DATE IN 11-5-04	SUSPENSE 11/20/04	ENGINEER Jones	LOGGED IN 11-8-04	TYPE SWD	APP NO. PSEM0431327612

ABOVE THIS LINE FOR DIVISION USE ONLY

961

NEW MEXICO OIL CONVERVATION 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:

[NSP-Non-Standard Location] [NSL-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 ____________________

30-025-37083
AOR: 4 active (1=SA oil) 0 P&A

[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 if 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

[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.

Bill Baswell	[signature]	Production Engineering Manager	11/3/04
Print or Type Name	Signature	Title	Date

bill.baswell@apachecorp.com
e-mail Address

TWO WARREN PLACE / SUITE 1500 / 6120 SOUTH YALE / TULSA, OK 74136-4224

APACHE CORPORATION

WWW.APACHECORP.COM

(918) 491-4900
(918) 491-4853 (FAX)
(918) 491-4854 (FAX)

November 3, 2004

State of New Mexico
Energy, Minerals & Natural Resources Dept.
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

bp

Re: **Proposed – Elliott #4-WD**
Unit A, Sec. 7-T22S-R37E
Eunice, San Andres, Southwest
Lea County, New Mexico

2004 NOV 5 PM 2 11

Apache Corporation is proposing to drill a saltwater disposal well.

To support this request we have attached the following:

1) OCD Form C-108 with attachments

2) Maps which include all wells within one-half mile and two mile radius of the proposed disposal well.

3) Injection Well Data Sheet for the proposed disposal well

4) A Publishing Affidavit and copy of legal notice

5) List of Surface Owners and Offset Operators with Certified Mail Receipt numbers indicated and copy of letter sent

6) Tabulation of Data on wells located within the Area of Review

7) Wellbore Diagrams for all wells P&A'd in the Area of Review

Please contact me at 918-491-4957 if you need additional information or have any questions regarding this application. Thank you.

Sincerely,

APACHE CORPORATION

Kara Coday

Kara Coday
Sr. Engineering Technician

Attachments

cc: Mr. Chris Williams
Oil Conservation Division
District I
P O Box 1980
Hobbs, New Mexico 88241

Bureau of Land Management
2909 West 2nd Street
Roswell, New Mexico 88201

STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL
RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
SANTA FE, NEW MEXICO 87505

Form C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. OPERATOR: Apache Corporation

ADDRESS: 6120 South Yale, Suite 1500 Tulsa, Oklahoma 74136-4224

CONTACT PARTY: Kara Coday PHONE: (918)491-4957

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

IV. Is this an expansion of an existing project? _____ Yes __X__ 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 a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological 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.

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 any 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 source 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: Kara Coday TITLE: Sr. Engineering Technician

SIGNATURE: Kara Coday DATE: 11/02/2004

E-MAIL ADDRESS: kara.coday@apachecorp.com

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

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

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 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, NM 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 applications within 15 days from the date this application was mailed to them.

OPERATOR **Apache Corporation** LEASE **Elliott**

WELL NO. ~~2 WD~~ #8 IO WD | **330' FNL & 330' FEL** | **A** | **7** | **22S** | **37E**

FOOTAGE LOCATION | UNIT | SECTION | TOWNSHIP | RANGE

Well Construction Data

Surface Casing

Size **9-5/8** Cemented with **250 sx**

TOC **Surface** feet determined by **Circulation**

Hole Size **12-1/4**

Intermediate Casing

Size _____ Cemented with _____

TOC _____ feet determined by _____

Hole Size _____

Long String

Size **7** Cemented with **800 sx**

TOC **Surface** feet determined by **Circulation**

Hole Size **8-3/4**

Total Depth **5050**

Injection Interval

4400 (est.) feet to **5050 (est.)** feet **Open-hole**

(perforated or open-hole; indicate which)

Tubing Size **4-1/2"** lined with **Fiberliner** set in a

(type of internal coating)

7" Baker Lok-Set packer at **4375'** feet

Other type of tubing / casing seal if applicable **N/A**

Other Data

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

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

2. Name of the Injection formation **San Andres**

3. Name of Field or Pool (if applicable) **Eunice, San Andres, Southwest**

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 names and depths of any over or underlying oil or gas zones (pools) in this area.
   See C-108 Attachment

The San Andres formation has been chosen for water disposal.
The intervals chosen within the San Andres are as follows:

Proposed Injection Formation: San Andres, Top - 3870' Base - 5105'
Proposed Injection Intervals: 4400 - 5050'

The San Andres formation is overall a thick, porous dolomite exhibiting excellent porosity. In offset logs, porosities are typically in the 15 - 20 % range. These porosity zones are more than adequate to allow for the disposal of produced water. Sufficient barriers exist in the upper and lower portions of the San Andres formations to prevent vertical migration either upwards or downwards into over/underlying productive formations.

Nearest overlying productive formation: Grayburg, Top - 3635 Base - 3870'
Distance to uppermost San Andres perforation: 530'

Next lowest productive zone: Blinebry, Top - 5530' Base - 6085'
Distance from lowest San Andres perforation to top of Blinebry: 480'

The deepest known fresh water in this immediate area is the Ogallala formation at a depth of 100' - 300', ~4000' above the proposed disposal zone. This should present no hazard to the fresh water aquifers in the area.

The above information is accurate to the best of my knowledge. I have worked in the Permian Basin for the last 25 years. My credentials have been accepted by the NMOCD as an expert witness in this area.

Robert E. Curtis
Sr. Staff Geologist
Apache Corporation
(918) 491-4924
bob.curtis@apachecorp.com

B #10

ATTACHMENT FOR FORM C-108
ELLIOTT #4-WD
MISCELLANEOUS DATA

III. WELL DATA

B. (5)	Next higher oil zone	Grayburg @ +/- 3595'	
	Next lower oil zone	Blinebry @ +/- 5530'	

VII. PROPOSED OPERATION

1.	Average Injection Rate	8,000 BWPD	
	Maximum Injection Rate	12,000 BWPD	
2.	Closed Injection System		
3.	Average Injection Pressure	700 psi	
	Maximum Injection Pressure	1200 psi (approximate) (will not exceed 0.2 psi/ft to top perforation)	
4.	Source Water	Grayburg	Analysis Attached
		San Andres	Analysis Attached

VIII. Please see attached.

IX. STIMULATION PROGRAM

Acidize injection interval with +/- 12,000 gals 15% HCL

X. Logs will be submitted upon completion of the well.

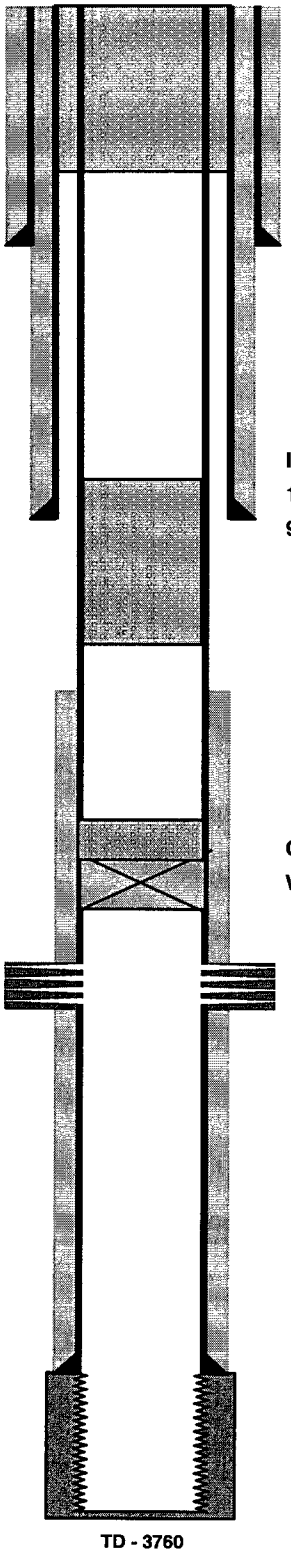
XI. There are no Fresh Water Wells

CP Falby "A" Federal #2
API - 30-025-10104 Penrose Skelly Grayburg
660' FNL & 660' FWL
Sec. 8 T-22S R-37E
Lea County, New Mexico
Spud Date - 10/18/1937

ELEV. 3434'

Last Updated - 10/12/2004 BY RAC

CURRENT STATUS - P&A (2/96)



INSTALL P&A Marker
PERF - 260'
Surface Plug - 7" and 9-5/8" 0' - 260 '

Surface Casing
15" Hole
13" 0' - 194' 200 sxs cmt. TOC - Surf Calc.

Intermediate Casing
12-1/4" Hole
9-5/8" 0'-1180' 600 sxs. Cement TOC. Surf Calc.

Cement Plug - 60 Sxs
1160' -1465

CIBP - 2550'
W/ 50' Cement

EUMONT YATES SEVEN RIVERS QUEEN
2610-2970

Production Casing
8-7/8" Hole 3500 4/12
7" 0' - ~~6280'~~ 300 sxs cmt. TOC - ~~1548~~ Calc.

PENROSE SKELLY GRAYBURG 3500-3760
OPEN HOLE

TD - 3760

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of 1

weeks.

Beginning with the issue dated

October 13 2004

and ending with the issue dated

October 13 2004

Kathi Bearden

Publisher

Sworn and subscribed to before me this 13th day of

October 2004

Janyce M. Bowers

Notary Public.

My Commission expires
November 27, 2004
(Seal)

B 15

LEGAL NOTICE
October 13, 2004

Notice is hereby given of the application of Apache Corporation, 6120 South Yale, Suite 1500, Tulsa, Oklahoma 74136-4224 (918 491-4957, to the Oil Conservation Division, New Mexico Energy, Minerals and Natural Resources Department, for approval of the following injection well to be drilled for the purpose of water disposal.

Pool Name: Eunice; San Andres, Southwest
This well is located in Lea County, New Mexico

Lease/Unit Name: Elliott

Well No. 6-WD (API - not yet assigned)

Location: 330'FNL & 330' FEL, Section 7, T22S, R37E, Unit A

The injection formation is the San Andres located between the interval of 4400' MD to 4900' MD below the surface of the ground. Expected maximum injection rate is 12.000 barrels per day and the expected maximum injection pressure is 1200 psi. Interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, NM 87505 within fifteen days.
#21007

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

02102716000 67525595

Apache Corporation
6120 South Yale, Suite 1500
TULSA, OK 74136-4224

TWO WARREN PLACE / SUITE 1500 / 6120 SOUTH YALE / TULSA, OK 74136-4224

APACHE CORPORATION

WWW.APACHECORP.COM

(918) 491-4900
(918) 491-4853 (FAX)
(918) 491-4854 (FAX)

November 3, 2004

Offset Operator

- B"D

Re: Proposed – Elliott #4-WD
Unit A, Sec. 7-T22S-R37E
Eunice, San Andres, Southwest
Lea County, New Mexico

Attached please find a copy of completed form C-108 with attachments, which Apache has filed with the New Mexico Oil Conservation Division. The map shows the referenced well in relation to your offset operations.

Sincerely,

APACHE CORPORATION

Kara Coday

Kara Coday
Sr. Engineering Technician

Attachments

cc: State of New Mexico
Energy, Minerals & Natural Resources Dept.
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

TWO WARREN PLACE / SUITE 1500 / 6120 SOUTH YALE / TULSA, OK 74136-4224

APACHE CORPORATION

WWW.APACHECORP.COM

(918) 491-4900
(918) 491-4853 (FAX)
(918) 491-4854 (FAX)

November 3, 2004

Surface Owner

Plantation Petroleum
2203 Timberloch Place, Suite 229
The Woodlands, Texas 77380

"B" #10

Re: Proposed – Elliott #~~4~~-WD
Unit A, Sec. 7-T22S-R37E
Eunice, San Andres, Southwest
Lea County, New Mexico

Attached please find a copy of completed form C-108 with attachments, which Apache has filed with the New Mexico Oil Conservation Division.

Sincerely,

APACHE CORPORATION

Kara Coday

Kara Coday
Sr. Engineering Technician

cc: State of New Mexico
Energy, Minerals & Natural Resources Dept.
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

South Permian Basin Region
10520 West I-20 East
Odessa, TX 79765
(915) 498-9191
Lab Team Leader - Sheila Hernandez
(915) 495-7240

Water Analysis Report by Baker Petrolite

Company:	APACHE CORPORATION	Sales RDT:	33102
Region:	PERMIAN BASIN	Account Manager:	MIKE EDWARDS (505) 910-9517
Area:	EUNICE, NM	ID #:	22638
Lease/Platform:	GRIZZELL UNIT	Analysis Cost:	$40.00
Entity (or well #):	10		
Formation:	San Andres		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	11/15/01
Analysis Date:	11/20/01
Analyst:	JAMES AHRLETT
TDS (mg/l or g/m3):	9891.7
Density (g/cm3, tonne/m3):	1.007
Anion/Cation Ratio:	1.0000000
Carbon Dioxide:	
Oxygen:	
Comments:	

Analysis of Sample 209885 @ 75 °F

Anions	mg/l	meq/l
Chloride:	4111.0	115.96
Bicarbonate:	2282.0	37.4
Carbonate:	0.0	0
Sulfate:	20.0	0.42
Phosphate:		
Borate:		
Silicate:		
Hydrogen Sulfide:		
pH at time of sampling:		
pH at time of analysis:		7.44
pH used in Calculation:		7.44

Cations	mg/l	meq/l
Sodium:	2877.7	125.17
Magnesium:	114.0	9.38
Calcium:	281.0	14.02
Strontium:	9.0	0.21
Barium:	8.0	0.12
Iron:	4.0	0.14
Potassium:	185.0	4.73
Aluminum:		
Chromium:		
Copper:		
Lead:		
Manganese:		
Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO3		Gypsum CaSO4*2H20		Anhydrite CaSO4		Celestite SrSO4		Barite BaSO4		CO2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	1.30	177.00	-2.39	0.00	-2.46	0.00	-2.11	0.00	0.94	4.16	0.95
100	0	1.39	188.80	-2.41	0.00	-2.41	0.00	-2.10	0.00	0.79	3.82	1.3
120	0	1.49	199.91	-2.42	0.00	-2.34	0.00	-2.07	0.00	0.67	3.47	1.71
140	0	1.59	209.97	-2.43	0.00	-2.26	0.00	-2.04	0.00	0.57	3.12	2.2

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.

South Permian Basin Region
10520 West I-20 East
Odessa, TX 79765
(915) 498-9191
Lab Team Leader - Sheila Hernandez
(915) 495-7240

Water Analysis Report by Baker Petrolite

Company:	APACHE CORPORATION	Sales RDT:	33102
Region:	PERMIAN BASIN	Account Manager:	MIKE EDWARDS (505) 910-9517
Area:	EUNICE, NM	ID #:	22639
Lease/Platform:	GRIZZELL UNIT	Analysis Cost:	$40.00
Entity (or well #):	12		
Formation:	Grayburg		
Sample Point:	WELLHEAD		

Summary	
Sampling Date:	11/15/01
Analysis Date:	11/20/01
Analyst:	JAMES AHRLETT
TDS (mg/l or g/m3):	9975.3
Density (g/cm3, tonne/m3):	1.008
Anion/Cation Ratio:	1.0000001
Carbon Dioxide:	
Oxygen:	
Comments:	

Analysis of Sample 209886 @ 75 °F

Anions	mg/l	meq/l
Chloride:	4050.0	114.24
Bicarbonate:	2405.0	39.42
Carbonate:	0.0	0.
Sulfate:	20.0	0.42
Phosphate:		
Borate:		
Silicate:		
Hydrogen Sulfide:		
pH at time of sampling:		
pH at time of analysis:		7.47
pH used in Calculation:		7.47

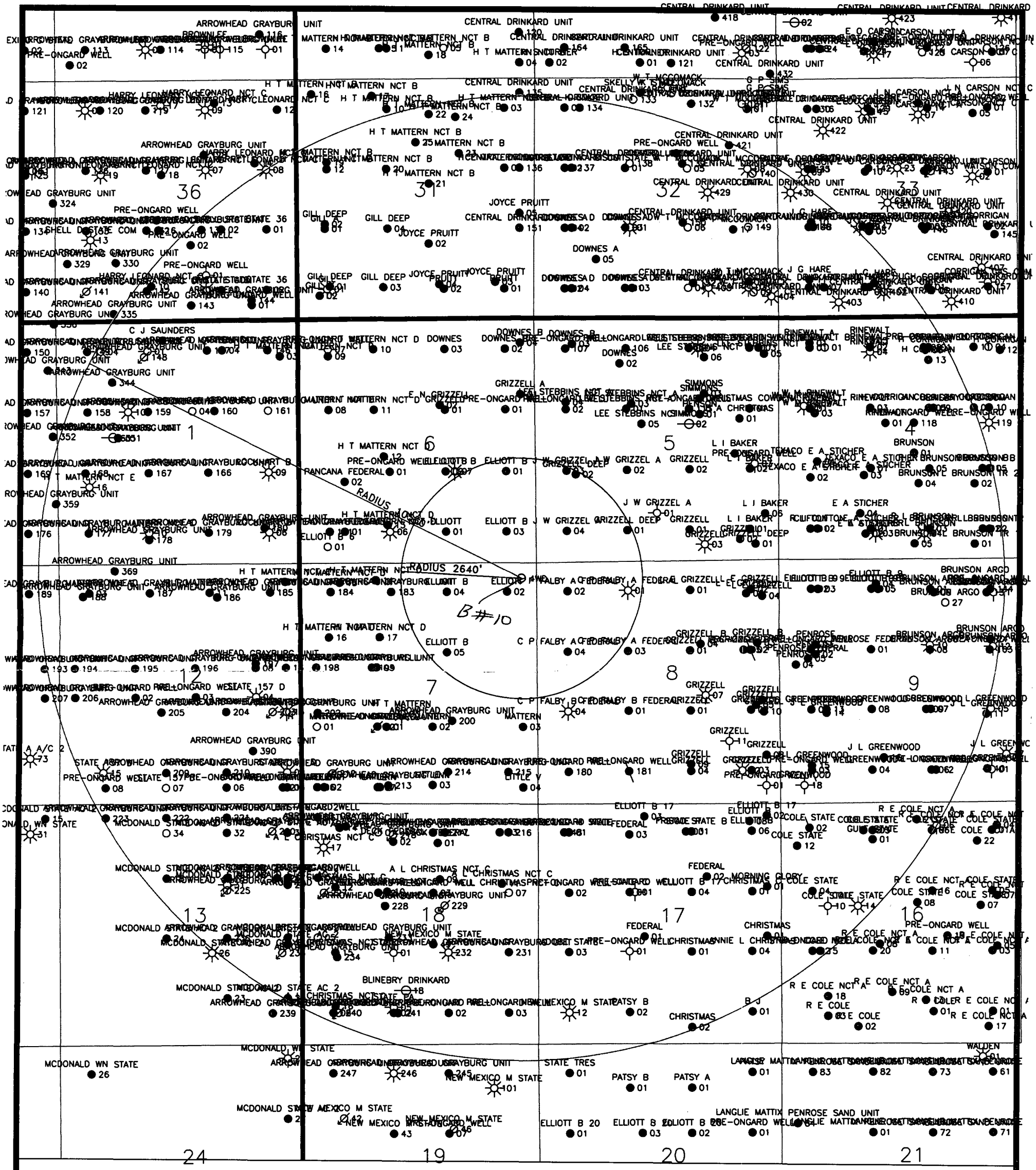
Cations	mg/l	meq/l
Sodium:	2894.3	125.9
Magnesium:	112.0	9.21
Calcium:	262.0	13.07
Strontium:	9.0	0.21
Barium:	6.0	0.09
Iron:	4.0	0.14
Potassium:	213.0	5.45
Aluminum:		
Chromium:		
Copper:		
Lead:		
Manganese:		
Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO3		Gypsum CaSO4*2H20		Anhydrite CaSO4		Celestite SrSO4		Barite BaSO4		CO2 Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	1.32	171.78	-2.42	0.00	-2.49	0.00	-2.11	0.00	0.82	2.78	0.94
100	0	1.41	181.85	-2.44	0.00	-2.44	0.00	-2.09	0.00	0.67	2.78	1.28
120	0	1.51	191.57	-2.45	0.00	-2.37	0.00	-2.07	0.00	0.55	2.43	1.7
140	0	1.60	199.89	-2.46	0.00	-2.29	0.00	-2.04	0.00	0.45	2.08	2.2

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO2 pressure is actually the calculated CO2 fugacity. It is usually nearly the same as the CO2 partial pressure.



YEARS Apache CORPORATION

TWO WARREN PLACE, SUITE 1500
6120 SOUTH YALE
TULSA, OKLAHOMA 74136-4224

ELLIOTT 4WD

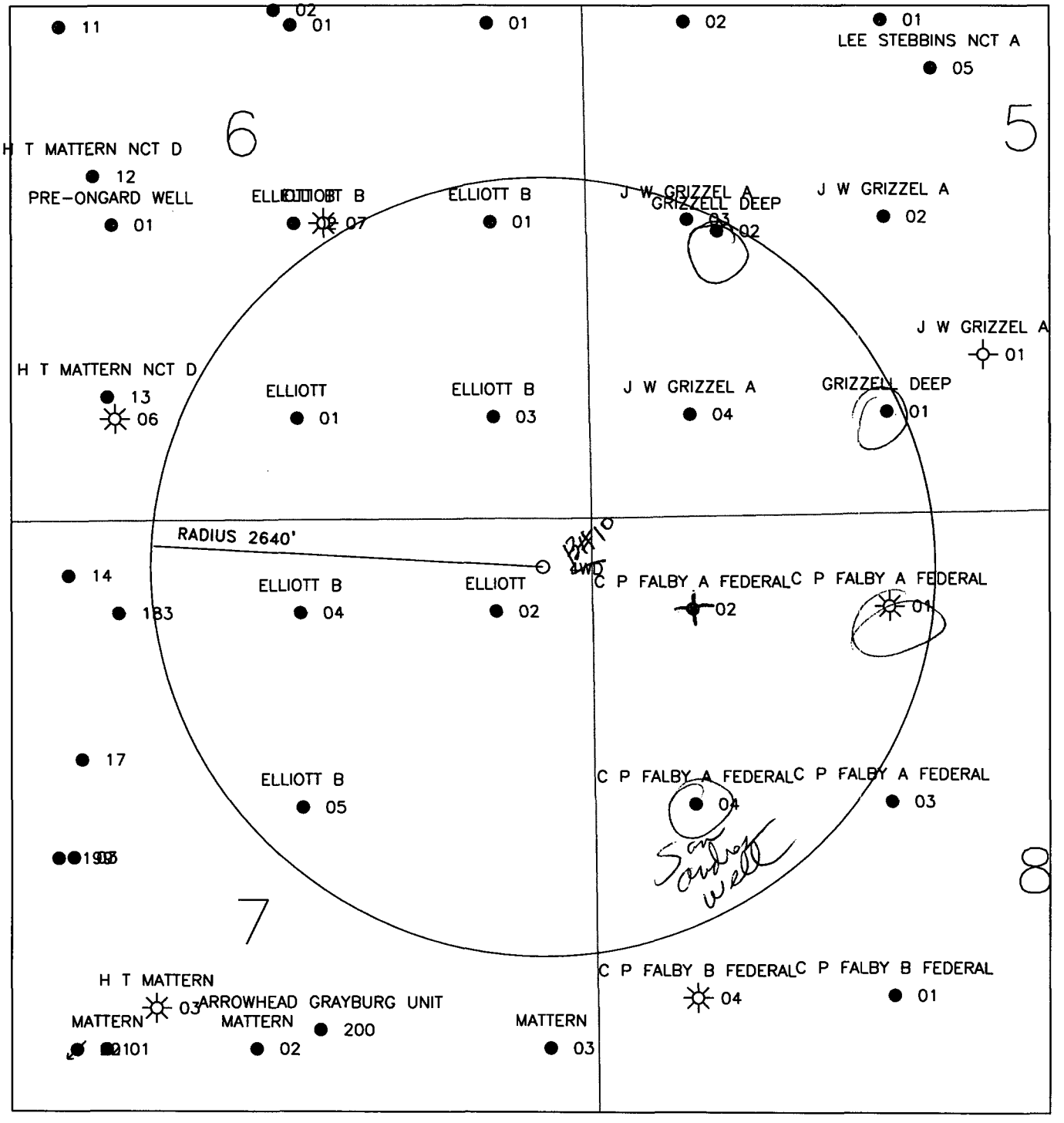
Sec. 7-22S 37E

LEA COUNTY, NEW MEXICO

CONVERSIONS
Injection Well Permitting

DATE: 10/18/04

ELLIOTT 4WD (KARA)



- LOCATION
- INJ WELL
- OIL WELL
- P&A-OIL
- GAS WELL
- DRY HOLE

0 1320' 2640'

Apache CORPORATION
TWO WARREN PLACE, SUITE 1500
6120 SOUTH YALE
TULSA, OKLAHOMA 74136-4224

ELLIOTT 4WD

Sec. 7-22S 37E

Lea County, New Mexico

Date: 11/2/04

Dwg: ELLIOTT 4WD SMALL (KARA)

APPLICATION TO EXPAND WATERFLOOD
ELLIOTT LEASE
OFFSET OPERATORS

BEC Corporation
110 N Marienfeld, Suite 370
Midland, Texas 79702
Certified Rcpt. # 7002 2410 0004 2683 4320

Chevron Texaco
P O Box 36366
Houston, Texas 77236-6366
Certified Rcpt. # 7002 2410 0004 2683 4337

OK

McCasland Farm & Ranch
P.O. Box 206
Eunice, New Mexico 88231
Certified Rcpt. # 7002 2410 0004 2683 4344

Me-Tex Oil & Gas Inc.
401 W Taylor
Hobbs, New Mexico 88240
Certified Rcpt. # 7002 2410 0004 2683 4351

Zia Energy Inc.
2203 Timberloch Place, Suite 229
The Woodlands, TX 77380
Certified Rcpt. # 7002 2410 0004 2683 4368

XTO Energy, Inc.
3000 North Garfiled Suite 175
Midland, TX 79705
Certified Rcpt. # 7002 2410 0004 2683 4375

A copy of the application was mailed to the Offset Operators listed above on November 3, 2004.

Kara Coday
Kara Coday, Sr. Engineering Technician

11/3/2004
Date

AREA OF REVIEW / WELL DATA

WELL NAME	API NO.	S / T / R	LOCATION	WELL TYPE	COMP DATE	TD	SURFACE CASING				INTERMEDIATE CASING				PRODUCTION CASING					LINER				
							HOLE	CSG	SET	CMT	HOLE	CSG	SET	CMT	HOLE	CSG	SET	CMT	TOC	HOLE	LINER	DEPTH	CMT	TOC
CP Falby "A" Federal #1 ✓	30-025-10117	8/22S/37E	660 FNL -1980 FWL	O	06/23/75	6570	14-3/4	12-1/2	228	175	12-1/4	9-5/8	1192	600	8-3/4	7	3450	300	1262 (C)	6-1/4	5	6570	300	2670
CP Falby "A" Federal #2 ✓	30-025-10104	8/22S/37E	660 FNL - 660 FWL	P&A	01/08/38	3760	15	13	194	200	12-1/4	9-5/8	1180	600	8-7/8	7	3500	300	1118 (C)					
CP Falby "A" Federal #4	30-025-10120	8/22S/37E	1980 FNL-660 FWL	O	08/12/61	6555	15	10-3/4	339	300					9-1/4	7-5/8	3943	1200	0 (C)	6-3/4	4-1/2	6554	200	3883 (B)
Elliott "B" #1	30-025-10076	6/22S/37E	1980 FSL - 660 FEL	O	11/14/37	3715	15	10-3/4	206	225	9-5/8	7-5/8	1188	425	6-5/8	5-1/2	3424	425	0 (C)	6-5/8	4	3757	150	3221(C)
Elliott "B" #3	30-025-10078	6/22S/37E	660 FSL - 660 FEL	O	03/22/38	3778	15	10-3/4	298	225	9-5/8	7-5/8	1182	425	6-1/8	5-1/2	3433	425	0 (C)					
Elliott "B" #4	30-025-10090	7/22S/37E	660 FNL - 1980 FEL	O	12/14/44	3723	9-5/8	7-5/8	1125	425					7-3/8	5-1/2	3723	324	1025 (C)					
Elliott "B" #5	30-025-10091	7/22S/37E	1980 FNL - 1980 FEL	O	01/23/45	3724	9-5/8	7-5/8	1117	500					7-3/8	5-1/2	3629	425	221 (C)					
Elliott #1	30-025-10085	6/22S/37E	660 FSL - 1980 FEL	O	03/09/50	3771	15	10-3/4	300	250					9-5/8	5-1/2	3650	300	2715 (C)					
Elliott #2	30-025-10087	7/22S/37E	660 FNL - 660 FEL	O	01/20/49	3719	12-1/4	10-3/4	323	200					7-7/8	5-1/2	3459	400	422 (C)					
Grizzell Deep #1	30-025-10074	5/22S/37E	1980 FWL - 660 FSL	O	07/07/36	6565	18	12-1/2	284	300	10-3/4	9-1/4	1256	50	8-1/4	7	3573	100	2438 (C)	6-1/4	5	6494	300	3400 (C)
Grizzell Deep #2	30-025-26149	5/22S/37E	1980 FSL - 860 FWL	O	05/29/79	6750	12-1/4	8-5/8	1180	550					7-7/8	5-1/2	6750	925	Surface					
J W Grizzell "A" #3	30-025-10050	5/22S/37E	1980 FSL - 660 FWL	O	08/03/37	3780	15	10-3/4	285	200					9-5/8	7	3426	600	764 (C)					
J W Grizzell "A" #4	30-025-10068	5/22S/37E	660 FSL - 660 FWL	SWD	08/13/37	3780	13	10-3/4	265	257					8-1/4	7	3459	600	Surface	6-1/8	4-1/2	3666	150	3144 (C)
Top of Cement Legend:																								
B = Cement Bond Log																								
C = Calculated																								
Surface = Circulated																								
T = Temperature Survey																								

4 AOR
4 TOTAL @ Depth
4 ACTIVE
0 PEA