

11-1061

000 Hobbs

HOBBS OGD  
FEB 15 2012  
RECEIVED

# Split Estate

Form 3160-3  
(August 2007)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0137  
Expires July 31, 2010

|                                                                                                                                                                                                                        |                                                     |                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------|
| 1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER                                                                                                                           |                                                     | 5. Lease Serial No.<br>NMLC063798                                               |
| 1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone |                                                     | 6. If Indian, Allottee or Tribe Name<br>N/A                                     |
| 2. Name of Operator: Agave Energy Company                                                                                                                                                                              |                                                     | 7. If Unit or C/A Agreement, Name and No.<br>N/A                                |
| 3a. Address: 105 S. Fourth Street, Artesia, NM 88210                                                                                                                                                                   |                                                     | 8. Lease Name and Well No.<br>Red Hills AGI #1 39078                            |
| 3b. Phone No. (include area code): 147831 575-748-4528                                                                                                                                                                 |                                                     | 9. API Well No.<br>30-025-40448                                                 |
| 4. Location of Well (Report location clearly and in accordance with any State requirements.)<br>At surface: 1600FSL, 150FEL, Section 13, T 24 S, R 33 E, NMPM, Lea Co, NM<br>At proposed prod. zone: same as surface   |                                                     | 10. Field and Pool, or Exploratory<br>Exploratory (Cherry Canyon) 97887         |
| 14. Distance in miles and direction from nearest town or post office:<br>approximately 20 miles west of Jai, NM                                                                                                        |                                                     | 11. Sec., T, R, M or Bk. and Survey or Area<br>Section 13, T 24 S, R 33 E, NMPM |
| 15. Distance from proposed* location to nearest property on lease line, ft:<br>approximately 150' to Agave East Plant Boundary<br>(Also to nearest drig unit line, if any)                                             | 16. No. of acres in lease<br>N/A Class II disposal  | 17. Spacing Unit dedicated to this well<br>N/A                                  |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.<br>1900 ft                                                                                                  | 19. Proposed Depth<br>6550'                         | 20. BLM/BIA Bond No. on file<br>B006778                                         |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.)<br>3574 GL                                                                                                                                                         | 22. Approximate date work will start*<br>12/01/2011 | 23. Estimated duration<br>90 days drill, test & complete                        |

**Non-Standard Location**

### 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form.

- |                                                                                                                                                |                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| 1. Well plat certified by a registered surveyor.                                                                                               | 4. Bond to cover the operations unless covered by an existing bond on file (see item 20 above). |
| 2. A Drilling Plan.                                                                                                                            | 5. Operator certification                                                                       |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM.             |

|                |                                                |                  |
|----------------|------------------------------------------------|------------------|
| 25. Signature: | Name (Printed/Typed): Alberto A. Gutierrez, RG | Date: 09/22/2011 |
|----------------|------------------------------------------------|------------------|

Title: Consultant for Agave Energy Company

|                                           |                       |                   |
|-------------------------------------------|-----------------------|-------------------|
| Approved by (Signature): /s/ Don Peterson | Name (Printed/Typed): | Date: FEB 13 2012 |
|-------------------------------------------|-----------------------|-------------------|

|                      |                               |
|----------------------|-------------------------------|
| Title: FIELD MANAGER | Office: CARLSBAD FIELD OFFICE |
|----------------------|-------------------------------|

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

**APPROVAL FOR TWO YEARS**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

(Instructions on page 2)

**CARLSBAD CONTROLLED WATER BASIN**

R-13507

12/17/12

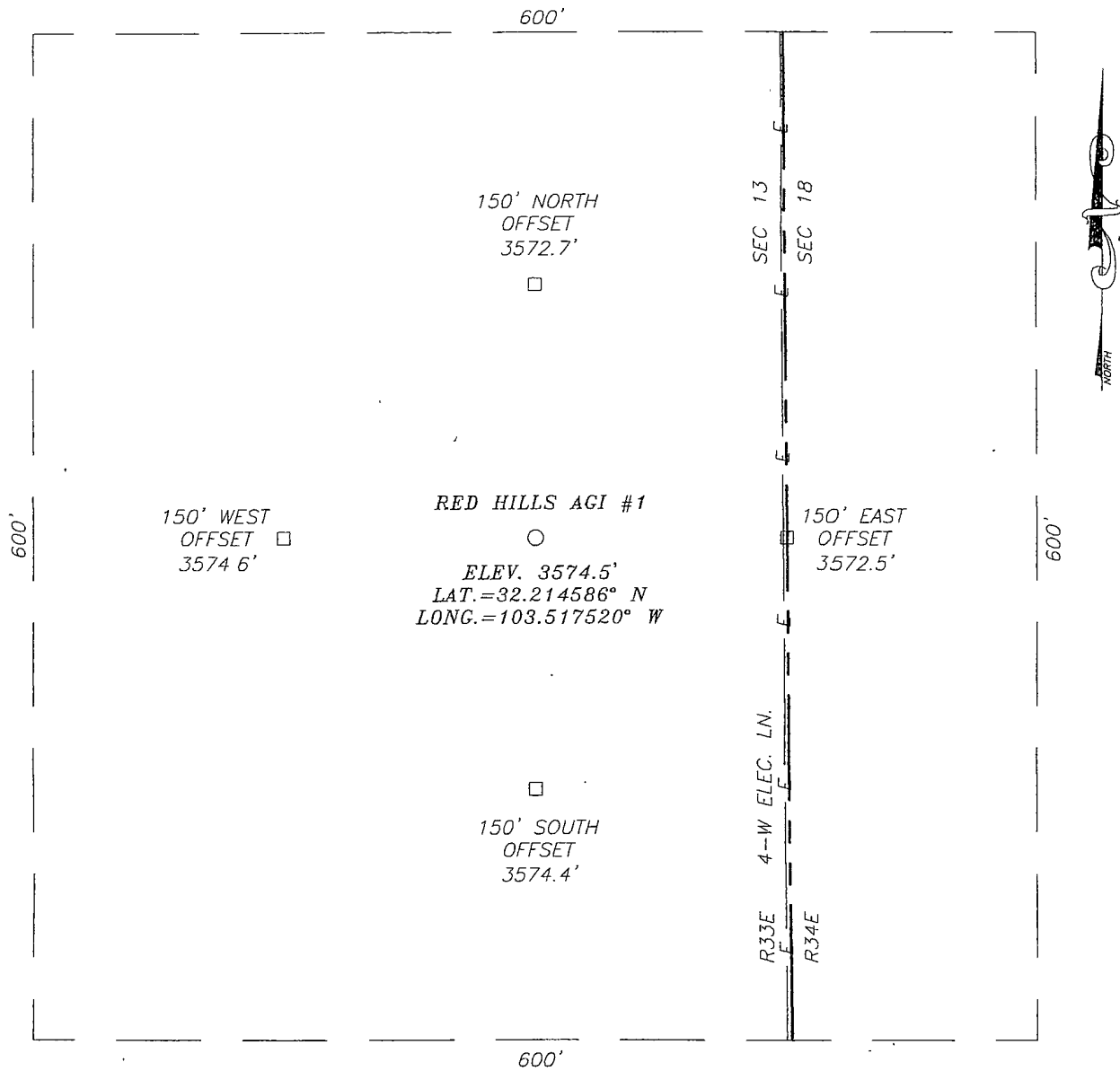
**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

**SUBJECT TO LIKE  
APPROVAL BY STATE ATTACHED**

**APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS**

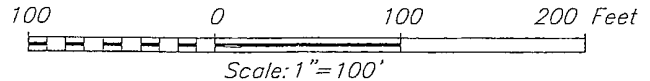
FEB 20 2012

SECTION 13, TOWNSHIP 24 SOUTH, RANGE 33 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO



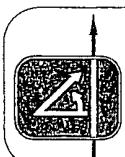
DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. #128 AND CO. RD. J21 (DELAWARE BASIN) GO WEST APPROX. 0.4 MILES ON ST. HWY. #128. THE LOCATION IS APPROX. 1500 FEET NORTH



AGAVE ENERGY COMPANY

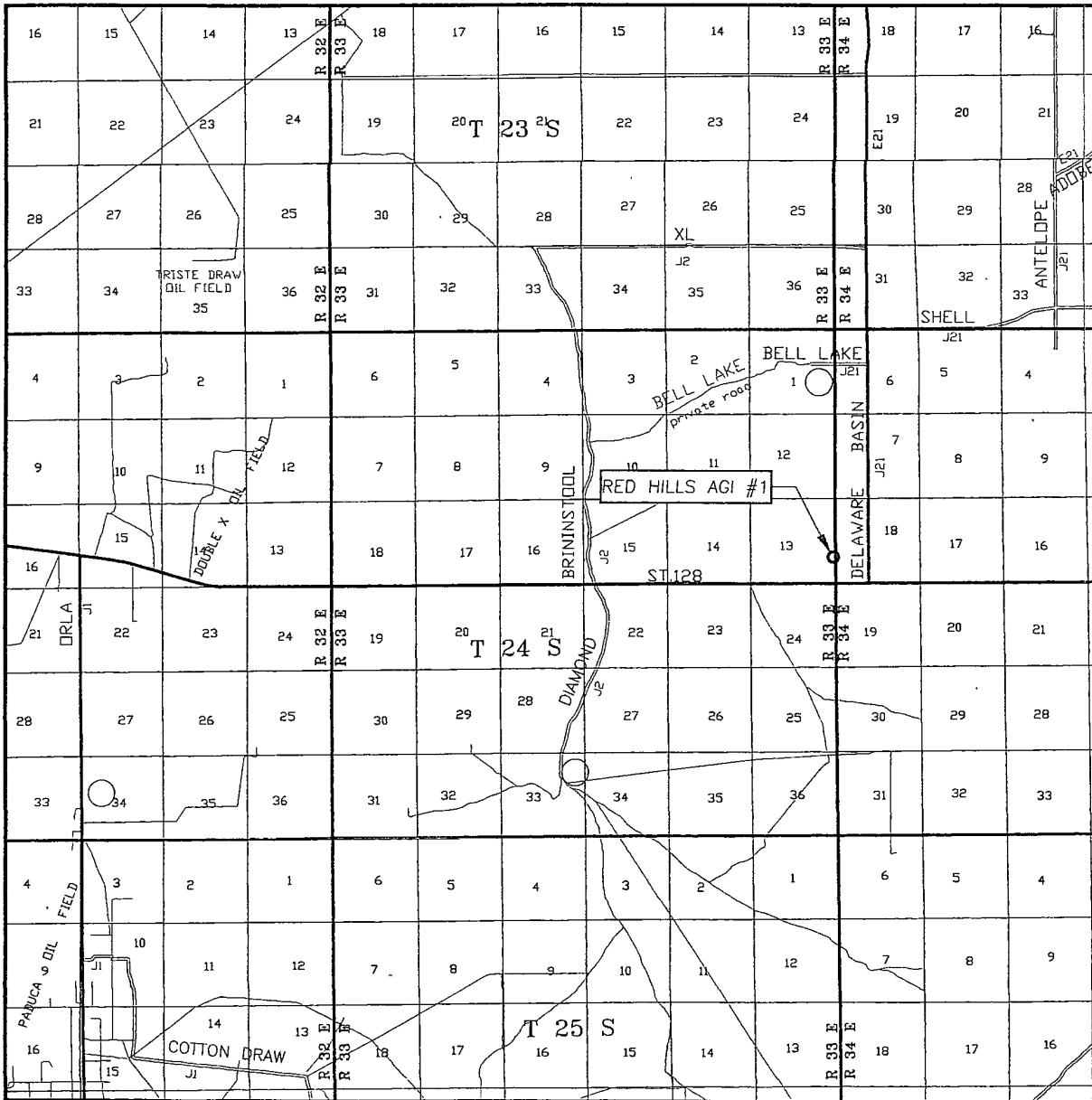
RED HILLS AGI #1 WELL  
LOCATED 1600 FEET FROM THE SOUTH LINE  
AND 150 FEET FROM THE EAST LINE OF SECTION 13,  
TOWNSHIP 24 SOUTH, RANGE 33 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.



PROVIDING SURVEYING SERVICES  
SINCE 1946  
JOHN WEST SURVEYING COMPANY  
412 N DAL PASO  
HOBBS, N.M. 88240  
(575) 393-3117

|                        |                     |
|------------------------|---------------------|
| Survey Date: 7/26/11   | Sheet 1 of 1 Sheets |
| W O Number: 11 11 1636 | Dr By: LA           |
| Date: 7/28/11          | 11111636            |
|                        | Scale: 1"=100'      |

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 13 TWP. 24-S RGE. 33-E

SURVEY N.M.P.M.

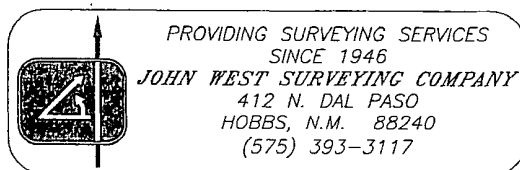
COUNTY LEA STATE NEW MEXICO

DESCRIPTION 1600' FSL & 150' FEL

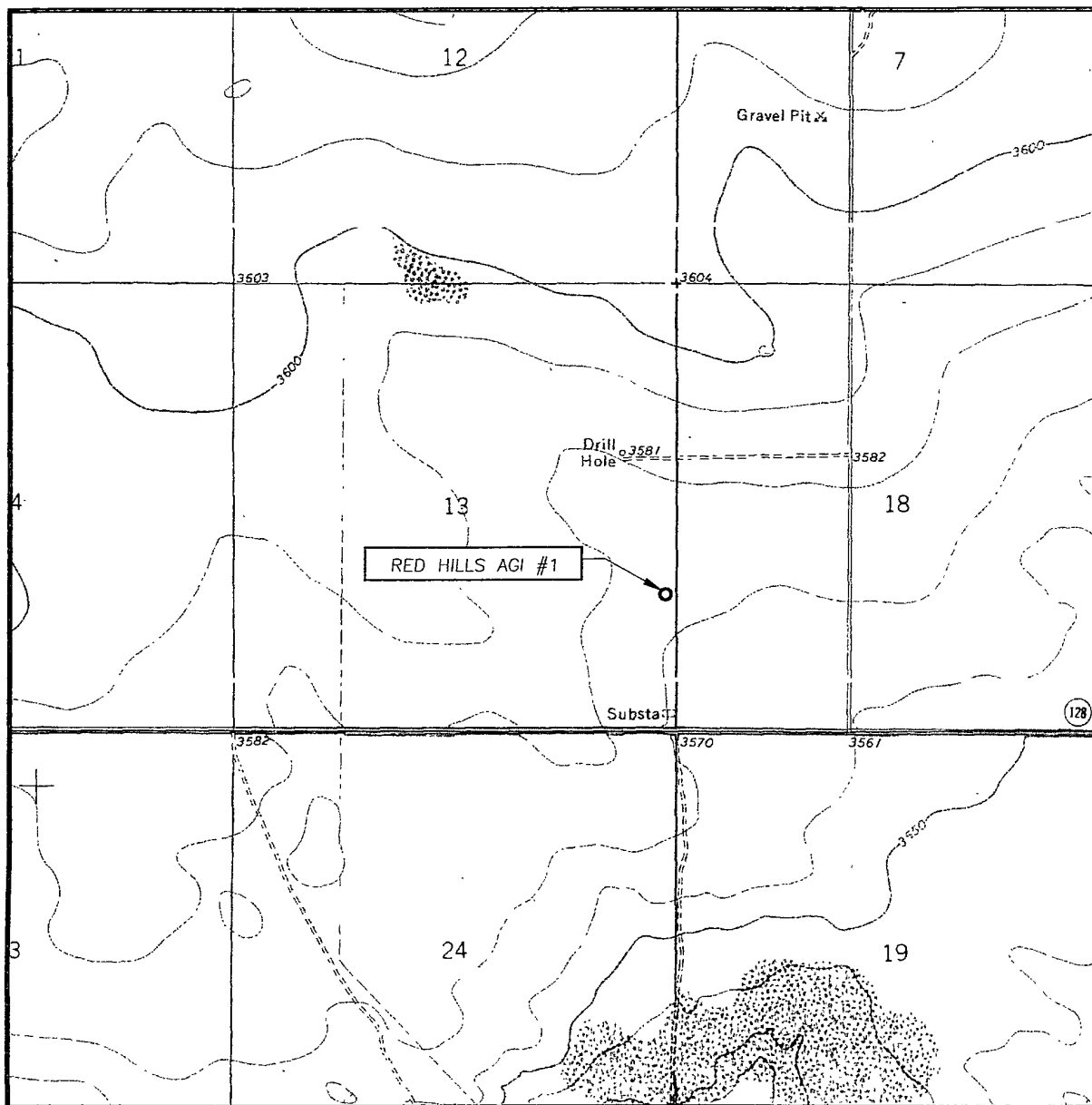
ELEVATION 3574'

OPERATOR AGAVE ENERGY COMPANY

LEASE RED HILLS AGI



# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
BELL LAKE, N.M. - 10'

SEC. 13 TWP. 24-S RGE. 33-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

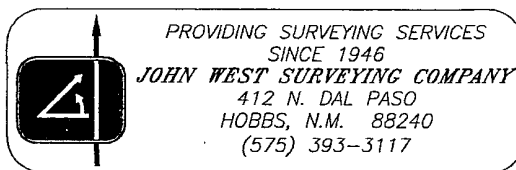
DESCRIPTION 1600' FSL & 150' FEL

ELEVATION 3574'

OPERATOR AGAVE ENERGY COMPANY

LEASE RED HILLS AGI

U.S.G.S. TOPOGRAPHIC MAP  
BELL LAKE, N.M.



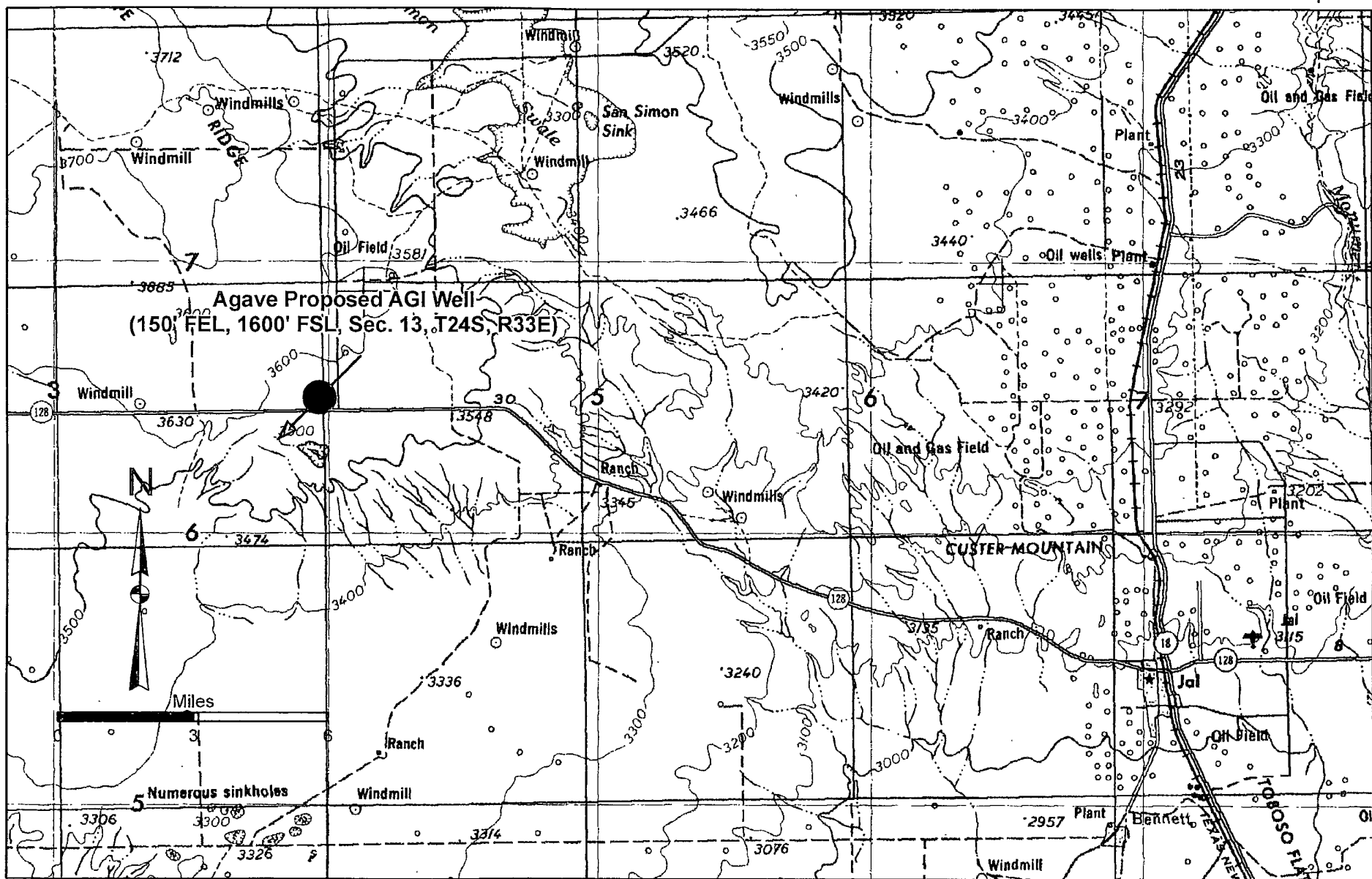
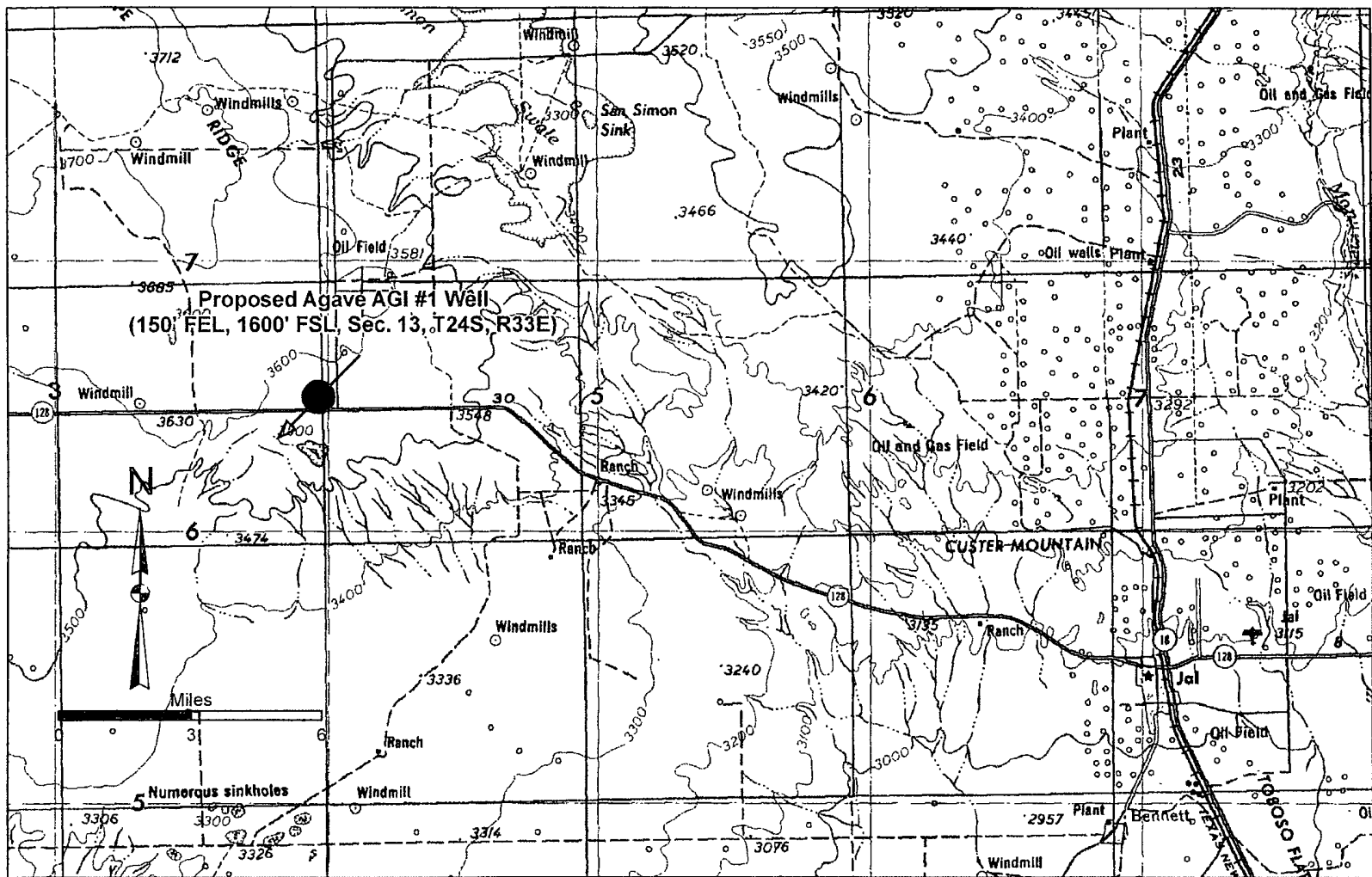


Figure 1: Location of Agave Proposed AGI Well



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Figure 1. Location of Proposed Agave Red Hills Gas Plant and AGI #1 Well



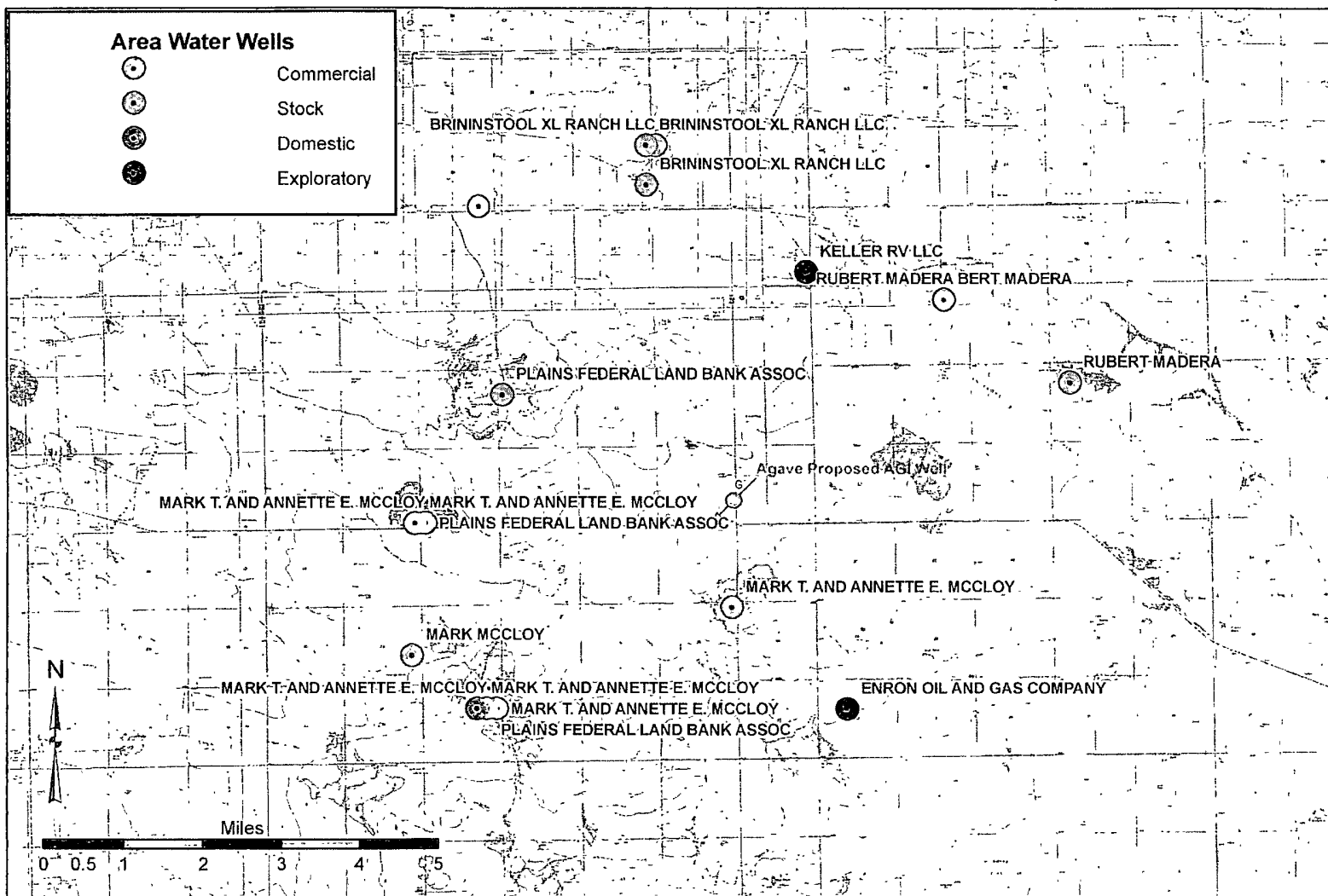
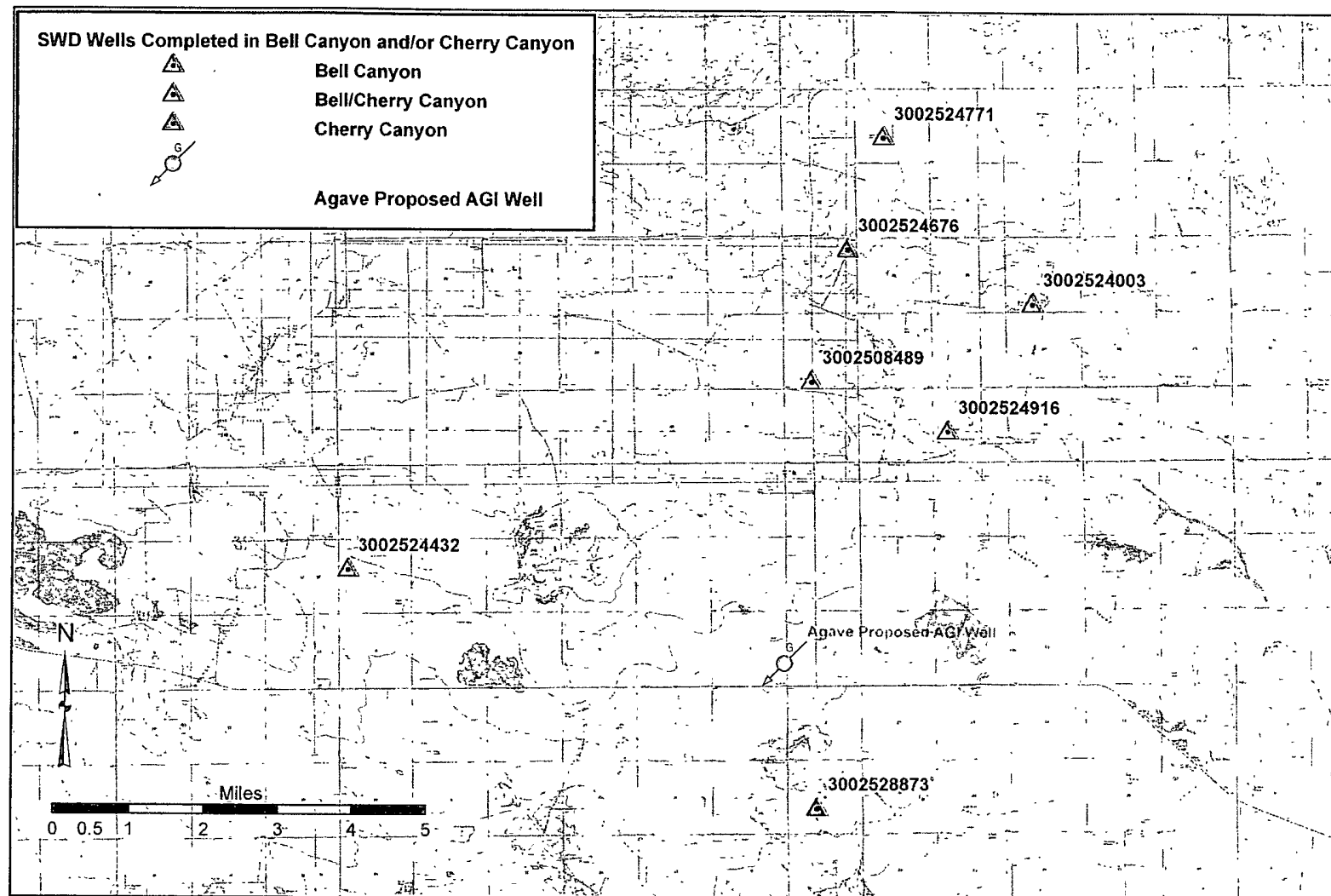


Figure 2 Locations of Water Wells within Five Miles of Proposed Agave Red Hills AGI #1 Well



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Figure 5 Locations of Salt Water Disposal Wells Completed in Bell Canyon and/or Cherry Canyon within Ten Miles of Proposed Agave Red Hills AGI #1 Well.



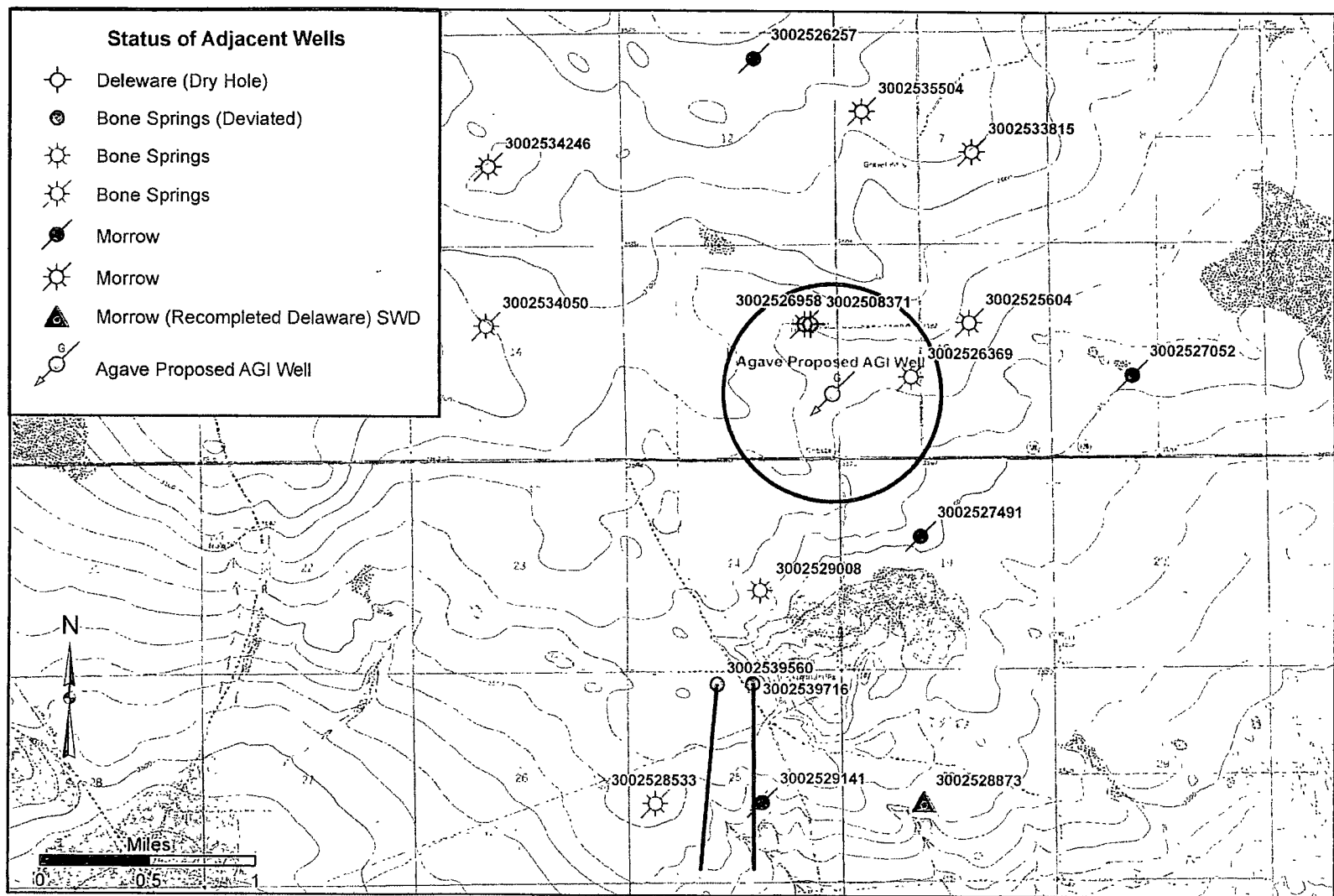
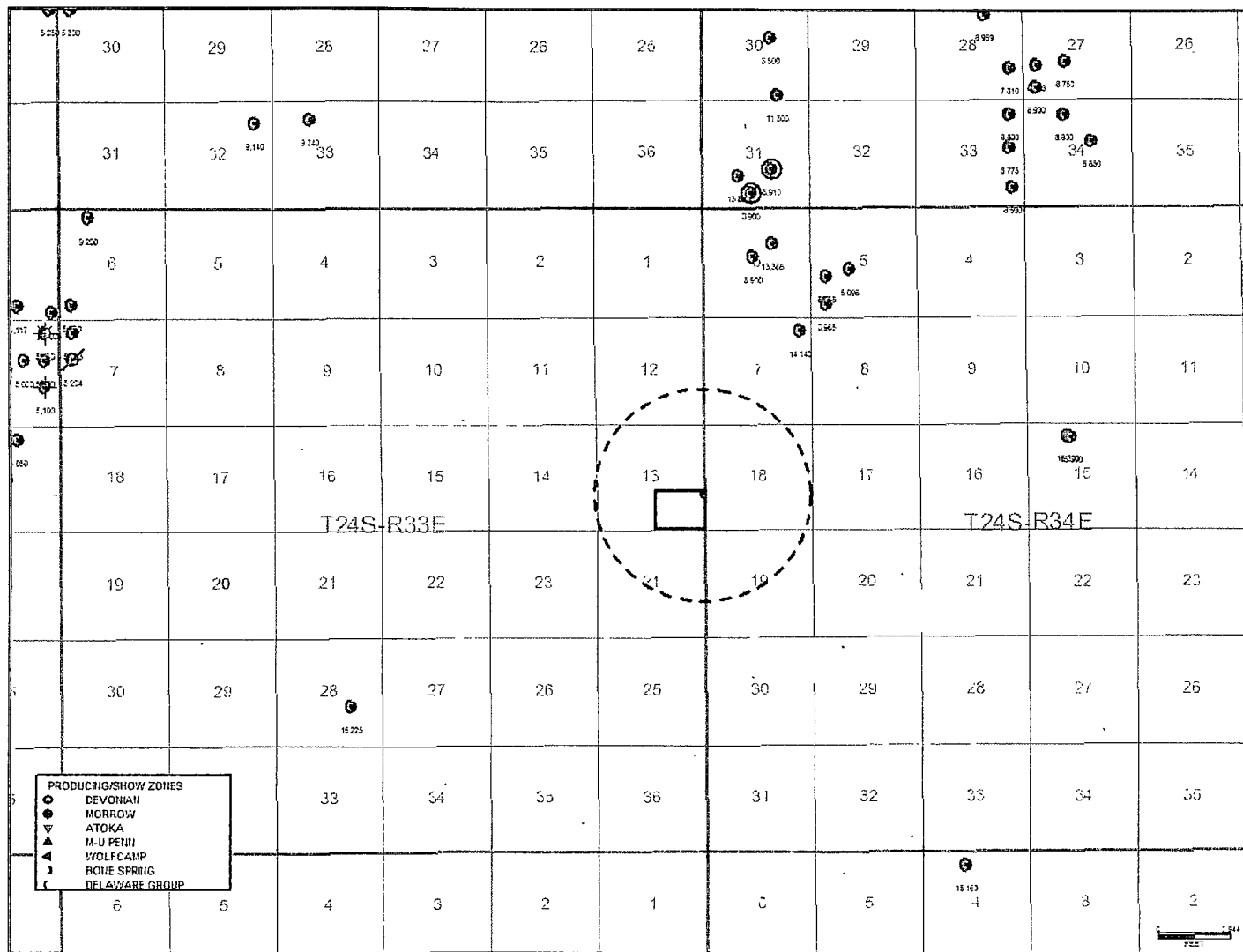


Figure 7 Calculated Area of Injection After 30 Years at 13 MMSCFD

— Calculated Radius of Injection After 30 Years at 13 MMSCFD

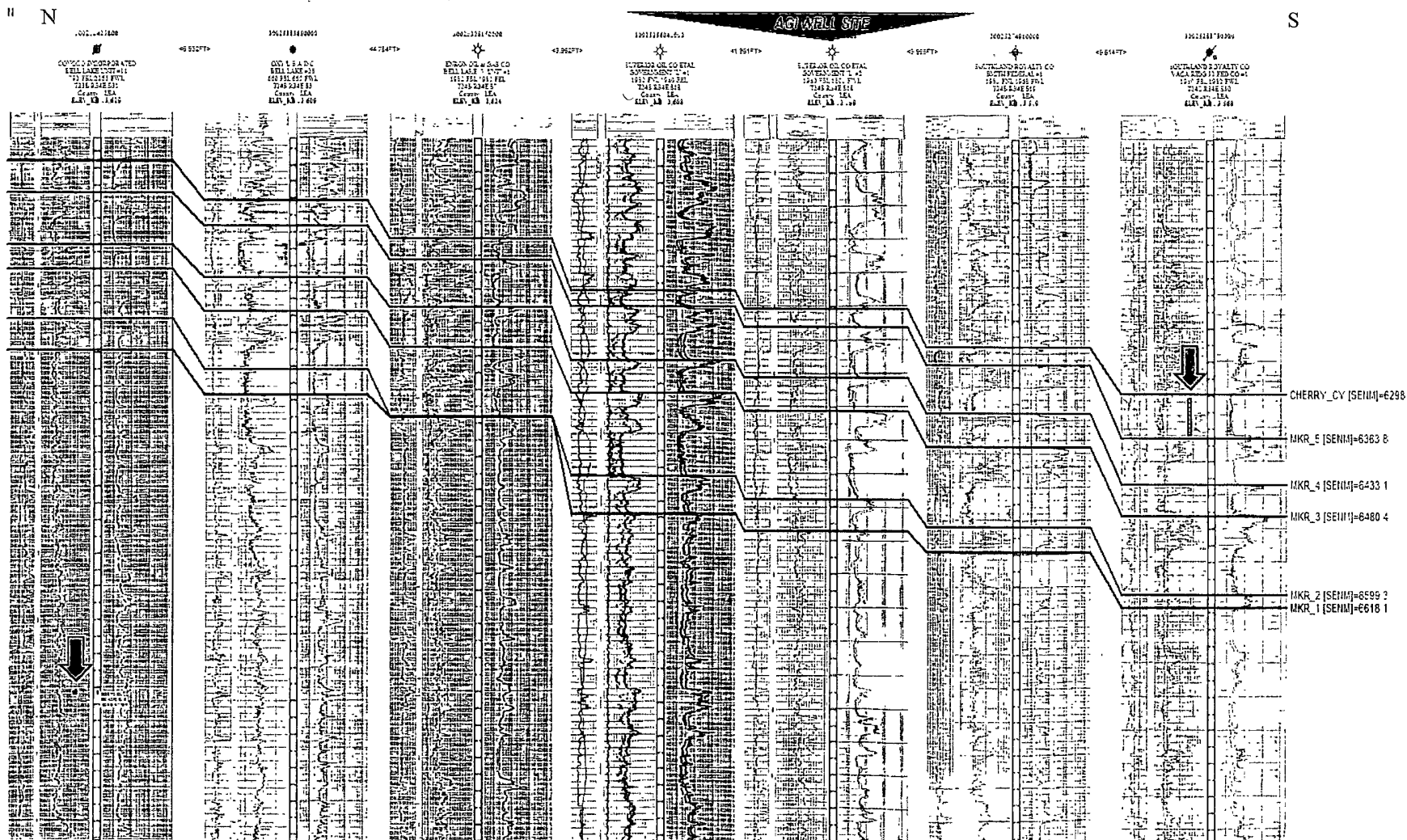


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Figure 8 Oil and Gas Production in the Delaware Group in the Vicinity of the Proposed Agave Red Hills AGI #1 Well Showing One Mile Area of Review







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Figure 10 North-South Cross-Section Showing the Cherry Canyon Formation.

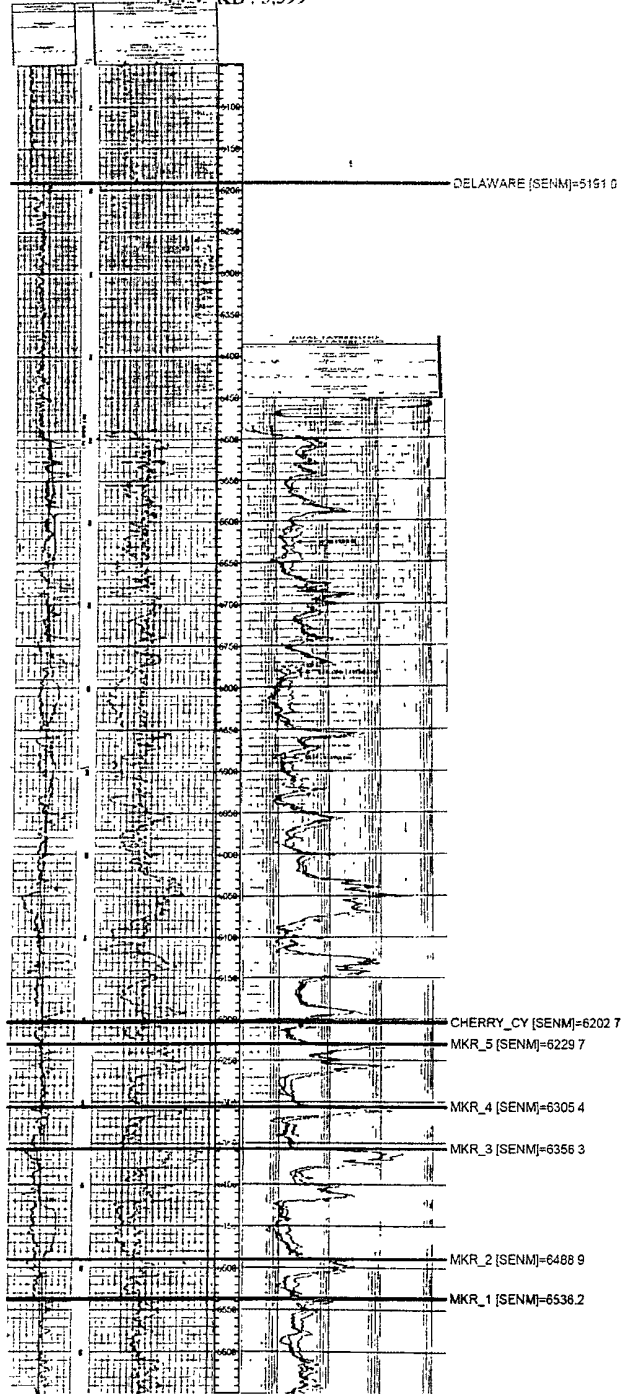
(Note: Blue Arrow Shows Injection Interval of Closest SWD Well. Red Arrow Indicates Location of Cherry Canyon Production within Two Wells Located More Than 2.5 Miles to the North.)



30025263690000



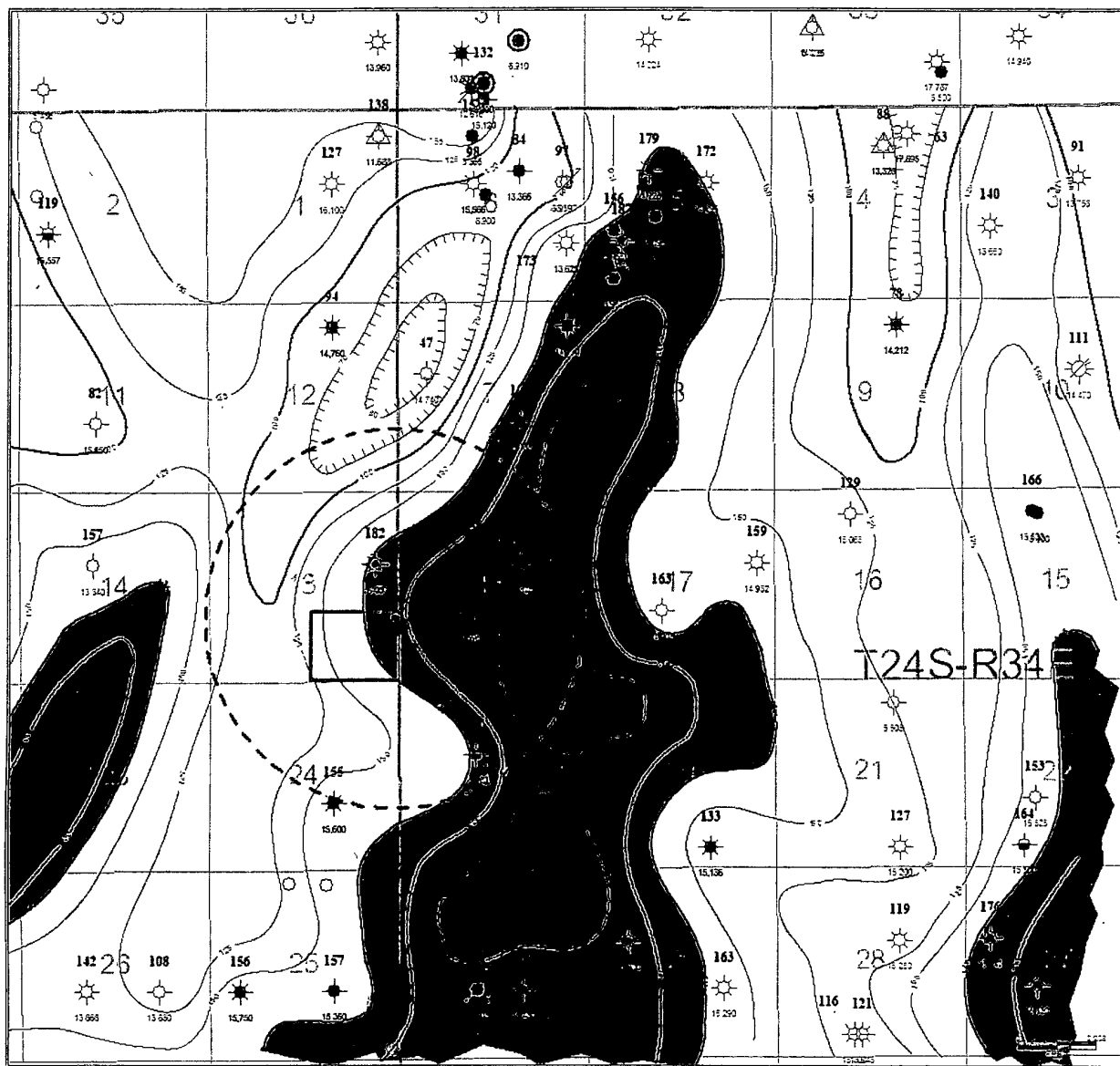
SUPERIOR OIL CO ETAL  
GOVERNMENT 'L' #2  
1980 FSL 1800 FWL  
T24S R34E S18  
County : LEA  
ELEV. KB : 3,599



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Figure 11 Geophysical Logs of the Bell Canyon and Upper Cherry Canyon from the Government 'L' #2 Well, Located 0.38 Miles from the Proposed Agave Red Hills AGI #1.



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Figure 12 Map Showing the Thickness of Clean Sands in the Proposed Upper Cherry Canyon Injection Interval and One Mile Area of Review.



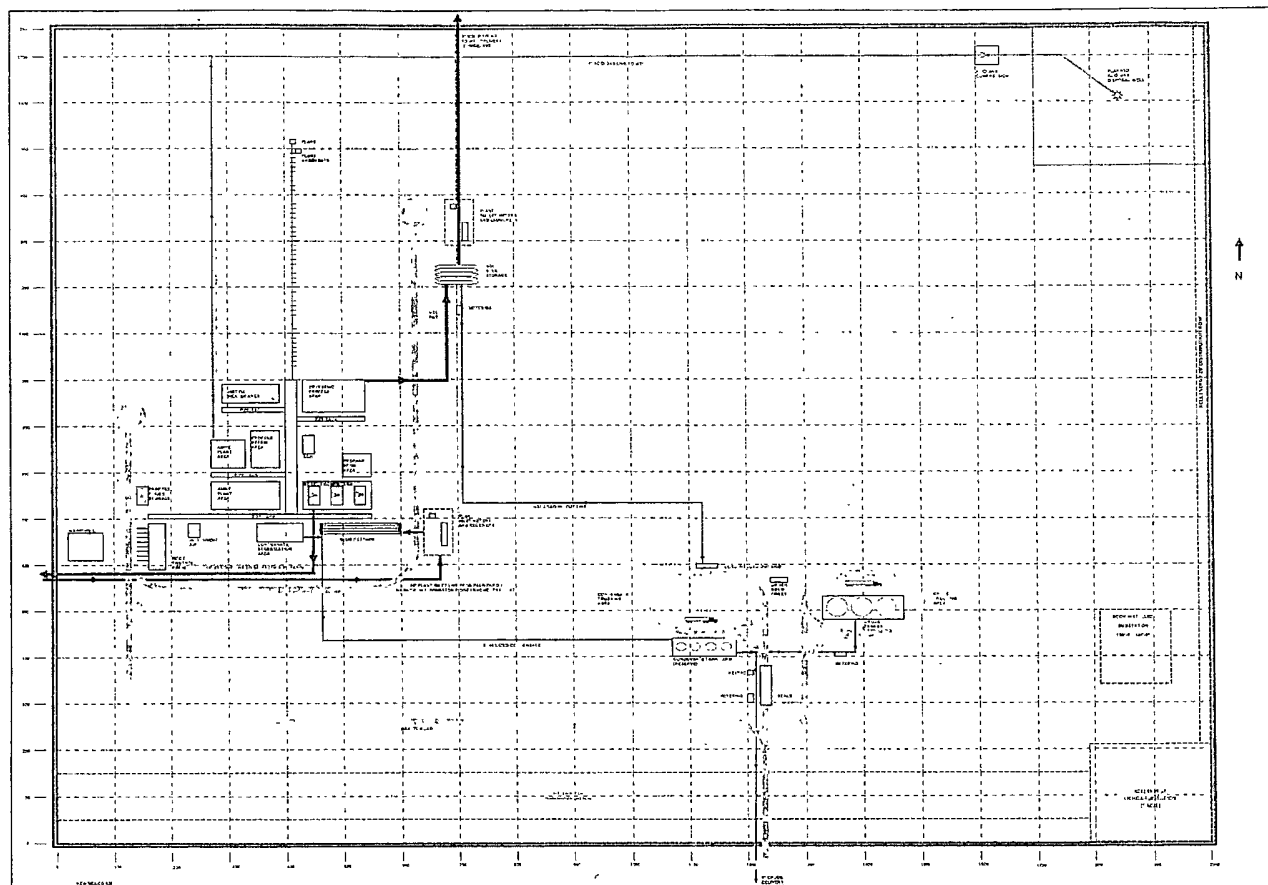


Figure 3 General Plant Diagram Showing Proposed Locations of the Amine Units, Compressor Facility, and AGI Well

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