

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.

29 SF-078860

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

NM

8. Lease Name and Well No.

Largo Federal B #2

9. API Well No.

30-045-33/73

10. Field and Pool, or Exploratory

Bisti Lower Gallup

11. Sec., T., R., M., or Blk. and Survey or Area

C Sec. 22, T24N, R9W

12. County or Parish
SAN JUAN

13. State
NM

17. Spacing Unit dedicated to this well

N/2 NW/4, (80-ac.)

20. BLM/BIA Bond No. on file

23. Estimated duration
8 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature

Kurt Fagrelus

Name (Printed/Typed)

KURT FAGRELIUS

Date

6-15-2005

Title

GEOLOGIST

Approved By (Signature)

Almeida

Name (Printed/Typed)

Office

Date

5/14/05

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

A water based gel-mud will be used to drill surface and production casing hole. Standard 2,000 psi BOP will be used to drill production hole. Open hole logs will be run, productivity of the Gallup interval will be determined, casing will be cemented, perforated and the interval will be fracture stimulated.

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4

RMOC

District I
PO Box 1980, Hobbs, NM 88241-1980

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

*API Number		*Pool Code 5890	*Pool Name BISTI LOWER - GALLUP (O)
*Property Code	*Property Name LARGO FEDERAL B		*Well Number 2
*GRID No. 006515	*Operator Name DUGAN PRODUCTION CORPORATION		*Elevation 6746'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	22	24N	9W		590	NORTH	1950	WEST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

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

¹² Dedicated Acres 80.0 Acres - (N/2 NW/4)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <i>Kurt Fagrelus</i> Signature Kurt Fagrelus Printed Name Geology Title 6-15-2005 Date
	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. Date of Survey: JUNE 3, 2005 Signature and Seal of Professional Surveyor <i>JASON C. EDWARDS</i> Certificate Number 15269

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>	7. Lease Name or Unit Agreement Name Largo Federal B
2. Name of Operator Dugan Production Corp.	8. Well Number 2
3. Address of Operator 505-325-1821 709 East Murray Drive, Farmington, NM 87401	9. OGRID Number 006515
4. Well Location Unit Letter C : 590 feet from the north line and 1950 feet from the west line Section 22 Township 24N Range 9W NMPM County San Juan	10. Pool name or Wildcat Bisti Lower Gallup (0)
11. Elevation (Show whether DR, RKB, RT, GR, etc.) GL-6746'	
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>	
Pit type <u>Drilling</u> Depth to Groundwater <u>550'</u> Distance from nearest fresh water well <u>>1000'</u> Distance from nearest surface water <u>400'</u>	
Pit Liner Thickness: mil Below-Grade Tank: Volume bbls; Construction Material	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
OTHER: Reserve pit for drilling (unlined) <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion. A water based gel-mud will be used to drill surface and production casing hole. Standard 2,000 psi BOP will be used to drill production hole. Open hole logs will be run, the Gallup interval evaluated and if determined productive, casing will be run, perforated and fracture stimulated. Pits will be constructed and abandoned as per BLM conditions of approval.



I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.
Federal lease, pits will be constructed and abandoned as per BLM conditions of approval.

SIGNATURE Kurt Fegredo TITLE Geologist DATE 6-15-2005

Type or print name
For State Use Only

E-mail address:

Telephone No.

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 8 DATE SEP 16 2005
Conditions of Approval (if any): Pits will be constructed and abandoned in compliance w/ NMOCD rules and guidelines.

DUGAN PRODUCTION CORPORATION LARGO FEDERAL B #2
590' FNL, 1950' FWL, SECTION 22, T24N, R9W, NMPM
SAN JUAN COUNTY, NEW MEXICO GROUND ELEVATION: 6746'

PLAT 3.

LATITUDE: 36°18'19"
LONGITUDE: 107°46'42"
 DATUM: NAD1927

PLAT NOTE:

SURFACE OWNER
 Bureau of Land
 Management

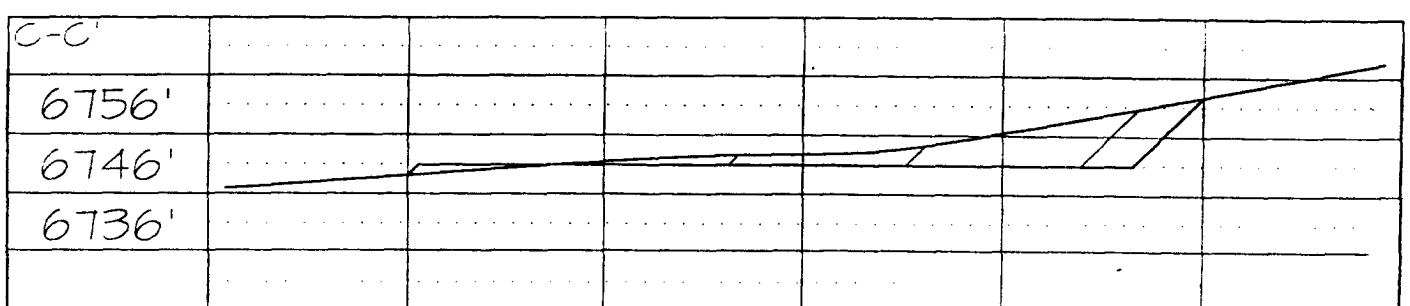
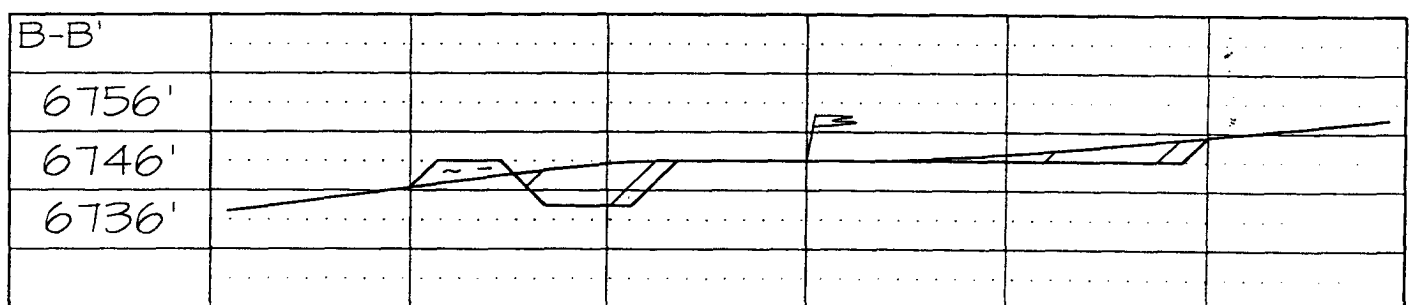
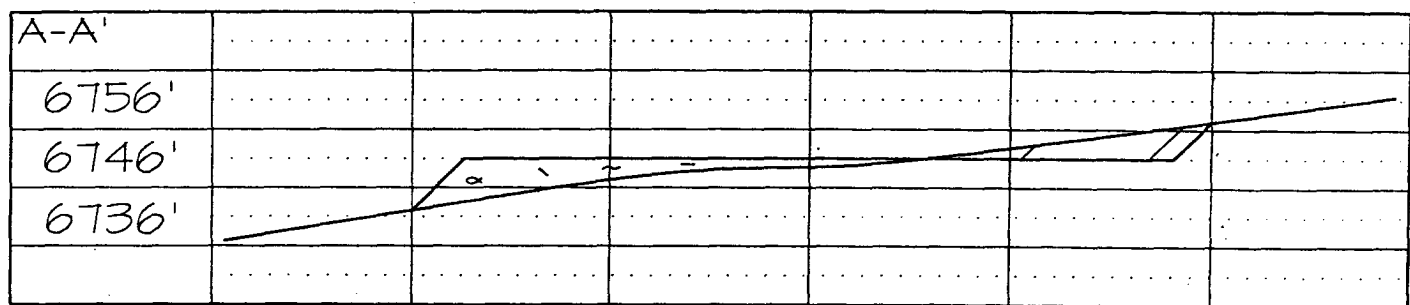
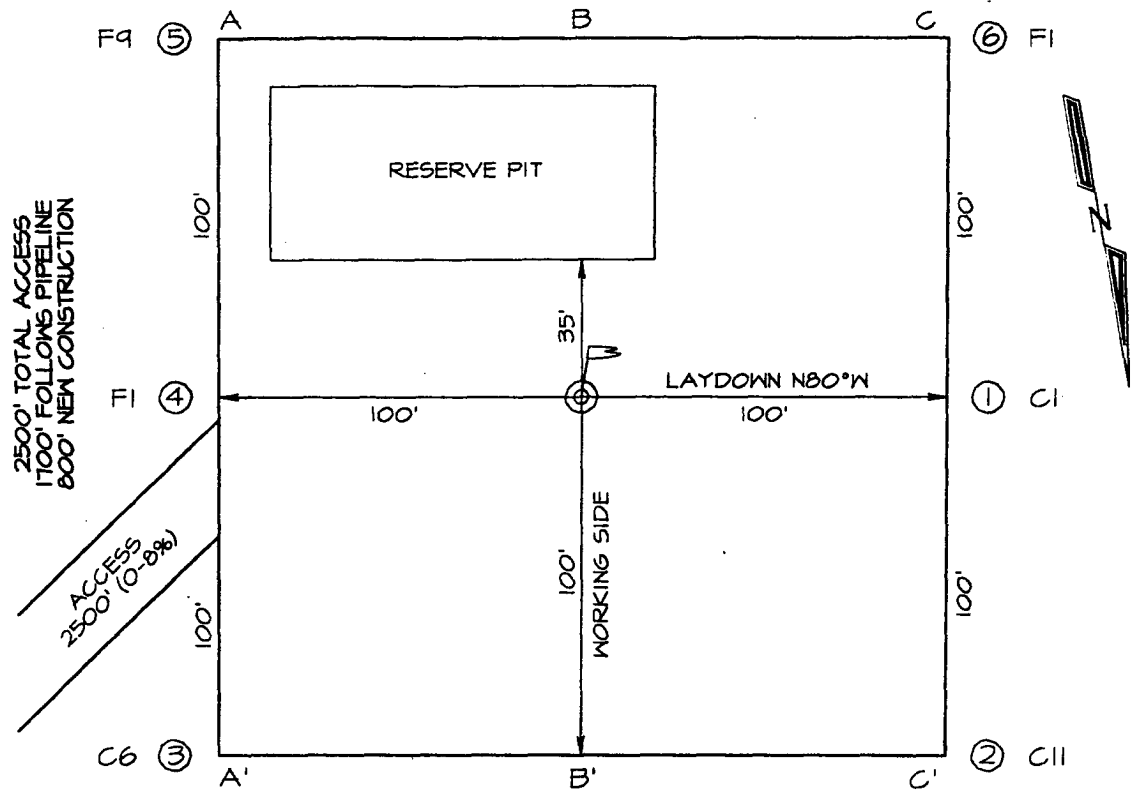


EXHIBIT B
OPERATIONS PLAN
Largo Federal B #2

APPROXIMATE FORMATION TOPS:

Ojo Alamo	545'	Cliff House	2420'
Kirtland	615'	Menefee	3015'
Fruitland	1185'	Point Lookout	4035'
Pictured Cliffs	1565'	Mancos	4235'
Lewis	1720'	Gallup	4950'
		Total Depth	5400'

Catch samples every 10 feet from 5050' to T.D.

LOGGING PROGRAM:

IES and CDL logs will be run from total depth to surface.

CASING PROGRAM:

Hole Size	Casing Size	Wt./ft.	Setting Depth	Grade and Condition
12-1/4	8-5/8	24#	200	J-55
7-7/8	4-1/2	10.5#	5,400	J-55

Plan to drill a 12-1/4" hole and set 200' of 8-5/8" OD, 24#, J-55 surface casing. Then plan to drill a 7-7/8" hole to total depth with gel-water mud program to test Gallup interval. Plan to run IES and CDL logs. If determined productive, will run 4-1/2", 10.5#, J-55 production casing, selectively perforate, frac, clean out after frac and complete well.

CEMENTING PROGRAM:

Surface Cement to surface with 125 cf Class B + 2% CaCl₂.
Circulate to surface.

1st Stage Cement with 50/50 "B" Poz with 2% gel + 1/4# flocele/sk (400 cf).
Total cement slurry for 1st state is 400 cf.
Projected top for 1st stage is 4350'.

2nd Stage Cement with 65/35 "B" Poz with 12% gel + 1/4# flocele/sk (1370 cf) followed by 50/50 "B" Poz with 2% gel + 1/4# flocele/sk (100 cf).
Circulate to surface.
Total cement slurry for 2nd stage is 1570 cf.
Total cement for both stages is ~~1970~~ cf.

1870

An adequate spacer will be pumped ahead of the cement slurry to help prevent mud contamination of the cement. An adequate number of casing centralizers will be run through usable water zones to ensure that casing is centralized through these zones. The adequate number of centralizers will be determined based on API standards. Centralizers to impart a swirling action around the casing will be used just below and into the base of the lowest usable water zone. These devices will assist mud displacement, increase cement bonding potential and create an effective hydraulic seal. A chronological log will be kept which records the pump rate, pump pressure, slurry density, and slurry volume for the cement job. The log will be sent to the BLM after completion of the job.

WELLHEAD EQUIPMENT:

Casinghead 8-5/8" X 4-1/2" 2000# WP-screwed wellhead.
Tubinghead 4-1/2" X 2-3/8" 2000#WP-screwed wellhead.

BOP and Related Equipment will include for a 2000 psi system:

(Exhibit D)

Annular preventer, double ram, or 2 rams with one
Being blind and one being a pipe ram.

Kill line (2" minimum)

1 kill line valve (2" minimum)

1 choke line valve

2 chokes

Upper kelly cock valve with handle available

Safety valve and subs to fit all drill string
connections in use.

Pressure gauge on choke manifold.

2" minimum choke line.

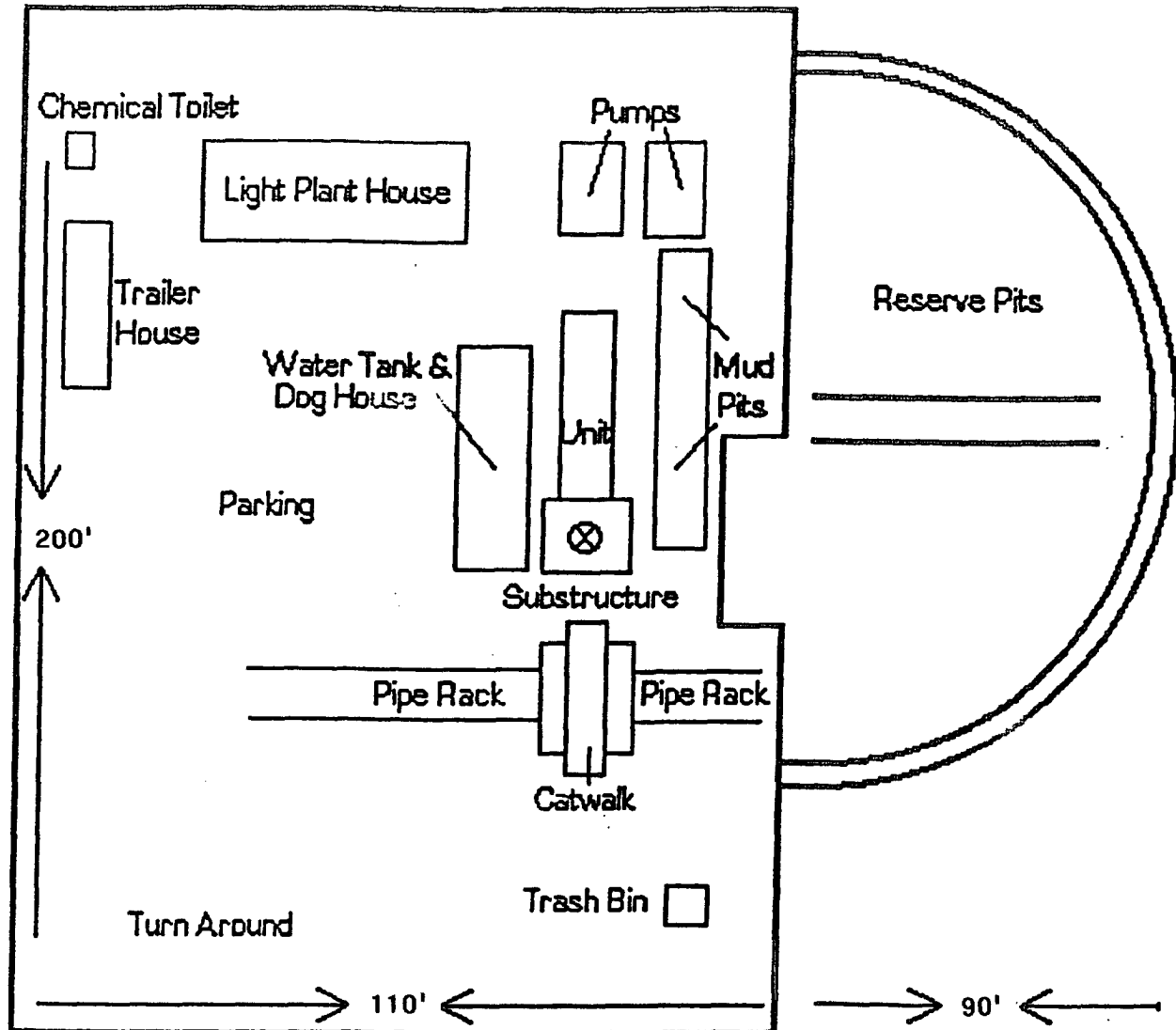
Fill-up line.

Contacts:

Dugan Prod.Corp. Office & Radio Dispatch: 325-1821

Mark Brown	327-3632 (H)
	320-8247 (M)
Kurt Fagrelus	325-4327 (H)
	320-8248 (M)
John Alexander	325-6927 (H)
	320-1935 (M)

Typical Location
For a Gallup Well

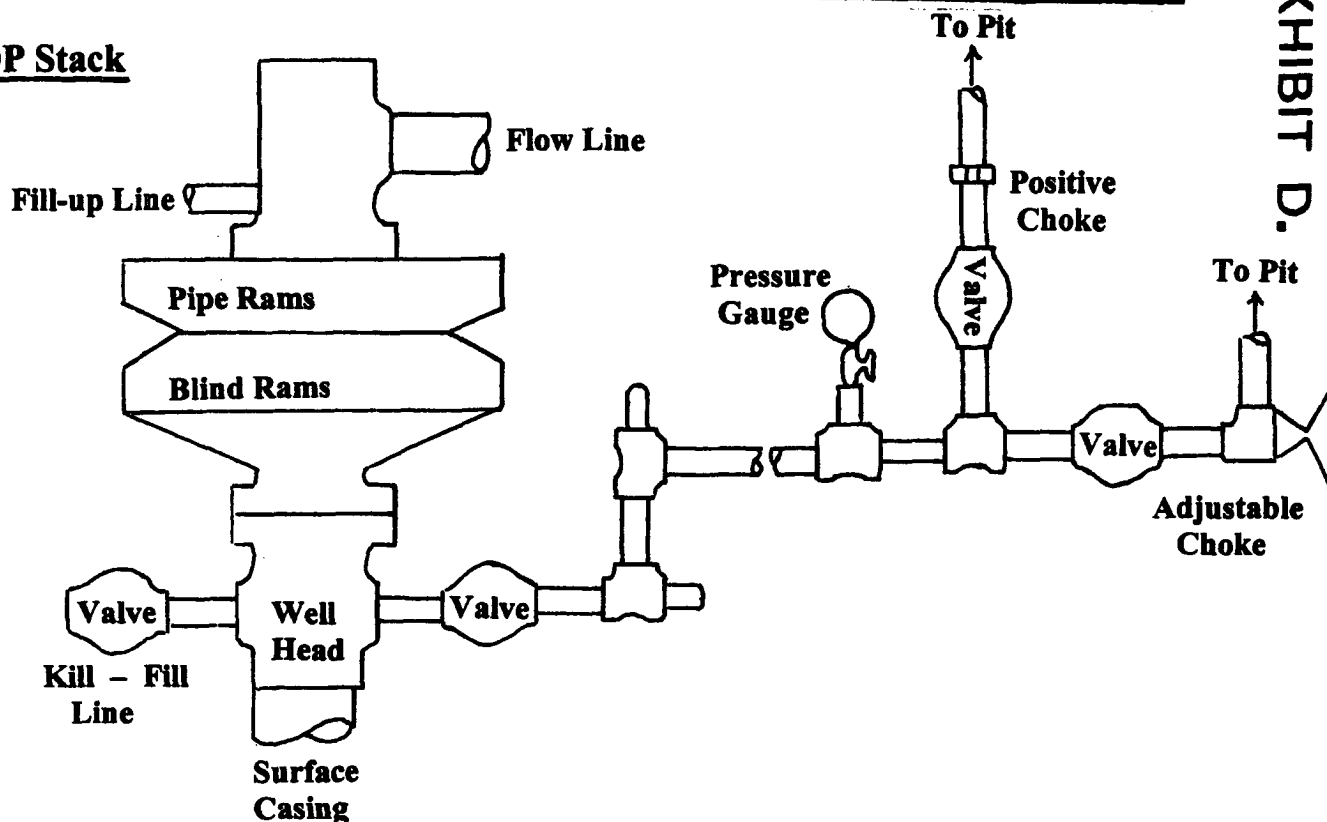


DUGAN PRODUCTION CORP.
LARGO FEDERAL B #2

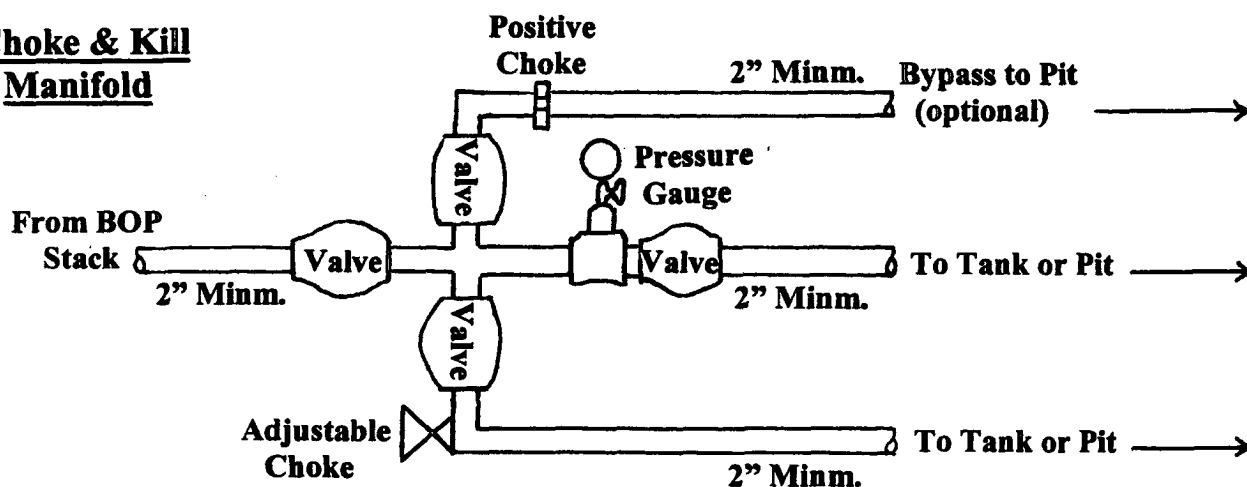
Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

BOP Stack



Choke & Kill Manifold



Working Pressure for all equipment is 2,000 psi or greater

DUGAN PRODUCTION CORP.
LARGO FEDERAL B #2

DUGAN PRODUCTION CORPORATION LARGO FEDERAL B #2

590' FNL & 1950' FNL, SECTION 22, T24N, R9W, N.M.P.M.

SAN JUAN COUNTY, NEW MEXICO

EXHIBIT E.

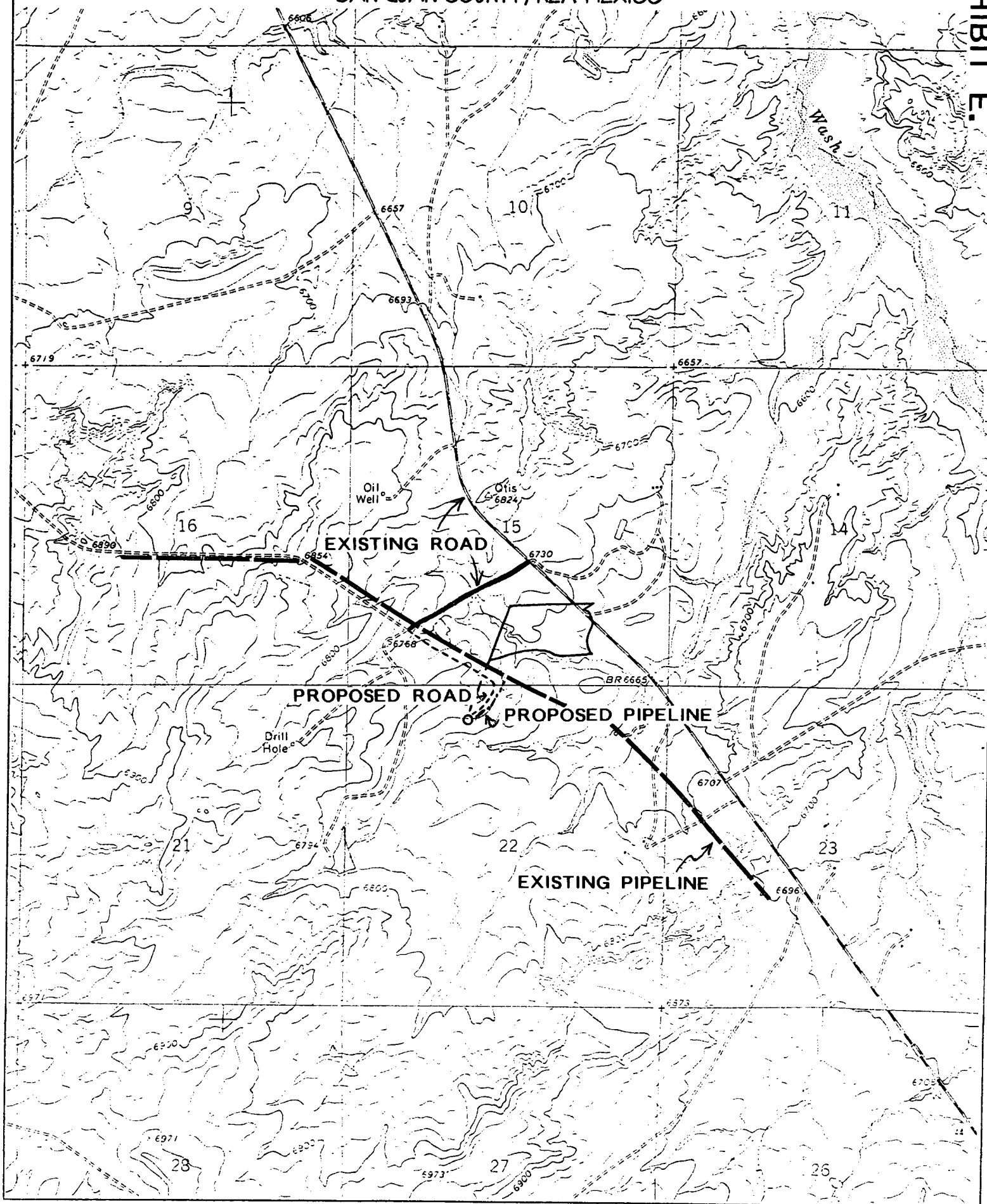
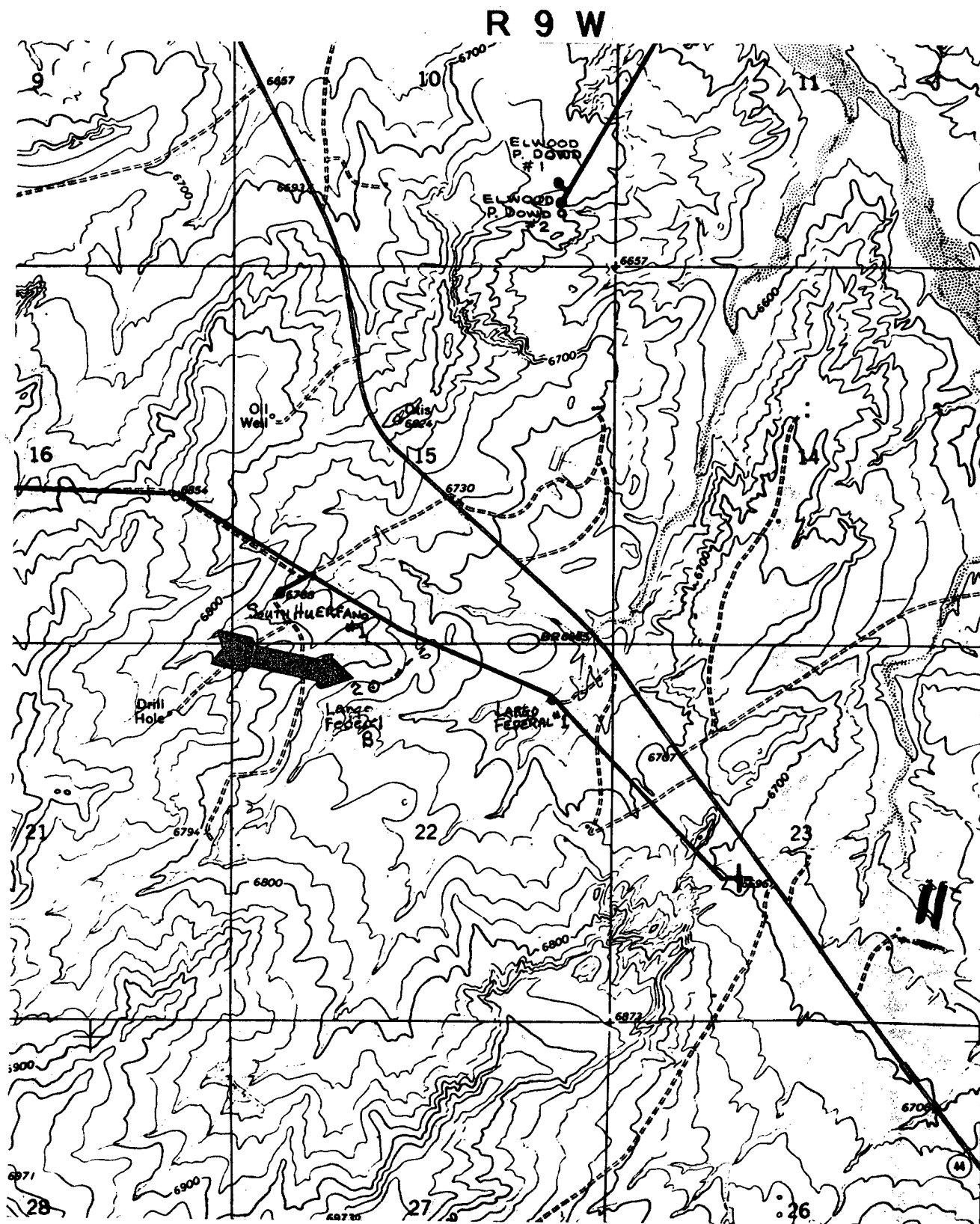


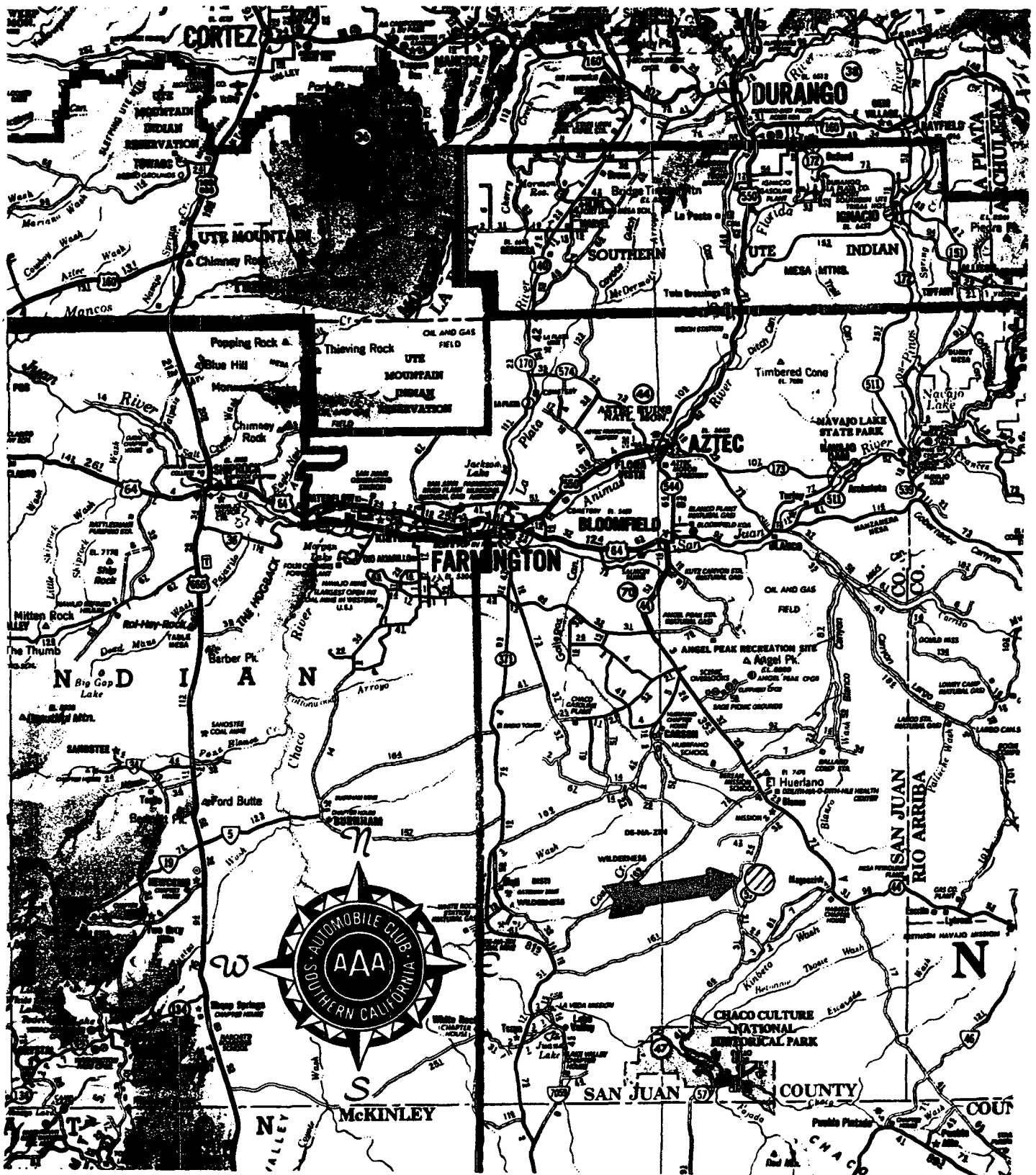
EXHIBIT F.

T 2 4 N



DUGAN PRODUCTION CORP.
LARGO FEDERAL B #2

EXHIBIT V.



DUGAN PRODUCTION CORP.
LARGO FEDERAL B #2