

UNITED STATES  
DEPARTMENT OF THE INTERIOR

## GEOLOGICAL SURVEY

API 30-045-21996

5. LEASE DESIGNATION AND SERIAL NO.

NM 25440

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Big 8

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Bisti DK - Bisti GA

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

Sec 8, T24N, R9W

12. COUNTY OR PARISH 13. STATE

San Juan

NM

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

1530' FSL - 840' FWL

At proposed prod. zone

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

2 miles south Blanco Trading Post

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

840'

16. NO. OF ACRES IN LEASE

640

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

None

19. PROPOSED DEPTH

6440'

20. ROTARY OR CABLE TOOLS

Rotary

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

6771' GR

22. APPROX. DATE WORK WILL START\*

3-1-76

## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#	180'	135 sx
7-7/8"	5-1/2"	15.5#	6440'	800 cu ft

Plan to drill hole to test Gallup and Dakota formations. Set 5-1/2" casing thru Dakota, cement first stage to cover Dakota and Gallup formations, set two-stage tool below Mesaverde formation and cement second stage with enough cement to cover Mesaverde and Pictured Cliffs formations. Selective perf and frac Dakota and Gallup formations, clean out, set Baker Model "D" packer below Gallup formation, set 1-1/4" tubing to Dakota formation and 2-1/16" tubing to Gallup formation.

We plan to use blowout preventer furnished by Young Drilling Company while drilling hole and use manual Shaffer 6" double gate blowout preventer while completing well.

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

Jim L. Jacobs

TITLE

Geologist

DATE

2-4-76

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

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.

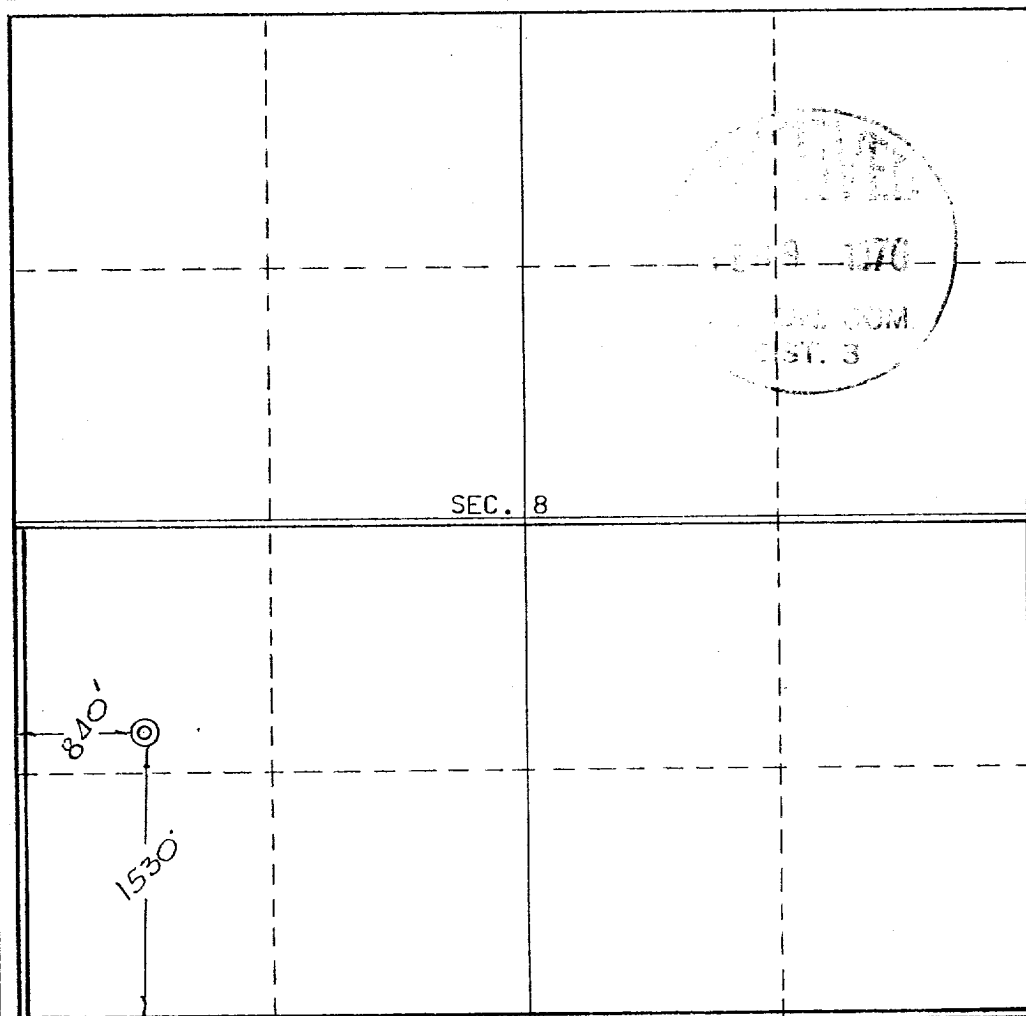
Operator <b>Dugan Production Corporation</b>			Lease <b>Big 8</b>		Well No. <b>1</b>
Unit Letter <b>L</b>	Section <b>8</b>	Township <b>24 North</b>	Range <b>9 West</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1530</b> feet from the <b>South</b> line and <b>840</b> feet from the <b>West</b> line					
Ground Level Elev. <b>6771</b>	Producing Formation <b>Dakota</b>	Pool <b>Basin Weldcat</b>	Dedicated Acreage: <b>320</b> Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. 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 \_\_\_\_\_

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  
**Jim L. Jacobs**

Position  
**Geologist**

Company  
**Dugan Production Corp.**

Date  
**2-4-76**

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

Date Surveyed  
**February 2, 1976**

Registered Professional Engineer and/or Land Surveyor

**E.V. Echohawk**

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

0 330 660 .90 1320 1650 1980 2310 2640 2000 1500 1000 500 0

Form 9-331  
(May 1962)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE\*  
(Other instructions on re-  
verse side)Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

NM 25440

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

## 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

1530' FSL - 840' FWL

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Big 8

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat DK - Bisti GA

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

Sec 8, T24N, R9W

14. PERMIT NO.

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

6771' GR

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:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON\*

REPAIR WELL

CHANGE PLANS

(Other)

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREATMENT

ALTERING CASING

SHOOTING OR ACIDIZING

ABANDONMENT\*

(Other)

Operations

(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.)\*

SEE ATTACHED REPORT

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

SIGNED

T. A. Dugan  
THOMAS A. Dugan

TITLE

Engineer

DATE

6-21-76

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

dugan production corp.

Dugan Production Corp.  
Big 8 #1  
1530' FSL - 840' FWL  
Sec 8, T24N, R9W  
San Juan County, New Mexico  
Elevation - 6771' GR

MORNING REPORT

1-19-76 Moved in L & B Speed Drill and spudded 12-1/4" hole, drilled to 90'.

1-20-76 Finished drilling 12-1/4" hole to 190' GR. Ran 6 jts 8-5/8" OD 24#  
8R ST&C csg, TE 188' set @ 199' RKB, cemented by Woodco w/115 sx  
Class "B" w/2% CaCl. FOB 3:30 PM 2-19-76.

WAITING ON ROTARY TOOLS

3-7-76 Moved in and rigged up Young Drilling Company. Drilled to 15--something  
feet (report by Herman Walters).

3-8-76 Trip for Bit #3 @ 2633'.  
WT 9.0 VIS 36 WL 7.0

3-9-76 Drilling @ 3322' w/Bit #5  
WT 8.9+ VIS 36 WL 6.0 PH 9.5

3-10-76 Trip @ 3833' for Bit #6  
WT 9.0+ VIS 40 WL 6.0 PH 9.5

3-11-76 Drilling @ 4370' w/Bit #8  
WT 9.1 VIS 37 WL 7.0 DEV 1-3/4" @ 4274'

3-12-76 Trip @ 4775' for Bit #8.  
WT 9.2 VIS 34 WL 8 PH 9.5 DEV 1-3/4" @ 4719'

3-13-76 Trip @ 5075 for Bit #10  
WT 9.1 VIS 37 WL 6.0 PH 9.5

3-14-76 Drilling @ 5412' w/Bit #11  
WT 9.2 VIS 38 WL 6.6 PH 9.0 DEV 1-1/2" @ 5393'

3-15-76 Drilling @ 5745' w/Bit #12  
WT 9.2 VIS 38 WL 5.6 PH 8.8 DEV 2-1/4" @ 5680'

3-16-76 Drilling @ 6170' w/Bit #13  
WT 9.2 VIS 38 WL 5.2 PH 8.5 DEV 2" @ 6084'

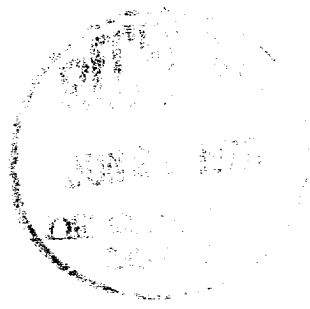
MORNING REPORT (Cont'd)

- 3-17-76 Drilling @ 6372'  
WT 9.2 VIS 38 WL 5.4 PH 9
- 3-18-76 TD 6392'. Conditioned hole, made short trip, attempted to run logs, hit bridge @ 265'. Made short trip - 30 stands, circulated hole, attempted to log, hit bridge @ 310'. Ran 6 stands, drilled out bridges. Go International ran IES and density-gamma ray logs.
- 3-19-76 TD 6392'. Laid down drill pipe. Ran 204 jts 4-1/2" OD 10.5# K-55 8R ST&C CF&I csg set @ 6392'. Had trouble breaking circulation. Cemented first stage w/300 sx 4# gel (456 cu ft) 1/4# cello-flake/sk, good mud returns while cementing. Max cementing press 600 psi, worked csg while cementing. POB 10:30 PM 3-18-76. Opened Baker stage tool @ 4430', circulated hole 4 hrs thru stage tool. Cemented second stage w/525 sx 65-35 plus 12% gel plus 1/2# cello-flake/sk (slurry volume 1328 cu ft). Good mud returns while cementing. Max cementing press 1000 psi. POB 3:15 AM 3-18-76. Had approx one bbl cement to surface. Released rig.

WAITING ON COMPLETION RIG

DAILY REPORT

- 4-16-76 Moved in Farmington Well Service Rig #6. Set csg pack off, welder trimmed and bevelled csg, installed tbg head and BOP. Went in hole with 3-7/8" bit on 2-3/8" OD tbg. Tagged stage collar @ 4430'.
- 4-17-76 Drilled stage collar, cleaned out 18' cement above float collar, cleaned out to 6375', circulated hole clean.
- 4-18-76 Shut down - Easter Sunday.
- 4-19-76 Western Company pressure tested csg and BOP to 4000 psi - held OK. Circulated hole. Spotted 300 gal 15% HCl. Pulled tbg. Go International ran gamma-ray correlation log, hit btm @ 6362'. Ran perf gun, unable to spud past 6362'. Ran bond log. Went in hole with 2-3/8" tbg, circulated out 13' of frac sand.
- 4-20-76 PBTD 6375'. Pressure tested csg and BOP to 4000 psi - held OK. Spotted 300 gal 15% HCl. Pulled tbg, went in hole w/perf gun, tagged up @ 6370'. Perforated one jet/ft 6353-69'. Broke down perf, pumped 100 bbls wtr, IR 32 B/M @ 3600 psi, ISDP 1800 psi. Perforated one jet/ft 6255-69' and 6278-90'. Western Company frac Dakota fm using 1628 bbls wtr, 58,700 lbs 20-40 sd, 2979 hp, 2 1/2# FR-2/1000 gal wtr, shut down after 50 bbls pad ISDP 1400 psi, IF 3000 psi, Max 3800 psi, Avg 3260 psi, Min 2900 psi, Final 3700 psi, Avg IR 37.4 B/M, ISDP 2200 psi. Made 2 ball drops of 15 balls each: first drop 200 psi increase; second drop w/300 gal 15% HCl 100 psi press increase. Shut well in 8 hrs. Opened well to pit overnight.



DAILY REPORT (Cont'd)

- 4-21-76 Well flowing by head w/small amount of flammable gas, wtr slightly salty. Went in hole w/tbg, had 5' sand fill. Swabbed well 8 hrs, swabbing est 80 bbls wtr/hr. Wtr gas cut. Csg press 100 psi, fluid level 500'. Left tbg open overnight.
- 4-22-76 SI csg press 500 psi. Well had not flowed thru tbg overnight. Fluid level 500'. Made 2 swab runs. Checked sand fill-up, had 12' of sand in well bore. Circulated sand out of hole. Pulled tbg. Ran Baker Model "R" packer set @ 6330'. Swabbed perfs 6353-69' thru tbg, swabbed 5 hrs, well making enough gas to blow wtr off swab but will not flow. Left tbg open overnight.
- 4-23-76 Well kicked off during night, flowing by heads, show of oil, est 500 MCFGPD (oil golden color). Moved packer up hole, set @ 6230'. All Dakota perfs open below packer. Swabbed well, well kicked off making est 1000 MCFGPD w/heavy spray of wtr. Left well open overnight.
- 4-24-76 Well flowing est 1500 MCF w/heavy spray of oil and wtr (oil from all zones dark green color). Killed well, pulled tbg and packer, set Baker Model "D" packer on wire line @ 6200'. Perforated one jet/ft 6125-40' and 6154-66'. Ran Baker Model "R" packer on 2-3/8" OD tbg set @ 6077'. Swabbed tbg dry, no fluid entry, filled back side of tbg, pressured to 500 psi. Acidized Greenhorn fm using 1000 gal 15% HCl. Dropped 25 balls in acid. IF 3725 psi, Max 3725 psi, broke from 3600-3325' when acid hit, Avg 3300 psi, Final 3500 psi, Avg IR 2.2 B/M, Max IR 2.8 B/M. Small press increase when balls hit. ISDP 3000 psi, 5-Min SI 2975 psi. Swabbed well, recovered approx 1/4 of acid, well making est 50 MCF w/some light oil. Shut well in.
- 4-25-76 Sunday - did not work
- 4-26-76 Shut-in tbg press 200 psi. Swabbed well, had 1500' of oil, no wtr. Second run recovered 200' of oil, no wtr. Well making est 50 MCF. Loaded 2-3/8" tbg w/wtr, pulled Baker Model "R" packer. Ran 5 jts 1-1/4" OD 2.3# J-55 10R IJ tbg below seal assy and Baker Model "F" nipple above seal assy. 196 jts 2-3/8" OD 4.7# J-55 8R EUE tbg plus one 4' tbg sub placed first under donut. TE 6353.86' set @ 6365' RKB. Tbg stung into Baker Model "D" packer @ 6200'. Kicked well off with three swab runs. Well flowing to pit making est 1800 MCF w/heavy spray of wtr and oil. Let well flow to pit over night.
- 4-27-76 After flowing to pit 16 hrs well making est 1200 MCF w/heavy spray of oil and wtr, some slugs of wtr. Shut well in.
- 4-28-76 Blow well one hr, unloaded slug of oil and wtr, flowing strong and steady after one hr. Shut well in for test.

SHUT-IN FOR INITIAL POTENTIAL TEST



## OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO  
1000 RIO BRAZOS RD. - AZTEC

87410

DIRECTOR  
JOE D. RAMEY

LAND COMMISSIONER  
PHIL R. LUCERO



STATE GEOLOGIST  
EMERY C. ARNOLD

February 13, 1976

Mr. T. A. Dugan  
Dugan Production Corp.  
Box 234  
Farmington, New Mexico 87401

Re: Dugan Production Corp  
Big 8 # 1  
L-8-24N-9W

Dear Tom:

The intention to drill the above captioned well is approved for drilling a Basin Dakota well.

If the well is to be completed in the Bisti Lower Gallup Oil Pool, an acreage dedication plat will be required and approval of the non-standard location will be required if the current pool rules remain in effect.

If there are questions please contact us.

Yours very truly,

A. R. Kendrick,  
Supervisor District #3

ARK/mm