             |             |             |               |               |                           |            |            |              |                  |
|----------------------|-------------|-------------|-------------|---------------|---------------|---------------------------|------------|------------|--------------|------------------|
| DATE FIRST PRODUCED: |             | TEST DATE:  |             | HOURS TESTED: |               | TEST PRODUCTION RATES: →  | OIL - BBL: | GAS - MCF: | WATER - BBL: | PROD. METHOD:    |
| CHOKE SIZE:          | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU - GAS     | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL - BBL: | GAS - MCF: | WATER - BBL: | INTERVAL STATUS: |

INTERVAL C (As shown in item #26)

|                      |             |             |             |               |               |                           |            |            |              |                  |
|----------------------|-------------|-------------|-------------|---------------|---------------|---------------------------|------------|------------|--------------|------------------|
| DATE FIRST PRODUCED: |             | TEST DATE:  |             | HOURS TESTED: |               | TEST PRODUCTION RATES: →  | OIL - BBL: | GAS - MCF: | WATER - BBL: | PROD. METHOD:    |
| CHOKE SIZE:          | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU - GAS     | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL - BBL: | GAS - MCF: | WATER - BBL: | INTERVAL STATUS: |

INTERVAL D (As shown in item #26)

|                      |             |             |             |               |               |                           |            |            |              |                  |
|----------------------|-------------|-------------|-------------|---------------|---------------|---------------------------|------------|------------|--------------|------------------|
| DATE FIRST PRODUCED: |             | TEST DATE:  |             | HOURS TESTED: |               | TEST PRODUCTION RATES: →  | OIL - BBL: | GAS - MCF: | WATER - BBL: | PROD. METHOD:    |
| CHOKE SIZE:          | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU - GAS     | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL - BBL: | GAS - MCF: | WATER - BBL: | INTERVAL STATUS: |

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

33. SUMMARY OF POROUS ZONES (Include Aquifers):

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.

34. FORMATION (Log) MARKERS:

| Formation   | Top (MD) | Bottom (MD) | Descriptions, Contents, etc.  | Name   | Top (Measured Depth)   |
|-------------|----------|-------------|---|--|--|
| UPPER ISMAY | 5845     | 5950        | DST-10-60-60-240<br>PRESSURES - I.H. - 2892<br>IF - 106-263<br>ISI - 1903<br>FF - 294-632<br>FSI - 1912<br>FH - 2898<br><br>SEE CORE REPORT | HONAKER TRAIL<br>LA SAL<br>UPPER ISMAY<br>UPPER ISMAY MOUND<br>HOVENWEEP<br>GOTHIC<br>DESERT CREEK<br>AKAH | 4822<br>5508<br>5820<br>5876<br>5922<br>6030<br>6064<br>6168 |

35. ADDITIONAL REMARKS (Include plugging procedure)

SET CEMENT PLUGS @ - 6070-5720-130SKS. STD CEMENT 1%CC - TAGGED CEMENT @ 5709  
3035-2885- 70 SKS  
2223 - 2123 - 45 SKS  
SURFACE PLUG

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

NAME (PLEASE PRINT) DENNIS W. YOCKIM TITLE LANDMAN  
SIGNATURE *Dennis W. Yockim* DATE 11-5-01

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

\* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top - Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining Phone: 801-538-5340  
1594 West North Temple, Suite 1210  
Box 145801 Fax: 801-359-3940  
Salt Lake City, Utah 84114-5801

**PETRAL EXPLORATION**  
P.O. Box 5083 • Denver, CO 80217  
1700 Lincoln Street, Suite 4750 • Denver, CO 80203  
(303) 832-3131 • Fax (303) 894-9088

**CONFIDENTIAL**

December 12, 2001

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

Re: Sundry Notices and Reports on Wells

Gentlemen:

Enclosed in duplicate please find four (4) Sundry Notices and Reports on Wells on the following wells listed below for filing and subject to your approval.

**Dalmore #44-23**  
Aultmore 1-24X Federal  
Black Bull Federal #43-30  
Knockdhu Unit #8

Thank you,

Sincerely,

PETRAL EXPLORATION LLC

*Dennis W. Yockim*  
Dennis W. Yockim  
Landman

/sp  
Encl.

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DEC 17 2001

DIVISION OF  
OIL, GAS AND MINING

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

CONFIDENTIAL FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL OIL WELL  GAS WELL  OTHER \_\_\_\_\_

2. NAME OF OPERATOR: PETRAL EXPLORATION LLC

3. ADDRESS OF OPERATOR: P. O. Box 5083 CITY Denver STATE CO ZIP 80217 PHONE NUMBER: 303-832-3131

4. LOCATION OF WELL FOOTAGES AT SURFACE: 230' FSL & 280' FEL COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SESE 23 37S 23E 51M STATE: UTAH

5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-41085  
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  
7. UNIT or CA AGREEMENT NAME: CA#UTU-60789  
8. WELL NAME and NUMBER: Dalmore # 44-23  
9. API NUMBER: 43-037-31801  
10. FIELD AND POOL, OR WILDCAT: Deadman Canyon

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION   | TYPE OF ACTION  |  |  |
|--|---|--|--|
| <input checked="" type="checkbox"/> NOTICE OF INTENT<br>(Submit in Duplicate)<br>Approximate date work will start:<br>12/20/01 | <input type="checkbox"/> ACIDIZE                        | <input type="checkbox"/> DEEPEN                              | <input type="checkbox"/> REPERFORATE CURRENT FORMATION |
| <input type="checkbox"/> SUBSEQUENT REPORT<br>(Submit Original Form Only)<br>Date of work completion:                          | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> FRACTURE TREAT                      | <input type="checkbox"/> SIDETRACK TO REPAIR WELL      |
|  | <input type="checkbox"/> CASING REPAIR                  | <input type="checkbox"/> NEW CONSTRUCTION                    | <input type="checkbox"/> TEMPORARILY ABANDON           |
|  | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS       | <input type="checkbox"/> OPERATOR CHANGE                     | <input type="checkbox"/> TUBING REPAIR                 |
|  | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> PLUG AND ABANDON                    | <input type="checkbox"/> VENT OR FLARE                 |
|  | <input type="checkbox"/> CHANGE WELL NAME               | <input type="checkbox"/> PLUG BACK                           | <input type="checkbox"/> WATER DISPOSAL                |
|  | <input type="checkbox"/> CHANGE WELL STATUS             | <input type="checkbox"/> PRODUCTION (START/RESUME)           | <input type="checkbox"/> WATER SHUT-OFF                |
|  | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input checked="" type="checkbox"/> RECLAMATION OF WELL SITE | <input type="checkbox"/> OTHER: _____                  |
|  | <input type="checkbox"/> CONVERT WELL TYPE              | <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION    |  |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
Petral intends to reclaim surface and pits. Will reseed to Bureau of Land Management's specifications. Dirt work and reseeded to be done by Crawley Construction Co. of Monticello, Utah, telephone 435-587-2377. Field Supervision by Petral - Randy Shelton. Telephone 435-459-1027.

All reclamation will be in accordance with specifications outlined in APD.

COPY SENT TO OPERATOR  
Date: 12-21-01  
Initials: CHD

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OIL, GAS AND MINING

NAME (PLEASE PRINT) Dennis W. Yockim TITLE Landman  
SIGNATURE *Dennis W. Yockim* DATE 12-12-01

(This space for State use only) Accepted by the Utah Division of Oil, Gas and Mining  
Date: 12/20/01  
By: *[Signature]* (See Instructions on Reverse Side)  
Federal Approval Of This Action Is Necessary