

NM3 - _____2_____

REGISTRATION

DATE:

____Nov. 19, 2009____

Jones, Brad A., EMNRD

From: Jones, Brad A., EMNRD
Sent: Thursday, November 19, 2009 4:45 PM
To: 'sroberts@gwdc.com'; 'paul@walsheng.com'
Cc: Powell, Brandon, EMNRD
Subject: Small Landarm Registration Approval NM-3-002
Attachments: 2009 11-19 NM3-002 approval.pdf

Paul,

Thank you for your cooperation in providing the additional information and making the appropriate revisions as requested. Please see the attached... It is Great Western Drilling Company's small landfarm registration approval. A hardcopy will be mailed to Mr. Sam Roberts of Great Western Drilling Company. If you have any questions, please contact me.

Brad

Brad A. Jones

Environmental Engineer

Environmental Bureau

NM Oil Conservation Division

1220 S. St. Francis Drive

Santa Fe, New Mexico 87505

E-mail: brad.a.jones@state.nm.us

Office: (505) 476-3487

Fax: (505) 476-3462

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Socorro, NM 87741
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-137 EZ
Revised August 3, 2009

Submit 1 Copy to Santa Fe Office

REGISTRATION/ FINAL CLOSURE REPORT FOR SMALL LANDFARM

Section 7 of 19.15.36 NMAC defines a small landfarm as a centralized landfarm of two acres or less that has a total capacity of 2000 cubic yards or less in a single lift of eight inches or less, remains active for a maximum of three years from the date of its registration and that receives only petroleum hydrocarbon-contaminated soils (excluding drill cuttings) that are exempt or non-hazardous waste. The operator shall operate only one active small landfarm per governmental section at any time. *Estimate 1000 yds.*

GENERAL INFORMATION

1. ☒ Small Landfarm Registration ☐ Small Landfarm Final Closure Report*
(*Must be submitted within three years from the registration date) *SCR 10/19/09*
2. Operator: GREAT WESTERN DRILLING COMPANY
Address: 700 W. LOUISIANA ST., MIDLAND, TX 79701
Contact Person: SAM ROBERTS Phone: (432) 682-5241
3. Location: SE /4 SE /4 Section 7 Township 32 N Range 11 W

REGISTRATION

1. As operator, are you the surface estate owner of the proposed site? ☐ Yes ☒ No If no, please attach a certification statement that demonstrates a written agreement is established with the surface estate owner authorizing the use of the site for the proposed small landfarm.
2. Will the proposed small landfarm comply with the siting requirements of Subsections A and B of 19.15.36.13 NMAC?
☒ Yes ☐ No
- A. Depth to ground water.
- No small landfarm shall be located where ground water is less than 50 feet below the lowest elevation at which the operator will place oil field waste.
- B. No surface waste management facility shall be located:
- within 200 feet of a watercourse, lakebed, sinkhole or playa lake;
 - within an existing wellhead protection area or 100-year floodplain;
 - within, or within 500 feet of, a wetland;
 - within the area overlying a subsurface mine;
 - within 500 feet from the nearest permanent residence, school, hospital, institution or church in existence at the time of initial application; or
 - within an unstable area, unless the operator demonstrates that engineering measures have been incorporated into the surface waste management facility design to ensure that the surface waste management facility's integrity will not be compromised.
3. Attach a plat and topographic map showing the small landfarm's location in relation to governmental surveys (quarter-quarter section, township and range); highways or roads giving access to the small landfarm site; watercourses; fresh water sources, including wells and springs; oil and gas wells or other production facilities; and inhabited buildings within one mile of the site's perimeter.

Based on the information provided with this submittal, registration of a small landfarm can only be granted if the operator complies with the following understandings and conditions:

- The operator shall operate only one active small landfarm per governmental section at any time. No small landfarm shall be located more than one mile from the operator's nearest oil or gas well or other production facility.
- The operator shall accept only exempt or non-hazardous wastes consisting of soils (excluding drill cuttings) generated as a result of accidental releases from production operations, that are predominantly contaminated by petroleum hydrocarbons, do not contain free liquids, would pass the paint filter test and where testing shows chloride concentrations are 500 mg/kg or below.
- The operator shall berm the landfarm to prevent rainwater run-on and run-off.
- The operator shall post a sign at the site readable from a distance of 50 feet and listing the operator's name; small landfarm registration number; location by unit letter, section, township and range; expiration date; and an emergency contact telephone number.
- The operator shall spread and disk contaminated soils in a single eight inch or less lift within 72 hours of receipt. The operator shall conduct treatment zone monitoring to ensure that the TPH concentration, as determined by EPA SW-846 method 8015M or EPA method 418.1 or other EPA method approved by the division, does not exceed 2500 mg/kg; and that the chloride

concentration, as determined by EPA method 300.1, does not exceed 500 mg/kg. The operator shall treat soils by disking at least once a month and by watering and adding bioremediation enhancing materials when needed.

- The operator shall maintain records reflecting the generator, the location of origin, the volume and type of oil field waste, the date of acceptance and the hauling company for each load of oil field waste received. The division shall post on its website each small landfarm's location, operator and registration date. In addition, the operator shall maintain records of the small landfarm's remediation activities in a form readily accessible for division inspection. The operator shall maintain all records for five years following the small landfarm's closure.

- The operator shall submit a final closure report on a form C-137 EZ, together with photographs of the closed site, to the environmental bureau in the division's Santa Fe office.

CERTIFICATION

I hereby certify that the information submitted with this registration is true, accurate and complete to the best of my knowledge and belief and agree to the understandings and conditions of this registration.

Name: Sam Roberts

Title: Area Engineer

Signature: [Signature]

Date: 10/19/09

E-mail Address: sroberts@gwde.com

OCD REGISTRATION: ☒ Approved. Date: 11/19/09 ☐ Denied. Date: _____

Comments: _____

OCD Representative Signature: [Signature]

Title: Environmental Engineer OCD Registration Number: AM-3-002

FINAL CLOSURE REPORT

Were the landfarmed soils able to achieve the closure performance standards, listed below, within three years from the registration date? ☐ Yes ☐ No (Please provide laboratory analytical results)

- benzene, as determined by EPA SW-846 method 8021 B or 8260B, shall not exceed 0.2 mg/kg;
- Total BTEX, as determined by EPA SW-846 method 8021 B or 8260B, shall not exceed 50 mg/kg;
- TPH, as determined by EPA SW-846 method 418.1 or other EPA method approved by the division, shall not exceed 2500 mg/kg; the GRO and DRO combined fraction, as determined by EPA SW-846 method 8015M, shall not exceed 500 mg/kg; and
- chlorides, as determined by EPA method 300.1, shall not exceed 500 mg/kg.

If yes, were the additional closure requirements listed below satisfied? ☐ Yes ☐ No (Please provide photos)

- The operator shall re-vegetate soils remediated to the closure performance standards if left in place in accordance with Paragraph (6) of Subsection A of 19.15.36.18 NMAC.
- If the operator returns remediated soils to the original site, or with division permission, recycles them, re-vegetate the cell filled in with native soil to the standards in Paragraph (6) of Subsection A of 19.15.36.18 NMAC;
- The operator shall remove berms on the small landfarm and buildings, fences, roads and equipment; and
- The operator shall clean up the site and collect one vadose zone soil sample from three to five feet below the middle of the treatment zone, or in an area where liquids may have collected due to rainfall events; the vadose zone soil sample shall be collected and analyzed using the methods specified above for TPH, BTEX and chlorides.

If no, were the landfarmed soils that have not or cannot be remediated to the closure performance standards within three years removed to a division-approved surface waste management facility, and the cell filled in with native soil to the standards in Paragraph (6) of Subsection A of 19.15.36.18 NMAC and re-vegetated? ☐ Yes ☐ No (Please provide photos)

CERTIFICATION

I hereby certify that the information submitted with this final closure report is true, accurate and complete to the best of my knowledge and belief.

Name: _____

Title: _____

Signature: _____

Date: _____

E-mail Address: _____

OCD CLOSURE REVIEW: ☐ Closure Approved. Date: _____ ☐ Closure Denied. Date: _____

Comments: _____

OCD Representative Signature: _____

Title: _____ OCD Registration Number: _____

**WALSH**

ENGINEERING & PRODUCTION CORP.

RECEIVED
2009 NOV 16 PM 1 56Petroleum Engineering Consulting
Lease Management
Contract Pumping7415 East Main
Farmington, New Mexico 87402
(505) 327-4892 • Fax: (505) 327-9834

November 12, 2009

Mr. Brad Jones
NMOCD
1220 South St. Francis Dr.
Santa Fe, NM 87505

Re: Great Western Drilling
Small Landfarm Application

Dear Mr. Jones,

Please replace/add the attached pages to the previously submitted Small Landfarm application for Great Western Drilling on the Decker #5 location. I believe I have made all of your suggested changes, but if not, please call me at (505) 327-4892.

Sincerely,

Paul C. Thompson, P.E.



WALSH

ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping7415 East Main
Farmington, New Mexico 87402
(505) 327-4892 • Fax: (505) 327-9834

November 12, 2009

Registration for a Small Landfarm
Great Western Drilling Company
SE/4 Section 7, T32N, R11W
San Juan County, NM

Surface Owner Approval

An agreement with the surface owner authorizing approval of the site for a landfarm is attached.

Depth to Ground Water

According to the NM State Engineer's iWaters Database (please see attached listing), the closest fresh water well is one mile southwest of the proposed landfarm in NE Section 19, T32N, R11W. Depth the groundwater in this well is 155'. This location is at a similar elevation and with similar topography as the proposed landfarm site.

Siting Requirements

As can be seen on the attached topo map and aerial photograph, there are no watercourses, lakes, sinkholes, or playa lakes within 200 feet of the proposed landfarm nor is it within 500' of a wetland. There are no permanent residences, schools, hospitals, churches, or other institutional building within 500' of the proposed landfarm. The land farm will not be in a "wellhead protection area".

According to the attached FEMA Flood Map the proposed location is not in the 100 year floodplain.

The attached EMNRD Mining and Mineral Division mining map, indicates that there are no mines in the vicinity of the proposed landfarm.

The area of the proposed landfarm is relatively flat and is not in an unstable area.



Landfarm Operations

This will be Great Western Drilling Company's only landfarm. The landfarm will be bermed to prevent rain water run-on and run-off.

Only non-hazardous wastes (soil contaminated with hydrocarbons) will be accepted and the facility. No drill cuttings will be allowed at this site. The contaminated soil will not contain free liquids and will pass the paint filter test. Chlorides concentrations will be 500 mg/kg or below.

A sign will be posted at the facility indicating the landfarm's location, expiration date, and emergency contact numbers.

The contaminated soils will be spread to a thickness not to exceed 8 inches and will be disked once a month and will treat by watering and adding bioremediation materials as necessary.

Great Western Drilling will maintain records showing the origin, date, and hauling company for each load of contaminated soil delivered to the landfarm. The remediation activities will also be recorded and be available for NMOCD inspection. A Closure Report on Form C-137 EZ, along with photographs of the closed site will be submitted to the environmental bureau in the OCD's Santa Fe office.

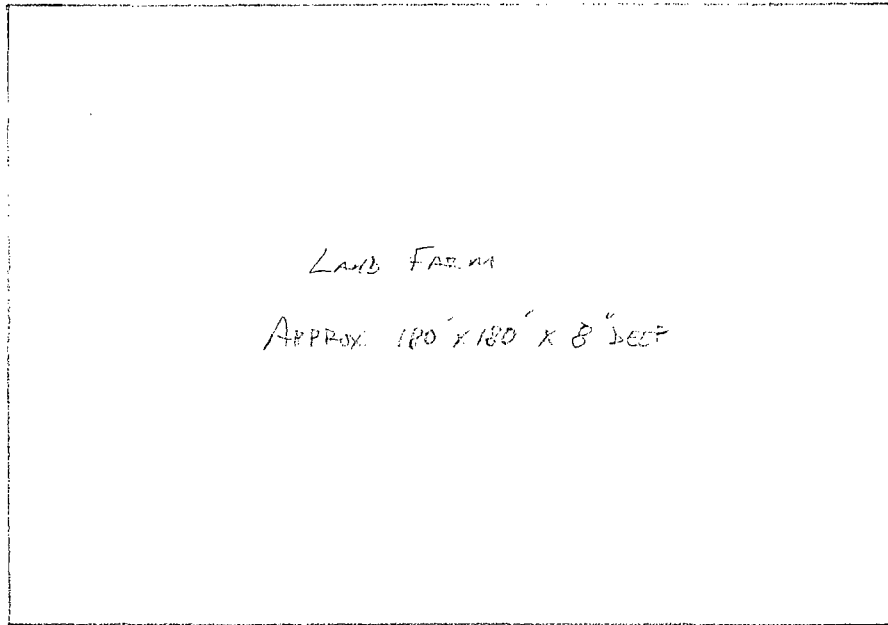
A handwritten signature in black ink, appearing to read "Paul C. Thompson", followed by a horizontal line.

Paul C. Thompson, P.E.

Agent for

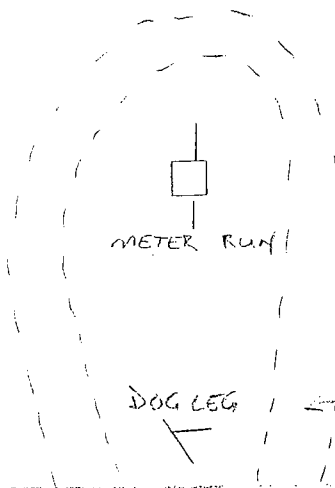
Great Western Drilling Company

DECKER #5
LAND FARM PLAT



Hill

EDGE OF WOODS



DIRT ROAD

Pat 11/12/09



SCALE: 1" = 2000'

No. County Roads
DUELLING
WATER COURSES

2,180,000 FEET
(N. MEX.)

4098

COX CANYON UNIT

32N

4097

274 SAN JUAN CO 8

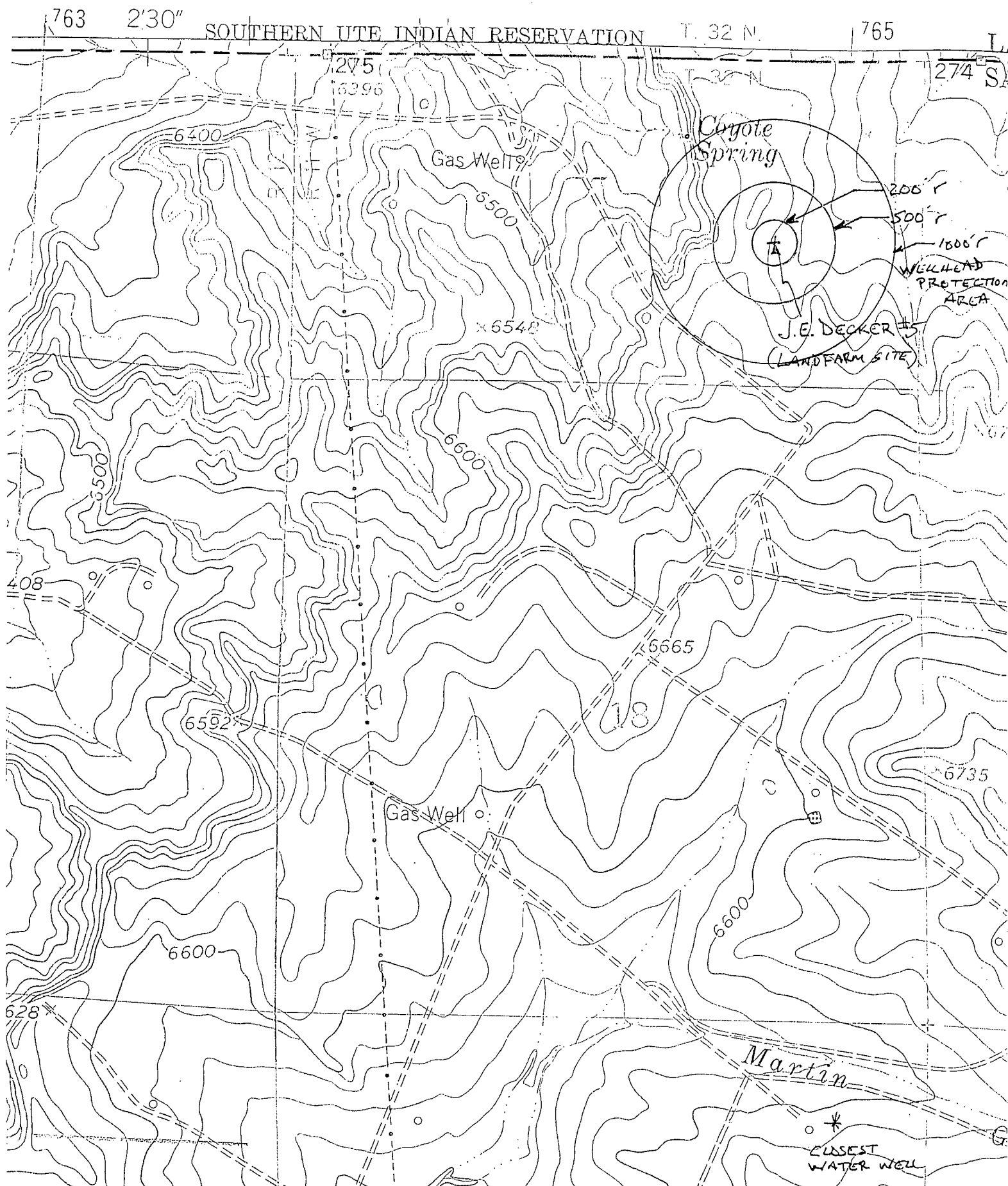
7

R.R. W.

4096

5733

7



FROM : GREAT WESTERN DRILLING FARM

FAX NO. : 505 334 6800

Sep 17 2009 10:00PM F2

Kenny Decker
141 CR. 2300
Aztec, N.M. 87410

Mr. Decker,

Great Western Drilling Co. is requesting permission to have a Landfarm/Biopile on your land. The location of the farm is Unit P, Section 7, Township 32 N, Range 11 W. The location name is J.E. Decker #5. The farm will be maintained as outlined by the Oil Conservation Division, 1000 Rio Brazos Road, Aztec, N.M.

I Kenny Decker give Great Western Drilling Co.
permission to go ahead with the above stated Landfarm/Biopile.

Kenny Decker
Signature

9/17/09
Date

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.

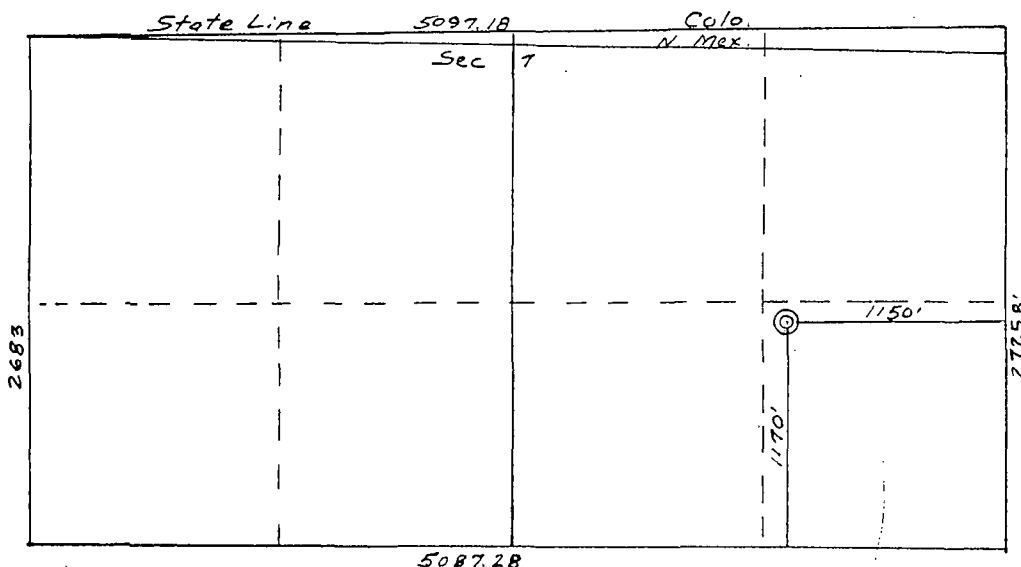
Operator Great Western Drilling Company			Lease Decker P.O.		Well No. 5
Unit Letter P	Section 7	Township 32N	Range 11W	County San Juan	
Actual Footage Location of Well: 1170 feet from the South line and 1150 feet from the East line					
Ground Level Elev: 6613	Producing Formation Pictured Cliffs		Pool		Dedicated Acreage: 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.



SCALE: 1"=1000'

CERTIFICATION

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

Name

Position

Company

Date

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 knowledge and belief.

Date Surveyed

March 11, 1978

Registered Professional Engineer and Land Surveyor

Fred B. Kerr Jr.
Fred B. Kerr Jr.

Certificate No.

3950



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)

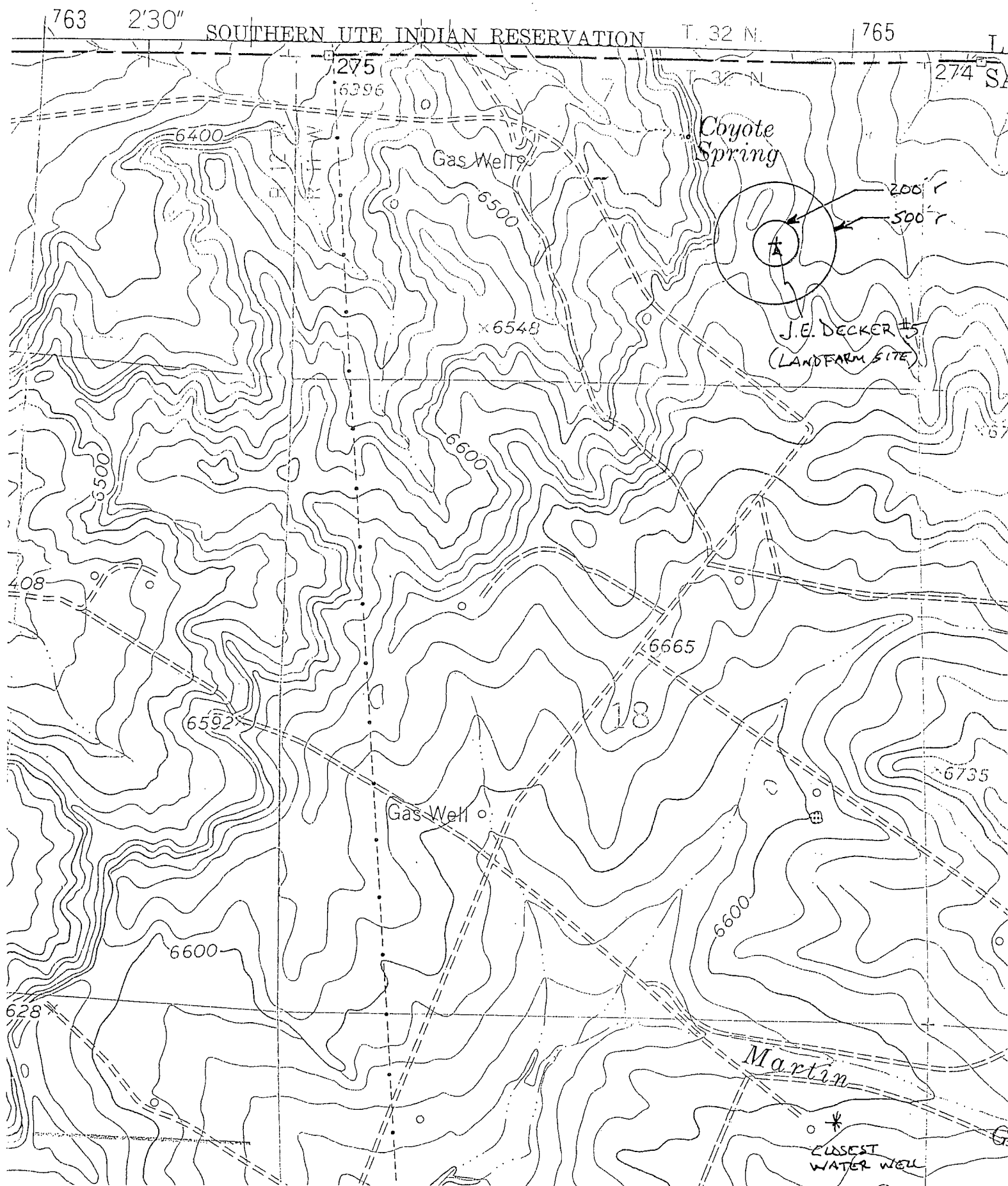
(quarters are smallest to largest)

(NAD83 UTM in meters)

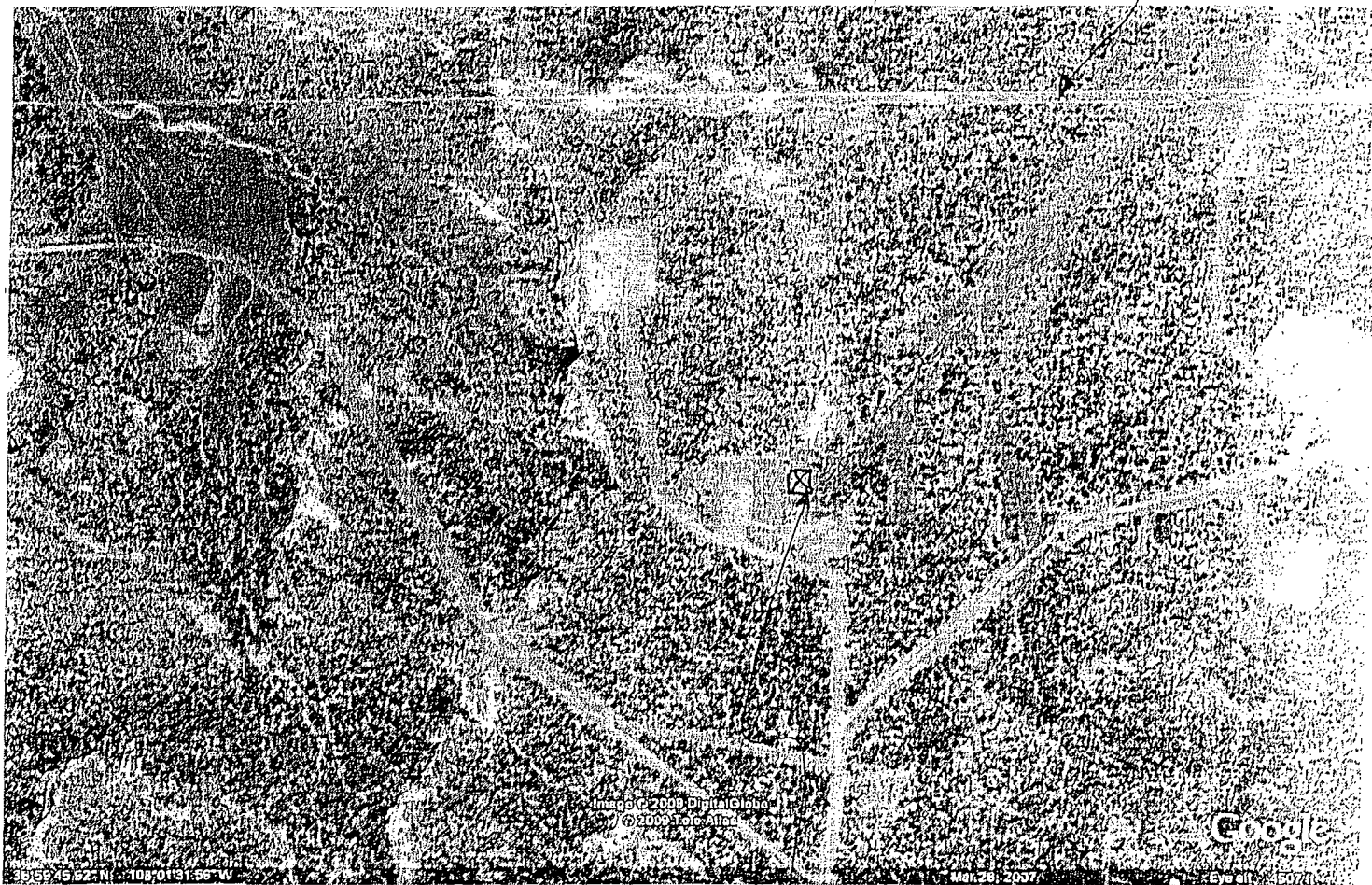
(In feet)

POD Number	Sub basin	Use	County	Q	Q	Q	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
SJ 01360	STK	SJ		2	2	19	32N	11W		230954	4096508*	2154	180	155	25
SJ 03865	STK	SJ		2	3	4	20	32N	11W	232217	4095306	3608	200		
SJ 00055	IND	SJ			2	25	32N	12W		229105	4094796*	4257	504		
SJ 03583	DOM	SJ		1	1	1	23	32N	12W	226477	4096872*	4761	167	60	107
SJ 00020	NOT	SJ			3	29	32N	11W		231467	4093877*	4819	588		
SJ 00021	NOT	SJ			3	23	32N	11W		236177	4095304*	6263	585		
SJ 00026	IND	SJ			2	33	32N	11W		233717	4092955*	6368	321		
SJ 02163	DOM	SJ		4	4	4	21	30N	12W	224688	4096488	6571	31	15	16
SJ 01327	STK	SJ		3	2	2	23	32N	11W	237092	4096187*	6677	90	50	40
SJ 01106	DOM	SJ			4	3	35	32N	12W	226851	4092240*	7586	180	115	65
SJ 00017	IND	SJ			2	24	32N	11W		238546	4096052*	8088	105		
SJ 03738 POD1	DOM	SJ		3	1	4	01	31N	12W	228612	4090866*	8121	115	50	65
SJ 03022	DOM	SJ		2	3	4	01	31N	12W	228764	4090661*	8278	490	250	240
SJ 03134	DOM	SJ		2	3	4	01	31N	12W	228764	4090661*	8278	80	20	60
SJ 02099	DOM	SJ			4	4	01	31N	12W	229006	4090568*	8310	95		
SJ 02034	DOM	SJ			3	4	01	31N	12W	228665	4090562*	8399	85	55	30
SJ 03488	DOM	SJ		2	3	3	01	31N	12W	228084	4090678*	8462	150		
SJ 01649	DOM	SJ		4	3	4	01	31N	12W	228764	4090461*	8471	220	161	59
SJ 03660	DOM	SJ		4	3	4	01	31N	12W	228764	4090461*	8471	70	42	28
SJ 01660	DOM	SJ		3	3	4	01	31N	12W	228564	4090461*	8524	320	275	45
SJ 01213	MON	SJ		4	3	2	18	32N	12W	221160	4098002*	9751	640	20	620
SJ 01212	MON	SJ		3	1	4	18	32N	12W	220948	4097615*	9996	43	5	38
SJ 03429	DOM	SJ		3	1	3	20	32N	10W	240675	4095316*	10341	103	54	49
SJ 01356	DOM	SJ			3	3	31	32N	10W	239013	4091829*	10614	65	50	15
SJ 03858 POD1	STK	SJ		3	2	4	18	31N	11W	230326	4087706	10969	295	85	210
SJ 03857 POD1	STK	SJ		3	2	1	14	31N	11W	236033	4088283	11582	220	60	160
SJ 01977	DOM	SJ			3	2	06	31N	10W	239768	4091024*	11711	93	33	60
SJ 01958	DOM	SJ			2	06		31N	10W	239969	4091225*	11736	103	83	20
SJ 03308	DOM	SJ		3	4	2	06	31N	10W	240078	4090920*	12015	100	60	40

*UTM location was derived from PLSS - see Help



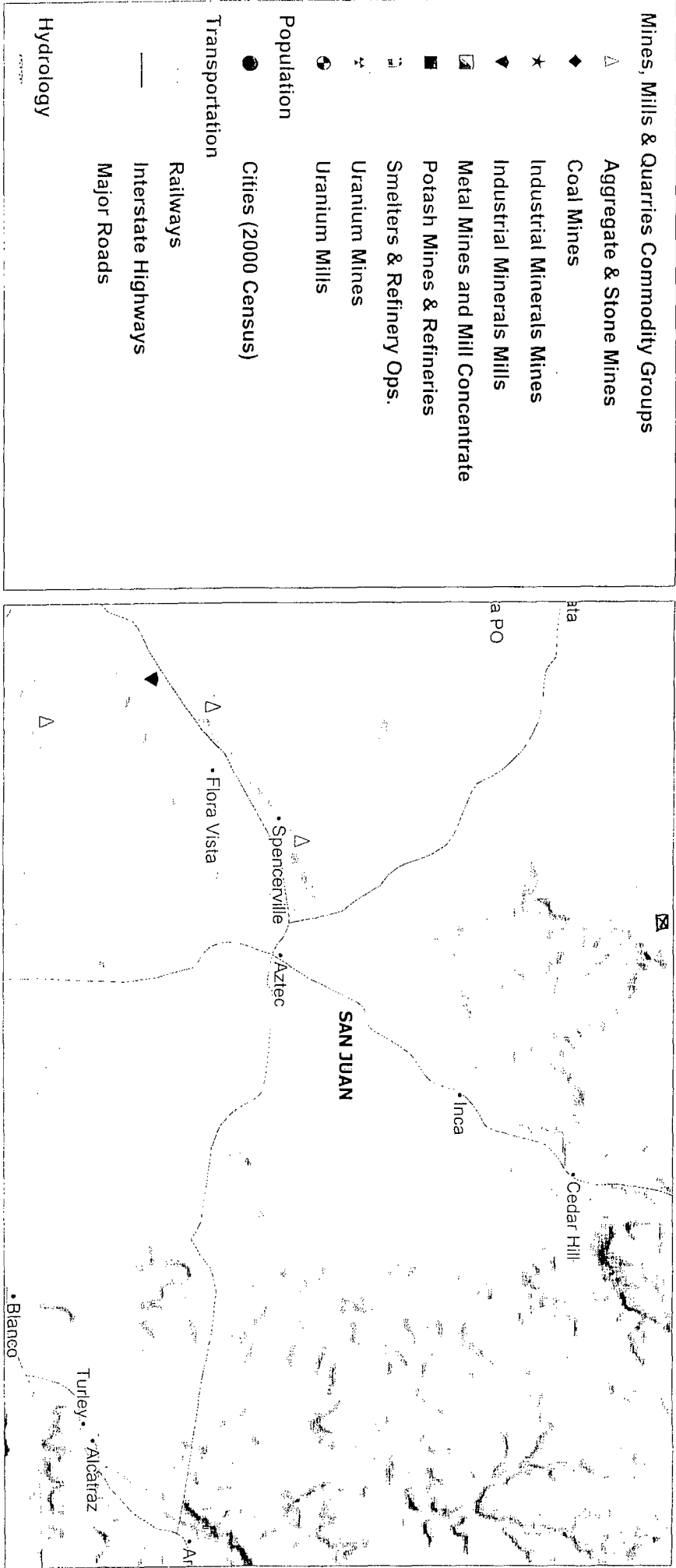
COLORADO / NM STATELINE



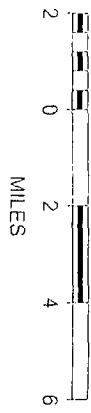
PROPOSED LAND FARM
J.E. DECKER #5 LOCATION
SE SECTION 7, T32N, R11W
SAN JUAN COUNTY

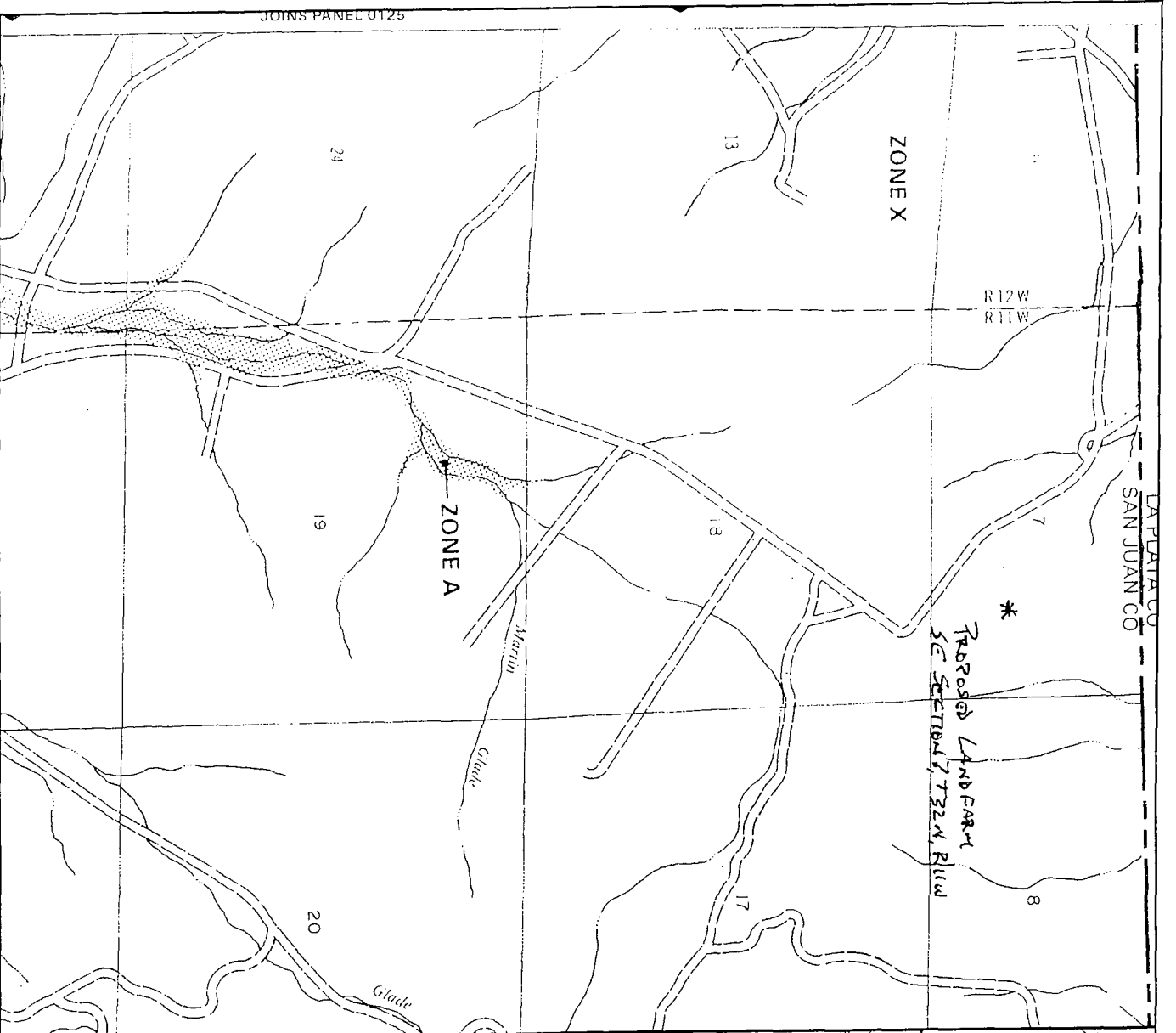
MMQonline Public Version

LAND FARM SITE
SE/4 SECTION 7, T32N, R11W



SCALE 1 : 250,000





APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

SAN JUAN COUNTY,
NEW MEXICO
UNINCORPORATED AREAS

PANEL 150 OF 1450
(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION

COMMUNITY PANEL NUMBER
350064 0150

EFFECTIVE DATE:
AUGUST 4, 1988



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov