



NEW MEXICO OIL CONSERVATION DIVISION  
 - Engineering Bureau -  
 1220 South St. Francis Drive, Santa Fe, NM 87505

Rec.  
5-30-03

ABOVE THIS LINE FOR DIVISION USE ONLY

**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Application Acronyms:**

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication  
 NSL     NSP     SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement  
 DHC     CTB     PLC     PC     OLS     OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
 WFX     PMX     SWD     IPI     EOR     PPR
- [D] Other: Specify \_\_\_\_\_

RICHARDSON'S  
 NV RACHELLE 23 #4  
 (30-045-31184)

- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or \_ Does Not Apply
- [A] Working, Royalty or Overriding Royalty Interest Owners
- [B] Offset Operators, Leaseholders or Surface Owner
- [C] Application is One Which Requires Published Legal Notice
- [D] Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate and complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name	Signature	Title	Date
BRIAN WOOD (505) 466-8120 FAX 466-9682		CONSULTANT	5-30-03
		e-mail Address	brian@permitswest.com

REQUEST FOR ADMINISTRATIVE APPROVAL FOR NON-STANDARD LOCATION  
FOR RICHARDSON OPERATING COMPANY'S  
NV RACHELLE 23 #4 GAS WELL  
435' FSL & 2050' FWL SEC. 23, T. 29 N., R. 14 W., SAN JUAN COUNTY, NM

I. The well is staked on Navajo Tribal Trust surface and on Navajo Tribal Trust lease 14-20-603-2198A. The proposed well is non-standard for the West Kutz Pictured Cliffs and the Basin Fruitland coal gas due to terrain (too steep). The well must be  $\geq 660'$  from all quarter section lines. This proposed well is 435' from the south line and 2050' from the east line of Section 23. Thus, it is 225' too far south and 70' too far west. It is non-standard to the southwest quarter of Section 23 and north half of Section 26. The APD and a Sundry Notice are attached (EXHIBIT A).

Richardson controls all Pictured Cliff and Fruitland coal gas rights in a one mile radius. All leases in a one mile + radius are Navajo Tribal Trust (see Exhibit B).

Richardson has already has staked, filed APDs, or drilled wells for all Fruitland or Pictured Cliffs offset locations (Exhibit C). Closest such well is Richardson's NV Kyle 23 #3 (30-045-31184) which is 2,265' west.

II. A C-102 (Exhibit D) showing the well location and pro ration units (solid line marking the east half = 320 acres for the Fruitland and a dashed line marking the southeast quarter = 160 acres for the Pictured Cliffs) is attached. Richardson's lease 14-20-603-2198A (= solid line) is shown on Exhibit B) of the Kirtland USGS topo map. The well is  $>7,000'$  from the closest non-Richardson operated lease or non-Tribal lease.

III. According to NM Oil Conservation Records; there is no existing or proposed production from the Fruitland or Pictured Cliffs within a 2,265' radius. Closest such well is Richardson's NV Kyle 23 #3 at 956' FSL & 1025' FWL 23-29n-14w. A copy of the Kirtland 7.5' USGS map (Exhibit C) is attached showing the proposed well site and other proposed or existing gas wells (all Richardson) within one mile. Richardson is the operator of all leases within  $>7,000'$ . Registered letters were sent on May 30, 2003 to the only affected interest owners. Copies are provided.

IV. The proposed well and Basin Fruitland coal gas pro ration unit (east half Section 23 = 320 acres) are both marked on the attached copy of the Kirtland USGS map (Exhibit E). Solid line represents the pro ration unit. Dashed line represents the drilling window.

The proposed well and Pictured Cliffs pro ration unit (southeast quarter of Section 23 = 160 acres) are both marked on Exhibit F. Solid line represents the pro ration unit. Dashed line represents the drilling window.

V. Terrain forces a non-standard location. The well was initially staked at a standard location of 1594 FSL & 1732 FEL (see Exhibit G). This was rejected because of the height of the cuts (13') and fills (13') on the pad and length (700') of road along a sandy ridge with a 10% grade. The non-standard location (435' FSL & 2050' FEL) has a maximum cut and fill of 2' each. It overlaps a plugged and abandoned Gallup oil well (NW Cha Cha Unit 34-23) beside a power line. No new road is needed since it overlaps an existing road.

VI. Archaeology is not an issue.

VII. The non-standard location is requested because of terrain. All of the drilling window is a series of steep narrow sandy ridges.

VIII. Directional drilling is not a feasible for such a shallow well.

IX. I hereby certify that notice has been sent to the following lessees, lessors, operators of spacing units, or owners of undrilled leases which adjoin the applicant's spacing unit on one or more of the two sides or the single closest corner to the proposed well and that the information is current and correct:

Navajo Nation Minerals Department  
Paul & Patricia Slayton



\_\_\_\_\_  
Brian Wood, Consultant

May 30, 2003

Date

STATE OF NEW MEXICO )  
 ) SS:  
COUNTY OF SANTA FE )

The foregoing instrument was acknowledged before me this 30th day of May, 2003 by Brian Wood. Witness my hand and official seal.

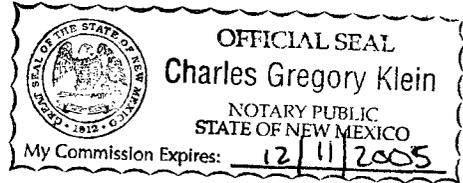
*Charles Gregory Klein*

Notary Public

My Commission Expires: 12/11/2005

Business Address: 37 VERANO LOOP, SANTA FE, NM 87508

cc: Aztec OCD, BLM, Richardson



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
**Richardson Operating Company**

3a. Address  
**3100 LaPlata Highway  
Farmington, NM 87401**

3b. Phone No. (include area code)  
**(505) 564-3100**

4. Location of Well (Finger, Sec., T., R., M., or Survey Description)  
**SURFACE: 435' FSL & 2050' FEL 23-29n-14w  
BHL: SAME**

FORM APPROVED  
OMB No. 1004-0135  
Expires November 30, 2000

5. Lease Serial No.  
**14-20-603-2198A**

6. If Indian, Allottee or Tribe Name  
**Navajo**

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

8. Well Name and No.  
**NV Rachele 23 #4**

9. API Well No.  
**30-045-31184**

10. Field and Pool, or Exploratory Area  
**W Kutz PC & Basin Fr. Coal**

11. County or Parish, State  
**SAN JUAN COUNTY, NM**

State of New Mexico  
Energy, Minerals & Mining Resources Department  
OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Form C - 102

\* ADDITIONAL POOL:  
**BASIN FRUITLAND COAL GAS**  
 AMENDED REPORT

\* ADDITIONAL POOL CODE:  
**71629**

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

APA Number	Pool Code	Pool Name
	<b>79680 *</b>	<b>WEST KUTZ PICTURED CLIFFS *</b>
Property Code	Property Name	Well Number
	<b>NV Navajo 23</b>	<b>4</b>
OGPD No.	Operator Name	Elevation
<b>019219</b>	<b>RICHARDSON OPERATING COMPANY</b>	<b>5505</b>

UL or Lot	Sec.	Top.	Rge.	Lot Id.	Feet from	North/South	Feet from	East/West	County
0	23	29. N	14. W		435'	SOUTH	2050'	EAST	SAN JUAN

UL or Lot	Sec.	Top.	Rge.	Lot Id.	Feet from	North/South	Feet from	East/West	County

NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon
	<input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. 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.)

**Add Basin Fruitland Coal Gas as additional zone.  
Otherwise, no change in down hole or surface use plans.**

cc: BIA, BLM, Jones, Tribe

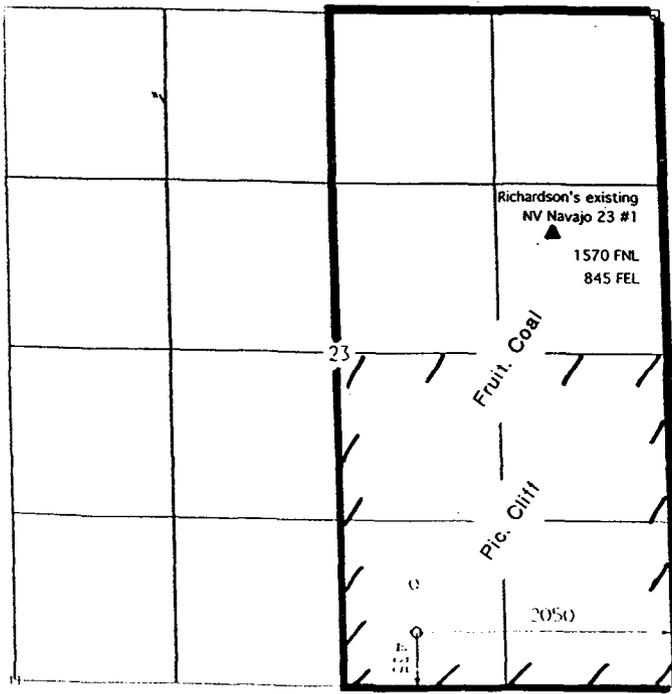
14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) <b>BRIAN WOOD</b>	Title <b>CONSULTANT (505) 466-8120</b>
Signature <i>B. Wood</i>	Date <b>5-28-03</b>

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice 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.	Office	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.



**OPERATOR CERTIFICATION**  
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature *B. Wood*

Printed Name **BRIAN WOOD**

Title **CONSULTANT**

Date **May 28, 2003**

**SURVEYOR CERTIFICATION**  
I hereby certify that the well location on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey

Signature *[Signature]*

Professional Surveyor

REGISTERED LAND SURVEYOR

6844

**EXHIBIT A**

*[Handwritten signatures]*

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**APPLICATION FOR PERMIT TO DRILL OR REENTER**

FORM APPROVED  
OMB No. 1004-0116  
Expires November 30, 2000

State of New Mexico  
Energy, Minerals & Mining Resources Department  
OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

14. Type of Work  DRILL  REENTER

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

Name of Operator  
**RICHARDSON OPERATING CO..**

16. Address **3100 LaPLATA HIGHWAY FARMINGTON, NM 87401** 17. Phone No. (include area code) **(505) 564-3100**

18. Location of Well (Report location clearly and in accordance with any State requirements. \*)  
At surface **435' FSL & 2050' FEL**  
At proposed prod. zone **SAME**

19. Distance in miles and direction from nearest town or post office\*  
**3 AIR MILES SW OF FARMINGTON**

20. Distance from proposed location\* to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) **435'**

21. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft. **1,282' (oil)**

22. Elevations (Show whether DF, KDB, RT, GL, etc.) **5,505' GL**

16. No. of Acres in lease **600**

17. Spacing Unit dedicated to this well  
**PC: 160 AC. (SE4)**

19. Proposed Depth **1,300'**

20. BLM/BIA Bond No. on file  
**#158293308 (BLM - NATIONWIDE)**

22. Approximate date work will start\*  
**UPON APPROVAL**

23. Estimated duration  
**2 WEEKS**

24. Attachments

APA Number	Pool Code	Pool Name							
	<b>79680</b>	<b>WEST KUTZ PICTURED CLIFFS</b>							
Property Code	Property Name	Well Number							
	<b>NV Navajo 23</b>	<b>4</b>							
OGRD No.	Operator Name	Elevation							
<b>019219</b>	<b>RICHARDSON OPERATING COMPANY</b>	<b>5505'</b>							
Surface Location									
UL or Lot	Sec.	Top.	Rge.	Lot Id.	Feet from	North/South	Feet from	East/West	County
<b>0</b>	<b>23</b>	<b>29, N.</b>	<b>14, W.</b>		<b>.435'</b>	<b>SOUTH</b>	<b>2050.</b>	<b>EAST</b>	<b>SAN JUAN</b>
Bottom Hole Location if Different From Surface									
UL or Lot	Sec.	Top.	Rge.	Lot Id.	Feet from	North/South	Feet from	East/West	County
Dedication	Joint ?	Consolidation	Order No.						

NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

- The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form
- 1. Well plat certified by a registered surveyor.
  - 2. A Drilling Plan.
  - 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
  - 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
  - 5. Operator certification.
  - 6. Such other site specific information and/or plans as may be required by the authorized officer.

Comments  
**Notice of Staking filed as "Navajo 23 #4"**

cc: BIA, BLM (&OCD), Richardson, Tribe

Signature *B. Wood* Name (Printed/Typed) **BRIAN WOOD** Date **8-16-02**

Title **CONSULTANT** PHONE: **505 466-8120** FAX: **505 466-9682**

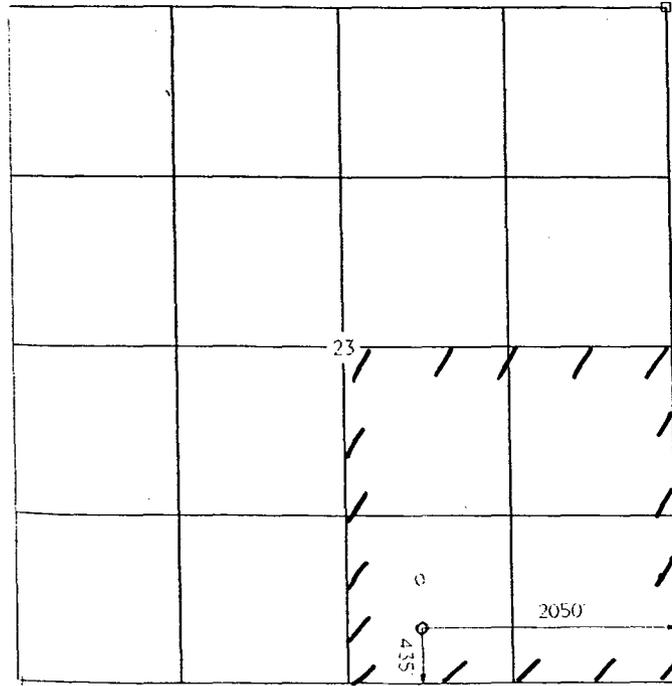
Approved by (Signature) \_\_\_\_\_ Name (Printed/Typed) \_\_\_\_\_ Date \_\_\_\_\_

Title \_\_\_\_\_ Office \_\_\_\_\_

Application approval does not warrant or certify the 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, are attached

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.



**OPERATOR CERTIFICATION**  
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature *B. Wood*  
Printed Name **BRIAN WOOD**  
Title **CONSULTANT**  
Date **AUG. 16, 2002**

**SURVEYOR CERTIFICATION**  
I hereby certify that the well location on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.  
Date of Survey \_\_\_\_\_

Signature *[Signature]*  
Professional Surveyor  
Date **AUG 16 2002**  
Registered Land Surveyor  
6844

EXHIBIT A

Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation Name</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
Kirtland Shale	000'	5'	+5,505'
Fruitland Coal	955'	960'	+4,550'
Pictured Cliffs Ss	1,060'	1,065'	+4,445'
Total Depth (TD)*	1,300'	1,305'	+4,205'

\* all elevations reflect the ungraded ground level of 5,505'

2. NOTABLE ZONES

<u>Gas Zones</u>	<u>Water Zones</u>	<u>Coal Zones</u>
Fruitland Coal	Fruitland Coal	Fruitland Coal
Pictured Cliffs		

Water zones will be protected with casing, cement, and weighted mud. Fresh water encountered during drilling will be recorded by depth, cased, and cemented. Oil and gas shows will be tested for commercial potential based on the well site geologist's recommendations.

3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. (A typical 2,000 psi model is on PAGE 3.) Double ram or annular system with a rotating head will be used. All ram preventers and related equipment will be hydraulically tested at nipple up and after any use under pressure to 1000 psi.

Blind rams will be hydraulically activated and checked for operational readiness

**EXHIBIT A**

each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. BOP equipment will include a kelly cock, floor safety valve, and choke manifold all rated to 2000 psi. Maximum expected pressure is ~440 psi.

4. CASING & CEMENT

<u>Hole Size</u>	<u>O.D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>GL Setting Depth</u>
8-3/4"	7"	20	K-55	New	120'
6-1/4"	4-1/2"	10.5	K-55	New	1,300'

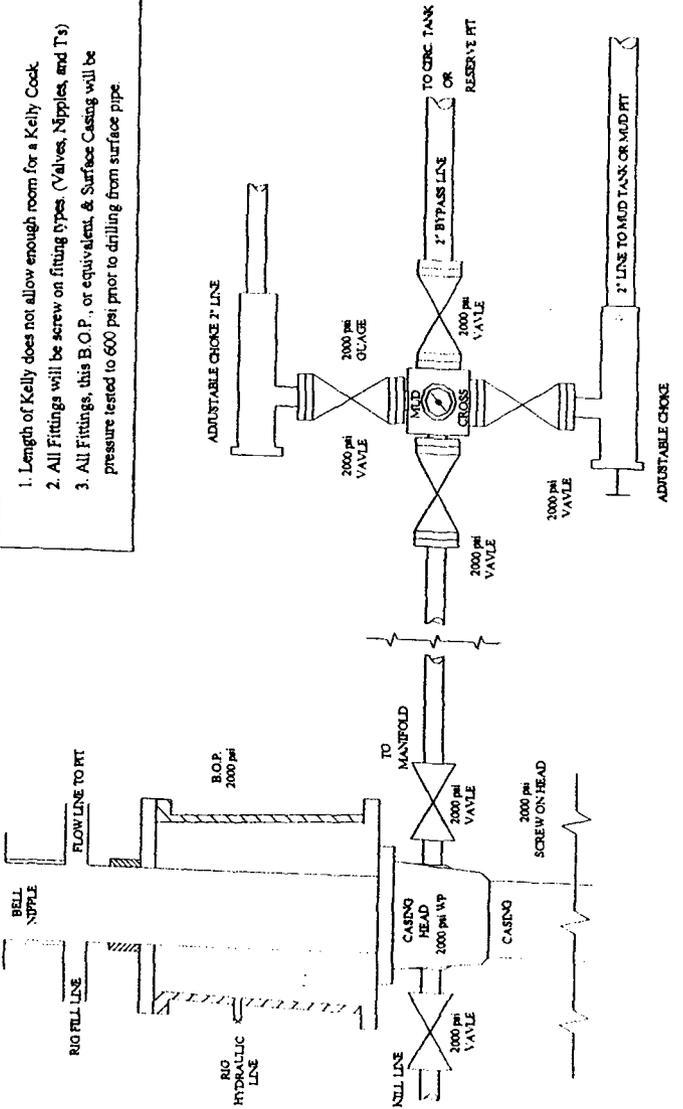
Surface casing will be cemented to surface with ~36 cu. ft. (~30 sacks) Class B + 2% CaCl<sub>2</sub>. Volume is based on 100% excess, yield of 1.18 cu. ft./sk, and slurry weight of 15.6 PPG. W.O.C. = 12 hours. Pressure test surface casing to 600 psi for 30 minutes.

Production casing hole will first be cleaned of rock chips by circulating at least 150% of hole volume with mud to the surface. Thirty barrels of fresh water will next be circulated. Lead with ~155 cubic feet (~75 sacks) Class B with 2% metasilicate (yield = 2.06 cubic feet per sack, slurry weight = 12.5 pounds per gallon). Tail with ~95 cubic feet (~80 sacks) of Class B with 2% CaCl<sub>2</sub> (yield = 1.18 cubic feet per sack, slurry weight = 15.6 pounds per gallon). Total cement volume is ~250 cubic feet based on 75% excess and circulating to surface.

Production casing will have 4-1/2" cement guide shoe and self fill float collar. Float will be placed one joint above the shoe. Five centralizers will be spaced on every other joint starting above the shoe. Five turbolizers will be placed on every other joint starting from the top of the well.

# BLOW OUT PREVENTER (B.O.P.)

- Notes:
1. Length of Kelly does not allow enough room for a Kelly Cock
  2. All Fittings will be screw on fitting types. (Valves, Nipples, and Ts)
  3. All Fittings, this B.O.P., or equivalent, & Surface Casing will be pressure tested to 600 psi prior to drilling from surface pipe



\*\* 2000 psi Rubber hose will be used from Well Head to Manifold & from Well Head to Kill Line.

EXHIBIT A

Richardson Operating Co.  
 NV Rachele 23 #4  
 435' FSL & 2050' FEL  
 Sec. 23, T. 29 N., R. 14 W.  
 San Juan County, New Mexico

5. MUD PROGRAM

Surface casing hole will be drilled with fresh water. Production casing hole will be drilled with a fresh water polymer mud. Weighting material will be drill solids or, if needed, barite. Maximum expected mud weight will be 8.7 pounds per gallon. Sufficient material to maintain mud properties, control lost circulation, and contain a blowout will be available at the well while drilling.

6. CORING, TESTING, & LOGGING

No cores or drill stem tests are planned. Induction/GR and density log will be run from TD to surface.

7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum pressure will be ~520 psi.

8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take four days to drill and one week to complete the well.

Richardson Operating Co.  
NV Rachele 23 #4  
435' FSL & 2050' FEL  
Sec. 23, T. 29 N., R. 14 W.  
San Juan County, New Mexico

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### Surface Use Plan

#### 1. DIRECTIONS & EXISTING ROADS (See PAGES 9 & 10)

From the San Juan River bridge in southwest Farmington ...  
Go southwest on NM 371 to the equivalent of Milepost 105.9  
Then turn right and go W 2.4 miles on paved N-36  
Then turn left and go S 0.9 miles on N-363 (NM State University Road)  
Then turn left at a white gate and go SE 0.5 mi. to the proposed well

Roads will be maintained to a standard at least equal to their present condition.

#### 2. ROAD TO BE BUILT OR UPGRADED

No new road will be built. No road will be upgraded.

#### 3. EXISTING WELLS (See PAGE 10)

Three gas wells, six oil wells, and seven plugged and abandoned wells are within a mile radius. There are no water or disposal wells within a mile according to NM Oil Conservation Division and NM State Engineer office records.

#### 4. PROPOSED PRODUCTION FACILITIES (See PAGES 13 & 14)

A meter run and separator will be installed on the pad. Surface equipment will be painted a flat tan or juniper green color. Two ~4" O. D. SDR-11 polyethylene pipelines will be buried by Richardson in one ~36" deep trench. The trench will run west 2,415.10' to Richardson's NV Kyle 23 #3. Gas line will operate at ~50 psi. Water line will operate ~60 psi. Test pressure will be ~128 psi. Test

Richardson Operating Co.  
NV Rachele 23 #4  
435' FSL & 2050' FEL  
Sec. 23, T. 29 N., R. 14 W.  
San Juan County, New Mexico

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medium will be the well's own gas and water. Water will be discharged into the reserve pit. Burst pressure is 630 psi at 60° Celsius. Wall thickness is 0.318". Joints will be heat fused. Route will be posted with markers.

#### 5. WATER SUPPLY

Water will be trucked from a private water source in Farmington.

#### 6. CONSTRUCTION MATERIALS & METHODS

NM One Call (1-800-321-ALERT), NAPI, and Kenson will be notified before construction starts. Soil and brush will be stripped and stored east of the pit. A minimum 12 mil plastic liner will be installed in the reserve pit.

#### 7. WASTE DISPOSAL

All trash will be placed in a portable trash cage and hauled to the county landfill. There will be no trash burning. Once dry, contents of the reserve pit will be buried in place. Human waste will be disposed of in chemical toilets. Toilet contents will be hauled to an approved dump station.

#### 8. ANCILLARY FACILITIES

There will be no air strips or camps. Camper trailers may be on location for the company man, tool pusher, or mud logger.

#### 9. WELL SITE LAYOUT

EXHIBIT A

Richardson Operating Co.  
NV Rachele 23 #4  
435' FSL & 2050' FEL  
Sec. 23, T. 29 N., R. 14 W.  
San Juan County, New Mexico

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See Pages 11 and 12 for depictions of the well pad, cross section, cut and fill diagram, reserve pit, trash cage, access onto the location, parking, living facilities, and rig orientation.

#### 10. RECLAMATION

Reclamation starts once the reserve pit is dry. It usually takes a year for a reserve pit to fully evaporate, at which point it will be filled. The pad and filled pit will be contoured to a natural appearance, soil spread evenly over disturbed areas, and disturbed areas ripped or harrowed. BLM's "down south" (aka, dry or low mix or mix #2) seed mix (below) will be drilled at a depth and time to be determined by BLM.

4 pounds per acre western wheatgrass  
2-1/2 pounds per acre Indian ricegrass  
1-1/2 pound per acre blue grama grass  
0.1 pound pr acre antelope bitter brush  
1/4 pound per acre four wing salt bush  
1 pound per acre small burnet

If the well is a producer, then the pipeline route, reserve pit, and any other areas not needed for work overs will be reclaimed as described.

#### 11. SURFACE OWNER

The project is on Navajo Tribal Trust surface. Project Review Office phone is (928) 871-7040. Address is P. O. Box 9000, Window Rock, Az. 86515.

#### 12. OTHER INFORMATION

The nearest hospital is a 15 minute drive away in southwest Farmington.

**PERMITS WEST** INC.  
PROVIDING PERMITS TO LAND OWNERS

EXHIBIT A

Richardson Operating Co.  
NV Rachele 23 #4  
435' FSL & 2050' FEL  
Sec. 23, T. 29 N., R. 14 W.  
San Juan County, New Mexico

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#### 13. REPRESENTATION

Anyone having questions concerning the APD should call:

Brian Wood, Consultant  
Permits West, Inc.  
37 Verano Loop  
Santa Fe, NM 87508  
(505) 466-8120

FAX: (505) 466-9682

Cellular: (505) 699-2276

Field representative will be:

David Richardson  
Richardson Operating Co.  
3100 LaPlata Highway  
Farmington, NM 87401  
(505) 564-3100

FAX: (505) 564-3109

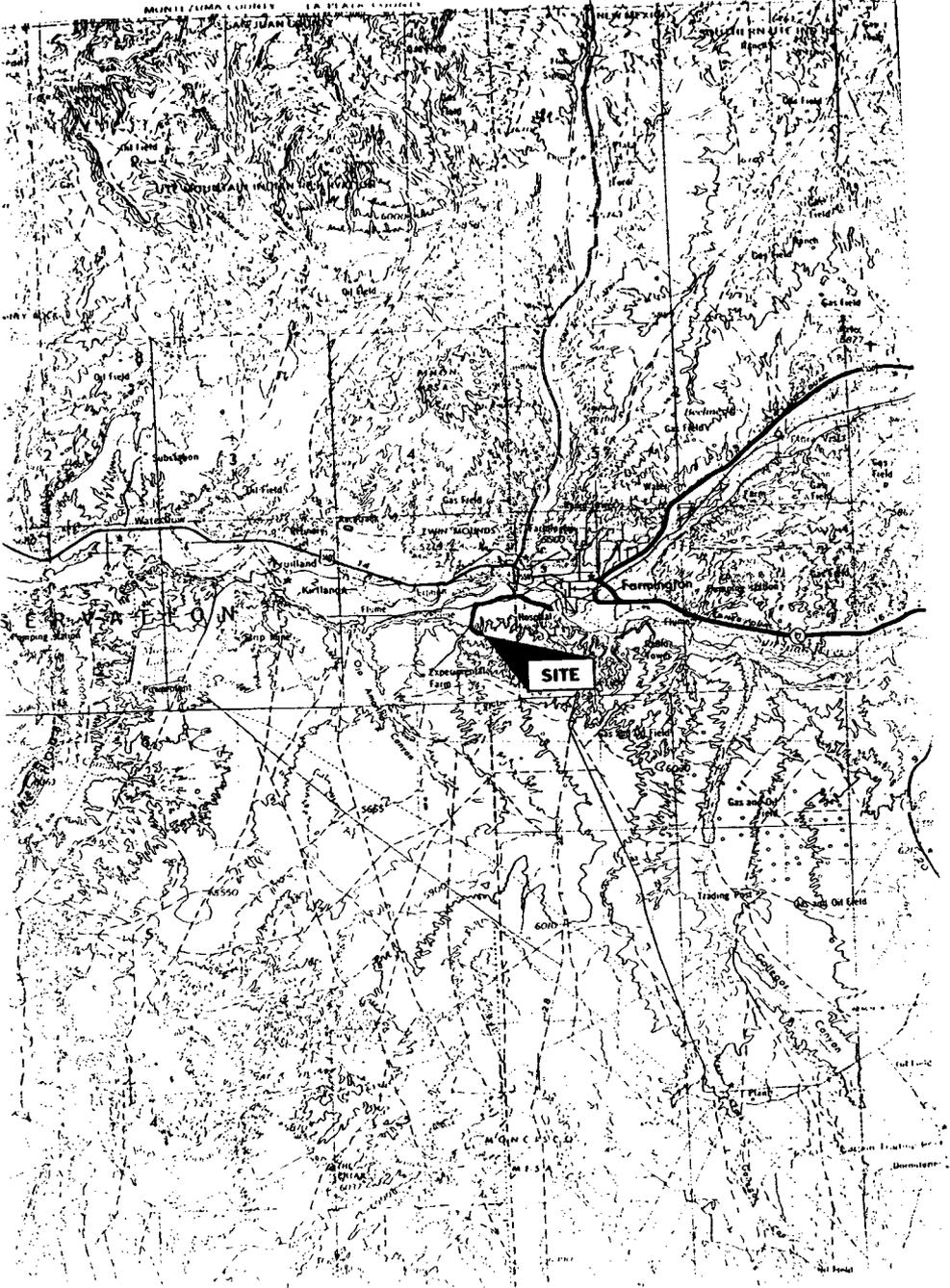
Richardson Operating Co. has the necessary consents from the proper lease owners to conduct lease operations in conjunction with this well. Bond coverage pursuant to 43 CFR 3104 for lease activities and operations is being provided by Richardson Operating Co. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Richardson Operating Co. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U. S. C. 1001 for the filing of a false statement.

  
\_\_\_\_\_  
Brian Wood, Consultant

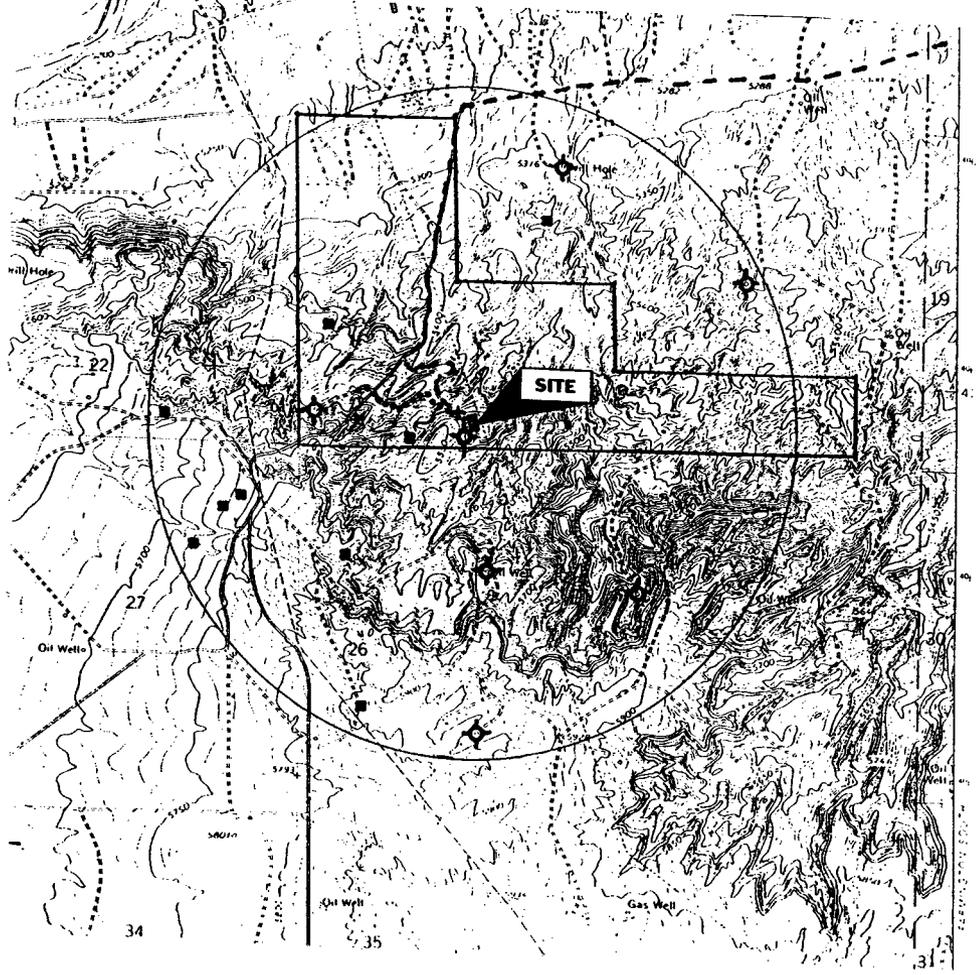
August 16, 2002

Date

**PERMITS WEST** INC.  
PROVIDING PERMITS TO LAND OWNERS



Richardson Operating Co.  
 NV Rachelle 23 #4  
 435' FSL & 2050' FEL  
 Sec. 23, T. 29 N., R. 14 W.  
 San Juan County, New Mexico



- PROPOSED WELL: ■
- EXISTING WELL: ■
- P & A WELL: ⊕
- PROPOSED PIPELINES: ····
- EXISTING ROAD: - - - -
- LEASE: ▭

**PERMITS WEST** INC.  
 PROVIDING PERMITS FOR LAND USERS

EXHIBIT A

Richardson Operating Co.  
 NV Rachele 23 #4  
 435' FSL & 2050' FEL  
 Sec. 23, T. 29 N., R. 14 W.  
 San Juan County, New Mexico

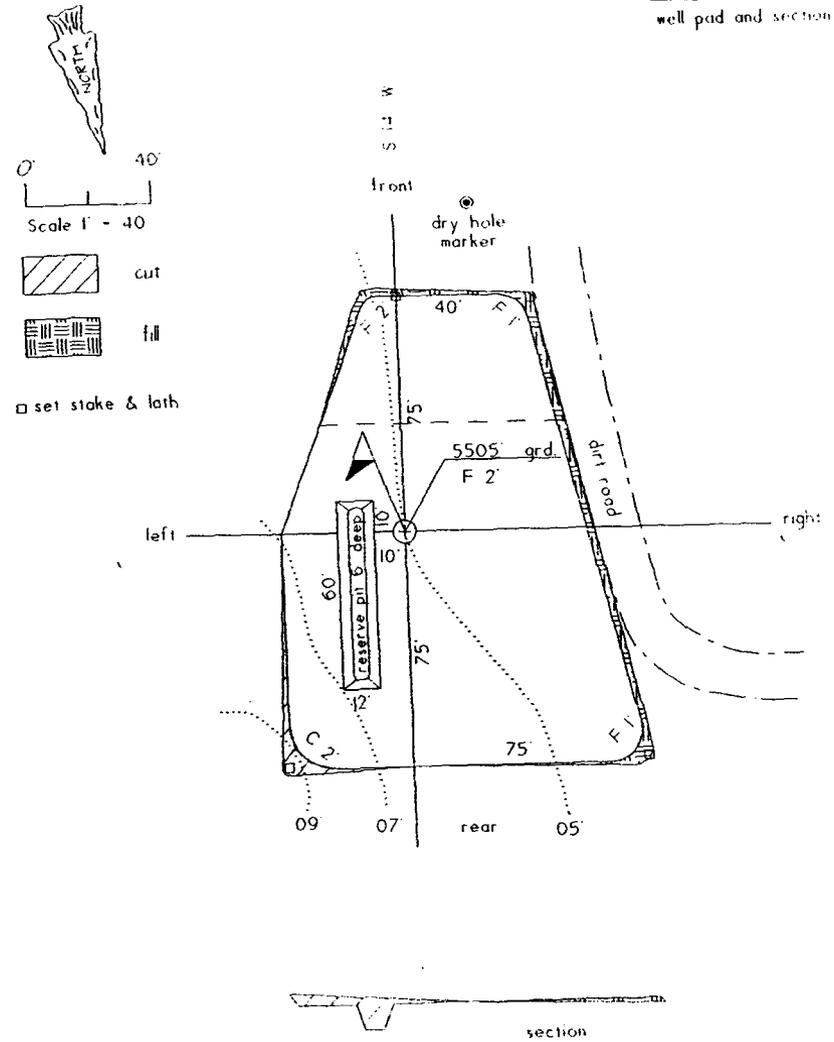
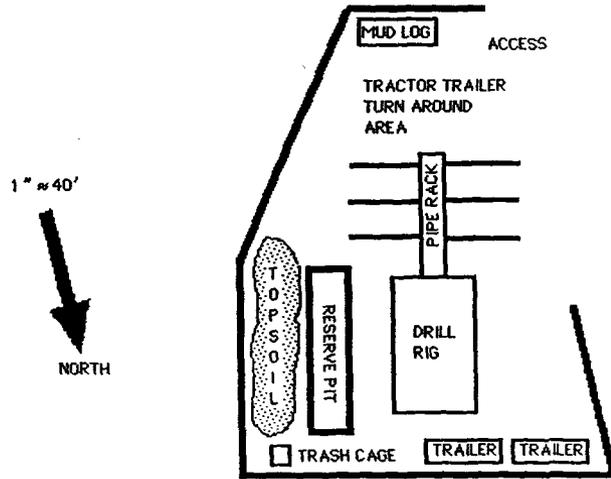
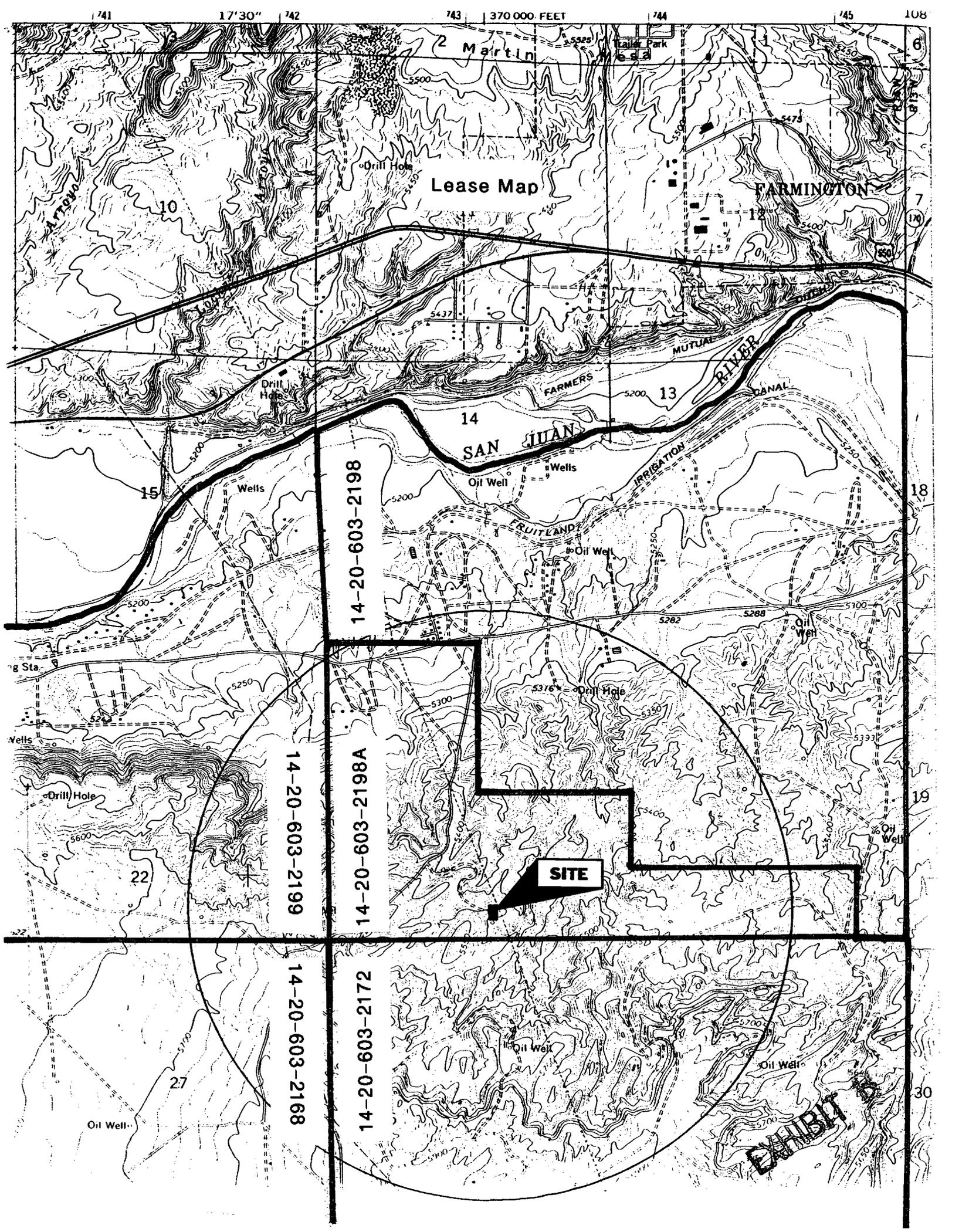


EXHIBIT A





Lease Map

FARMINGTON

SAN JUAN

SITE

EXHIBIT

14-20-603-2198

14-20-603-2199

14-20-603-2198

14-20-603-2168

14-20-603-2172

Martin

Walker Park

MUTUAL RIVER

FARMERS

FRUITLAND

IRRIGATION CANAL

Oil Well

Wells

Oil Well

Oil Well

Drill Hole

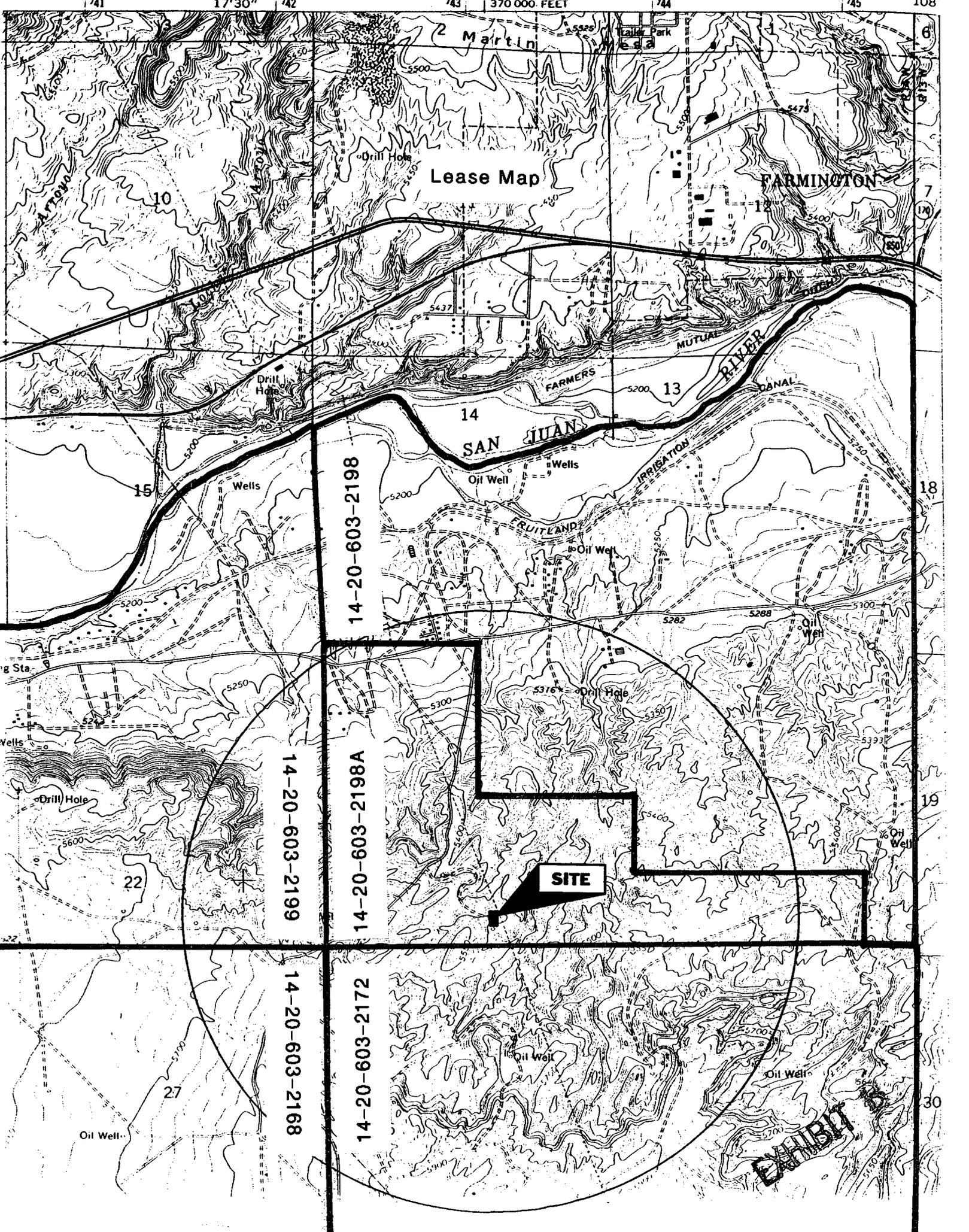
Drill Hole

Oil Well

Oil Well

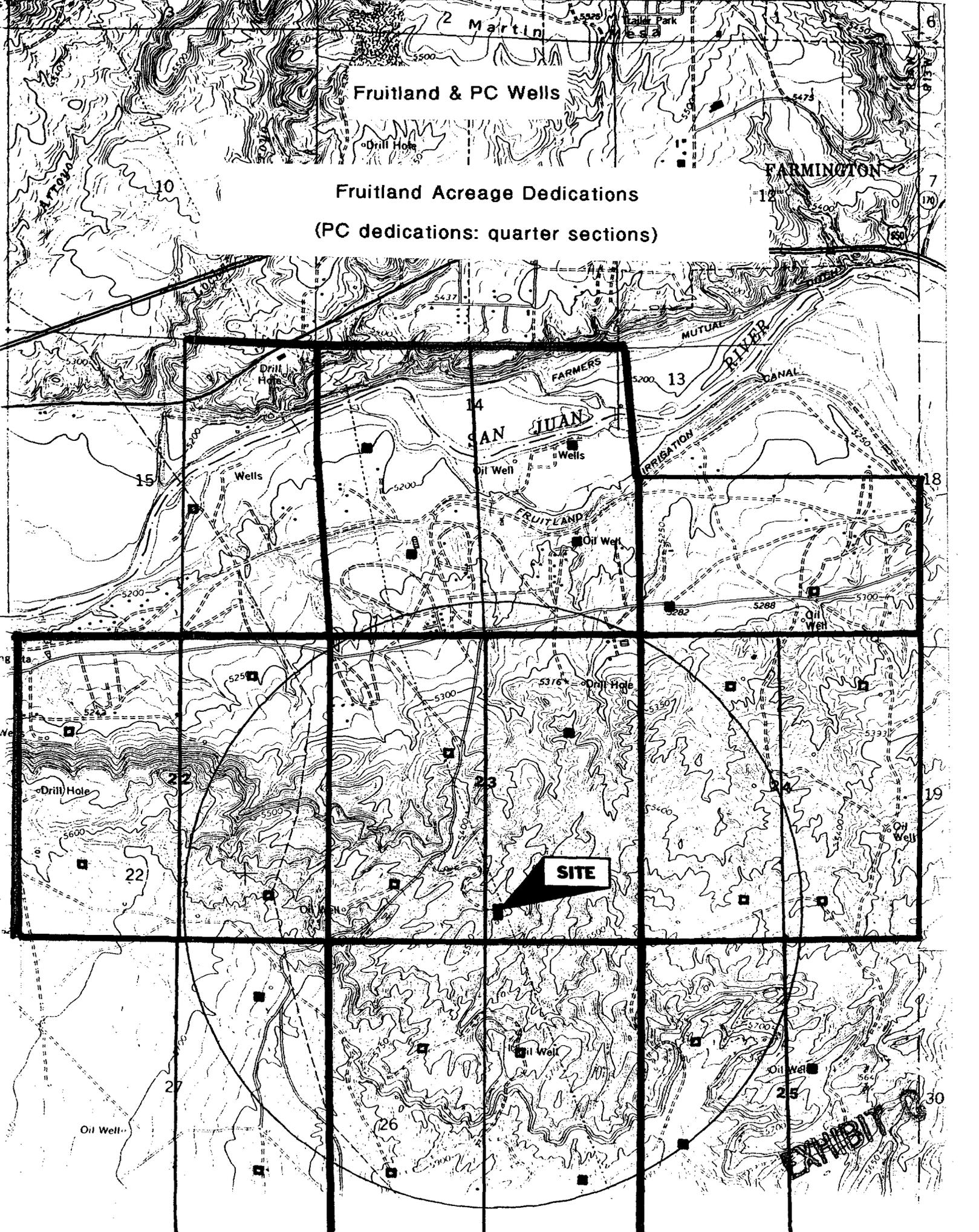
Oil Well

Oil Well



# Fruitland & PC Wells

## Fruitland Acreage Dedications (PC dedications: quarter sections)



**EXHIBIT**

State of New Mexico  
 Energy, Minerals & Mining Resources Department  
 OIL CONSERVATION DIVISION  
 2040 South Pacheco  
 Santa Fe, NM 87505

Form C - 102

\* ADDITIONAL POOL CODE:  
 71629

\* ADDITIONAL POOL:  
 BASIN FRUITLAND COAL GAS  
 AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

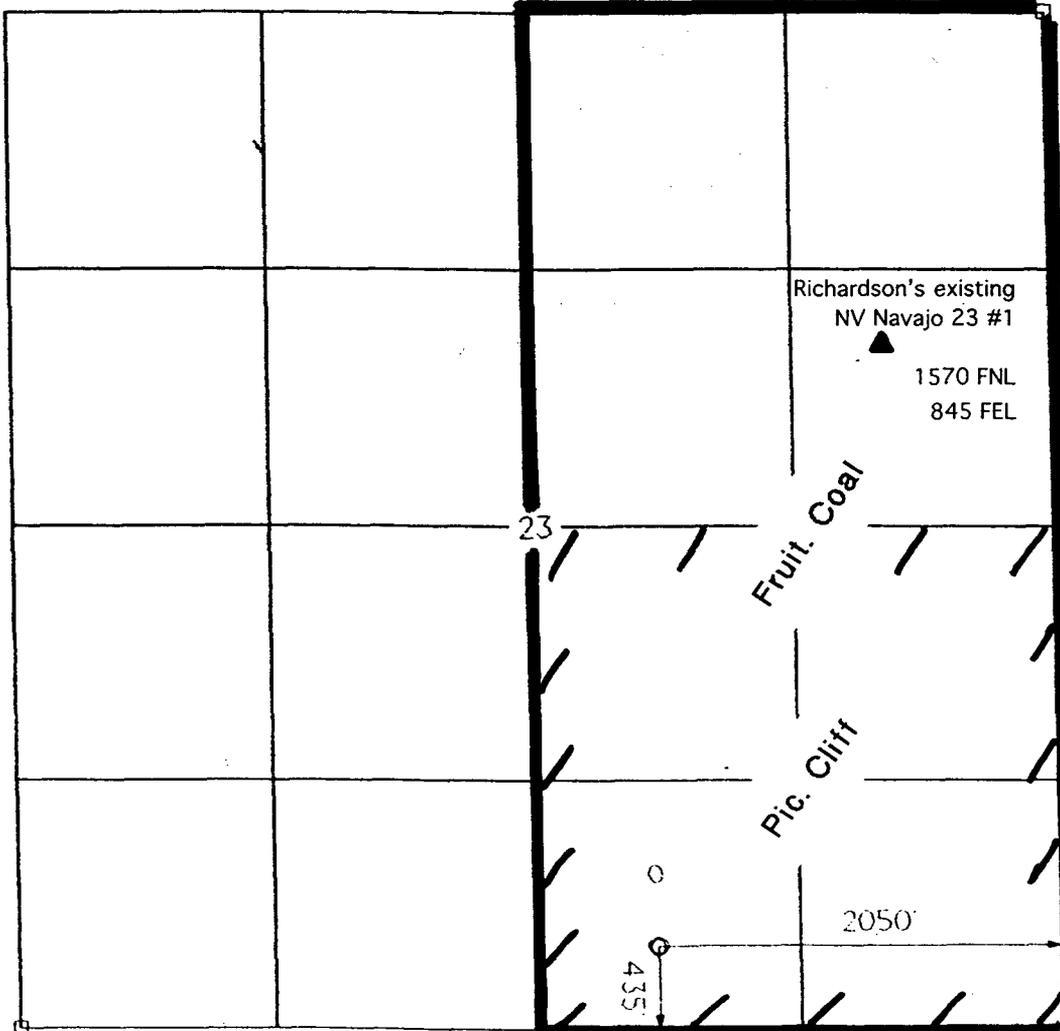
APA Number	Pool Code	Pool Name
	79680 *	WEST KUTZ PICTURED CLIFFS *
Property Code	Property Name	Well Number
	NV Navajo 23	4
OGRID No.	Operator Name	Elevation
019219	RICHARDSON OPERATING COMPANY	5505'

Surface Location									
UL or Lot	Sec.	Twp.	Rge.	Lot Idn.	Feet from >	North/South	Feet from >	East/West	County
0	23	29.N.	14.W.		.435'	SOUTH	2050.	EAST	SAN JUAN

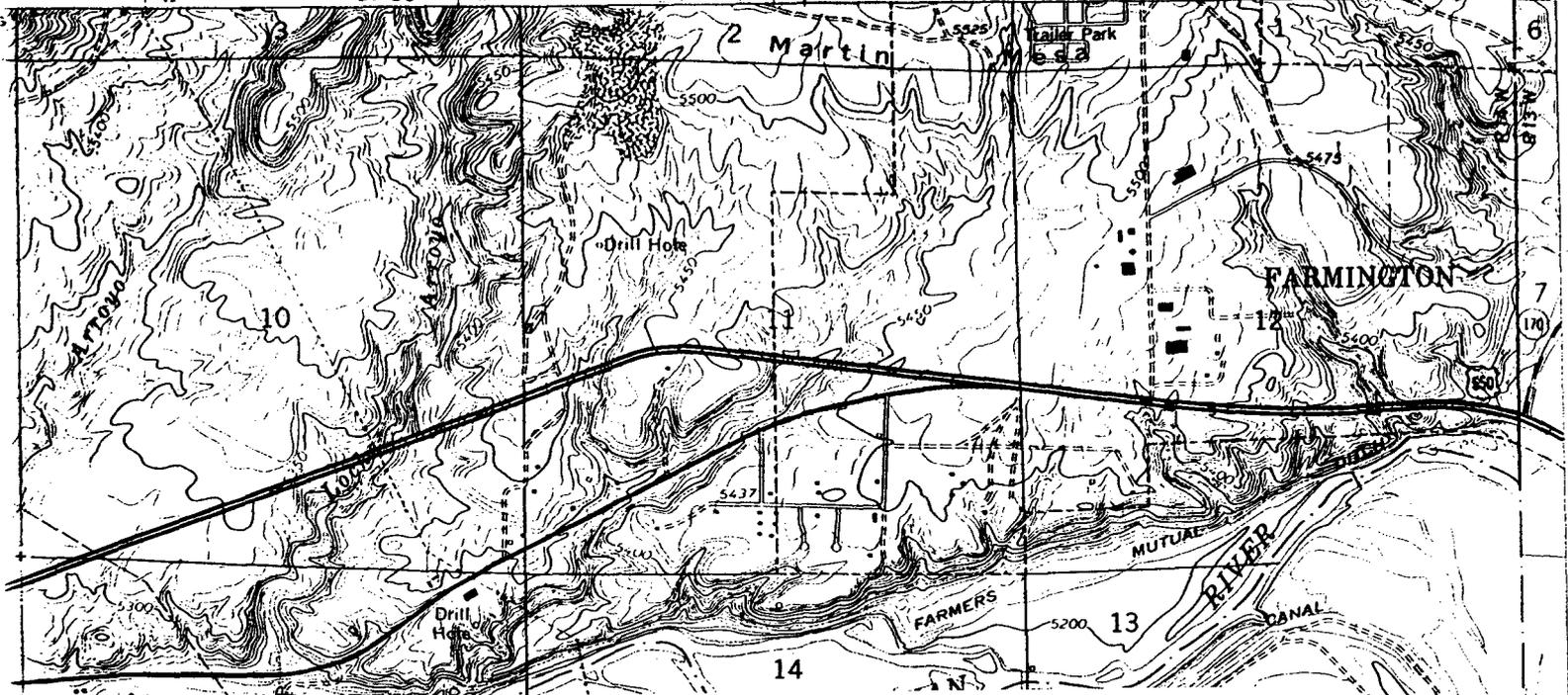
Bottom Hole Location if Different From Surface									
UL or Lot	Sec.	Twp.	Rge.	Lot Idn.	Feet from >	North/South	Feet from >	East/West	County

Dedication	Joint ?	Consolidation	Order No.

NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
 OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



<b>OPERATOR CERTIFICATION</b>	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
Signature	<i>B. Wood</i>
Printed Name	BRIAN WOOD
Title	CONSULTANT
Date	May 28, 2003
<b>SURVEYOR CERTIFICATION</b>	
I hereby certify that the well location on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.	
Date of Survey	



Fruitland Drilling Window (dashed)

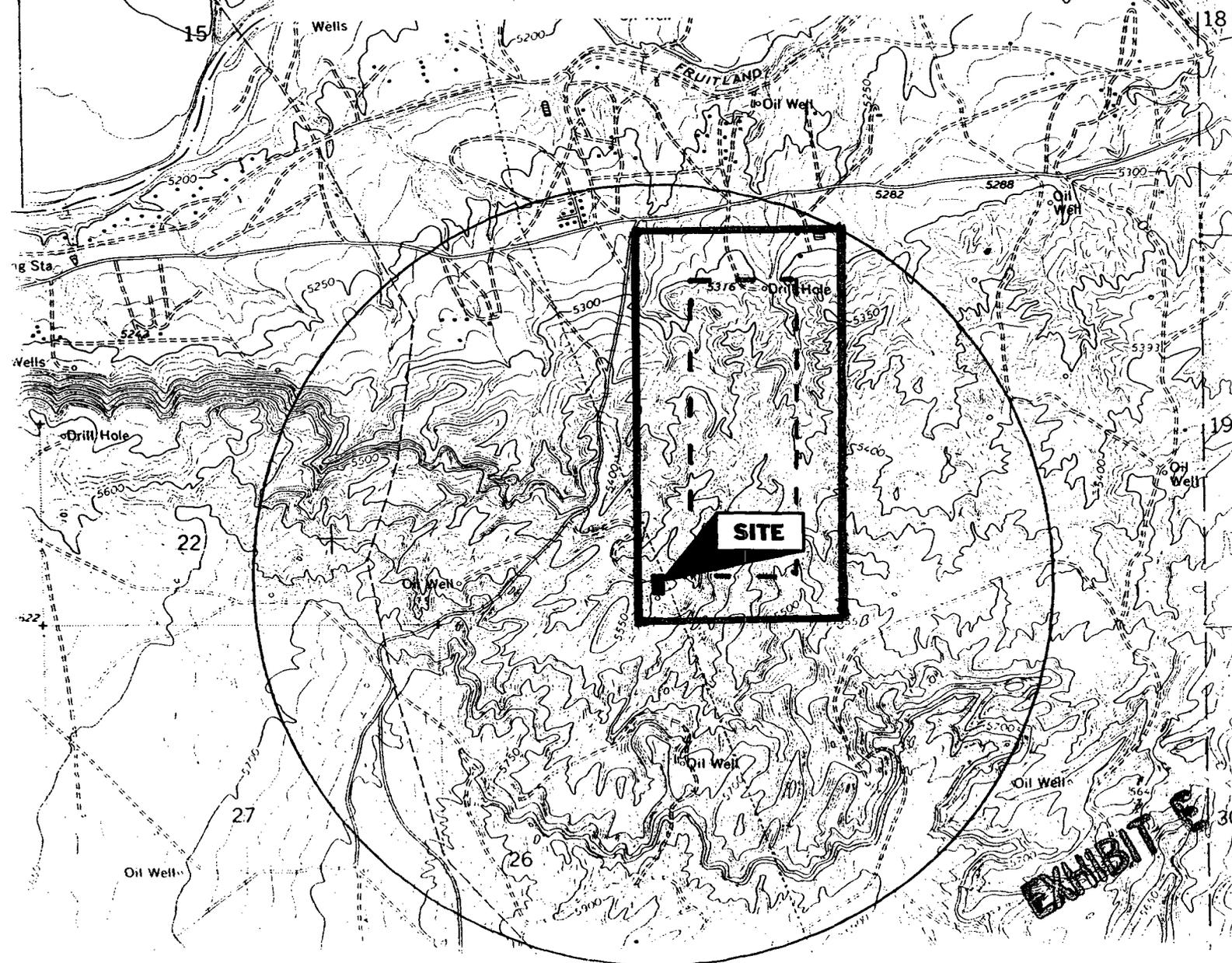
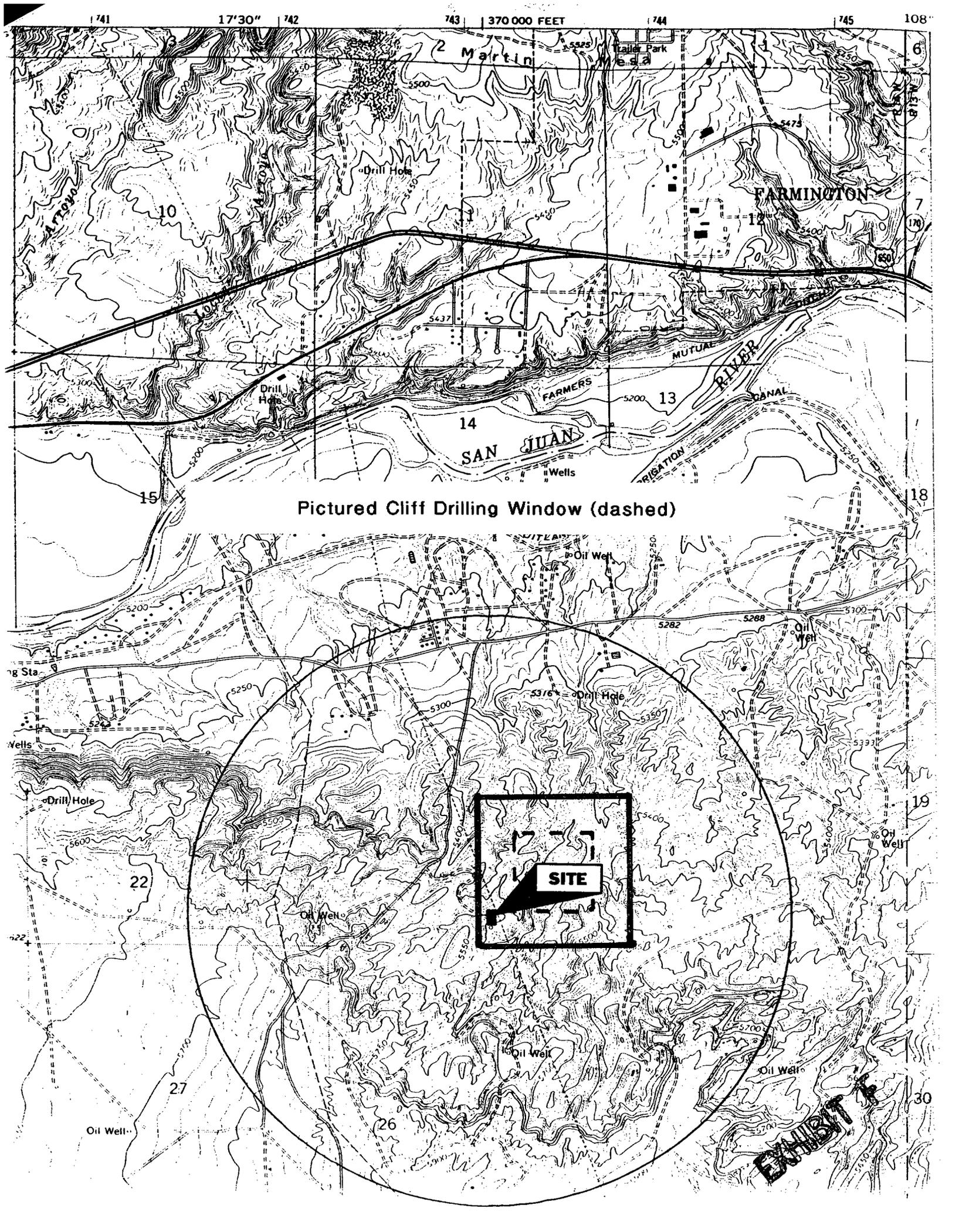


EXHIBIT E



1741 17'30" 742 743 370 000 FEET 744 745 108

MARTIN

FARMINGTON

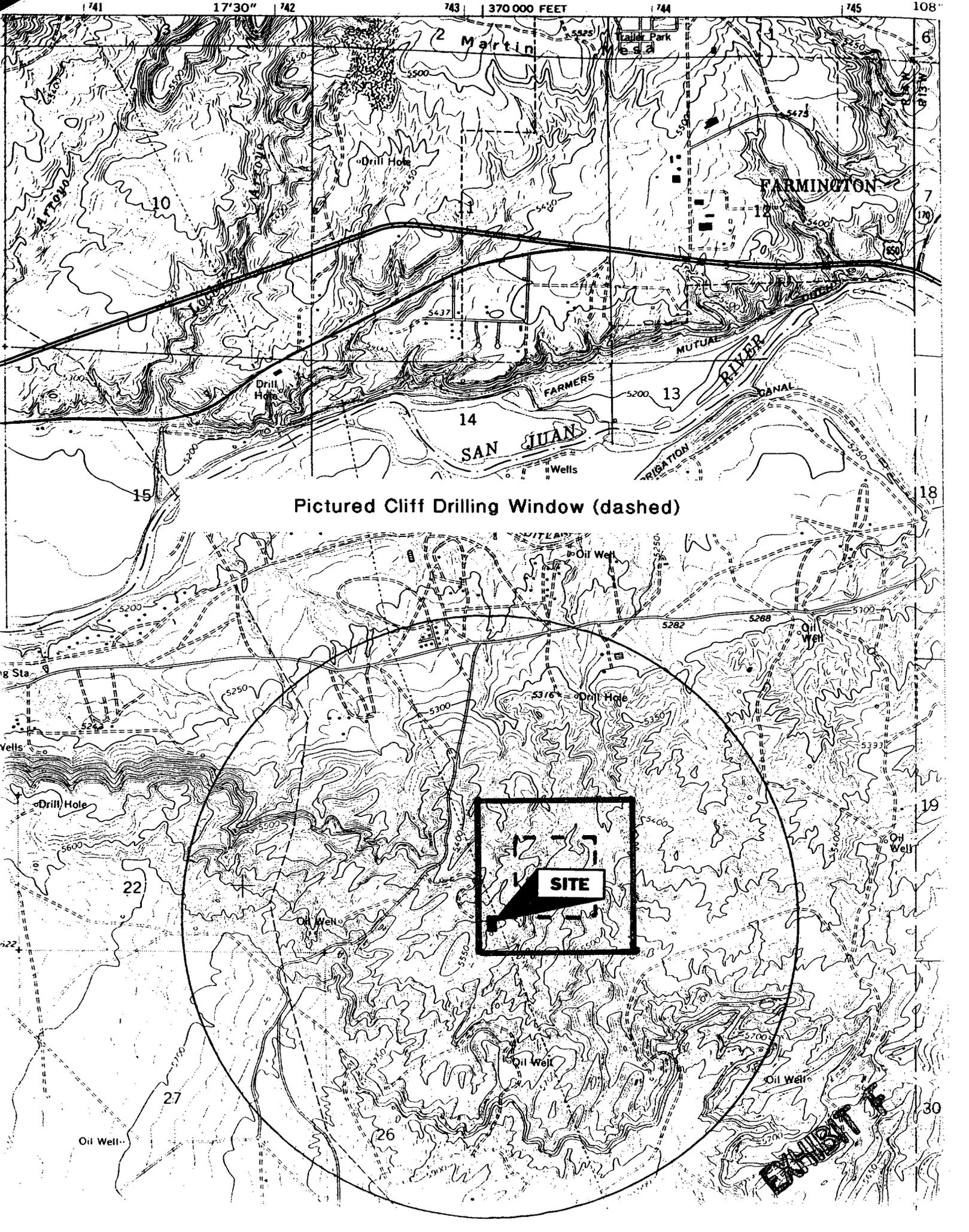
SAN JUAN RIVER

MUTUAL RIVER

Pictured Cliff Drilling Window (dashed)

SITE

EXHIBIT A





**PERMITS WEST**, INC.  
PROVIDING PERMITS for LAND USERS  
37 Verano Loop, Santa Fe, New Mexico 87508 (505) 466-8120

May 29, 2003

Akhtar Zaman  
Minerals Dept.  
P. O. Box 1910  
Window Rock, Az. 86515

Dear Akhtar,

As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following non-standard location for a well. This letter is a notice only. No action is needed unless you have questions or objections.

Richardson Operating Company is applying to drill its NV Rachelle 23 #4 gas well. Such a gas well must be  $\geq 660'$  from a quarter section line. Due to surface conditions (steep sandy terrain), the well is 225' too far south and 70' too far west. Thus, it is a non-standard location. The proposed well is 2,265' from the closest existing or proposed gas well (Richardson's NV Kyle 23 #). See attached map for more details.

Well Name: NV Rachelle 23 #4

Total Depth: 1,300'

Proposed Producing Zones: Fruitland coal gas & Pictured Cliffs sandstone

Acreage Dedication: Fruitland: E2 Sec. 23 & PC SE4 Sec. 23

Location: 435' FSL & 2050' FEL Sec. 23, T. 29 N., R. 14 W.,

San Juan County, NM on Tribal lease 14-20-603-2198A

Approximate Location:  $\approx 3$  air mile southwest of Farmington, NM

Applicant Name: Richardson Operating Company (505) 564-3100

Applicant's Address: 3100 LaPlata Highway, Farmington, NM 87401

Submittal Information: Application for a non-standard location will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 S. St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

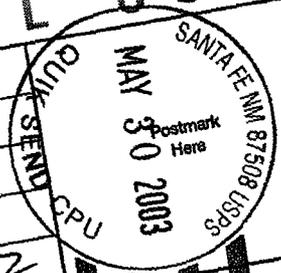


U.S. Postal Service  
**CERTIFIED MAIL RECEIPT**  
(Domestic Mail Only; No Insurance Coverage Provided)

**OFFICIAL USE**

2529  
2876  
0000  
0940  
2002

Postage	\$ .37
Certified Fee	2.30
Return Receipt Fee (Endorsement Required)	1.75
Restricted Delivery Fee (Endorsement Required)	
<b>Total Postage &amp; Fees</b>	<b>\$ 4.42</b>



Sent To Minerals Dept  
Street, Apt. No., or PO Box No. PO Box 1910  
City, State, ZIP+4 Window Rock AZ 86515

# **PERMITS WEST**, INC.

PROVIDING PERMITS for LAND USERS

17 Verano Loop, Santa Fe, New Mexico 87508

(505) 466-8120

May 29, 2003

Paul & Patricia Slayton  
P. O. Box 1936  
Roswell, NM 88202

Dear Mr. & Ms. Slayton:

As required by New Mexico Oil Conservation Division Rules, I am notifying you of the following non-standard location for a well. This letter is a notice only. No action is needed unless you have questions or objections.

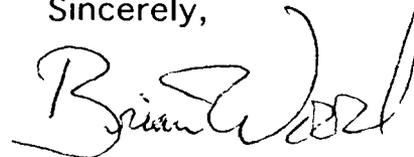
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Proposed Producing Zones: Fruitland coal gas & Pictured Cliffs sandstone  
Acreage Dedication: Fruitland: E2 Sec. 23 & PC SE4 Sec. 23  
Location: 435' FSL & 2050' FEL Sec. 23, T. 29 N., R. 14 W.,  
San Juan County, NM on Tribal lease 14-20-603-2198A  
Approximate Location:  $\approx 3$  air mile southwest of Farmington, NM  
Applicant Name: Richardson Operating Company (505) 564-3100  
Applicant's Address: 3100 LaPlata Highway, Farmington, NM 87401

Submittal Information: Application for a non-standard location will be filed with the NM Oil Conservation Division. If they determine the application complies with the applicable regulations, then it will be approved. The New Mexico Oil Conservation Division address is 1220 S. St. Francis Dr., Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

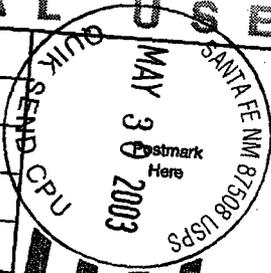
Sincerely,



U.S. Postal Service  
**CERTIFIED MAIL RECEIPT**  
(Domestic Mail Only. No Insurance Coverage Provided)

**OFFICIAL USE**

Postage	\$ .37
Certified Fee	2.30
Return Receipt Fee (Endorsement Required)	1.75
Restricted Delivery Fee (Endorsement Required)	
<b>Total Postage &amp; Fees</b>	<b>\$ 4.42</b>



**Sent To**  
P + P Slayton  
**Street, Apt. No.,  
or PO Box No.** PO Box 1936  
**City, State, ZIP+ 4** Roswell NY 88202

7002 0460 0940 2001  
515  
916  
0000