

N.M. Oil Cons. Div-Dist. 2

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

1301 W. Grand Avenue  
Artesia, NM 88210

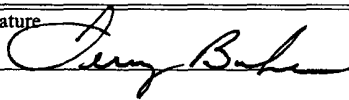
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM-0144698
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Mewbourne Oil Company 14744		7. If Unit or CA Agreement, Name and No.
3a. Address P.O. Box 5270 Hobbs, NM 88241	3b. Phone No. (include area code) (505) 393-5905	8. Lease Name and Well No. Colt "6" Federal # 1
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1980' FSL & 1650' FEL At proposed prod. zone		9. API Well No. 30-015-33041
14. Distance in miles and direction from nearest town or post office* 18 miles NE Carlsbad		10. Field and Pool, or Exploratory E. Burton Flat Morrow
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'		11. Sec., T., R., M., or Blk. and Survey or Area Sec. 6; T20S; R29E
16. No. of Acres in lease 299.84 *	17. Spacing Unit dedicated to this well 299.84 *	12. County or Parish Eddy
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 11700	13. State NM
20. BLM/BIA Bond No. on file NM-1693, Nationwide	21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3285 GL	22. Approximate date work will start* October 4, 2003
23. Estimated duration 45 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.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) Terry Burke	Date 09-05-03
Title Drilling Foreman		
Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	Date 8 OCT 2003
Title ACTING FIELD MANAGER		Office CARLSBAD FIELD 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.

APPROVAL FOR 1 YEAR

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 reverse)

CAPITAN CONTROLLED WATER BASIN

\* Under Sized Section



APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

## DISTRICT II

811 South First, Artesia, NM 88210

Instruction on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

## DISTRICT IV

2040 South Pacheco, Santa Fe, NM 87505

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		E. Burton Flat Morrow
Property Code	Property Name	Well Number
14744	COLT "6" FEDERAL	1
OGRID No.	Operator Name	Elevation
	MEWBOURNE OIL COMPANY	3286

## Surface Location

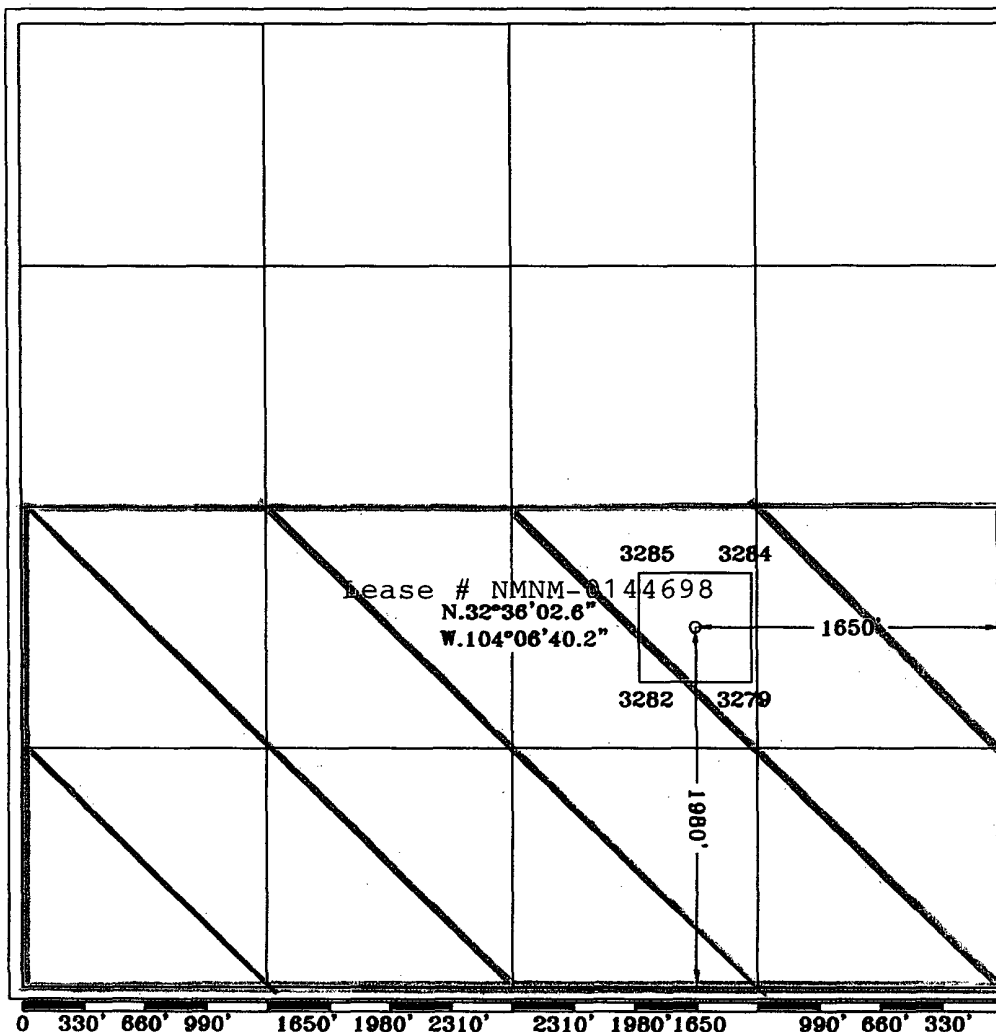
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	6	20S	29E		1980	SOUTH	1650	EAST	EDDY

## 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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
* 299.84			

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



## OPERATOR CERTIFICATION

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

*Terry Burke*  
Signature

Terry Burke

Printed Name

Drilling Foreman

Title

September 5, 2003

Date

## 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.

8/23/2003

Date Surveyed

Signature & Seal of  
Professional Surveyor

3640  
Certificate No. Herschel Jones RLS 3640  
COLT 6-1  
GENERAL SURVEYING COMPANY

**Drilling Program**  
**Mewbourne Oil Company**  
Colt "6" Federal # 1  
1980' FSL & 1650' FEL  
Section 6 -T20S-R29E  
Eddy County, New Mexico  
Lease Number NMNM-0144698

**1. The estimated top of geological markers are as follows:**

Delaware	3,279'
Bone Spring	5,286'
Wolfcamp	9,103'
Strawn	10,247'
Atoka	10,695'
Morrow	11,167'
TD	11,702'

**2. Estimated depths of anticipated fresh water, oil, or gas:**

Water	Approximately 200'
Hydrocarbons	All zones below Wolfcamp

**3. Pressure control equipment:**

Two thousand psi working pressure annular BOP's will be installed on the 13-3/8" surface casing. Five thousand psi working pressure BOP's and two thousand psi working pressure Hydril will be installed on the 9-5/8" intermediate casing. Pressure tests with rig pump will be conducted prior to drilling out under all casing strings. A third party Safety Test Company will pressure test and record on chart the approved testing pressure of the BOP, Choke, Hydril, Kelly Cock Valves before we drill below the Bone Springs formation. BOP controls will be installed prior to drilling under surface casing and will remain in use until completion of drilling operations. BOP's will be inspected and operated daily to insure mechanical integrity and the inspection will be recorded on the daily drilling report.

Kelly cock and a sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position when the kelly is not in use.

## **Drilling Program**

**Mewbourne Oil Company**

Colt "6" Federal # 1

Page 2

### **4. Proposed casing and cementing program:**

#### **A. Casing Program:**

	<u>Hole Size</u>	<u>Casing</u>	<u>Wt/Ft.</u>	<u>Grade</u>	<u>Depth</u>	
WITNESS	26"	20"	94#	H40	0-325'	WITNESS
	17-1/2"	13-3/8"	48#	H40	0-1200'	
	12-1/4"	9-5/8"	40#	N80/J55	0-3,000'	
	8-3/4"	5-1/2"	17#	P110/S95	0-11,700'	

Minimum casing design factors: Collapse 1.2, Burst 1.1, Tensile strength 2.0.

#### **B. Cementing Program**

- i. Surface Casing: 400 sacks Class "C" light cement containing .25 lbs/sack cellophane flakes, 2% CaCl, 6% bwoc Bentonite. 200 sacks Class "C" cement containing 2% CaCl.
- ii. Surface Casing: 700 sacks Class "C" light cement containing .25 lbs/sack cellophane flakes, 2% CaCl, 6% bwoc Bentonite. 200 sacks Class "C" cement containing 2% CaCl.
- iii. Intermediate Casing: 900 sacks 35:65 pozmix cement containing 6% gel, 5 lbs/sack LCM-1. 200 sacks Class "C" cement containing 2% CaCl.
- iiii. Production Casing: 600 sacks Class "H" cement containing fluid loss additive, friction reducer additive, compressive strength enhancer, and NaCl. Shallower productive zones may be protected by utilizing and multiple stage cementing tool in the production casing below potentially productive zones and cementing with a light cement slurry.

*\*Mewbourne Oil Company reserves the right to change cement designs as hole conditions may warrant.*

### **5. Mud Program:**

<u>Interval</u>	<u>Type System</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0'-325'	FW spud mud	8.6-9.4	32-34	NA
325'-1200'	Brine Water	10.0-10.2	28-30	NA
1200'-3000'	Fresh water	8.8-9.2	28-30	NA
3000'-9000'	Fresh water	8.8-9.2	28-30	NA
9,000'-11,700'	Cut brine water	9.2-10.0	32-42	8-12

(Note: Any Weight Above 8.6#/gallon would be to hold back Wolfcamp shale, rather than abnormal BHP.)

**Drilling Program**

**Mewbourne Oil Company**

Colt "6" Federal # 1

Page 3

**6. Evaluation Program:**

Samples:	10'samples from intermediate casing to TD
Logging:	Compensated density and dual laterlog from intermediate casing to TD
Coring:	As needed for evaluation
Drill Stem Tests:	As needed for evaluation

**7. Downhole Conditions**

Zones of abnormal pressure:	None anticipated
Zones of lost circulation:	Anticipated in surface and intermediate holes
Maximum bottom hole temperature:	180 degree F
Maximum bottom hole pressure:	8.3 lbs/gal gradient or less

**8. Anticipated Starting Date:**

Mewbourne Oil Company intends to drill this well as soon as possible after receiving approval with approximately 45 days involved in drilling operations and an additional 10 days involved in completion operations on the project.

# Mewbourne Oil Company

BOP Schematic for

12 1/4" Hole

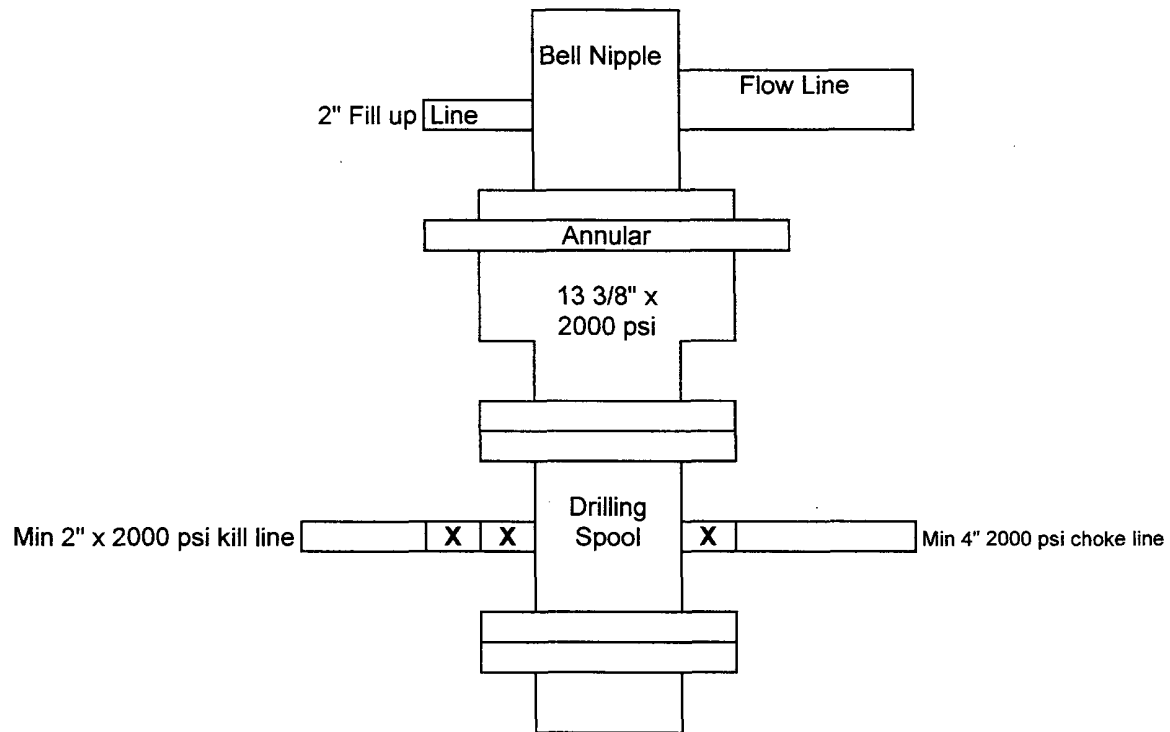


Exhibit #2

Colt "6" Federal # 1  
1980' FSL & 1650' FEL  
Sec.6-20S; R29E  
Eddy County, New Mexico

# Mewbourne Oil Company

BOP Scematic for

8 3/4" or 7 7/8" Hole

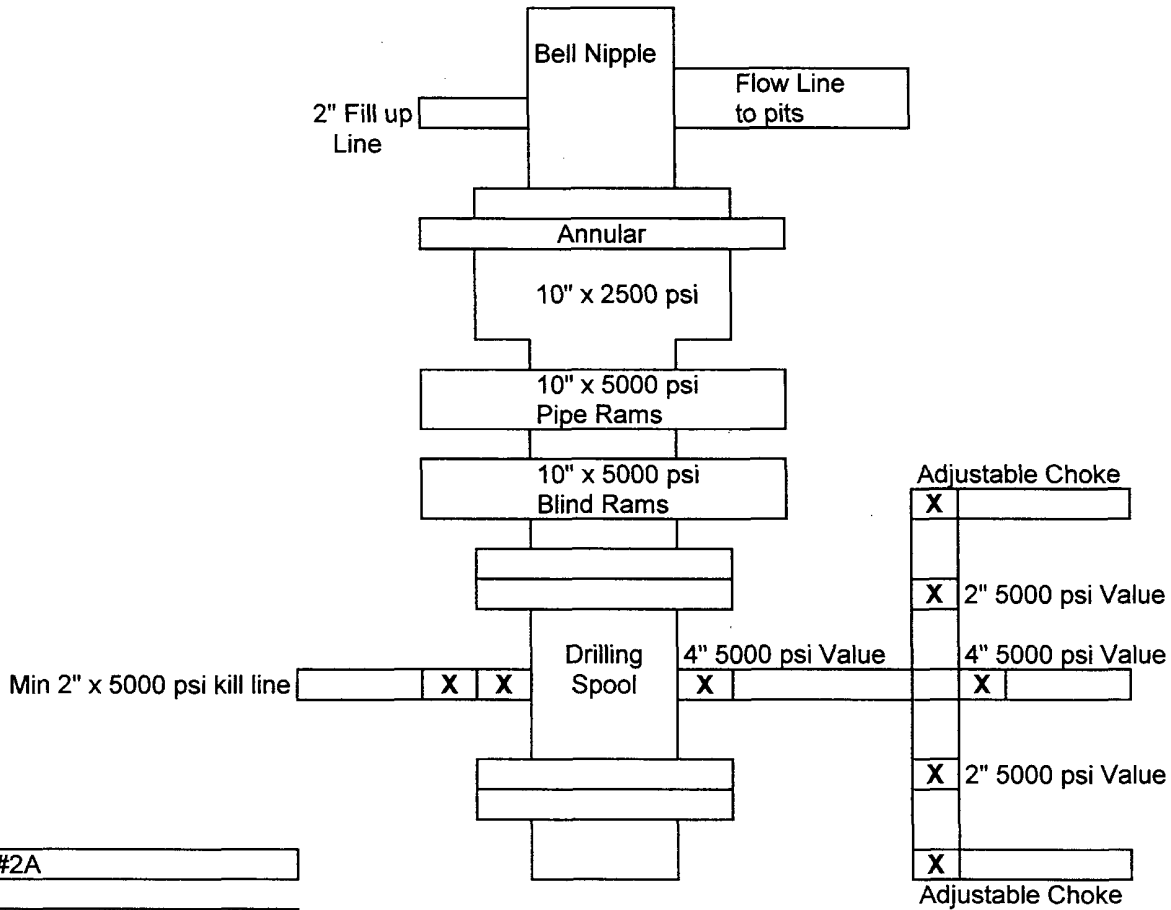


Exhibit #2A

Colt "6" Federal # 1  
1980' FSL & 1650' FEL  
Sec.6; T20S; R29E  
Eddy County, New Mexico

**Notes Regarding Blowout Preventer**

**Mewbourne Oil Company**

Colt "6" Federal # 1

1980' FSL & 1650' FEL

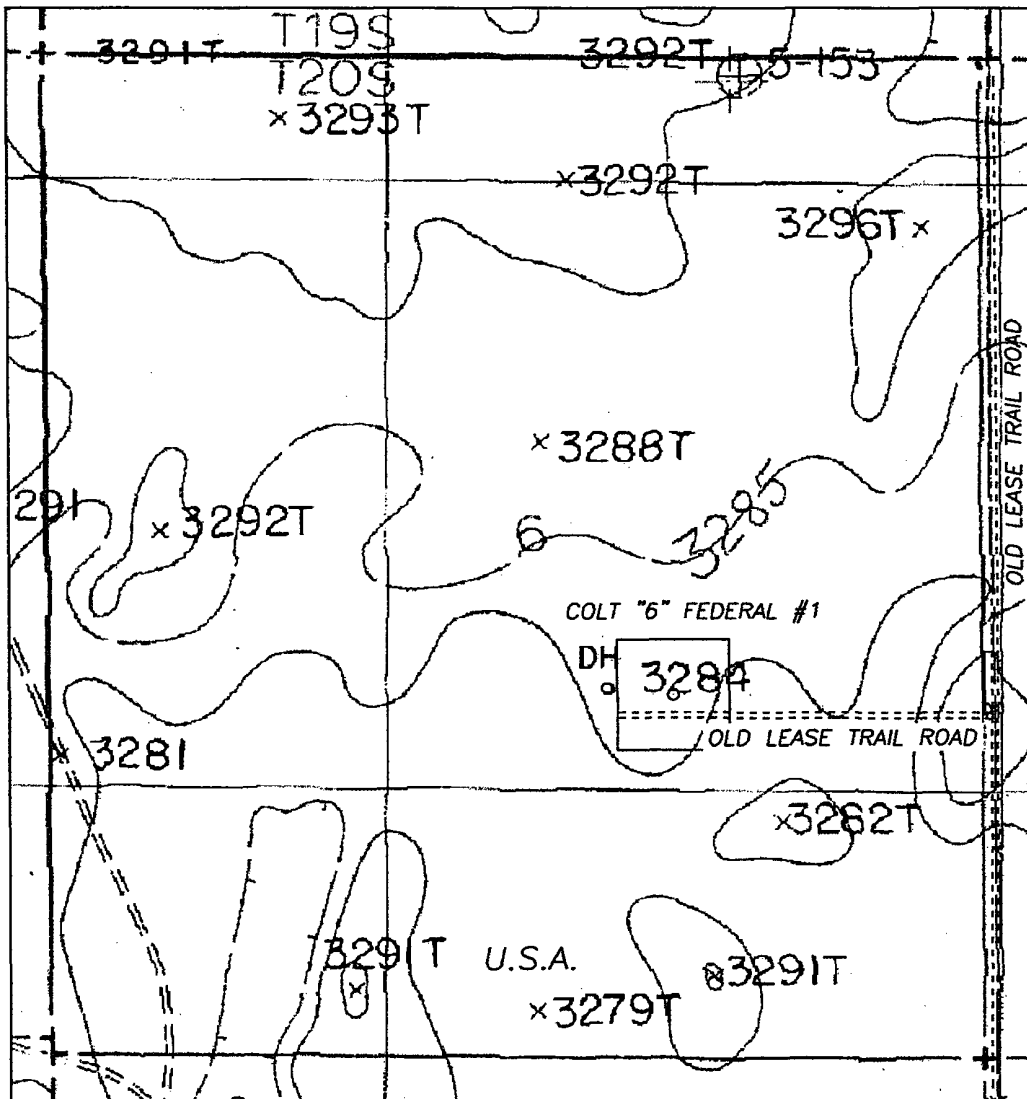
Section 6- T20S-R29E

Eddy County, New Mexico

1. Drilling nipple (bell nipple) to be constructed so that it can be removed without the use of a welder through the opening of the rotary table, with minimum internal diameter equal to blowout preventer bore.
2. Blowout preventer and all fittings must be in good condition with a minimum 2000 psi working pressure.
3. Safety valve must be available on the rig floor at all times with proper connections to install in the drill string. Valve must be full bore with minimum 2000 psi working pressure.
4. Equipment through which bit must pass shall be at least as large as internal diameter of the casing.
5. A kelly cock shall be installed on the kelly at all times.
6. Blowout preventer closing equipment to include and accumulator of at least 40 gallon capacity, two independent sources of pressure on closing unit, and meet all other API specifications.



SECTION 6, TOWNSHIP 20 SOUTH, RANGE 29 EAST, NMPM, EDDY COUNTY, NEW MEXICO.



1000' 0 1000' 2000'  
Scale 1" = 1000'

THE PREPARATION OF THIS PLAT AND THE PERFORMANCE OF THE SURVEY UPON WHICH IT IS BASED WERE DONE UNDER MY DIRECTION AND THE PLAT ACCURATELY DEPICTS THE RESULTS OF SAID SURVEY AND MEET THE REQUIREMENTS OF THE STANDARDS FOR LAND SURVEYS IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

HERSCHEL L. JONES, P.E., No. 3640

GENERAL SURVEYING COMPANY P.O. BOX 1928  
LOVINGTON, NEW MEXICO 88260

MEWBOURNE OIL COMPANY

LEASE ROAD TO ACCESS THE MEWBOURNE COLT #6  
FEDERAL #1 WELL, LOCATED IN SECTION 6, TOWNSHIP 20  
SOUTH, RANGE 29 EAST, NMPM, EDDY COUNTY, NEW  
MEXICO.

Survey Date: 8/22/2003	Sheet 1 of 1 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 8/22/03	Scale 1" = 1000' COLT 6-1

**Exhibit #4**  
**Status of Wells in Immediate Vicinity**  
**Mewbourne Oil Company**  
Colt "6" Federal # 1  
1980' FSL & 1650' FEL  
Section 6 T-20S R-29E  
Eddy County, New Mexico  
Lease Number NMNM-0144698

**Section 5 T-20S R-29E**

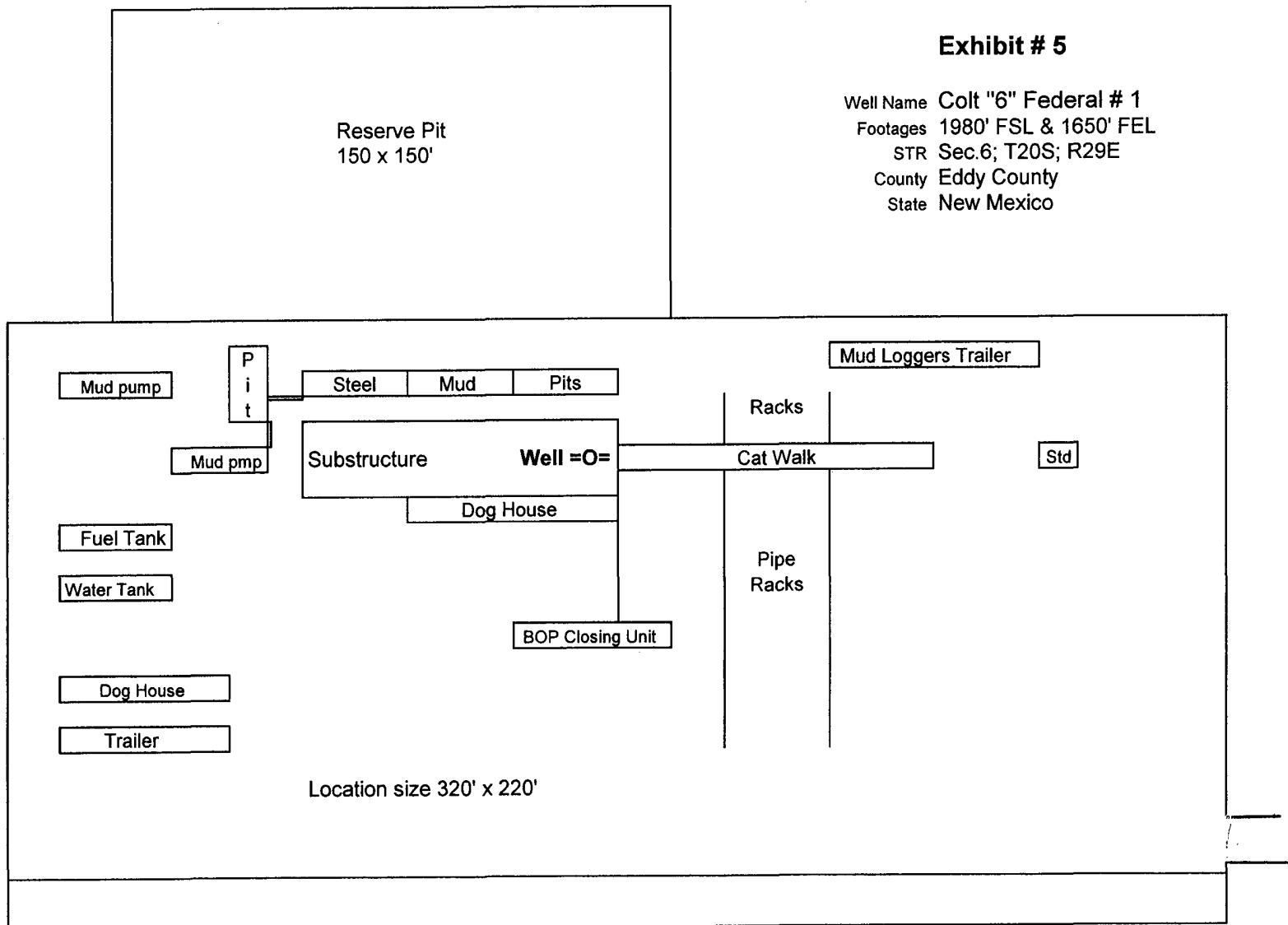
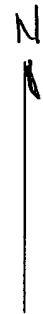
Operator: Mewbourne Oil Company  
Well Name: Gatuna "5 Federal Com # 1  
Unit letter: M  
Status: Producing  
Field: E. Burton Flats Morrow

Operator: Mewbourne Oil Company  
Well Name: Gatuna "5 Federal Com # 2  
Unit letter: F  
Status: Producing  
Field: E. Burton Flats Morrow

# Mewbourne Oil Company

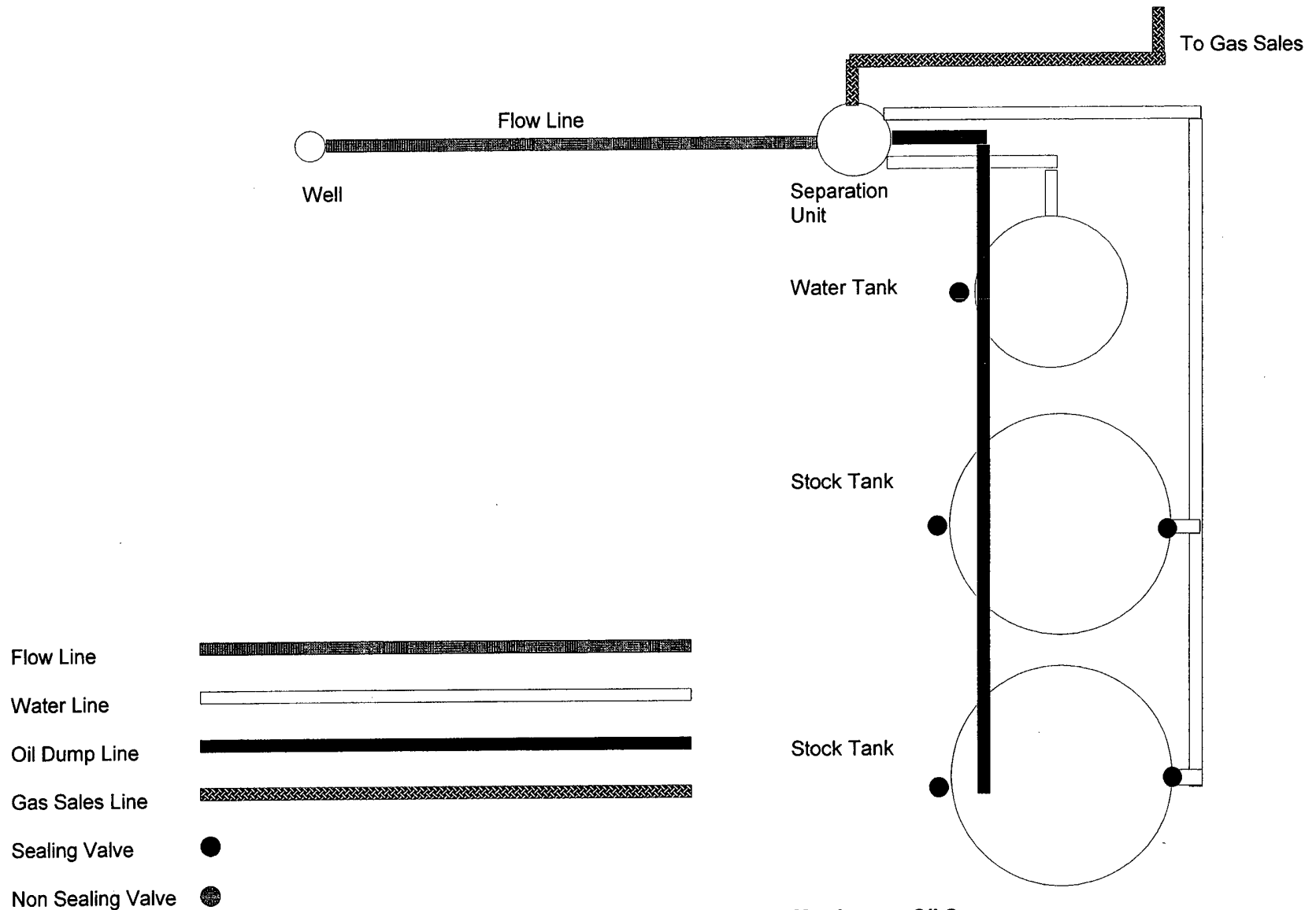
## Exhibit # 5

Well Name Colt "6" Federal # 1  
Footages 1980' FSL & 1650' FEL  
STR Sec.6; T20S; R29E  
County Eddy County  
State New Mexico



Rig Location Schematic

# Proposed Production Facilities Schematic



**Mewbourne Oil Company**

Exhibit # 6

Proposed Production Facilities Schematic

Colt "6" Federal # 1

Sec. 6; T20S; R29E

1980' FSL & 1650' FEL

Eddy County, NM

## **Hydrogen Sulfide Drilling Operations Plan**

### **Mewbourne Oil Company**

Colt "6" Federal # 1

1980' FSL & 1650' FEL

Section 6-T20S-R29E

Eddy County, New Mexico

#### **1. Hydrogen Sulfide Training**

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will have received training from a qualified instructor in the following areas prior to entering the drilling pad area of the well:

- 1 The hazards and characteristics of hydrogen sulfide gas.
- 2 The proper use of personal protective equipment and life support systems.
- 3 The proper use of hydrogen sulfide detectors, alarms, warning systems, briefing areas, evacuation procedures.
- 4 The proper techniques for first aid and rescue operations.

Additionally, supervisory personnel will be trained in the following areas:

- 1 The effects of hydrogen sulfide on metal components. If high tensile tubular systems are utilized, supervisory personnel will be trained in their special maintenance requirements.
- 2 Corrective action and shut in procedures, blowout prevention, and well control procedures while drilling a well.
- 3 The contents of the Hydrogen Sulfide Drilling Operations Plan.

There will be an initial training session prior to encountering a known hydrogen sulfide source. The initial training session shall include a review of the site specific Hydrogen Sulfide Drilling Operations Plan.

#### **2. Hydrogen Sulfide Safety Equipment and Systems**

All hydrogen sulfide safety equipment and systems will be installed, tested, and operational prior to drilling below the intermediate casing.

##### **1. Well Control Equipment**

- A. Flare line with automatic igniter or continuous ignition source.
- B. Choke manifold with minimum of one adjustable choke.
- C. Blowout preventers equipped with blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
- D. Auxiliary equipment including rotating head and annular type blowout preventer..

2. Protective Equipment for Essential Personnel

Thirty minute self contained work unit located at briefing area as indicated on wellsite diagram.

3. Hydrogen Sulfide Protection and Monitoring Equipment

Two portable hydrogen sulfide monitors positioned on location for optimum coverage and detection. The units shall have audible sirens to notify personnel when hydrogen sulfide levels exceed 20 ppm.

4. Visual Warning Systems

A. Wind direction indicators as indicated on the wellsite diagram.

B. Caution signs shall be posted on roads providing access to location. Signs shall be painted a high visibility color with lettering of sufficient size to be readable at reasonable distances from potentially contaminated areas.

3. **Mud Program**

The mud program has been designed to minimize the amount of hydrogen sulfide entrained in the mud system. Proper mud weight, safe drilling practices, and the use of hydrogen sulfide scavengers will minimize hazards while drilling the well.

4. **Metallurgy**

All tubular systems, wellheads, blowout preventers, drilling spools, kill lines, choke manifolds, and valves shall be suitable for service in a hydrogen sulfide environment when chemically treated.

5. **Communications**

State & County Officials phone numbers are posted on rig floor and supervisors trailer. Communications in company vehicles and toolpushers are either two way radios or cellular phones.

6. **Well Testing**

Drill stem testing is not an anticipated requirement for evaluation of this well. A drill stem test is required, it will be conducted with a minimum number of personnel in the immediate vicinity. The test will be conducted during daylight hours only.

7. **General Requirements**

MOC has researched this area and no high concentrations of H<sub>2</sub>S was found. MOC will have on location and working all H<sub>2</sub>S safety equipment before Yates and Delaware formations.

**United States Department of the Interior  
Bureau of Land Management  
Roswell Field Office  
2909 West Second Street  
Roswell, New Mexico 88201-1287**

**Statement Accepting Responsibility for Operations**

Operator Name: Mewbourne Oil Company  
Street or Box: P.O. Box 5570  
City, State: Hobbs, New Mexico  
Zip Code: 88241

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted of the leased land or portion thereof, as described below.

Lease Number: Lease Number NMNM-0144698

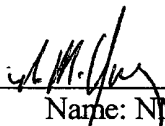
Legal Description of Land: Section 6, T20S, R29E, Eddy County, New Mexico. Location 1980' FSL & 1650' FEL of Section 6.

Formation (if applicable):

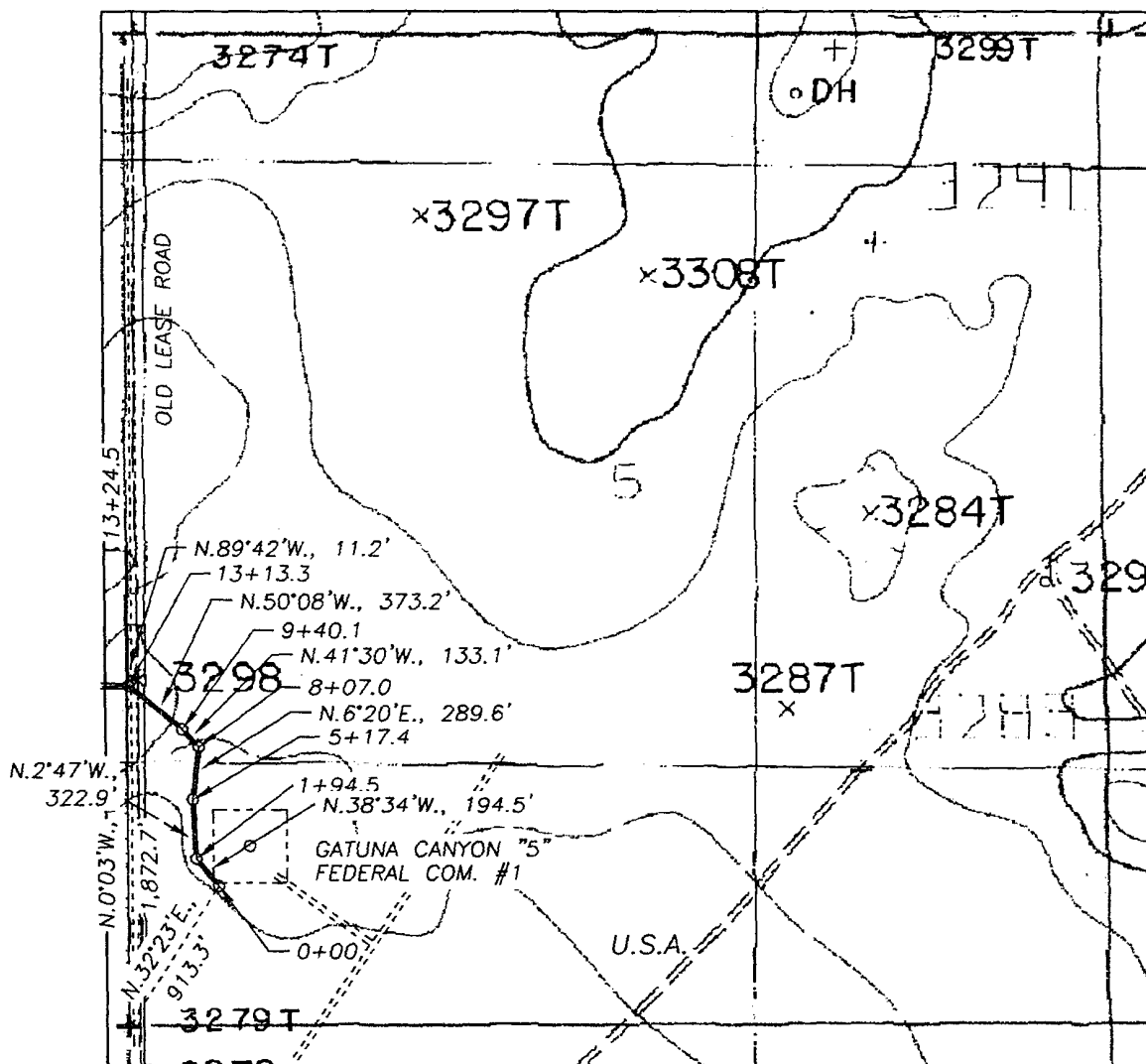
Bond Coverage: \$150,000

BLM Bond File: NM1693, Nationwide

Authorized Signature: \_\_\_\_\_

  
Name: NM (Micky) Young  
Title: District Manager  
Date: September 2003

SECTION 5, TOWNSHIP 20 SOUTH, RANGE 29 EAST, NMPM, EDDY COUNTY, NEW MEXICO.



DESCRIPTION:

A LEASE ROAD AND PIPELINE RIGHT OF WAY 30 FEET WIDE AND 1,324.5 FEET IN LENGTH LOCATED IN SECTION 5, TOWNSHIP 20 SOUTH, RANGE 29 EAST, NMPM, EDDY COUNTY, NEW MEXICO, BEING 15 FEET TO THE LEFT AND RIGHT OF THE SURVEY CENTERLINE AS SHOWN ON THIS PLAT.

1,324.5 FEET = 449.2343 RODS, 0.2509 MILES OR 0.9122 ACRES, MORE OR LESS.

RECEIVED  
2008 SEP 11 AM 12:42  
EDDY COUNTY LAND MGMT.  
COLTSBAD FIELD OFFICE

1000' 0 1000' 2000'  
Scale 1" = 1000'

THE PREPARATION OF THIS PLAT AND THE PERFORMANCE OF THE SURVEY UPON WHICH IT IS BASED WERE DONE UNDER MY DIRECTION AND THE PLAT ACCURATELY DEPICTS THE RESULTS OF SAID SURVEY AND MEET THE REQUIREMENTS OF THE STANDARDS FOR LAND SURVEYS IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

*[Signature]*  
HERSCHEL L. JONES, R.L.S. No. 3640  
SURVEYOR

GENERAL SURVEYING COMPANY, P.O. BOX 1928  
LOVINGTON, NEW MEXICO 88260

MEWBOURNE OIL COMPANY

LEASE ROAD AND PIPELINE RIGHT OF WAY TO ACCESS THE MEWBOURNE COLT "6" FEDERAL #1 WELL, LOCATED IN SECTION 6, TOWNSHIP 20 SOUTH, RANGE 29 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

Survey Date: 8/22/2003	Sheet 1 of 2 Sheets
Drawn By: Ed Blevins	W.O. Number
Date: 8/22/03	Scale 1" = 1000' COLT 6-1