

# dugan production corp.

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March 2, 2000

Ms. Lori Wrotenbery  
New Mexico Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

Re: Application for Administrative Approval of  
Unorthodox Location for Dugan Production Corp's. Carpenter Com # 90  
1767' FSL & 280' FWL (NW/4 SW/4)  
Unit L, Section 25, T30N, R14W  
San Juan County, New Mexico  
Basin Fruitland Coal Pool

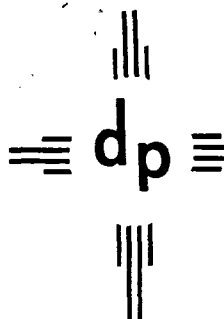
Dear Ms. Wrotenbery:

Recently, Dugan Production submitted an application to the New Mexico Oil Conservation Division for administrative approval of an unorthodox location (necessitated by topographic conditions) for the Carpenter Com # 90. The application was rejected based on the Oil Conservation Division's opinion that an existing well pad at a standard location was available and suitable for usage by the operator. The Oil Conservation stated that "staking the proposed Carpenter Com. Well No. 90 on an existing well pad would serve to minimize surface resource damage and/or avoid the topographic conditions mentioned" in our original application. Two well bores occupy the existing well pad that the NMOCD was referring to, the producing Carpenter #1 and the plugged and abandoned Carpenter #2.

Dugan Production expressed their concern with the NMOCD's opinion and provided additional information to support the need for the unorthodox location. However, in it's final decision, the NMOCD failed to recognize the following concerns of the operator:

1. Topographic problems with the Carpenter #1 and Carpenter #2 well pad.
2. Minimizing risk to an existing well bore.
3. Minimizing surface resource damage.
4. Maximizing efficient development of the Fruitland coal gas resource.

The first concern is that the existing topographic conditions at the Carpenter #1 and Carpenter #2 well pad create difficult operation problems that will be expensive, unnecessary and wasteful to deal with. This well pad is merely a small island of flat terrain (roughly 300-feet in diameter), that is surrounded by a sea of very rough, Bad



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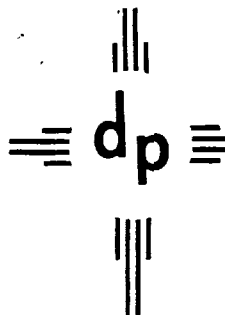
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Lands type topography. To operate a Fruitland coal well here, a considerable amount of expensive dirt work would be required in order to make the pad useable. The produced water from the well (150 - 250 bls per day) would have to be either pipelined to our gathering system (1/2 mile away) across very rough terrain, or, the access road would have to be improved and graveled (2-miles) in order to provide year round access to haul the produced water to our injection facility (five miles away). Also, a large 3-stage compressor would be required at the well site in order to produce into El Paso's high-pressure pipeline. However, if allowed to build our location at the unorthodox site, a minimal amount of dirt work would be necessary to build the pad and only a short distance (1/4 mile) of pipeline across flat terrain would be needed in order to transport the produced gas and water to our existing, centralized compression and injection facilities.

The second concern of Dugan Production is to minimize risk exposure to the producing, Carpenter #1 well bore (38-years old). The Carpenter #1 was cemented across the deeper, productive Dakota and Gallup zones only. It has a history of shallow casing problems and does not have any cement across the Fruitland coal zone. To locate a coal well within 500-feet of this Dakota producer is a risk that our sound engineering practices will not allow us to willingly take. The well bore could be damaged or lost, the remaining Dakota reserves would be left in the ground and the expense of our frac could be wasted if we were forced to drill and frac the Fruitland coal within close proximity to it. Only careless and reckless engineering would recommend that a Fruitland coal well be drilled and frac'd on this well pad.

Another concern of Dugan Production is to minimize destruction of the wonderful surface resource that this unusual topography provides for the Farmington community. This area referred to as the Cottonwood Wash area being unique and close to town, is a very popular area for outdoors-recreational activities like hiking, bicycling and horseback riding. An employee of Dugan Production that lives close to this area has seen 3 - 4 different cars in the parking lot on a daily basis and as many as 15 - 20 on any given weekend. The primary trail that people use in and out of this area is the access road for the Carpenter #1. As noted earlier, this road would have to be improved to accommodate the water trucks. However, the road is very crooked with several blind corners along its length. Serious safety problems will occur if water trucks, bicycles and horseback riders are forced to share the same road. Also, a large compressor at the head of the wash would destroy the peaceful serenity of this region that many people come to enjoy.

The final concern of Dugan Production is to maximize efficient development of the Fruitland coal gas reserve. The topography of the subject area and our reluctance to put an existing well bore at risk make it difficult to drill our well at the site recommended by the New Mexico Oil Conservation Division. If we are not allowed to drill our Fruitland



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coal well at the proposed, unorthodox location we will be forced to take a very close look at the economics and determine if they will justify drilling at the location that the NMOCD is recommending. If they do not, the Fruitland coal gas reserves will not be developed.

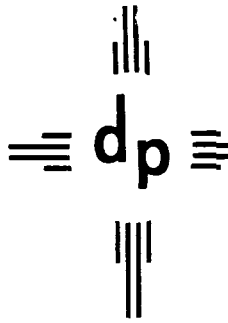
It is in the best interest of both the NMOCD and Dugan Production that we maximize efficient development of the Fruitland coal gas and at the same time protect the existing Dakota gas and surface resources in this area. We urge the New Mexico Oil Conservation to review your ruling on our application, recognize our concerns and grant us administrative approval of our unorthodox location.

If you have any questions or need additional information on this matter, please contact me.

Very Sincerely,

Kurt H. Fagrelus  
Geologist

cc: Mr. Lee Otteni, U.S. Bureau of Land Management, Farmington  
Ms. Mary Lou Drywater, U.S. Bureau of Land Management, Farmington  
Mr. NeelMcBride, U.S. Bureau of Land Management, Farmington  
Mr. Frank Chavez, New Mexico Oil Conservation Division - Aztec  
Mr. Michael Stogner, New Mexico Oil Conservation Division - Santa Fe  
Ms. Kathy Valdes, New Mexico Oil Conservation Division - Santa F  
Mr. Steve Salzman, U.S. Bureau of Land Management, Santa Fe  
Mr. Bob Gallagher, New Mexico Oil and Gas Association, Santa Fe



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January 27, 2000

Mr. Michael E. Stogner  
New Mexico Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

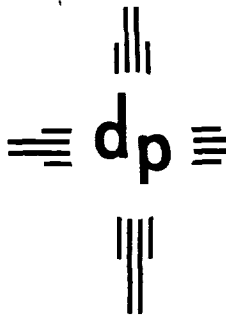
**Re: Application for Administrative Approval of  
Unorthodox Location for Dugan Production Corp's. Carpenter Com # 90  
1767' FSL & 280' FWL (NW/4 SW/4)  
Unit L, Section 25, T30N, R14W  
San Juan County, New Mexico  
Basin Fruitland Coal Pool**

Dear Mr. Stogner:

Dugan Production submitted an application for administrative approval of an unorthodox location for the Carpenter Com #90 to your office dated January 10, 2000 (Exhibit 1). On January 20, I received a letter back from you, rejecting our application because insufficient information was submitted to justify the drilling of this well at an unorthodox coal gas well location.

In response to your letter and a phone conversation to you on January 20, and a phone call from Mr. Frank Chavez on January 21, I have enclosed the following discussion and exhibits:

1. The original Application for Administrative Approval of Unorthodox Location for Dugan Production Corp's. Carpenter Com # 90.
2. An enlarged map showing the topography, standard drilling window for the Fruitland coal and the location of the Carpenter #1, #2 and proposed #90.
3. Sundry notices and reports for the Carpenter # 1 located in the NE/4 SW/4 of Section 25, T30N, and R14W.
  - a. Sundry on spud, 8-5/8" surface casing and cement.
  - b. Sundry on total depth drilled, 4-1/2" casing and cement.
  - c. Request for Allowable (Form C-104).
  - d. Sundry to repair 4-1/2" casing.
  - e. Production decline curve.
4. Sundry notice and report for the Carpenter # 2 located in the NE/4 SW/4 of Section 25, T30N, and R14W.
  - a. Completion report.



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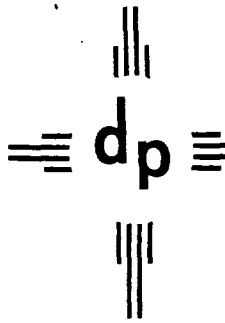
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- b. Sundry report of plugging and abandonment.
5. Map showing traverses made on four different surveys of the subject area.
6. An in house memorandum from David Poage, Dugan Production Corp's Landman showing the working interest owners in the Fruitland Coal for the lands offsetting the proposed Carpenter Com # 90.
7. Offsetting operator/working interest owner map.
8. Copies of signed waivers from all affected and offsetting operators /working interest owners.

Exhibit 2. is an enlarged topographic map (200% enlargement of the Youngs Lake NM Quadrangle, scale 1:24,000) that shows the location of the Carpenter #1, Carpenter #2, the orthodox drilling window for a Fruitland coal well in a W/2 proration unit and the proposed Carpenter Com #90 location. The topographic conditions in the general area are very rugged. Within the orthodox drilling window the only site suitable for building a location is already occupied by an older, deeper and producing Dakota well (Carpenter #1) and a plugged and abandoned Pictured Cliffs well (Carpenter #2).

The Carpenter #1, formerly the Carpenter Gas Unit "B" #1 located 1730' FSL and 1800' FWL of Section 25, T30N and R14W was drilled and completed in late 1962 and early 1963 by the Pan American Petroleum Corporation. The well was spudded and drilled to a depth of 355' and 8-5/8" casing was set with 210-sacks of cement (circulated 25-sacks to surface) (Exhibit 3a). A 7-7/8" hole was then drilled to a total depth of 6021' and 4-1/2" casing was set at 6016' with 150-sacks of cement containing 4% gel and 1-1/2 pounds of medium "Tuf Plug" per sack followed by 75-sacks of neat cement in one stage (top of cement est. 5000') (Exhibit 3b). The well was then completed in the Dakota (5889-5901) (Exhibit 3c). Production began in February of 1963 and in May of 1973, Dugan Production became operator of the well. By 1981 the well had stopped producing. In March of 1985, holes in the 4-1/2" casing were repaired by squeezing 150 sacks into leaks at 3632-3662 and 100 sacks into leaks at 2275-2306 (Exhibit 3d). Production was restored and continues to this date (cumulative gas 168,760 mcf, daily gas 15 mcf/d) (Exhibit 3e).

The Carpenter #2 located 1460' FSL and 1850' FWL of Section 25, T30N and R14W was drilled and completed by Dugan Production in 1978. This well was spudded and drilled to a depth of 47' and 5-1/2" casing was set with 8-sacks of cement. A 4-3/4" hole was then drilled to a total depth of 1300' and 2-7/8" casing was set at 1284' with 115-sacks of cement (circulated 7-bls. cement to surface).



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The well was then perforated in the Fruitland Formation and acidized with 250-gallons of 15% HCL (Exhibit 4a). The well was never fracture stimulated and did not produce gas in paying quantities. In December of 1981, the well was plugged and abandoned by filling the 2-7/8" casing with 33-sacks of cement (Exhibit 4b).

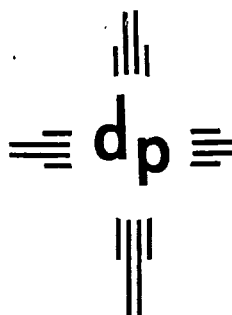
Our records demonstrate that the Carpenter #1 does not have adequate cement across the Fruitland coal interval and has a history of casing failures. The Carpenter #2 is located on the south edge of the Carpenter #1 location and is only 275-feet from the Carpenter #1 well bore.

As a matter of policy, Dugan Production Corp has not allowed other operators or ourselves to locate any new locations within 500 feet of any pre-existing, deeper well bores. We feel that this is sound engineering that minimizes risk, maximizes safety and protects existing well bores. To locate a coal well within 500-feet of our Carpenter #1 is a risk that we would not willingly take. This well bore could be damaged or lost, if we were to drill and frac the Fruitland coal in close proximity to it.

In this general area, in order to be productive, the Fruitland coal seams (thin coals less than 10-feet thick, spread out over a 100-foot interval at a depth of 1000-1200 feet) need to be foam frac'd at pressures from 1500-2000 psi and rates of 30-50 bpm with about 40,000 gals of 70Q foam, 60,000# sand and 250,000 SCF of N<sub>2</sub>.

Dugan Production has conducted four different surveys in the subject area in search of a suitable location within the Fruitland coal orthodox drilling window to build a drill site on (Exhibit 5). On August 30 and September 1, 1999 two Dugan personnel from our APD department accompanied our surveyor, Ed Reisenhover in the field. On November 12, 1999 I went out with our surveyor and one of our APD personnel to find a suitable location. On January 24, 2000 I made a fourth trip out to the area. The four surveys were unsuccessful in locating a suitable site. All of the places that looked good on the topographic map in the office turned out to be very rough when viewed in the field (the topographic maps are misleading).

Exhibit 6 is an in house memorandum from Dugan's landman David Poage showing the ownership in the Fruitland Coal Formations for the lands offsetting the proposed spacing unit for the referenced well. The ownership presented on this list is shown on the offsetting operator map (Exhibit 7). Exhibits 8a, 8b, 8c and 8d are copies of the signed waivers of objection Dugan Production has received from all affected and offsetting operators and working interest owners notified in the original application.



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The entire orthodox drilling window for a Fruitland coal well in the W/2 of Section 25, T30N, R14W encompasses very rugged, badlands type topography at the head of Cottonwood Wash. This area being unique and close to Farmington, NM is a popular area for outdoors-recreational activities like hiking, bicycling and horseback riding. If required to drill the subject well at an orthodox location a considerable amount of dirt work and expense will be required to build a pad. A large pump jack and compressor will be required in order to produce the well. The access road will need to be improved in order to accommodate the large trucks hauling 150-200 barrels of water per day out of the area. These operations will diminish the value of this surface resource area. However, if allowed to locate the subject well at the unorthodox location as proposed, the impact of these operations on the surface resources will be mitigated.

The unorthodox location of the Carpenter Com #90 is necessary in order to avoid areas of extreme topographic conditions, minimize surface resource damage and also minimize risk to an existing well bore.

As stated in the original application, please contact me if you have any questions or need additional information.

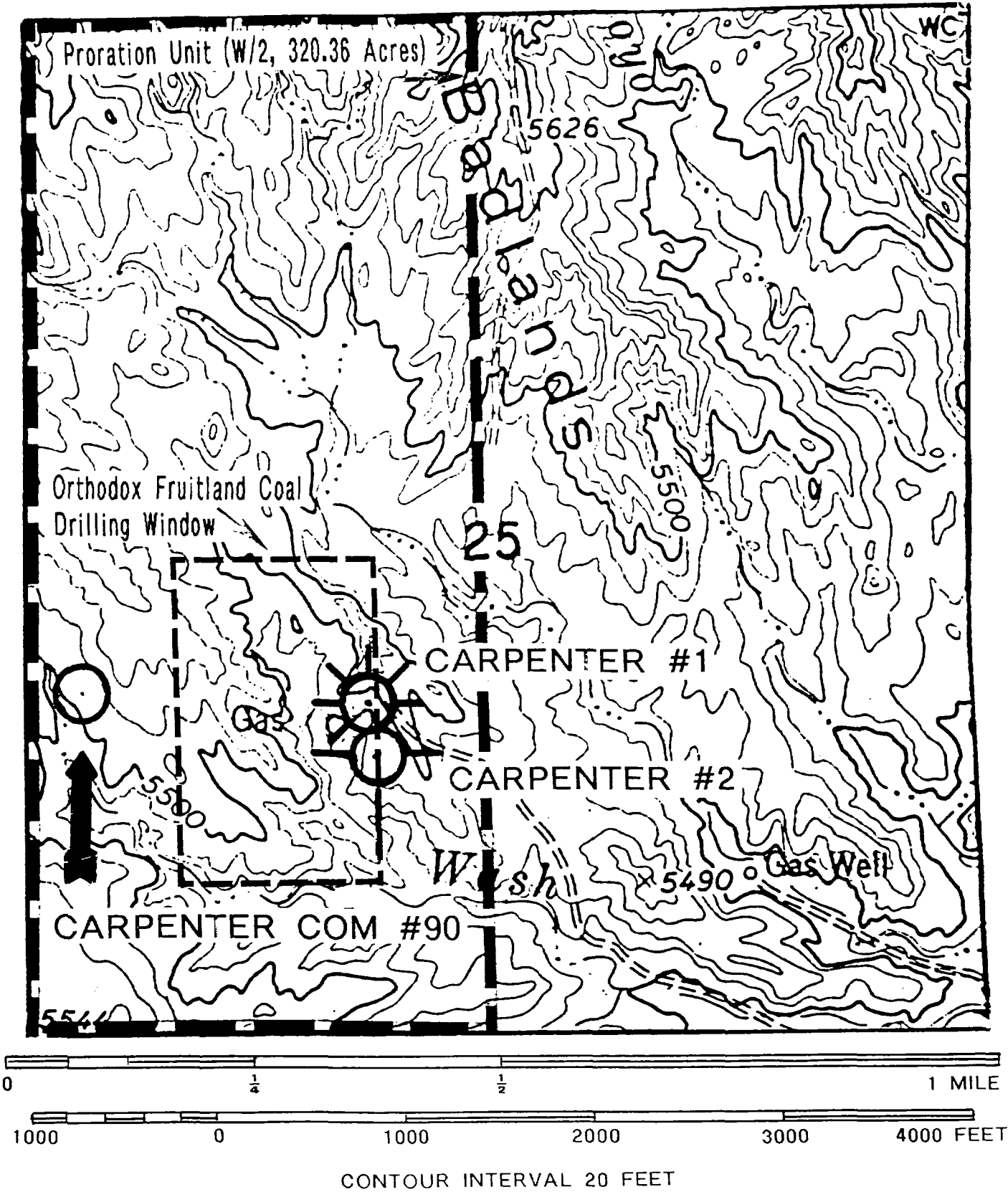
Very Sincerely,

Kurt H. Fagrelus  
Geologist

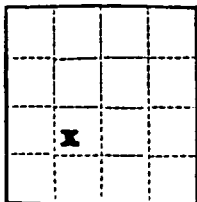
Attachments

cc: Mr. Frank Chavez - New Mexico Oil Conservation Division, Aztec

Sect. 25, Twp. 30 North, Rge. 14 West



TOPOGRAPHIC MAP



(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Budget Bureau No. 42-R358.4.  
Form Approved.

Land Office New Mexico  
Lease No. NY-0206994  
Unit Carpenter Gas Unit

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	<u>8-5/8"</u>	<u>X</u>
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....		
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....		
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....		
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....		
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....		
NOTICE OF INTENTION TO ABANDON WELL.....			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Carpenter Gas Unit "B"

Farmington, New Mexico December 26, 1962

Well No. 1 is located 1730 ft. from NE line and 1800 ft. from W line of sec. 25

NE/4 SW/4 Section 25 T-30-N R-11-W N.M.P.M.  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Basin Dakota San Juan New Mexico  
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is \_\_\_\_\_ ft. (To report later)

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

The above well was spudded on December 23, 1962 and drilled to a depth of 355'. 8-5/8" casing was set at that depth with 210 sacks of neat Inco cement containing 2% calcium chloride. Circulated 25 sacks to surface. After waiting on cement, tested casing with 1000 psi for 30 minutes. Test o.k. Reduced hole to 7-7/8" at 355' and resumed drilling operations.



I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Pan American Petroleum Corporation

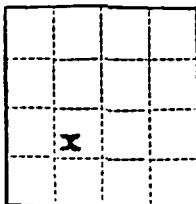
Address Box 480

Farmington, New Mexico

Attn: L.O. Spaer, Jr.

ORIGINAL SIGNED BY  
F. H. HOLLINGSTON

By \_\_\_\_\_  
Title Petroleum Engineer



(SUBMIT IN TRIPLICATE)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Land Office New Mexico

Lease No. NM-0206994

Unit Carpenter Gas Unit

RECEIVE

JAN 25 1963

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	<u>4-1/2" SECTION</u>	<u>X</u>
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....		
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....		
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....		
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....		
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....		<u>X</u>
NOTICE OF INTENTION TO ABANDON WELL.....			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Carpenter Gas Unit "B"

Farmington, New Mexico January 23, 1963

Well No. 1 is located 1730 ft. from [S] line and 1800 ft. from [W] line of sec. 25

NE 1/4, SW 1/4 Section 25  
(1/4 Sec. and Sec. No.)

T-30N E-11W  
(Twp.) (Range)

N.M.P.M.  
(Meridian)

Basin Dakota  
(Field)

San Juan  
(County or Subdivision)

New Mexico  
(State or Territory)

The elevation of the derrick floor above sea level is 5512 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

The above well was drilled to a total depth of 6021' and 4-1/2" casing set at 6016' with 150 sacks cement containing 45 gel and 1-1/2 pounds medium Tuf Plug per sack followed by 75 sacks neat cement. After waiting on cement, tested casing with 3500#, test ok.

Perforated this well from 5289-5901 with 4 shots per foot. Sand water fracked these perforations with 30,000 gallons water containing 15 calcium chloride and 7 pounds of Dowell J-98 per 1000 gallons and 30,000 pounds sand. Pressures were: Breakdown 1200, Treating 2800, Average injection rate 42 barrels per minute. Set bull plug at 5845 and tested with 3000 pounds. Test ok. Perforated 5789-5801 with 4 shots per foot. Sand water fracked these perforations with 30,000 gallons water containing 15 calcium chloride and 7 pounds of Dowell J-98 per 1000 gallons and 30,000 pounds sand. No noticeable breakdown pressures. Average treating pressure 2900; Average injection rate 38 barrels per minute. (SEE REVERS.)

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Pan American Petroleum Corporation

Address P. O. Box 480

Farmington, New Mexico

Attn: L. O. Spear, Jr.

ORIGINAL SIGNED BY  
F. H. HOLMESWORTH

By \_\_\_\_\_

Title Petroleum Engineer

RECEIVED	
DISTRIBUTION	
UNIT NO.	
FILE	
U.S.S.	
LAND OFFICE	
TRANSPORTER	OIL GAS
PRODUCTION OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
REQUEST FOR (XXXX) - (GAS) ALLOWABLE

(Form C-104)  
Revised 7/1/57

New Well  
**REGULAR**

This form shall be submitted by the operator before an initial allowable will be assigned to any completed Oil or Gas well. Form C-104 is to be submitted in QUADRUPLICATE to the same District Office to which Form C-101 was sent. The allowable will be assigned effective 7:00 A.M. on date of completion or recompletion, provided this form is filed during calendar month of completion or recompletion. The completion date shall be that date in the case of an oil well when new oil is delivered into the stock tanks. Gas must be reported on 15.025 psia at 60° Fahrenheit.

Farmington, New Mexico January 31, 1963  
(Place) (Date)

WE ARE HEREBY REQUESTING AN ALLOWABLE FOR A WELL KNOWN AS:

Pan American Petroleum Corporation-Carpenter Gas Unit Well No. 1, in NE 1/4 SW 1/4,  
(Company or Operator) (Lease)

K Sec. 25 T-3C1 R-14W NMPM, Basin Dakota Pool  
Unit Letter

San Juan County Date Spudded 12-23-62 Date Drilling Completed 1-11-62

Please indicate location:

D	C	B	A
E	F	G	H
L	K X	J	I
M	N	O	P

1730' FSL and 1800' FWL  
(Footage)

Tubing, Casing and Cementing Record

Size	Feet	Sax
8-5/8"	345	210
4-1/2"	6045	225
2-3/8"	5790	

Elevation 5199' (GL) Total Depth 6021' FBTD 5975'

Top Gas Pay 5789 Name of Prod. Form. Dakota

PRODUCING INTERVAL -

Perforations 4 shots per foot 5889-5901, 5789-5801

Open Hole None Depth Casing Shoe 6016' Depth Tubing 5778'

OIL WELL TEST -

Natural Prod. Test: bbls. oil, bbls water in hrs, min. Size Choke

Test After Acid or Fracture Treatment (after recovery of volume of oil equal to volume of Choke load oil used): bbls. oil, bbls water in hrs, min. Size

GAS WELL TEST -

Natural Prod. Test: MCF/Day; Hours flowed Choke Size

Method of Testing (pitot, back pressure, etc.):

Test After Acid or Fracture Treatment: 137% MCF/Day; Hours flowed 3

Choke Size 2" Method of Testing: Pitot Tube

Acid or Fracture Treatment (Give amounts of materials used, such as acid, water, oil, and sand): 60,000 gallons water and 60,000 pounds sand.

Casing Tubing Date first new Press. 300(CPF) Press. 75(TPF) il run to tanks

Oil Transporter

Gas Transporter

Remarks: Completed January 29, 1963 as shut in Basin Dakota Field Development Well.  
Copies of Deviation Survey are attached.

I hereby certify that the information given above is true and complete to the best of my knowledge.

Approved FEB 4 1963, 19

OIL CONSERVATION COMMISSION  
Original Signed by W. B. Smith

By

Exhibit 3c. OIL & GAS INSPECTOR DIST. NO. 3

PAN AMERICAN PETROLEUM CORPORATION  
(Company or Operator)

By: L. O. Speer, Jr. FEB 4 1963  
(Signature) OIL CON. COM. DIST. 3

Title: Administrative Clerk

Send Communications regarding well to:

Name: L. O. Speer, Jr.

Box 120 Farmington, New Mexico

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPlicate  
(Other instructions  
reverse side)

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL ☐ GAS WELL ☒ OTHER ☐

2. NAME OF OPERATOR  
Dugan Production Corp.

3. ADDRESS OF OPERATOR  
P.O. Box 208, Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.  
See also space 17 below.)  
At surface 1730' FSL & 1800' FWL

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, CR, etc.)  
5499' GL 5512 RK

5. LEASE DESIGNATION AND SERIAL NO.  
NM-0206994

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Carpenter

9. WELL NO.  
1

10. FIELD AND POOL, OR WILDCAT  
Basin Dakota

11. SEC., T., R., M., OR ELK. AND  
SHELVET OR AREA  
Sec. 25, T30N, R14W, NMPM

12. COUNTY OR PARISH  
San Juan

13. STATE  
NM

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐  
FRACTURE TREAT ☐  
SHOOT OR ACIDIZE ☐  
REPAIR WELL ☐  
(Other) ☐

PULL OR ALTER CASING ☐  
MULTIPLE COMPLETE ☐  
ABANDON\* ☐  
CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐  
FRACTURE TREATMENT ☐  
SHOOTING OR ACIDIZING ☐  
(Other) ☐

REPAIRING WELL ☒  
ALTERING CASING ☐  
ABANDONMENT\* ☐

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

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

The 4½" Casing was repaired in this well as follows:

1. A drillable bridge plug was set on wireline at 5510' RKB.
2. Ran 4½" Model "R" Packer and found two casing leaks, one from 3632' - 3662' & one from 2275' - 2306'.
3. Squeezed leak from 3632 - 3662' with 150 sx class "B" Cement.
4. Squeezed leak from 2275 - 2306' 200 sk of 2% Lodense followed by 100 sx class "B" Neat. (Total Slurry 530 cu.ft.) had intermittent circulation through braden head valve while cementing.
5. Drilled out cement and pressure tested casing -- held ok.
6. Cleaned out to PBTD 5916' RKB
7. Ran 187 joints of 2-3/8" O.D., 4.7#, 8 Rd EUE Tubing TE 5885.61 set @ 5894' RKB w/ Baker Model "R" Packer @ 5740'.
8. Swabbed tubing down and acidized Dakota formation w/250 gals 15% HCl acid. Swabbed acid back.
9. Blowing intermittently to atmosphere to clean up.

TO WHOM IT MAY CONCERN:

A COPY OF THE ATTACHED APPLICATION  
HAS BEEN FORWARDED TO NMOCC.

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

SIGNED Jim L. Jacobs

TITLE Vice President

DATE 3/14/85

(This space for Federal or State office use)

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

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

ACCEPTED FOR RECORD

MAR 21 1985

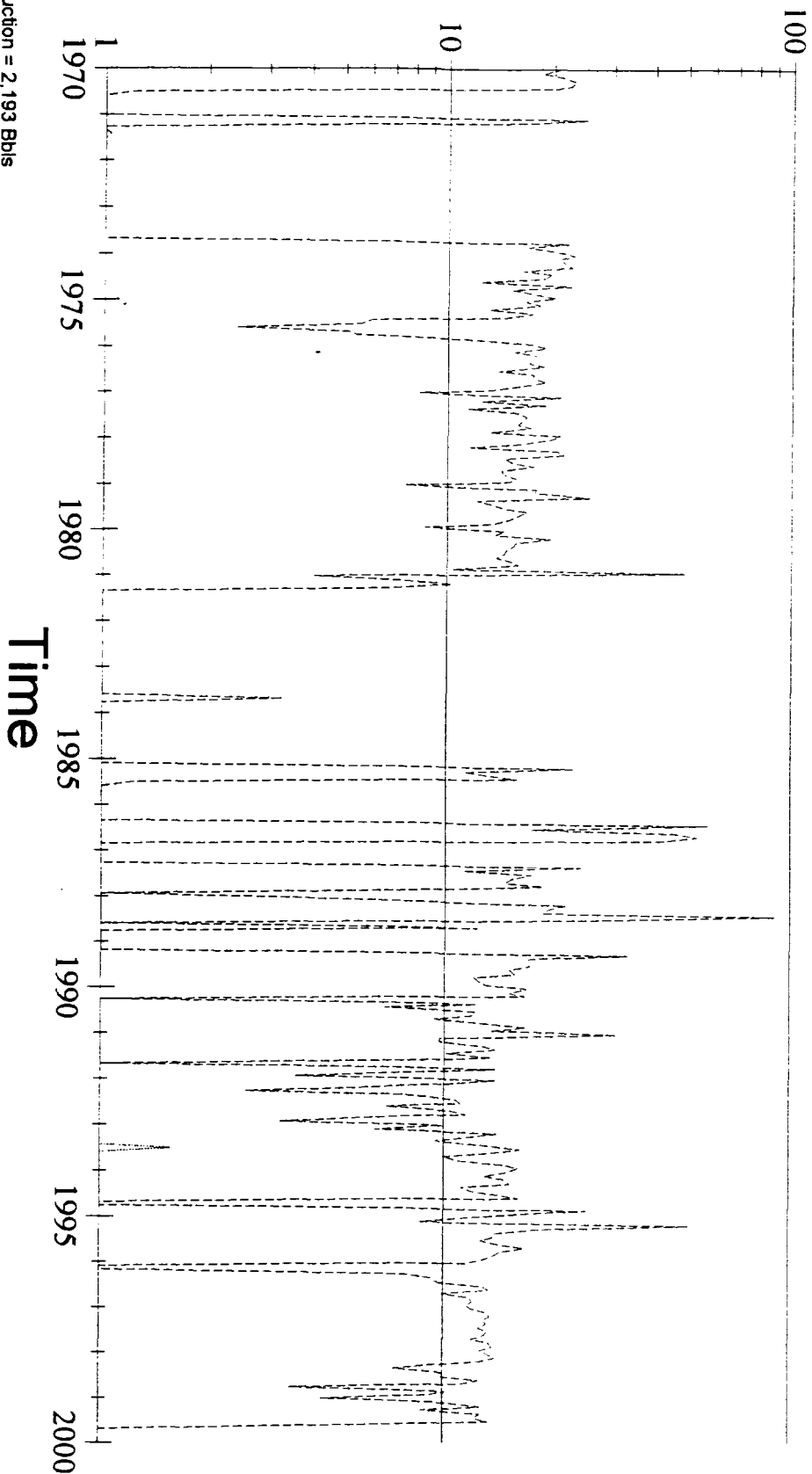
\*See Instructions on Reverse Side

FARMINGTON RESOURCE AREA  
DI ESR  
RV ESR

# BBI/Day or Mci/Day

Oil  
Gas  
Water  
Wells

Field: BASIN  
Lease: CARPENTER | Well #1  
Operator: DUGAN PRODUCTION CORPORATION  
Production Rate vs Time  
For the Period 01/1970 to 12/1999 | API: 30045091780000



Reported Oil Production = 2,193 Bbls  
Reported Gas Production = 168,760 Mcf  
Reported Water Production = 1,694 Bbls

Time

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See instructions on  
reverse side)Form approved.  
Budget Bureau No. 42-R355.5.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input checked="" type="checkbox"/> Other _____		5. LEASE DESIGNATION AND SERIAL NO. NM 0206994	
b. TYPE OF COMPLETION: NEW WELL <input type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESER. <input type="checkbox"/> Other _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Dugan Production Corp.		7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR Box 208, Farmington, NM 87401		8. FARM OR LEASE NAME Carpenter	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 1460' FSL - 1850' FWL At top prod. interval reported below At total depth		9. WELL NO. 2	
14. PERMIT NO.		10. FIELD AND POOL, OR WILDCAT Harper Hill Ext.	
DATE ISSUED		11. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA Sec 25 T30N R14W	
12. COUNTY OR PARISH San Juan		13. STATE NM	
15. DATE SPUDDED 8-16-78	16. DATE T.D. REACHED 8-17-78	17. DATE COMPL. (Ready to prod.) Plan to P & A	18. ELEVATIONS (OF, RER, RT, OR, ETC.)* 5500' GL
19. ELEV. CASINGHEAD	20. TOTAL DEPTH, MD & TVD 1300'		
21. PLUG BACK T.D., MD & TVD 1216'		22. IF MULTIPLE COMPL. HOW MANY* Plan to P & A	23. INTERVALS DRILLED BY →
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 1174-1181' 840-850		25. WAS DIRECTIONAL SURVEY MADE No	
26. TYPE ELECTRIC AND OTHER LOGS RUN IES		27. WAS WELL CORED No	
28. CASING RECORD (Report all strings set in well)			
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE
5-1/2"	14#	47'	7-7/8"
2-7/8"	6.4#	1284'	4-3/4"
CEMENTING RECORD		AMOUNT PULLED	
8 sx			
115 sx			
29. LINER RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*
SCREEN (MD)		30. TUBING RECORD	
		SIZE	DEPTH SET (MD)
		None	
		PACKER SET (MD)	
31. PERFORATION RECORD (Interval, size and number)			
840-850 1174-1181			
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED	
840-850			
1174-1181		250 gals 15% HCl	
33. PRODUCTION			
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	
		No Test - Plan to P & A	
WELL STATUS (Producing or shut-in)			
DATE OF TEST	HOURS TESTED	CHOKER SIZE	PROD'N. FOR TEST PERIOD
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)		TEST WITNESSED BY	
35. LIST OF ATTACHMENTS			
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records			
SIGNED <u>Thomas A. Dugan</u>		TITLE <u>President</u>	
DATE <u>4-27-80</u>			

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

OPERATOR

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☐ gas ☒ other ☐  
well well

2. NAME OF OPERATOR  
DUGAN PRODUCTION CORP.

3. ADDRESS OF OPERATOR  
P O Box 208, Farmington, NM 87401

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE: 1460' FSL - 1850' FWL  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF ☐  
FRACTURE TREAT ☐  
SHOOT OR ACIDIZE ☐  
REPAIR WELL ☐  
PULL OR ALTER CASING ☐  
MULTIPLE COMPLETE ☐  
CHANGE ZONES ☐  
ABANDON\* ☐  
(other) ☐

SUBSEQUENT REPORT OF:

☐  
☐  
☐  
☐  
☐  
☐  
☐  
☐  
☒

RECEIVED

DEC 14 1981

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

U. S. GEOLOGICAL SURVEY  
FARMINGTON, N. M.

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

Plugged and abandoned well as follows:

1. Filled 2-7/8" with 33 sx cement, displaced with 1 bbl. water.
2. Installed permanent dry hole monument.
3. Filled all pits.
4. Cleaned well location of all equipment, pipe, junk, and trash.
5. Will complete surface restoration as specified by the surface management agency or landowner next planting season.
6. Cut off tie-downs 1 ft. below surface.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_

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

SIGNED Sherman E. Dugan TITLE Agent

DATE 12-3-81

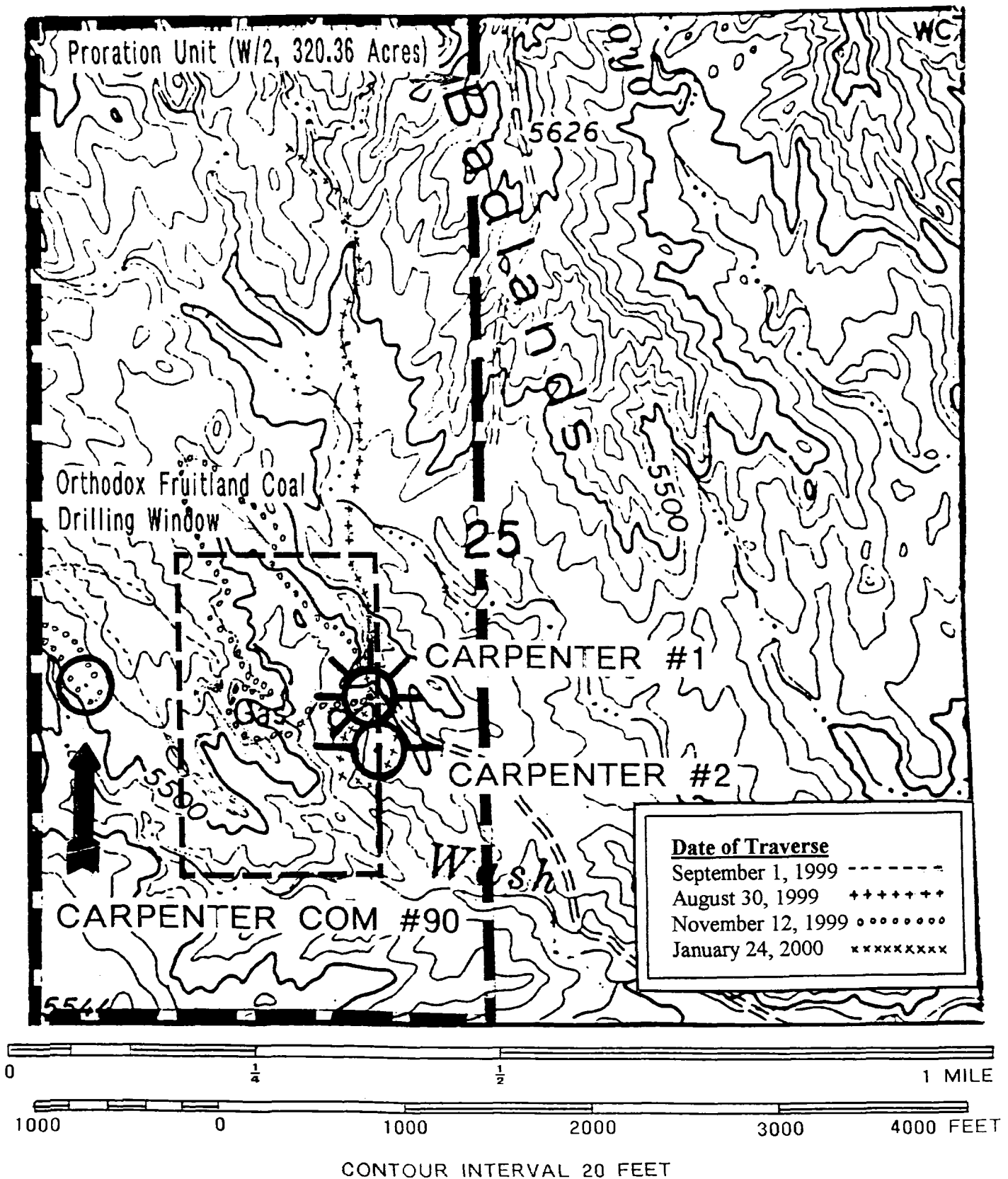
(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

OPERATION

APPROVED  
Set @ \_\_\_\_\_ Ft.  
12-3-81  
M. WILLENBACH  
AREA MANAGER

Sect. 25, Twp. 30 North, Rge. 14 West



TOPOGRAPHIC MAP  
SHOWING SURVEY TRAVERSES

**Dugan Production Corp.**  
**P.O. Box 420**  
**Farmington, NM 87499**  
**505-325-1821**

# Memorandum

**To:** Kurt Fagrelus

**From:** David Poage 

**Date:** 01/24/00

**Re:** Carpenter Corn # 90 Well

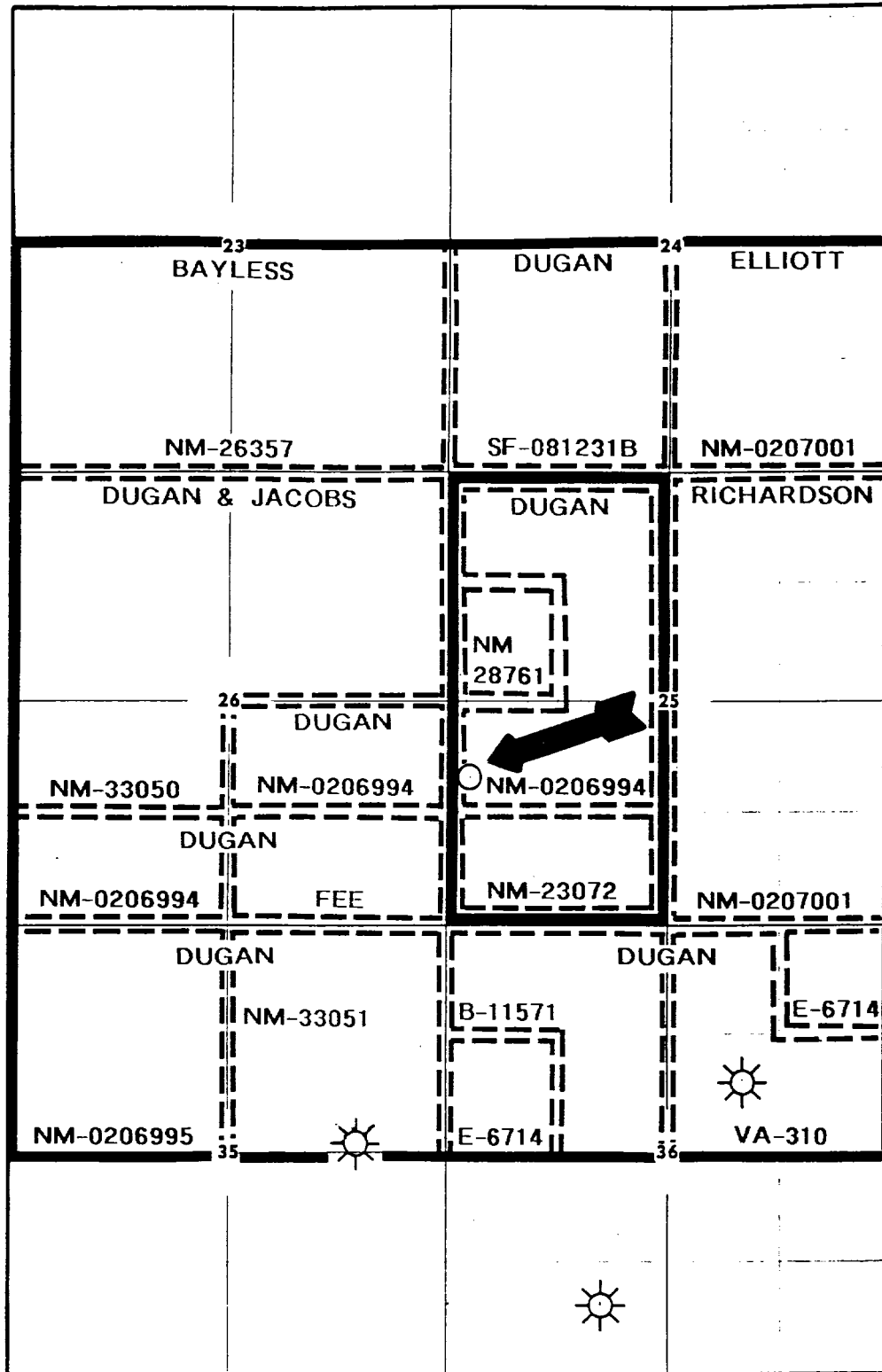
The following is the ownership in the Fruitland Coal Formation for the lands offsetting the proposed spacing unit for the referenced well. This well is to be spaced as a W/2 Section 25-T30N-R14W unit. All of the lands listed below are located in Township 30 North, Range 14 West.

<u>Description</u>	<u>Lease</u>	<u>W.I. Owner</u>	<u>Percent</u>
S/2 23	NM-26357	Robert L. Bayless Producer	100.00%
SE/4 24	NM-0207001	Elliott Oil Company	100.00%
SW/4 24	SF-081231B	Dugan Production Corp.	100.00%
E/2 25	NM-0207001	Dugan Production Corp.	100.00%
W/2 25	NM-28761	Dugan Production Corp.	100.00%
	NM-0206994	Dugan Production Corp.	100.00%
	NM-23072	Dugan Production Corp.	100.00%

1/24/00 Memorandum

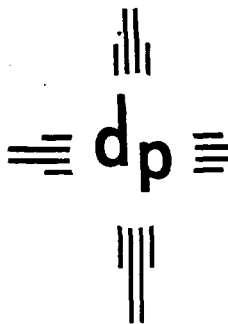
N/2, N/2SW/4 26	NM-33050	Dugan Production Corp.	75.00%
		Jim & Mary Lou Jacobs Tr.	25.00%
S/2SW/4, N/2SE/4 26	NM-0206994	Dugan Production Corp.	100.00%
S/2SE/4 28	Fee	Dugan Production Corp.	100.00%
N/2 35	NM-0206995	Dugan Production Corp.	100.00%
	NM-33051	Dugan Production Corp.	100.00%
N/2 36	State of NM B-11571	Dugan Production Corp.	100.00%
	State of NM E-6714	Dugan Production Corp.	100.00%
	State of NM VA-310	Dugan Production Corp.	100.00%

R14W



Dugan Production Corp.  
Carpenter Com # 90  
Application For Unorthodox Location

**OFFSETTING OPERATOR MAP**  
**FRUITLAND COAL WELLS ONLY**  
All offsetting operators are  
100% working interest owners



dugan production corp.

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

January 10, 2000

Jim L. and Mary Lou Jacobs Trust  
3505 Crescent Ave.  
Farmington, NM 87401


Re: Application for Administrative Approval of Unorthodox Location  
Dugan Production Corp.'s Carpenter Com # 90  
1767' FSL & 280' FWL (NW/4 SW/4)  
Unit L, Section 25, T30N, R14W  
San Juan County, New Mexico  
Basin Fruitland Coal Pool

Dear Jim Jacobs:

Dugan Production Corp. requests that the Jim L. and Mary Lou Jacobs Trust waive objection to its application for administrative approval of the unorthodox location referenced above. A copy of this application is enclosed for your review.

Please sign and return this waiver form in the enclosed envelope. If you wish to object to this application, you must notify the New Mexico Oil Conservation Commission at 2040 South Pacheco Street, Santa Fe, NM, 87505 within 20 days of receiving this notice.

Sincerely,

  
Kurt H. Fagrellius  
Geologist

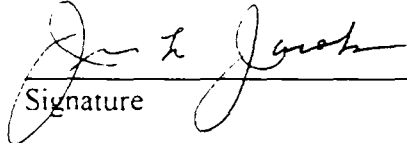
Jim L. and Mary Lou Jacobs Trust waives objection in the above matter.

Jim L. Jacobs Trustee

Print Name

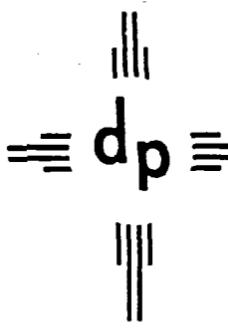
1-14-2000

Date

  
Signature

1-14-2000

Date

dugan production corp.

---

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

January 10, 2000

Richardson Production Co.  
1700 Lincoln, Suite 1700  
Denver, Colorado 80203


Re: Application for Administrative Approval of Unorthodox Location  
Dugan Production Corp.'s Carpenter Com # 90  
1767' FSL & 280' FWL (NW/4 SW/4)  
Unit L, Section 25, T30N, R14W  
San Juan County, New Mexico  
Basin Fruitland Coal Pool

Dear Richardson Production:

Dugan Production Corp. requests that Richardson Production waive objection to it's application for administrative approval of the unorthodox location referenced above. A copy of this application is enclosed for your review.

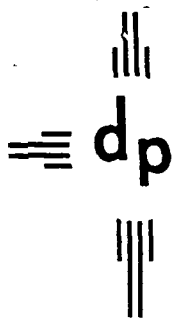
Please sign and return this waiver form in the enclosed envelope. If you wish to object to this application, you must notify the New Mexico Oil Conservation Commission at 2040 South Pacheco Street, Santa Fe, NM, 87505 within 20 days of receiving this notice.

Sincerely,

  
Kurt H. Fagrelus  
Geologist

Richardson Production Co. waives objection in the above matter.

<u>Cathleen Colby</u>	<u>1-17-00</u>
Print Name	Date
<u>Cathleen Colby</u>	<u>1-17-00</u>
Signature	Date



dugan production corp.

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

January 10, 2000

Robert Bayless Producer, L.L.C.  
P.O. Box 168  
Farmington, NM 87499

Re: Application for Administrative Approval of Unorthodox Location  
Dugan Production Corp.'s Carpenter Com # 90  
1767' FSL & 280' FWL (NW/4 SW/4)  
Unit L, Section 25, T30N, R14W  
San Juan County, New Mexico  
Basin Fruitland Coal Pool

Dear Robert Bayless Producer, L.L.C.:

Dugan Production Corp. requests that Robert Bayless waive objection to it's application for administrative approval of the unorthodox location referenced above. A copy of this application is enclosed for your review.

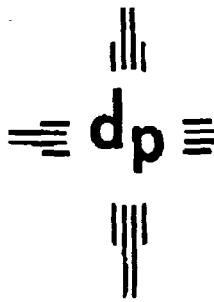
Please sign and return this waiver form in the enclosed envelope. If you wish to object to this application, you must notify the New Mexico Oil Conservation Commission at 2040 South Pacheco Street, Santa Fe, NM, 87505 within 20 days of receiving this notice.

Sincerely,

*Kurt H. Fagrelius*  
Kurt H. Fagrelius  
Geologist

Robert Bayless Producer, L.L.C. waives objection in the above matter.

<u>ROBERT L. BAYLESS</u>	<u>1/13/00</u>
Print Name	Date
<u><i>Robert L. Bayless</i></u>	<u>1-13-00</u>
Signature	Date



dugan production corp.

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

January 10, 2000

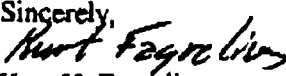
Elliott Oil Company  
P.O. Box 1355  
Roswell, NM 88202-1355

Re: Application for Administrative Approval of Unorthodox Location  
Dugan Production Corp.'s Carpenter Corn # 90  
1767' FSL & 280' FWL (NW/4 SW/4)  
Unit L, Section 25, T30N, R14W  
San Juan County, New Mexico  
Basin Fruitland Coal Pool

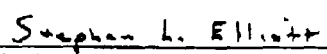
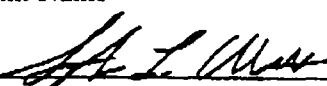
Dear Elliott Oil Company:

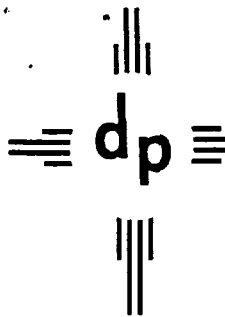
Dugan Production Corp. requests that Elliott Oil waive objection to it's application for administrative approval of the unorthodox location referenced above. A copy of this application is enclosed for your review.

Please sign and return this waiver form in the enclosed envelope. If you wish to object to this application, you must notify the New Mexico Oil Conservation Commission at 2040 South Pacheco Street, Santa Fe, NM, 87505 within 20 days of receiving this notice.

Sincerely,  
  
Kurt H. Fagrelus  
Geologist

Elliott Oil Company waives objection in the above matter.

 _____ Print Name	_____ Date
 _____ Signature	1/27/00 _____ Date



dugan production corp.

---

January 10, 2000

Mr. Michael E. Stogner  
New Mexico Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

**Re: Application for Administrative Approval of  
Unorthodox Location for Dugan Production Corp's. Carpenter Com # 90  
1767' FSL & 280' FWL (NW/4 SW/4)  
Unit L, Section 25, T30N, R14W  
San Juan County, New Mexico  
Basin Fruitland Coal Pool**

Dear Mr. Stogner:

Dugan Production hereby requests approval for an unorthodox location for the referenced well.  
Attached for your reference are the following exhibits:

1. Well location and acreage dedication plat (NMOCD Form C-102)
2. Topographic map
3. Offsetting operator map

The unorthodox location is necessary due to topographic conditions.

By certified mail, a copy of this application and request for administrative approval has been sent to all Fruitland coal offsetting operators and the Bureau of Land Management.

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

Very Sincerely,

*Kurt Fagrelus*

Kurt H. Fagrelus

Attachments

District I  
PO Box 1790, Hobbs, NM 88241-1790  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APN Number 30 045	Pool Code 71629	Pool Name Basin Fruitland Coal
Property Code	Property Name Carpenter Com	Well Number 90
UGRID No. 006515	Operator Name Dugan Production Corporation	Elevation 5510'

10 Surface Location

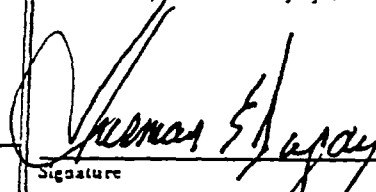
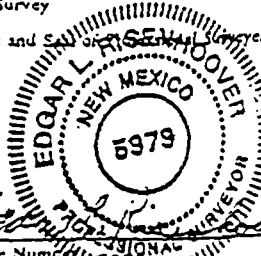
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
L	25	30N	14W	L	1767	South	280	West	San Juan

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
320			

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

16						17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Signature Sherman E. Dugan Printed Name Vice-president Title December 22, 1999 Date
Dugan Prod. NM-28761						18 SURVEYOR CERTIFICATION I hereby certify that the well location shown 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. November 10, 1999 Date of Survey Signature and Seal of Registered Surveyor  Certificate Number
	Section 25					
	Dugan Prod. NM-0206994					
1767'	Dugan Prod. NM-23072					

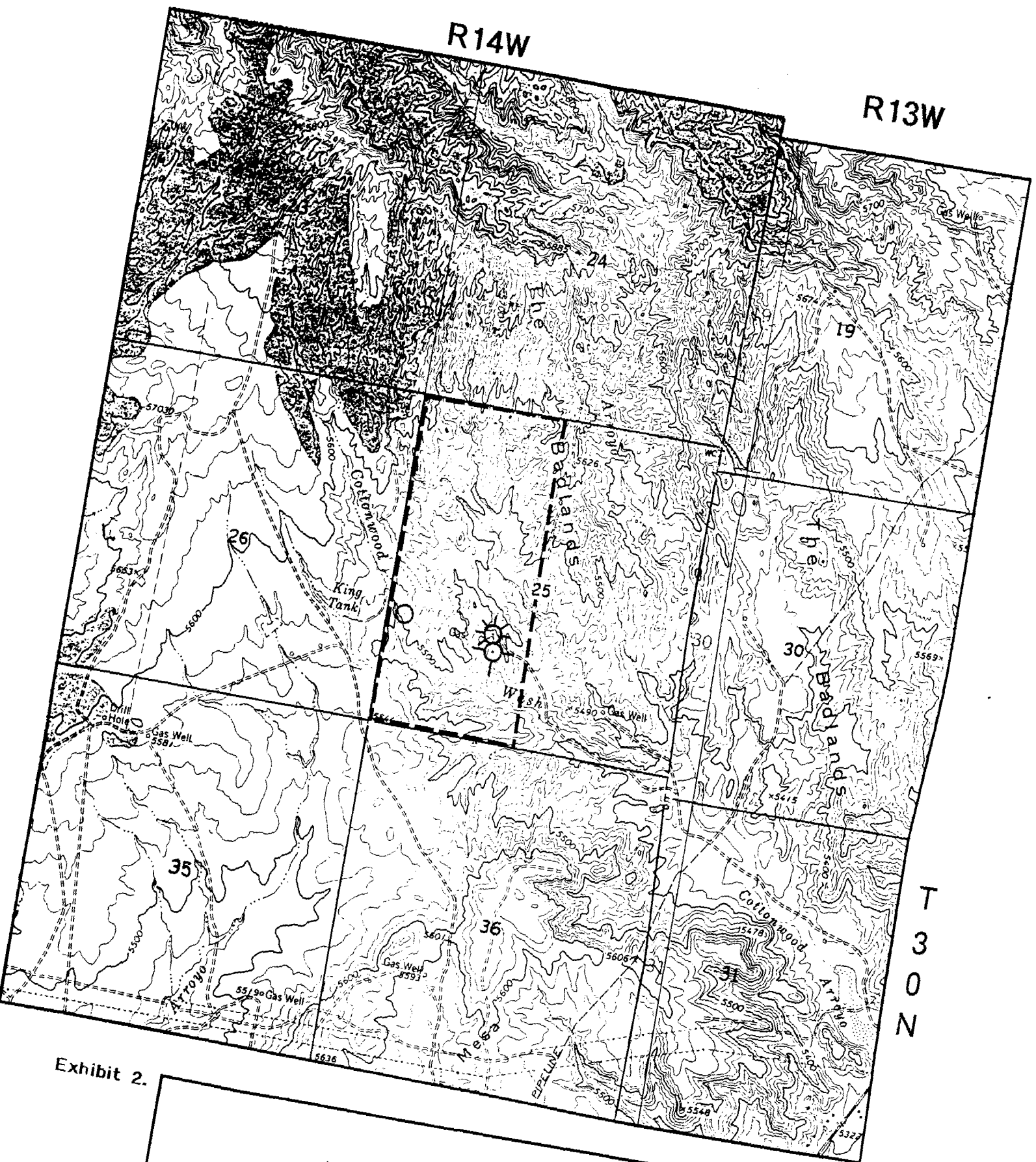


Exhibit 2.

Dugan Production Corp.  
Carpenter Com # 90  
Application For Unorthodox Location

TOPOGRAPHIC MAP

R14W

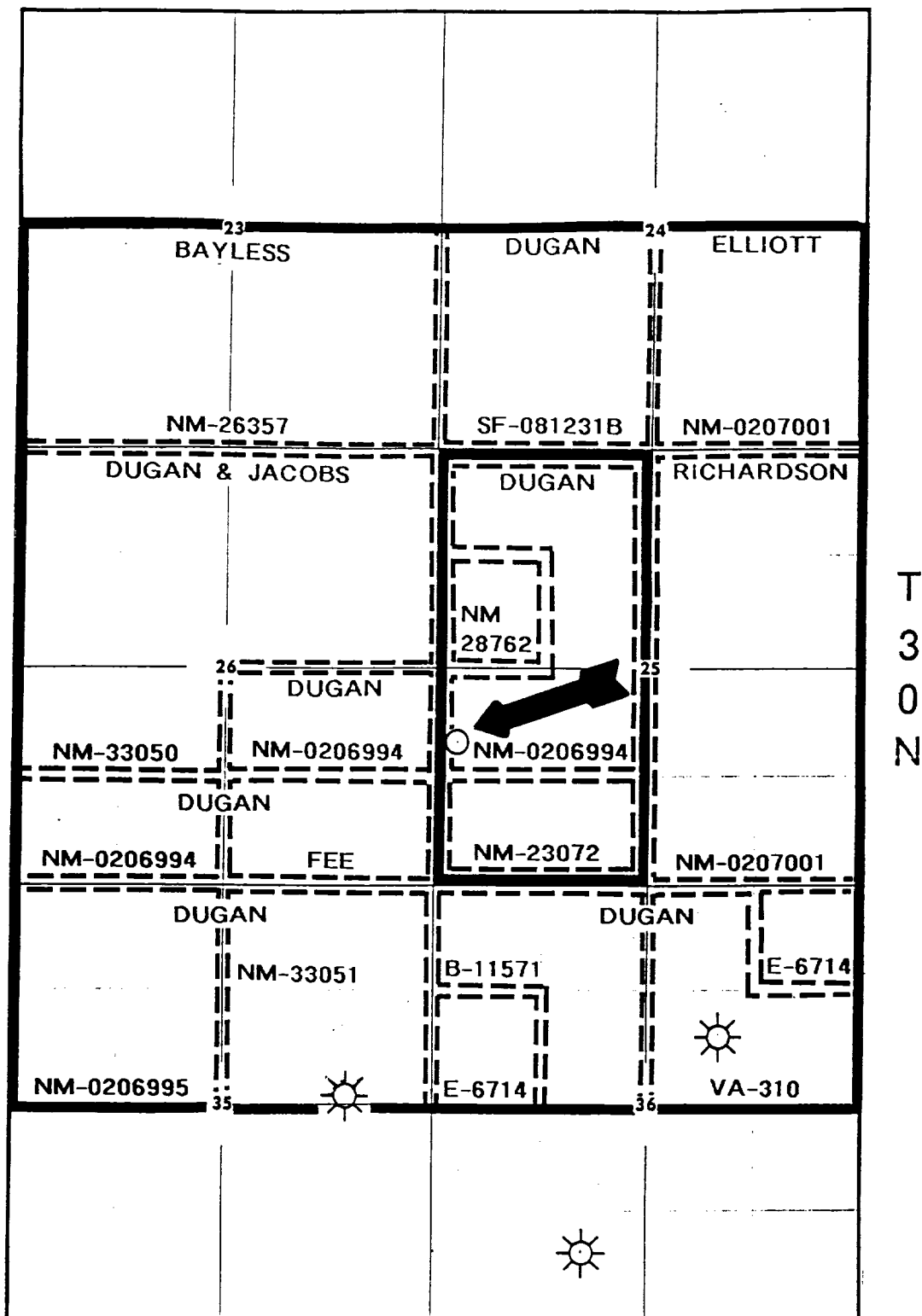
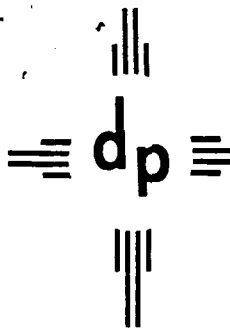


Exhibit 3.

Dugan Production Corp.  
Carpenter Com # 90  
Application For Unorthodox Location

**OFFSETTING OPERATOR MAP  
FRUITLAND COAL WELLS ONLY**



dugan production corp.

**Exhibit 3a.**

OFFSET OPERATORS NOTIFICATION LIST

Robert Bayless Producer, L.L.C.  
P.O. Box 168  
Farmington, NM 87499

Elliott Oil Company  
P.O. Box 1355  
Roswell, NM 88202-1355

Richardson Production Co.  
1700 Lincoln, Suite 1700  
Denver, Co 80203

Jim L. & Mary Lou Jacobs Trust  
3505 Crescent Ave.  
Farmington, NM 87401