

### **United States Department of the Interior**

#### BUREAU OF LAND MANAGEMENT

Farmington Field Office 6251 College Blvd. - Suite A Farmington, New Mexico 87402 www.blm.gov/nm



In Reply Refer To: NMNM10089 3162.3-1 (211)

May 18, 2016

Dugan Production Corporation 709 East Murray Drive Farmington, NM 87401

Dear Mr. Fagrelius,

Reference is made to the following Application for Permit to Drill (APD):

Mary Anne No. 4, located 815'FSL and 1140'FWL, Section 9, T24N, R9W, San Juan County, New Mexico on Federal Lease No. 10089, API No. 30-045-35034.

This APD originally submitted on October 2, 2009. Per my conversation with Mr. Alexander, Dugan does not intend to drill this well at this time. The BLM is returning your APD effective December 2, 2011 with no further action taken. If you wish to drill this well at a later date you will need to file a new APD.

If you have, any questions regarding the above contact Cynthia Marquez at (505) 564-7741.

Sincerely,

Cynthia Marquez Land Law Examiner

Petroleum Management Team

aguthia Marquez

Enclosures-1
Distribution: NMOCD-1

A

APD-Entered in Numco-cancelled APD Never reviewed or Approved by Number.

FORM APPROVED AY 2 0 2016 Form 3160-3 (April 2004) OMB No. 1004-0137 Expires March 31, 2007 UNITED STATES 5. Lease Serial No. DEPARTMENT OF THE INTERIOR OCT 02 2009 NM-10089 BUREAU OF LAND MANAGEMENT 6. If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER Navajo Surface 7 If Unit or CA Agreement, Name and No. X DRILL REENTER la. Type of work: 8. Lease Name and Well No. Oil Well X Gas Well X Single Zone Multiple Zone Mary Anne #4 lb. Type of Well: 9. API Well No. Name of Operator Dugan Production Corp. 30-045-3b. Phone No. (include area code) 3a. Address 10. Field and Pool, or Exploratory 709 East Murray Drive 505-325-1821 Basin Fruitland Coal Farmington, NM 87401 11. Sec., T. R. M. or Blk and Survey or Area 4. Location of Well (Report Irration clearly and in accordance with any State requirements.\*) Sec. 9, T24N, R9W 815' FSL & 1140' FWL Lat: 36.32355 N **NMPM** At proposed prod. zone Same as above Long: 107.79966 W 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office® NM Approx. 40-miles SE of Bloomfield, New Mexico San Juan 17. Spacing Unit dedicated to this well Distance from proposed<sup>4</sup> location to nearest 16. No. of acres in lease property or lease line, ft.
(Also to nearest drig. unit line, if any) 320.0 Acres - (W/2) 815-Feet 640-Acres 20. BLM/BIA Bond No. Distance from proposed location<sup>6</sup> to nearest well, drilling, completed, applied for, on this lease, ft. 19. Proposed Depth Approx. 1800-Feet On File 835-Feet 22. Approximate date work will start 23. Estimated duration 21. Elevations (Show whether DF, KDB, RT, GL, etc.) ASAP 5-Days GL-6706-Feet 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form: Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 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 5. Operator certification SUPO shall be filed with the appropriate Forest Service Office). Such other site specific information and/or plans as may be required by the authorized officer. 25. Signature Name (Printed/Typed) 11-2-2009 Kurt Fagrelius Title Geologist Date Name (Printed/Typed) Approved by (Signature) Office Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. 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.

\*(Instructions on page 2)

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.

The Fruitland Coal will be perforated from approximately 1630-1640 feet.

The interval will be fracture stimulated.

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATION ON FEDERAL AND INDIAN LANDS

NMOCD

, District I 1625 N. French Dr., Hobbs, NM 88240

District II
1301 W. Grand Avenue, 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 & Natural Resources Department

> OIL CONSERVATION DIVISION 1220 South St. Francis Dr.

> > Santa Fe, NM 87505

OCT 02 2009

Revised October 12, 2005
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

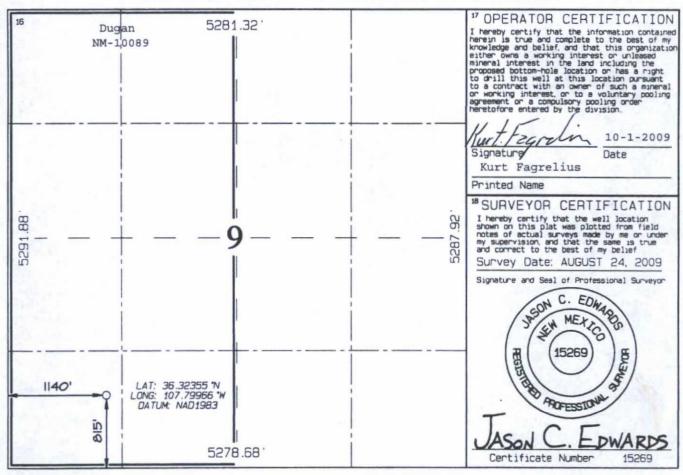
MAY 2 0 2016

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	*Pool Code 71629	Pool Name BASIN FRUITLA	ND COAL
*Property Code	*Property Name MARY ANNE		Well Number
'OGRID No. 006515	*Operator DUGAN PRODUCTIO	*Elevation 6706	

10 Surface Location Lot Idn Feet from the County UL or lot no. Section North/South line Feet from the East/West line 9 24N 9W SOUTH WEST SAN JUAN M 815 1140 11 Bottom Hole Location If Different From Surface UL or lot no. Section Feet from the Feet from the East/West line County 12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 320.0 Acres - (W/2)

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



#### EXHIBIT A

### DEVELOPMENTAL PLAN

Mary Anne #4 Lease #NM-10089

Township 24 North, Range 9 West, NMPM Section 9, 815' FSL - 1140' FWL San Juan County, New Mexico

- Existing roads are shown on Exhibit E.
   Plan to improve and maintain existing roads as required.
- Planned access road(s) are shown on Exhibit E.
  A. New or reconstructed road(s), if any, were centerline flagged at the time of location staking.
  No new road construction is needed.
- Location of existing wells is shown on Exhibit F.
- 4. Location of Existing and/or Proposed Facilities:

A. Existing facilities owned or controlled by Lessee/Operator are shown on Exhibit F.

- B. New facilities, in the event of production, are shown on Exhibit F. Construction materials and methods: Materials obtained on site; anticipated new production facilities are shown on Plat #1. Protective measures and devices to protect livestock and wildlife: As required.
- C. Plan for rehabilitation of disturbed areas no longer needed for operations after construction completed: As required.
- D. Pipeline will follow existing road and will be 2916.2 feet in length (Plat 2). The well pad (105' X 150') and 1460.6' of pipeline will be on Navajo Tribal Trust Land, 139.7' of the pipeline will be on State of New Mexico Land and 1315.6' of the pipeline will be on Bureau of Land Management Land. A 2" water and 4" gas pipeline will be constructed.
- 5. Location and Type of Water Supply:
  - A. Location and type of water supply: Produced water.
  - B. Method of transporting water: Water truck.
  - C. Water well is not to be drilled on lease.
- 6. Source of Construction Materials:
  - A. Materials are to be obtained on site.
  - B. These materials are to be used as follows: Level location, build pits (Plat 3).

7. Methods for Handling Waste Disposal:

- A. Waste materials will be contained/disposed of as follows:
  - 1) Cuttings: Reserve pit.

2) Drilling fluids: Reserve pit.

- 3) Produced fluids (oil, water): Test tank and/or reserve pit.
- Sewage: Drilling Contractor will provide facilities.
- 5) Trash: Facilities will be provided as required.
- 6) Operator will be responsible for proper cleanup when the rig is moved.
- 7) Reserve pits will be fenced on three sides during the drilling operations and on four sides when the rig is moved from location.
- 8. Ancillary Facilities: No permanent camp is planned; temporary trailer house may be utilized while drilling. No airstrip is planned.
- 9. Well Site Layout is shown on Exhibit C. Pits are to be lined.
- 10. Plans for restoration of surface upon completion of operations:
  - A. Location will be leveled, re-contoured, and restored as needed.
  - B. Re-vegetation and rehabilitation, including abandoned access roads, will be completed per instructions from the surface management agency.
  - C. Pits will be fenced as required and so maintained until cleanup.
  - D. Rehabilitation operations will be commenced as soon as practically possible and completed soon thereafter.
  - 11. Other Information:
    - A. Other surface use activities and surface ownership of all involved lands: Navajo, Federal and State surface grazing.
- 12. Lessee's or Operator's Representative:

Kurt Fagrelius Dugan Production Corp. P.O. Box 420 Farmington, NM 87499 13. <u>Certification:</u> The following statement must be signed by the Lessee's or Operator's Field Representative who is identified in Item #12 of this Developmental Plan.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this Plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Operator and its Contractors and Subcontractors in conformity with the Plan and the terms and conditions under which it is approved.

By: Nurt Fagrelis Date: September 2, 2009

Kurt Fagrelius

# EXHIBIT B OPERATIONS PLAN

Mary Anne #4

#### APPROXIMATE FORMATION TOPS:

Nacimiento	Surface
Ojo Alamo	810'
Kirtland	930'
Fruitland	1295′ 1675′
Pictured Cliffs	
Total Depth	1800'

Catch samples every 10 feet from 1600-feet to total depth.

#### LOGGING PROGRAM:

Run cased hole GR-CCL-CNL from total depth to surface.

#### CASING PROGRAM:

Hole	Casing		Setting	Grade and
Size	Size	Wt./ft.	Depth	Condition
12-1/4"	8-5/8"	24#	120'	J-55
7-7/8"	5-1/2"	15.5#	1800'	J-55

Plan to drill a 12-1/4" hole and set 120' 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 the Fruitland Coal. 5-1/2", 15.5#, J-55 production casing will be run and cemented. Cased hole GR-CCL-CNL log will be run. Productive zone will be perforated and fractured. After frac, the well will be cleaned out and production equipment will be installed.

#### CEMENTING PROGRAM:

Surface: Cement to surface with 75-cf Class B + 2% CaCl<sub>2</sub>. Circulate to surface.

Production Stage - Cement w/150-sx Premium Lite FM 3% BWOC

Calcium Chloride + 0.25 lbs/sx Celloflake + 5 lbs/sk

LCM-1 + 0.4% BWOC FL-52 + 8% BWOC Bentonite + 0.4%

BWOC Sodium Metasilicate + 112.3% fresh water (12.1 lb/gal, 2.13 cu ft/sx - 320-cu ft slurry). Tail

w/152-sx Type III cement + 1 lb/sk Calcium Chloride + 0.25 lb/sx Celloflake + 0.2% BWOC FL-52 + 59% fresh water (14.6 lb/gal, 1.38 cu ft/sx - 210-cu ft slurry).

Total cement slurry for production stage is 530-cf Circulate cement to surface.

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.

Maximum Anticipated Bottom Hole Pressure - 300-psi.

Drilling Fluid - will be fresh water with bentonite (8.9#/gal).

### WELLHEAD EQUIPMENT:

Huber 8-5/8"x5-1/2" casing head, 1000# WP, tested to 2000#. Huber 5-1/2"x2-7/8" tubing head, 1000# WP, tested to 2000#.

#### Blow-Out Preventer Equipment (BOPE): 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 adjustable 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.

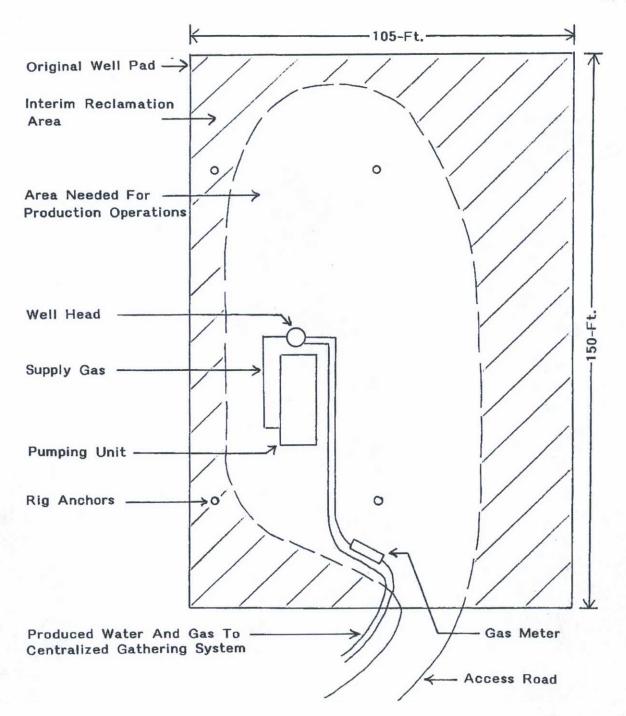
Fill-up line.

Working pressure for all BOPE will be 2,000 psi or greater.

Will test BOPE (blind rams, pipe rams, choke manifold and surface casing) separately. Each test will include a low pressure test to 250-psig held for five minutes and a high pressure test to 800-psig held for thirty minutes (with no more than a 10-percent pressure drop during the duration of the tests). If a 10-percent or greater pressure drop occurs; a packer will be run to isolate the surface casing and BOPE to locate the source of the leak.

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

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

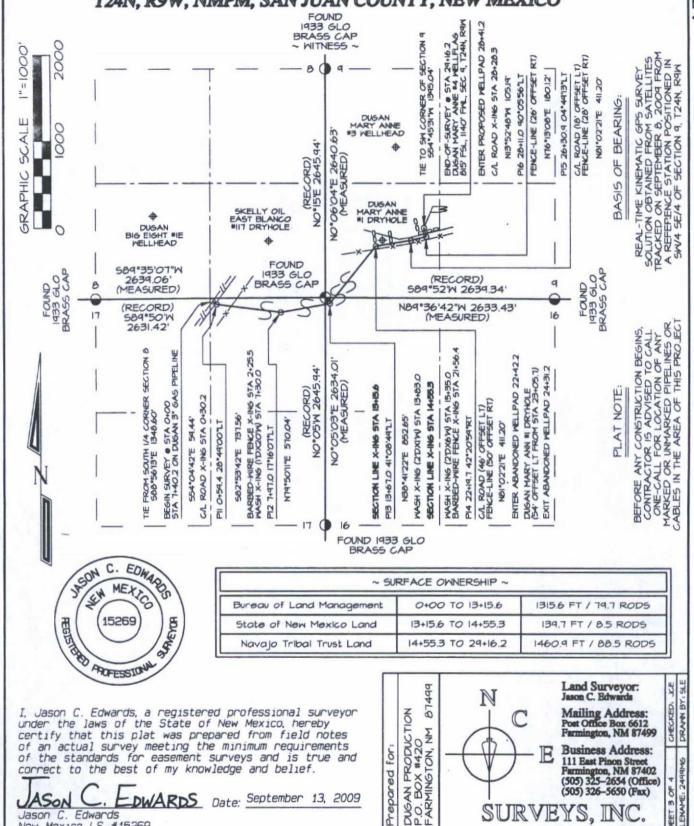


Anticipated Production Facilities

Dugan Production Corp.

Mary Anne #4

## **DUGAN PRODUCTION CORPORATION MARY ANNE #4** PROPOSED PIPELINE SURVEY LOCATED IN THE NE/4 SECTION 17, NW/4 SECTION 16 & SW/4 SECTION 9 T24N, R9W, NMPM, SAN JUAN COUNTY, NEW MEXICO

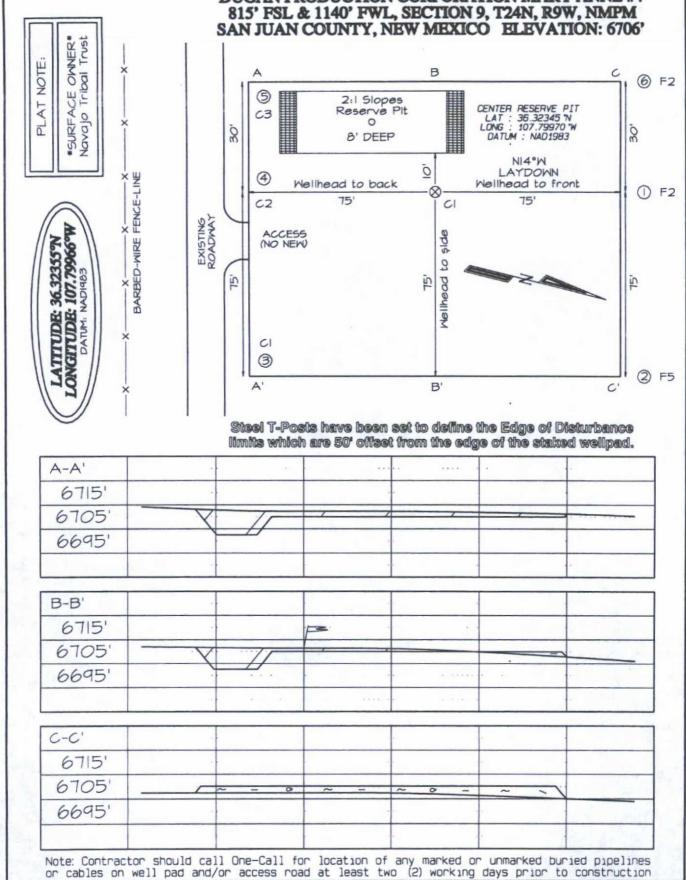


DWARDS Date: September 13, 2009 Edwards Jason

SURVEYS, INC.

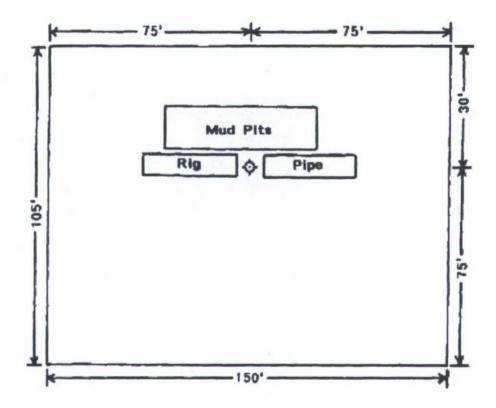
FILENAME, 2499M6

C. New Mexico LS #15269

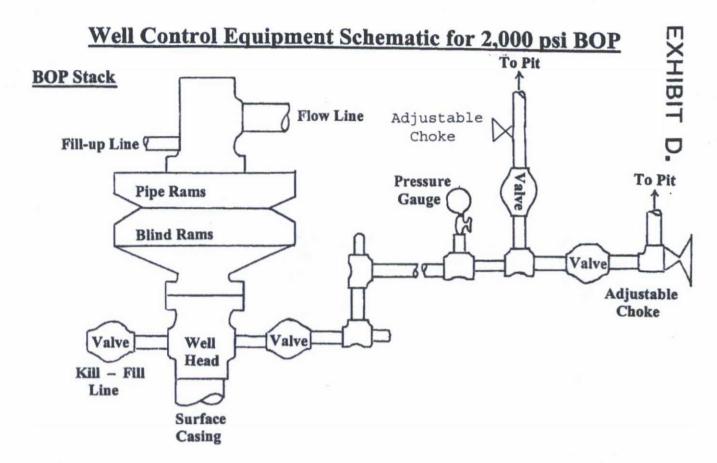


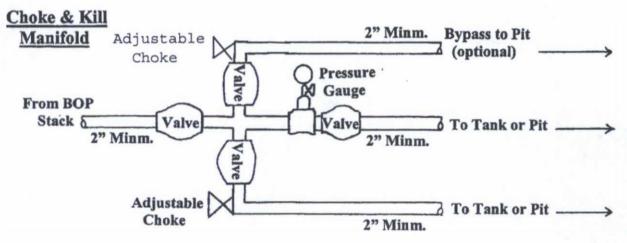
**DUGAN PRODUCTION CORPORATION MARY ANNE #4** 

# Typical Location For a Fruitland Coal Well



DUGAN PRODUCTION CORP.
MARY ANNE #4

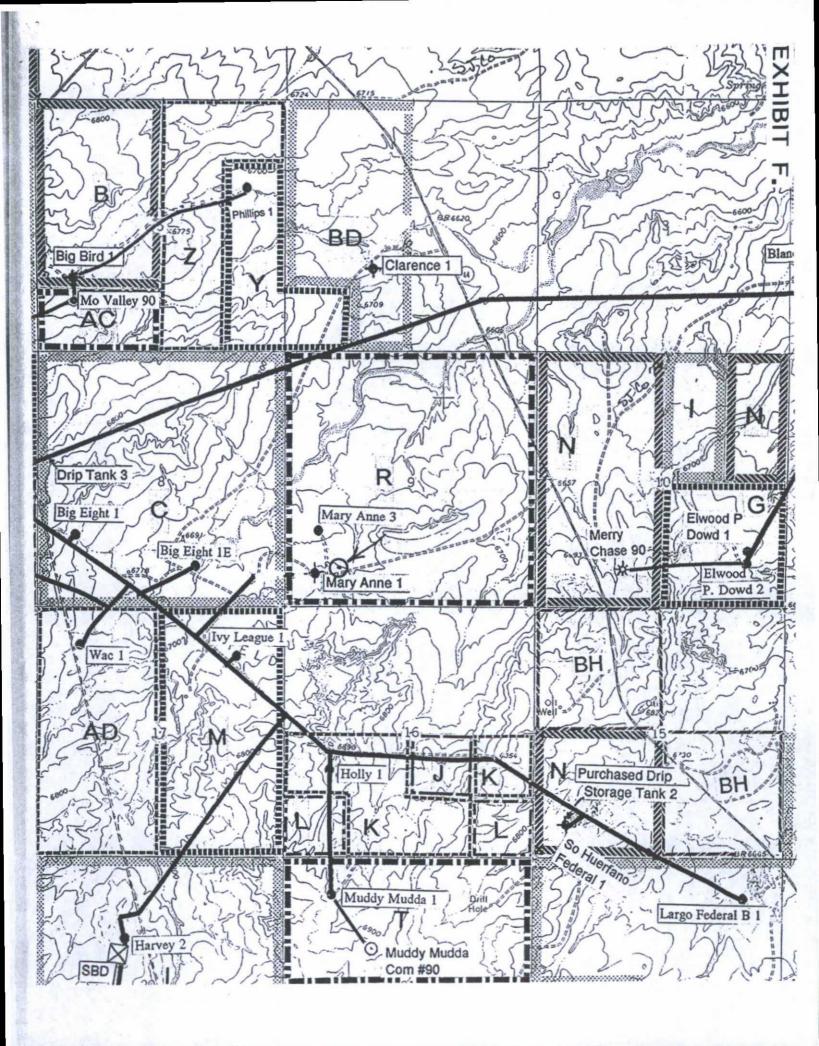




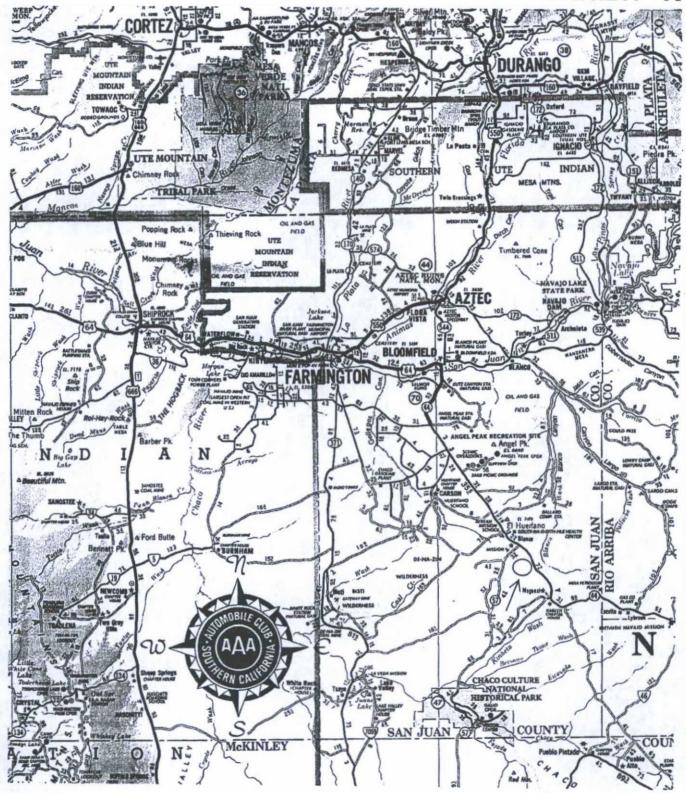
Working Pressure for all equipment is 2,000 psi or greater

DUGAN PRODUCTION CORP.

MARY ANNE #4



### EXHIBIT V.



DUGAN PRODUCTION CORP.

MARY ANNE #4