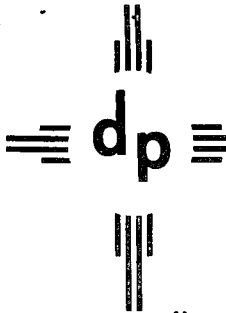


Sent copy to Connie Bunch 11/30

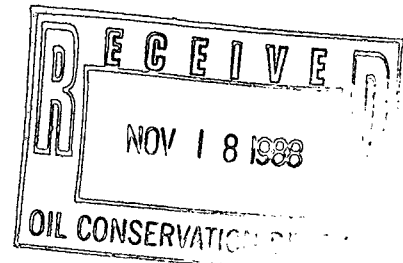


dugan production corp.

CERTIFIED
RETURN RECEIPT REQUESTED

November 16, 1988

Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504-2088



RE: Administrative Approval
160 Acre Spacing Unit
Western Federal #7 Well
T26N, R11W
Section 7: SW/4
San Juan County, NM

Gentlemen:

Dugan Production Corp., hereby requests administrative approval for a 160 acre non-standard spacing unit consisting of the SW/4 of Section 7, T26N, R11W, under the rules of Order No. R-8768.

By certified mail, return receipt requested, we have provided all operators or owners offsetting the subject non-standard spacing unit with a copy of this letter application. A copy of the offset operator or owner notice along with a list of names and addresses of all operators notified is attached for your information. Upon receiving the "return receipts", we will provide you with a copy for your records.

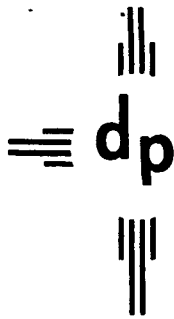
Should you have questions regarding our application, please feel free to contact me at the letterhead address.

Respectfully,

Richard Corcoran
Landman

RC/dh

Enc.



dugan production corp.

CERTIFIED
RETURN RECEIPT REQUESTED

November 14, 1988

TO: Offsetting Operators or Owners
(See attached list)

RE: Application for Administrative Approval
Non-Standard 160 Acre Spacing Unit
Western Federal #7 Well
T26N, R11W
Section 7: SW/4
San Juan County, NM

Gentlemen:

Dugan Production Corp., (Dugan) is making application to the New Mexico Oil Conservation Division, (NMOCD) for administrative approval of a non-standard spacing unit, for the captioned well, consisting of the SW/4 of Section 7, T26N, R11W, to comply with the rules of Order No. R-8768.

Dugan completed the referenced well on August 31, 1977, in the South Gallegos Pool, spaced 160 acres. The well was drilled on USA lease Number SF - 075897 and communitized with USA lease SF - 078897A covering the SW/4 of said Section 7. Dugan was designated operator under Communitization Agreement SRM-1354 approved effective 7/1/77.

The NMOCD under case No. 9420, Order NO. R-8768, established the Basin-Fruitland Coal Gas Pool providing for 320 acre spacing for wells producing from Fruitland Coal seams, effective November 1, 1988.

As provided for in the rules of the above mentioned Order, we are giving notice to you as either the operator or owner (or Trustee) of the offsetting acreage, of our application.

We are enclosing a copy of our letter of application and location plat for your reference. Any operator or owner that objects to the administrative granting of the subject non-standard spacing unit should provide notice to the NMOCD within 20 days of our making application. We would also appreciate any such party to also notify Dugan.

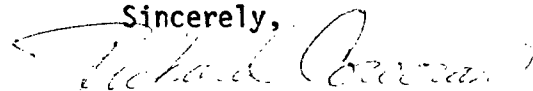
Offsetting Operators or Owners

November 14, 1988

Page 2 of 2

Should you need additional information regarding our application, please
feel free to contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read "Richard Corcoran".

Richard Corcoran
Landman

RC/dh

Enc.

Navajo Tribal Council
P.O. Box 2010
Window Rock, Arizona 86515
Attn: Akhtar Azaman, Director
Navajo Tribal Minerals Dept.

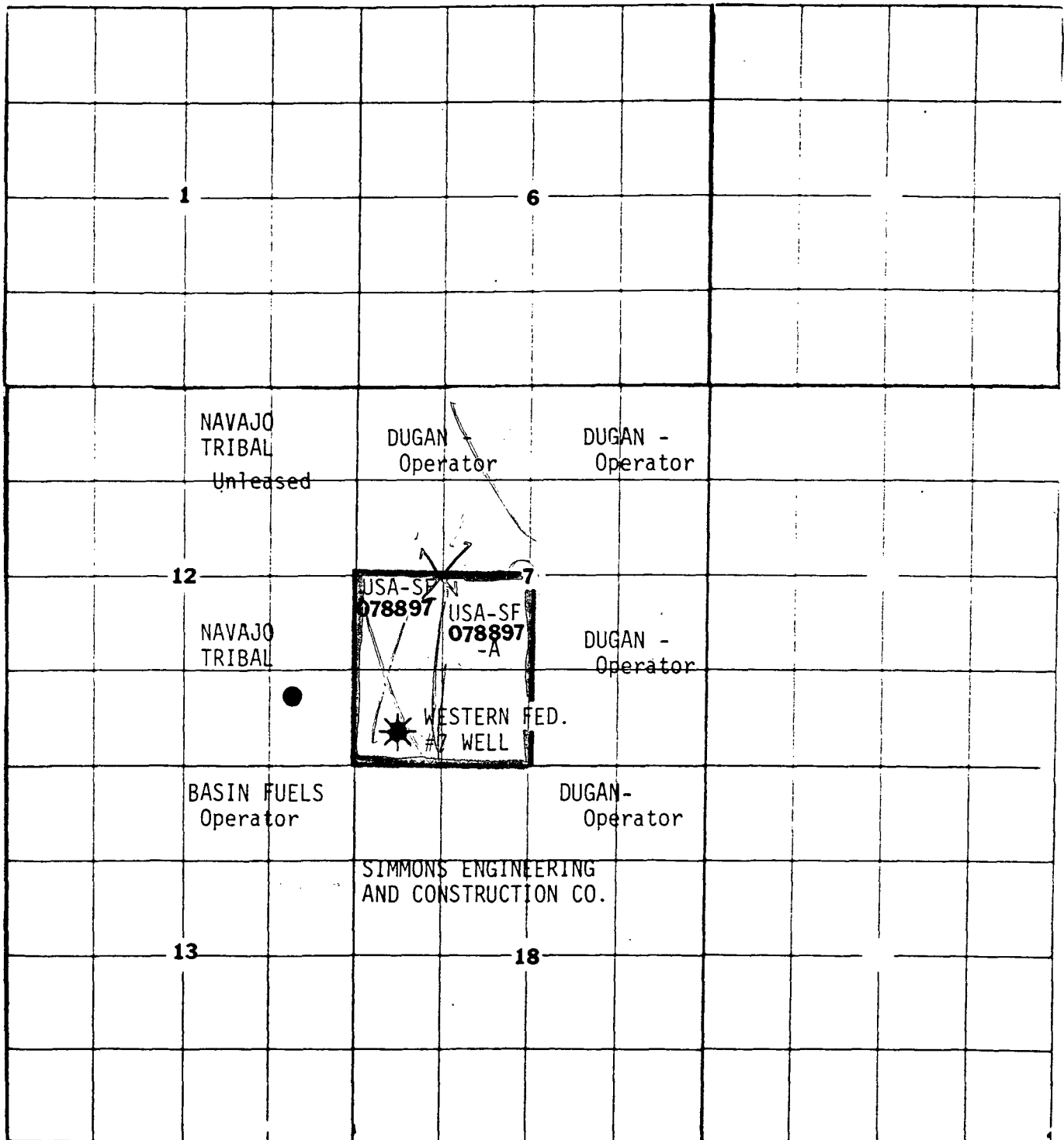
Bureau of Land Management
Farmington Resources and Tribal Leases
1235 La Plata Highway
Farmington, NM 87499

Basin Fuels
P.O. Box 50
Farmington, NM 87499

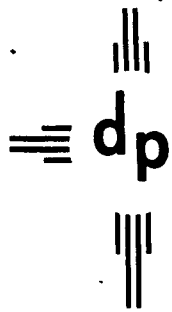
Simmons Engineering & Construction Co.
5704 Villa View Drive
Farmington, NM 87401

R12W

R11W



T 26 N



dugan production corp.

December 1, 1988

Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504-2088

RE: Application of Dugan Production Corp. for
Administrative Approval of Non-Standard Spacing Unit
dated November 16, 1988
Basin Fruitland Coal Gas Pool
San Juan County, NM

Gentlemen:

Attached for your file is a copy of the U.S. Postal return receipts that were attached to our November 16, 1988 notice to all operators/owners offsetting the location proposed for the following wells in San Juan County, New Mexico:

✓ Knauff #1 Well	T28N, R10W, Section 31: NW/4
Western Federal #7	T26N, R11W, Section 7: SW/4
Petroleum Inc. Wells	T28N, R15W, Sections 25, 26, 35, 36
Hana #1 Well	T29N, R11W, Section 18: NE/4
Western Federal #9	T26N, R11W, Section 7: NW/4

Having received a receipt for each operator noticed, it is our belief that we have met the notice requirements of the special pool rules for the Basin Fruitland Coal Gas Pool.

Should you need additional information or have questions, please feel free to contact the undersigned.

Sincerely,

Richard Corcoran
Landman

RC/dh

Attach.

Western Federal #7 Well
T26N, R11W
Section 7: SW/4
San Juan County, NM

Offset Operators/Owners:

Navajo Tribal Council
BLM - Tribal Leases
Basin Fuels
Simmons Engineering

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery.

3. Article Addressed to:

Basin Fuels
P.O. Box 50
Farmington, NM 87499

4. Article Number
P 916 474 602

Type of Service:
☒ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and **DATE DELIVERED**.

5. Signature - Addressee
X

6. Signature - Agent
X *Donna Schodler*

7. Date of Delivery
11-18-88

PS Form 3811, Feb. 1986 DH DOMESTIC RETURN RECEIPT

P 916 474 602

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to
Basin Fuels
Street and No.
P.O. Box 50
P.O. State and ZIP Code
Farmington, NM 87499

Postage \$ 2.50

Certified Fee \$.85

Special Delivery Fee ✓

Restricted Delivery Fee

Return Receipt showing to whom and Date Delivered \$.90

Return Receipt showing to whom, Date, and Address of Delivery

TOTAL Postage and Fees \$ 2.90

Postmark or Date
11/16/88

PS Form 3800, June 1985

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery.

3. Article Addressed to:

Mr. William J. LeMay, Director
NM Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504-2088

4. Article Number
P 916 474 603

Type of Service:
☒ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and **DATE DELIVERED**.

5. Signature - Addressee
X *Donna Schodler*

6. Signature - Agent
X

7. Date of Delivery
11-18-88

PS Form 3811, Feb. 1986 DH DOMESTIC RETURN RECEIPT

P 916 474 603

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to
Mr. William J. LeMay, Dir.
NM Oil Conservation Division
Street and No.
P.O. Box 2088
P.O. State and ZIP Code
Santa Fe, NM 87504-2088

Postage \$.45

Certified Fee \$.85

Special Delivery Fee ✓

Restricted Delivery Fee

Return Receipt showing to whom and Date Delivered \$.90

Return Receipt showing to whom, Date, and Address of Delivery

TOTAL Postage and Fees \$ 2.90

Postmark or Date
11/16/88

PS Form 3800, June 1985

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery.

3. Article Addressed to:
Bureau of Land Management
Farmington Resources & Tribal
Leases
1235 La Plata Highway
Farmington, NM 87499

4. Article Number
P 916 474 599

Type of Service:
☒ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee
X *[Signature]*

6. Signature - Agent
X *[Signature]*

7. Date of Delivery
11/17/88 W

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Feb. 1986 DH DOMESTIC RETURN RECEIPT

P 916 474 599

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to Bureau of Land Management
Farmington Resources & Tribal
Leases
1235 La Plata Highway
P.O. State and ZIP Code
Farmington, NM 87499

Postage \$.25

Certified Fee \$.85

Special Delivery Fee

Restricted Delivery Fee

Return Receipt showing to whom and Date Delivered \$.90

Return Receipt showing to whom Date and Address of Delivery

TOTAL Postage and Fees \$ 2.00

Postmark or Date
11/16/88

PS Form 3800, June 1985

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery.

3. Article Addressed to:
Navajo Tribal Council
P.O. Box 2010
Window Rock, Arizona 86515
Attn: Akhtar Azaman, Director
Navajo Tribal Minerals Dept.

4. Article Number
P 916 474 600

Type of Service:
☒ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee
X *Akhtar Azaman*

6. Signature - Agent
X

7. Date of Delivery
NOV 17 1988

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Feb. 1986 DH DOMESTIC RETURN RECEIPT

P 916 474 600

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to Navajo Tribal Council
Attn: Akhtar Azaman, Dir.
Nav. Tribal Minerals Dept.
P.O. Box 2010
Window Rock, AZ 86515

Postage \$.25

Certified Fee \$.85

Special Delivery Fee

Restricted Delivery Fee

Return Receipt showing to whom and Date Delivered \$.90

Return Receipt showing to whom Date and Address of Delivery

TOTAL Postage and Fees \$ 2.00

Postmark or Date
11/16/88

PS Form 3800, June 1985

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery.

3. Article Addressed to:
Simmons Engineering & Construction
Company
5704 Villa View Drive
Farmington, NM 87401

4. Article Number
P 916 474 601

Type of Service:
☒ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee
X *[Signature]*

6. Signature - Agent
X *[Signature]*

7. Date of Delivery
11-23-88

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Feb. 1986 DOMESTIC RETURN RECEIPT

P 916 474 601

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to Simmons Engineering
& Construction Co.
Street and No.
5704 Villa View Drive
P.O. State and ZIP Code
Farmington, NM 87401

Postage \$.25

Certified Fee \$.85

Special Delivery Fee

Restricted Delivery Fee

Return Receipt showing to whom and Date Delivered \$.90

Return Receipt showing to whom Date and Address of Delivery

TOTAL Postage and Fees \$ 2.00

Postmark or Date
11/16/88

PS Form 3800, June 1985

4-NMOCC (Aztec) 1-Atom, Inc. 1-Merrion & Bayless 1-File

NO. OF COPIES RECEIVED		4
DISTRIBUTION		
SANTA FE		1
FILE		1
U.S.O.S.		
LAND OFFICE		
TRANSPORTER	OIL	
	GAS	1
OPERATOR		
PRODUCTION OFFICE		

NEW MEXICO OIL CONSERVATION COMMISSION
REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Form C-104
Supersedes Old C-104 and C-110
Effective 1-1-65

I. Operator **Dugan Production Corp.**
Address **Box 234, Farmington, NM 87401**
Reason(s) for filing (Check proper box)
New Well ☒ Change in Transporter of:
Recompletion ☐ Oil ☐ Dry Gas ☐
Change in Ownership ☐ Casinghead Gas ☐ Condensate ☐
Other (Please explain)

If change of ownership give name
and address of previous owner

II. DESCRIPTION OF WELL AND LEASE

Lease Name Western Federal	Well No. 7	Pool Name, including Formation South Gallegos-Fruitland	Kind of Lease State, Federal or Fee Federal	Lease No. SF 078897
Location Unit Letter M ; 650 Feet From The South Line and 650 Feet From The West Line of Section 7 Township 26N Range 11W , NMPM, San Juan County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input type="checkbox"/> or Condensate <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input checked="" type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)
El Paso Natural Gas Company	Box 990, Farmington, NM 87401
If well produces oil or liquids, give location of tanks.	Is gas actually connected? When

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Resv.	Diff. Resv.
		X	X					
Date Spudded 7-25-77	Date Compl. Ready to Prod. 8-31-77	Total Depth 1450'	P.B.T.D. 1385'					
Elevations (DF, RKB, RT, CR, etc.) 6037' GR	Name of Producing Formation Fruitland	Top Oil/Gas Pay 1210'	Tubing Depth 1248'					
Perforations 1233-1238' & 1210-1214'		Depth Casing Shoe						
TUBING, CASING, AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT					
7-7/8"	5-1/2"	46'	6					
4-3/4"	2-7/8"	1412'	125					
	1-1/4"	1248'						

V. TEST DATA AND REQUEST FOR ALLOWABLE

(Test must be after recovery of total volume of load oil and must be equal to or less than top allowable for this depth or be for full 24 hours)

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	Tubing Pressure	Casing Pressure	
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	

GAS WELL

Actual Prod. Test-MCF/D 82 AOF	Length of Test 3 hrs	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (shut-in)	Casing Pressure (shut-in)	Choke Size
One point back pressure	209	239	1/2"

VI. CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Commission have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

(Signature) **Jim L. Jacobs**
Geologist
(Title)
9-8-77
(Date)

OIL CONSERVATION COMMISSION

APPROVED **SEP 14 1977**
BY
TITLE **SUPERVISOR DIST. #3**

This form is to be filed in compliance with RULE 1104.
If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.
All sections of this form must be filled out completely for allowable on new and recompleted wells.
Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter or other such change of condition.

dugan production corp.

September 8, 1977

N. M. Oil Conservation Commission
1000 Rio Brazos Road
Aztec, New Mexico 87410


Re: Dugan Production Corp.
Western Federal #7
650' FSL - 650' FWL
Section 7, T26N, R11W
San Juan County, New Mexico

TO WHOM IT MAY CONCERN:

This is to certify that deviation tests were run on the captioned well
and the following is a true report of those tests:


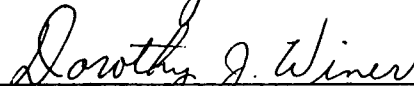
3/4" @ 1400'

Sincerely,


Jim L. Jacobs

State of New Mexico)
County of San Juan) ss

Subscribed and sworn to before me this 8th day of Sept., 1977.



Notary Public

My commission expires November 5, 1978

EL PASO NATURAL GAS COMPANY
POST OFFICE BOX 990
FARMINGTON, NEW MEXICO

NOTICE OF GAS CONNECTION

DATE August 31, 1978

THIS IS TO NOTIFY THE OIL CONSERVATION COMMISSION THAT CONNECTION FOR PURCHASE OF

GAS FROM Dugan Production Company
OperatorWestern Federal #7
Well Name90-169-01
Meter Code24268
Site CodeM
Well Unit7-26-11
S-T-RSouth Gallegos Fruitland
PoolEl Paso Natural Gas Company
Name of PurchaserWAS MADE ON August 23, 1978,
DateFIRST DELIVERY August 23, 1978
DateAOF 82CHOKE 80El Paso Natural Gas Company
Purchaser*S. R. Killman*
RepresentativeAssistant Chief Dispatcher
Titlecc: Operator Farmington
Oil Conservation Commission -- 2
Proration -- El Paso

File



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.6.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other _____

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other _____

2. NAME OF OPERATOR

Dugan Production Corp.

3. ADDRESS OF OPERATOR

Box 234, Farmington, NM 87401

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

At surface

650' FSL - 650' FWL

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED 7-25-77 16. DATE T.D. REACHED 7-29-77 17. DATE COMPL. (Ready to prod.) 8-31-77 18. ELEVATIONS (DF, HSB, RT, GR, ETC.)* 6037' GR 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 1450' 21. PLUG, BACK T.D., MD & TVD 1385' 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY 0-TD 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 1210-1238' Fruitland 25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN

Electrical Log

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
5-1/2"	14#	46'	7-7/8"	6 SX	None
2-7/8"	6.4#	1412'	4-3/4"	125 SX	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
1-1/4"	1248'	

31. PERFORATION RECORD (Interval, size and number)

1 jet/ft
1233-1238' (5 holes)
1210-1214' (4 holes)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
	See completion report for detailed information.

33. PRODUCTION

DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing WELL STATUS (Producing or shut-in) Shut-in

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
8-31-77	3	1/2"			82 AOF		
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY API (CORR.)	
209 SI	239 SI			82 AOF			

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

Jim L. Jacobs

TITLE

Geologist

DATE

9-8-77

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

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

tion and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

items 22, one 24, 47. If items were incomplete for separate production from one interval, state in item 24, and in item 47 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 53. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, PLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

[illegible]

U.S. GOVERNMENT PRINTING OFFICE: 1963-O-683636
GPO 937-497

871-233

Form 9-331
(May 1963)UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)Form approved.
Budget Bureau No. 42-R1424

SUNDRY NOTICES AND REPORTS ON WELLS

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

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. SF 078897	
2. NAME OF OPERATOR Dugan Production Corp.		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. ADDRESS OF OPERATOR Box 234, Farmington, NM 87401		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 650' FSL - 650' FWL		8. FARM OR LEASE NAME Western Federal	
14. PERMIT NO.		9. WELL NO. 7	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 6037' GR		10. FIELD AND POOL, OR WILDCAT South Gallegos-Fruitland	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 7, T26N, R11W	
		12. COUNTY OR PARISH San Juan	
		13. STATE NM	

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	Completion <input checked="" type="checkbox"/>
(Other) <input type="checkbox"/>			

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

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting and 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.)*

(OVER)

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

SIGNED

Jim L. Jacobs

TITLE

Geologist

DATE

9-7-77

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

RECEIVED
SEP 9 - 1977
GEOLOGICAL SURVEY

SEP 12 1977
OIL CON. COM.
DIST. 3

8-17-77 PSTD 1385'. Moved in Farmington Well Service swabbing unit. Blue Jet rigged up and ran gamma-ray correlation and collar log. Swabbed 2-7/8" csg down to 800'. Perf w/one 2-1/8" glass jet/ft 1233-1238' (5 holes). Swabbed csg down (no indication of gas or wtr entry). Acidized all perfs w/375 gals 15% HCl reg acid. Breakdown press 2000 psi, treated @ 1-1/2 BPM @ 1100 psi. Swabbed well (very slight show gas ahead of swab, no indication of wtr entry). Perf w/one 2-1/8" glass jet/ft 1210-1214' (4 holes). Swabbed csg down, no increase in gas or fluid entry. Treated all perfs w/375 gals 15% HCl reg acid followed by 8 bbls wtr, treated @ 750 psi @ 2 bbls/min. Dropped 7 ball sealers, no ball action. Swabbed well down, very slight increase in gas show ahead of swab, TSTM, no evidence of wtr entry.

8-19-77 Western Company and NOWSCO foam frac well using 70 quality foam. Used 15,000# 10-20 sand, 86.5 bbls wtr, 22 gals Adafoam, and 70,000 SCF nitrogen. Initial treating press 1500 psi, Max treating press 2400 psi, Avg treating press 1800 psi. Avg IR 4.5 BPM of fluid and 3500 SCF nitrogen/min. Flushed w/3000 SCF nitrogen. ISDP 1500 psi, 10-min standing press 1100 psi. Job complete 2:30 PM 8-19-77.

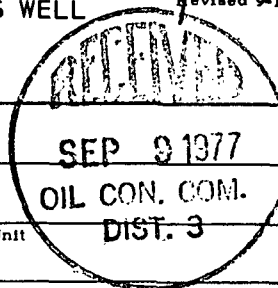
8-23-77 Moved in Farmington Well Service swabbing unit. Ran 39 jts 1-1/4" OD 2.3# J-55 IJ Buttress tbg. TE 1251.43' set @ 1248' GR. Nippled up wellhead and installed master valve. Well kicked off in 15 min making est 100 MCF. Blew well to atmosphere overnight. Rigged down Farmington Well Service.

(Aztec) 1-Atom, Inc. 1-Merrion & Bayless 1-EPNG (Bob Clark) 1-File

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65



Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		Test Date 8-31-77	
Company Dugan Production Corp.		Connection SEP 12 1977	
Pool South Gallegos Fruitland		Formation Fruitland	
Completion Date 8-23-77		Total Depth 1450'	Plug Back TD 1385'
		Elevation 6037' GR	Farm or Lease Name Western Federal
Csg. Size 2-7/8"	Wt. 6.4#	Set At 1412'	Perforations: From 1210' To 1238'
Thg. Size 1-1/4"	Wt. 2.3#	Set At 1248'	Perforations: From Open End To
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single - Gas		Packer Set At	County San Juan
Producing Thru Tubing	Reservoir Temp. °F @	Mean Annual Temp. °F	Baro. Press. - P _g New Mexico
L	H	G _g	% CO ₂ % N ₂ % H ₂ S Prover Meter Run Taps
.62 est			

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							209		239		7 days
1.											
2.											
3.	1/2" Pos Choke			3					27		3 hrs
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1							
2							
3	5.4315		15	1.000	.9837	1.000	80
4							
5							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcl/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ XXXXXXXXXX
3.					Specific Gravity Flowing Fluid _____ XXXXX
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

P_c 251 P_c² 63,001

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1				
2				
3		39	1,521	61,480
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{1.0247}{1.0247 - 1.0210} = 1.0247$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0210$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 82$

Absolute Open Flow	82	Mcid @ 15.025	Angle of Slope @	Slope, n .85
--------------------	----	---------------	------------------	--------------

Remarks:

Approved By Commission:	Conducted By: Charles Hall	Calculated By: Charles Hall	Checked By:
-------------------------	-------------------------------	--------------------------------	-------------

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

SF 078897

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Western Federal

9. WELL NO.

7

10. FIELD AND POOL, OR WILDCAT

South Gallegos

Fruitland - PC

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

Sec 7, T26N, R11W

12. COUNTY OR PARISH

San Juan

13. STATE

NM

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

Box 234, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

650' FSL - 650' FWL

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

6037' GR

16. 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 ON:

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 perti-
nent to this work.)*

7-26-77

Moved in and rigged up Morrow Drilling Company. Spudded 7-7/8" hole @ 10:00 AM 7-25-77. Drilled to 46'. Ran 1 jt 5-1/2" OD 14# ST&C csg. TE 44.50' set @ 46' GR. Cemented w/6 sx. Job complete @ 11:30 AM 7-25-77.

7-30-77

TD 1450'. Drilled 4-3/4" hole w/native mud 1230-1450' TD.

7-31-77

Ran 53 jts 2-7/8" OD 6.4# J-55 10R NEUE new tbq. TE 1413.01' set @ 1412' GR. Had good circ and recip pipe during cementing operations. Cemented w/75 sx BJ 2% Lodense with 1/4# Cello-flake per sk plus 50 sx neat cement with 1/4# Cello-flake/sk. Pre-flushed hole w/100 gals Mud-Sweep. Bumped plug w/1800 psi, released to 750 psi. Shut well in. POB 12:15 PM 7-30-77.

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

SIGNED

Thomas A. Dugan

TITLE

Petroleum Engineer

DATE

8-2-77

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

AUG 3 1977

U.S. GEOLOGICAL SURVEY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☐MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Dugan Production Corp.

3. ADDRESS OF OPERATOR

Box 234, Farmington, NM 87401

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

At surface

650' FSL - 650' FWL

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

20 miles south of Bloomfield, New Mexico

10. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

650'

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED
TO THIS WELL

158.75

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

660' Approx

19. PROPOSED DEPTH

1350'

20. ROTARY OR CABLE TOOLS

Rotary

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

6037' GR

22. APPROX. DATE WORK WILL START*

7-7-77

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
7-7/8"	5-1/2"	14#	30'	5 SX
4-3/4"	2-7/8"	6.5#	1350'	75 SX

Plan to test Fruitland and Pictured Cliffs formation using slim hole technique. If productive, plan to set 2-7/8" tbg for csg thru pay zone, selectively perforate, frac, clean out after frac, run 1-1/4" OD 2.4# tbg, and complete well.

Do not plan to have BOP on well while drilling. Will install master valve and stripper head while completing.

NMERB Requirement: Gas not dedicated at this time.

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

24.

SIGNED

Thomas A. Dugan

TITLE

Petroleum Engineer

DATE

6-29-77

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

MSL INDICATED PROJECT
DHC APPLIED FOR

*See Instructions On Reverse Side

30-095-22627

5. LEASE DESIGNATION AND SERIAL NO.

SF 078897

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Western Federal

9. WELL NO.

7

10. FIELD AND POOL, OR WILDCAT

McGALLAGOS FRUITLAND
WILDCAT P.C.11. SEC., T., R., M., OR BLE.
AND SURVEY OR AREA

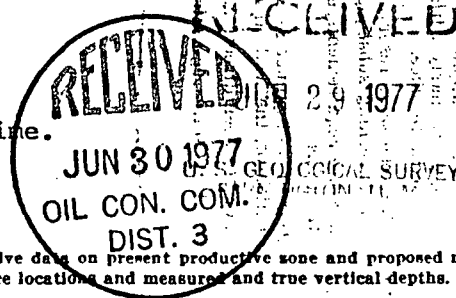
Sec 7, T26N, R11W

12. COUNTY OR PARISH

San Juan

13. STATE

NM



NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

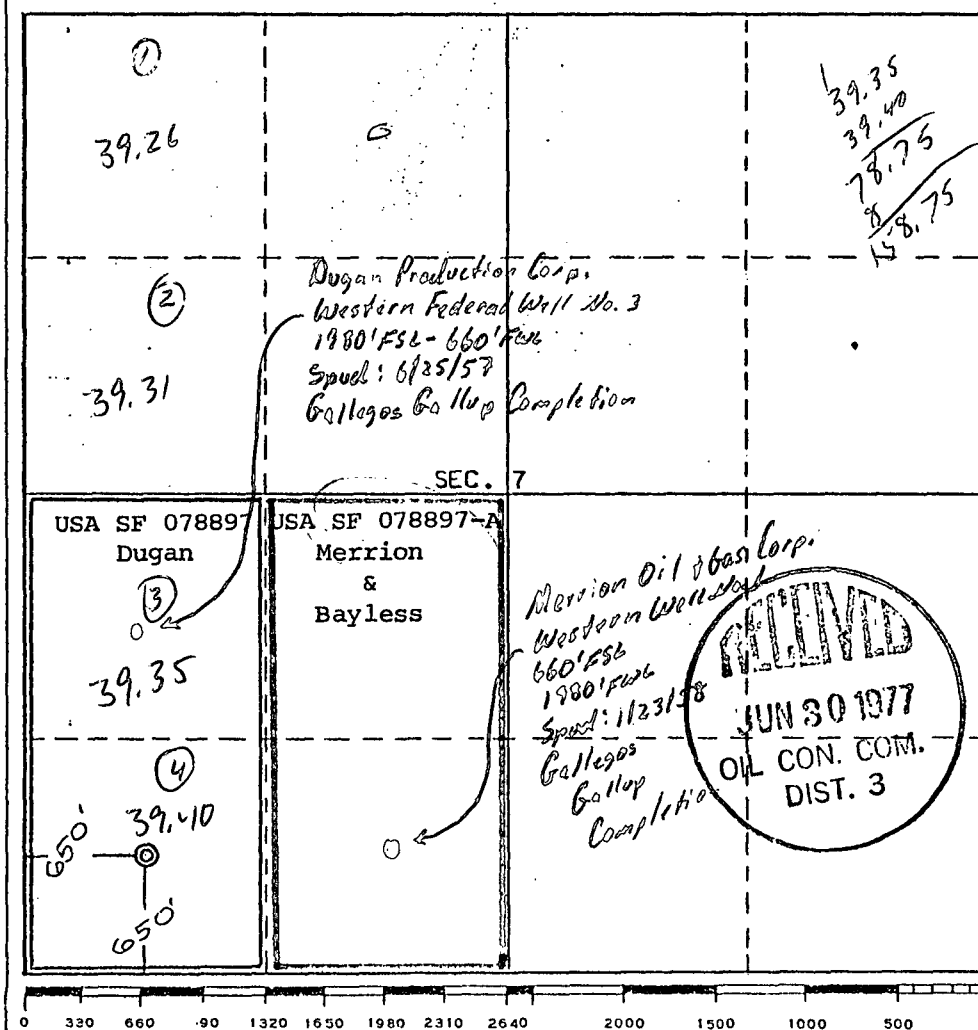
Operator Dugan Production Corp.			Lease Western Federal		Well No. 7
Unit Letter M	Section 7	Township 26 North	Range 11 West	County San Juan	
Actual Footage Location of Well: 650 feet from the South line and 650 feet from the West line					
Ground Level Elev. 6037	Producing Formation Fruitland-Pictured Cliffs	Pool W.C. P.C. South Gallegos FZT.	Dedicated Acreage: 158.75 Acres		

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation Plan to communitize

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Name
Thomas A. Dugan

Position
Petroleum Engineer

Company
Dugan Production Corp.

Date
6-29-77

STATE OF NEW MEXICO
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 are true and correct to the best of my knowledge and belief.
REGISTERED LAND SURVEYOR
E.V. ECHOHAWK
No. 3602

Date Surveyed

June 11, 1977

Registered Professional Engineer and/or Land Surveyor

Certificate No. **3602**
E.V. Echohawk LS

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

July 14, 1977

C Dugan Production Corporation
P. O. Box 234
Farmington, New Mexico 87401

Attention: Richard Tully

Administrative Order NSL-965

O Gentlemen:

P Reference is made to your application for approval of a non-standard location for your Western Federal Well No. 7 located 650 feet from the South line and 650 feet from the West line of Section 7, Township 26 North, Range 11 West, NMPN, San Juan County, New Mexico.

Y By authority granted me under the provisions of Rule 104 F of the Commission Rules and Regulations, the above-described unorthodox location is hereby approved.

Very truly yours,

JOE D. RAMEY
Secretary-Director

JDR/JER/jr

cc: Oil Conservation Commission - Astec
Oil & Gas Engineering Committee - Hobbs
U.S. Geological Survey - Farmington