NM3 - ___2_____

GENERAL CORRESPONDENCE YEAR(S):

___2009 - Present____

Jones, Brad A., EMNRD

From: Sam Roberts <sroberts@gwdc.com>
Sent: Wednesday, June 27, 2012 3:04 PM
To: Jones, Brad A., EMNRD
Subject: Great Western Drilling Company-Decker #5 Land Farm

Brad,

We have noted the discrepancy you mentioned concerning sample depths in the final closure report for this land farm and plan to re submit at a later date.

Also, please note that my previous email incorrectly referred to a land fill instead of a land farm.

Sam Roberts
Great Western Drilling Company

Jones, Brad A., EMNRD

From: Sam Roberts <sroberts@gwdc.com>
Sent: Wednesday, June 27, 2012 2:39 PM
To: Jones, Brad A., EMNRD
Subject: Great Western Drilling Company-Decker #5 Landfill

Brad,
We have noted the discrepancy you mentioned concerning sample depths in the final closure report for this landfill and plan to resubmit at a later date.

Sam Roberts
Great Western Drilling Company

GREAT WESTERN DRILLING COMPANY
Post Office Box 1659 • Midland, Texas 79702 • 432/682-5241

June 20, 2012
State of New Mexico
Energy Minerals and Natural resources
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Gentlemen:

Please find attached a small landfarm final closure report for your approval.

Your consideration is appreciated.

Sincerely,

Sam Roberts
Area Engineer

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

RECEIVED
2009 NOV 22 PM 12 04

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Decker #5

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

SCR 10/19/09

GENERAL INFORMATION

1. ☒ Small Landfarm Registration ☒ Small Landfarm Final Closure Report*
(*Must be submitted within three years from the registration date)

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: Sam Roberts Date: 10/19/09

E-mail Address: sroberts@gwdc.com

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

Comments: _____

OCD Representative Signature: _____

Title: Environmental Engineer **OCD Registration Number:** NM-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. Well Pad in use.
- 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: Sam Roberts Title: Area Engineer

Signature: Sam Roberts Date: 6/19/12

E-mail Address: sroberts@gwdc.com

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

Comments: _____

OCD Representative Signature: _____

Title: _____ **OCD Registration Number:** _____

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

RECEIVED
2009 OCT 22 PM 12 04

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Decker #5

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.

SCR 10/19/09

GENERAL INFORMATION

1. ☒ Small Landfarm Registration ☐ Small Landfarm Final Closure Report*
(*Must be submitted within three years from the registration date)

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: Sam Roberts Date: 10/19/09

E-mail Address: sroberts@gwdc.com

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

Comments: _____

OCD Representative Signature: _____

Title: Environmental Engineer **OCD Registration Number:** NM-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.
Petroleum Engineering Consulting
Lease Management
Contract Pumping
7416 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

Paul C. Thompson, P.E.

WALSH ENGINEERING & PRODUCTION CORP.
Petroleum Engineering Consulting
Lease Management
Contract Pumping
7415 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.

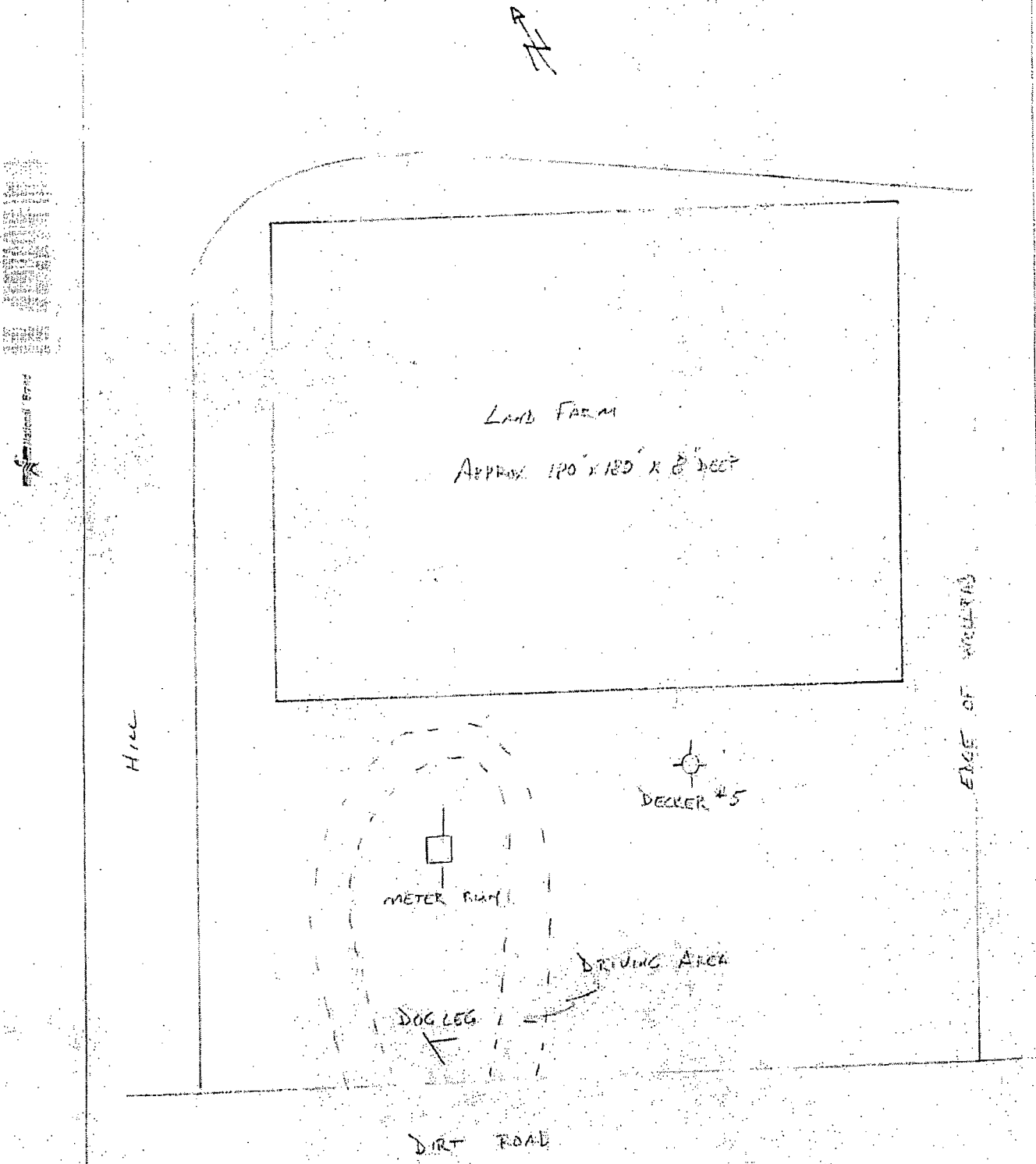
The contaminated soils will be spread to a thickness not to exceed 8 inches and will be disked once a month and will treat by watering and adding bioremediation materials as necessary.

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.

Paul C. Thompson, P.E.
Agent for
Great Western Drilling Company

DECKER #5

LAND FARM PLOT



Pat 11/12/09

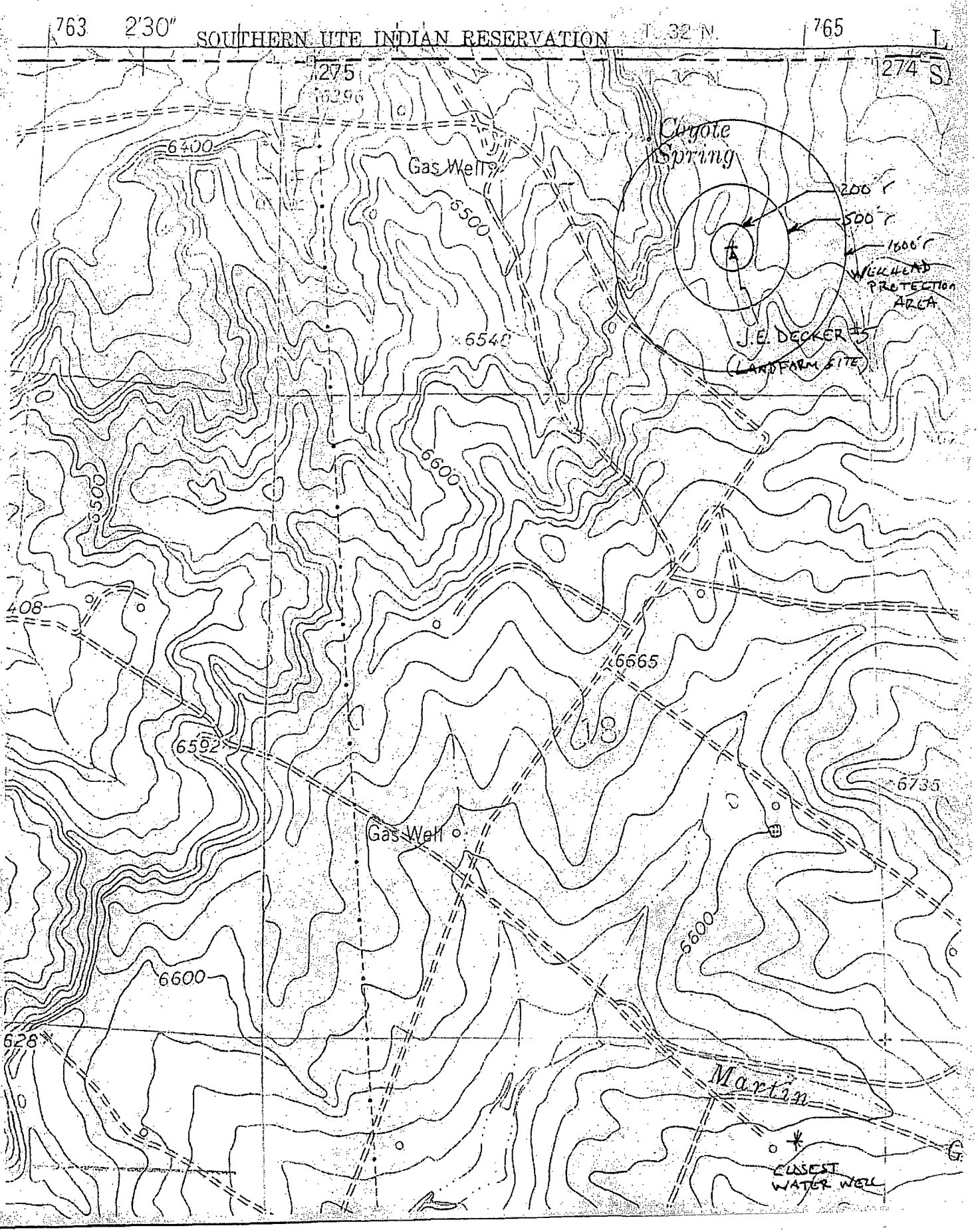
No: County Roads
Dwellings
Water Courses

Scale: 1" = 2000'

ADUI

SCALE: 1" = 1000'

7



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

Kennon 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	Lease	Well No.
Great Western Drilling Company	Decker P.C.	5

Unit Letter	Section	Township	Range	County
P	7	32N	11W	San Juan

Actual Footage Location of Well:
1170 feet from the South line and 1150 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6613	Pictured Cliffs		Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

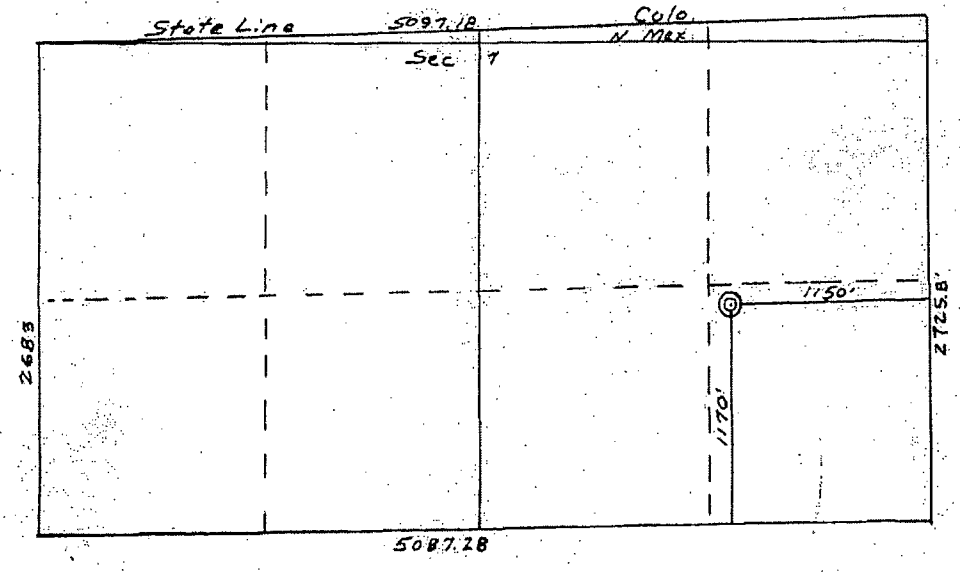
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.

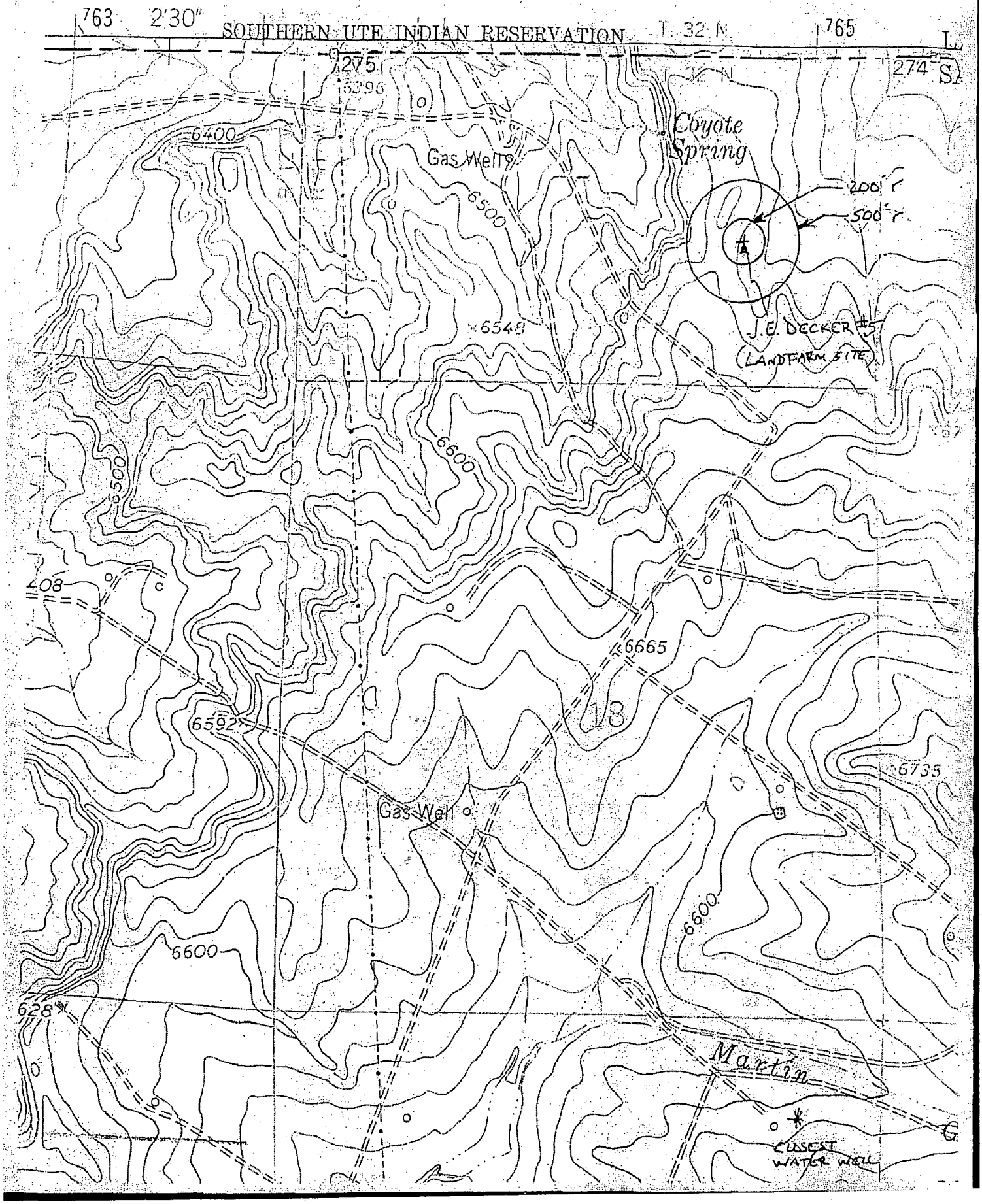
Certificate No.
3950

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

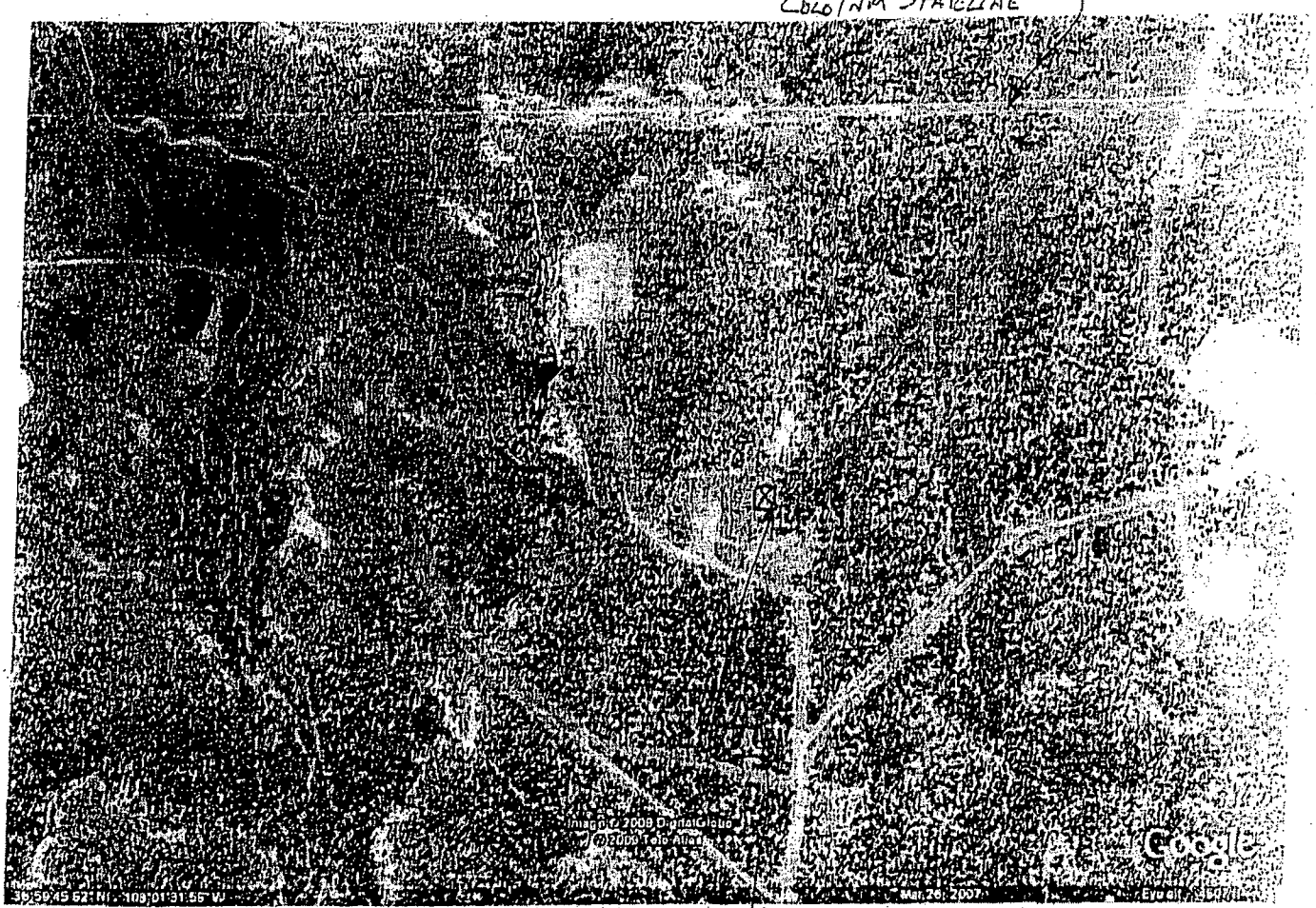
(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
SJ 01360 ← CLOSEST WELL		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	220946	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

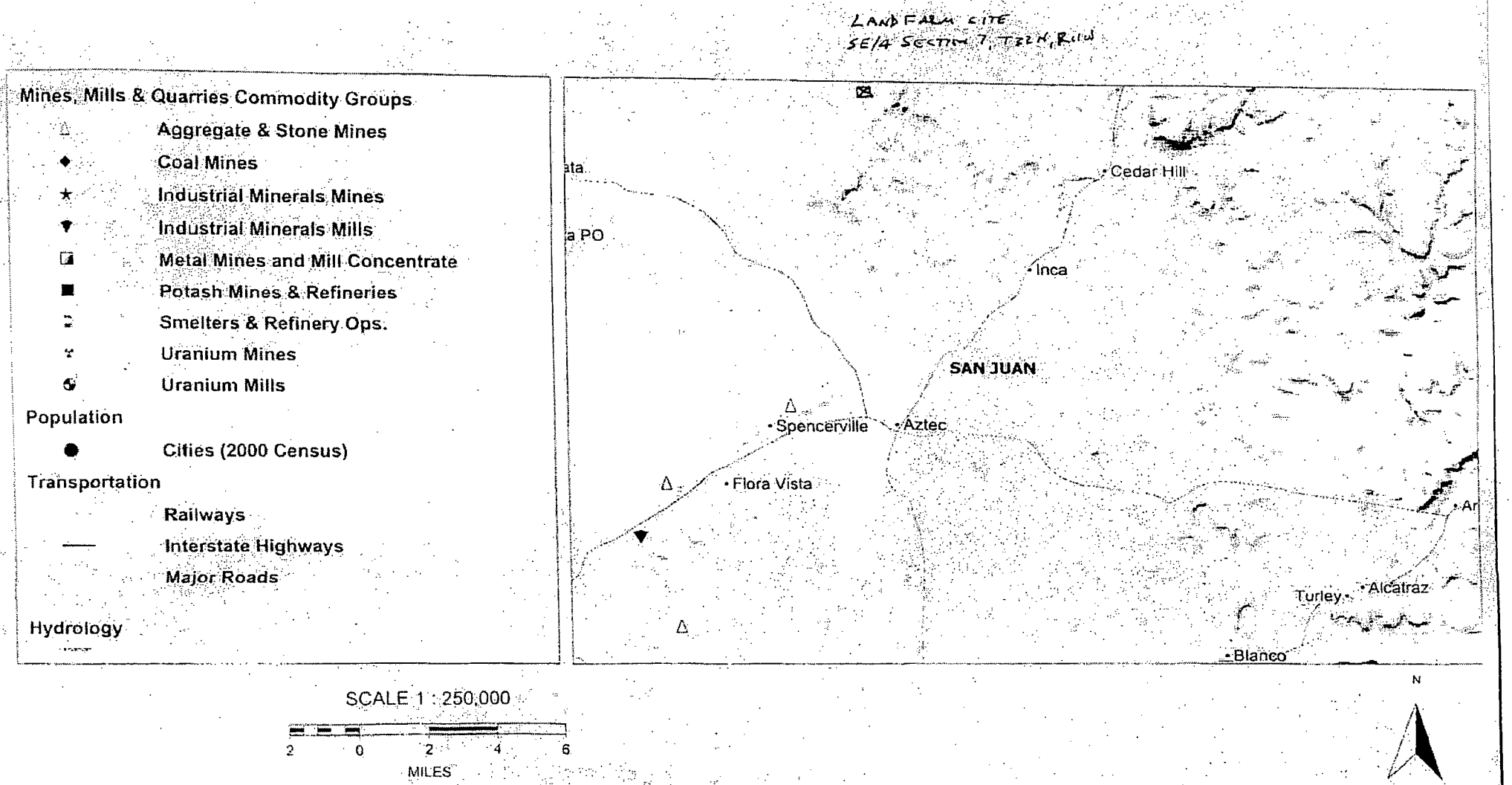

763
2'30"
SOUTHERN UTE INDIAN RESERVATION
T. 32 N.
765
275
274
6396
6400
Coyote Spring
Gas Well
6500
200' r
500' r
6549
J.E. DECKER #5
(LANDFARM SITE)
6600
6500
408
6665
18
6592
6735
Gas Well
6600
6600
628
Martin
CLOSEST WATER WELL

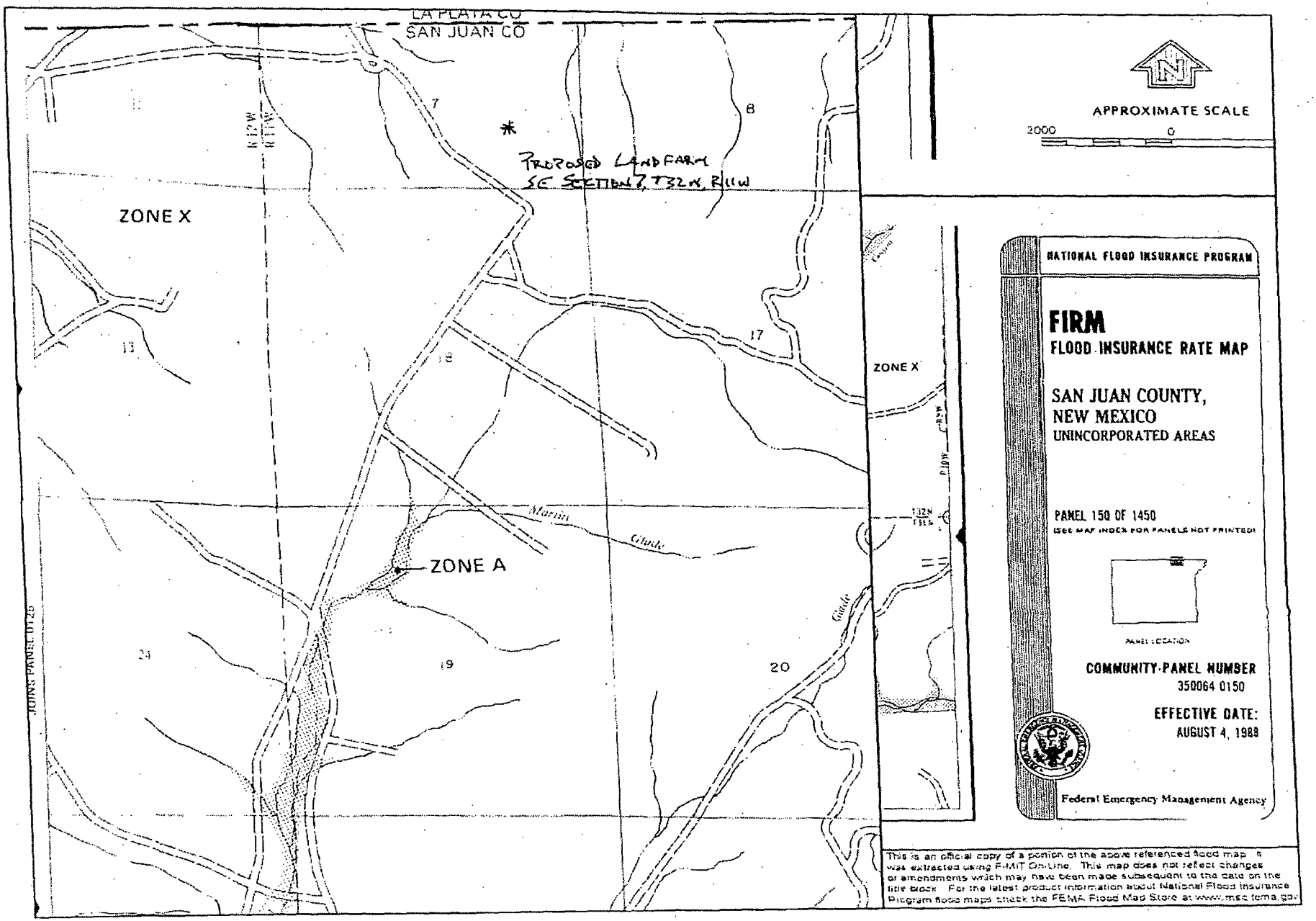
COLO/NM STATELINE



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

MMQonline Public Version




LA PLATA CO
SAN JUAN CO
R 12 W
R 11 W
7
8
PROPOSED LANDFARM
SE SECTION 7, T32N, R11W
ZONE X
13
18
17
ZONE A
Martin
Glade
24
19
20
JOHNS PANEL 0125
ZONE X
T32N
T31N
R11W
APPROXIMATE SCALE
2000
0
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

WALSH ENGINEERING & PRODUCTION CORP.

Petroleum Engineering Consulting
Lease Management
Contract Pumping

7415 East Main
Farmington, New Mexico 87402
(505) 327-4892 • Fax: (505) 327-9834

September 22, 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.

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. 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.

Paul C. Thompson, P.E.
Agent for
Great Western Drilling Company

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

Kennon 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	Lease	Well No.
Great Western Drilling Company	Decker P.C.	5

Unit Letter	Section	Township	Range	County
P	7	32N	11W	San Juan

Actual Footage Location of Well:
1170 feet from the South line and 1150 feet from the East line

Ground Level Elev:	Producing Formation	Pool	Dedicated Acreage:
6613	Pictured Cliffs		Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

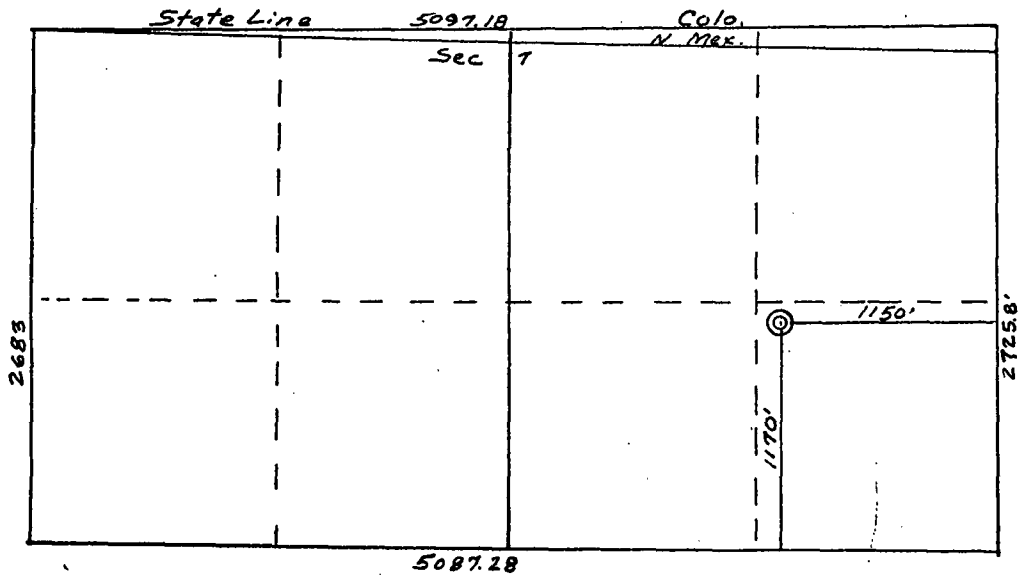
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.

Certificate No.
950

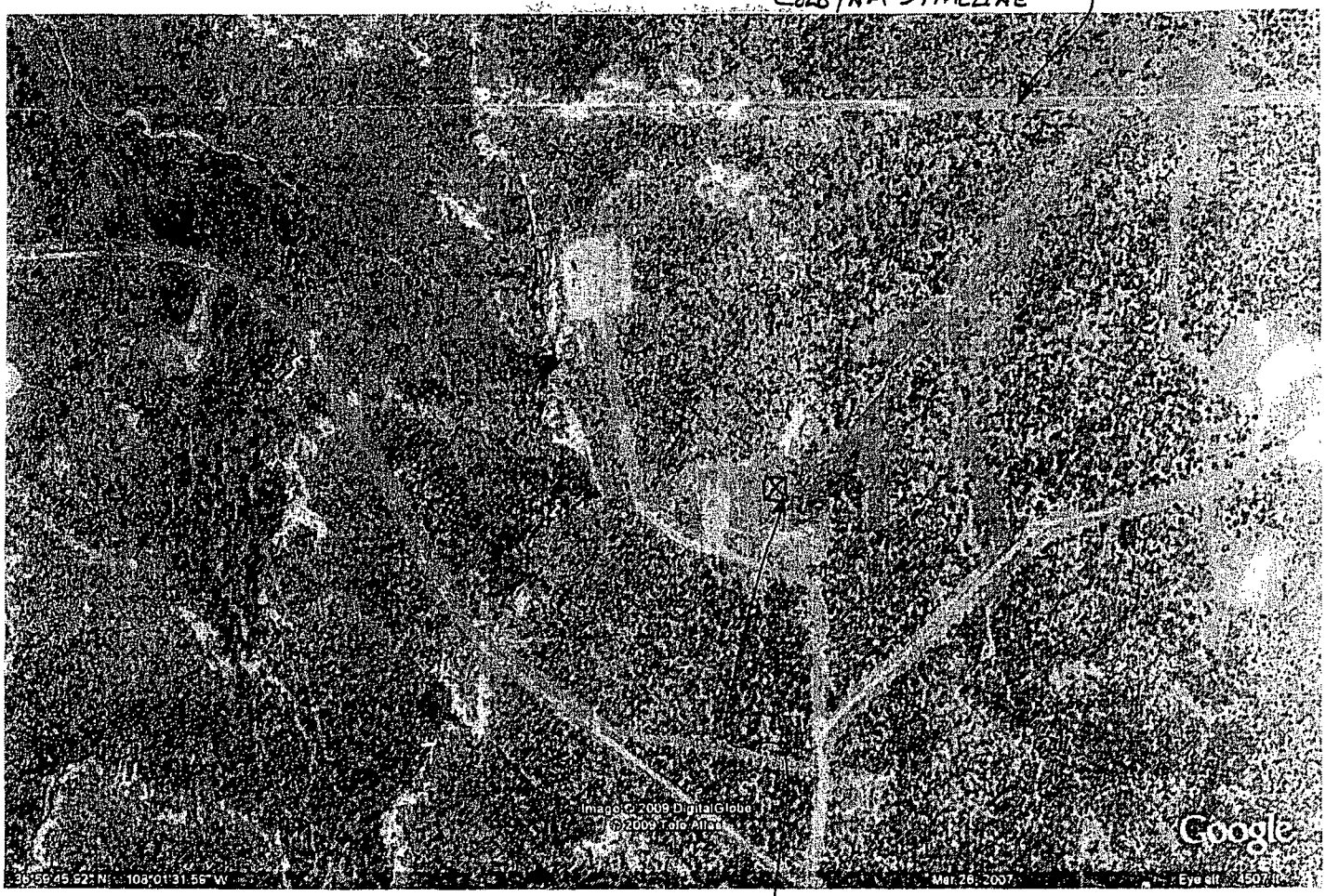
New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(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 64	Q 16	Q 4	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 CLOSEST WELL		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**

COLO/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

Mines, Mills & Quarries Commodity Groups

- Aggregate & Stone Mines
- Coal Mines
- Industrial Minerals Mines
- Industrial Minerals Mills
- Metal Mines and Mill Concentrate
- Potash Mines & Refineries
- Smelters & Refinery Ops.
- Uranium Mines
- Uranium Mills

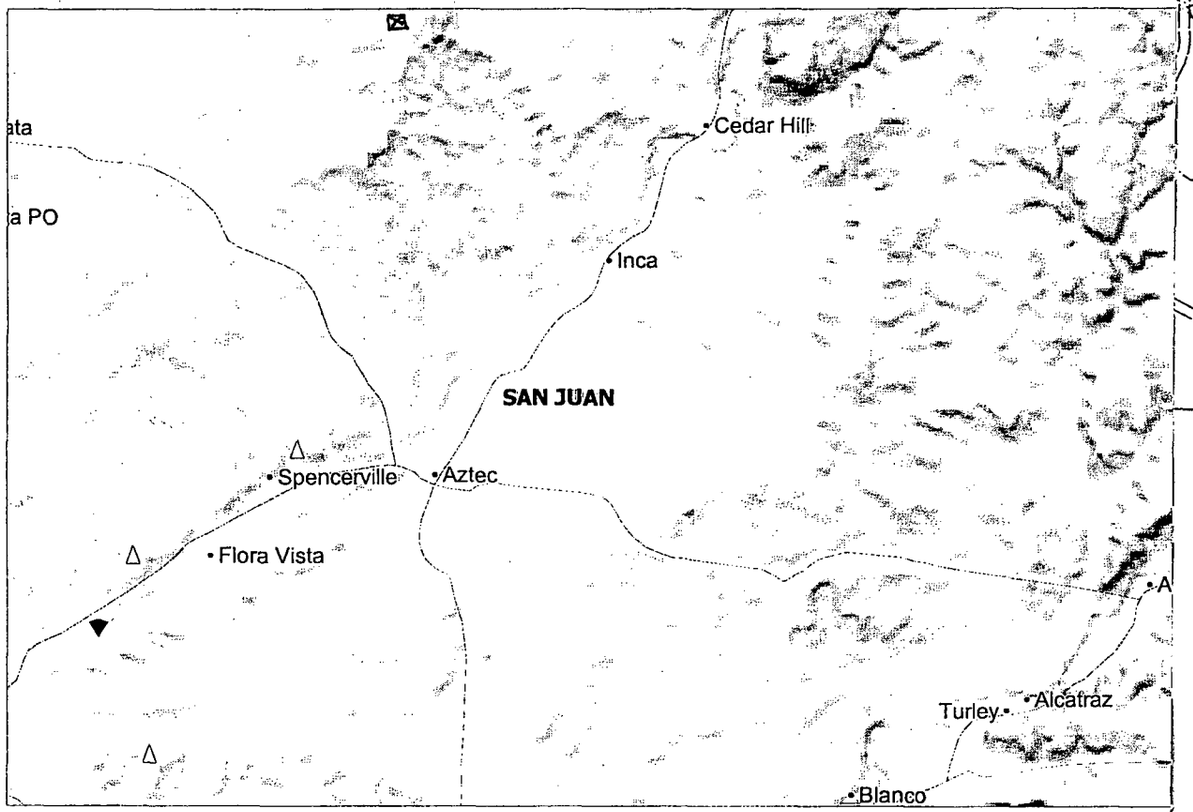
Population

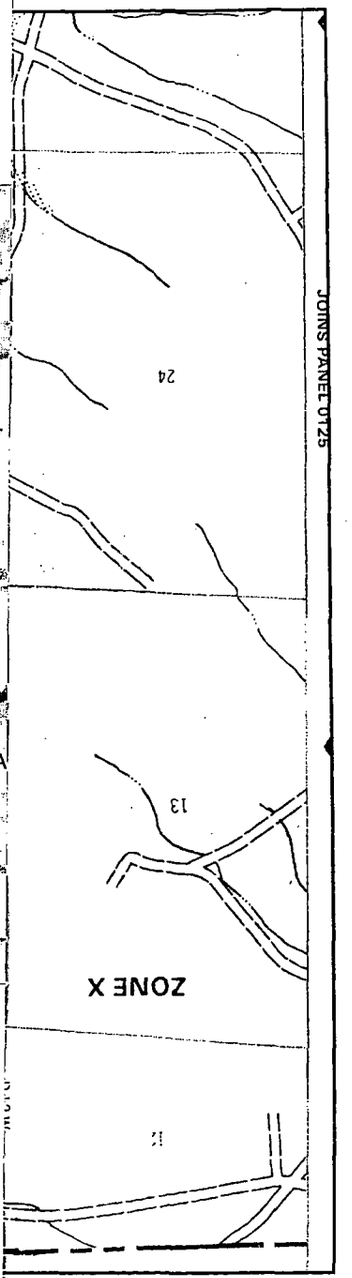
- Cities (2000 Census)

Transportation

- Railways
- Interstate Highways
- Major Roads

Hydrology

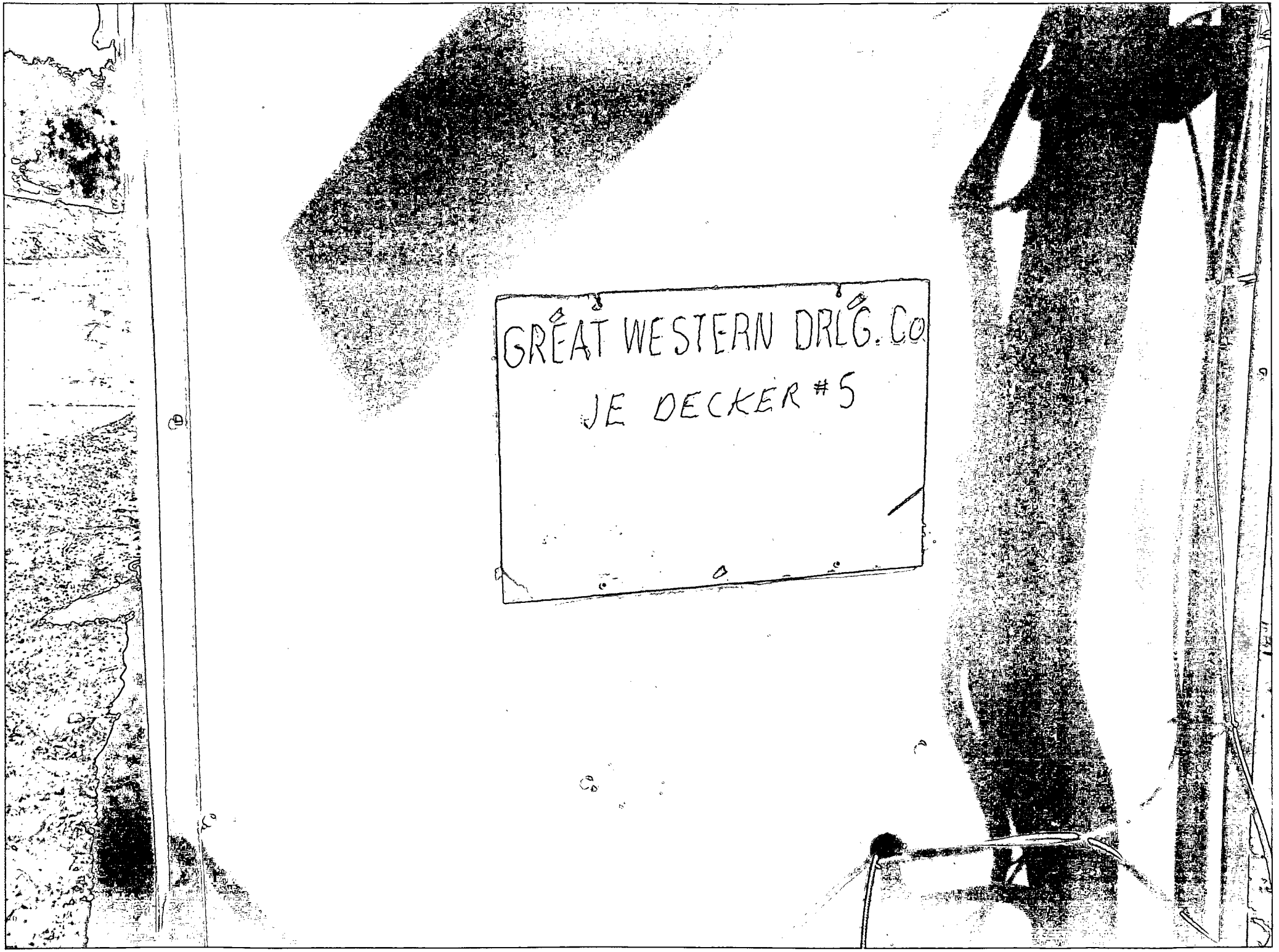


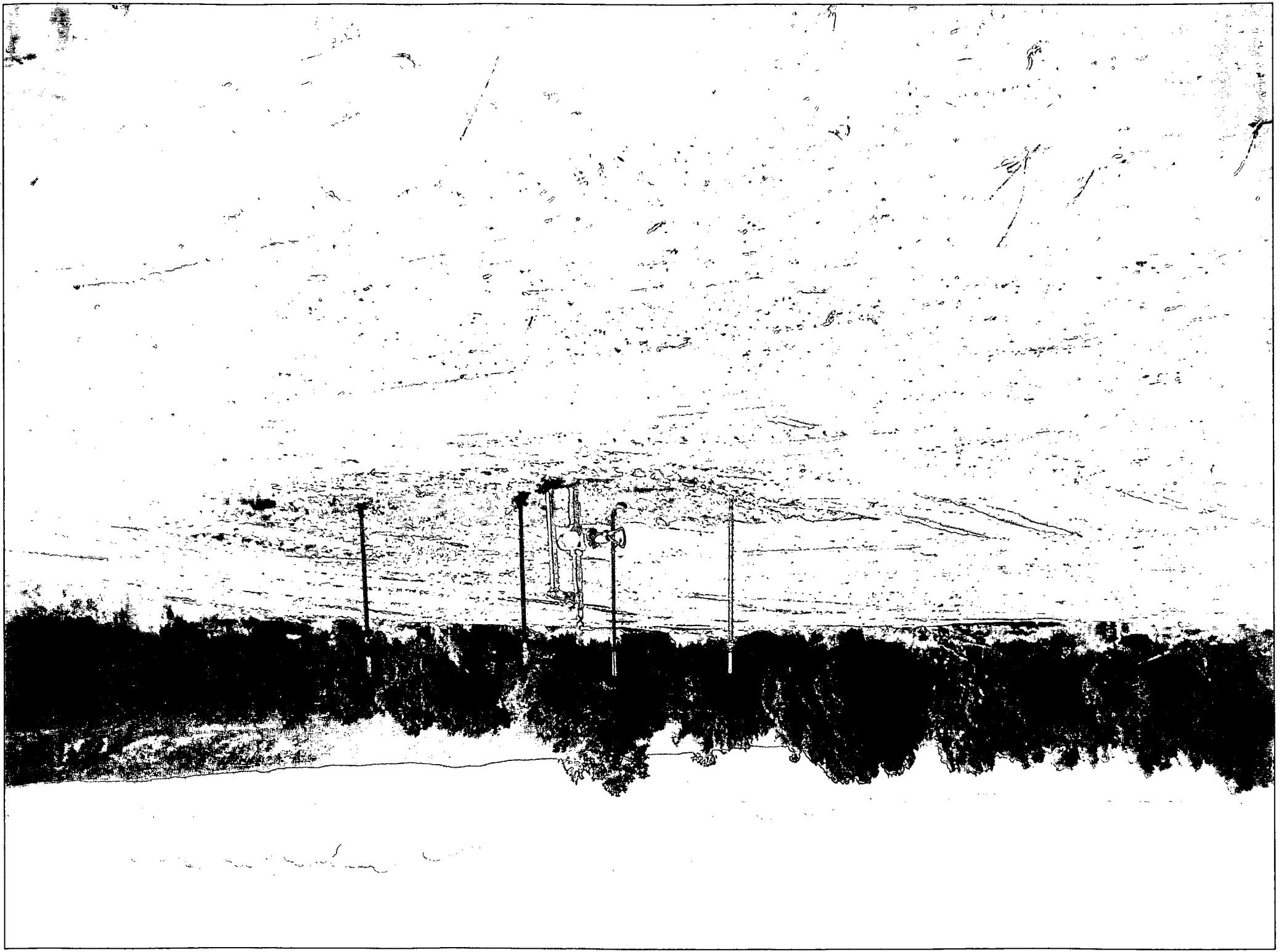


SCALE 1 : 250,000

2 0 2 4 6

MILES


GREAT WESTERN DRLG. Co
JE DECKER #5



envirotech

JUN 15 2011

DECR
SCR
File

June 10, 2011

Project No. 99010-0011

Mr. Richard Choate
Great Western Drilling
7415 E. Main St
Farmington, New Mexico 87401

Phone: (575) 396-5538

RE: SAMPLING OF THE LANDFARM LOCATED AT THE JE DECKER #5 WELL SITE, SAN JUAN COUNTY, NEW MEXICO

for #3-B remediation

Dear Mr. Choate,

Enclosed please find the analytical results for the sampling activities at the JE Decker #5 well site, located in Section 17, Township 32N, Range 11W, San Juan County, New Mexico. The landfarm was divided into five (5) sections, and one (1) five (5) point composite sample was collected from each section at approximately one (1) to 1.5 feet below ground surface. Additionally, one (1) soil sample was collected from the vadose zone at five (5) feet below ground surface in Section 5, due to Section 5 being the lowest elevation at the land farm as determined in the New Mexico Oil Conservation Division (NMOCD) Final Closure Report Sampling Requirements. Each sample was collected into a four (4)-ounce glass jar, capped headspace free, and transported on ice, under chain of custody, to Envirotech's Analytical Laboratory to be analyzed for total petroleum hydrocarbons (TPH) using USEPA Method 8015 and USEPA Method 418.1, for benzene and BTEX using USEPA Method 8021 and for chlorides using USEPA Method 4500B. All samples returned results below the regulatory standards of 500 ppm TPH using USEPA Method 8015, 2500 TPH using USEPA Method 418.1, 0.2 ppm benzene and 50 ppm BTEX, and 500 ppm total chlorides; see enclosed ***Analytical Results***. Envirotech, Inc. recommends the landfarm be closed and site returned to native conditions.

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully Submitted,
ENVIROTECH, INC.

Toni McKnight . FOR:

Toni McKnight, EIT
Environmental Project Manager
tmcknight@envirotech-inc.com

Enclosures: Analytical Results

Cc: Client File No. 99010

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block 1	Date Reported:	05-02-11
Laboratory Number:	57993	Sampled:	04-28-11
Chain of Custody No:	11618	Date Received:	04-28-11
Sample Matrix:	Soil	Date Extracted:	04-29-11
Preservative:	Cool	Date Analyzed:	04-29-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**61.2**	**0.2**
Diesel Range (C10 - C28)	**70.9**	**0.1**
Total Petroleum Hydrocarbons	**132**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **J E Decker #5**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block 2	Date Reported:	05-02-11
Laboratory Number:	57994	Sampled:	04-28-11
Chain of Custody No:	11618	Date Received:	04-28-11
Sample Matrix:	Soil	Date Extracted:	04-29-11
Preservative:	Cool	Date Analyzed:	04-29-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**0.1**	**0.1**
Total Petroleum Hydrocarbons	**0.1**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **J E Decker #5**

Analyst

Review

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envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block 3	Date Reported:	05-02-11
Laboratory Number:	57995	Sampled:	04-28-11
Chain of Custody No:	11618	Date Received:	04-28-11
Sample Matrix:	Soil	Date Extracted:	04-29-11
Preservative:	Cool	Date Analyzed:	04-29-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **J E Decker #5**

Analyst

Review

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envirotech
Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block 4	Date Reported:	05-02-11
Laboratory Number:	57996	Sampled:	04-28-11
Chain of Custody No:	11618	Date Received:	04-28-11
Sample Matrix:	Soil	Date Extracted:	04-29-11
Preservative:	Cool	Date Analyzed:	04-29-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **J E Decker #5**

Analyst

Review

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Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block 5	Date Reported:	05-02-11
Laboratory Number:	57997	Sampled:	04-28-11
Chain of Custody No:	11618	Date Received:	04-28-11
Sample Matrix:	Soil	Date Extracted:	04-29-11
Preservative:	Cool	Date Analyzed:	04-29-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **J E Decker #5**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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Analytical Laboratory

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block 5 @ 5'	Date Reported:	05-02-11
Laboratory Number:	57998	Sampled:	04-28-11
Chain of Custody No:	11618	Date Received:	04-28-11
Sample Matrix:	Soil	Date Extracted:	04-29-11
Preservative:	Cool	Date Analyzed:	04-29-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **J E Decker #5**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

envirotech
Analytical Laboratory

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-29-11 QA/QC	Date Reported:	05-02-11
Laboratory Number:	57990	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-29-11
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	40662	9.996E+02	1.000E+03	**0.04%**	**0 - 15%**
Diesel Range C10 - C28	40662	9.996E+02	1.000E+03	**0.04%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**2.36**	**0.2**
Diesel Range C10 - C28	**1.50**	**0.1**

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Range
Gasoline Range C5 - C10	**ND**	**ND**	**0.00%**	**0 - 30%**
Diesel Range C10 - C28	**ND**	**ND**	**0.00%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**ND**	**250**	**249**	**99.5%**	**75 - 125%**
Diesel Range C10 - C28	**ND**	**250**	**231**	**92.4%**	**75 - 125%**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste,

SW-846, USEPA, December 1996.

Comments: **QA/QC for Samples 57989-57991, 57993-57800**

Analyst

Review

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block1	Date Reported:	05-02-11
Laboratory Number:	57993	Date Sampled:	04-28-11
Chain of Custody:	11618	Date Received:	04-28-11
Sample Matrix:	Soil	Date Analyzed:	05-02-11
Preservative:	Cool	Date Extracted:	04-29-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**0.9**
Toluene	**ND**	**1.0**
Ethylbenzene	**ND**	**1.0**
p,m-Xylene	**ND**	**1.2**
o-Xylene	**ND**	**0.9**
Total BTEX	**ND**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**84.4 %**
	1,4-difluorobenzene	**99.3 %**
	Bromochlorobenzene	**86.0 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **J E Decker #5**

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block2	Date Reported:	05-02-11
Laboratory Number:	57994	Date Sampled:	04-28-11
Chain of Custody:	11618	Date Received:	04-28-11
Sample Matrix:	Soil	Date Analyzed:	05-02-11
Preservative:	Cool	Date Extracted:	04-29-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**0.9**
Toluene	**ND**	**1.0**
Ethylbenzene	**ND**	**1.0**
p,m-Xylene	**ND**	**1.2**
o-Xylene	**ND**	**0.9**
Total BTEX	**ND**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**80.8 %**
	1,4-difluorobenzene	**80.5 %**
	Bromochlorobenzene	**86.3 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **J E Decker #5**

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block3	Date Reported:	05-02-11
Laboratory Number:	57995	Date Sampled:	04-28-11
Chain of Custody:	11618	Date Received:	04-28-11
Sample Matrix:	Soil	Date Analyzed:	05-02-11
Preservative:	Cool	Date Extracted:	04-29-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**0.9**
Toluene	**ND**	**1.0**
Ethylbenzene	**ND**	**1.0**
p,m-Xylene	**ND**	**1.2**
o-Xylene	**ND**	**0.9**
Total BTEX	**ND**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**86.3 %**
	1,4-difluorobenzene	**86.0 %**
	Bromochlorobenzene	**83.1 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **J E Decker #5**

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block 4	Date Reported:	05-02-11
Laboratory Number:	57996	Date Sampled:	04-28-11
Chain of Custody:	11618	Date Received:	04-28-11
Sample Matrix:	Soil	Date Analyzed:	05-02-11
Preservative:	Cool	Date Extracted:	04-29-11
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	10

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**0.9**
Toluene	**ND**	**1.0**
Ethylbenzene	**ND**	**1.0**
p,m-Xylene	**ND**	**1.2**
o-Xylene	**ND**	**0.9**
Total BTEX	**ND**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**82.5 %**
	1,4-difluorobenzene	**85.8 %**
	Bromochlorobenzene	**94.5 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **J E Decker #5**

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	0502BBLK QA/QC	Date Reported:	05-02-11
Laboratory Number:	58022	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	05-02-11
Condition:	N/A	Analysis:	BTEX
		Dilution:	10

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	1.1850E+005	1.1874E+005	**0.2%**	**ND**	**0.1**
Toluene	1.2941E+005	1.2967E+005	**0.2%**	**ND**	**0.1**
Ethylbenzene	1.1152E+005	1.1174E+005	**0.2%**	**ND**	**0.1**
p,m-Xylene	2.6075E+005	2.6128E+005	**0.2%**	**ND**	**0.1**
o-Xylene	1.0600E+005	1.0622E+005	**0.2%**	**ND**	**0.1**

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	**ND**	**ND**	**0.0%**	**0 - 30%**	**0.9**
Toluene	**ND**	**ND**	**0.0%**	**0 - 30%**	**1.0**
Ethylbenzene	**ND**	**ND**	**0.0%**	**0 - 30%**	**1.0**
p,m-Xylene	**ND**	**ND**	**0.0%**	**0 - 30%**	**1.2**
o-Xylene	**ND**	**ND**	**0.0%**	**0 - 30%**	**0.9**

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	**ND**	**500**	**523**	**105%**	**39 - 150**
Toluene	**ND**	**500**	**528**	**106%**	**46 - 148**
Ethylbenzene	**ND**	**500**	**524**	**105%**	**32 - 160**
p,m-Xylene	**ND**	**1000**	**1,040**	**104%**	**46 - 148**
o-Xylene	**ND**	**500**	**532**	**106%**	**46 - 148**

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for Samples 58022, 57993-58000**

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EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block 2	Date Reported:	05/02/11
Laboratory Number:	57994	Date Sampled:	04/28/11
Chain of Custody No:	11618	Date Received:	04/28/11
Sample Matrix:	Soil	Date Extracted:	04/29/11
Preservative:	Cool	Date Analyzed:	04/29/11
Condition:	Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**20.3**	**9.5**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **J E Decker #5**

Analyst

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EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS
QUALITY ASSURANCE REPORT

Client:	QA/QC	Project #:	N/A
Sample ID:	QA/QC	Date Reported:	05/02/11
Laboratory Number:	04-29 -TPH.QA/QC 57993	Date Sampled:	N/A
Sample Matrix:	Freon-113	Date Analyzed:	04/29/11
Preservative:	N/A	Date Extracted:	04/29/11
Condition:	N/A	Analysis Needed:	TPH

Calibration	I-Cal Date	C-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
	04/15/11	04/29/11	1,590	1,490	6.3%	+/- 10%

Blank Conc. (mg/Kg)	Concentration	Detection Limit
TPH	ND	9.5

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
TPH	24.2	24.2	0.0%	+/- 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
TPH	24.2	2,000	1,910	94.4%	80 - 120%

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **QA/QC for Samples 57993-58000**

Analyst

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Chloride

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block 1	Date Reported:	05/03/11
Lab ID#:	57993	Date Sampled:	04/28/11
Sample Matrix:	Soil	Date Received:	04/28/11
Preservative:	Cool	Date Analyzed:	05/03/11
Condition:	Intact	Chain of Custody:	11618

Parameter	Concentration (mg/Kg)
Total Chloride	**20**

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **J E Decker #5**

Analyst

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Chloride

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block 2	Date Reported:	05/03/11
Lab ID#:	57994	Date Sampled:	04/28/11
Sample Matrix:	Soil	Date Received:	04/28/11
Preservative:	Cool	Date Analyzed:	05/03/11
Condition:	Intact	Chain of Custody:	11618

Parameter	Concentration (mg/Kg)
Total Chloride	**20**

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **J E Decker #5**

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Chloride

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block 3	Date Reported:	05/03/11
Lab ID#:	57995	Date Sampled:	04/28/11
Sample Matrix:	Soil	Date Received:	04/28/11
Preservative:	Cool	Date Analyzed:	05/03/11
Condition:	Intact	Chain of Custody:	11618

Parameter	Concentration (mg/Kg)
Total Chloride	**50**

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **J E Decker #5**

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Chloride

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block 4	Date Reported:	05/03/11
Lab ID#:	57996	Date Sampled:	04/28/11
Sample Matrix:	Soil	Date Received:	04/28/11
Preservative:	Cool	Date Analyzed:	05/03/11
Condition:	Intact	Chain of Custody:	11618

Parameter	Concentration (mg/Kg)
Total Chloride	**30**

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **J E Decker #5**

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Chloride

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block 5	Date Reported:	05/03/11
Lab ID#:	57997	Date Sampled:	04/28/11
Sample Matrix:	Soil	Date Received:	04/28/11
Preservative:	Cool	Date Analyzed:	05/03/11
Condition:	Intact	Chain of Custody:	11618

Parameter	Concentration (mg/Kg)
Total Chloride	**50**

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **J E Decker #5**

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Chloride

Client:	Great Western Drilling	Project #:	99010-0011
Sample ID:	Block 5 @ 5'	Date Reported:	05/03/11
Lab ID#:	57998	Date Sampled:	04/28/11
Sample Matrix:	Soil	Date Received:	04/28/11
Preservative:	Cool	Date Analyzed:	05/03/11
Condition:	Intact	Chain of Custody:	11618

Parameter	Concentration (mg/Kg)
Total Chloride	**10**

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **J E Decker #5**

Analyst

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CHAIN OF CUSTODY RECORD

11618

Client:	Project Name / Location:
GREAT WESTERN DRILLING	SE DECKER #5
Client Address:	Sampler Name: T. McKnight
Client Phone No.:	Client No.: 99010-0011

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative	TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
						$HgCl_2$ HCl														
Block 1	4/28/11	15:15	57993	Soil Solid Sludge Aqueous	1/4oz	✓	✓	✓							✓	✓			Y	Y
Block 2	4/28/11	15:20	57994	Soil Solid Sludge Aqueous	1/4oz	✓	✓	✓							✓	✓				
Block 3	4/28/11	15:25	57995	Soil Solid Sludge Aqueous	1/4oz	✓	✓	✓							✓	✓				
Block 4	4/28/11	15:30	57996	Soil Solid Sludge Aqueous	1/4oz	✓	✓	✓							✓	✓				
Block 5	4/28/11	15:35	57997	Soil Solid Sludge Aqueous	1/4oz	✓	✓	✓							✓	✓				
Block 5@5'	4/28/11	15:40	57998	Soil Solid Sludge Aqueous	1/4oz	✓	✓	✓								✓				
				Soil Solid Sludge Aqueous																
				Soil Solid Sludge Aqueous																
				Soil Solid Sludge Aqueous																
				Soil Solid Sludge Aqueous																

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	4/28/11	17:00	[signature]	4/28/11	17:00
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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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. SCR 10/19/09

GENERAL INFORMATION

1. ☒ Small Landfarm Registration ☐ Small Landfarm Final Closure Report*
(*Must be submitted within three years from the registration date)

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: Sam Roberts Date: 10/19/09

E-mail Address: sroberts@gwdc.com

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

Comments: _____

OCD Representative Signature: _____

Title: Environmental Engineer **OCD Registration Number:** NM-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.
Petroleum Engineering Consulting
Lease Management
Contract Pumping
7415 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 Pumping

7415 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.

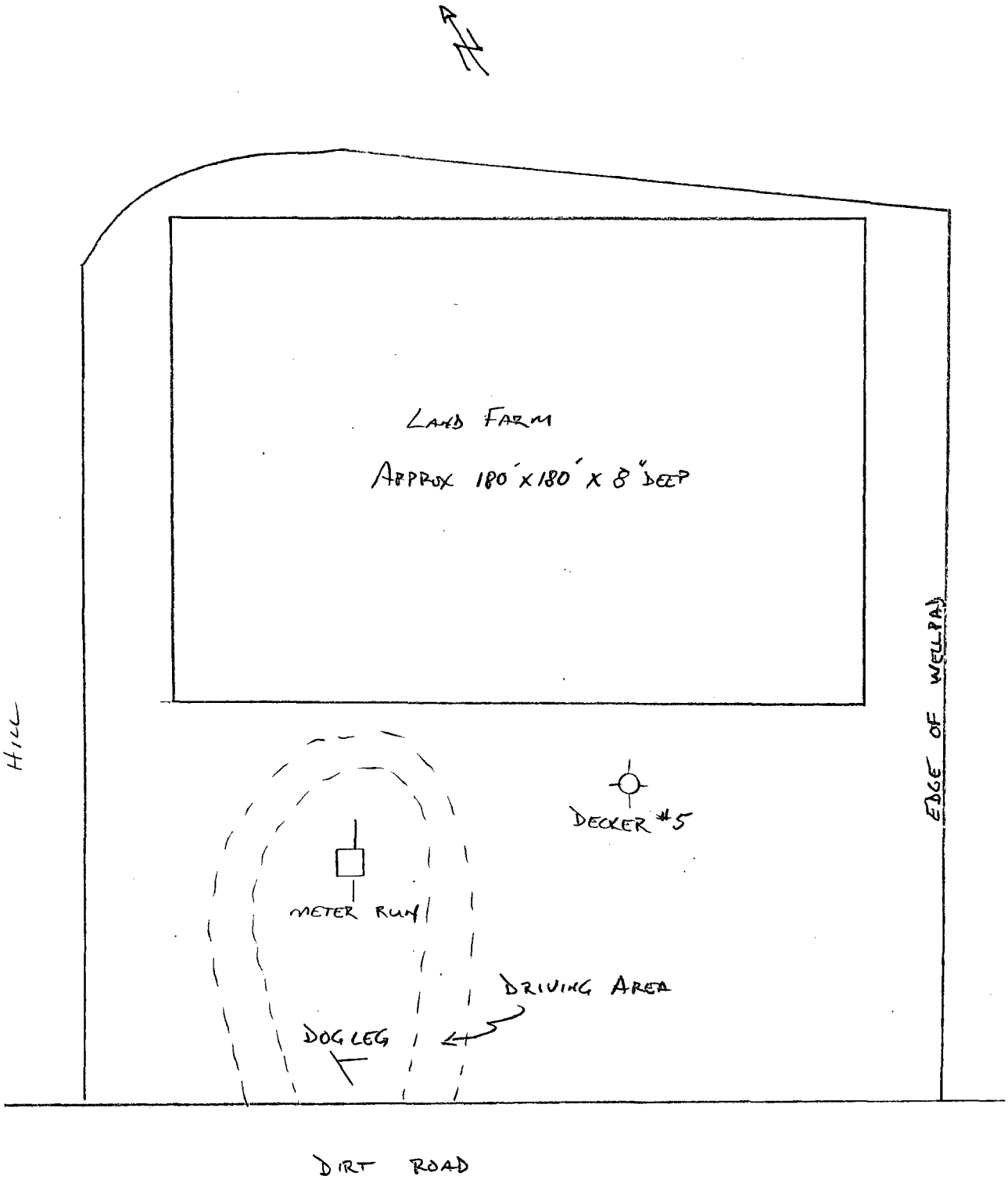
The contaminated soils will be spread to a thickness not to exceed 8 inches and will be disked once a month and will treat by watering and adding bioremediation materials as necessary.

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.

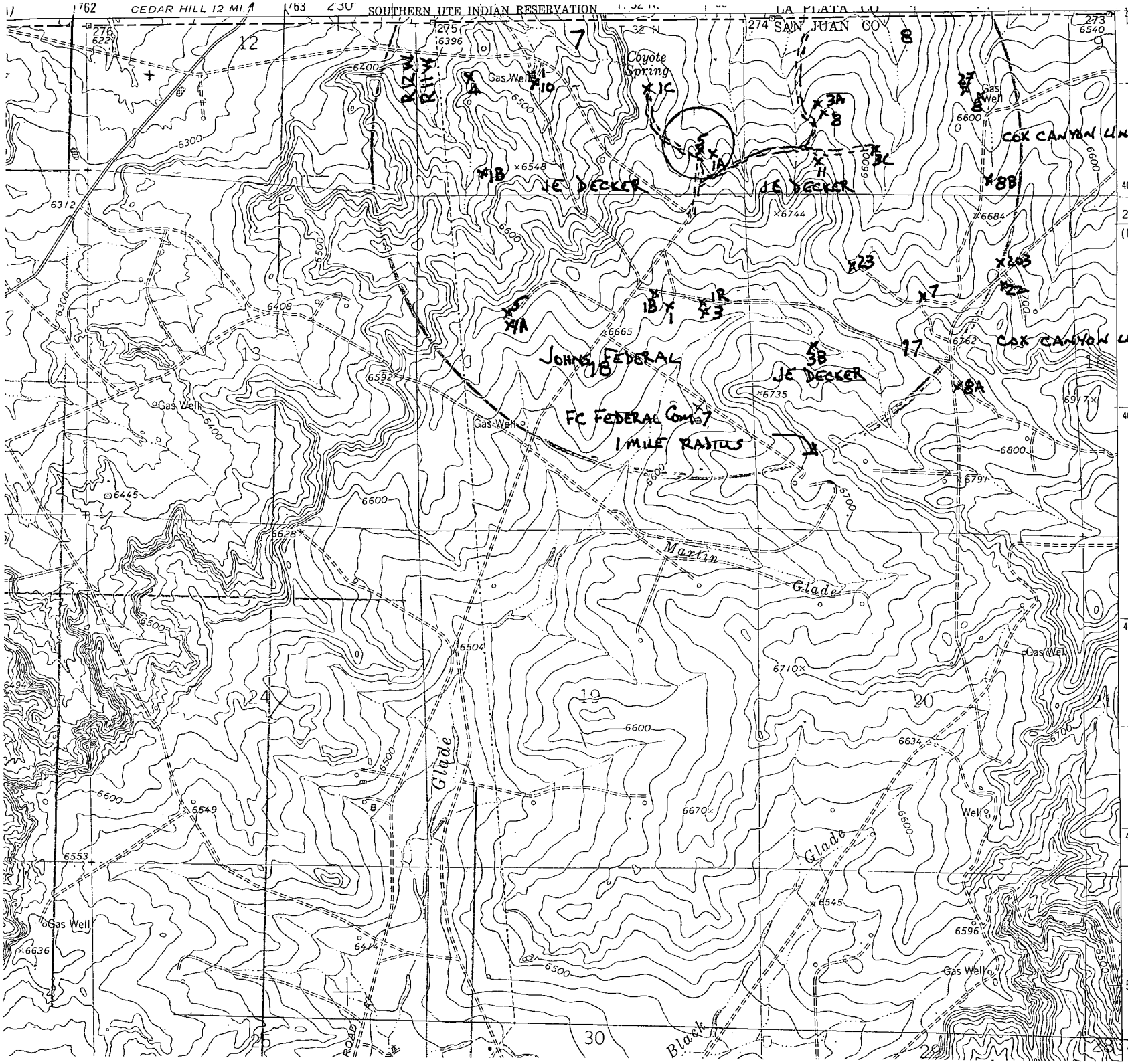
Paul C. Thompson, P.E.
Agent for
Great Western Drilling Company

DECKER #5

LAND FARM PLAT



Pat 11/12/09



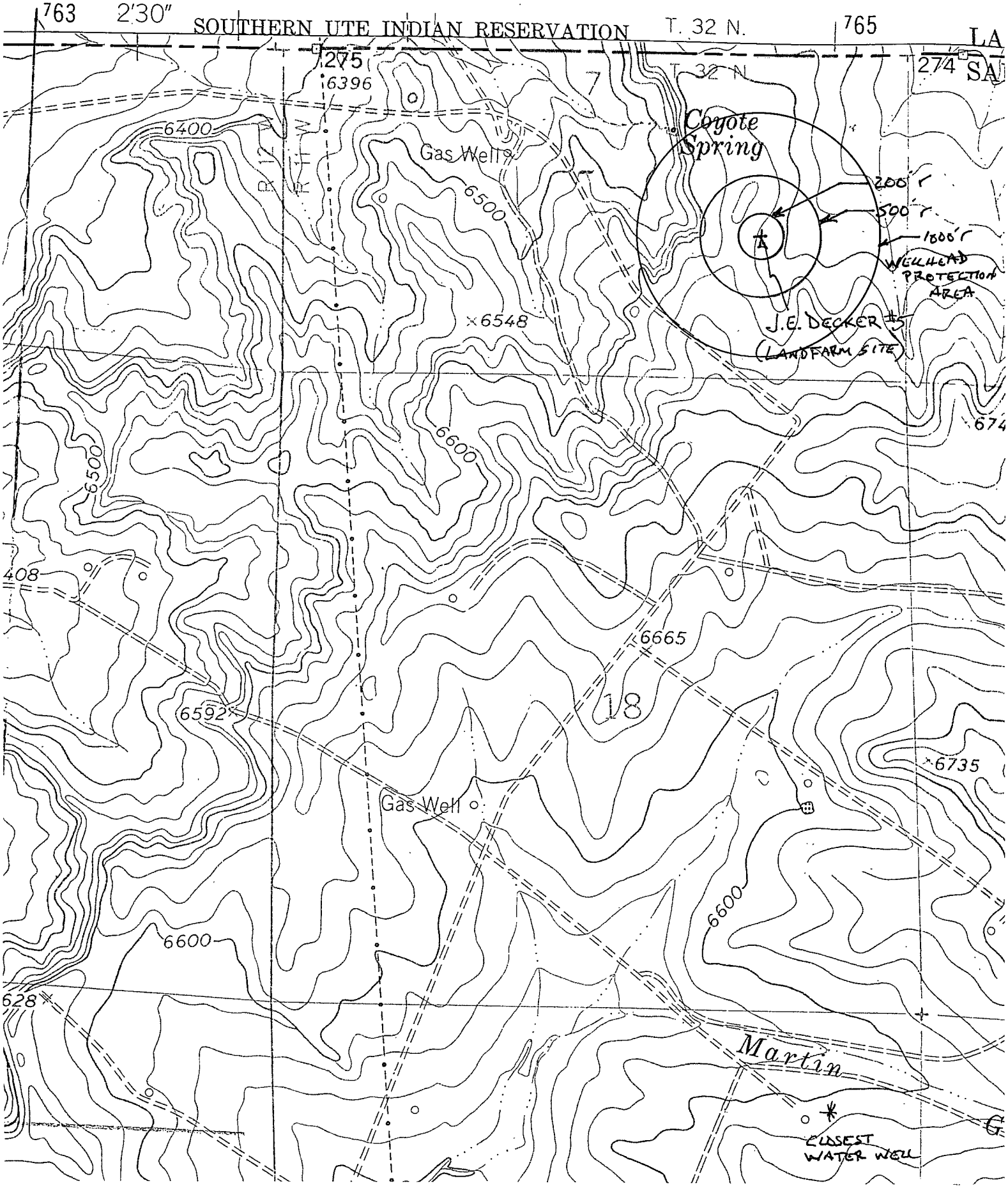
NO: COUNTY ROADS
DWELLINGS
WATER COURSES

SCALE: 1" = 2000'

ADOB

SCALE: 1" = 1000'

7.5



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

Kenzo 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	Lease	Well No.
Great Western Drilling Company	Decker P.C.	5

Unit Letter	Section	Township	Range	County
P	7	32N	11W	San Juan

Actual Footage Location of Well:
1170 feet from the South line and 1150 feet from the East line

Ground Level Elev:	Producing Formation	Pool	Dedicated Acreage:
6613	Pictured Cliffs		Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

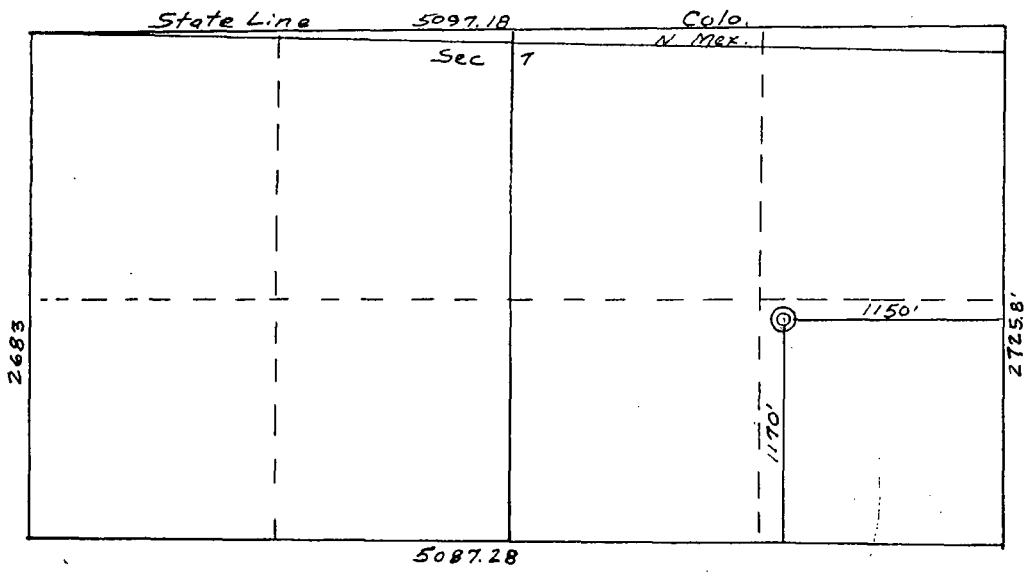
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.

Certificate No.
3950

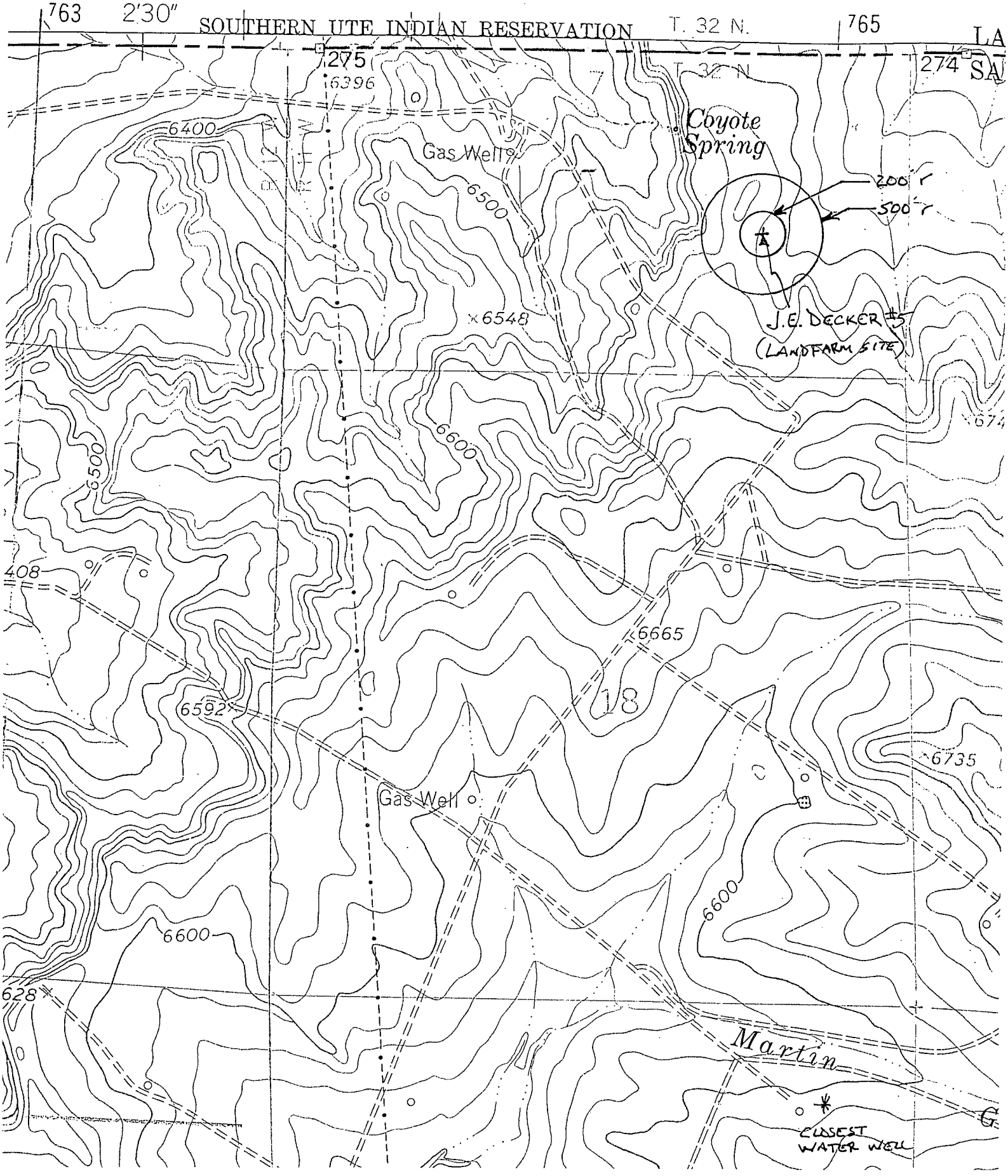
New Mexico Office of the State Engineer
Water Column/Average Depth to Water

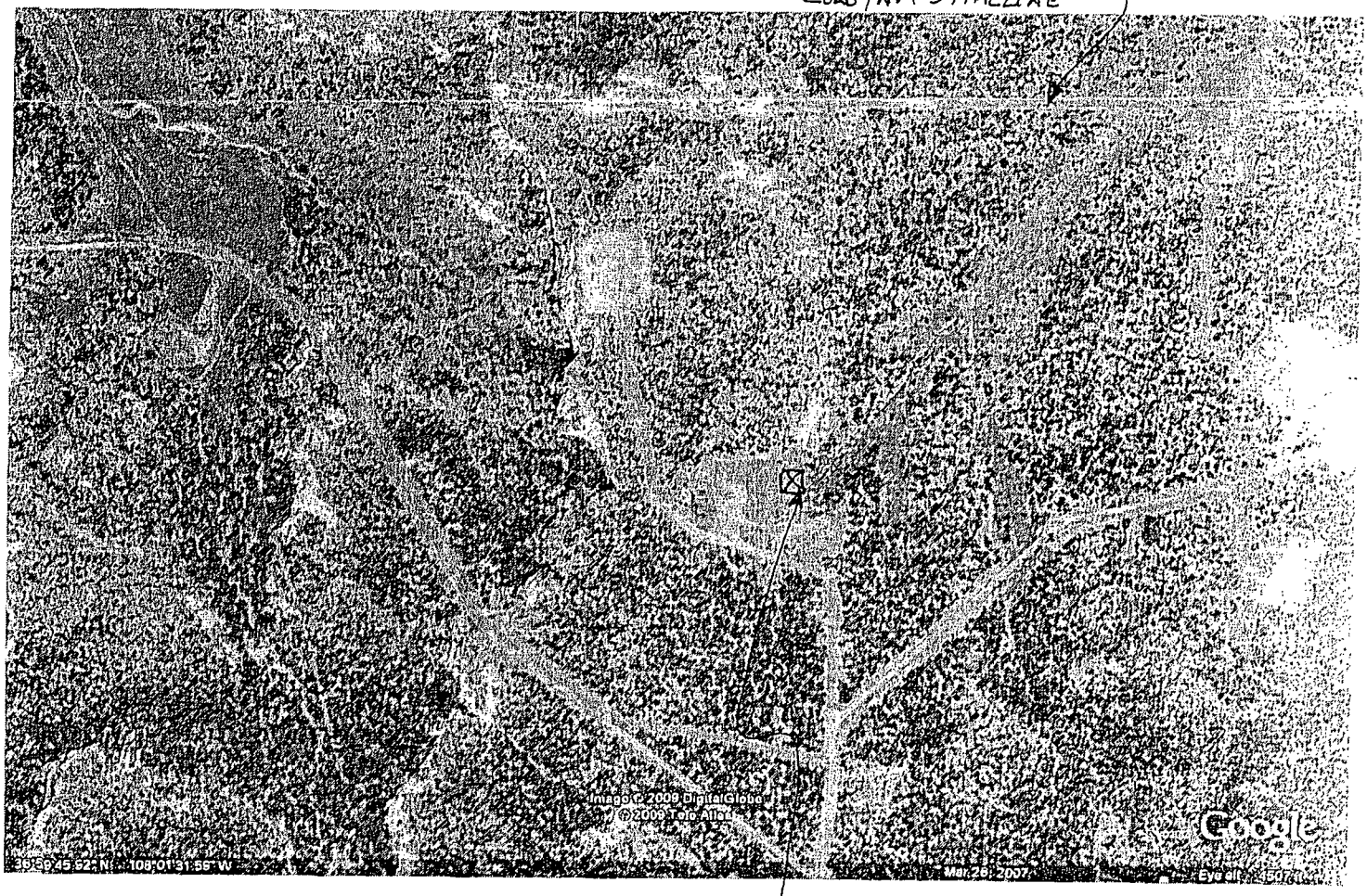
(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	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 CLOSEST WELL		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

7.5

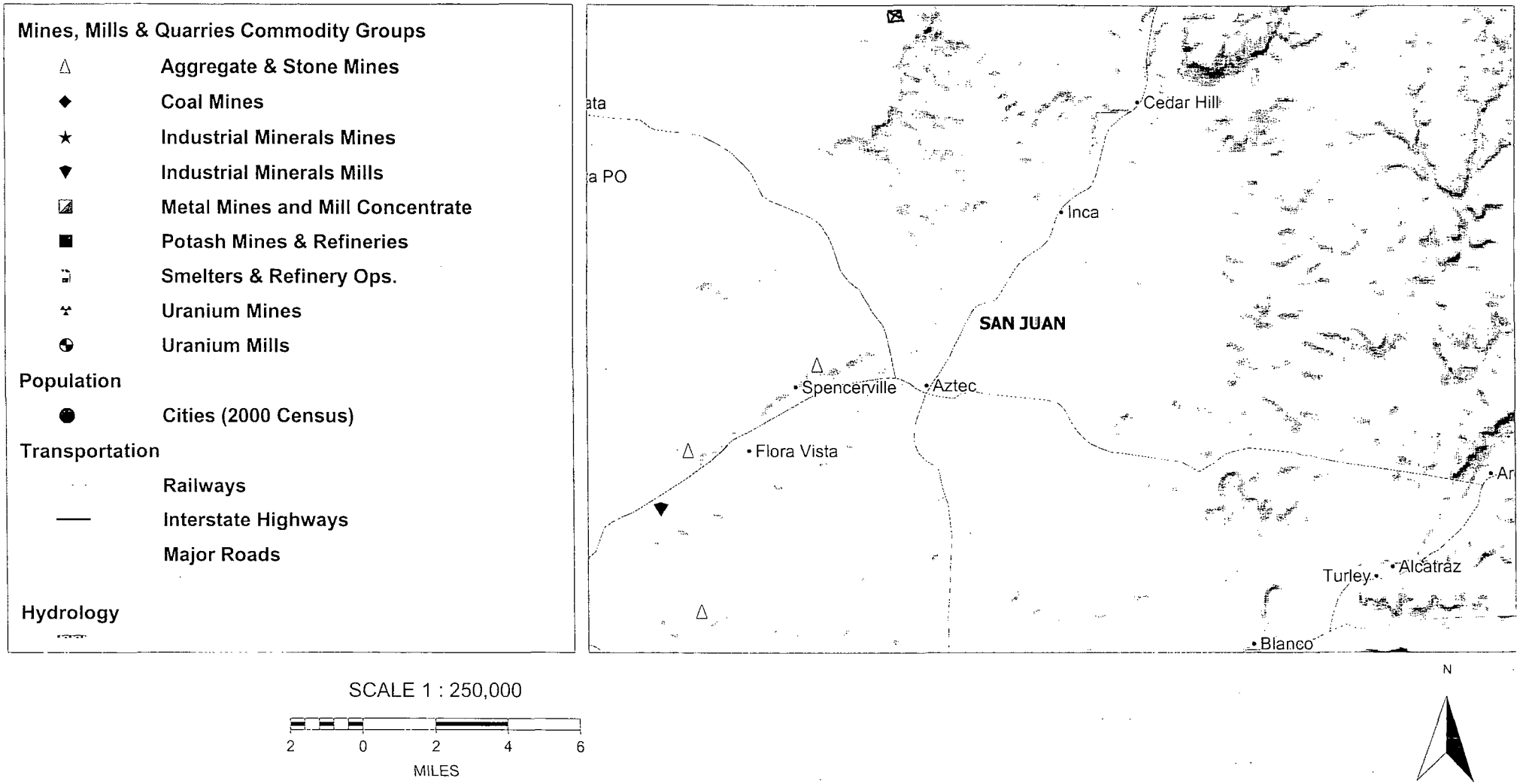

763
2'30"
SOUTHERN UTE INDIAN RESERVATION
T. 32 N.
765
275
274
6396
6400
6500
Gas Well
Coyote Spring
200' r
500' r
J.E. DECKER #5
(LANDFARM SITE)
×6548
6600
6500
408
6665
18
6592
6735
Gas Well
6600
6600
628
Martin
CLOSEST WATER WELL

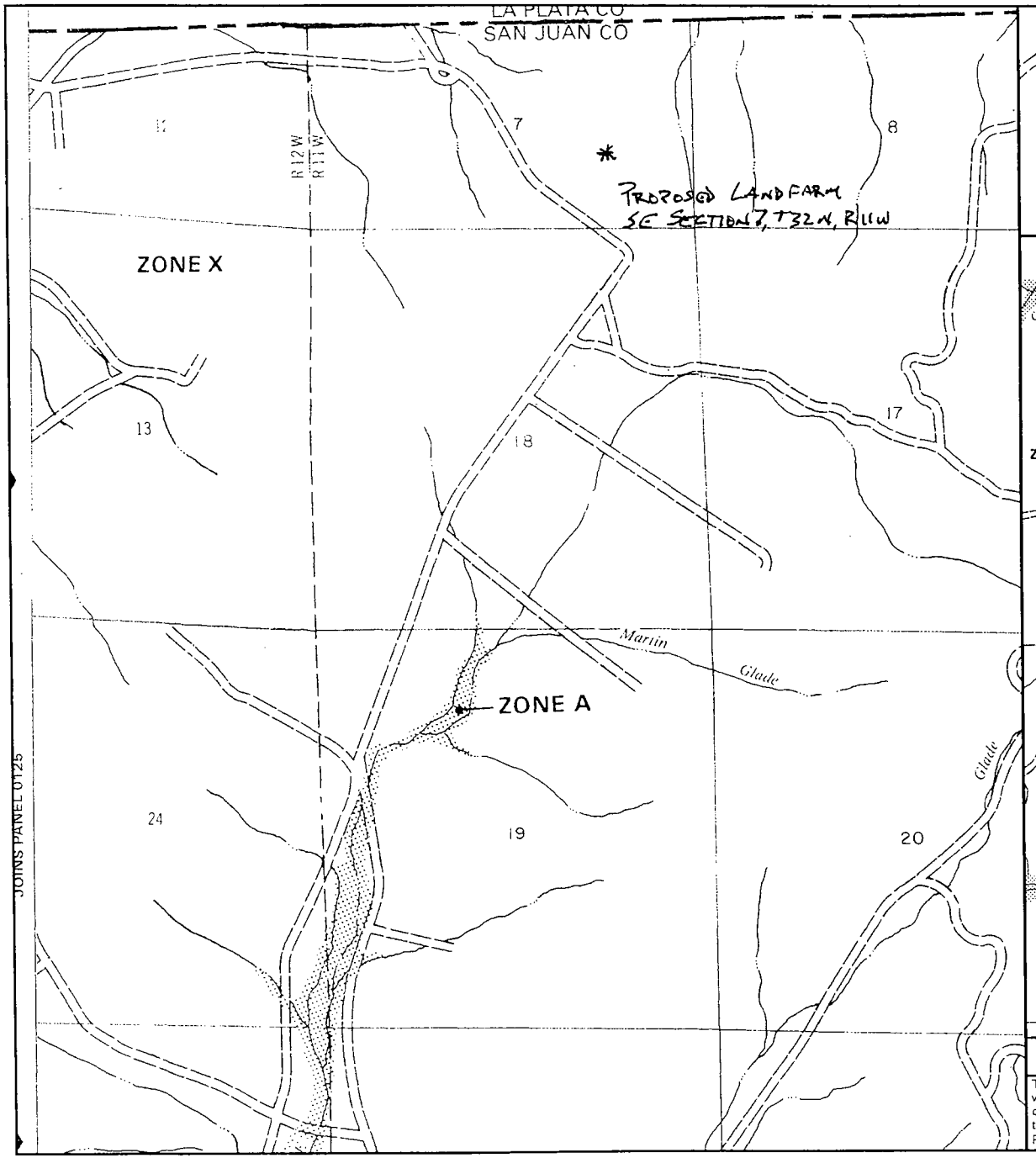


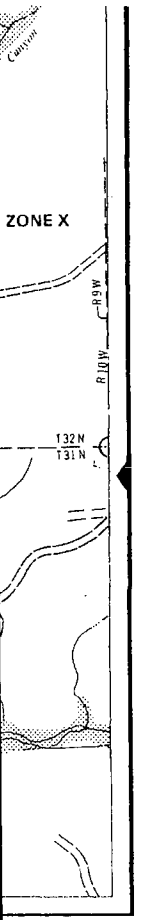
PROPOSED LAND FARM
J.E. DECKER #5 LOCATION
SE SECTION 7, T32N, R11W
SAN JUAN COUNTY

MMQonline Public Version

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







APPROXIMATE SCALE

2000 0

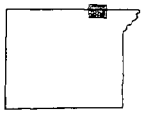
NATIONAL FLOOD INSURANCE PROGRAM

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

RECEIVED
2009 OCT 7 AM 11 03

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
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

For State Use Only:
Registration #

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.

GENERAL INFORMATION

1. ☒ Small Landfarm Registration ☐ Small Landfarm Final Closure Report*
(*Must be submitted within three years from the registration date)

2. Operator: GREAT WESTERN DRILLING COMPANY

Address: C/O WALSH ENGINEERING, 7415 E. MAIN ST., FARMINGTON, N.M. 87402

Contact Person: PAUL THOMPSON Phone: 505. 327. 4892

3. Location: SE /4 SE /4 Section 7 Township 32N Range 11W

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: Paul C. Thompson Title: Agent

Signature: Paul C. Thompson Date: 9/22/09

E-mail Address: paul@walsheng.net

OCD REGISTRATION: ☐ Approved. Date : _____ ☐ Denied. Date: _____

Comments: _____

OCD Representative Signature: _____

Title: _____ **OCD Registration Number:** _____

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.

Petroleum Engineering Consulting
Lease Management
Contract Pumping

7415 East Main
Farmington, New Mexico 87402
(505) 327-4892 • Fax: (505) 327-9834

September 22, 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.

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. 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.

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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.

Paul C. Thompson, P.E.
Agent for
Great Western Drilling Company

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

Kennon 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	Lease	Well No.
Great Western Drilling Company	Decker P.C.	5

Unit Letter	Section	Township	Range	County
P	7	32N	11W	San Juan

Actual Footage Location of Well:
1170 feet from the South line and 1150 feet from the East line

Ground Level Elev:	Producing Formation	Pool	Dedicated Acreage:
6613	Pictured Cliffs		Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

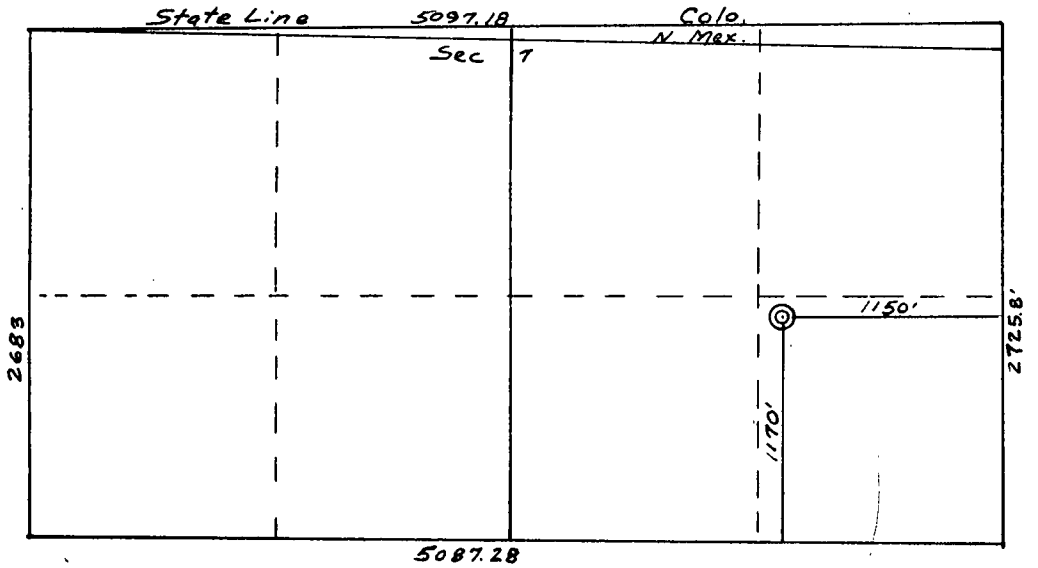
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.

Certificate No.
3950

FORM 24

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 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
SJ 01360 ← CLOSEST WELL		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		
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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		
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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		
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SJ 03488		DOM	SJ	2	3	3	01	31N	12W	228084	4090678*	8462	150		
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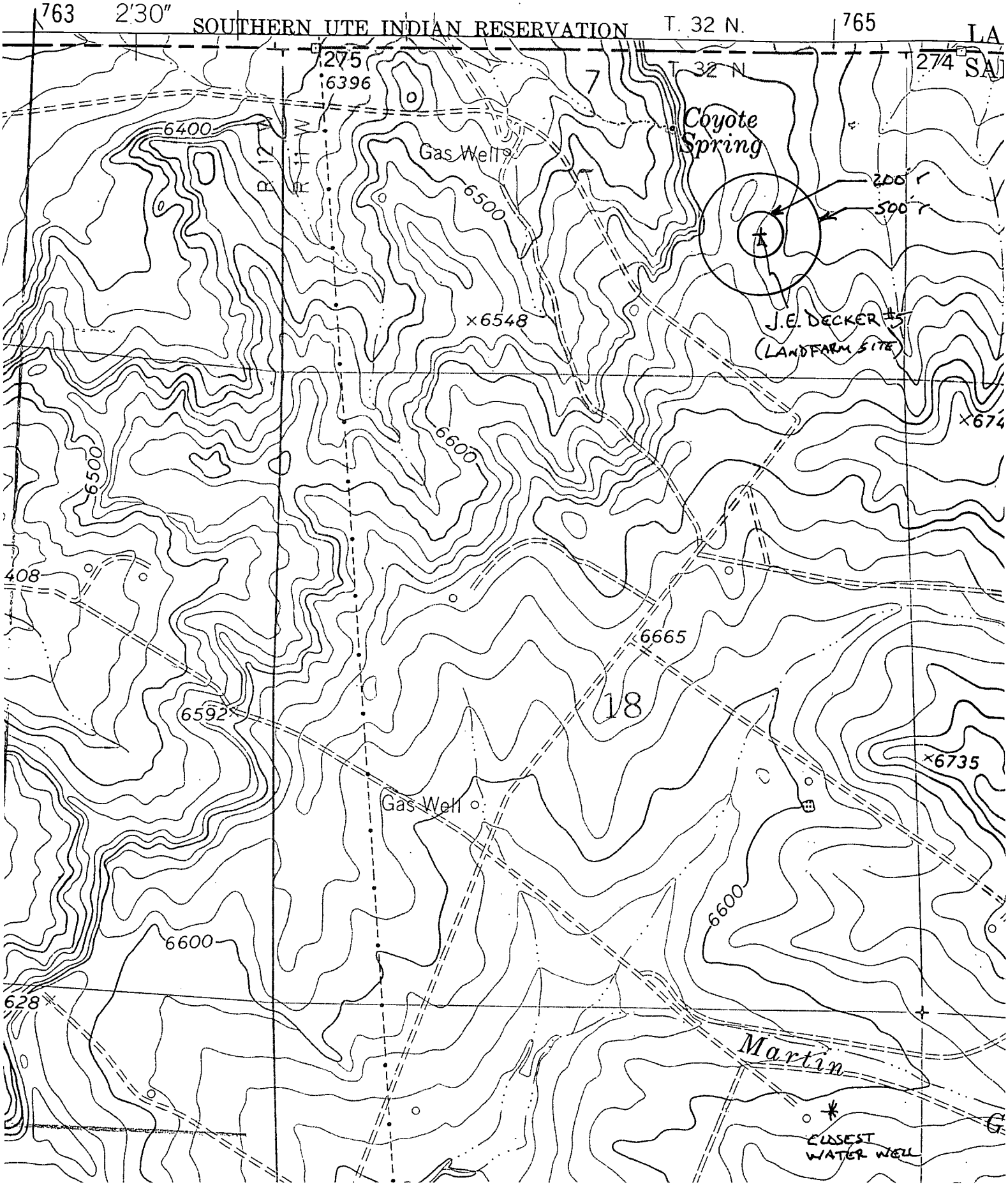
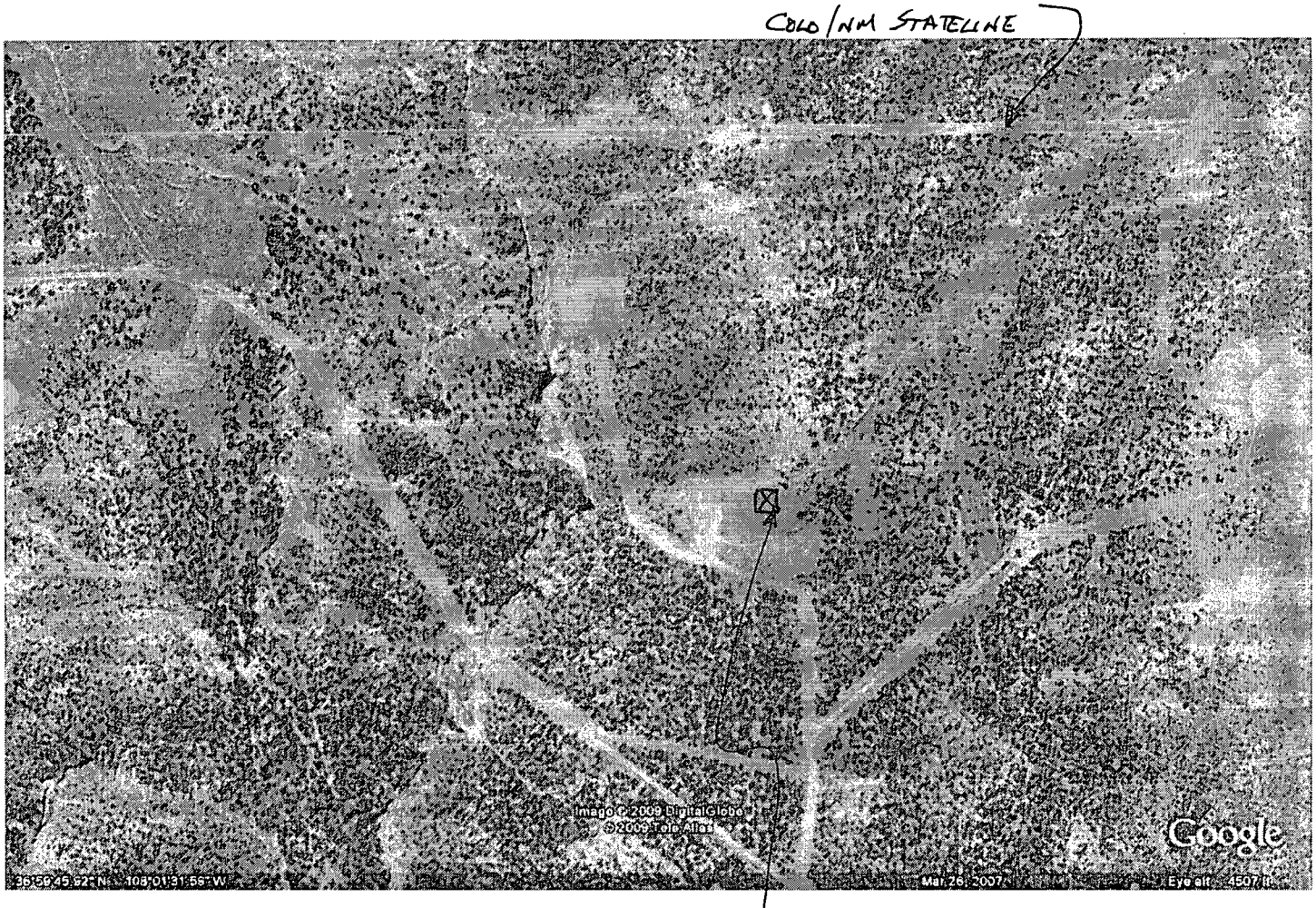
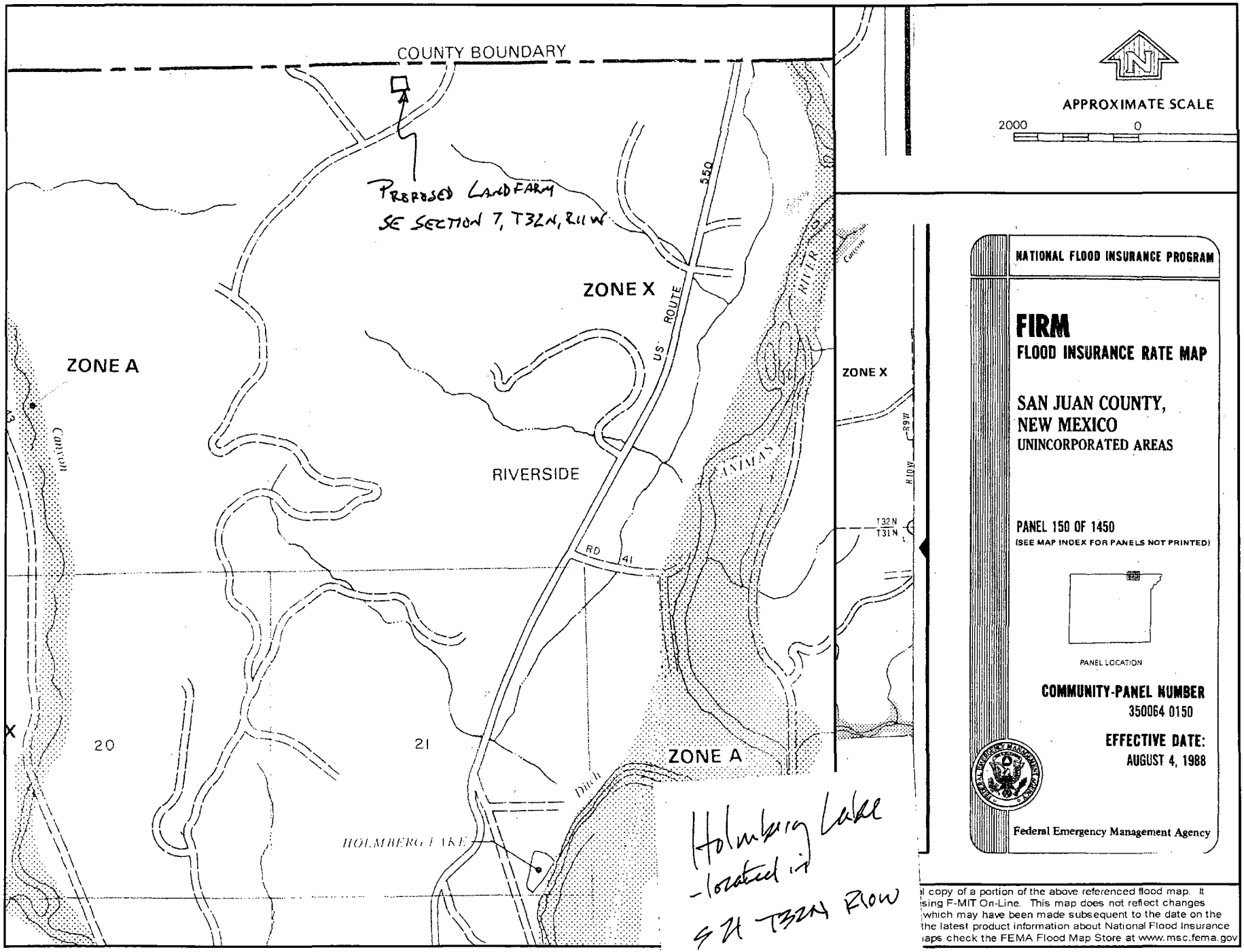
***UTM location was derived from PLSS - see Help**


763
2'30"
SOUTHERN UTE INDIAN RESERVATION
T. 32 N.
765
LA
275
6396
7
T. 32 N.
274
SA
6400
R. 11 W.
Coyote Spring
Gas Well
6500
200'
500'
×6548
J.E. DECKER #5
(LANDFARM SITE)
×674
6600
6500
408
6665
18
6592
×6735
Gas Well
6600
6600
628
Martin
CLOSEST WATER WELL



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



l copy of a portion of the above referenced flood map. It
sing F-MIT On-Line. This map does not reflect changes
which may have been made subsequent to the date on the
the latest product information about National Flood Insurance
aps check the FEMA Flood Map Store at www.msc.fema.gov

MMQonline Public Version

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

Mines, Mills & Quarries Commodity Groups

- Aggregate & Stone Mines
- Coal Mines
- Industrial Minerals Mines
- Industrial Minerals Mills
- Metal Mines and Mill Concentrate
- Potash Mines & Refineries
- Smelters & Refinery Ops.
- Uranium Mines
- Uranium Mills

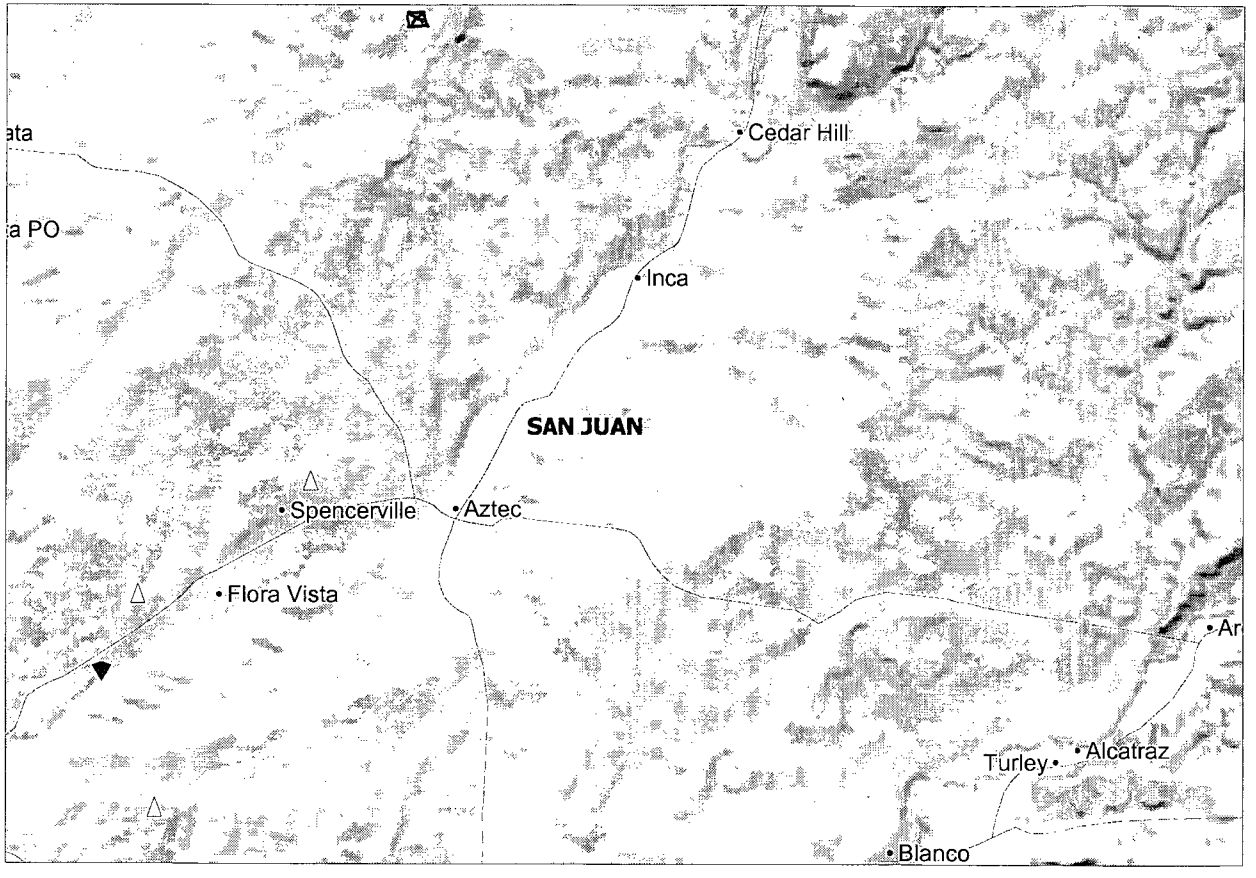
Population

- Cities (2000 Census)

Transportation

- Railways
- Interstate Highways
- Major Roads

Hydrology



SCALE 1 : 250,000

2 0 2 4 6

MILES

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

RECEIVED
2009 OCT 22 PM 12 04

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. SCR 10/19/09

GENERAL INFORMATION

1. ☒ Small Landfarm Registration ☐ Small Landfarm Final Closure Report*
(*Must be submitted within three years from the registration date)

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 32N Range 11W

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: Sam Roberts Date: 10/19/09

E-mail Address: sroberts@gwdc.com

OCD REGISTRATION: ☐ Approved. Date : _____ ☐ Denied. Date: _____

Comments: _____

OCD Representative Signature: _____

Title: _____ **OCD Registration Number:** _____

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.

Petroleum Engineering Consulting
Lease Management
Contract Pumping

7415 East Main
Farmington, New Mexico 87402
(505) 327-4892 • Fax: (505) 327-9834

September 22, 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.

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. 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.

Paul C. Thompson, P.E.
Agent for
Great Western Drilling Company

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

Kennon 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	Lease	Well No.
Great Western Drilling Company	Decker P.C.	5

Unit Letter	Section	Township	Range	County
P	7	32N	11W	San Juan

Actual Footage Location of Well:
1170 feet from the South line and 1150 feet from the East line

Ground Level Elev:	Producing Formation	Pool	Dedicated Acreage:
6613	Pictured Cliffs		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.) _____

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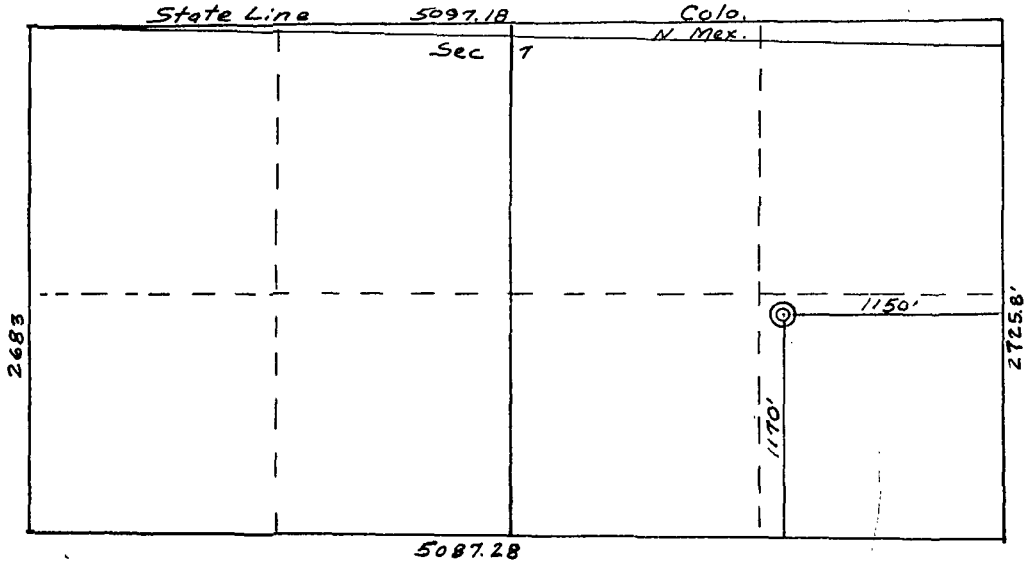

SCALE: 1"=1000'

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.

Certificate No.
3950

FORM 24-11

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)

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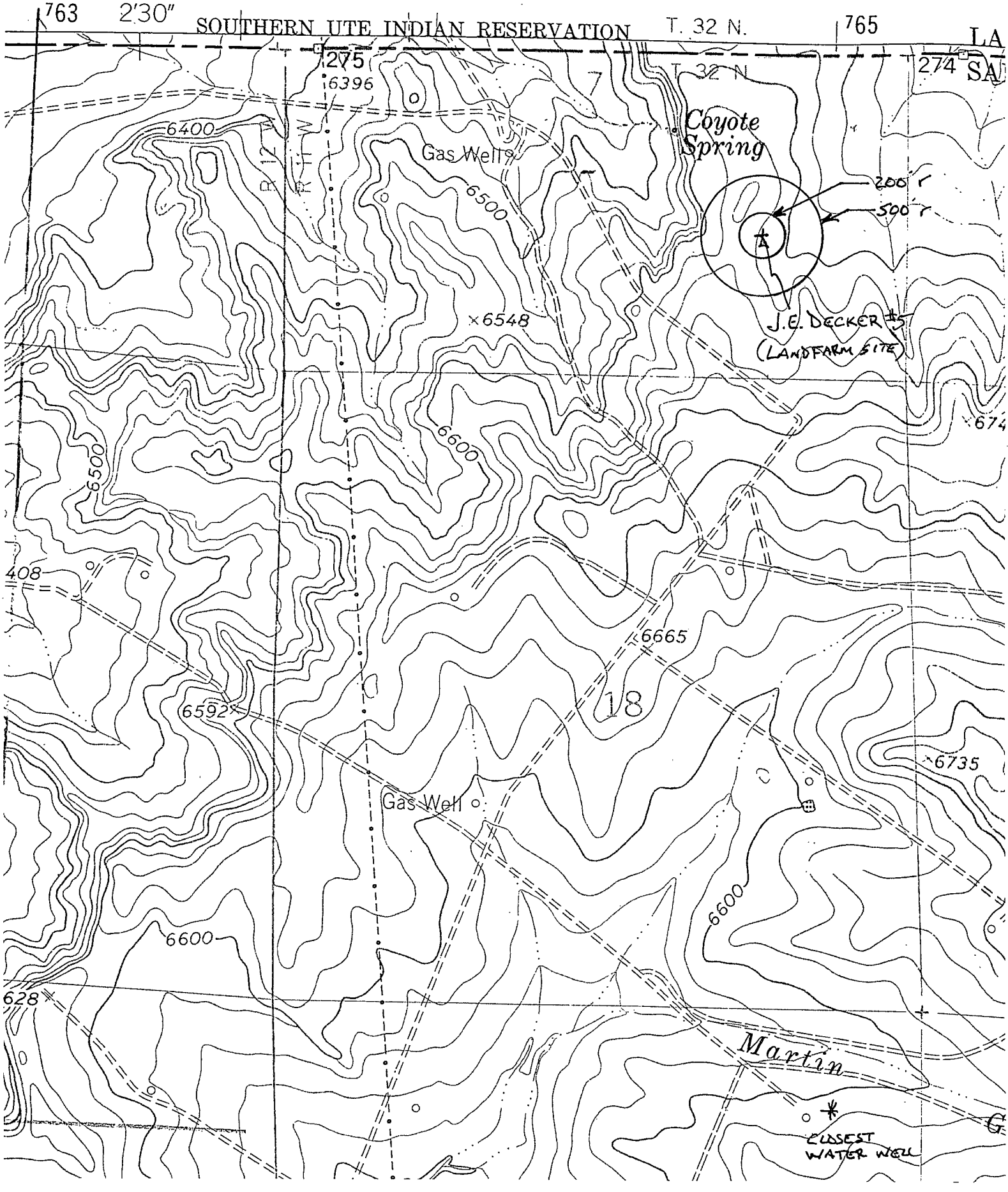
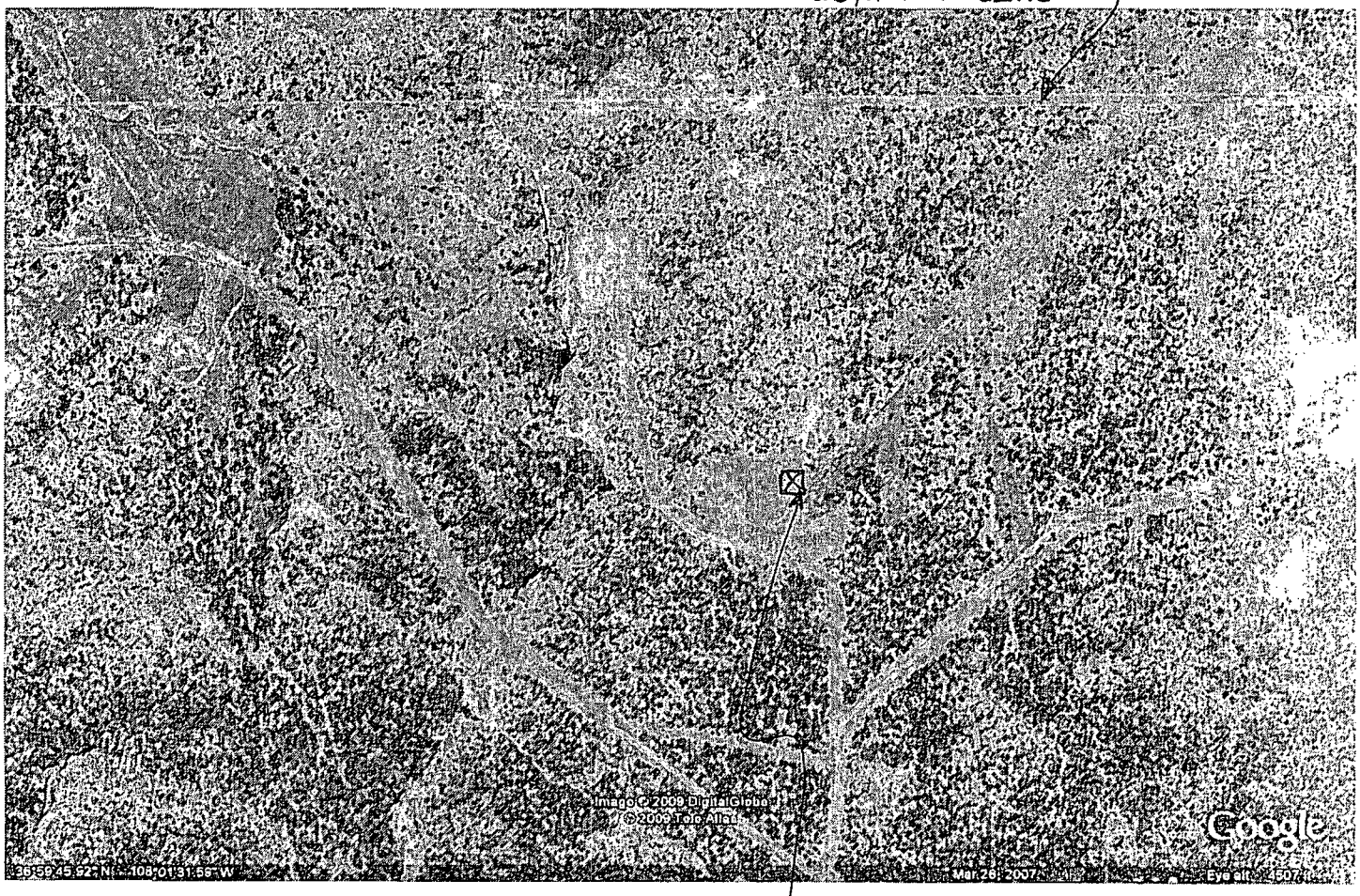
ADOB

7.5


763 2'30"
SOUTHERN UTE INDIAN RESERVATION
T. 32 N.
765
LA
275
6396
7
T. 32 N.
274
SA
6400
R. 12 W.
Gas Well
Coyote Spring
6500
200' r
500' r
×6548
J.E. DECKER #5
(LANDFARM SITE)
674
6600
6500
408
6665
6592
18
6735
Gas Well
6600
6600
628
Martin
CLOSEST WATER WELL

COLO/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

Mines, Mills & Quarries Commodity Groups

- Aggregate & Stone Mines
- Coal Mines
- Industrial Minerals Mines
- Industrial Minerals Mills
- Metal Mines and Mill Concentrate
- Potash Mines & Refineries
- Smelters & Refinery Ops.
- Uranium Mines
- Uranium Mills

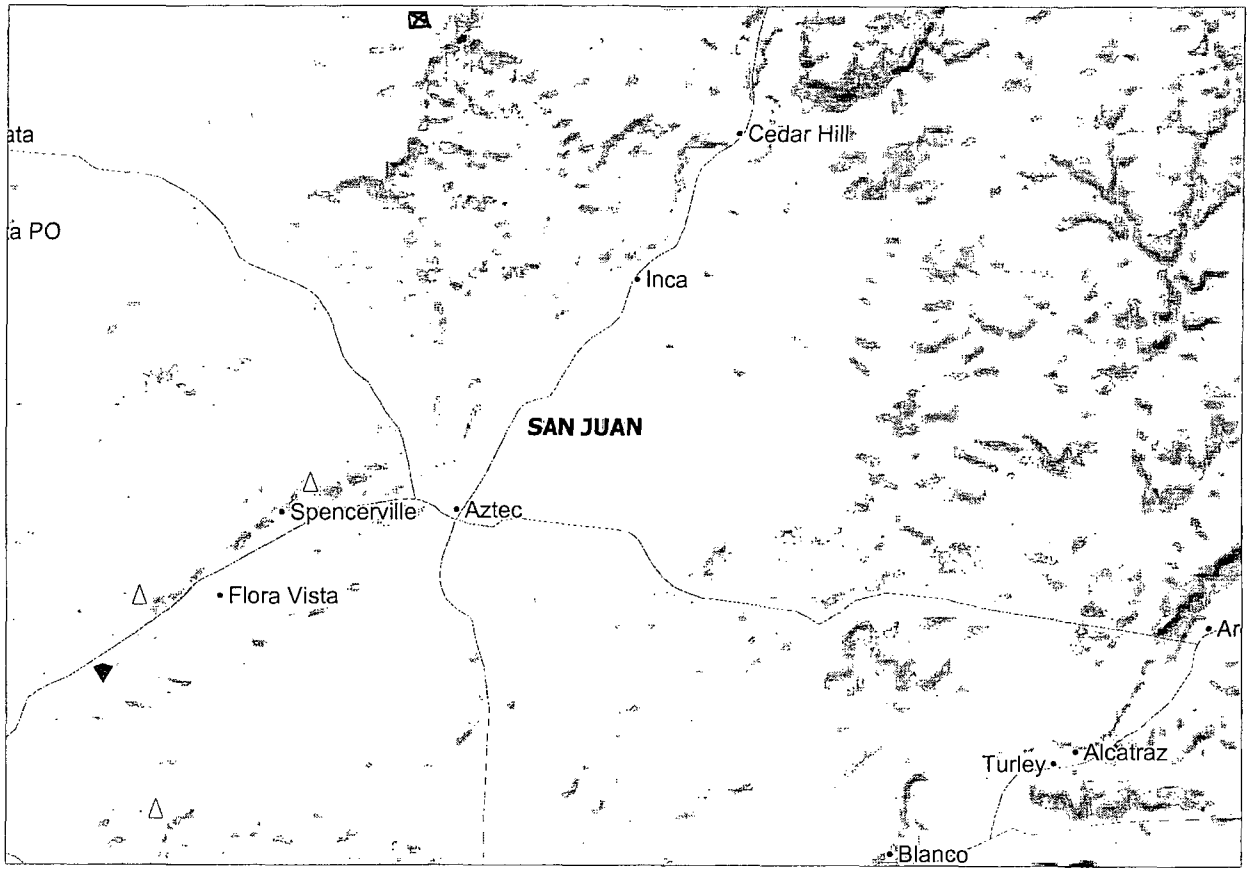
Population

- Cities (2000 Census)

Transportation

- Railways
- Interstate Highways
- Major Roads

Hydrology



SCALE 1 : 250,000

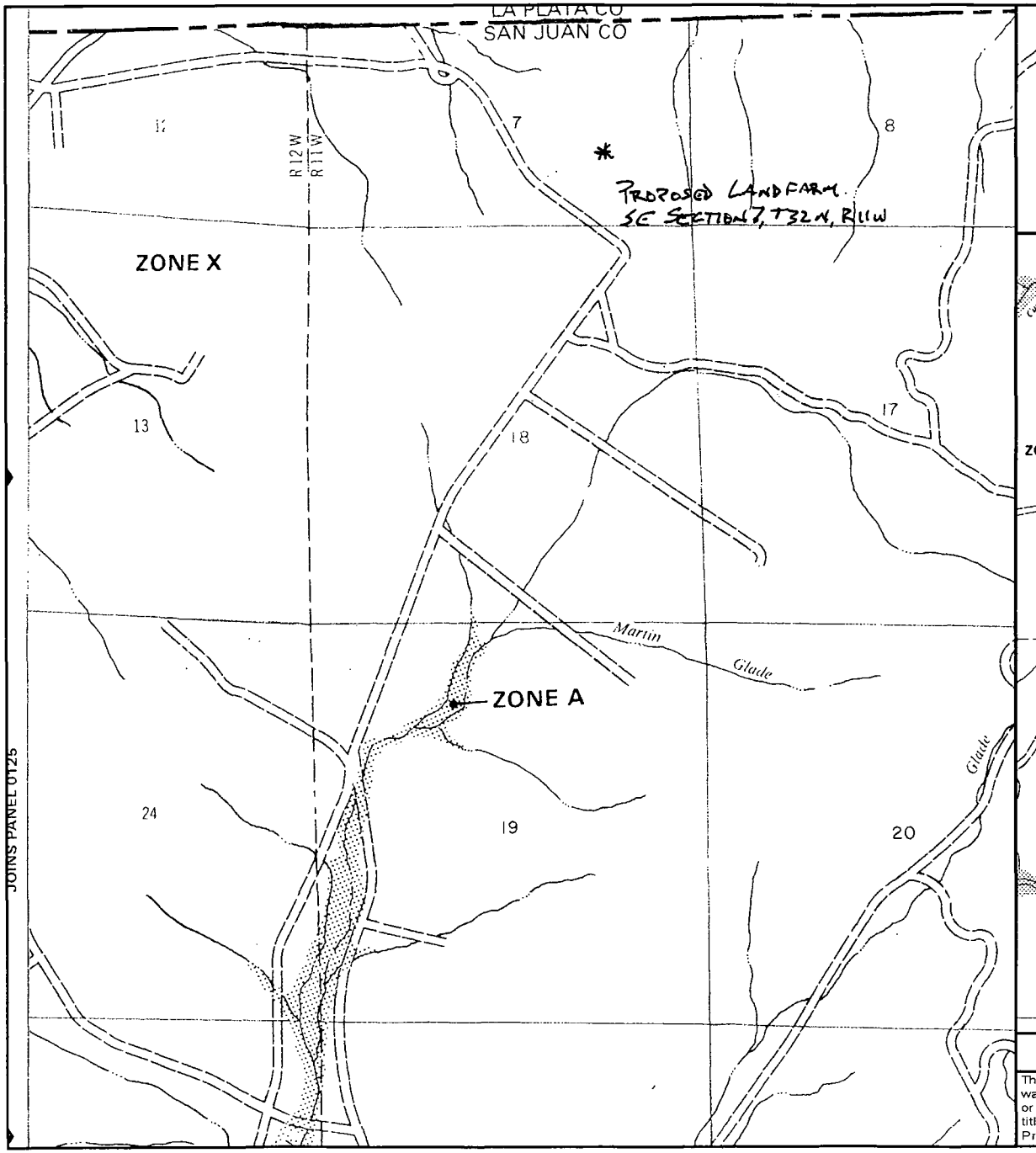
2 0 2 4 6

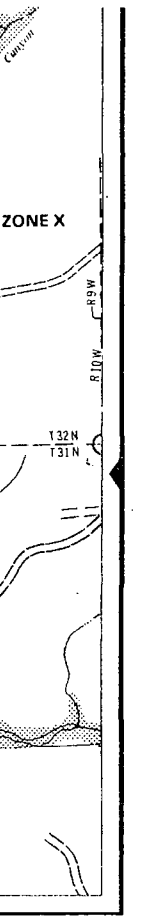
MILES

N

http://www.emnrd.state.nm.us/MMD/MMQonline/MMQonline-PUBLIC-PROD.mwf

Monday, September 21, 2009 4:45 PM





APPROXIMATE SCALE

2000 0

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

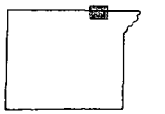
FLOOD INSURANCE RATE MAP

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