

DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☒ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify _____

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☒ Notification and/or Concurrent Approval by BLM or SLO
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

Oil Conservation Division
Case No. 2
Exhibit No.

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Robin Askew
Print or Type Name

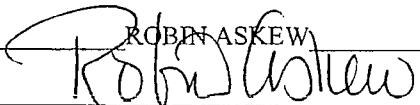
Robin Askew
Signature

Regulatory Clerk
Title

5-12-0
Date

robina@chienergyinc.com
e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance _____ ☒ Disposal _____ Storage
Application qualifies for administrative approval? _____ ☒ Yes _____ No
- II. OPERATOR: CHI OPERATING, INC.
ADDRESS: P.O. BOX 1799, MIDLAND, TEXAS 79702
CONTACT PARTY: GARY WOMACK PHONE: 432-685-5001
- 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: _____
- 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.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
 5. 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 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 total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- *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 injection or disposal well showing location of wells and dates samples were taken.
- 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: ROBINA ASKEW TITLE: REGULATORY CLERK
SIGNATURE:  DATE: 5-4-2009
E-MAIL ADDRESS: robina@chienergyinc.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: _____

VII. DATA SHEET: PROPOSED OPERATIONS

1. Proposed average and maximum daily rate and volume of fluids to be injected;
4000 BWPD
2. The system is closed or open;
CLOSED
3. Proposed average and maximum injection pressure;
1400#
4. Sources and an appropriate analysis of injection fluid and compatibility with the Receiving formation if other than re-injected produced water;
WE WILL BE RE-INJECTING PRODUCED WATER
5. 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;
N/A

VIII. GEOLOGICAL DATA

1. Lithologic Detail; **SANDSTONE**
2. Geological Name; **BENSON DELAWARE**
3. Thickness; **900'**
4. Depth; **4300-5500'**

IX. PROPOSED STIMULATION PROGRAM

1. **5,000GAL ACID, 30,000# SAND**

X. LOGS AND TEST DATA

1. Well data will be filed with OCD.

XI. ANALYSIS OF FRESH WATER WELLS

1. To be sent when completed.

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.

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, 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.

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

XII. AFFIRMATIVE STATEMENT

Re: MUNCHKIN 14W, 15W, 16W, 17W, 18W, 19W, 20W, 21W, 22W

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

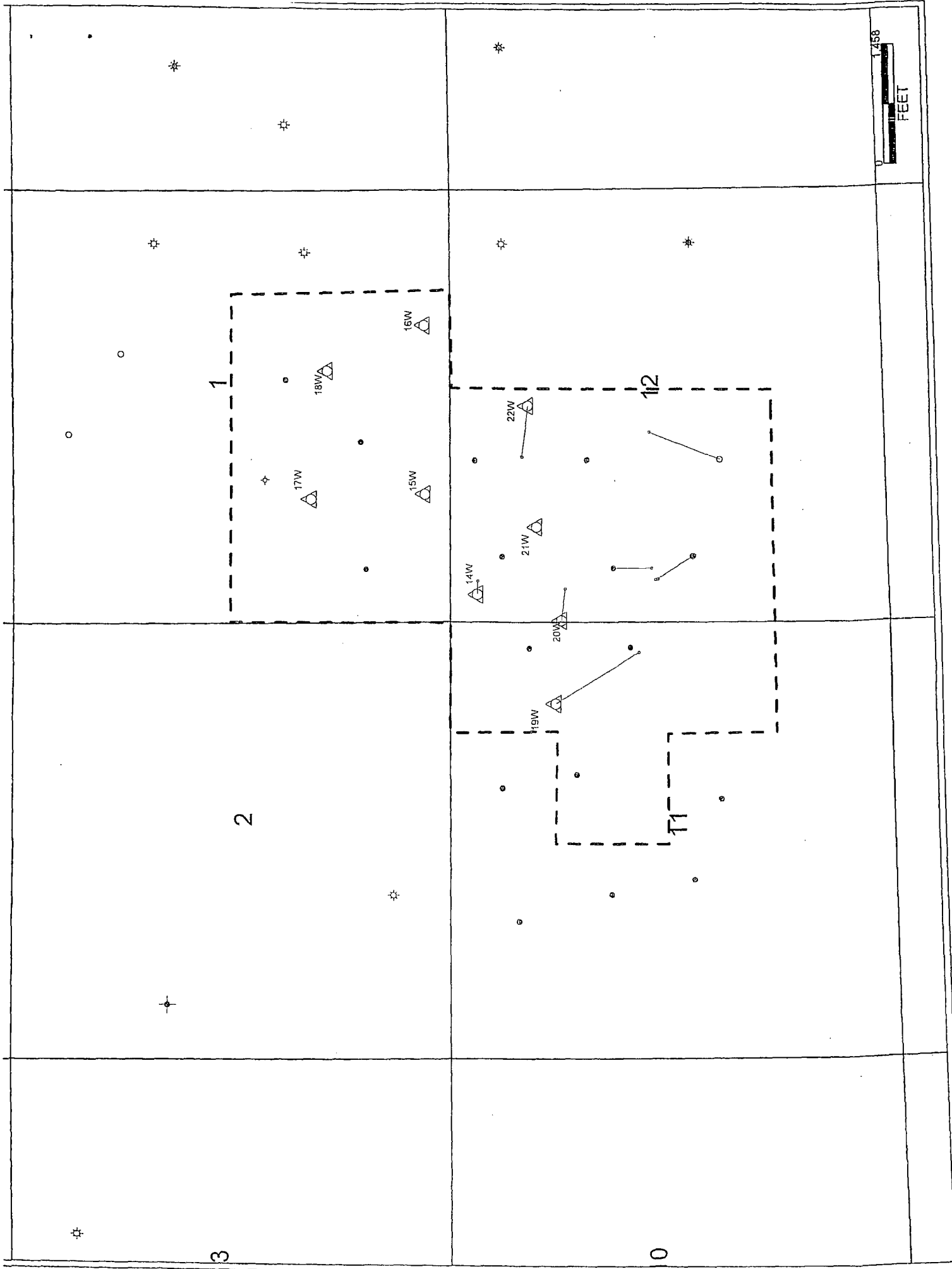
Date: _____

5/7/09

Chi Operating, Inc.



Gary Womack, Engineer



INJECTION WELL DATA SHEET

OPERATOR: _____ CHI OPERATING, INC. _____

WELL NAME & NUMBER: _____ MUNCHKIN #22W _____

900' FNL & 1980' FWL (SHL)

WELL LOCATION: _____ 930' FNL & 2620' FWL (BHL) _____

FOOTAGE LOCATION

UNIT LETTER _____ C _____ SECTION _____ 12 _____ 19S _____ TOWNSHIP _____ 30E _____ RANGE _____

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: _____ 17 1/2" _____ Casing Size: _____ 13 3/8" 48# J55 _____

Cemented with: _____ + 400 _____ sx. _____ or _____ ft³ _____

Top of Cement: _____ SURFACE _____ Method Determined: _____

Intermediate Casing

Hole Size: _____ 11" _____ Casing Size: _____ 8 5/8" 32# J55 _____

Cemented with: _____ + 525 _____ sx. _____ or _____ ft³ _____

Top of Cement: _____ SURFACE _____ Method Determined: _____

Production Casing

Hole Size: _____ 7 7/8" _____ Casing Size: _____ 5 1/2" _____

Cemented with: _____ 2 STAGE _____ sx. _____ or _____ ft³ _____

Top of Cement: _____ SURFACE _____ Method Determined: _____

Total Depth: _____ 5500' _____

Injection Interval

_____ 4300 _____ feet to _____ 5200 _____

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2.875 Lining Material: CEMENTType of Packer: BAKER LOK-SETPacker Setting Depth: 4300Other Type of Tubing/Casing Seal (if applicable): Additional Data

1. Is this a new well drilled for injection? X Yes No

If no, for what purpose was the well originally drilled?

2. Name of the Injection Formation: DELAWARE

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

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.

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

QUEEN 2914' (OVERLYING)

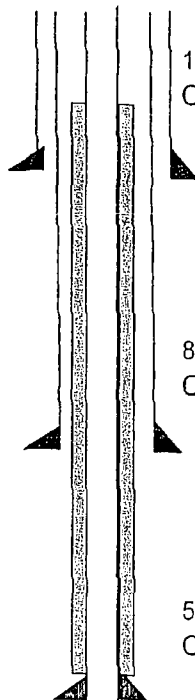
BONE SPRING LS 6090' (UNDERLYING)

Munchkin WD #22

Sec. 12-19S-30E

900' FNL & 1980' FWL (SHL)

930' FNL & 2620' FWL (BHL)

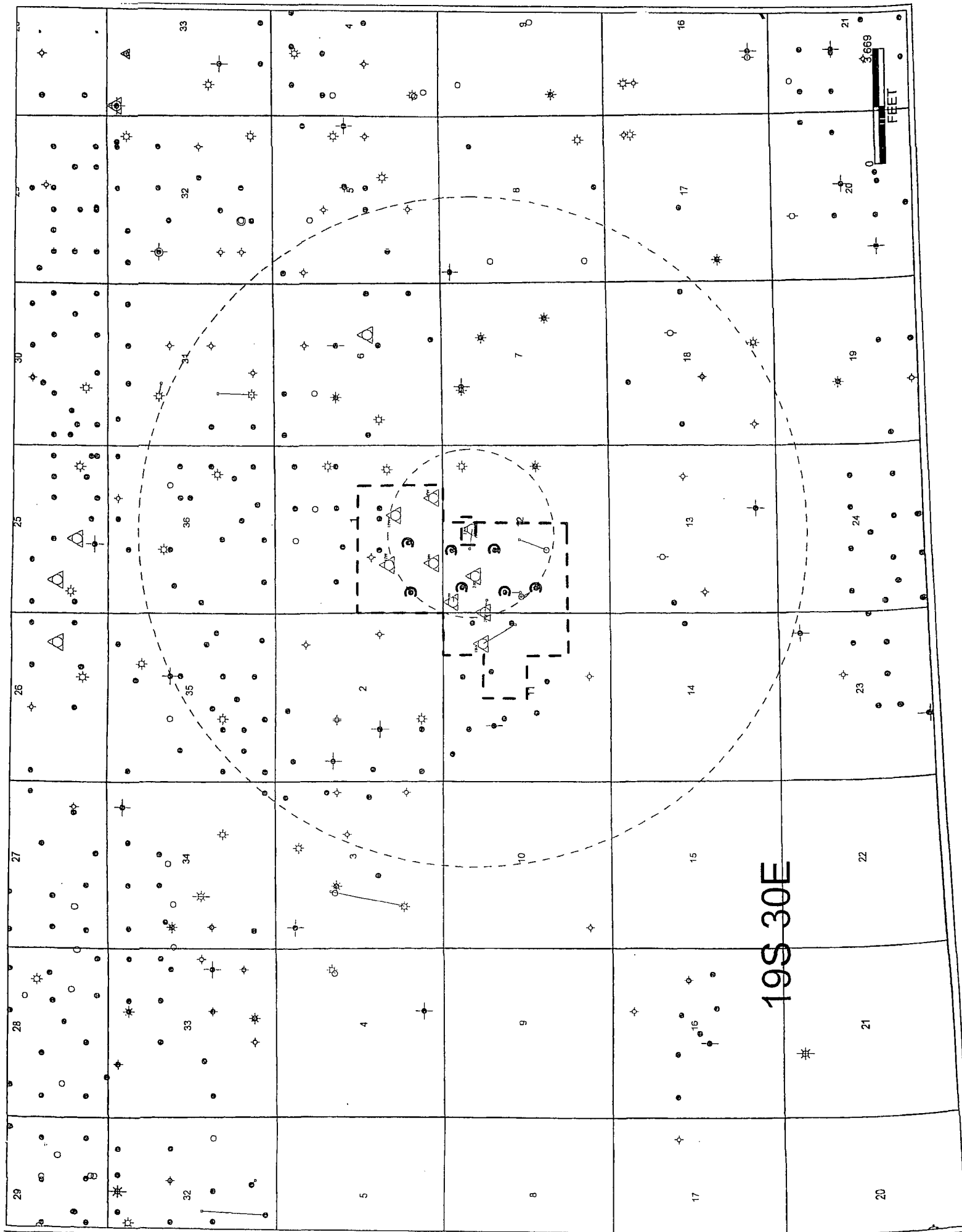


13 3/8" 48# J55 @ ± 500'
Cmtd w/± 400sks

8 5/8" 32# J55 @ ± 2150'
Cmtd w/± 525sks

5 1/2" 15.5# J55 @ ± 5500'
Cmtd w/2 stage





Wells in review area that penetrated injection zone

WELL NAME	WELL TYPE	CONSTRUCTION	DATE DRILLED	LOCATION	DEPTH	COMPLETION
Munchkin Fed. #2	Active oil well	9 5/8" J55/36# @ 483', 3182' 5 1/2" J55/17# @ 5350'	5/12/2001	1-19S-30E 990' FSL & 660' FWL	5350'	10/16/2002
Munchkin Fed. #4	Active oil well	9 5/8" J55/36# @ 506' 5 1/2" J55/17# @ 5526'	1/21/2004	12-19S-30E 330' FNL & 1980' FWL	5526'	2/26/2004
Munchkin Fed. #6	Active oil well	9 5/8" J55/36# @ 510' 5 1/2" J55/17# @ 5400'	1/1/2005	12-19S-30E 660' FNL & 8100' FWL	5400'	2/22/2005
Munchkin Fed. #5	Active oil well	9 5/8" J55/36# @ 525' 5 1/2" J55/15.5 @ 5400'	12/17/2004	12-19S-30E 1700' FNL & 1980' FWL	5400'	2/4/2005
Munchkin Fed. #8	Active oil well	13 3/8" J55 48# @ 511' 8 5/8" J55 24# @ 1910' 5 1/2" J55 15.5# @ 5351'	4/15/2006	12-19S-30E 2500' FNL & 660' FWL (STMD 5351' 1980' FNL & 660' FWL (TVD 5299'	STMD 5351'	7/15/2006
Munchkin Fed. #12	Active oil well	13 3/8" J55 48# @ 511' 8 5/8" J55 24# @ 2050' 5 1/2" J55 15.5# @ 5415'	9/19/2007	12-19S-30E 2547' FNL & 519' FWL (STMD 5415' 2310' FSL & 800' FWL (B)	STMD 5415'	11/16/2007
Munchkin Fed. #1	Active oil well	9 5/8" J55/36# @ 494' 5 1/2" J55/15.5# @ 6707'	1/25/2001	1-19S-30E 1060' FSL & 2210' FWL	6707'	2/16/2000

INJECTION WELL DATA SHEET

OPERATOR: _____ CHI OPERATING, INC. _____

WELL NAME & NUMBER: _____ MUNCHKIN #21W _____

WELL LOCATION: _____ 1050' FNL & 1150' FWL (BHL) _____ D _____ 12 _____ 19S _____ 30E _____
FOOTAGE LOCATION _____ UNIT LETTER _____ SECTION _____ TOWNSHIP _____ RANGE _____WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: _____ 17 1/2" _____ Casing Size: _____ 13 3/8" 48# J55 _____

Cemented with: _____ + 400 _____ sx. _____ or _____ ft³ _____

Top of Cement: _____ SURFACE _____ Method Determined: _____

Intermediate Casing

Hole Size: _____ 11" _____ Casing Size: _____ 8 5/8" 32# J55 _____

Cemented with: _____ + 525 _____ sx. _____ or _____ ft³ _____

Top of Cement: _____ SURFACE _____ Method Determined: _____

Production Casing

Hole Size: _____ 7 7/8" _____ Casing Size: _____ 5 1/2" _____

Cemented with: _____ 2 STAGE _____ sx. _____ or _____ ft³ _____

Top of Cement: _____ SURFACE _____ Method Determined: _____

Total Depth: _____ 5500' _____

Injection Interval

_____ 4300 _____ feet to _____ 5200 _____

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2.875 Lining Material: CEMENT
Type of Packer: BAKER LOK-SET
Packer Setting Depth: 4300
Other Type of Tubing/Casing Seal (if applicable):

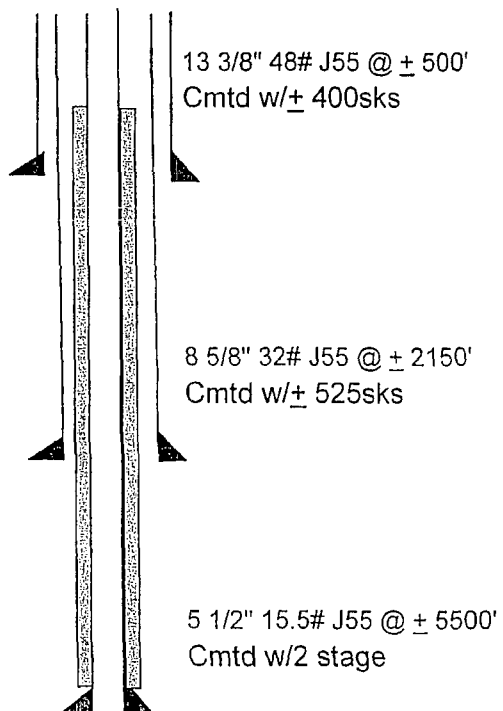
Additional Data

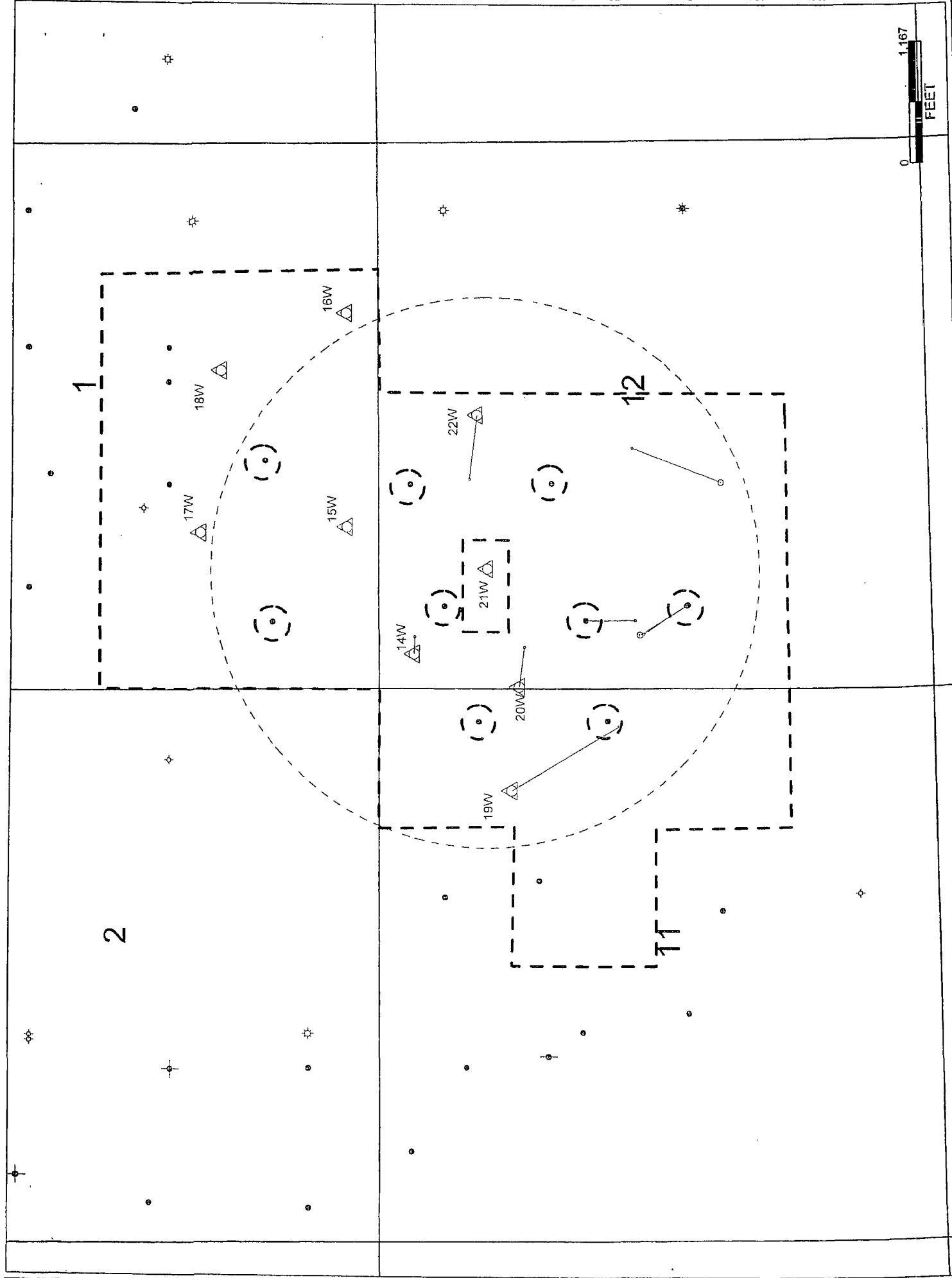
1. Is this a new well drilled for injection? X Yes No
If no, for what purpose was the well originally drilled?
2. Name of the Injection Formation: DELAWARE
3. Name of Field or Pool (if applicable):
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:
QUEEN 2914' (OVERLYING)
BONE SPRING LS 6090' (UNDERLYING)

Munchkin WD #21

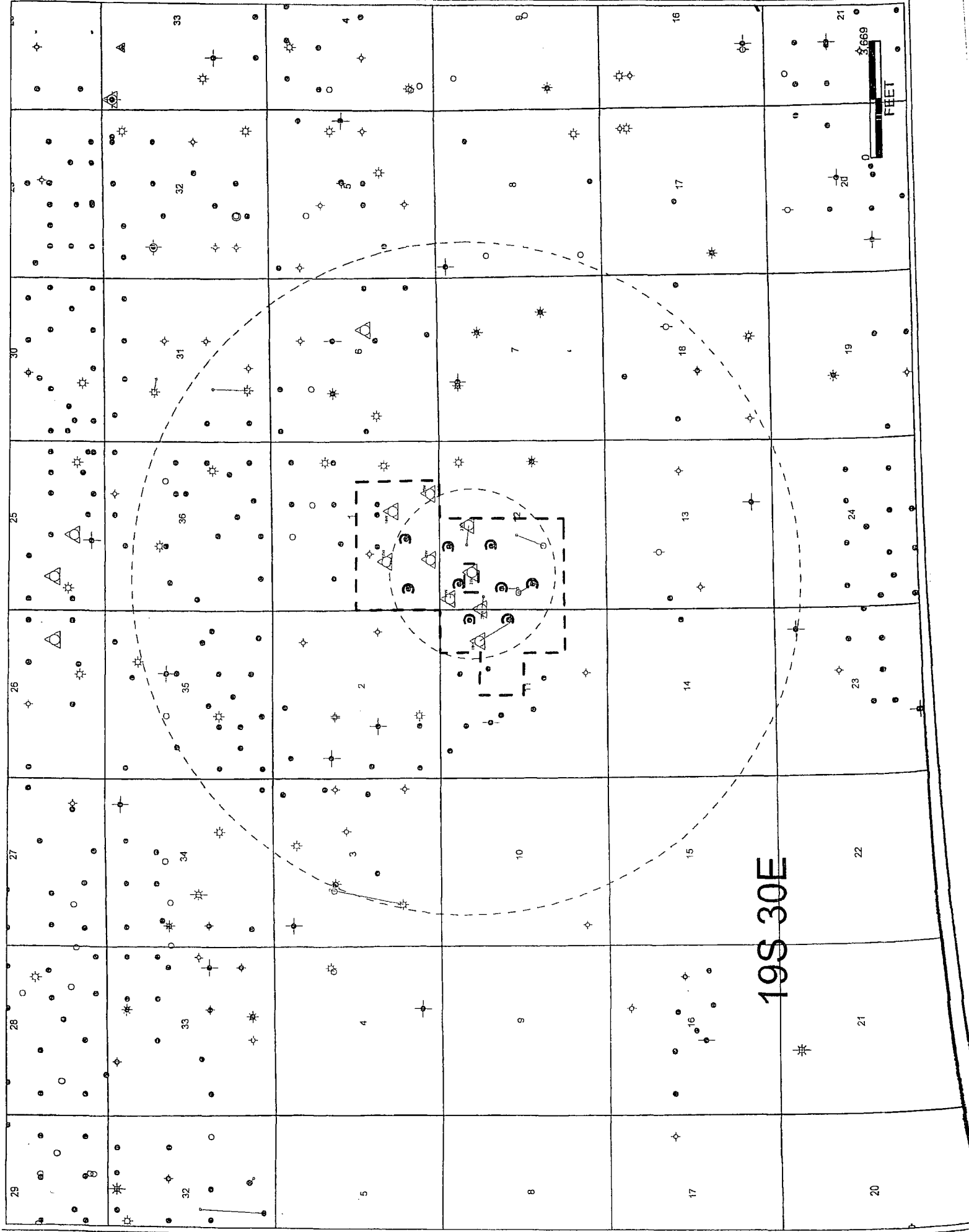
Sec. 12-19S-30E

1050' FNL & 1150' FWL





1,167
0
FEET



19S 30E

3,669
FEET

Wells in review area that penetrated injection zone

WELL NAME	WELL TYPE	CONSTRUCTION	DATE DRILLED	LOCATION	DEPTH	COMPLETION
Munchkin Fed. #2	Active oil well	9 5/8" J55/36# @ 483', 3182' 5 1/2" J55/17# @ 5350'	5/12/2001	1-19S-30E 990' FSL & 660' FWL	5350'	10/16/2002
Munchkin Fed. #4	Active oil well	9 5/8" J55/36# @ 506' 5 1/2" J55/17# @ 5526'	1/21/2004	12-19S-30E 330' FNL & 1980' FWL	5526'	2/26/2004
Munchkin Fed. #6	Active oil well	9 5/8" J55/36# @ 510' 5 1/2" J55/17# @ 5400'	1/1/2005	12-19S-30E 660' FNL & 8100' FWL	5400'	2/22/2005
Munchkin Fed. #5	Active oil well	9 5/8" J55/36# @ 525' 5 1/2" J55/15.5 @ 5400'	12/17/2004	12-19S-30E 1700' FNL & 1980' FWL	5400'	2/4/2005
Munchkin Fed. #9	Active oil well	9 5/8" J55/36# @ 497' 5 1/2" J55/17 @ 5233'	5/4/2006	11-19S-30E 990' FNL & 300' FEL	5233'	8/18/2006
Munchkin Fed. #8	Active oil well	13 3/8" J55 48# @ 511' 8 5/8" J55 24# @ 1910' 5 1/2" J55 15.5# @ 5351'	4/15/2006	12-19S-30E 2500' FNL & 660' FWL (STMD 5351' 1980' FNL & 660' FWL (TVD 5299'	5351'	7/15/2006
Munchkin Fed. #10	Active oil well	9 5/8" J55/36# @ 519' 5 1/2" J55/17 @ 4078' 5 1/2" J55 15.5# @ 5258'	8/31/2006	11-19S-30E 220' FNL & 330' FEL	5258'	11/17/2006
Munchkin Fed. #12	Active oil well	13 3/8" J55 48# @ 511' 8 5/8" J55 24# @ 2050' 5 1/2" J55 15.5# @ 5415'	9/19/2007	12-19S-30E 2547' FNL & 519' FWL (STMD 5415' 2310' FSL & 800' FWL (B)	5415'	11/16/2007
Munchkin Fed. #1	Active oil well	9 5/8" J55/36# @ 494' 5 1/2" J55/15.5# @ 6707'	1/25/2001	1-19S-30E 1060' FSL & 2210' FWL	6707'	2/16/2000

INJECTION WELL DATA SHEET

OPERATOR: _____ CHI OPERATING, INC. _____

WELL NAME & NUMBER: _____ MUNCHKIN #20W _____

1400' FNL & 400' FWL (SHL)

WELL LOCATION: _____ 1350' FNL & 20' FWL (BHL) _____ D _____ 12 _____ 19S _____ 30E _____
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: _____ 17 1/2" _____ Casing Size: _____ 13 3/8" 48# J55 _____

Cemented with: _____ + 400 _____ sx. _____ or _____ ft³

Top of Cement: _____ SURFACE _____ Method Determined: _____

Intermediate Casing

Hole Size: _____ 11" _____ Casing Size: _____ 8 5/8" 32# J55 _____

Cemented with: _____ + 525 _____ sx. _____ or _____ ft³

Top of Cement: _____ SURFACE _____ Method Determined: _____

Production Casing

Hole Size: _____ 7 7/8" _____ Casing Size: _____ 5 1/2" _____

Cemented with: _____ 2 STAGE _____ sx. _____ or _____ ft³

Top of Cement: _____ SURFACE _____ Method Determined: _____

Total Depth: _____ 5500' _____

Injection Interval

_____ 4300 _____ feet to _____ 5200 _____

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2.875 Lining Material: CEMENTType of Packer: BAKER LOK-SETPacker Setting Depth: 4300

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

Additional Data

1. Is this a new well drilled for injection? X Yes No

If no, for what purpose was the well originally drilled? _____

2. Name of the Injection Formation: DELAWARE

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

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. _____

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

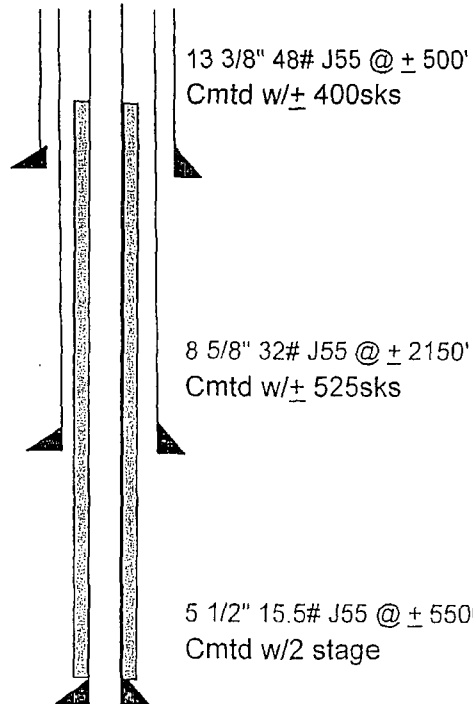
QUEEN 2914' (OVERLYING)BONE SPRING LS 6090' (UNDERLYING)

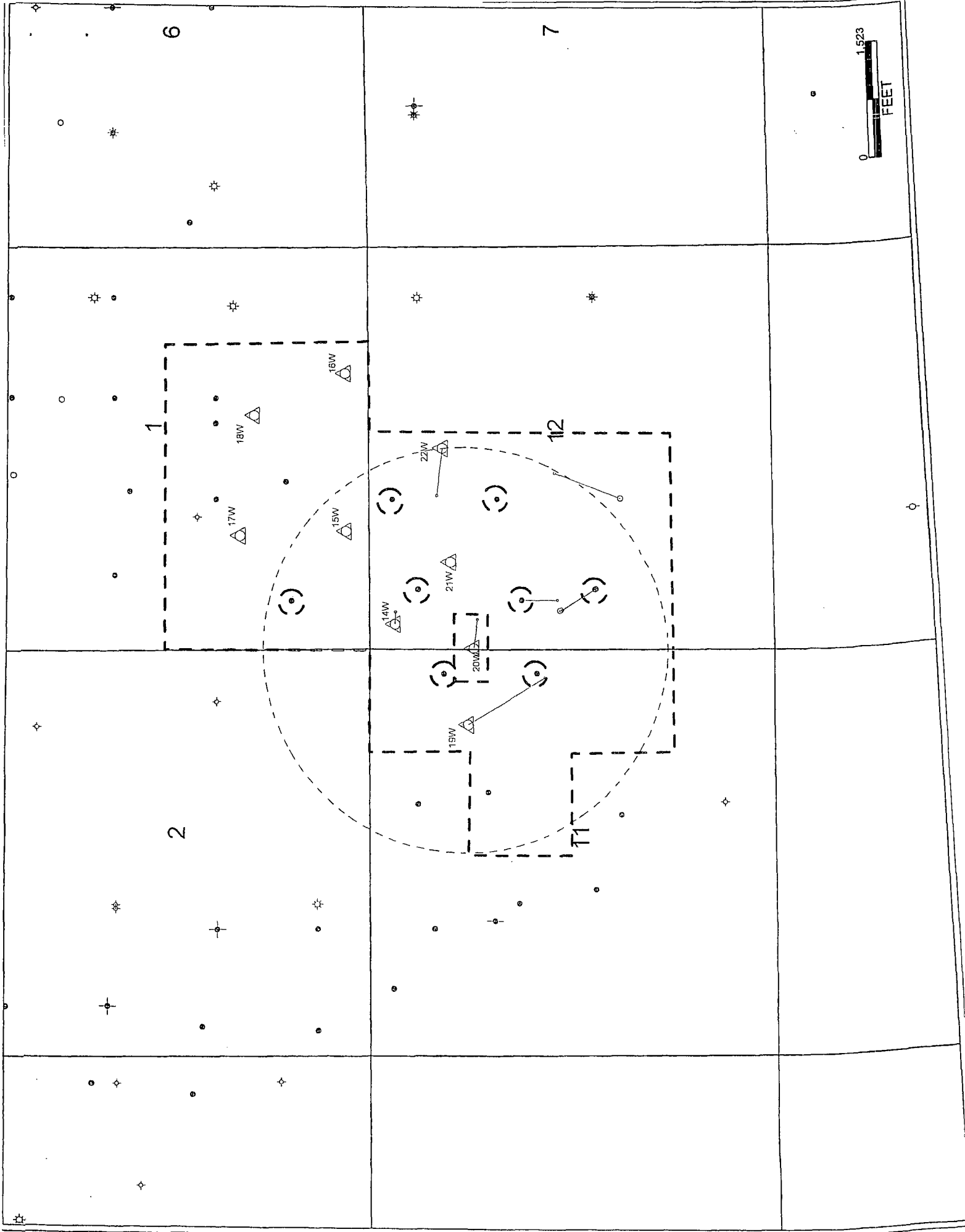
Munchkin WD #20

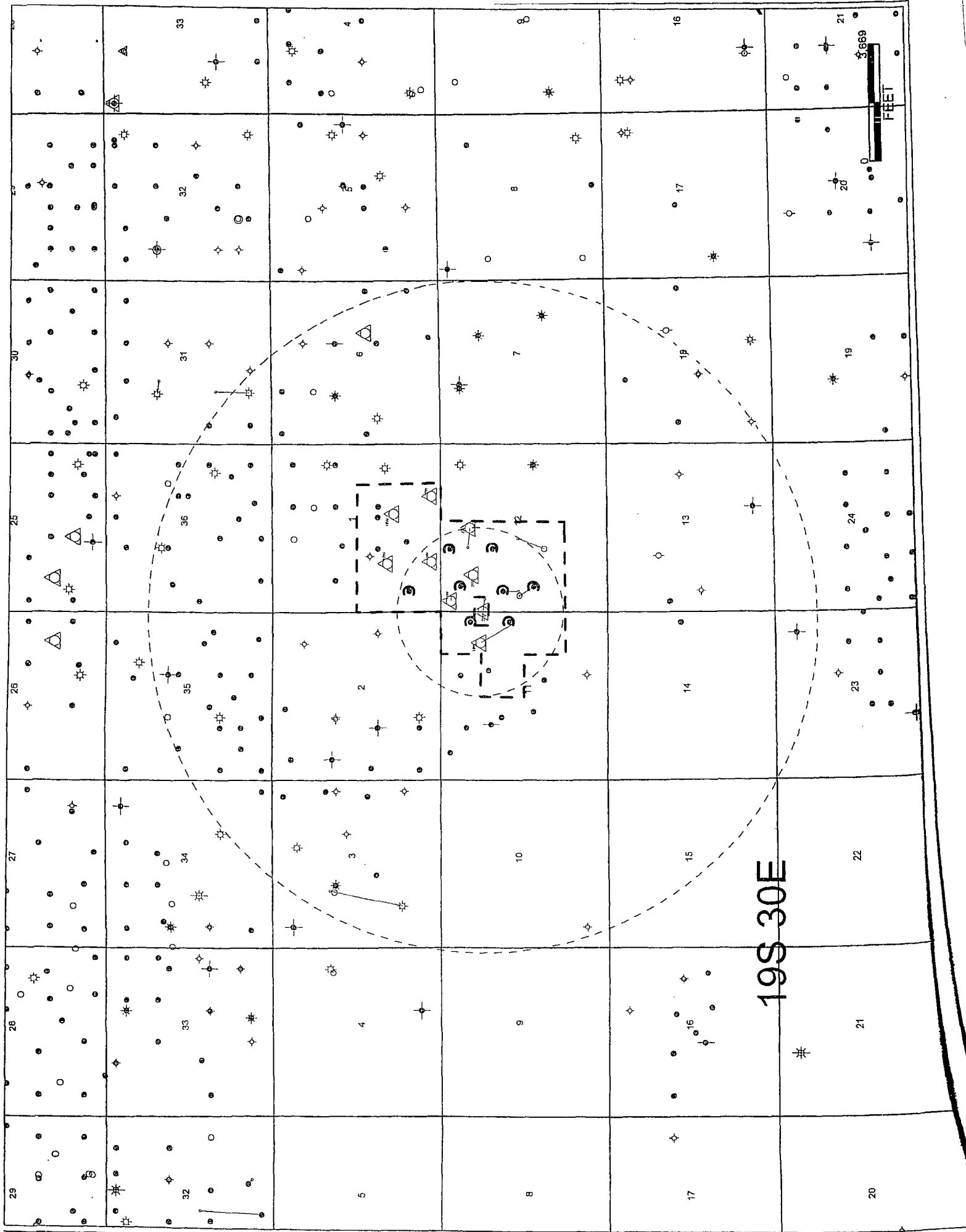
Sec. 12-19S-30E

1400FNL & 400' FWL (SHL)

1350' FNL & 20' FWL (BHL)







Wells in review area that penetrated injection zone

WELL NAME	WELL TYPE	CONSTRUCTION	DATE DRILLED	LOCATION	DEPTH	COMPLETION
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Munchkin Fed. #6	Active oil well	9 5/8" J55/36# @ 510' 5 1/2" J55/17# @ 5400'	1/1/2005	12-19S-30E 660' FNL & 8100' FWL	5400'	2/22/2005
Munchkin Fed. #5	Active oil well	9 5/8" J55/36# @ 525' 5 1/2" J55/15.5 @ 5400'	12/17/2004	12-19S-30E 1700' FNL & 1980' FWL	5400'	2/4/2005
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Munchkin Fed. #8	Active oil well	13 3/8" J55 48# @ 511' 8 5/8" J55 24# @ 1910' 5 1/2" J55 15.5# @ 5351'	4/15/2006	12-19S-30E 2500'FNL & 660'FWL (S 1980' FNL & 660' FWL (TVD 5299'	STMD 5351' TVD 5299'	7/15/2006
Munchkin Fed. #10	Active oil well	9 5/8" J55/36# @ 519' 5 1/2" J55/17 @ 4078' 5 1/2" J55 15.5# @ 5258'	8/31/2006	11-19S-30E 220' FNL & 330' FEL	5258'	11/17/2006
Munchkin Fed. #12	Active oil well	13 3/8" J55 48# @ 511' 8 5/8" J55 24# @ 2050' 5 1/2" J55 15.5# @ 5415'	9/19/2007	12-19S-30E 2547'FNL & 519'FWL (S 2310' FSL & 800' FWL (B)	STMD 5415'	11/16/2007

INJECTION WELL DATA SHEET

OPERATOR: CHI OPERATING, INC.WELL NAME & NUMBER: MUNCHKIN #19W2300' FNL & 400' FEL (SHL)WELL LOCATION: 1300' FNL & 1000' FEL (BHL)FOOTAGE LOCATIONUNIT LETTER ASECTION 11TOWNSHIP 19SRANGE 30EWELLBORE SCHEMATICWELL CONSTRUCTION DATASurface CasingHole Size: 17 1/2" Casing Size: 13 3/8" 48# J55Cemented with: + 400 sx. or ft³Top of Cement: SURFACE Method Determined: Intermediate CasingHole Size: 11" Casing Size: 8 5/8" 32# J55Cemented with: + 525 sx. or ft³Top of Cement: SURFACE Method Determined: Production CasingHole Size: 7 7/8" Casing Size: 5 1/2"Cemented with: 2 STAGE sx. or ft³Top of Cement: SURFACE Method Determined: Total Depth: 5500'Injection Interval4300 feet to 5200

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2.875 Lining Material: CEMENTType of Packer: BAKER LOK-SETPacker Setting Depth: 4300

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

Additional Data

1. Is this a new well drilled for injection? X Yes No

If no, for what purpose was the well originally drilled? _____

2. Name of the Injection Formation: DELAWARE

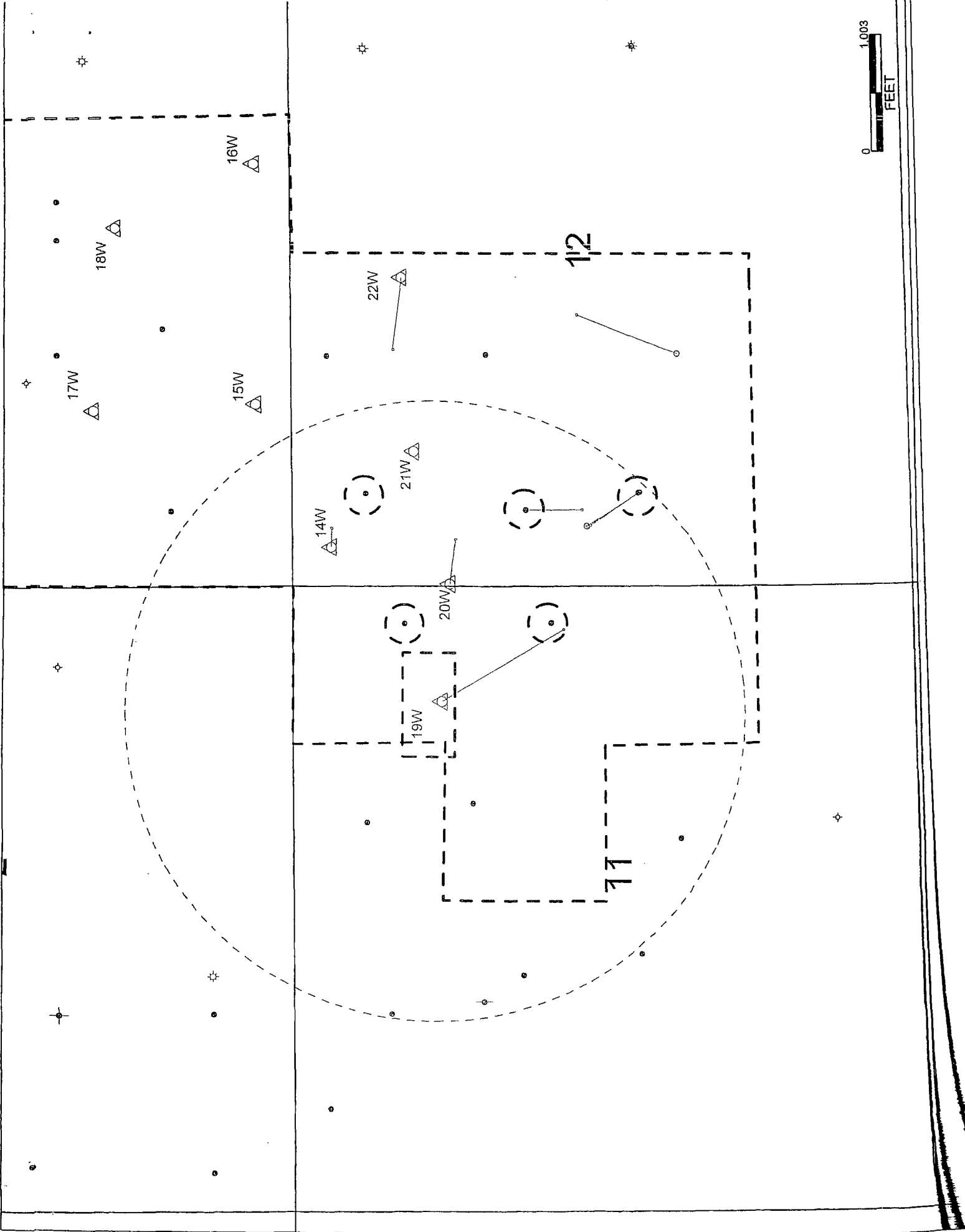
3. Name of Field or Pool (if applicable): _____

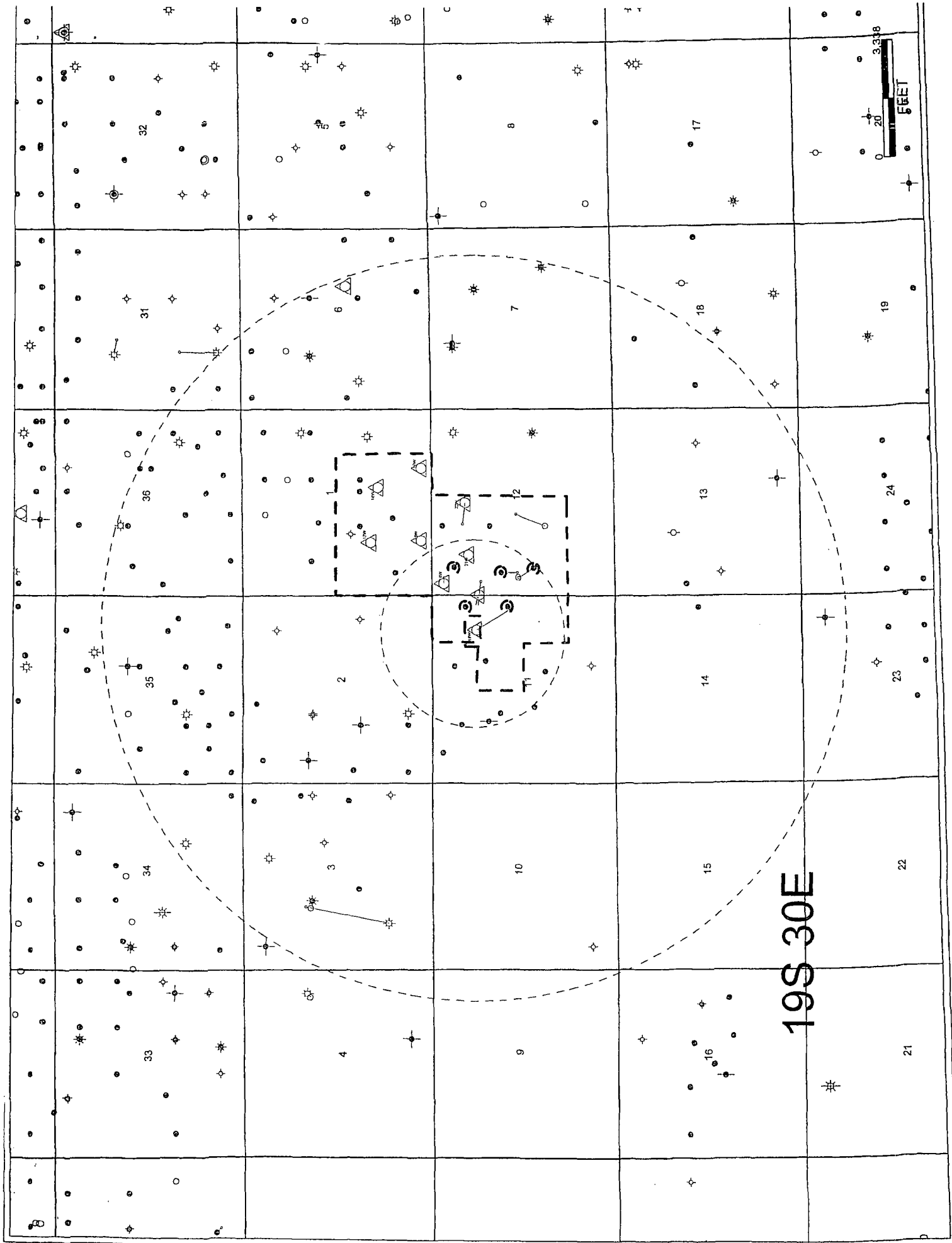
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. _____

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

QUEEN 2914' (OVERLYING)

BONE SPRING LS 6090' (UNDERLYING)



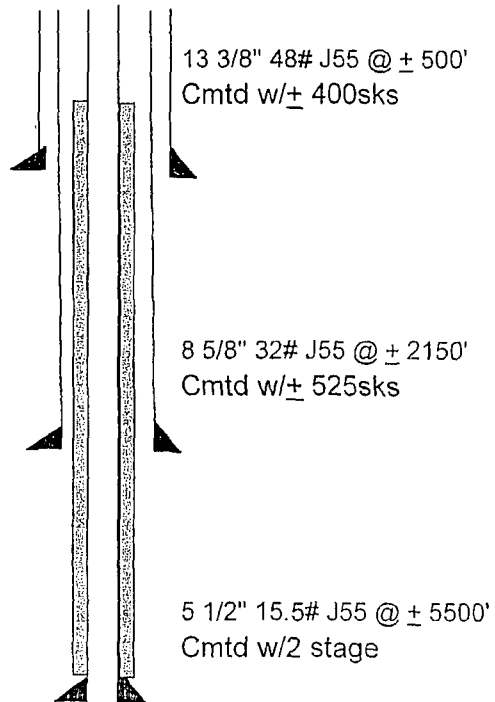


Munchkin WD #19

Sec. 11-19S-30E

1300' FNL & 1000' FEL (BHL)

2300' FNL & 400' FEL (SHL)



Wells in review area that penetrated injection zone

WELL NAME	WELL TYPE	CONSTRUCTION	DATE DRILLED	LOCATION	DEPTH	COMPLETION
Munchkin Fed. #6	Active oil well	9 5/8" J55/36# @ 510' 5 1/2" J55/17# @ 5400'	1/1/2005	12-19S-30E 660' FNL & 8100' FWL	5400'	2/22/2005
Munchkin Fed. #9	Active oil well	9 5/8" J55/36# @ 497' 5 1/2" J55/17 @ 5233'	5/4/2006	11-19S-30E 990' FNL & 300' FEL	5233'	8/18/2006
Munchkin Fed. #8	Active oil well	13 3/8" J55 48# @ 511' 8 5/8" J55 24# @ 1910' 5 1/2" J55 15.5# @ 5351'	4/15/2006	12-19S-30E 2500'FNL & 660'FWL (S) 1980' FNL & 660' FWL (B)	TMD 5351' TVD 5299'	7/15/2006
Munchkin Fed. #10	Active oil well	9 5/8" J55/36# @ 519' 5 1/2" J55/17 @ 4078' 5 1/2" J55 15.5# @ 5258'	8/31/2006	11-19S-30E 220' FNL & 330' FEL	5258'	11/17/2006
Munchkin Fed. #12	Active oil well	13 3/8" J55 48# @ 511' 8 5/8" J55 24# @ 2050' 5 1/2" J55 15.5# @ 5415'	9/19/2007	12-19S-30E 2547'FNL & 519'FWL (S) 2310' FSL & 800' FWL (B)	TMD 5415'	11/16/2007

INJECTION WELL DATA SHEET

OPERATOR: _____ CHI OPERATING, INC. _____

WELL NAME & NUMBER: _____ MUNCHKIN #18W _____

WELL LOCATION: _____ 1500' FSL & 2200' FEL _____ J _____ 1 _____ 19S _____ 30E _____
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGEWELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: _____ 17 1/2" _____ Casing Size: _____ 13 3/8" 48# J55 _____

Cemented with: _____ ± 400 _____ sx. _____ or _____ ft³

Top of Cement: _____ SURFACE _____ Method Determined: _____

Intermediate Casing

Hole Size: _____ 11" _____ Casing Size: _____ 8 5/8" 32# J55 _____

Cemented with: _____ ± 525 _____ sx. _____ or _____ ft³

Top of Cement: _____ SURFACE _____ Method Determined: _____

Production Casing

Hole Size: _____ 7 7/8" _____ Casing Size: _____ 5 1/2" _____

Cemented with: _____ 2 STAGE _____ sx. _____ or _____ ft³

Top of Cement: _____ SURFACE _____ Method Determined: _____

Total Depth: _____ 5500' _____

Injection Interval

_____ 4300 _____ feet to _____ 5200 _____

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2.875 Lining Material: CEMENTType of Packer: BAKER LOK-SETPacker Setting Depth: 4300

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

Additional Data

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

2. Name of the Injection Formation: DELAWARE

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

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. _____

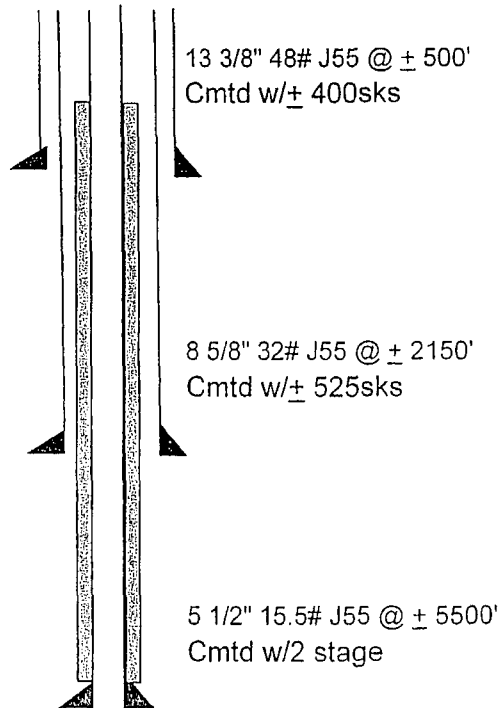
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: _____

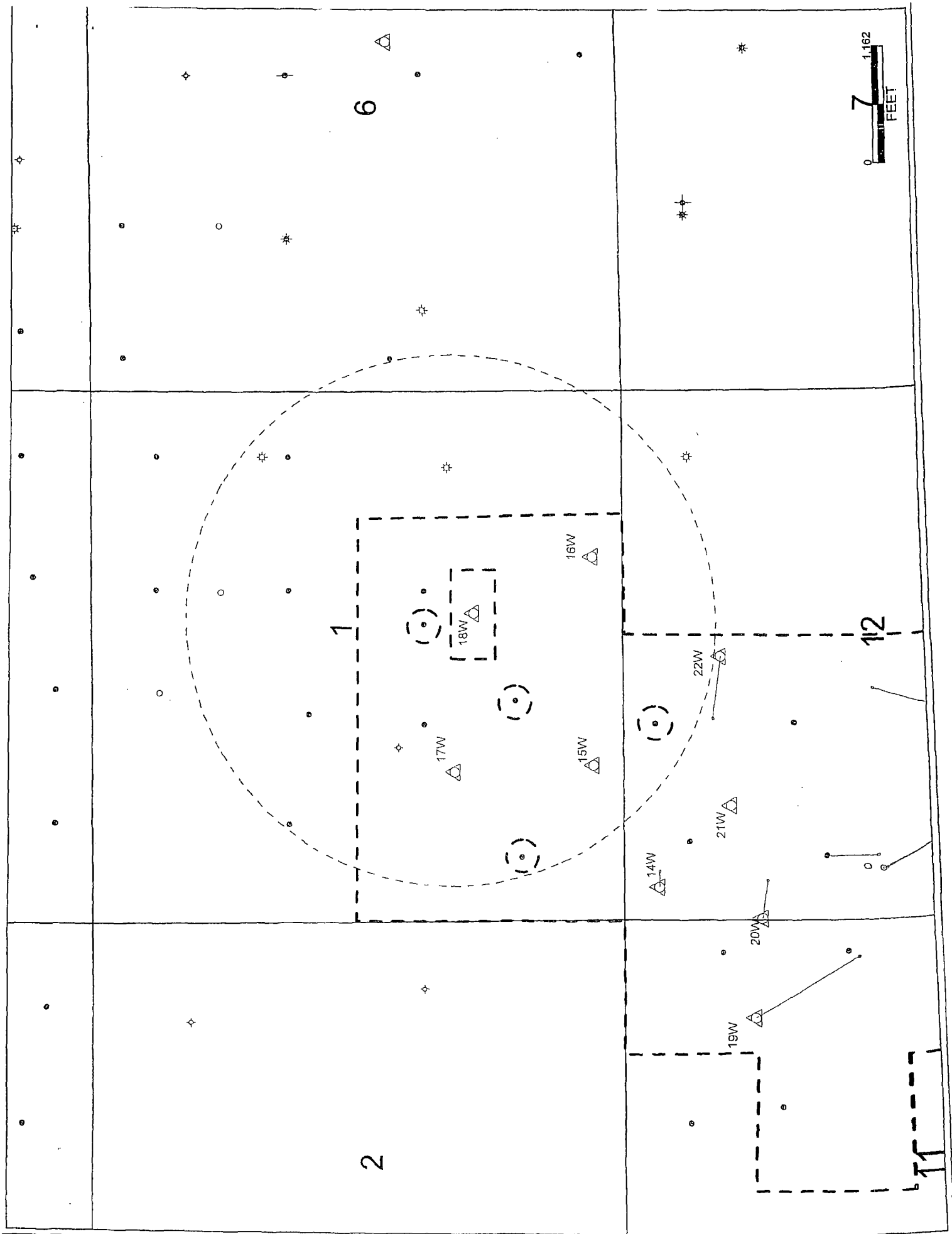
QUEEN 2914' (OVERLYING)BONE SPRING LS 6090' (UNDERLYING)

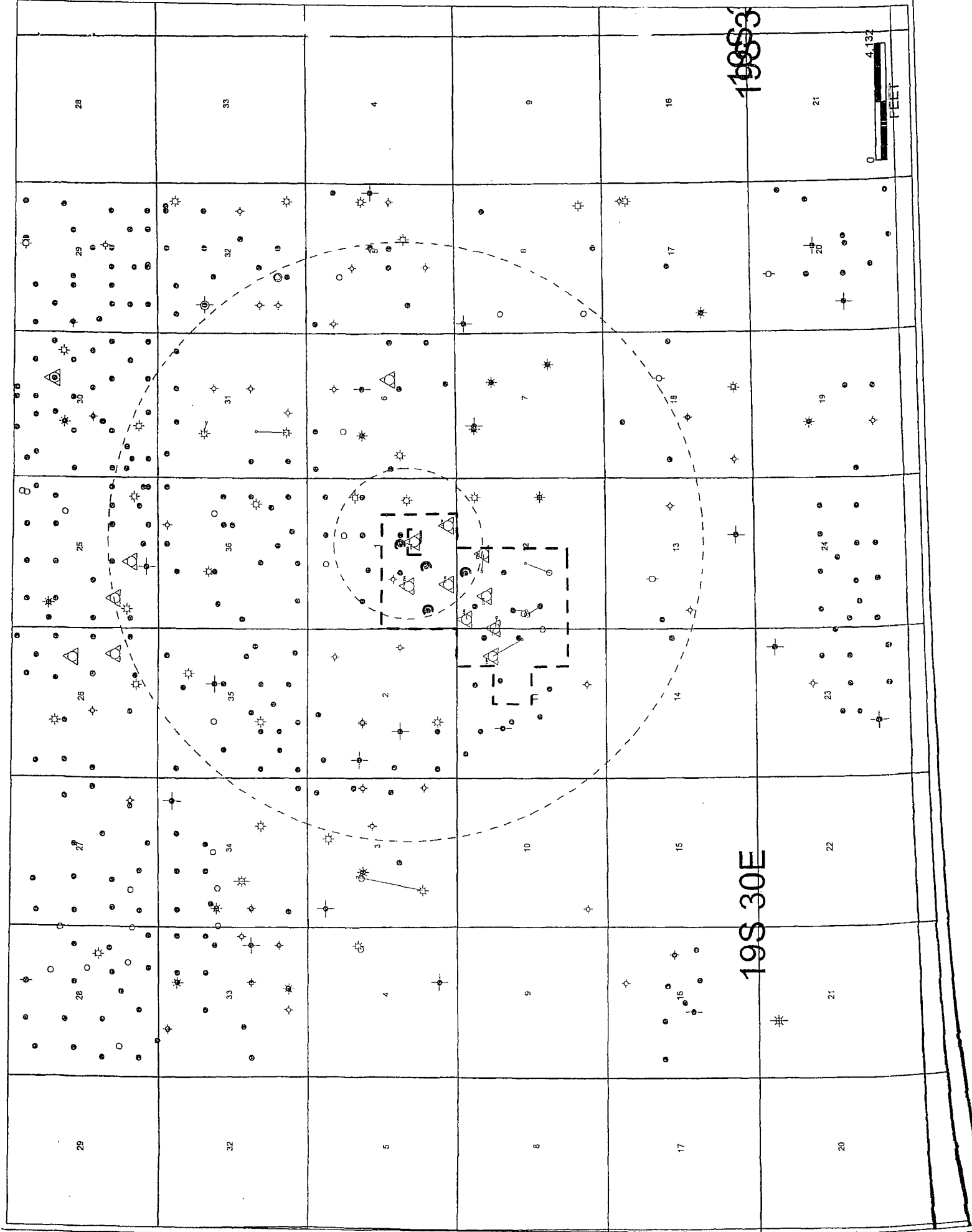
Munchkin WD #18

Sec. 1-19S-30E

1500' FSL & 2200' FEL







Wells in review area that penetrated injection zone

WELL NAME	WELL TYPE	CONSTRUCTION	DATE DRILLED	LOCATION	DEPTH	COMPLETION
Munchkin Fed. #1	Active oil well	9 5/8" J55/36# @ 494' 5 1/2" J55/15.5# @ 6707'	1/25/2001	1-19S-30E 1060' FSL & 2210' FWL	6707'	2/16/2000
Munchkin Fed. #2	Active oil well	9 5/8" J55/36# @ 483', 3182' 5 1/2" J55/17# @ 5350'	5/12/2001	1-19S-30E 990' FSL & 660' FWL	5350'	10/16/2002
Munchkin Fed. #4	Active oil well	9 5/8" J55/36# @ 506' 5 1/2" J55/17# @ 5526'	1/21/2004	12-19S-30E 330' FNL & 1980' FWL	5526'	2/26/2004
Wizard Fed. #3	Active oil well	9 5/8" J55/36# @ 480' 5 1/2" J55/17# @ 5500'	3/11/2003	1-19S-30E 1980' FSL & 2310' FEL	5500'	4/15/2003

Munchkin Federal #3

Sec. 1-19S-30E

2230' FSL & 1750' FWL

4th plug: 550-450'

5th plug: 60-0'

9 5/8" 36# J55 @ 500'

Cmtd w/500sks & circ 100sks

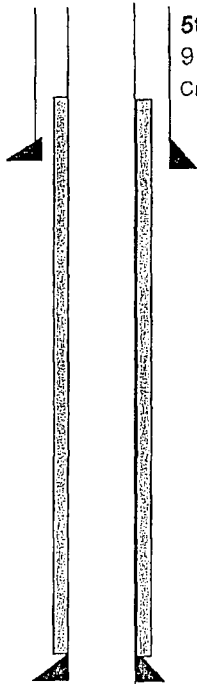
3rd plug: 2078-1978'

2nd plug: 4105-4005'

45sks

1st plug: 6393-6293'

50sks



INJECTION WELL DATA SHEET

OPERATOR: _____ CHI OPERATING, INC. _____

WELL NAME & NUMBER: _____ MUNCHKIN #17W _____

WELL LOCATION: _____ 1700' FSL & 1500' FWL _____ K _____ 1 _____ 19S _____ 30E _____
FOOTAGE LOCATION _____ UNIT LETTER _____ SECTION _____ TOWNSHIP _____ RANGE _____WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: _____ 17 1/2" _____ Casing Size: _____ 13 3/8" 48# J55 _____

Cemented with: _____ + 400 _____ sx. _____ or _____ ft³

Top of Cement: _____ SURFACE _____ Method Determined: _____

Intermediate Casing

Hole Size: _____ 11" _____ Casing Size: _____ 8 5/8" 32# J55 _____

Cemented with: _____ + 525 _____ sx. _____ or _____ ft³

Top of Cement: _____ SURFACE _____ Method Determined: _____

Production Casing

Hole Size: _____ 7 7/8" _____ Casing Size: _____ 5 1/2" _____

Cemented with: _____ 2 STAGE _____ sx. _____ or _____ ft³

Top of Cement: _____ SURFACE _____ Method Determined: _____

Total Depth: _____ 5500' _____

Injection Interval

_____ 4300 _____ feet to _____ 5200 _____

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2.875 Lining Material: CEMENTType of Packer: BAKER LOK-SETPacker Setting Depth: 4300

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

Additional Data

1. Is this a new well drilled for injection? X Yes No

If no, for what purpose was the well originally drilled? _____

2. Name of the Injection Formation: DELAWARE

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

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. _____

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

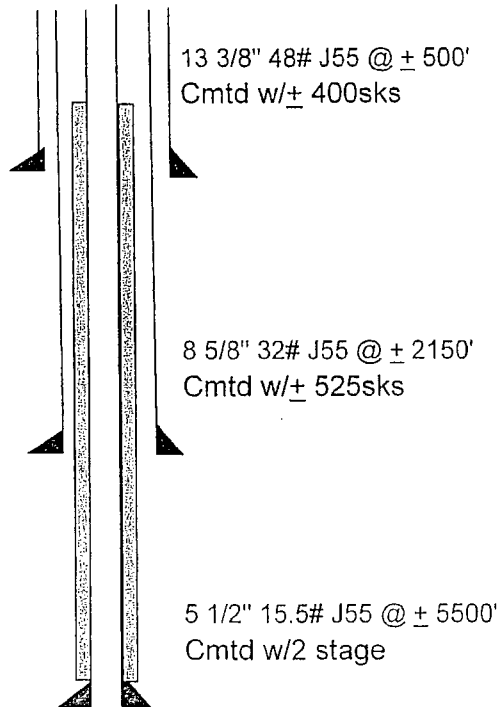
QUEEN 2914' (OVERLYING)

BONE SPRING LS 6090' (UNDERLYING)

Munchkin WD #17

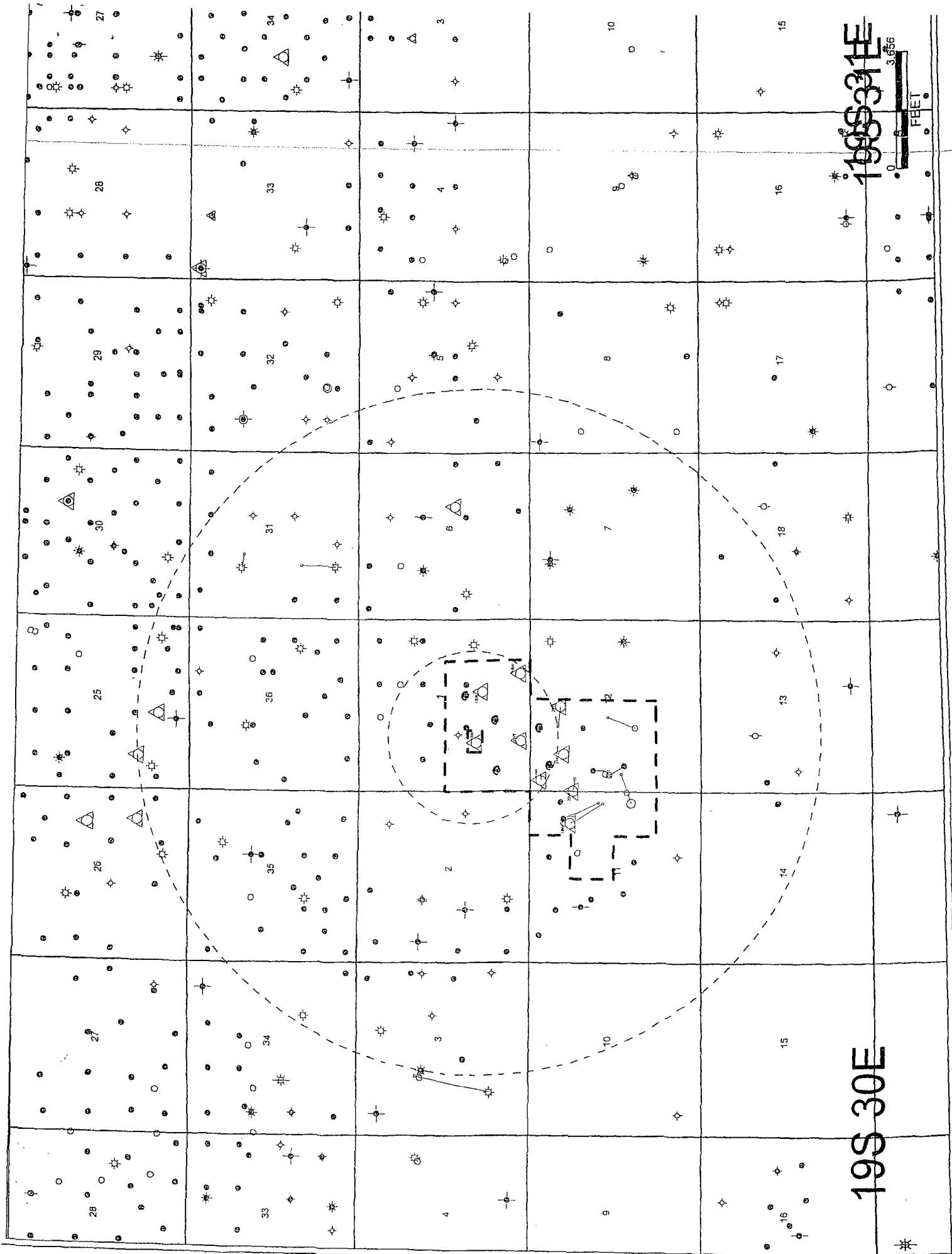
Sec. 1-19S-30E

1700' FSL & 1500' FWL





0 1,378
FEET



19S 30E

19S 31E

3.656
FEET

Wells in review area that penetrated injection zone

WELL NAME	WELL TYPE	CONSTRUCTION	DATE DRILLED	LOCATION	DEPTH	COMPLETION
Munchkin Fed. #1	Active oil well	9 5/8" J55/36# @ 494' 5 1/2" J55/15.5# @ 6707'	1/25/2001	1-19S-30E 1060' FSL & 2210' FWL	6707'	2/16/2000
Munchkin Fed. #2	Active oil well	9 5/8" J55/36# @ 483', 3182' 5 1/2" J55/17# @ 5350'	5/12/2001	1-19S-30E 990' FSL & 660' FWL	5350'	10/16/2002
Munchkin Fed. #4	Active oil well	9 5/8" J55/36# @ 506' 5 1/2" J55/17# @ 5526'	1/21/2004	12-19S-30E 330' FNL & 1980' FWL	5526'	2/26/2004
Munchkin Fed. #6	Active oil well	9 5/8" J55/36# @ 510' 5 1/2" J55/17# @ 5400'	1/1/2005	12-19S-30E 660' FNL & 8100' FWL	5400'	2/22/2005
Wizard Fed. #3	Active oil well	9 5/8" J55/36# @ 480' 5 1/2" J55/17# @ 5500'	3/11/2003	1-19S-30E 1980' FSL & 2310' FEL	5500'	4/15/2003

Munchkin Federal #3

Sec. 1-19S-30E

2230' FSL & 1750' FWL

4th plug: 550-450'

5th plug: 60-0'

9 5/8" 36# J55 @ 500'

Cmtd w/500sks & circ 100sks

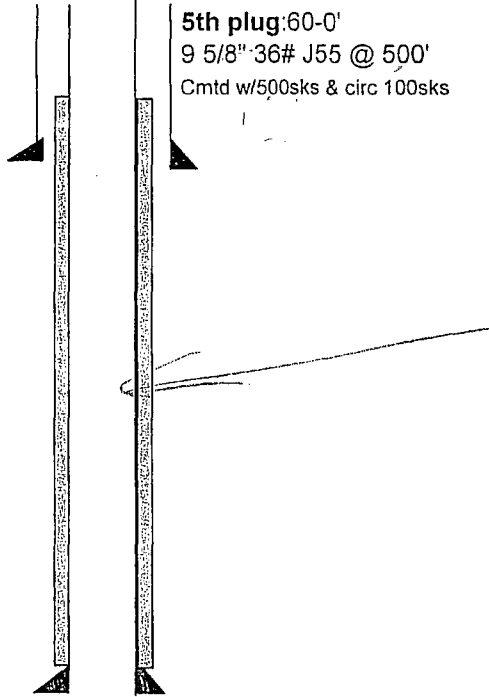
3rd plug: 2078-1978'

2nd plug: 4105-4005'

45sks

1st plug: 6393-6293'

50sks



State "2" #1

3001504588 2-19S-30E

1980' FSL & 660' FEL

8 5/8" Casing set @ 750'

5th plug: 4'

5sk

4th plug: 580' (top of 8 5/8 csg)

10sk

3rd plug: 765'

10sk

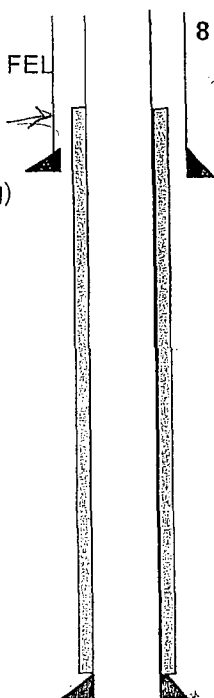
2nd plug: 1925'

10sk

1st plug: 3485"

25sk

Intervals between all
plugs filled w/heavy mud



Side 1

INJECTION WELL DATA SHEET

OPERATOR: CHI OPERATING, INC.

WELL NAME & NUMBER: MUNCHKIN #16W

WELL LOCATION: 300' FSL & 1650' FEL
FOOTAGE LOCATION

UNIT LETTER O SECTION 1 TOWNSHIP 19S RANGE 30E

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 17 1/2" Casing Size: 13 3/8" 48# J55

Cemented with: + 400 sx. or ft³

Top of Cement: SURFACE Method Determined:

Intermediate Casing

Hole Size: 11" Casing Size: 8 5/8" 32# J55

Cemented with: + 525 sx. or ft³

Top of Cement: SURFACE Method Determined:

Production Casing

Hole Size: 7 7/8" Casing Size: 5 1/2"

Cemented with: 2 STAGE sx. or ft³

Top of Cement: SURFACE Method Determined:

Total Depth: 5500'

Injection Interval

4300 feet to 5200

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 2.875 Lining Material: CEMENT
Type of Packer: BAKER LOK-SET
Packer Setting Depth: 4300
Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

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

2. Name of the Injection Formation: DELAWARE

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

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. _____

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

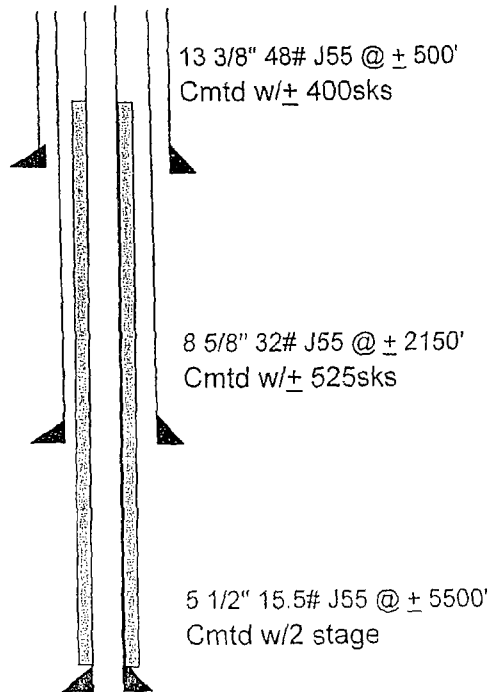
QUEEN 2914' (OVERLYING)

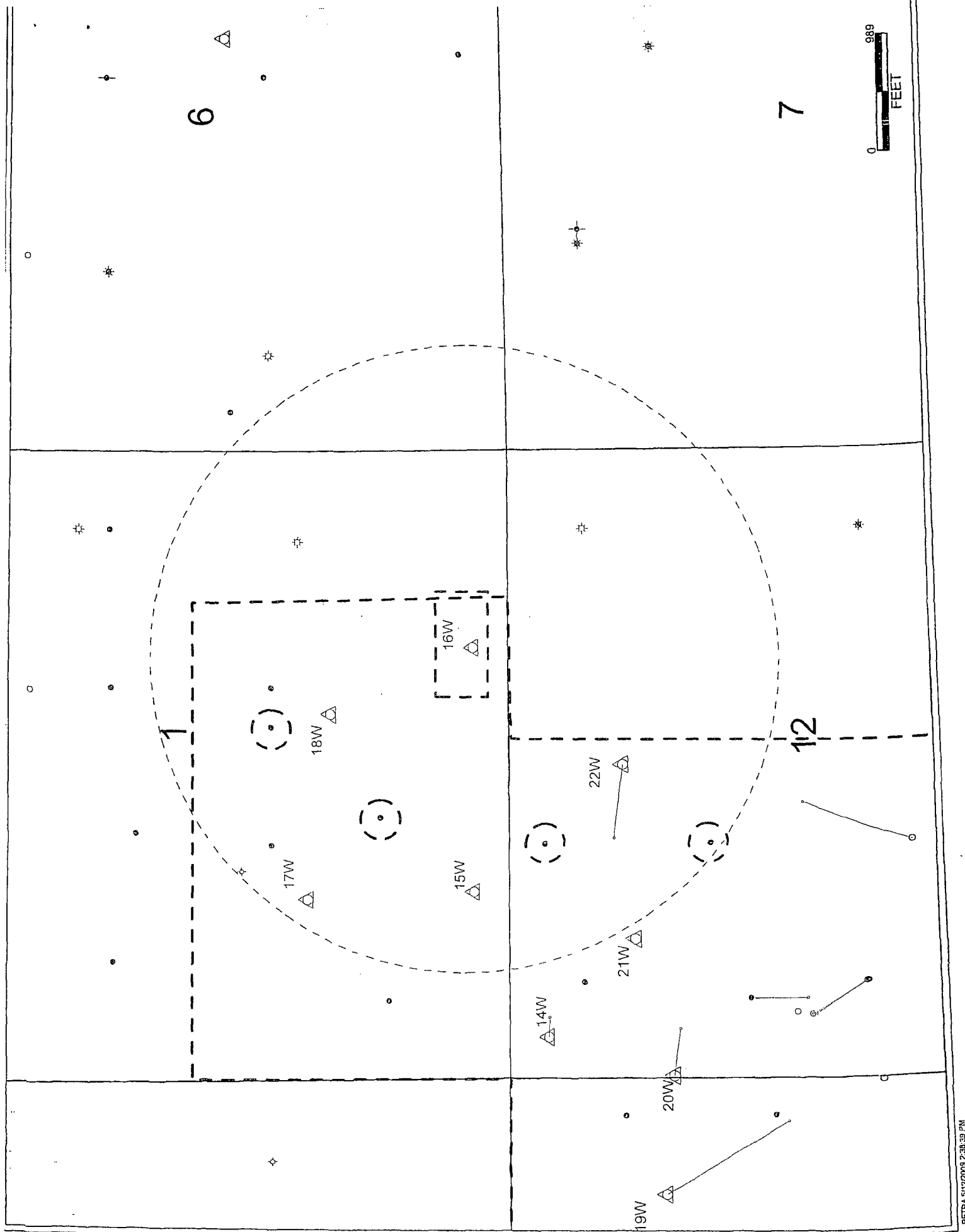
BONE SPRING LS 6090' (UNDERLYING)

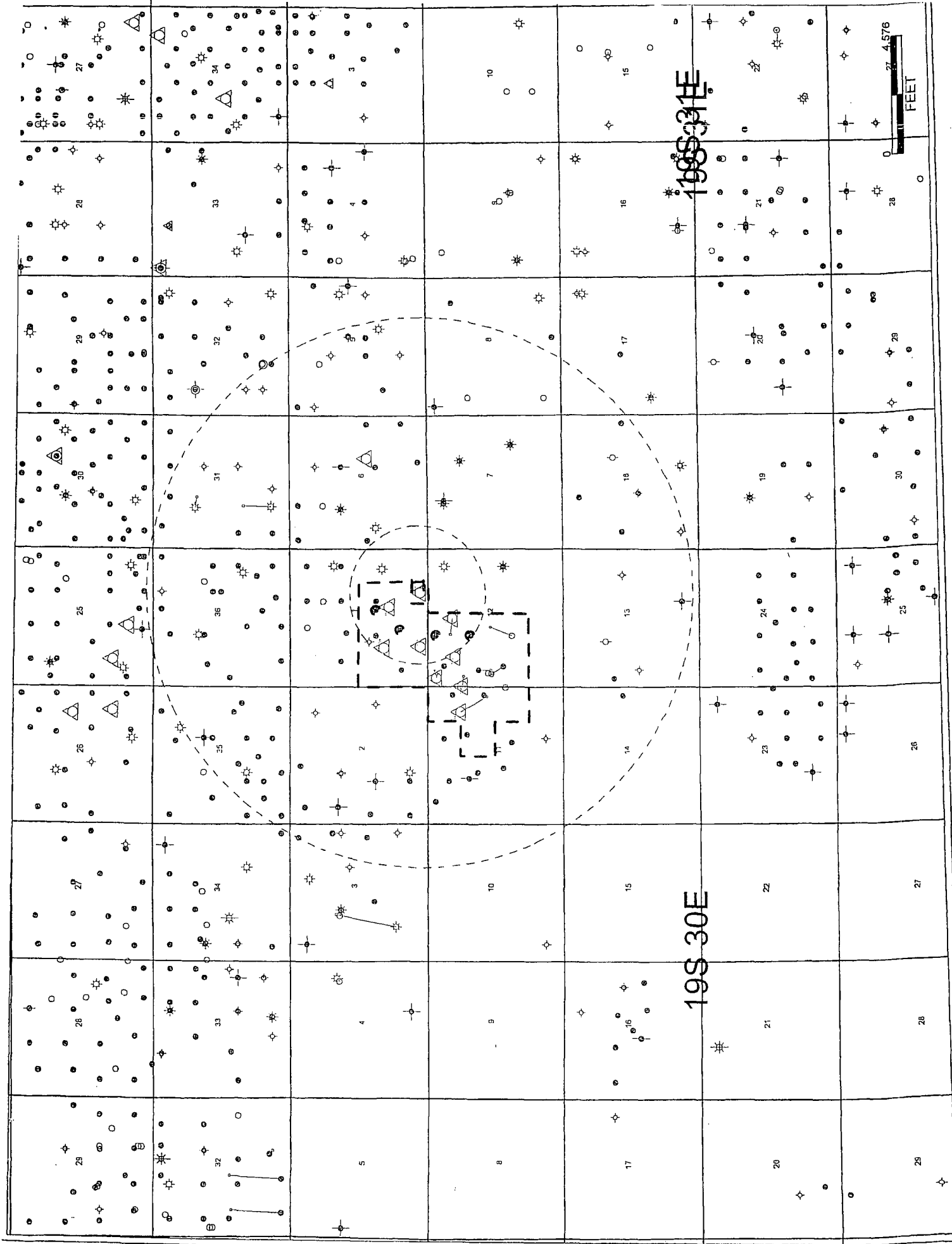
Munchkin WD #16

Sec. 1-19S-30E

300' FSL & 1650' FEL







Wells in review area that penetrated injection zone

WELL NAME	WELL TYPE	CONSTRUCTION	DATE DRILLED	LOCATION	DEPTH	COMPLETION
Munchkin Fed. #1	Active oil well	9 5/8" J55/36# @ 494' 5 1/2" J55/15.5# @ 6707'	1/25/2001	1-19S-30E 1060' FSL & 2210' FWL	6707'	2/16/2000
Munchkin Fed. #4	Active oil well	9 5/8" J55/36# @ 506' 5 1/2" J55/17# @ 5526'	1/21/2004	12-19S-30E 330' FNL & 1980' FWL	5526'	2/26/2004
Wizard Fed. #3	Active oil well	9 5/8" J55/36# @ 480' 5 1/2" J55/17# @ 5500'	3/11/2003	1-19S-30E 1980' FSL & 2310' FEL	5500'	4/15/2003
Munchkin Fed. #5	Active oil well	9 5/8" J55/36# @ 525' 5 1/2" J55/15.5# @ 5400'	12/17/2004	12-19S-30E 1700' FNL & 1980' FWL	5400'	2/4/2005

Munchkin Federal #3

Sec. 1-19S-30E

2230' FSL & 1750' FWL

4th plug: 550-450'

5th plug: 60-0'

9 5/8" 36# J55 @ 500'

Cmtd w/500sks & circ 100sks

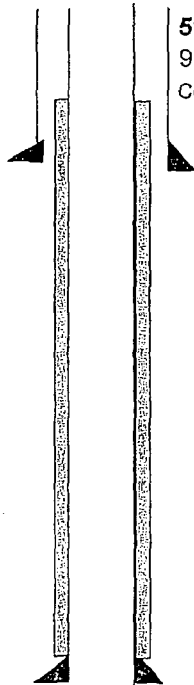
3rd plug: 2078-1978'

2nd plug: 4105-4005'

45sks

1st plug: 6393-6293'

50sks



INJECTION WELL DATA SHEET

OPERATOR: _____ CHI OPERATING, INC. _____

WELL NAME & NUMBER: _____ MUNCHKIN #15W _____

WELL LOCATION: _____ 300' FSL & 1550' FWL _____ N _____ 1 _____ 19S _____ 30E _____
FOOTAGE LOCATION _____ UNIT LETTER _____ SECTION _____ TOWNSHIP _____ RANGE _____

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: _____ 17 1/2" _____ Casing Size: _____ 13 3/8" 48# J55 _____

Cemented with: _____ ± 400 _____ sx. _____ or _____ ft³ _____

Top of Cement: _____ SURFACE _____ Method Determined: _____

Intermediate Casing

Hole Size: _____ 11" _____ Casing Size: _____ 8 5/8" 32# J55 _____

Cemented with: _____ ± 525 _____ sx. _____ or _____ ft³ _____

Top of Cement: _____ SURFACE _____ Method Determined: _____

Production Casing

Hole Size: _____ 7 7/8" _____ Casing Size: _____ 5 1/2" _____

Cemented with: _____ 2 STAGE _____ sx. _____ or _____ ft³ _____

Top of Cement: _____ SURFACE _____ Method Determined: _____

Total Depth: _____ 5500' _____

Injection Interval

_____ 4300 _____ feet to _____ 5200 _____

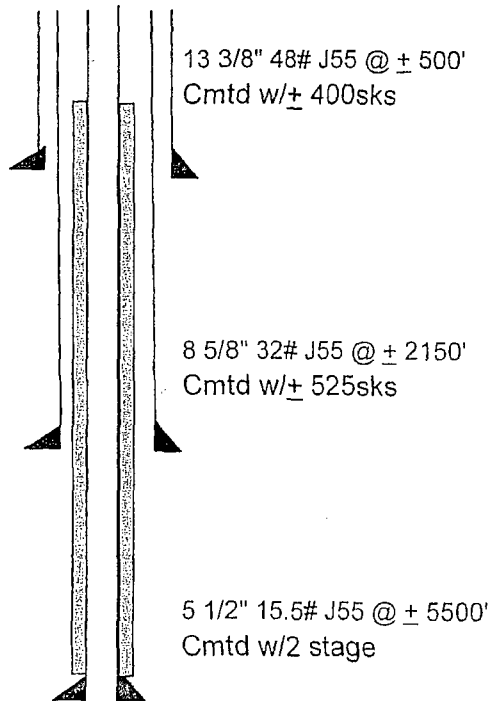
(Perforated or Open Hole; indicate which)

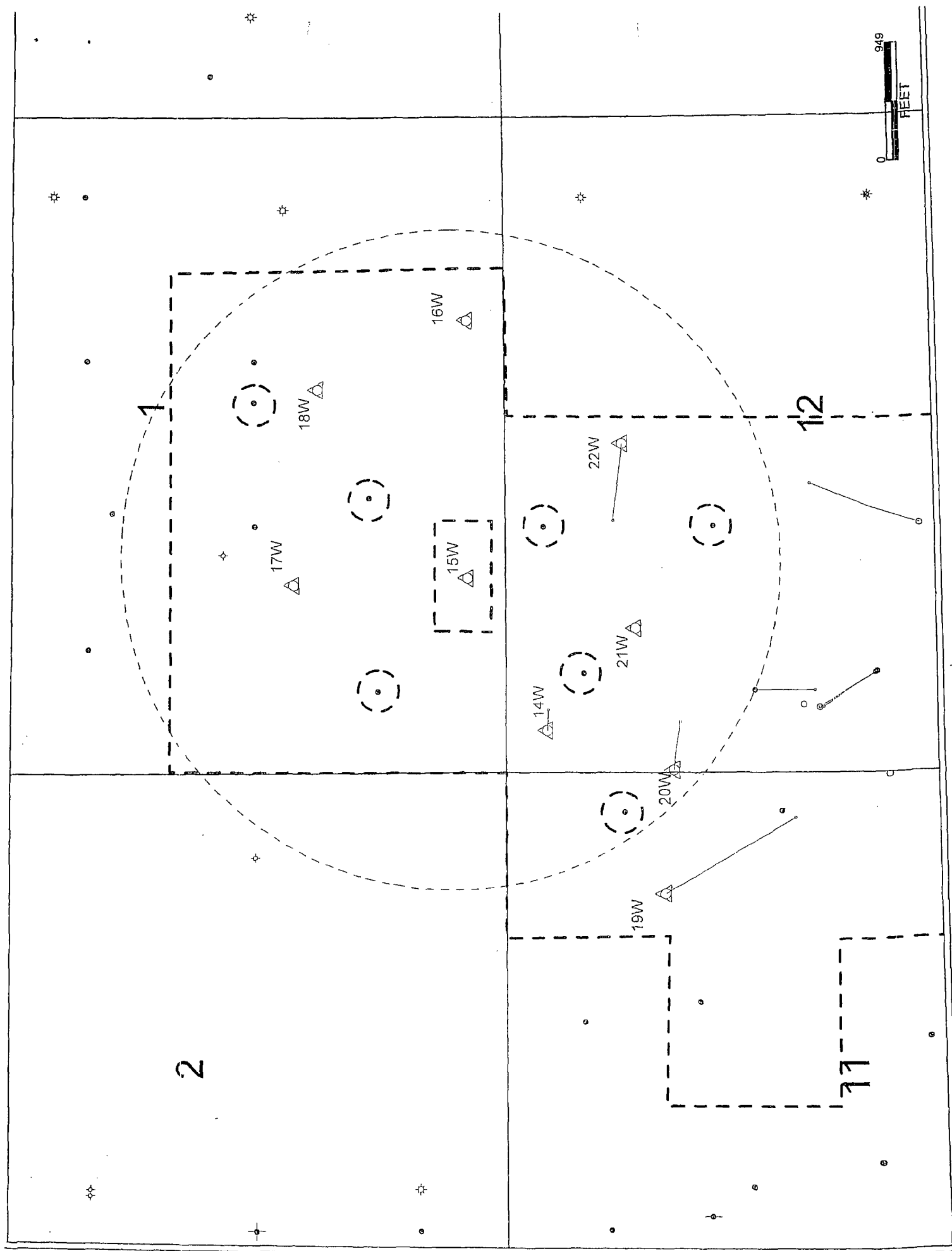
INJECTION WELL DATA SHEETTubing Size: 2.875 Lining Material: CEMENTType of Packer: BAKER LOK-SETPacker Setting Depth: 4300Other Type of Tubing/Casing Seal (if applicable): Additional Data1. Is this a new well drilled for injection? X Yes NoIf no, for what purpose was the well originally drilled? 2. Name of the Injection Formation: DELAWARE3. Name of Field or Pool (if applicable): 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. 5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: QUEEN 2914' (OVERLYING)BONE SPRING LS 6090' (UNDERLYING)

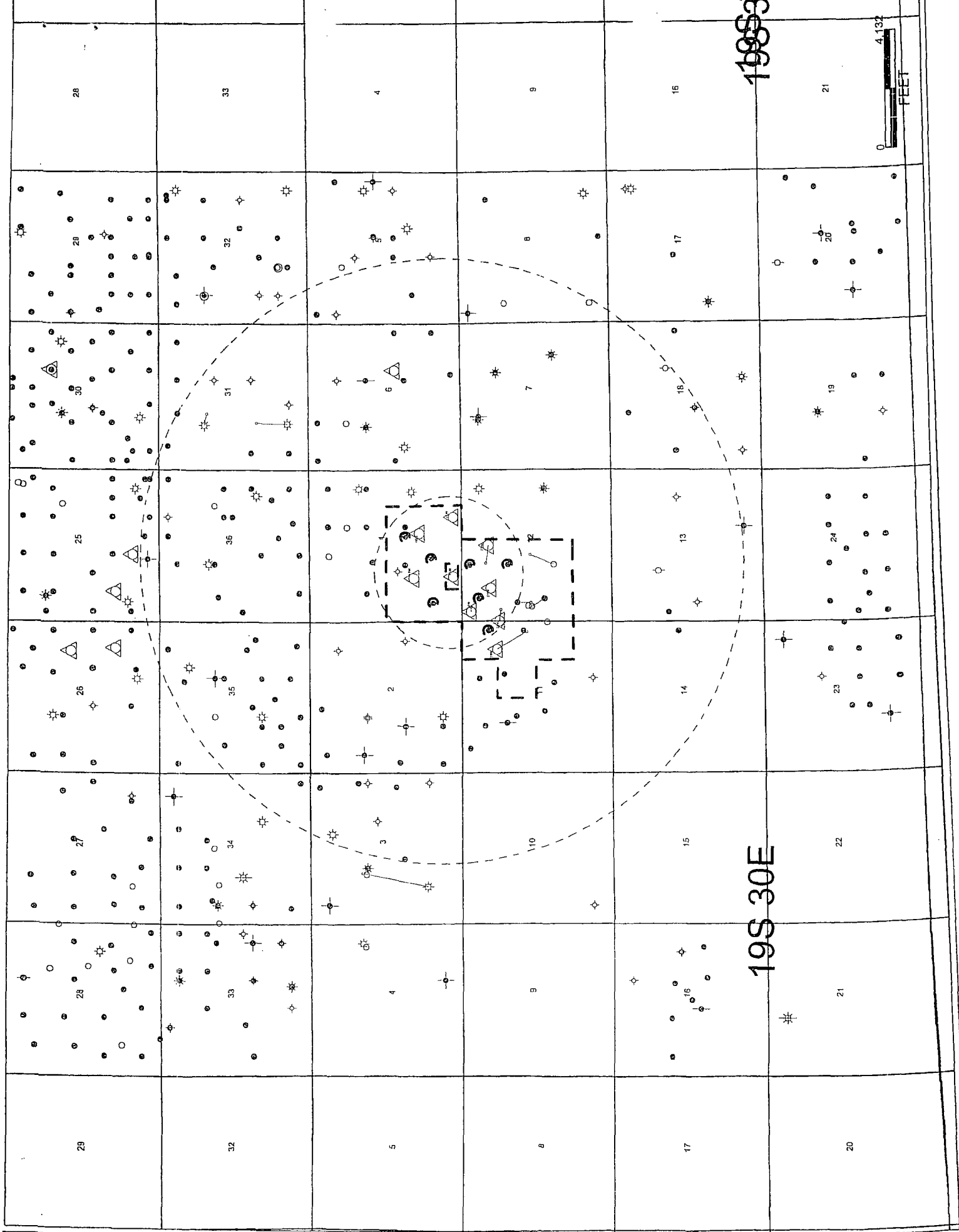
Munchkin WD #15

Sec. 1-19S-30E

300' FSL & 1550' FWL







19S 30E

19S 30E



Wells in review area that penetrated injection zone

WELL NAME	WELL TYPE	CONSTRUCTION	DATE DRILLED	LOCATION	DEPTH	COMPLETION
Munchkin Fed. #1	Active oil well	9 5/8" J55/36# @ 494' 5 1/2" J55/15.5# @ 6707'	1/25/2001	1-19S-30E 1060' FSL & 2210' FWL	6707'	2/16/2000
Munchkin Fed. #2	Active oil well	9 5/8" J55/36# @ 483', 3182' 5 1/2" J55/17# @ 5350'	5/12/2001	1-19S-30E 990' FSL & 660' FWL	5350'	10/16/2002
Munchkin Fed. #4	Active oil well	9 5/8" J55/36# @ 506' 5 1/2" J55/17# @ 5526'	1/21/2004	12-19S-30E 330' FNL & 1980' FWL	5526'	2/26/2004
Wizard Fed. #3	Active oil well	9 5/8" J55/36# @ 480' 5 1/2" J55/17# @ 5500'	3/11/2003	1-19S-30E 1980' FSL & 2310' FEL	5500'	4/15/2003
Munchkin Fed. #6	Active oil well	9 5/8" J55/36# @ 510' 5 1/2" J55/17# @ 5400'	1/1/2005	12-19S-30E 660' FNL & 8100' FWL	5400'	2/22/2005
Munchkin Fed. #5	Active oil well	9 5/8" J55/36# @ 525' 5 1/2" J55/15.5 @ 5400'	12/17/2004	12-19S-30E 1700' FNL & 1980' FWL	5400'	2/4/2005
Munchkin Fed. #9	Active oil well	9 5/8" J55/36# @ 497' 5 1/2" J55/17 @ 5233'	5/4/2006	11-19S-30E 990' FNL & 300' FEL	5233'	8/18/2006

Munchkin Federal #3

Sec. 1-19S-30E

2230' FSL & 1750' FWL

4th plug: 550-450'

5th plug: 60-0'

9 5/8" 36# J55 @ 500'

Cmtd w/500sks & circ 100sks

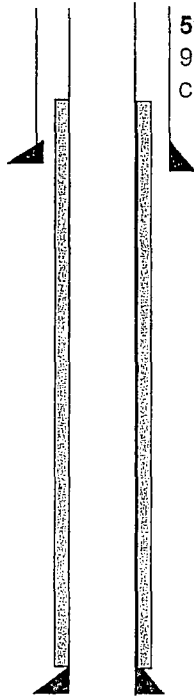
3rd plug: 2078-1978'

2nd plug: 4105-4005'

45sks

1st plug: 6393-6293'

50sks



INJECTION WELL DATA SHEET

OPERATOR: _____ CHI OPERATING, INC. _____

WELL NAME & NUMBER: _____ MUNCHKIN #14W _____

330' FNL & 500' FWL (SHL)

WELL LOCATION: _____ 330' FNL & 330' FWL (BHL) _____

FOOTAGE LOCATION

D

UNIT LETTER

12

SECTION

19S

TOWNSHIP

30E

RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

Hole Size: _____ 17 1/2" _____ Casing Size: _____ 13 3/8" 48# J55 _____

Cemented with: _____ + 400 _____ sx. _____ or _____ ft³ _____

Top of Cement: _____ SURFACE _____ Method Determined: _____

Intermediate Casing

Hole Size: _____ 11" _____ Casing Size: _____ 8 5/8" 32# J55 _____

Cemented with: _____ + 525 _____ sx. _____ or _____ ft³ _____

Top of Cement: _____ SURFACE _____ Method Determined: _____

Production Casing

Hole Size: _____ 7 7/8" _____ Casing Size: _____ 5 1/2" _____

Cemented with: _____ 2 STAGE _____ sx. _____ or _____ ft³ _____

Top of Cement: _____ SURFACE _____ Method Determined: _____

Total Depth: _____ 5500' _____

Injection Interval

_____ 4300 _____ feet to _____ 5200 _____

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEETTubing Size: 2.875 Lining Material: CEMENTType of Packer: BAKER LOK-SETPacker Setting Depth: 4300Other Type of Tubing/Casing Seal (if applicable): Additional Data

1. Is this a new well drilled for injection? X Yes No

If no, for what purpose was the well originally drilled?

2. Name of the Injection Formation: DELAWARE

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

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.

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

QUEEN 2914' (OVERLYING)

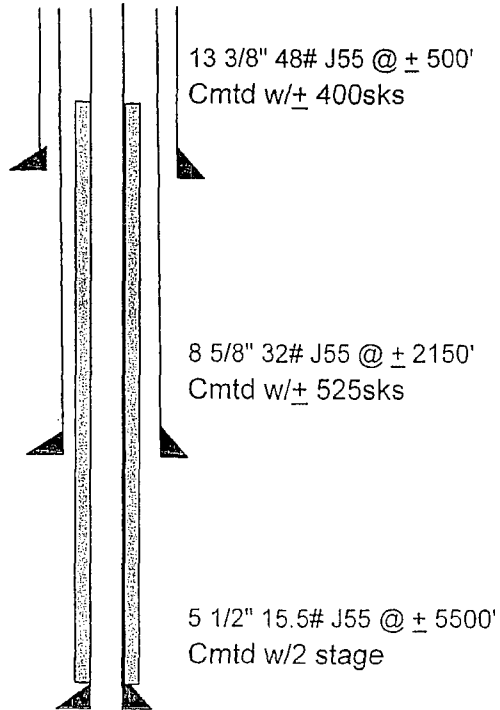
BONE SPRING LS 6090' (UNDERLYING)

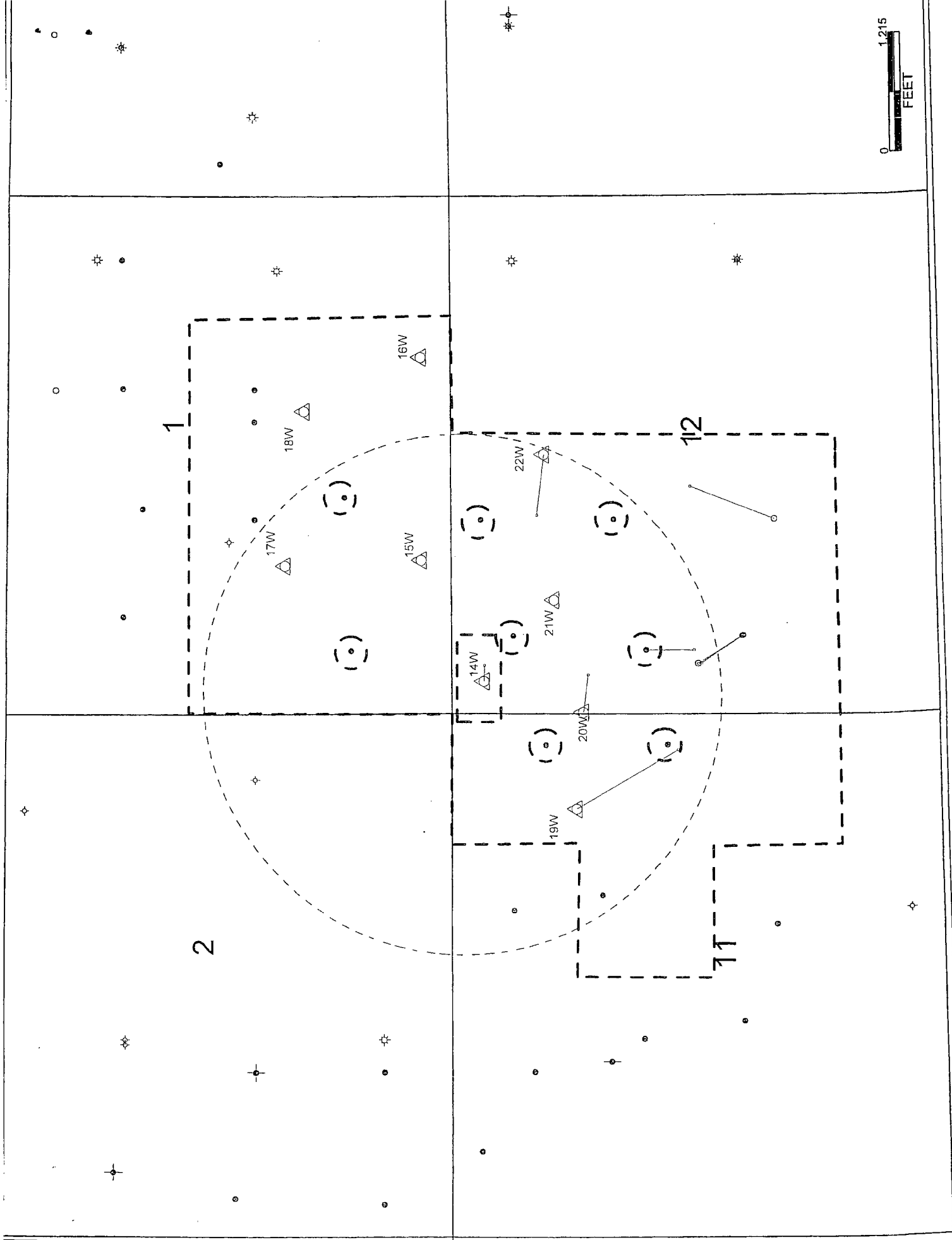
Munchkin WD #14

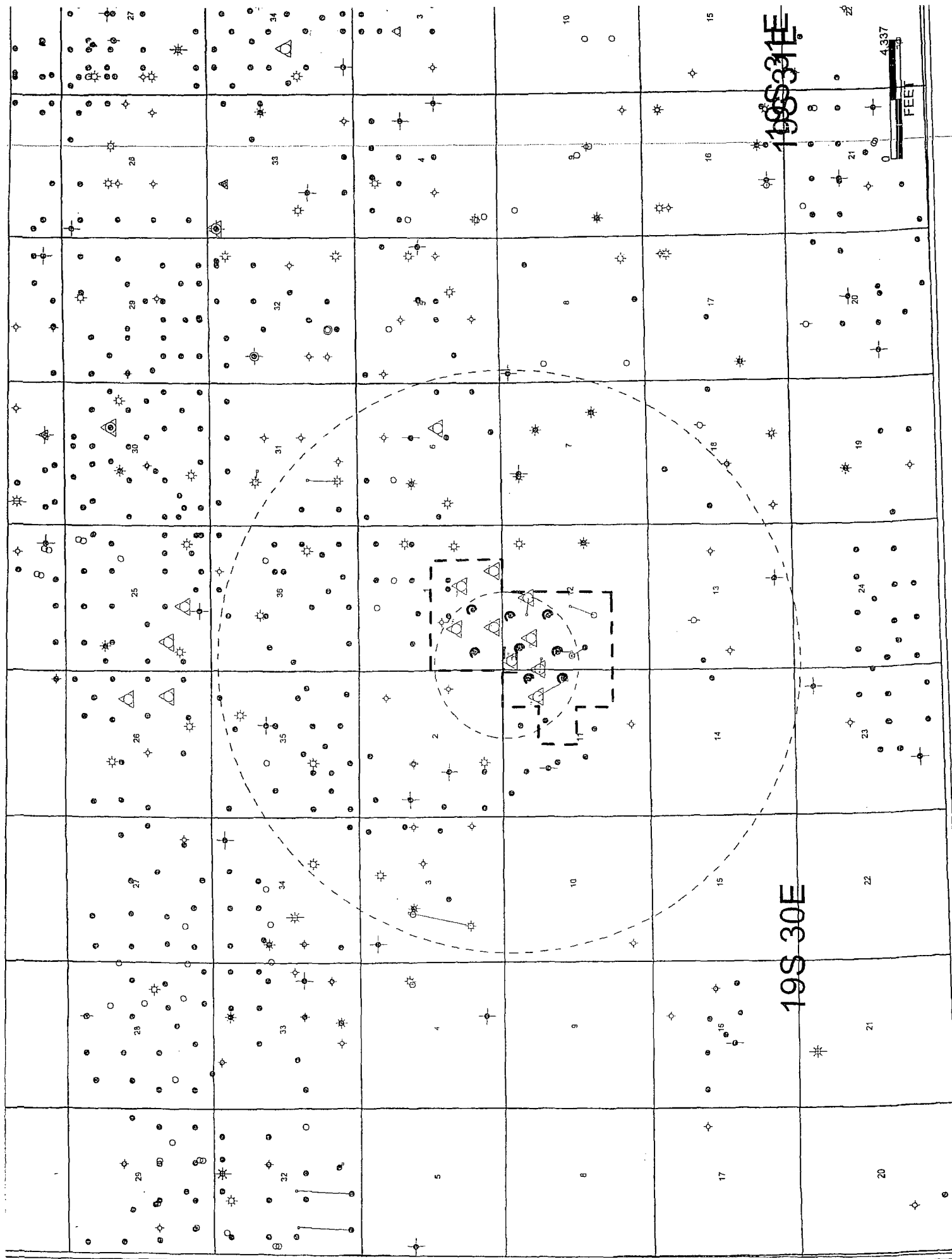
Sec. 12-19S-30E

330' FNL & 500' FWL (SHL)

330' FNL & 330' FWL (BHL)







Wells in review area that penetrated injection zone

WELL NAME	WELL TYPE	CONSTRUCTION	DATE DRILLED	LOCATION	DEPTH	COMPLETION
Munchkin Fed. #1	Active oil well	9 5/8" J55/36# @ 494' 5 1/2" J55/15.5# @ 6707'	1/25/2001	1-19S-30E 1060' FSL & 2210' FWL	6707'	2/16/2000
Munchkin Fed. #2	Active oil well	9 5/8" J55/36# @ 483', 3182' 5 1/2" J55/17# @ 5350'	5/12/2001	1-19S-30E 990' FSL & 660' FWL	5350'	10/16/2002
Munchkin Fed. #4	Active oil well	9 5/8" J55/36# @ 506' 5 1/2" J55/17# @ 5526'	1/21/2004	12-19S-30E 330' FNL & 1980' FWL	5526'	2/26/2004
Munchkin Fed. #6	Active oil well	9 5/8" J55/36# @ 510' 5 1/2" J55/17# @ 5400'	1/1/2005	12-19S-30E 660' FNL & 8100' FWL	5400'	2/22/2005
Munchkin Fed. #5	Active oil well	9 5/8" J55/36# @ 525' 5 1/2" J55/15.5 @ 5400'	12/17/2004	12-19S-30E 1700' FNL & 1980' FWL	5400'	2/4/2005
Munchkin Fed. #9	Active oil well	9 5/8" J55/36# @ 497' 5 1/2" J55/17 @ 5233'	5/4/2006	11-19S-30E 990' FNL & 300' FEL	5233'	8/18/2006
Munchkin Fed. #8	Active oil well	13 3/8" J55 48# @ 511' 8 5/8" J55 24# @ 1910' 5 1/2" J55 15.5# @ 5351'	4/15/2006	12-19S-30E 2500' FNL & 660' FWL (STMD 5351' 1980' FNL & 660' FWL (TVD 5299'	5351'	7/15/2006
Munchkin Fed. #10	Active oil well	9 5/8" J55/36# @ 519' 5 1/2" J55/17 @ 4078' 5 1/2" J55 15.5# @ 5258'	8/31/2006	11-19S-30E 220' FNL & 330' FEL	5258'	11/17/2006

State "2" #1

3001504588 2-19S-30E

1980' FSL & 660' FEL

8 5/8" Casing set @ 750'

5th plug: 4'

5sks

4th plug: 580' (top of 8 5/8 csg)

10sks

3rd plug: 765'

10sks

2nd plug: 1925'

10sks

1st plug: 3485'

25sks

Intervals between all
plugs filled w/heavy mud

