Form 3160-3
(November 1983)
(formerly 9-331C)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: USA NM 67402

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

7. UNIT AGREEMENT NAME: N/A

8. FARM OR LEASE NAME: Federal

9. WELL NO.: No. 1

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: NW SE Sec. 6: T16N-R7W

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Lone Mountain Production Company

3. ADDRESS OF OPERATOR: P.O. Box 3394, 408 Petroleum Bldg., Billings, MT 59103

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1700' FSL, 2000' FEL, Section 6
At proposed prod. zone: Township 16 North-Range 7 West, McKinley County, New Mexico

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 18 miles north of San Mateo, New Mexico

12. COUNTY OR PARISH: McKinley

13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
1700'	-----	40 acres
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
1700'	2880'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 6780' GR

22. APPROX. DATE WORK WILL START*: March 15, 1989

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.

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# New	100'	40 sacks "G" + 2% $CaCl_2$. Yield:1.1
7-7/8"	5-1/2"	14# New	2880'	270 sacks 50/50 Pozmix.+ 6% Gel + 10% salt. Yield:1.38 ft^3/sack. Weight: 13.1 ppg Top of cement @ 1300' (est.)

~~Enter in Addfile~~
~~Get API #~~
~~Make lead sheet~~
Label on well file
Make lead sheet

270 x 1.38 x 5.77 = 2149

RECEIVED
BLM MAIL ROOM
89 MAR -27 AM 11:39
FARMINGTON RESOURCE AREA
FARMINGTON, NEW MEXICO

See at

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 Joe Dyk TITLE Joe Dyk, Petroleum Engineer DATE February 23, 1989

(This space for Federal or State office use)

PERMIT NO. NM-3543 APPROVAL DATE

APPROVED AS AMENDED
APR 03 1989
AREA MANAGER

APPROVED BY TITLE 89-205

CONDITIONS OF APPROVAL, IF ANY:

FARMINGTON, NEW MEXICO

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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.

Application for Permit to Drill
Federal No. 1
NWSE Section 6-T16N-R7W
McKinley County, New Mexico

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1. Surface Formation is the Menefee.

2. Anticipated Geologic Markers are: Hosta/872', U. Hospah/1522', Gallup/1782', Greenhorn/2392', Dakota/2472', Morrison/2862', Total Depth/2880'.

3. Oil is Anticipated in the upper and lower Hospah. Oil and gas are possible in the Dakota.

4. Proposed casing program: See item no. 23 above.

5. Pressure control equipment: See attached Well Control Plan and Schematic of Drilling Contractor's BOP Stack. BOP's will be tested before drilling out from under surface casing and checked daily.

6. Fresh water and gel will be used to drill the surface hole. A chemical-gel type mud will be used to drill to total depth.

7. Auxiliary equipment: See Well Contol Plan.

8. The logging program will consist of a DIL and GR-FDC-CNL log from total depth to the base of the surface casing.

9. No abnormal pressures or temperatures are anticipated. No poisonous gas is anticipated.

10. Anticipated spud date is March 15, 1989. Completion operations should commence within 30 days of rig release.

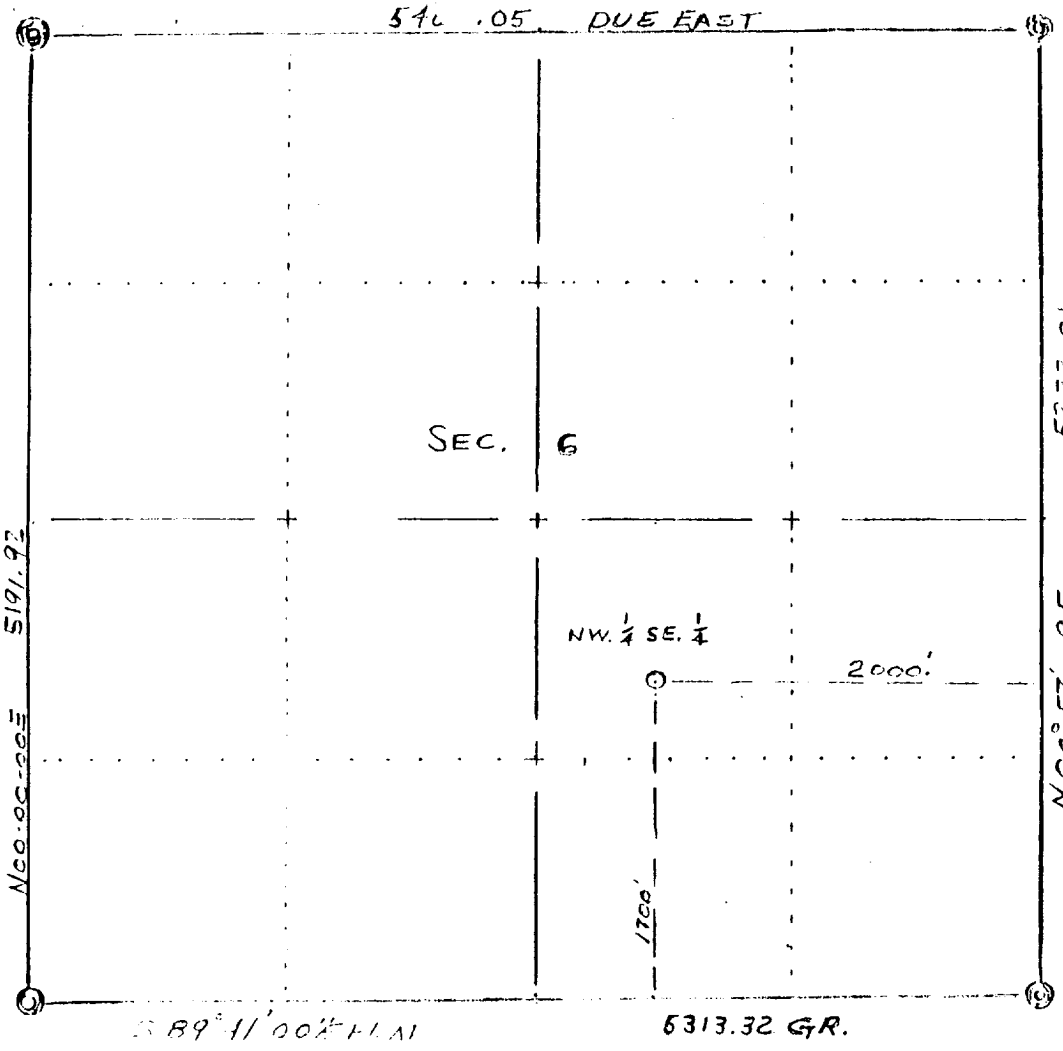
11. Survey plats are attached.

12. Oil will be sold to Farmington area refineries. Gas will be used as fuel or reinjected for pressure maintenance.

13. Designation of Operator from Conoco to Lone Mountain Production Company is attached.

SEC. 6 , T. 16 N. R. 7 W. OF THE N.M.P.M.

LOCATION PLAT



N

SCALE

1" = 1000'

LEGEND

○ WELL LOCATION

◎ ALUMINUM CAPS

THIS WELL LOCATION PLAT WAS PREPARED FOR LONE MOUNTAIN PRODUCTION CO.
TO LOCATE THE Federal No. 1, 1700 F N L.
2000 F E L. IN THE SE¼, ____ .OF SECTION 6, T. 16N, R. 7 W.
OF THE N.M.P.M. McKinley COUNTY, NEW MEXICO.

DENNIS L. MIRABAL NEW MEXICO 7001 REGISTERED LAND SURVEYOR

Dennis L Mirabal

DENNIS L. MIRABAL, P.L.S. LIC 7001

This is to certify that I am a Registered Land Surveyor and that this survey was done from field notes by me or under my direct supervision and is true and correct to the best of my knowledge and belief.

2/2/89

surveyed		MIRABAL SURVEYING CO.	scale 1"=1000'
drawn		824 MT. TAYLOR GRANTS, NM 87020	job no.
checked			sheet of

WELL CONTROL PLAN

1. Surface Casing: 8-5/8" O.D., 24#, L.S., STC, set at 100', cemented with pump and plug method back to the surface.

2. Casinghead Flange: 8-5/8" x 10" 600 series casinghead with two 2", 2000psi L.P. outlets.

3. Blowout Preventer: A 10" 2000 psi W.P. hydraulic Annular Preventor capable of closing in on itself.

4. Auxiliary Equipment: (a) Drill pipe floats will be allowed at contractor's discretion. (b) Visual monitoring of pit levels will be maintained. (c) Upper kelly cock will be used. (d) Stabbing valve will be kept on the floor.

5. Anticipated bottom hole pressure is 950 psi at 2880 or 0.33 psi/ft. No abnormal temperatures or hydrogen sulfide gas are anticipated.

LONE MOUNTAIN PRODUCTION COMPANY

By: _____
Joe V. Dyk
Petroleum Engineer

LONE MOUNTAIN PRODUCTION COMPANY

Drilling Program

WELL NAME: Federal No. 1 PROSPECT/FIELD: Padilla Prospect
LOCATION: (NW/4 SE/4) 1700 ' FSL, 2000 ' FEL, SECTION 6 , T16N , R7W
COUNTY: McKinley STATE: New Mexico TOTAL DEPTH: 2880 ft

HOLE SIZE:

12.25	" to	100	'
7.875	" to	2880	'
*	" to	*	'
*	" to	*	'
*	" to	*	'

DEVIATION SURVEYS:

Every	30 '	from	0 '	to	100 '
Every	200 '	from	100 '	to	2880 '
Every	* '	from	* '	to	* '
Every	* '	from	* '	to	* '
Every	* '	from	* '	to	* '

CASING/CEMENTING PROGRAM:

Type String	Depth From	Depth To	Casing Size	Casing Weight	Casing Grade	Cement
SURFACE	0'	100'	8 5/8"	24 #/'	K-55	CEMENT TO SURFACE
*	*	*	*	*	*	WITH 40 SX PREM
*	*	*	*	*	*	*
PRODUCTION	2880'	0'	5 1/2"	14.0 #/'	J-55	270 sx 50/50 Poz +
*	*	*	*	*	*	6% Gel + 2% CaCl
*	*	*	*	*	*	*
*	*	*	*	*	*	*

DRILLING FLUID PROGRAM:

Type	Depth From	Depth To	Characteristics Weight	Vis.	W.L.	Comments
Spud Mud	0'	100'	8.4-8.8	28-36	NC	*
Water	100'	1300'	8.4-8.6	28	NC	*
Chem Gel	1300'	TD	8.6-9.6	32-40	8-20cc	8-12 cc for zones
*	*	*	*	*	*	of interest

COMMENTS:
Mudlogger on above Hospah.
DST's are possible in the Hospah and Dakota.
*
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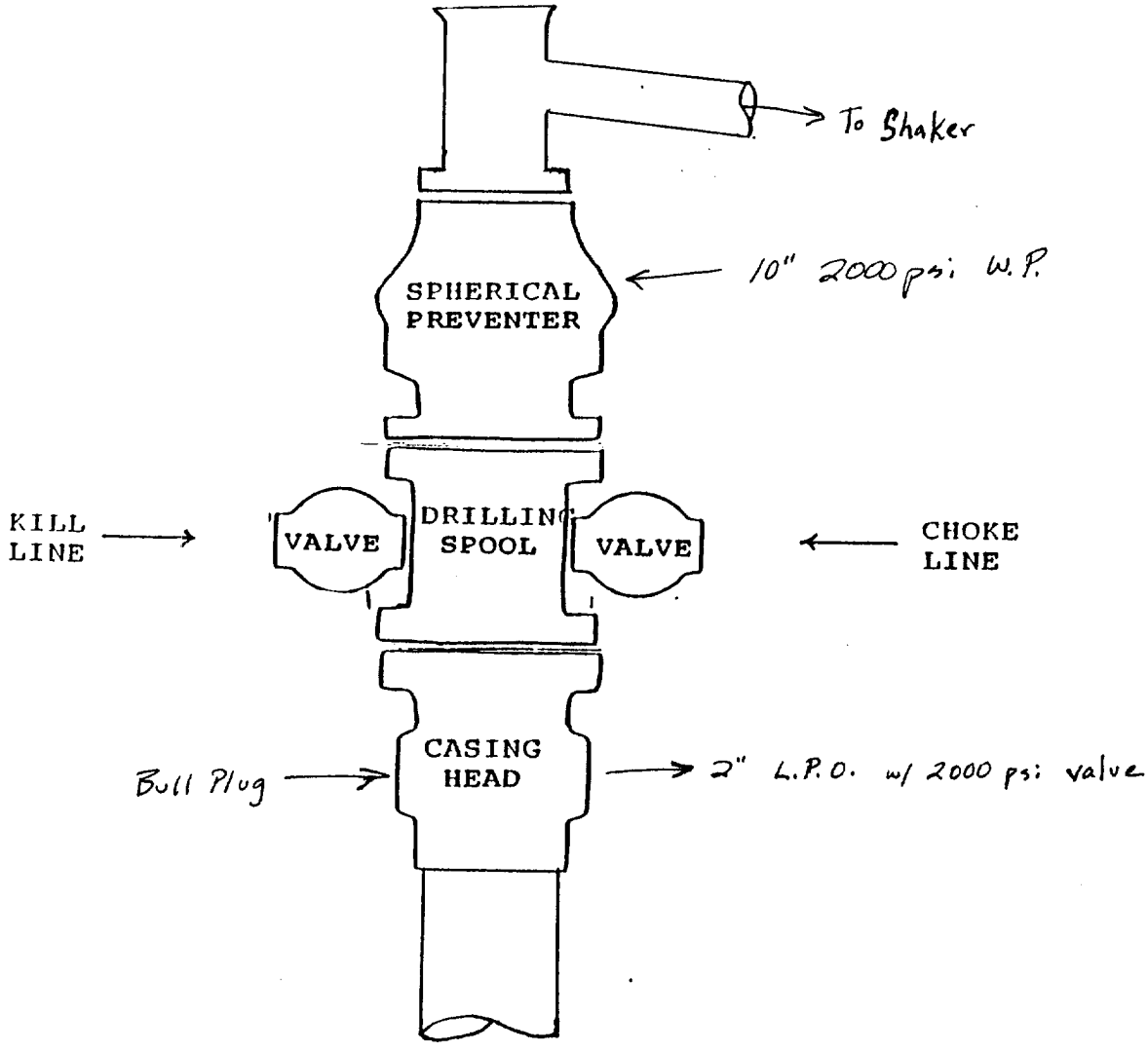
*

PREPARED BY: Joe Dyk DATE: February 10, 1989

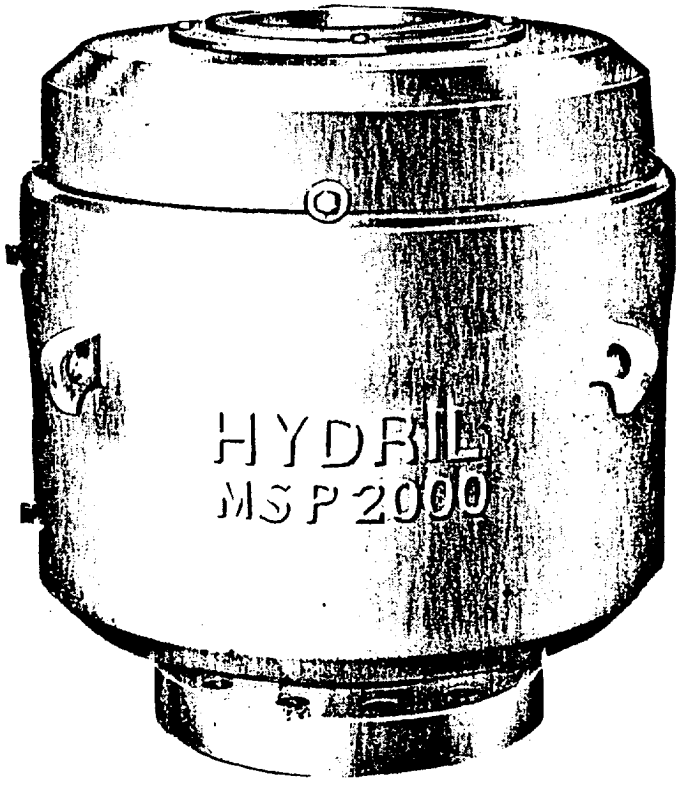
BLOWOUT PREVENTER STACK ARRANGEMENT



Hydril MSP

Operating Features

1) Will close on open hole. (but not recommended)
2) Primary usage is in diverter systems.
3) Automatically returns to the open position when closing is released.
4) Sealing assistance is gained from the well pressure.



SURFACE USE PLAN

Lone Mountain Production Company
Federal No. 1
NWSE Section 6-T16N-R7W
McKinley County, New Mexico

1. EXHISTING ROADS

   See Maps #1 and #2 and Plat #1. This proposed well is located approximately 10 miles north of San Mateo, New Mexico.

2. ACCESS ROADS TO BE CONSTRUCTED

   See Map #1 and Plat #2

3. LOCATION OF EXISTING WELLS

   See Map #3.

4. LOCATION OF PRODUCTION FACILITIES

   Submitted in the event the well is completed.

5. LOCATION AND TYPE OF WATER SUPPLY

   The source of water for this well is the Demitro Flores Water well located in SWSW of Section 9-T16N-R7W. It is used to water livestock on the Lee Ranch.

6. SOURCE OF CONSTRUCTION MATERIALS

   No construction materials will be used other than native materials. Soil from cuts will be used in fills. No outside material will be brought in.

7. METHODS FOR HANDLING WASTE MATERIAL

   Cuttings will be buried in the reserve pit at cleanup. Garbage and other waste material will be contained in a trash cage. This cage will be dumped at an approved sanitary landfill. Human waste will be contained and will be disposed of at an approved sanitary landfill.

   Drilling fluids will be contained in the reserve pit and left to evaporate. Any fluids produced during testing operations will be collected in a test tank. If a test tank is not available, the fluids will be contained in the reserve pit. Any spills of oil, gas, saltwater, or noxious fluid will be cleaned up and removed.

If the well is productive, produced water will be disposed of on site for 30 days only or 90 days with the permission of the State Petroleum Engineer. After that time application will be made for approval of permanent disposal method in compliance with the rules and regulations of the State of New Mexico.

8. ANCILLARY FACILITIES

No ancillary facilities are planned.

9. WELLSITE LAYOUT

See Plat #2 - Pit and Pad Layout
See Plat #2A - Cross Sections of Pit and Pad
See Plat #3 - Rig Layout

The location will be constructed large enough to accomodate the drilling rig and associated equipment with allowance made for future completion and production equipment.

Topsoil will be stripped to a depth of 8 - 12 inches and stockpiled on the north edge of the location. No topsoil stripping will be done when soils are moisture saturated to a depth of 3 inches, or frozen below the stripping depth.

The reserve pit will be fenced on three sides prior to drilling activity at the request of the Lee ranch and closed off on the fourth side after drilling is finished. Fencing will be four strands of barb wire or 48 inch woven wire with one strand of barb wire above the woven wire. All corners will be braced with a wooden H-type brace. The fence construction will be on cut or undisturbed surface.

The backslope of the location will not exceed 2:1.

All construction activities will be confined to the minimum area necessary. The exterior boundaries of the construction area will be clearly flagged prior to any surface disturbing activities or vegetation removal.

The proposed access road will be flat bladed as necessary. No traffic will be allowed outside of the right of way.

10. PLANS FOR RECLAMATION OF THE SURFACE

A biodegradeable mulch may be required if soil erosion or vegetation establishment is determined to be a problem by the authorized officer on the access or location reclamation.

All disturbed areas will be seeded with the seed mixture as outlined in the stipulations.following mixture. Application

Lone Mountain will prepare seedbed by contour cultivating 4 - 6 inches deep and drilling seed 1/2 to 1 inch deep following the contour. In areas that cannot be drilled, seed will be broadcast at 1.5 times the application rate and covered 1/2 to 1 inch deep with a harrow or drag bar.

Seeding will be completed during the approved time frame.

If the well is a producer:

Lone Mountain will upgrade and maintain access roads as necessary to prevent soil erosion and accomodate year-round traffic. Lone Mountain will reshape areas unnecessary to operation, rip or disk on the contour, and seed all disturbed areas outside the work area according to the approved seed mixture. The top soil will be saved for use during final reclamation unless the site can be recontoured to blend with the natural topography as required for final abandonment. Perennial vegetation will be established. Additional work will be required in case of seeding failures. All permanent facilities placed on the placed on the location will be painted the color specified by the BLM to blend with the natural environment.

If the well is abandoned/dryhole:

Lone Mountain will restore the access road and location to blend with the natural topography. During reclamation of the site, fill material will be pushed into cuts and up over the backslope. No depressions will be left that could trap water or form ponds. Topsoil will be distributed evenly over the location and seeding according to the above seed mixture. The access road and location will be ripped or disked prior to seeding.

The area is considered to be satisfactorily reclaimed when:

A) Soil erosion resulting from the operation has been stabilized.

B) A vegetative cover at least equal to that present prior to disturbence and a plant species composition at least as desireable as that present prior to disturbance has been established. Establishment of seeded species in the approved seed formula will be considered as acceptance.

Additional work will be required until these conditions are satisfied.

11. SURFACE OWNERSHIP

Owned By Iona Lee.

12. OTHER INFORMATION

Lone Mountain will contact the Farminton BLM Manager at least 24 hours prior to commencing construction or maintenance of the access road and well pad.

Lone Mountain will immediately bring to the attention of the Farmington Resource Area Manager any and all antiquities or other objects of historic or prehistoric ruins, artifacts, or fossils discovered as a result of operations under this permit. Lone Mountain will immediately suspend all activities in the area of the object and will leave such discoveries intact until told to proceed by the Area Manager. Notice to proceed will be based upon evaluation of the cultural significance of the object. Evaluation will be by a qualified professional selected by the Area Manager from a federal agency insofar as practical. When not practical, Lone Mountain will follow the mitigation requirements set forth by the Area Manager concerning protection, preservation, or diposition of any sites or material discovered. In those situations where the Area Manager determines that data recovery and/or salvage excavations are necessary, Lone Mountain will bear the cost of such data recovery and/or salvage operations.

The Farmington Resource Area Manager will be notified at least 24 hours prior to commencing reclamation work.

13. LESSEE'S OR OPERATOR'S REPRESENTATIVES AND CERTIFICATION

James G. Routson
Lone Mountain Production Company
P.O. Box 3394
Billings, Montana 59103
Office Phone: 406-245-5077
Home Phone: 406-245-8797

Joe Elledge
Field Consultant

P.O. Box 111
Farmington, New Mexico 87499
Phone: 505-327-9267

I hereby certify that I, or persons under my supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Lone Mountain Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

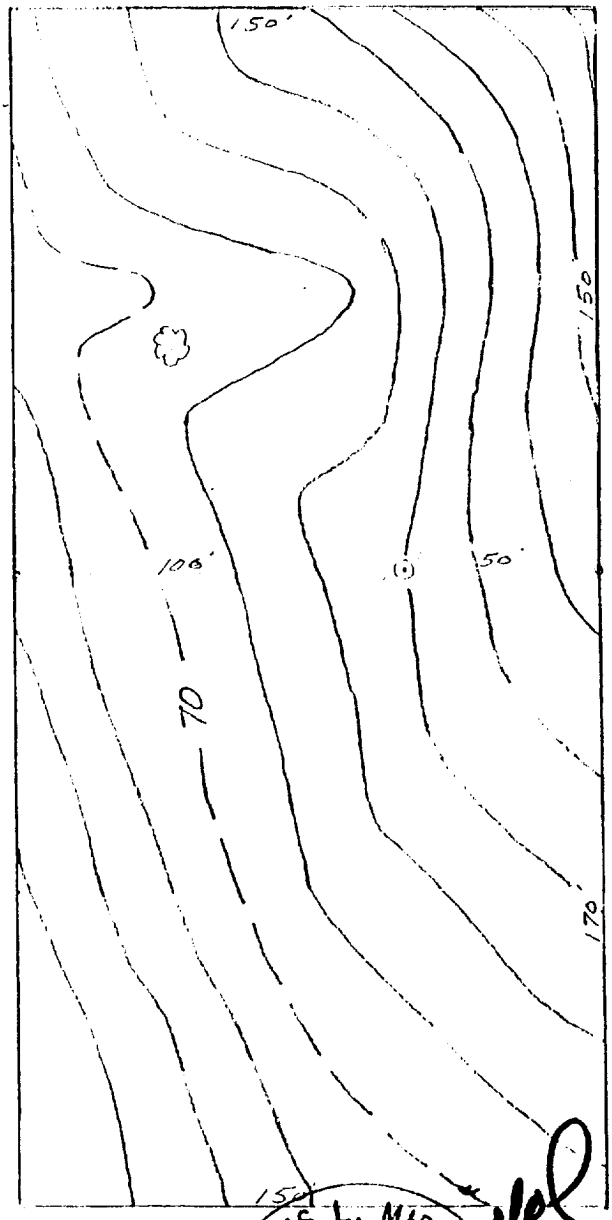
February 23, 1989
Date

James G. Routson

PLAT # 2

PIT & PAD LAYOUT

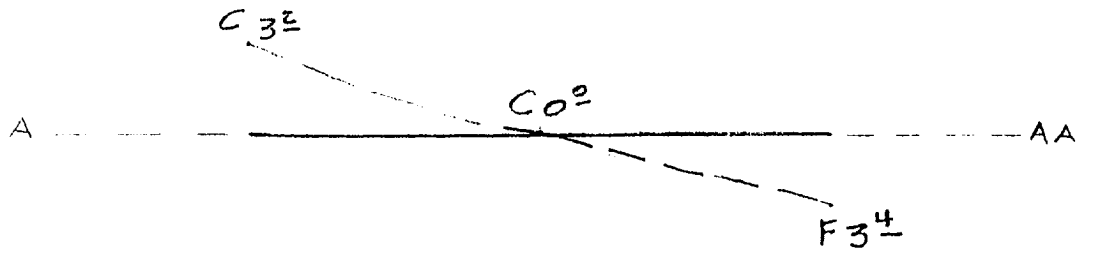
1" = 50'

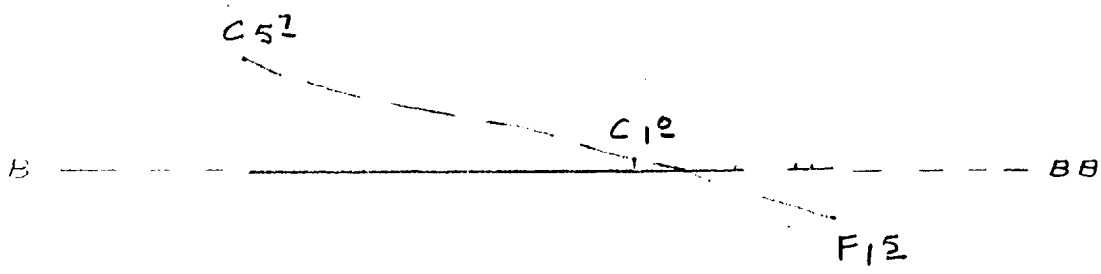


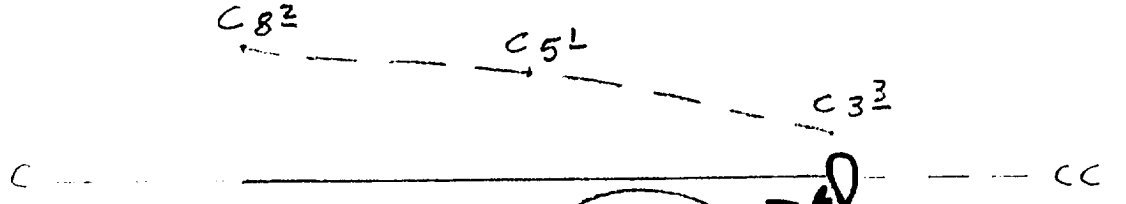
DENNIS L. MARSHALL
NEW MEXICO
5001
REGISTERED LAND SURVEYOR

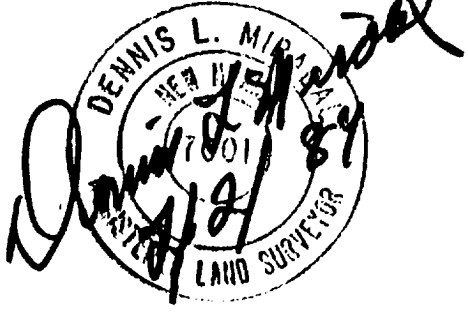
PLAT 2A

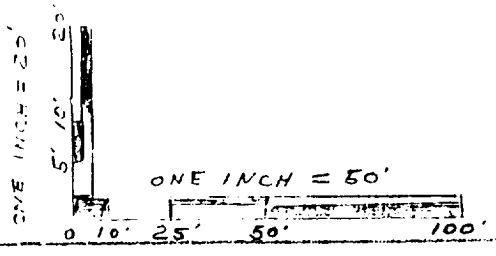
CROSS SECTIONS PIT & PAD



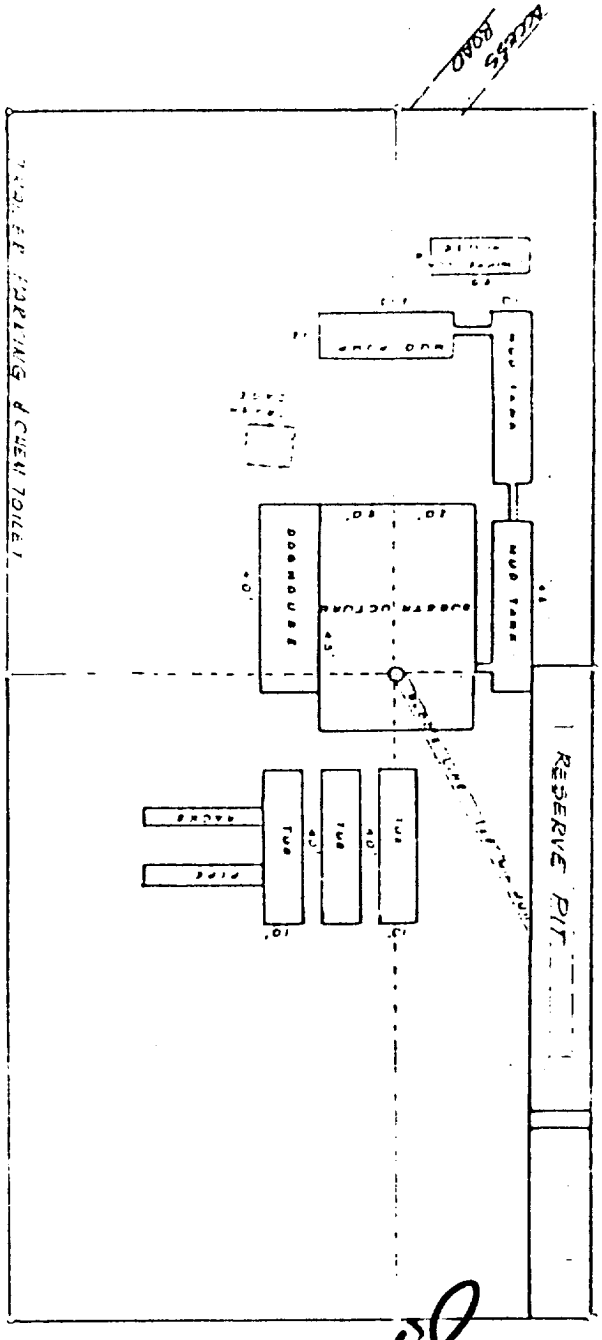








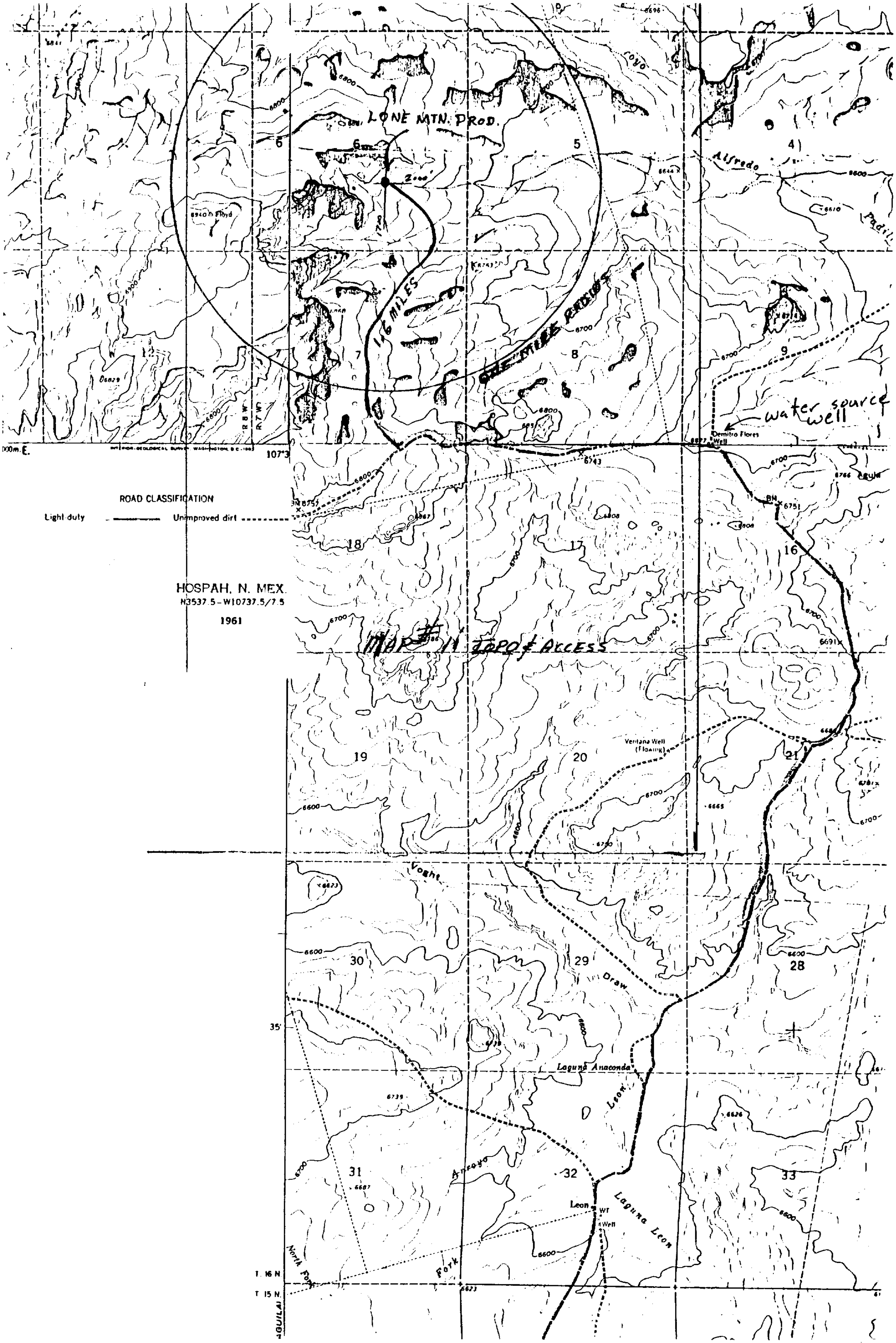
RIG Layout



DENNIS L. MIRANDA
NEW MEXICO
9001
REGISTERED LAND SURVEYOR

Dennis L. Miranda 8/29/89

LONE MTN. PROD. CO.


LONE MTN. PROD.
1.6 MILES
ONE MILE RADIUS
water source well
Demitro Flores Well
ROAD CLASSIFICATION
Light-duty
Unimproved dirt
HOSPAH, N. MEX.
N3537.5-W10737.5/7.5
1961
MAP # 11 TOPO & ACCESS
Alfredo
Ventana Well (Flowing)
Voght
Draw
Laguna Anaconda
Leon
Arroyo
Laguna Leon
North Fork
Fork
Floyd
T. 16 N.
T. 15 N.
R 8 W.
R 7 W.
6
5
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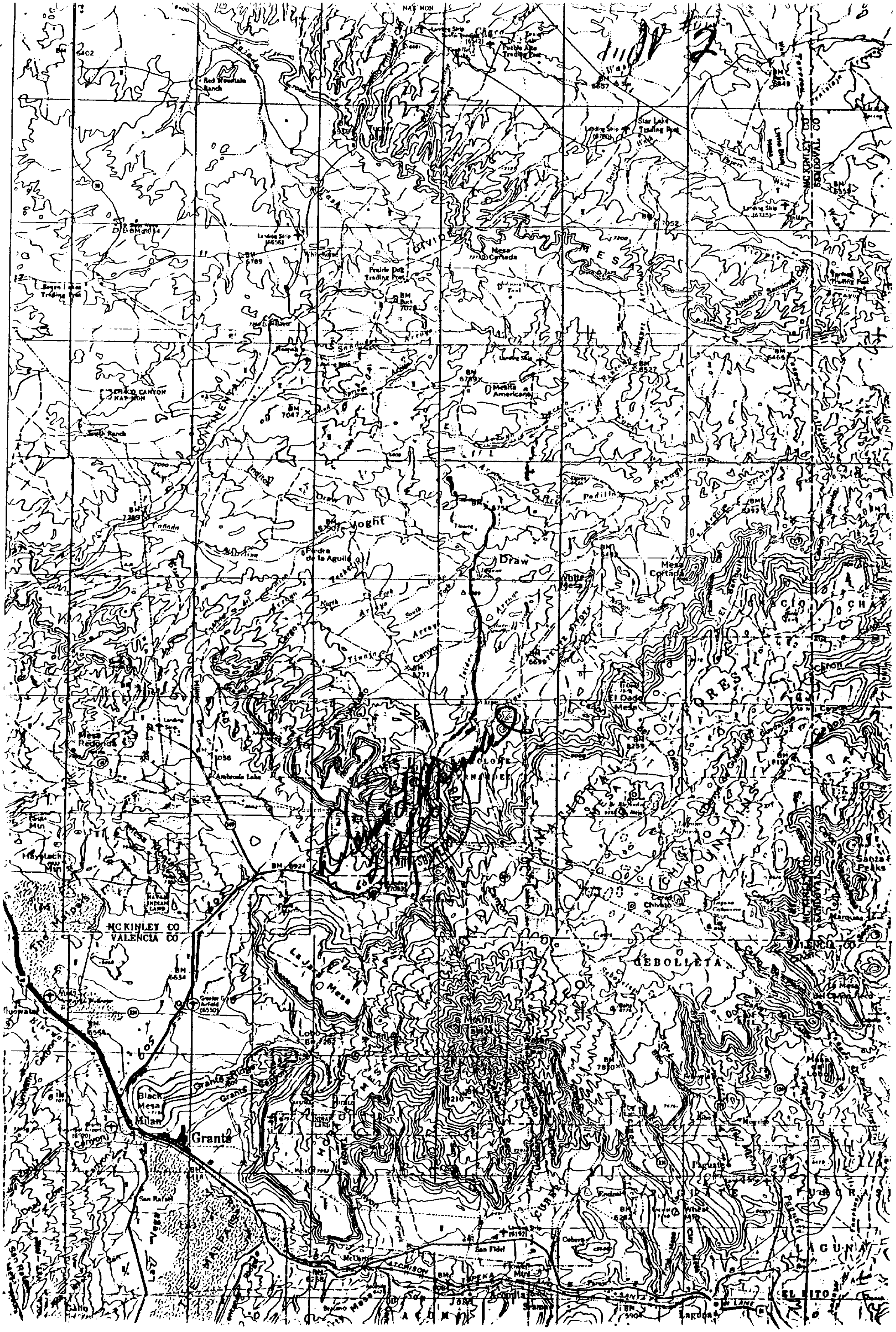
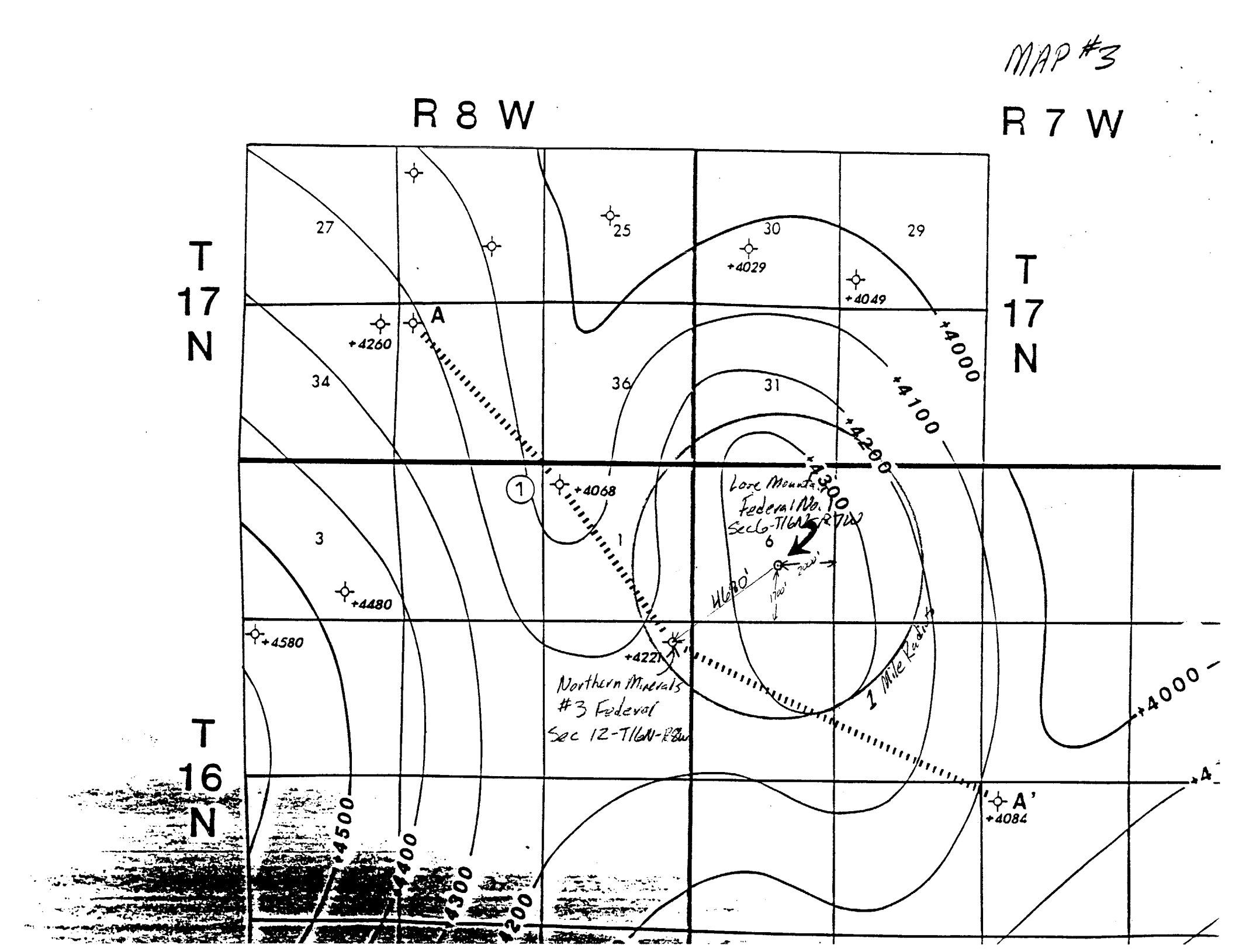

Red Mountain Ranch
Star Lake Trading Post
Pueblo Alto Trading Post
Mesa Cañada
Prairie Dog Trading Post
Whitehorse
Mesita Americana
CHACO CANYON NAT MON
Smith Ranch
CONTINENTAL
Voght
Draw
Piedra de la Aguila
White Mesa
Mesa Cortada
El Dado Mesa
Mesa Redonda
Ambrosia Lake
Haystack Mtn
MC KINLEY CO
VALENCIA CO
SANDOVAL CO
La Jara Mesa
CEBOLLETA
Santa Peaks
Marquez
Mount Taylor
Lobo
Black Mesa
Milan
Grants
San Rafael
Paguate
San Fidel
McCartys
ATCHISON TOPEKA
Acomita
Seama
Laguna
LAGUNA
EL RITO
Cebolla
Cubero
Chivato
Grants Canyon

MAP #3


R 8 W
R 7 W
T 17 N
T 17 N
T 16 N
27
25
30
29
+4029
+4049
+4260
A
34
36
31
+4000
+4100
+4200
+4300
1
+4068
Lone Mountain
Federal No.
Sec 6-T16N-R7W
6
3
1
+4480
1680'
2000'
1700'
+4580
+4221
Northern Minerals
#3 Federal
Sec 12-T16N-R8W
1 Mile Radius
+4000
A'
+4084
+4500
+4400
+4300
+4200

1. Existing Roads

See maps #1 and #2 and Plat #1. This proposed well is approximately 24.7 miles Northwest of the town of San Mateo. It is reached by going from the intersection of (in Milan, NM), the Santa Fe Railroad and Highway 605, Northeast on H/W 605 approximately 22.4 miles. Then LT. on H/W 456 1.7 miles then LT. on the Santa Fe Coal Mine Road approximatley 7.7 miles, then turn RT. on a dirt road approximately 13.7 miles, then turn rt. on new access road 1.6 miles to well location

2. Access road to be Reconstructed

See map #1 and Plat #1. The access road which lies Northerly through Section 7, and into Section 6. I will be necessary to grade and widen this road.

3. Location of Water Well

This well is located approximately 1¼ miles South, and 1¼ miles East of the proposed well sight. This is a Lee Ranch Well used to water their livestock.

4. Wellsite Layout

See Plat #2 - Pit & Pad Layout
See Plat #2A - Cross Section of Pit and Pad
See Plat #3 - Rig Layout

5. Other Information

The Vegetation includes juniper,pinon,sage brush, and grama grass.

2/2/89
Date:

Dennis L. Mirabal

DENNIS L. MIRABAL
NEW MEXICO
7001
REGISTERED LAND SURVEYOR