

2/19/05  
PWAJ 0503956298  
**APPLICATION FOR AUTHORIZATION TO INJECT**

I. PURPOSE: Secondary Recovery Pressure Maintenance  Disposal Storage  
Application qualifies for administrative approval?  Yes  No

II. OPERATOR: SDX Resources, Inc.

ADDRESS: PO Box 5061, Midland, TX 79704

CONTACT PARTY: Chuck Morgan PHONE: 432/685-1761

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  
Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project?  Yes  No  
If yes, give the Division order number authorizing the project: 30-015-31044

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail. 1. EAU #301 data attached

VII. Attach data on the proposed operation, including:

- Proposed average and maximum daily rate and volume of fluids to be injected; Avg Daily Rate - 1000 BWP, Max Daily Rate - 10000 BWP
- Whether the system is open or closed; Closed System
- Proposed average and maximum injection pressure; Avg Press 750#, Max Press 1500#
- Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
- If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature studies, nearby wells, etc.).

\*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval. No known fresh water underlies the inj zone. Fresh wtr overlies the proposed inj interval at appx 120'.

IX. Describe the proposed stimulation program, if any. Will acidize perms if necessary.

\*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

\*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken. NA

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Chuck Morgan TITLE: Engineer

SIGNATURE: *Chuck Morgan* DATE: 1/31/05

E-MAIL ADDRESS: cmorgan@sdresources.com

\* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal:

### III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

### XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

**NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.**

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**NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.**

**SDX Resources, Inc.**  
P.O. Box 5061  
MIDLAND, TX 79704  
TEL: (432) 685-1761 FAX: (432) 685-0533  
TOLL FREE: (800) 344-1761

**XII AFFIRMATIVE STATEMENT**

January 31, 2005

Re: Geronimo 33 #1

We have examined the available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

  
\_\_\_\_\_  
Chuck Morgan, Engineer

INJECTION WELL DATA SHEET

OPERATOR: SDX Resources, Inc.

WELL NAME & NUMBER: Gerónimo 33 State #1

WELL LOCATION: 1700' FNL 2020' FWL

F 33 17S 28E

FOOTAGE LOCATION

UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA  
Surface Casing

ATTACHED

Hole Size: 17-1/2" Casing Size: 13-3/8" 54.4#  
250 sx Lite  
Cemented with: 200 sx C sx. or ft<sup>3</sup>

Top of Cement: Surf Method Determined: circ.

Intermediate Casing

Hole Size: 12-1/4" Casing Size: 9-5/8" J55 36#  
700 sx C interfill  
Cemented with: 250 sx C sx. or ft<sup>3</sup>

Top of Cement: Surf Method Determined: circ

Production Casing

Hole Size: 8-3/4 / 7-7/8" Casing Size: 5-1/2" P110 N80 17#  
Cemented with: 2500 sx. or ft<sup>3</sup>

Top of Cement: Surf Method Determined: circ

Total Depth: 10,599'

Injection Interval

7500'

feet to 9250'

**Perforated** for Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2-7/8" Lining Material: Plastic

Type of Packer: 5-1/2" PC PH-6

Packer Setting Depth: 7400'

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

- 1. Is this a new well drilled for injection? Yes  No   
 If no, for what purpose was the well originally drilled? Morrow Gas

2. Name of the Injection Formation: Penn (Lower Wolfcamp, Cisco Canyon)

3. Name of Field or Pool (if applicable): Empire Penn

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. \_\_\_\_\_

See attached \_\_\_\_\_

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: \_\_\_\_\_

Underlying zone - Atoka Top 9752'

Overlying zone - Upper Wolfcamp Top 6880'

\_\_\_\_\_

**SDX Resources, Inc.**  
P.O. Box 5061  
MIDLAND, TX 79704  
TEL: (432) 685-1761 FAX: (432) 685-0533  
TOLL FREE: (800) 344-1761

**INJECTION WELL DATA SHEET ATTACHMENT**

Geronimo 33 St #1

4.	<u>Perfs</u>	<u>Zone</u>	<u>Plug</u>
	10287-95	Morrow	CIBP 10200' 35' cmt cap
	9528-34	Strawn	CIBP 9470' 35' cmt cap
	8227-34	Canyon	CIBP 8132 35' cmt cap
	7794-7800	Cisco	CIBP 7800' 35' cmt cap
	7215-66	Wolfcamp	CIBP 7165' 35' cmt cap

strict 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

Form C-101
May 27, 2004

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

Submit to appropriate District Office

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address: SDX Resources, Inc.
OGRID Number: 020451
API Number: 30-015-31044
Property Code, Property Name: Geronimo 33 State, Well No. 1
Proposed Pool 1: Empire, Penn; Proposed Pool 2

Surface Location

Table with 10 columns: UL or lot no., Section, Township, Range, Lot Idn, Feet from the, North/South line, Feet from the, East/West line, County. Values: F, 33, 17S, 28E, 1700, North, 2020, West, Eddy.

Proposed Bottom Hole Location If Different From Surface

Table with 10 columns: UL or lot no., Section, Township, Range, Lot Idn, Feet from the, North/South line, Feet from the, East/West line, County.

Additional Well Information

Work Type Code: Re-Entry; Well Type Code: SWD; Cable/Rotary: Rotary; Lease Type Code: State; Ground Level Elevation: 3665'
Proposed Depth: 10,900'; Formation: Cisco; Contractor: Pool; Spud Date: 4/05/05
Pit: Liner: Synthetic; Drilling Method: Fresh Water; Diesel/Oil-based; Gas/Air

Proposed Casing and Cement Program

Table with 6 columns: Hole Size, Casing Size, Casing weight/foot, Setting Depth, Sacks of Cement, Estimated TOC. Includes handwritten note '\*Existing'.

Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone.

Describe the blowout prevention program, if any. Use additional sheets if necessary.

WELL HISTORY: Orig PBTD 10,519'. Perf 10287' - 10295'. CIBP @ 10,200 w/35' cmt Perf 9528' -34'. CIBP @ 9470' w/35' cmt. Perf 8182' 92', 8204' - 12', 8227' - 34'. CIBP @ 8132' w/35' cmt. Perf 7794' - 7800', 7813' - 17', 7920-32', 7960-66. CIBP @ 7750' w/35' cmt. Perf 7215'-21', 58-66'

P&A'd AS FOLLOWS: 5-1/2" CIBP @ 7165' w/35' of cmt. TOC @ 7130'. Spot 25 sx cmt @ 4550'. TOC @ 4370'. Spot 25 sx cmt @ 3500'. TOC @ 3400' (calc top). Spot 25 sx cmt @ 2675'. TOC 2374'. Perf @ 575'. Sqz 155 sx cmt. TOC @ 230'. Spot 23 sx cmt 84' to surf.

PROPOSE TO RE-ENTER 5-1/2" WELLBORE TO 7300'.

Plan to use steel pits, no below ground pits should be necessary. Test csg above ~7300' & repair if necessary. Sqz perfs 7215' - 66' w/250 sx & test. Drill out to PBTD of 9435' (CIBP @ 9470' w/35' cap). Perf selected intervals from 7500' - 9250'. Stimulate w/acid if necessary for conversion to SWD. Work to commence pending approval of C-108.

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines X, a general permit, or an (attached) alternative OCD-approved plan.

OIL CONSERVATION DIVISION

Approved by:

Printed name: Bonnie Atwater

Handwritten signature: Bonnie Atwater

Title:

Title: Regulatory Tech

Approval Date:

Expiration Date:

E-mail Address: batwater@sdresources.com

Date: 1/6/05

Phone: 432/685-1761

Conditions of Approval Attached

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

Form C-102  
 Revised June 10, 2003  
 Submit to Appropriate District Office  
 State Lease - 4 Copies  
 Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-015-31044		<sup>2</sup> Pool Code 76440		<sup>3</sup> Pool Name Empire, Penn	
<sup>4</sup> Property Code		<sup>5</sup> Property Name Geronimo 33 State			<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 020451		<sup>8</sup> Operator Name SDX Resources, Inc.			<sup>9</sup> Elevation 3665' GR

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	33	17S	28E		1700	North	2020	West	Eddy

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p><sup>16</sup></p>	<p><b><sup>17</sup> OPERATOR CERTIFICATION</b></p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p><i>Chuck Morgan</i>        Signature</p> <p>Chuck Morgan        Printed Name</p> <p>Engineer        Title and E-mail Address</p> <p>1/6/05        Date</p>
	<p><b><sup>18</sup> SURVEYOR CERTIFICATION</b></p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p>ORIGINAL ON FILE</p> <p>Certificate Number</p>

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Artec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

**OIL CONSERVATION DIVISION**  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-102  
Revised February 10, 1994  
Instruction on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number	Pool Code	Pool Name
Property Code	Property Name <b>GERONIMO "33" STATE <del>CON.</del></b>	Well Number <b>1</b>
OGRID No. <b>025773</b>	Operator Name <b>LOUIS DREYFUS NATURAL GAS CORPORATION</b>	Elevation <b>3665'</b>

**Surface Location**

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>F</b>	<b>33</b>	<b>17 S</b>	<b>28 E</b>		<b>1700</b>	<b>NORTH</b>	<b>2020</b>	<b>WEST</b>	<b>EDDY</b>

**Bottom Hole Location If Different From Surface**

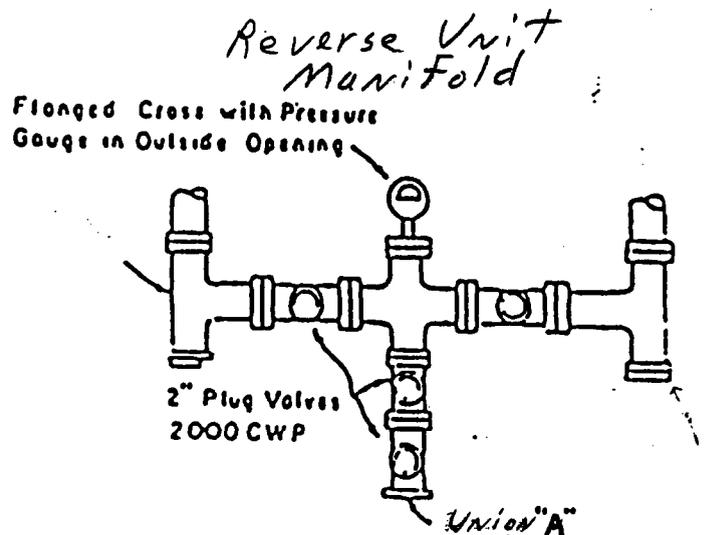
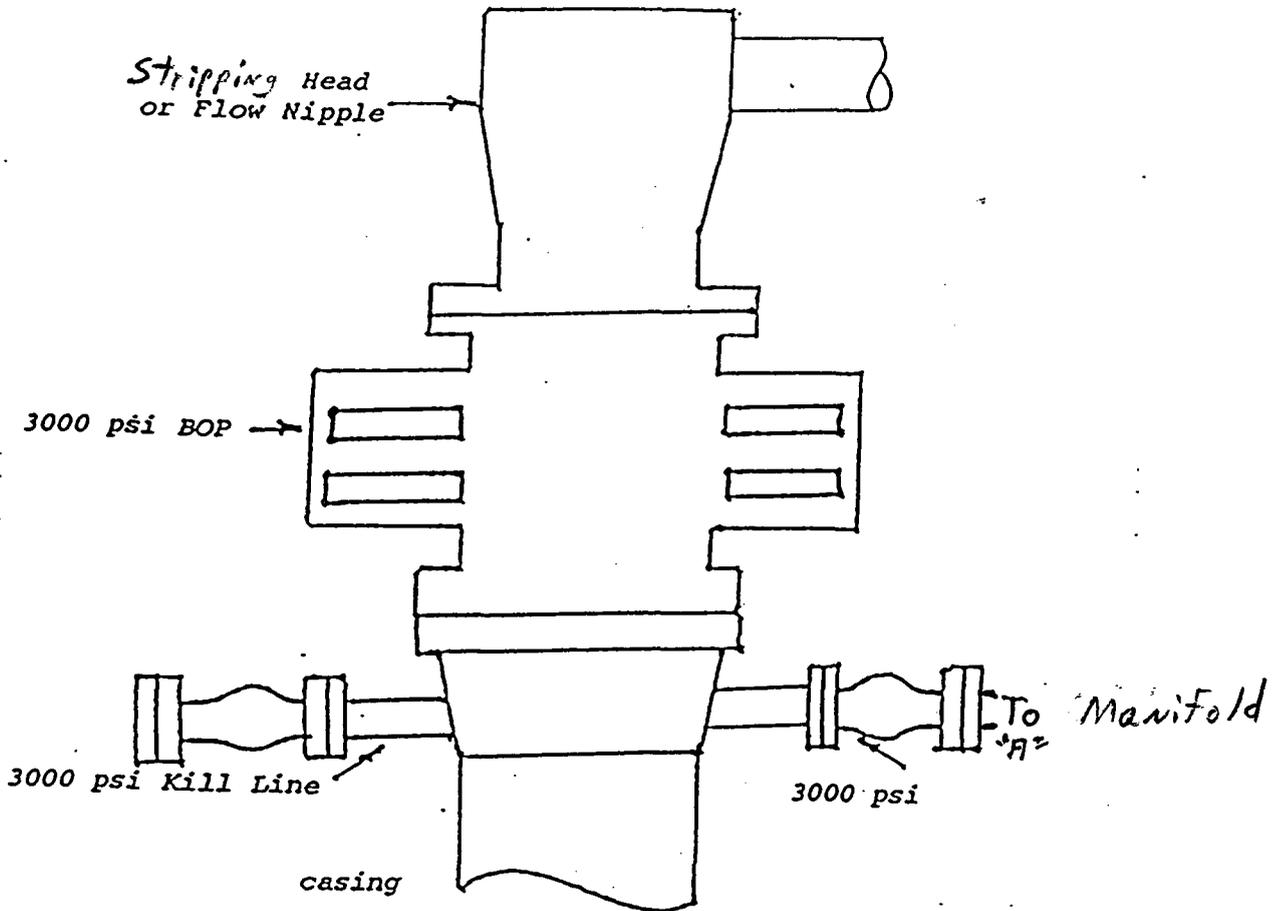
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres <b>40 320</b>	Joint or Infill <b>N</b>	Consolidation Code <b>C</b>	Order No.
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**NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION**

<p>State Lease B-4575-11</p>	<p>Lat.: N32°47'36.8" Long.: W104°10'58.2"</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Gene Simer</i> Signature</p> <p>Gene Simer Printed Name</p> <p>District Operations Mgr. Title</p> <p>03/16/00 Date</p>
<p>State Lease 647</p>		<p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>March 13, 2000 Date Surveyed</p> <p><i>J. Gary L. Jones</i> Signature &amp; Seal Professional Surveyor of New Mexico</p> <p>W.O.C. No. 0137A</p> <p>Certificate No. 7977</p>

Blow Out Preventor Schematic

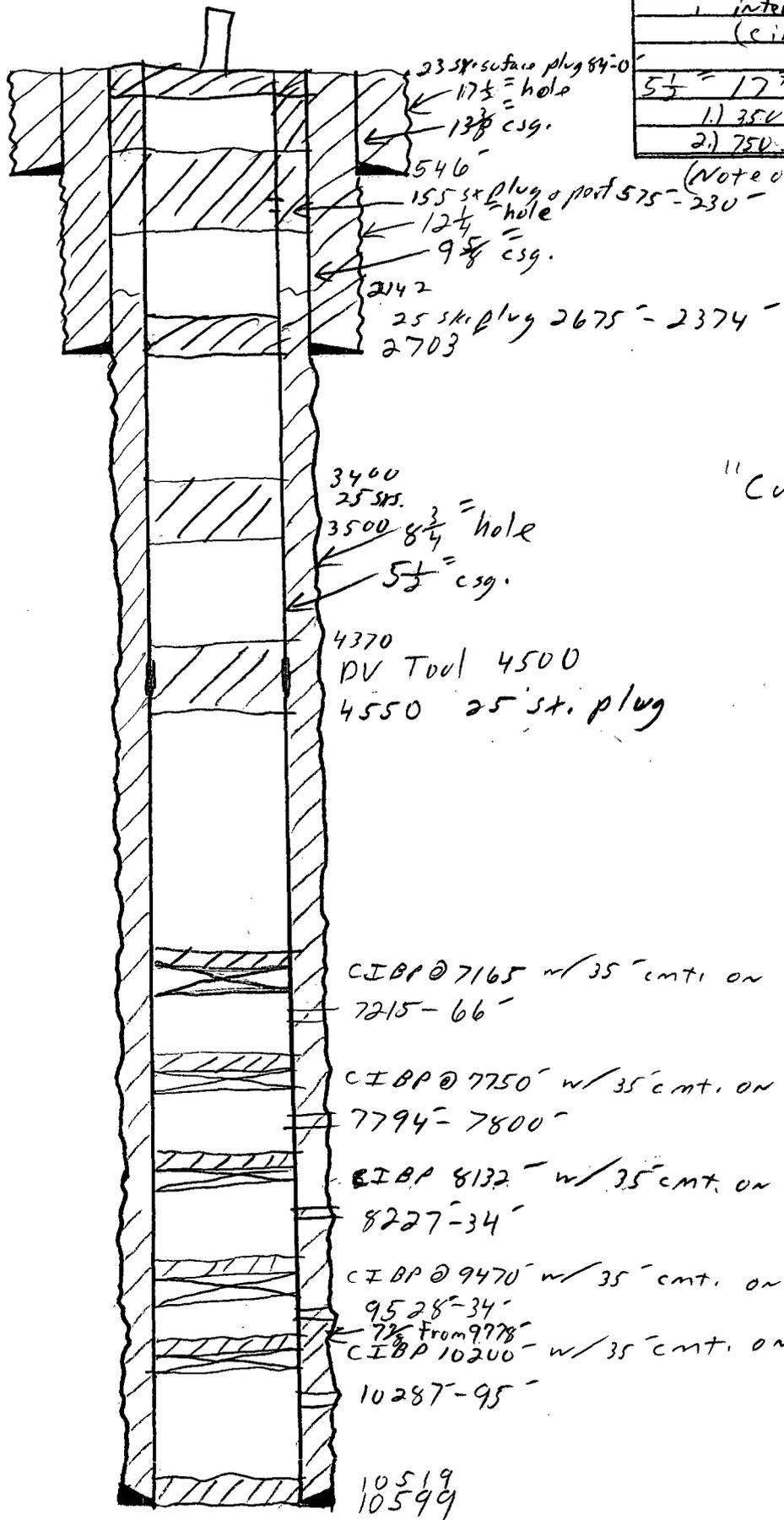


PLAN VIEW - MANIFOLD

WELL NAME: Gerónimo 33 St. #1 FIELD AREA: Empire Penn  
 LOCATION: 1700 Fwk 2020 Fwk Sec. 33 T17S R28E Eddy Co. N.M.  
 GL: 3665' ZERO: \_\_\_\_\_ AGL: \_\_\_\_\_  
 KB: \_\_\_\_\_ ORIG. DRLG./COMPL. DATE: \_\_\_\_\_  
 COMMENTS: \_\_\_\_\_

CASING PROGRAM:

SIZE/WT./GR./CONN.	DEPTH SET
13 7/8" 54.4# 250 sts. Lite 200 sts "c" (circ. 54 sts.)	546'
9 5/8" 36# J-55 700 sts. "c" interfill, 250 "c" (circ. 150 sts.)	2703'
5 1/2" 17# P-110 & N-80 2 stage 1) 350 sts. interfill 1400 sts super "H" 2) 750 sts. 50/50 PWT circ. 75 sts.	10599'



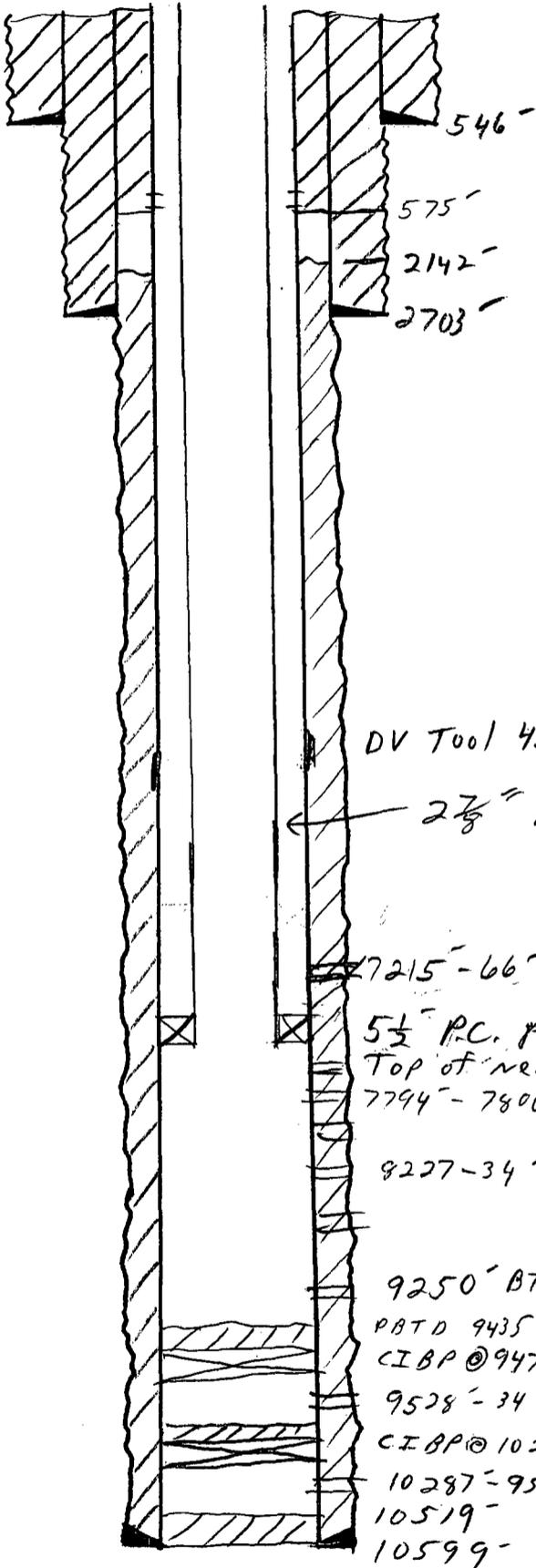
(Note on compl. shows TOC 2142')

"Current Condition"

WELL NAME: Geranium 33 St. #1 FIELD AREA: Empire Penn  
 LOCATION: 1700 FNL 2020 FNL Sec. 33 T12S R28E Eddy Co., N.M  
 GL: 3665' ZERO: \_\_\_\_\_' AGL: \_\_\_\_\_'  
 KB: \_\_\_\_\_' ORIG. DRLG./COMPL. DATE: \_\_\_\_\_  
 COMMENTS: \_\_\_\_\_

CASING PROGRAM:

SIZE/WT./GR./CONN.	DEPTH SET
13 7/8" 54.4# 250 sks. Lite 200 sks. "c" (circ. 54 sks.)	546'
9 5/8" 36# J-55 700 sks. "c" interfill, 250 "c" (circ. 150 sks.)	2703'
5 1/2" 17# P-110 & N-80 2 stg. 1) 350 sks interfill 1400 sks Super H 2) 750 sks, 50/50 P&E circ. 75 sks. (note on compl report TDC 2142')	10599'



"Proposed Condition"

DV Tool 4500'

← 2 7/8" P.C. J-55 + bg.

7215'-66' old perfs sqz'd w/ 250 sks.

5 1/2" P.C. packer 7400'

Top of new perfs 7500'

7794'-7800' old perfs

8227'-34' old perfs

9250' BTM of new perfs.

P&E @ 9435'

CIBP @ 9470 w/ 35' cap

9528'-34'

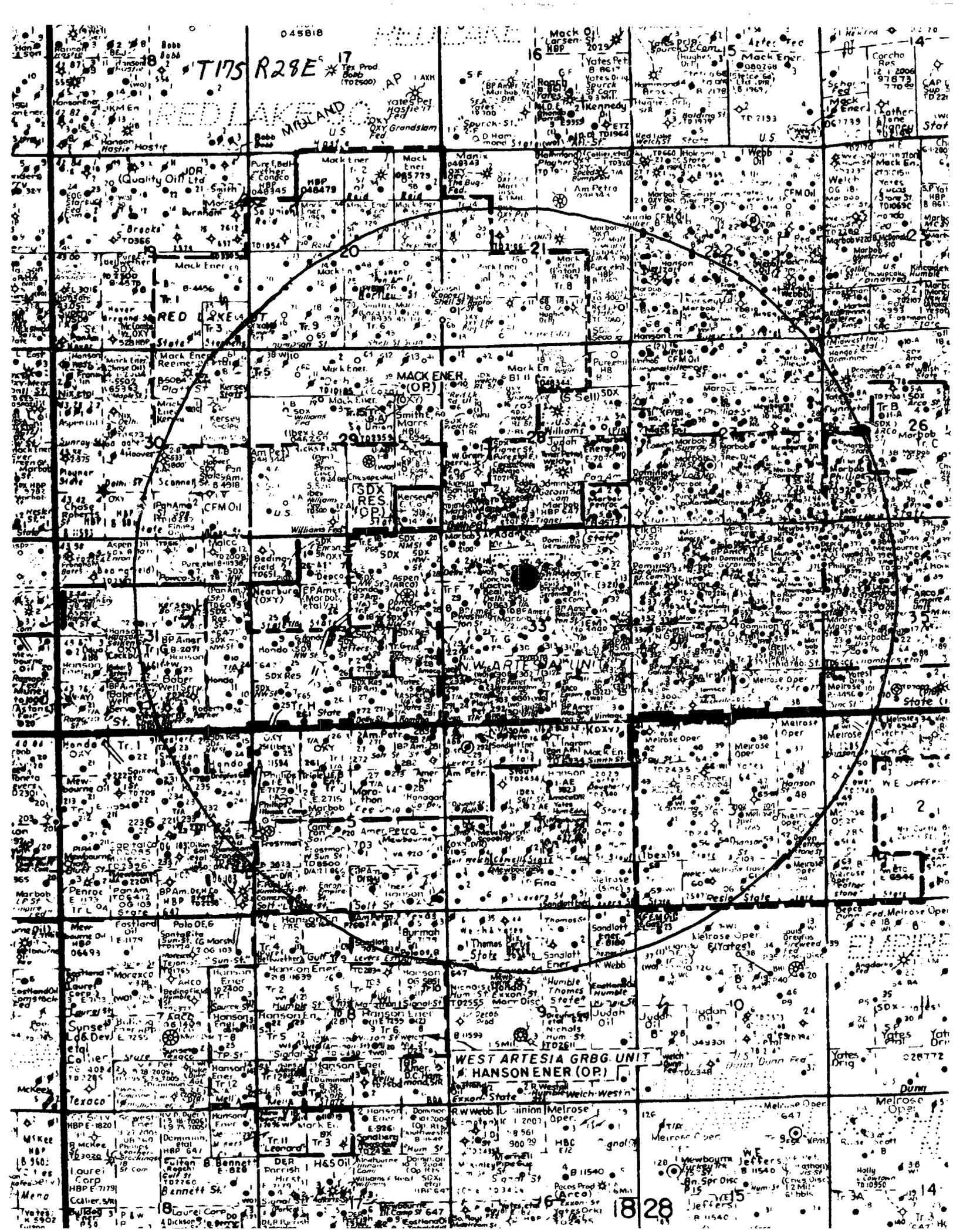
CIBP @ 10200' w/ 35' cap

10287'-95'

10519'

10599'





T175 R28E \*17

MIRLAND

MACK ENER

WEST ARTESIA GRBG UNIT

HANSON ENER (OP)

HANSON ENER (OP)

HANSON ENER (OP)

HANSON ENER (OP)

MELROSE OPER

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V1

# PI/Dwights PLUS on CD Scout Ticket

## 301 EMPIRE ABO UNIT G

State: NEW MEXICO  
 County: EDDY  
 Operator: ATLANTIC RICHFLD CO  
 API: 30015218910000 IC: 300157020376  
 Initial Class: D  
 Target Objective:  
 Final Well Class: DO  
 Status: OIL  
 Field: EMPIRE  
 Permit: on SEP 06, 1976  
 First Report Date: MAR 15, 1977  
 Projected TD: 10500 Formation: MORROW  
 Hole Direction: VERTICAL  
 IP Summary: Oil Gas Water Top Form  
 273 BPD ABO /SH/

### Location

Section, Twp., Range: 33 17 S 28 E  
 Spot Code:  
 Footage NS EW Origin: 1315 FSL 1315 FWL CONGRESS SECTION  
 Surface Remark:  
 Principal Meridian: NEW MEXICO  
 Lat/Long: 32.7874200 / -104.1846800 US  
 PBHL Footage NS EW Origin:  
 PBHL Section:  
 PBHL Remark:  
 ABHL Footage NS EW Origin:  
 ABHL Section:  
 ABHL Remark:

### Dates and Depths

Spud: SEP 16, 1976 Spud Date Code:  
 TD: 10498 on  
 LTD:  
 TVD:  
 PlugBack Depth: 6280  
 Completed: JAN 04, 1977  
 Formation @ TD: 359MSSP Name: MISSISSIPPIAN  
 Ref. Elevation: 3691 KB  
 KB. Elevation: 3691  
 Ground Elevation: 3667 GR  
 Contractor: SHARP & ASSOCIATES  
 Rig Release Date: Rig #

### IP # 001

Top Formation: ABO /SH/  
 Base Formation: ABO /SH/  
 Oil: 273 BPD Condst:  
 Gas: Water:  
 Interval: 6250 - 6270 Method: FLOWING  
 Duration of Test: 24 Hours Choke: 47/64  
 Oil: Gravity: GOR:

# PI/Dwights PLUS on CD Scout Ticket

Prod Method: PERF  
 Completed: O  
 Pressures: FTP: 100 SITP:  
 FCP: SICP:  
 FBHP: BHT: 146 Depth: 10498  
 Perforations: Interval Cnt Type Shots/Ft Top Formation  
 6250 - 6270 40 452ABO ABO /SH/

**PT # 001**

Top Formation: ABO /SH/  
 Base Formation: ABO /SH/  
 Oil: 34 BBL Condst:  
 Gas: Water:  
 Interval: 6250 - 6270 Method: SWABBING  
 Duration of Test: 10 Hours Choke:  
 Oil: Gravity: GOR:  
 Prod Method: PERF  
 Pressures: FTP: SITP:  
 FCP: SICP:  
 Perforations: 452ABO ABO /SH/  
 Perf Interval: 6250 - 6270 Shots/Ft:  
 Type of Perfs: Interval Perf Count: 40

Treatments: 100 Interval: 6250 - 6270  
 Fluid: 7000 GAL ACID Type: A  
 Additive:  
 Prop Agent:  
 Formation Break Down Pressure:  
 Average Injection Rate:  
 Stages: Remarks:

**DST # 001**

Show: S Formation: WOLFCAMP  
 Interval: 7300 - 7343 BHT  
 Choke: Top: Bottom:  
 Recovery: 1 10 FT O Rec Method: PIPE  
 Recovery: 2 230 FT PW Rec Method: PIPE  
 Mat'ls to Surface: GAS 100  
 Pressures and Times:  

Hydro		Init Flow		Final Flow		Shut-in		Open Time		Shut-in Time	
Init	Final	Init	Final	Init	Final	Init	Final	Init	Final	Init	Final
3286	3286			92	157	1935	2236		140	60	120

**DST # 002**

Show: Formation: MORROW  
 Interval: 10255 - 10300 BHT  
 Choke: Top: Bottom:  
 Recovery: 1 150 FT M Rec Method: PIPE  
 Pressures and Times:  

Hydro		Init Flow		Final Flow		Shut-in		Open Time		Shut-in Time	
Init	Final	Init	Final	Init	Final	Init	Final	Init	Final	Init	Final
4852	4852			69	69	2000	3758		105	60	180

## PI/Dwights PLUS on CD Scout Ticket

### Casing, Liner, Tubing

Casing 10 3/4 IN @ 700 w/ 410 sx  
Casing 7 5/8 IN @ 6705 w/ 1450 sx

### Formations and Logs

Log # 1 ILDL @ -  
Log # 2 AVC @ -  
Log # 3 DN @ -  
Log # 4 NEC @ -  
Log # 5 DNC @ -  
Log # 6 NE @ -

Top Formation	Measured Depth	Top TVD	Base Depth	Base TVD	Source	Lithology	Age code
ABO /SH/	5715				LOG		452
BOUGH C	7820				LOG		406
CANYON	8640				LOG		405
STRAWN	9240				LOG		404
ATOKA	9760				LOG		403
CHESTER	10466				LOG		354

### Operator Address

Street or PO Box:

City:

State, Zip: ,

Country:

Phone:

Fax:

E-Mail:

Agent Name:

Agent Code:

Agent Remark:



# Water Analysis

*BP Fresh Water Well*

Date: 1/7/2005

2401 Sivley, Artesia NM 88210  
Phone (505) 746-3140 Fax (505) 746-2293

## Analyzed For

Company	Well Name	County	State
SDX	BP Offset F/W Well	Eddy	New Mexico

## Sample Source

Sample #

BP

## Formation

Depth

Specific Gravity	1.005	SG @ 60 °F	1.005
pH	8.15	Sulfides	Not Tested
Temperature (°F)	60	Reducing Agents	Absent

## Cations

Sodium (Calc)	in Mg/L	-166	in PPM	-165
Calcium	in Mg/L	320	in PPM	318
Magnesium	in Mg/L	48	in PPM	48
Soluable Iron (FE2)	in Mg/L	0.0	in PPM	0

## Anions

Chlorides	in Mg/L	400	in PPM	398
Sulfates	in Mg/L	0	in PPM	0
Bicarbonates	in Mg/L	88	in PPM	87
Total Hardness (as CaCO3)	in Mg/L	1,000	in PPM	995
Total Dissolved Solids (Calc)	in Mg/L	690	in PPM	686
Equivalent NaCl Concentration	in Mg/L	654	in PPM	651

## Scaling Tendencles

\*Calcium Carbonate Index 28,109

*Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable*

\*Calcium Sulfate (Gyp) Index 0

*Below 500,000 Remote / 500,000 - 10,000,00 Possible / Above 10,000,000 Probable*

*\*This Calculation is only an approximation and is only valid before treatment of a well or several weeks after treatment.*

**Remarks** Chuck Morgan: Fax(432) 685-0533 Jerry Smith 748-9810

**No BF-7L precipitates.**

Report # 1718



BJ SERVICES

# Water Analysis

Date: 1/7/2005

*Injection Interval*

2401 Sivley, Artesia NM 88210

*Water Analysis*

Phone (505) 746-3140 Fax (505) 746-2293

## Analyzed For

Company	Well Name	County	State
SDX	Dominion Geronimo 33 St #2	Eddy	New Mexico

## Sample Source

## Sample #

Dominion

## Formation

Wolfcamp

## Depth

Specific Gravity	1.075	SG @ 60 °F	1.075
pH	8.42	Sulfides	Not Tested
Temperature (°F)	58	Reducing Agents	Present

## Cations

Sodium (Calc)	in Mg/L	10,720	in PPM	9,976
Calcium	in Mg/L	4,400	in PPM	4,095
Magnesium	in Mg/L	960	in PPM	893
Soluble Iron (FE2)	in Mg/L	0.0	in PPM	0

## Anions

Chlorides	in Mg/L	26,800	in PPM	24,940
Sulfates	in Mg/L	0	in PPM	0
Bicarbonates	in Mg/L	420	in PPM	391
Total Hardness (as CaCO3)	in Mg/L	15,000	in PPM	13,959
Total Dissolved Solids (Calc)	in Mg/L	43,300	in PPM	40,294
Equivalent NaCl Concentration	in Mg/L	40,697	in PPM	37,872

## Scaling Tendencles

\*Calcium Carbonate Index 1,846,592

Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable

\*Calcium Sulfate (Gyp) Index 0

Below 500,000 Remote / 500,000 - 10,000,00 Possible / Above 10,000,000 Probable

*\*This Calculation is only an approximation and is only valid before treatment of a well or several weeks after treatment.*

**Remarks** Chuck Morgan: Fax(432) 685-0533 Jerry Smith 748-9810

**Severe BF-7L precipitates.**

Report # 1719

Attachment D  
Produced H<sub>2</sub>O Sample  
**Pro-Kem, Inc.**

## WATER ANALYSIS REPORT

JUL 14 1999

### SAMPLE

Oil Co. : SDX Resources  
Lease : N.W. St.  
Well No. : # 1  
Lab No. : F:\ANALYSES\Jul0999.001

Sample Loc. :  
Date Analyzed: 09-July-1999  
Date Sampled : 01-July-1999

### ANALYSIS

- |    |  |  |        |
|----|--|--|--------|
| 1. | pH   |  | 5.950  |
| 2. | Specific Gravity 60/60 F.                  |  | 1.118  |
| 3. | CaCO <sub>3</sub> Saturation Index @ 80 F. |  | -0.029 |
|    | @ 140 F.                                   |  | +0.871 |

#### Dissolved Gasses

		MG/L	EQ. WT.	*MEQ/L
4.	Hydrogen Sulfide	10		
5.	Carbon Dioxide	160		
6.	Dissolved Oxygen	Not Determined		

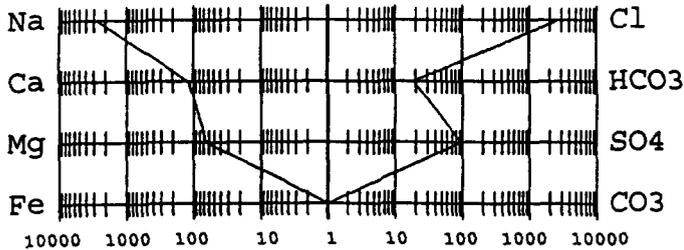
#### Cations

7.	Calcium (Ca <sup>++</sup> )	2,341	/	20.1 =	116.47
8.	Magnesium (Mg <sup>++</sup> )	741	/	12.2 =	60.74
9.	Sodium (Na <sup>+</sup> ) (Calculated)	60,071	/	23.0 =	2,611.78
10.	Barium (Ba <sup>++</sup> )	Not Determined			

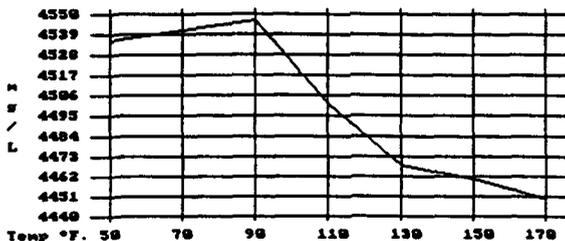
#### Anions

11.	Hydroxyl (OH <sup>-</sup> )	0	/	17.0 =	0.00
12.	Carbonate (CO <sub>3</sub> <sup>=</sup> )	0	/	30.0 =	0.00
13.	Bicarbonate (HCO <sub>3</sub> <sup>-</sup> )	1,098	/	61.1 =	17.97
14.	Sulfate (SO <sub>4</sub> <sup>=</sup> )	4,500	/	48.8 =	92.21
15.	Chloride (Cl <sup>-</sup> )	94,979	/	35.5 =	2,675.46
16.	Total Dissolved Solids	163,730			
17.	Total Iron (Fe)	7	/	18.2 =	0.38
18.	Total Hardness As CaCO <sub>3</sub>	8,898			
19.	Resistivity @ 75 F. (Calculated)	0.028 /cm.			

#### LOGARITHMIC WATER PATTERN \*meq/L.



#### Calcium Sulfate Solubility Profile



#### PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT. X	*meq/L =	mg/L.
Ca (HCO <sub>3</sub> ) <sub>2</sub>	81.04	17.97	1,456
CaSO <sub>4</sub>	68.07	92.21	6,277
CaCl <sub>2</sub>	55.50	6.28	349
Mg (HCO <sub>3</sub> ) <sub>2</sub>	73.17	0.00	0
MgSO <sub>4</sub>	60.19	0.00	0
MgCl <sub>2</sub>	47.62	60.74	2,892
NaHCO <sub>3</sub>	84.00	0.00	0
NaSO <sub>4</sub>	71.03	0.00	0
NaCl	58.46	2,608.44	152,490

\*Milli Equivalents per Liter

This water is somewhat corrosive due to the pH observed on analysis. The corrosivity is increased by the content of mineral salts, and the presence of H<sub>2</sub>S, CO<sub>2</sub> in solution.

OFFSET OPERATORS

**BP America** (Arco Petroleum)  
501 Westlake Park Blvd  
Houston, TX 77079-2604

**Yates Petroleum**  
105 S 4<sup>th</sup> St  
Yates Bldg  
Artesia, NM 88210-2177

**Aspen**  
PO Box 2674  
Hobbs, NM 88240

**Dominion**  
14000 Quail Springs Pkw, Ste 600  
Oklahoma City, OK 73134-2600

OFFSET OPERATORS ARE BEING NOTIFIED. PROOF OF  
NOTIFICATION IS FORTHCOMING.

## **LEGAL NOTICE**

### **NOTICE OF APPLICATION FOR WATER DISPOSAL WELL PERMIT**

SDX Resources, Inc., located at 511 W. Ohio St., Ste 601, Midland, TX 79701, mailing address PO Box 5061, Midland, TX 79704, Contact: Chuck Morgan 432/685-1761 is seeking administrative approval from the New Mexico Oil Conservation Division to convert the Geronimo 33 State #1 well located in Sec 33, T17S, R12E, Eddy Co., New Mexico to a Disposal well. The proposed zone is in the Penn (Lower Wolfcamp, Cisco Canyon) formation. SDX Resources, Inc. intends to inject a maximum of 10000 barrels of produced formation water per day at a maximum pressure of 1500 psi. Interested parties must file objections or request for hearing with the Oil Conservation Division, 2040 S. Pacheco, Santa Fe, NM 87505 within 15 days of this notice.

THIS NOTICE WILL BE PLACED IN THE ARTESIA DAILY PRESS. NOTORIZED COPY WILL BE SENT AS SOON AS IT IS RECEIVED.



**SDX Resources, Inc.**  
P.O. Box 5061  
MIDLAND, TX 79704  
TEL: (432) 685-1761 FAX: (432) 685-0533  
TOLL FREE: (800) 344-1761

February 15, 2005

William V. Jones  
NMOCD  
1220 S. St Francis Dr  
Santa Fe, NM 87505

Re: Geronimo 33 State #1  
Eddy Co., NM

Mr. Jones:

Enclosed is the Copy of Publication Notice for the referenced well. It was published in the Artesia Daily Press on February 4, 2005.

2005 FEB 18 PM 12 19

Sincerely,



Bonnie Atwater  
Regulatory Tech

enclosure

# Affidavit of Publication

NO. 18765

STATE OF NEW MEXICO

County of Eddy:

Gary D. Scott being duly

sworn, says: That he is the Publisher of The  
Artesia Daily Press, a daily newspaper of general  
circulation, published in English at Artesia, said county  
and county and state, and that the here to attached

### Legal Notice

was published in a regular and entire issue of the said  
Artesia Daily Press, a daily newspaper duly qualified  
for that purpose within the meaning of Chapter 167 of  
the 1937 Session Laws of the state of New Mexico for  
1 consecutive weeks/days on the same  
day as follows:

First Publication February 4 2005

Second Publication \_\_\_\_\_

Third Publication \_\_\_\_\_

Fourth Publication \_\_\_\_\_

Subscribed and sworn to before me this

4th Day February 2005

Barbara Ann Beers  
Notary Public, Eddy County, New Mexico

My Commission expires September :23, 2007

# Copy of Publication:

### LEGAL NOTICE

#### LEGAL NOTICE NOTICE OF APPLICATION FOR WATER DISPOSAL WELL PERMIT

SDX Resources, Inc., lo-  
cated at 511 W. Ohio St.,  
Ste 601, Midland, TX  
79701, mailing address  
PO Box 5061, Midland,  
TX 79704, Contact:  
Chuck Morgan  
432/685-1761 is seeking  
administrative approval  
from the New Mexico Oil  
Conservation Division to  
convert the Geronimo 33  
State #1 well located in  
Sec 33, T17S, R12E,  
Eddy Co., New Mexico to  
a Disposal well. The  
pro-  
posed zone is in the  
Penn (Lower  
Wolfcamp, Cisco  
Canyon) formation.

### LEGAL NOTICE

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cisco, Santa Fe, NM 87505  
within 15 days of this no-  
tice.  
Published in the Artesia  
Daily Press, Artesia,  
N.M. February 4, 2005.  
Legal 18765

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P.O. Box 5061  
MIDLAND, TX 79704  
TEL: (432) 685-1761 FAX: (432) 685-0533  
TOLL FREE: (800) 344-1761

RECEIVED

February 3, 2005

FEB 09 2005

OIL CONSERVATION  
DIVISION

William V. Jones  
NMOCD  
1220 S St Francis Dr  
Santa Fe, NM 87505

Re: C-108 Application  
Geronimo 33 St #1  
Eddy Co., NM

Mr. Jones:

Attached are the items you requested by email from Chuck Morgan on the referenced C-108 application.

1. Legal Notice correcting the OCD's address. The notice will be published in the Artesia Daily Press on Friday, February 4, 2005. I will forward the notarized copy of the publication to you as soon as I receive it.
2. Copy of Certified Mail Receipts showing notification to Offset Operators and Surface Owner.

Sincerely,



Bonnie Atwater  
Regulatory Tech

## **LEGAL NOTICE**

### **NOTICE OF APPLICATION FOR WATER DISPOSAL WELL PERMIT**

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TO BE PUBLISHED IN THE ARTESIA DAILY PRESS ON FRIDAY, 2/4/05.

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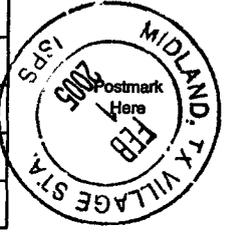
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