ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONVERVATION DIVISION

- Engineering Bureau -

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



		ADMINISTRATIVE APPLICATION	COVERSHEET
	THIS COVE	ERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCE WHICH REQUIRE PROCESSING AT THE DIVISION LEVE	EPTIONS TO DIVISION RULES AND REGULATIONS
Applica	DHC-Dow [PC-P		Unit] [SD-Simultaneous Dedication]] [PLC-Pool/Lease Commingling] DLM-Off-Lease Measurement] laintenance Expansion] Pressure Increase]
[1]	TYPE OF	APPLICATION - Check Those Which Apply	PTP WILLIAM CONTRACTOR AND
	[A]	Location - Spacing Unit - Simultaneous Dedication NSL NSP SD	on APR 3 2001
	Chec	ck One Only for [B] or [C]	The state of the s
	[B]	Commingling - Storage - Measurement DHC CTB PLC PC	OLS OLM
	[C]	Injection - Disposal - Pressure Increase - Enhance WFX PMX SWD IPI I	ed Oil Recovery EOR
[2]	NOTIFIC [A]	ATION REQUIRED TO: - Check Those Which Working, Royalty or Overriding Royalty Interest	
	[B]	Offset Operators, Leaseholders or Surface Owner	r
	[C]	Application if One Which Requires Published Le	egal Notice
	[D]	Notification and/or Concurrent Approval by BLN U.S. Bureau of Land Management - Commissioner of Public Lands, State Land	
	[E]	For all of the above, Proof of Notification or Pub	olication is Attached, and/or,
	[F]	☐ Waivers are Attached	
[3]	I hereby certify Oil Conservation complete to t I understan	that I, or personnel under my supervision, have reviewed on Division. Further, I assert that the attached application he best of my knowledge and where applicable, verify that that any omission of data (including API numbers, prequired notification is cause to have the application pace	the applicable Rules and Regulations of the for administrative approval is accurate and at all interest (WI, RI, ORRI) is common. cool codes, etc.), pertinent information
		lote: Statement must be completed by an individual with manage	le.
Lee R. V	Vhite Type Name	Significant	6/ Engineering Manager 4/12/01 Title Date
THE OF	туре маше	Signature	riug Date
			Lee.White@Apachecorp.com

e-mail Address



WWW.APACHECORP.COM (713) 296-6000

April 12, 2001

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

Re: Expansion of Waterflood Project Northeast Drinkard Unit Well No. 102, 103, 106, 112, 122, 123, 204, 207, 223 304, 305, 306, 310, 311, 404, 410 Eunice N., Blinebry-Tubb-Drinkard Lea County, New Mexico

Apache Corporation is proposing an expansion of the previous authority, Division Order No. R-8541, to add additional water injection wells to the above referenced lease.

To support this request we have attached the following:

- 1) OCD Form C-108 with attachments
- 2) Maps with surveys which include:
 - A) Unit Map with location of all wells within one-half mile radius of proposed injection wells
 - B) Individual maps for each proposed injection well with location of all wells and leases within a two mile and one-half mile radius (note: wells in red are proposed infill producers not yet drilled)
- 3) Injection Well Data Sheet for each proposed injector
- 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 713-296-6338 if you need additional information or have any questions regarding this application. Thank you.

Sincerely,

APACHE CORPORATION

Debra J. Anderson

Sr. Engineering Technician

Attachments

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

State of New Mexico

nderver!

Office of Land Commissioner P O Box 1148

Santa Fe, New Mexico 87504

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 DRIVE SANTA FE, NEW MEXICO 87505

Form C-108 Revised 4-1-98

APPLICATION FOR AUTHORIZATION TO INJECT

l.	PURPOSE: Secondary Recovery Pressure Maintenance Disposal Storage Application qualifies for administrative approval? No						
II.	OPERATOR: Apache Corporation						
	ADDRESS: 2000 Post Oak Blvd., Ste. 100, Houston, Texas 77056-4400						
	CONTACT PARTY: Debra Anderson PHONE: 713-296-6338						
Ш.	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:						
V.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half radius circle drawn around each proposed injection well. This circle identifies the wells 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:						
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; 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 geological 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) overlaying 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 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: Debra J. Anderson						
	SIGNATURE: NO LANDO LUON DATE: 4/12/01						
*	If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resultantly and submitted. Please show the date and circumstance of the earlier submitted.						

Hearing 9/24/87, Case No. 9232, Order No. 8541 & Supplemental Application 06/26/95
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 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 "ile objections or requests for hearing with the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505 within 15 days.

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

ATTACHMENT FOR FORM C-108 NORTHEAST DRINKARD UNIT MISCELLANEOUS DATA

III. WELL DATA

B. (5) Next higher oil zone Paddock @ +/- 5200'

Next lower oil zone Abo @ +/- 6750'

VII. PROPOSED OPERATION

1. Average Injection Rate 1000 BWPD Maximum Injection Rate 2000 BWPD

2. Closed Injection System

3. Average Injection Pressure 1100 psi

Maximum Injection Pressure 1300 psi (approximate)

(will not exceed 0.2 psi/ft to top perforation)

4. Source Water San Andres Analysis Attached

Blinebry-Tubb-Drinkard Produced

IX. STIMULATION PROGRAM

Acid treatment schedule will be determined following evaluation of GR/CNL/CCL (to be run prior to perforating the unitized interval)

XI. There are no Fresh Water Wells

Lab Tost No. 23748

Apache

Sample Date: 3/10/99

Water Analysis

Listed below please find water analysis report from: NEDU #919-S

Specific Gravity:

1.009

Total Dissolved Solids:

13273

pH:

6.49

Conductivity (µmhos):

Ionic Strength:

0.265

Cations: me/ 608 Calcium (C_0++) : 244 Magnesium (Mg++): 3909 Sodium (Ne+): 0.00 Iron (Fe++): Dissolved Iron (Fe++): 0.38 Barium (Bz++): 19 Stronilum (Sr): Manganese (Mn++): 10.0 Resistivity: **Anions**:

(HCO3-): 562 Bicarbonate (CO3-): Carbonaic (OH-): 0 Hydroxide 1750 Sulfate (SO4--): Chloride (CF): 6200

Gases;

Cerbon Dioxide (CO2):

Hydrogen Sulfide (F12S):

80.00 408.00

Oxygen

(02):

Soals Index (positive value indicates soale tendency) a blank indicates some tests were not run

Temperature		CaCO3 SI	CaSO4 S	
86F	30.0C	-0.14	-17.28	
104F	40.0C	0.09	-17.28	
122F	50.0C	0.35	-17.28	
140F	60.0C	0.57	-16.80	
168F	70.0C	0.87	-15.02	
176F	80.0C	1.20	-15.51	

Comments:

cc: Jorry White Jay Brown

Midland, TX 79711 - 4312 S. County Rtl. 1298, Midland, TX 79765 P.O. Box 61427 . Office: (915) 563-0241 . Paix: (915) 563 0243

#0240 P.002/010

UNICHEM LAB

MAR. 25'1999 15:26 915 563 0243

	Apache Corporation	LEASE		t Drinkard	Unit (forme	rly Taylor Gleni	
WELL NO.	102	1582' FNL & 990' FEL	H	4		215	37E
		FOOTAGE LOCATION	UNIT	SECTION		TOWNSHIP	RANGE
		Well Cor	nstruction [<u>Data</u>			
Surface Casin Size	<u>nq</u> 13-3/8	Cemented with		25	0 sx		
3126	13-3/6	_ Cemented with			U 5X		
TOC	Surface	feet determined	эу	Circu	lation		
Hole Size	17	_					
<u>Intermediate</u>	Casing						
Size	8-5/8	_ Cemented with		140	00 sx		
тос	Surface	feet determined	by	Circu	ılation		
Hole Size	11	_					
Long String							
Size	5-1/2	_ Cemented with		70	0 sx		
тос	2270	feet determined	ру	Calc	ulated		
Hole Size	7-7/8	_					
Total Depth	5935	_					
Injection Inter		E02E		foot	Doufoustad		
	<u>ro</u> feet to or open-hole; indicate wh	5935 nich)		_feet	Perforated		
o.			P 1 11			••	
Tubing Size	2	-3/8	lined with		internal coa	PC	set in a
	5-1/2" Bake	er Lok-Set		_packer at		5570	feet
Other type of	tubing / casing seal if app	olicable			N/A		
Other Data							
1.	Is this a new well drilled	for injection?		Yes 🗸 No			
	If no, for what purpose v	was the well originally drille	d?		Blinebry P	roducer	
2.	Name of the Injection fo	ormation		Blinebry-	Tubb-Drinka	ard	
3.	Name of Field or Pool (i	if applicable)		Eunice N	., Blinebry-T	ubb-Drinkard	
4.		perforated in any other zor I, i.e., sacks of cement or p				rvals Blinebry 5682 -	5862 / Cement
5.		pths of any over or underly	ing oil or g	as zones (p	oools) in this	area.	
	See C-108 Attachment						

Well: Northeast Drinkard Unit # 102

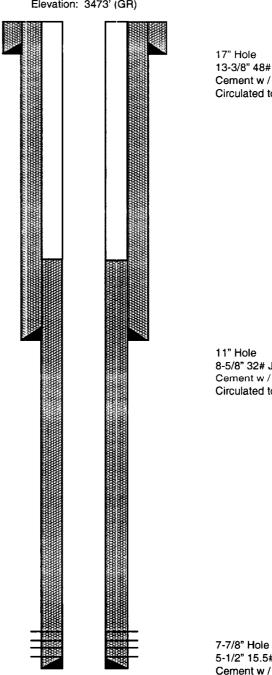
Field: Eunice N. Blinebry-Tubb-Drinkard

Location: 1582' FNL & 990' FEL

> Unit H, Sec. 4, T21S, R37E Lea County, New Mexico

API#: 30-025-06400

Elevation: 3473' (GR)



13-3/8" 48# H-40 CSA 306' Cement w / 350 sx Circulated to Surface

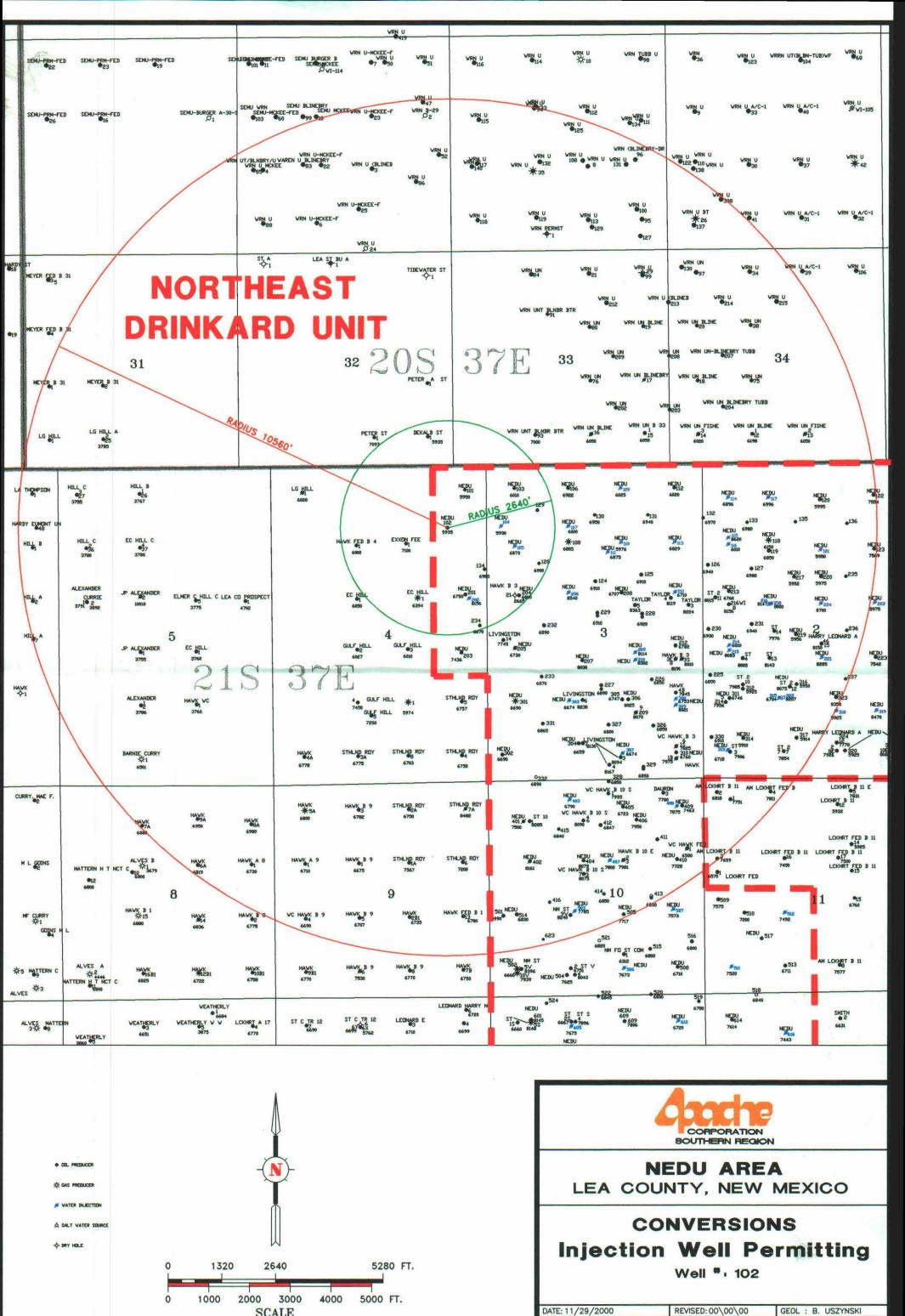
Current Status: Active Oil

8-5/8" 32# J-55 CSA 315C' Cement w / 1400 sx Circulated to Surface

Blinebry Perfs: 5682 - 5862 (174 Holes) Cement squeezed w/ 200 sx 5723 - 5931 (28 Holes)

TD @ 5935'

5-1/2" 15.5# J-55 CSA 5935' Cement w / 150 sx 5800' - Cement squeeze w/ 100 sx 4800' - Cement squeeze w/ 450 sx TOC @ 2270' (Calculated)



J:\PER\NEDU\INJ102.DWG

DRAFTED BY: HGS

LANDMAN: M. MORENO

SCALE

	Apache Corporation	LEASE			Unit (former	Ty nawk B-3 #1	
WELL NO.	103	660' FNL & 660' FWL FOOTAGE LOCATION	UNIT	3 SECTION		21S TOWNSHIP	37E RANGE
						1011101111	TANGE
Surface Casir	na	Well Co	nstruction I	<u>Data</u>			
Size	10-3/4	_ Cemented with		25	0 sx		
тос	Surface	feet determined	by	Circu	ılation		
Hole Size	13-3/4	_					
Intermediate (Casing						
Size	7-5/8	_ Cemented with		150	0 sx		
тос	1525	feet determined	by	Temp	Survey		
Hole Size	9-7/8	_					
Long String Size	5-1/2	_ Cemented with		35	0 sx		
тос	3035	feet determined	by	Temp	Survey		
Hole Size	6-3/4	_					
Total Depth	6010	_					
Injection Inter		6010		feet	Perforated		
	or open-hole; indicate wh			_1661	renorated		
Tubing Size	2	-3/8	lined with		IS	PC .	set in a
rubing Size			_ inied with	(type of	internal coat	ing)	3611114
	5-1/2" Bake	er Lok-Set		_packer at		5600	feet
Other type of	tubing / casing seal if app	olicable			N/A	-	-
Other Data 1.	Is this a new well drilled	for injection?		Yes 🗸 No			
	If no for what numbers	use the well originally drills	ad2		Plinchm, D.	oduce.	
	ii iio, ior what purpose v	was the well originally drille	3U !		Blinebry Pr	oducer	
2.	Name of the Injection for	ormation		Blinebry-	Tubb-Drinka	ırd	
3.	Name of Field or Pool (i	if applicable)		Eunice N	., Blinebry-T	ubb-Drinkard	
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. Squeezed w/ 75 sx Blinebry 5750 - 5806 / Cement						
5.		pths of any over or underly	/ing oil or g	as zones (r	oools) in this	area.	<u>. </u>
	See C-108 Attachment	<u> </u>					

Well: Northeast Drinkard Unit # 103

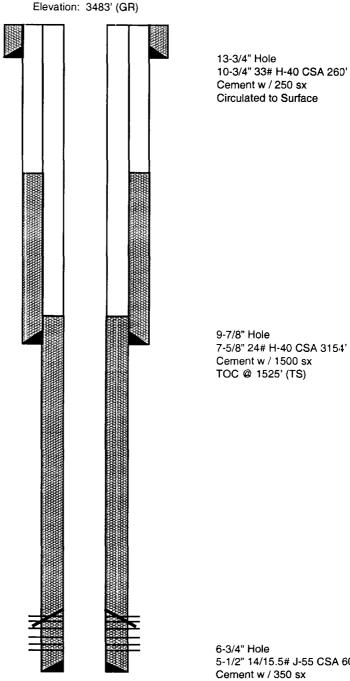
Current Status: Active Oil Field: Eunice N. Blinebry-Tubb-Drinkard

Location: 660' FNL & 660' FWL

Unit D, Sec. 3, T21S, R37E Lea County, New Mexico

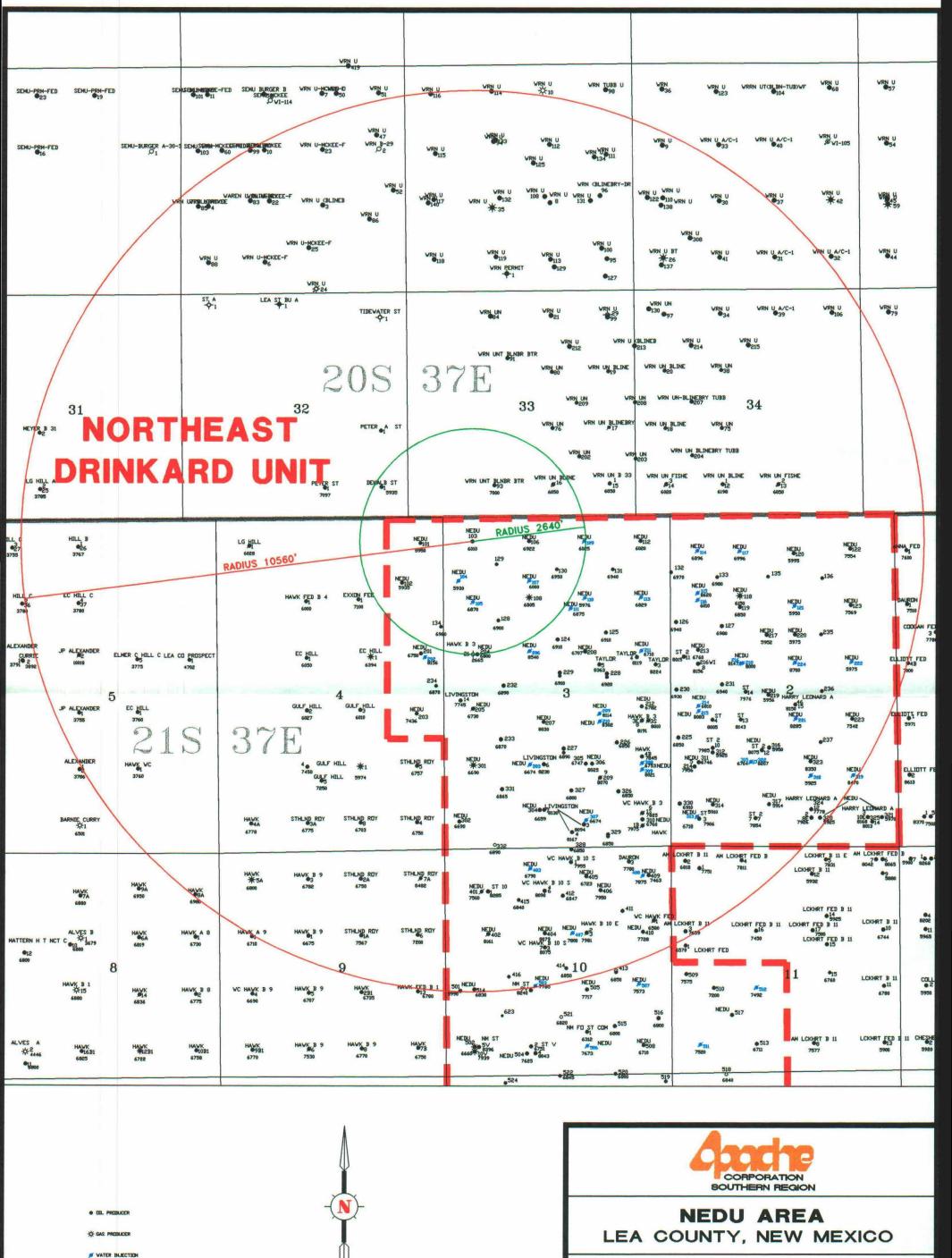
API#: 30-025-09897

TD @ 6010'



Blinebry Perfs: 5750 - 5806 (288 Holes) Cement squeezed w/ 75 sx 5854 - 5966 (312 Holes)

5-1/2" 14/15.5# J-55 CSA 6010' TOC @ 3035' (TS)



1320

1000

2640

2000 3000

SCALE

5280 FT.

5000 FT.

4000

CONVERSIONS
Injection Well Permitting

Well *: 103

DATE: 11/29/2000	REVISED: 00\00\00	GEOL : B. USZYNSKI
J:\PER\NEDU\INJ103.DWG	DRAFTED BY: HGS	LANDMAN: M. MORENO

	Apache Corporation	LEASE			Unit (forme	erly Hawk B-3 #16	
WELL NO.	106	660' FNL & 1980' FWL FOOTAGE LOCATION	C UNIT	SECTION		TOWNSHIP	37E RANGE
			nstruction [Data			
Surface Casin	<u>lg</u>	<u>wen co</u>	IISH UCHOH L	<u>Jaia</u>			
Size	10-3/4	_ Cemented with		250) sx		
TOC	Surface	feet determined	by	Circu	lation		
Hole Size	13-3/4	_					
Intermediate C	Casing						
Size	7-5/8	_ Cemented with		900) sx		
тос	1740	feet determined	by	Temp	Survey		
Hole Size	9-7/8	_					
Long String	F 4/0	O		F0.	D		
Size	5-1/2	_ Cemented with		500	0 sx		
TOC	2903	_ feet determined	by	Temp	Survey		
Hole Size	6-3/4	_					
Total Depth	6920	_					
Injection Inter					D		
(perforated	or open-hole; indicate wh	6920 nich)		_feet	Perforated	1	
" Tubing Size	•	·-3/8	lined with			PC	set in a
rubing Size					internal coa	ating)	GCT III d
	5-1/2" Bak	er Lok-Set		_packer at		5600	feet
Other type of	tubing / casing seal if ap	olicable			N/A		
Other Data 1.	Is this a new well drilled	I for injection?	\Box ,	res ✓ No			
					Tubb Box		
	If no, for what purpose	was the well originally drille	∍d?		Tubb Prod	ducer	
2.	Name of the Injection for	ormation		Blinebry-	Tubb-Drink	kard	
3.	Name of Field or Pool (if applicable)		Eunice N.	., Blinebry-	Tubb-Drinkard	
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. w/ 150 sx / Tubb 6343 - 6406 / Cement squeezed w/ 200 sx						ent squeezed
5.	Give the names and de See C-108 Attachmen	pths of any over or underly	ying oil or g	as zones (p	pools) in this	s area.	

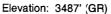
Well: Northeast Drinkard Unit # 106

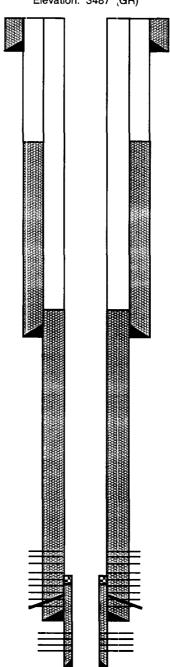
Field: Eunice N. Blinebry-Tubb-Drinkard Current Status: Active Oil

Location: 660' FNL & 1980' FWL

Unit C, Sec. 3, T21S, R37E Lea County, New Mexico

API #: 30-025-06410





TD @ 6920'

13-3/4" Hole 10-3/4" 33# H-40 CSA 263' Cement w / 250 sx Circulated to Surface

9-7/8" Hole 7-5/8" 24# H-40 CSA 3049' Cement w / 900 sx TOC @ 1740' (TS)

Blinebry Perfs:

5770 - 5956 (529 Holes) Cement squeezed w/ 150 sx 5732 - 6163 (272 Holes)

Tubb Perfs:

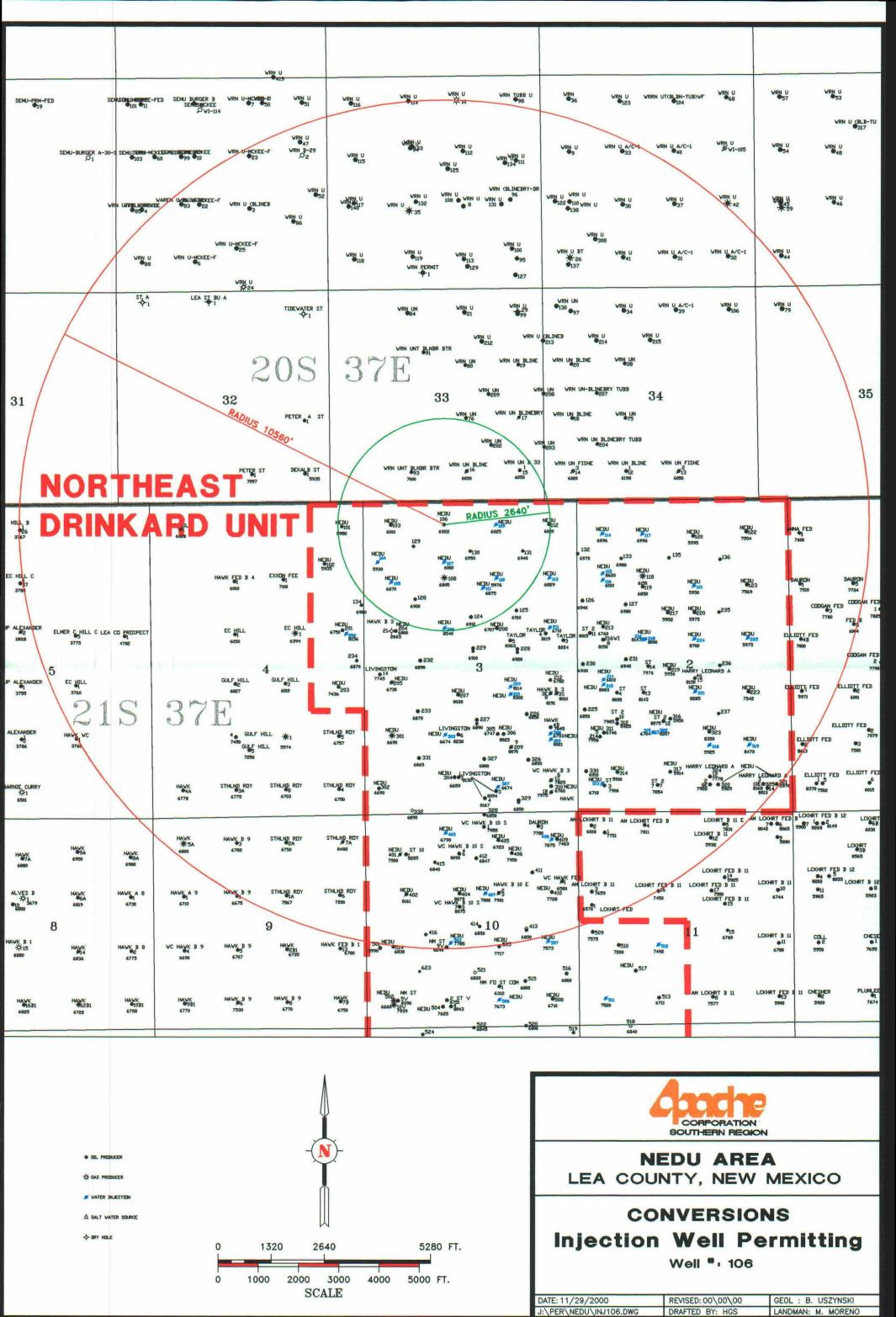
6343 - 6406 (140 Holes) **Cement squeezed w/ 200 sx** 6174 - 6269 (15 Holes)

Drinkard Perfs:

6587 - 6846 (25 Holes)

6-3/4" Hole 5-1/2" 14/15.5# J-55 CSA 6479' Cement w / 500 sx TOC @ 2903' (TS)

4-3/4" Hole 4" 10.5# J-55 LSA 6920' Cement w / 35 sx TOC @ 6237' (Top of Liner)



Well: Northeast Drinkard Unit # 112

Field: Eunice N. Blinebry-Tubb-Drinkard

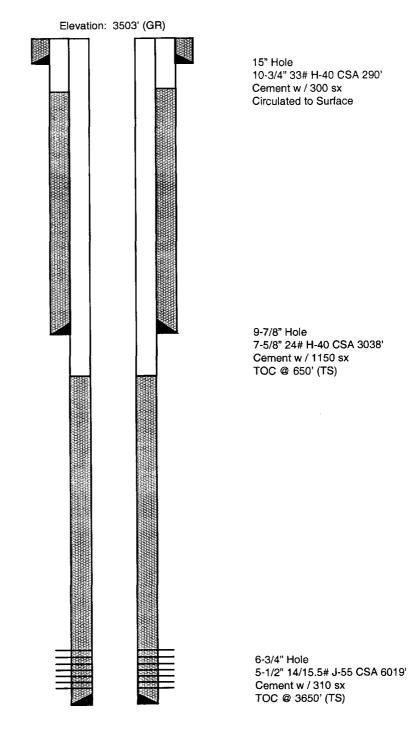
Blinebry Perfs:

5726 - 5982 (564 Holes)

Location: 660' FNL & 660' FEL

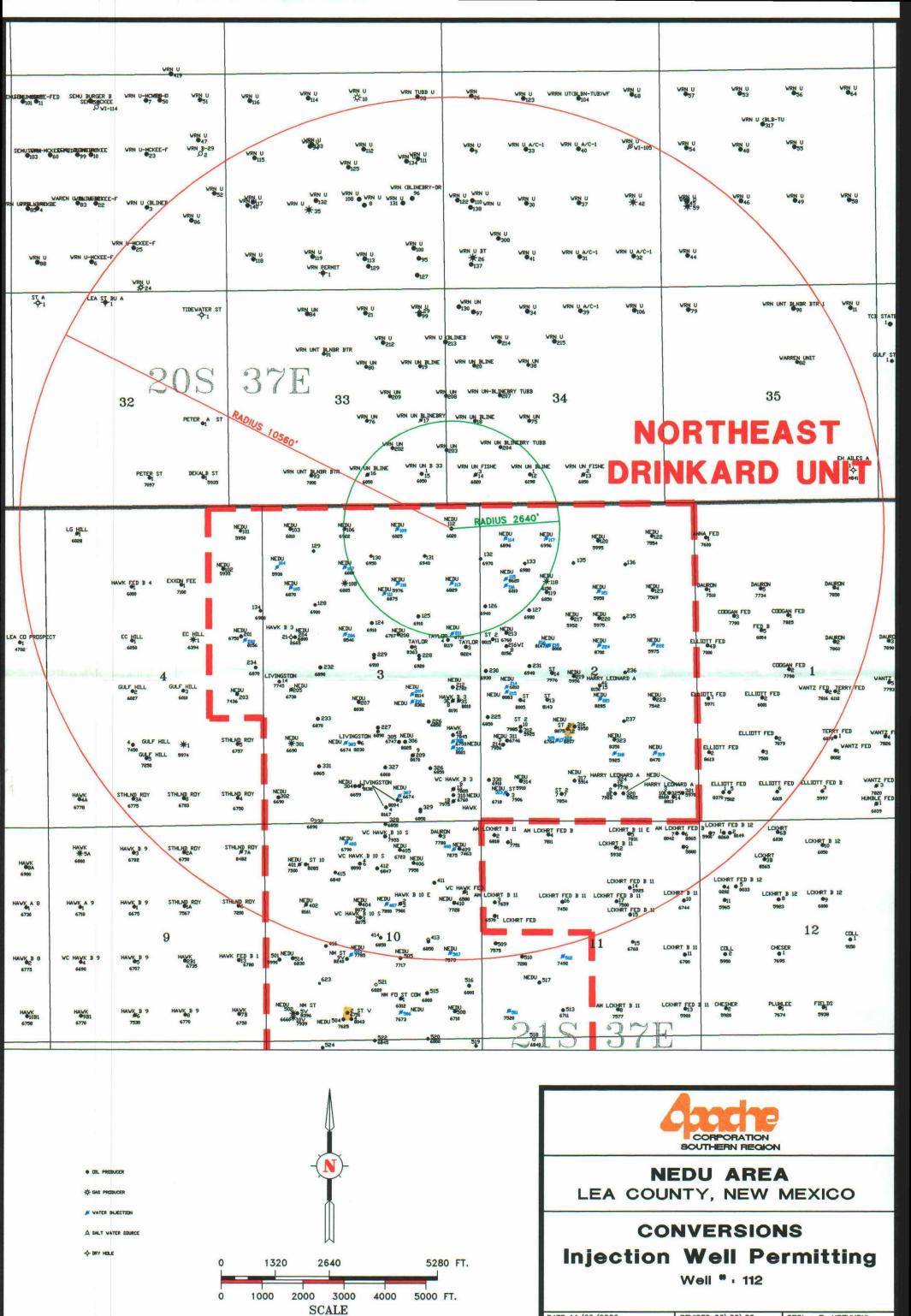
Unit A, Sec. 3, T21S, R37E Lea County, New Mexico

API #: 30-025-06509



Current Status: Active Oil

	Apache Corporation	LEASE	Northeas	t Drinkard Ur	nit (forme	rly Hawk B-3 #14	
WELL NO.	112	660' FNL & 660' FEL	Α	3		215	37E
		FOOTAGE LOCATIO	N UNIT	SECTION		TOWNSHIP	RANGE
Curtasa Casir		<u>Well</u>	Construction [<u>Data</u>			
<u>Surface Casir</u> Size	10-3/4	_ Cemented wi	ith	300 s	sx		
тос	Surface	feet determin	ed by	Circula	tion		
Hole Size	15	_					
Intermediate (Casing						
Size	7-5/8	Cemented wi	ith	1150	sx		
тос	650	feet determin	ned by	Temp Su	urvey		
Hole Size	9-7/8	_					
Long String							
Size	5-1/2	_ Cementec wi	ith	310 s	<u> </u>		
тос	3650	feet determin	ned by	Temp Su	urvey		
Hole Size	6-3/4	_					
Total Depth	6020	_					
Injection Inter		61	020	foot D	aufa vata d		
	or open-hole; indicate w		020	_feet P	erforated		
Tubing Size	•	2-3/8	lined with		11	PC .	set in a.
Tubing Oize			iiiled with		ternal coa	ting)	
	5-1/2" Bak	er Lok-Set		_packer at _	····	5600	feet
Other type of	tubing / casing seal if ap	plicable			N/A		
Other Data	Is this a new well drilled	4 for injection?		Yes 🗸 No			
1.		•		-			
	If no, for what purpose	was the well originally o	drilled?	<u>B</u>	Blinebry P	roducer	
2.	Name of the Injection for	ormation		Blinebry-Tu	ıbb-Drink	ard	
3.	Name of Field or Pool (if applicable)		Eunice N., E	Blinebry-1	ubb-Drinkard	<u> </u>
4.		perforated in any other il, i.e., sacks of cement	, ,	•	orated inte	rvals	
5.	Give the names and de	anths of any over or und	lerlying oil or o	las zones (no	ole) in this	area	
.	See C-108 Attachmen			Las zones (pot		u.ou.	



DATE: 11/29/2000

J:\PER\NEDU\INJ112.DWG

REVISED: 00\00\00

DRAFTED BY: HGS

GEOL : B. USZYNSKI

LANDMAN: M. MORENO

30-025-0636/

	Apache Corporation	LEASE			Unit (form	nerly Harry Leonard #	
WELL NO.	122	897' FNL & 990' FEL	A	2 CECTION		21\$	37E
		FOOTAGE LOCATION	UNIT	SECTION	ſ	TOWNSHIP	RANGE
Surface Casir	20	Well Co	nstruction	<u>Data</u>			
Surface Casir Size	13-3/8	_ Cemented with		37	5 sx_	_	
TOC	Surface	_ feet determined	by	Circ	ulation	_	
Hole Size	17-1/2	_					
Intermediate (Casing						
Size	8-5/8	_ Cemented with		170	00 sx	_	
TOC	Surface	feet determined	by	Circu	ulation	_	
Hole Size	11	-					
Long String Size	5-1/2	_ Cemented with		75	0 sx	_	
TOC	2156	feet determined	by	Temp	Survey	_	
Hole Size	7-7/8	_ <u>Liner</u> Size		4		Cemented with	125 av
Total Depth	7554	Size		4	_	Cemented with	135 sx
		тос	5	536	_	feet determined by	_Liner Top
		Hole Size	4	3/4	_		
Injection Inter	<u>val</u>						
(nerforated	60 feet to or open-hole; indicate wh	7015		_feet	Perforate	ed	
	·	·	Para L. 20			100	
Tubing Size	2	-3/8	_lined with	(type of	f internal co	IPC	set in a
	4" Baker	Lok-Set		_packer at		5750	feet
Other type of	tubing / casing seal if app	olicable			N/A		
Other Data							
1.	Is this a new well drilled	for injection?		res 🔽 No			
	If no, for what purpose v	was the well originally drille	ed?		Blinebry	Producer	
2.	Name of the Injection for	ormation		Blinebry-	Tubb-Drin	kard	-
3.	Name of Field or Pool (i	if applicable)		Eunice N	., Blinebry	-Tubb-Drinkard	
4.	and give plugging detail	perforated in any other zor I, i.e., sacks of cement or p 36 - 7554 / Abo 7062 - 750	lug(s) use	d.	Blinebry	5924 - 5980 Open Hole	e / P&A'd
5.		pths of any over or underly			-		

Well: Northeast Drinkard Unit # 122

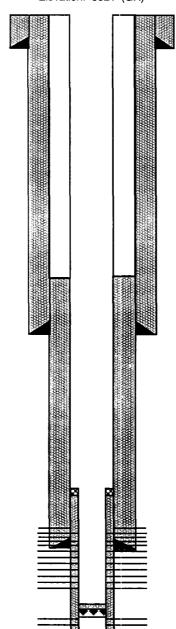
Field: Eunice N. Blinebry-Tubb-Drinkard

Location: 897' FNL & 990' FEL

Unit A, Sec. 2, T21S, R37E Lea County, New Mexico

API#: 30-025-06364

Elevation: 3521' (GR)



17-1/2" Hole 13-3/8" 48# H-40 CSA 32:7' Cement w / 375 sx Circulated to Surface

Current Status: Active Oil

11" Hole 8-5/8" 24/32# H-40/J-55 CSA 3098' Cement w / 1700 sx Circulated to Surface

Blinebry Perfs: 5856 - 5904 (4 Holes) **Open Hole:** 5924 - 5980

Cement squeezed behind 4" Liner

5878 - 6340 (52 Holes)

Tubb Perfs:

6343 - 6751 (37 Holes)

Drinkard Perfs:

6809 - 7012 (29 Holes)

CIBP @ 7050' w/ 35' cement

Abo Perfs:

7062 - 7507 (21 Holes)

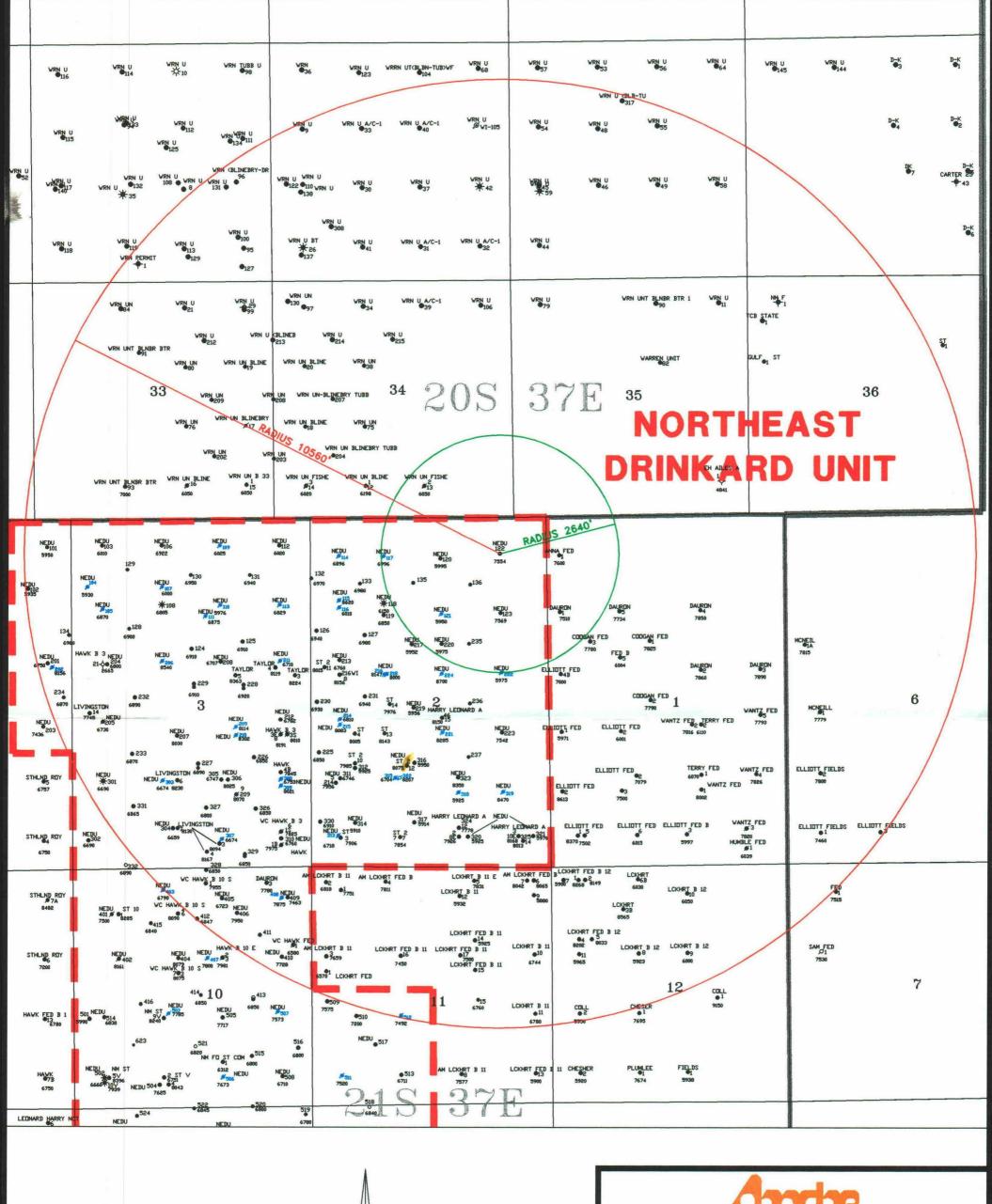
7-7/8" Hole

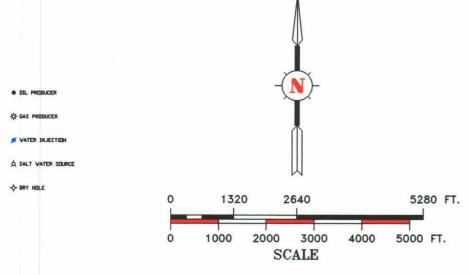
5-1/2" 14/15.5# J-55 CSA 5924'

Cement w / 750 sx TOC @ 2156' (TS)

4-3/4" Hole 4" 13.4# K-55 LSA 7554' Cement w / 135 sx TOC @ 5536' (Top of Liner)

TD @ 7554'







NEDU AREA LEA COUNTY, NEW MEXICO

CONVERSIONS Injection Well Permitting

Well * 122

DATE: 11/29/2000	REVISED: 00\00\00	GEOL : B. USZYNSKI
J:\PER\NEDU\INJ122.DWG	DRAFTED BY: HGS	LANDMAN: M. MORENO

	Apache Corporation	LEASE			Unit (form	erly Harry Leonard #1	
WELL NO.	123	2217' FNL & 989' FEL	<u> </u>	2		21S	37E
		FOOTAGE LOCATION	UNIT	SECTION		TOWNSHIP	RANGE
		Well Co	nstruction [Data			
Surface Casir	<u>ng</u>						
Size	13-3/8	Cemented with		37	5 sx	_	
тос	Surface	feet determined	by	Circu	ılation	_	
Hole Size	17-1/2	_					
Intermediate (Casing						
Size	8-5/8	_ Cemented with		180	00 sx	_	
TOC	47	feet determined	by	Temp	Survey	_	
Hole Size	11	-					
Long String							
Size	5-1/2	Cemented with		77	5 sx	_	
TOC	61	feet determined	by	Temp	Survey	_	
Hole Size	7-7/8	<u>Liner</u> Size		4		Cemented with	135 sx
Total Depth	7569	OIZ6		-	-	Ocinicited with	
, c.a. = cp		TOC	5	552	-	feet determined by	Liner Top
		Hole Size	4-	3/4	_		
Injection Inter	val						
583		7065	<u> </u>	_feet	Perforate	ed	
(perforated	or open-hole; indicate wl	hich)					
Tubing Size	2	2-3/8	_lined with			IPC	set in a
	4" Baker	Lok-Set		(type of packer at	internal co	oating) 5730	feet
	4 Daker	LOK-Get		_packer at	-	3730	
Other type of	tubing / casing seal if ap	plicable			N/A		
Other Data							
1.	Is this a new well drilled	d for injection?		res 🗹 No			
	If no, for what purpose	was the well originally drille	ed? 		Drinkard	Producer	
2.	Name of the Injection for	ormation		Blinebry-	Tubb-Drin	kard	
3.	Name of Field or Pool ((if applicable)		Eunice N	., Blinebry	-Tubb-Drinkard	
4.		perforated in any other zo					
		il, i.e., sacks of cement or p 552 - 7568 / Tubb 6394 - 0				5889 - 5975 Open Hole hind Partial Packer w/	
	6389'						
5.	Give the names and de See C-108 Attachmen	epths of any over or underly	ying oil or g	as zones (p	oools) in th	is area.	
						•	
							·

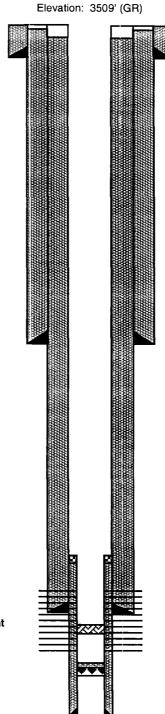
Well: Northeast Drinkard Unit # 123

Field: Eunice N. Blinebry-Tubb-Drinkard

Location: 2217' FNL & 989' FEL

Unit H, Sec. 2, T21S, R37E Lea County, New Mexico

API #: 30-025-06360



TD @ 7569'

17-1/2" Hole 13-3/8" 48# H-40 CSA 332' Cement w / 375 sx Circulated to Surface

Current Status: Active Oil

11" Hole 8-5/8" 24/32# J-55 CSA 3099' Cement w / 1800 sx TOC @ 47' (TS)

Blinebry Open Hole:

5889 - 5975

Cement squeezed behind 4" Liner Blinebry Perfs:

5844 - 6286 (64 Holes)

Tubb Perfs:

6300 - 6704 (35 Holes)

Partial Packer @ 6389' w/ 1 sx cement

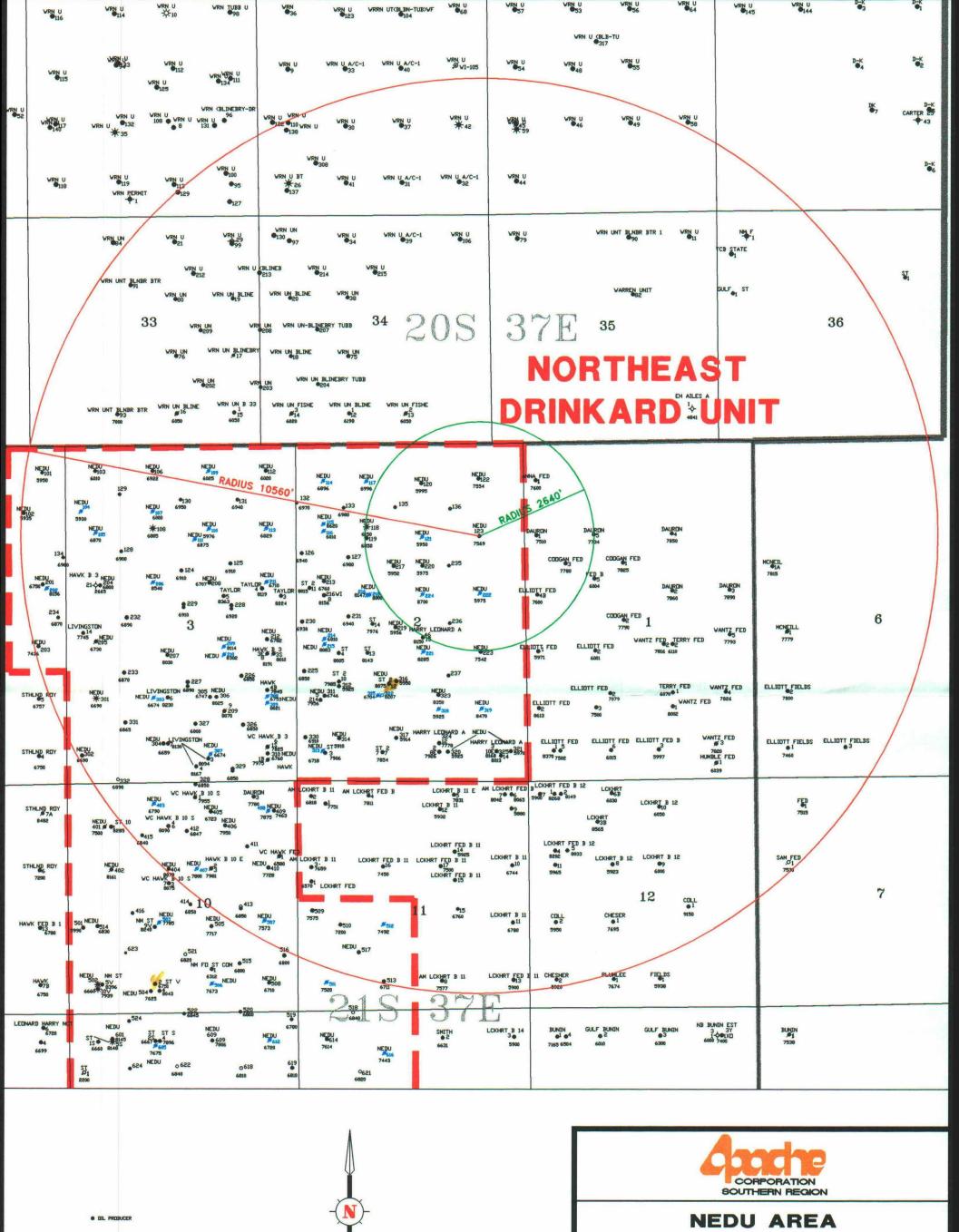
Drinkard Perfs:

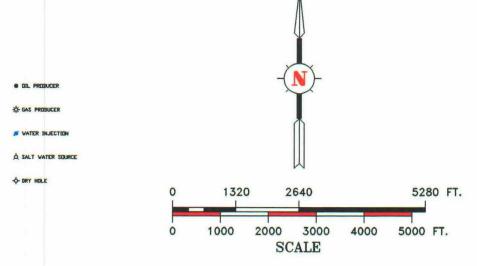
6732 - 6961 (31 Holes)

CIBP @ 7100' w/ 35' cement

7-7/8" Hole 5-1/2" 14/15.5# J-55 CSA 5889' Cement w / 775 sx TOC @ 61' (TS)

4-3/4" Hole 4" 13# K-55 LSA 7568' Cement w / 135 sx TOC @ 5552' (Top of Liner)





LEA COUNTY, NEW MEXICO

CONVERSIONS Injection Well Permitting

Well * 123

-			
١	DATE: 11/29/2000	REVISED: 00\00\00	GEOL : B. USZYNSKI
	J:\PER\NEDU\INJ123.DWG	DRAFTED BY: HGS	LANDMAN: M. MORENO

	Apache Corporation	LEASE			· · · · · · · · · · · · · · · · · · ·	erly Hawk B-3 # 2	-,
WELL NO.	204	3300' FNL & 760' FWL	L	3		21\$	37E
		FOOTAGE LOCATION	UNIT	SECTION		TOWNSHIP	RANGE
		Well Co	nstruction	<u>Data</u>			
Surface Casir Size	<u>1g</u> 9-5/8	Cemented with		625	5 sx		
		_	la	T.,		-	
TOC	Surface	_ feet determined	ру	Circu	lation	-	
Hole Size	10-3/4	_					
Intermediate (Casing						
Size		_ Cemented with				_	
TOC		feet determined	by	-		_	
Hole Size		_					
Long String							
Size	7	_ Cemented with		650) sx	-	
тос	2200	feet determined	by	Temp	Survey	_	
Hole Size	8-3/4	_					
Total Depth	6800	_					
Injection Inter					D - 4 1 -		
(perforated	or open-hole; indicate when	6800 nich)		_feet	Perforate	:a	
Tubing Size	2	2-3/8	lined with			IPC	set in a
, comig ones				(type of	internal co	pating)	
	7" Baker	Lok-Set		_packer at		5500	feet
Other type of	tubing / casing seal if ap	plicable			N/A		
Other Data 1.	Is this a new well drilled	l for injection?		Yes ☑ No			
••				Yes ✓ No			
	If no, for what purpose	was the well originally drille	ed?		Blinebry	Producer	
2.	Name of the Injection for	ormation		Blinebry-	Γubb-Drin	kard	
3.	Name of Field or Pool (if applicable)		Eunice N.	, Blinebry	-Tubb-Drinkard	
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. W/ 150 sx / Tubb 6218 - 6374 / Cement squeezed w/ 100 sx / Drinkard 6610 - 6686 / Cement squeezed w/ 100						
5.	Give the names and de See C-108 Attachmen	pths of any over or underly	ving oil or (jas zones (p	ools) in thi	s area.	

Well: Northeast Drinkard Unit # 204

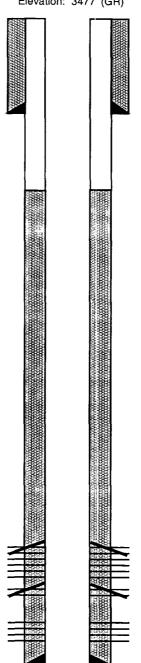
Field: Eunice N. Blinebry-Tubb-Drinkard

Location: 3300' FNL & 760' FWL

> Unit L, Sec. 3, T21S, R37E Lea County, New Mexico

API#: 30-025-06506

Elevation: 3477' (GR)



10-3/4" Hole 9-5/8" 36# H-40 CSA 1310' Cement w / 625 sx Circulated to Surface

Current Status: Active Oil

Blinebry Perfs: 5607 - 5714 (11 Holes) Cement squeezed w/ 150 sx 5736 - 6037 (124 Holes)

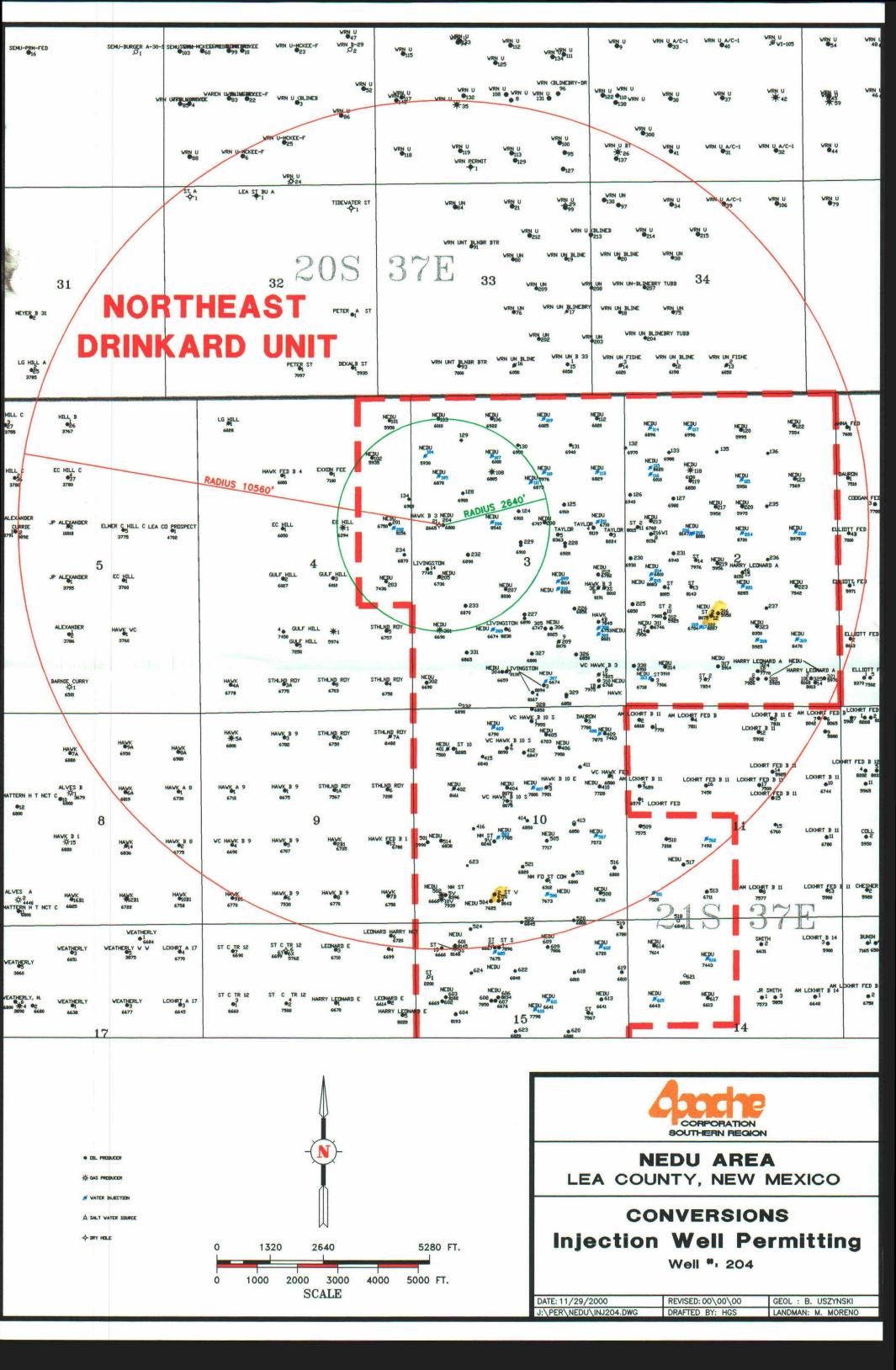
Tubb Perfs:

6218 - 6374 (94 Holes) Cement squeezed w/ 100 sx 6056 - 6144 (22 Holes)

Drinkard Perfs: 6610 - 6686 (58 Holes) Cement squeezed w/ 100 sx 6526 - 6740 (98 Holes)

8-3/4" Hole 7" 20/23# J-55 CSA 6800' Cement w / 650 sx TOC @ 2200' (Temp Survey)

TD @ 6800'



30 025-06519

	Apache Corporation	LEASE		-	Unit (forme	erly Livingston #		
WELL NO.	207	2970' FSL & 2308' FWL	N	3		215	37E	
		FOOTAGE LOCATION	UNIT	SECTION		TOWNSHIP	RANGE	
Curtage Cooin	_	Well Cor	struction	<u>Data</u>				
Surface Casir Size	13-3/8	_ Cemented with		25	0 sx			
TOC	Surface	_ feet determined l	ру	Circu	ılation			
Hole Size	17-1/2	_						
Intermediate (Casing							
Size	8-5/8	_ Cemented with		160	0 sx			
тос	Surface	feet determined I	ру	Circu	ılation			
Hole Size	11	_						
Long String Size	Liner 5-1/2	Cemented with		81	0 sx			
GIZC	<u> </u>	_ Ocinicined with			<u> </u>			
TOC	2648	feet determined l	ру	Тор	f Liner			
Hole Size	7-7/8	_						
Total Depth	8030	_						
Injection Inter								
(perforated	feet to or open-hole; indicate wh	6885		_feet	Perforated	i		
(periorated)	·	·						
Tubing Size	2	2-3/8	lined with		internal coa	PC	set in a	
	5-1/2" Bak	er Lok-Set		packer at		5520	feet	
Other type of	tubing / casing seal if app	plicable			N/A			
Other Data	Is this a new well drilled	I for injection?	<u></u>	Yes ✓ No				
1.	is this a new well diffied	nor injection:		res VINO				
	If no, for what purpose was the well originally drilled? Drinkard Producer							
2.	Name of the Injection formation Blinebry-Tubb-Drinkard							
3.	Name of Field or Pool (if applicable)			Eunice N., Blinebry-Tubb-Drinkard				
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. Blinebry 5655 - 5790 / Cement squeezed w/ 350 sx						nent squeezed	
5.	Give the names and de	oths of any over or underly	ing oil or o	ias zones (r	ools) in this	area	 .	
	Give the names and depths of any over or underlying oil or gas zones (pools) in this area. See C-108 Attachment						-	

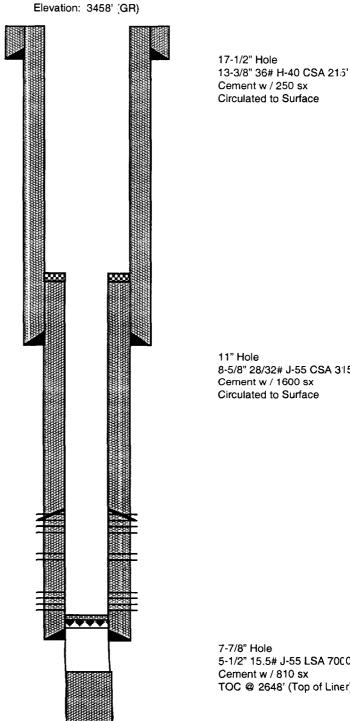
Well: Northeast Drinkard Unit # 207

Current Status: Active Oil Field: Eunice N. Blinebry-Tubb-Drinkard

Location: 2970' FSL & 2308' FWL

> Unit N, Sec. 3, T21S, R37E Lea County, New Mexico

API#: 30-025-06519



TD @ 8030'

8-5/8" 28/32# J-55 CSA 3153' Cement w / 1600 sx

Blinebry Perfs: 5655 - 5790 (432 Holes) Cement squeezed w/ 350 sx

5819 - 5890 (123 Holes)

Tubb Perfs:

6097 - 6191 (35 Holes)

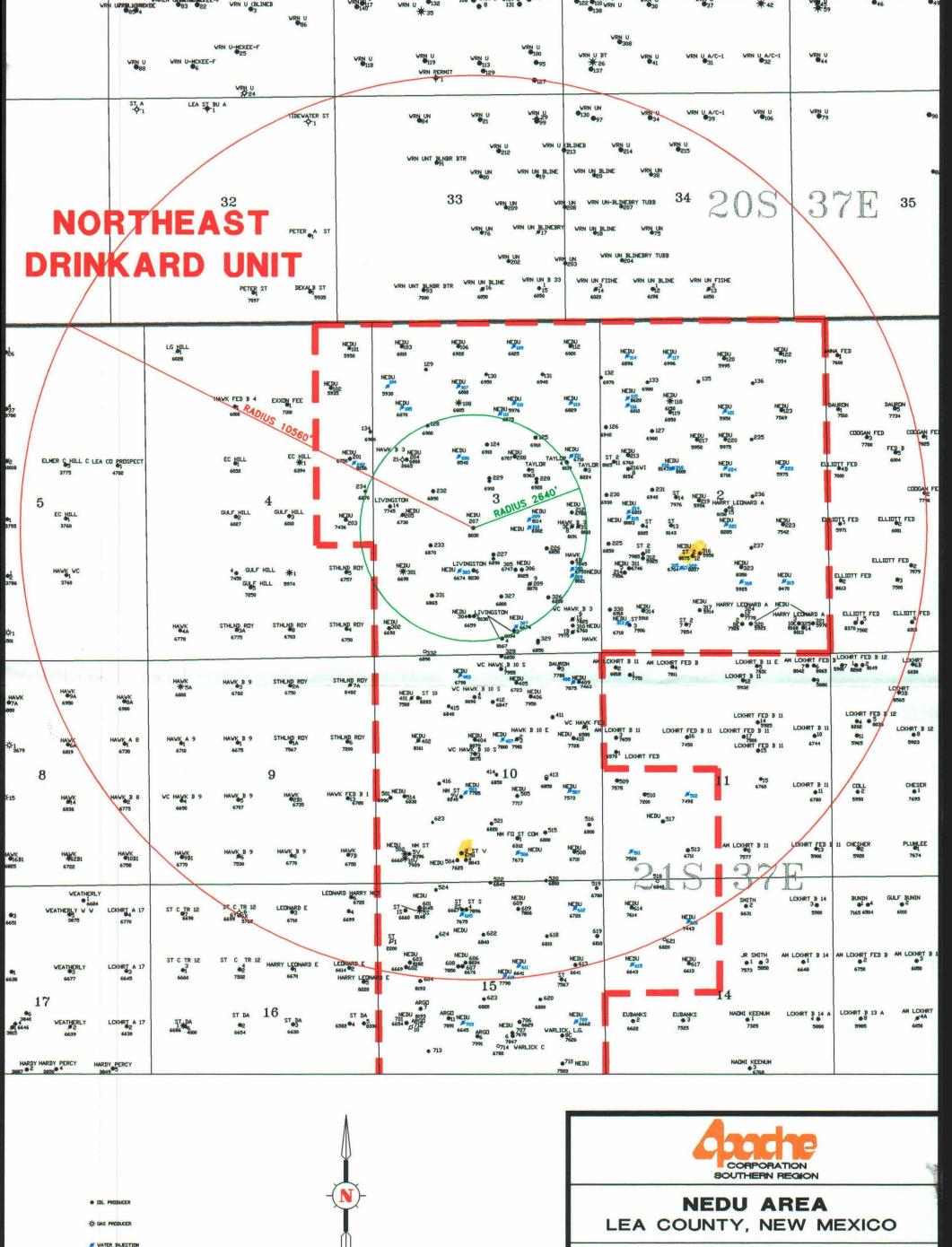
Drinkard Perfs:

6555 - 6813 (338 Holes)

CIBP @ 6920' w/ 35' cement

Plugback from 8030' to 7400' w/ 250 sx

5-1/2" 15.5# J-55 LSA 7000' Cement w / 810 sx TOC @ 2648' (Top of Liner)



A SALT WATER SOURCE

2640

4000

2000 3000

SCALE

1320

1000

5280 FT.

5000 FT.



CONVERSIONS
Injection Well Permitting

Well *, 207

ı	DATE: 11/29/2000	REVISED: 00\00\00	GEOL : B. USZYNSKI
	J:\PER\NEDU\INJ207.DWG	DRAFTED BY: HGS	LANDMAN: M. MORENO

OPERATOR	Apache Corporation		Northeas	t Drinkard	Unit (form	erly Harry Leonard #	11)	
WELL NO.	223	2970' FSL & 990' FEL FOOTAGE LOCATION	P UNIT	2 SECTION		21S TOWNSHIP	37E RANGE	
			struction [)ata				
Surface Casir	<u>ng</u>	<u> </u>	otraotrotr t	<u> </u>				
Size	13-3/8	_ Cemented with		45	0 sx	_		
TOC	Surface	feet determined b	у	Circu	lation	-		
Hole Size	17-1/2	_						
Intermediate (Casing							
Size	9-5/8	_ Cemented with		155	0 sx	_		
TOC	309	feet determined b	у	Temp	Survey	_		
Hole Size	12-1/4	_						
Long String Size	7	_ Cemented with		600	0 sx	_		
TOC	2670	feet determined b	у	Temp	Survey	_		
Hole Size	8-3/4	_ <u>Liner</u> Size	4-	1/2		Cemented with	325 sx	
Total Depth	7542	- тос		131	_	feet determined by	Liner Ten	
		•	<u> </u>		_	reet determined by	Liner Top	
		Hole Size	6-	1/4	-			
Injection Inter					5			
578 (perforated	feet to or open-hole; indicate when the state of the stat	6950	<u> </u>	_feet	Perforate	ea		
Tubing Size	2	2-3/8	lined with			IPC	set in a	
-	4-1/2" Bak	er Lok-Set		(type of packer at	internal co	pating) 5680	feet	
Other type of	tubing / casing seal if ap			••	N/A			
	Tability tability obtains ap			_				
Other Data 1.	Is this a new well drilled	I for injection?		∕es ☑ No				
	If no, for what purpose	was the well originally drilled	d?		Blinebry	Producer		
2.	Name of the Injection formation			Blinebry-Tubb-Drinkard				
3.	Name of Field or Pool (if applicable)			Eunice N., Blinebry-Tubb-Drinkard				
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. Blinebry 5834 - 59 behind 4-1/2" Liner from 5131 - 7541 / Abo 7134 - 7411 / CIBP @ 7110' w/ 35' cement				5834 - 5950 Open Hol	e / P&A'd		
5.	Give the names and depths of any over or underlying oil or gas zones (pools) in this area. See C-108 Attachment							

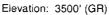
Well: Northeast Drinkard Unit # 223

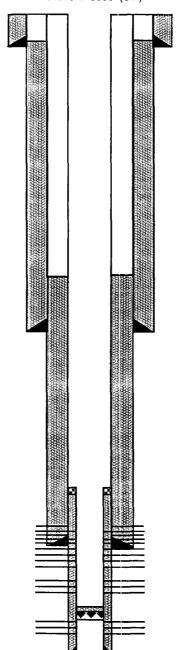
Current Status: Active Oil Field: Eunice N. Blinebry-Tubb-Drinkard

Location: 2970' FSL & 990' FEL

> Unit P, Sec. 2, T21S, R37E Lea County, New Mexico

API#: 30-025-06355





17-1/2" Hole 13-3/8" 48# H-40 CSA 336' Cement w / 450 sx Circulated to Surface

12-1/4" Hole 9-5/8" 36# J-55 CSA 3044' Cement w / 1550 sx TOC @ 309' (TS)

Blinebry Open Hole:

5834 - 5950

Cement squeezed behind 4" Liner

5787 - 6243 (60 Holes)

Tubb Perfs:

6252 - 6679 (36 Holes)

Drinkard Perfs:

6756 - 6938 (19 Holes)

CIBP @ 7110' w/ 35' cement

Abo Perfs:

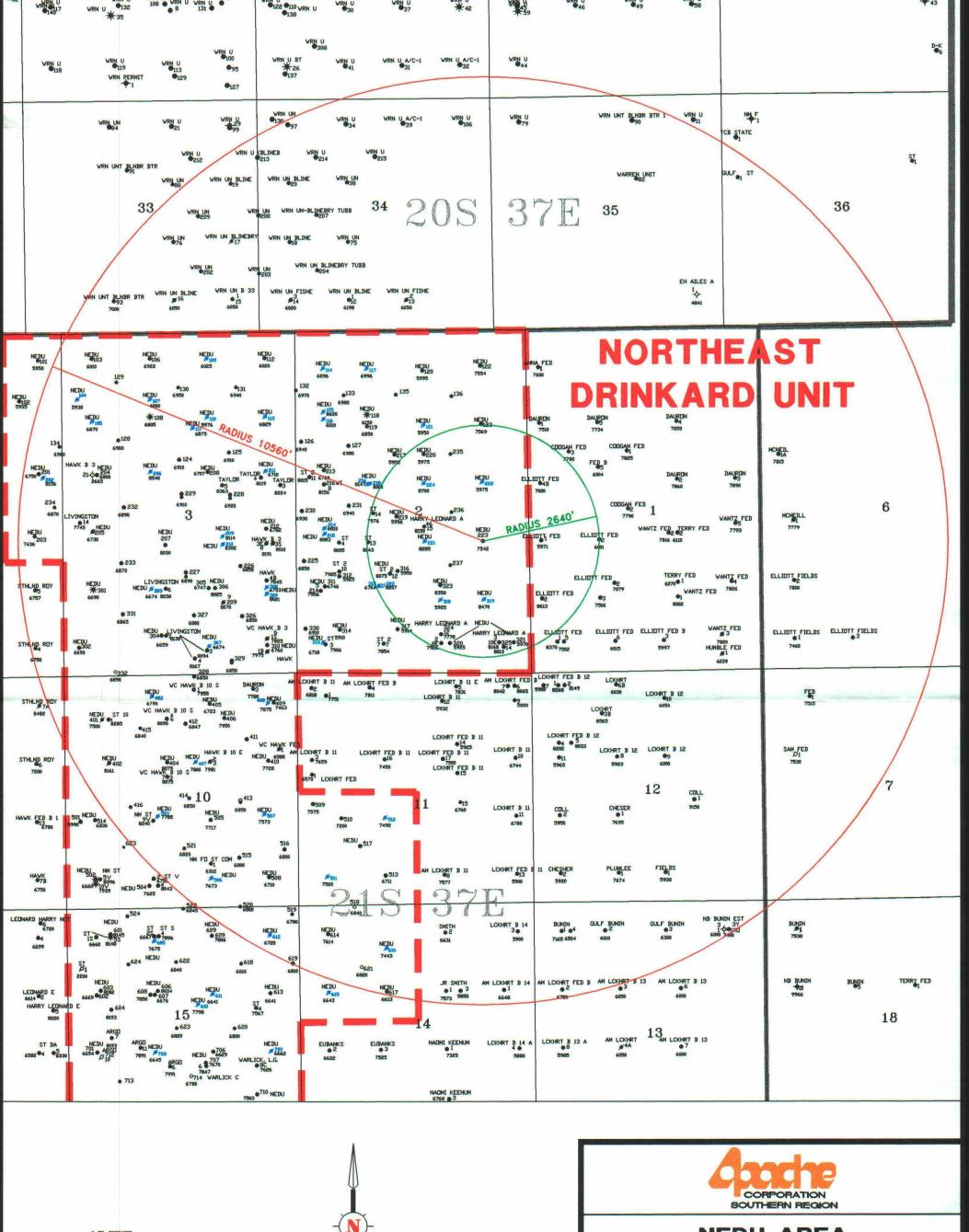
7134 - 7411 (12 Holes)

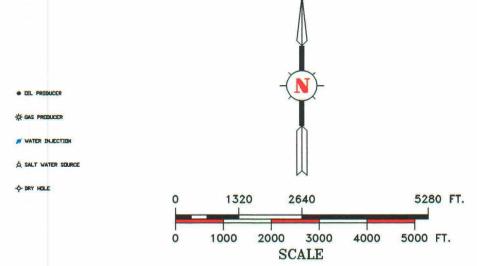
8-3/4" Hole 7" 20# J-55 CSA 5834'

Cement w / 600 sx TOC @ 2670' (TS)

6-1/4" Hole 4-1/2" 10.5# K-55 LSA 7541' Cement w / 325 sx TOC @ 5131' (Top of Liner)

TD @ 7542'





NEDU AREA LEA COUNTY, NEW MEXICO

CONVERSIONS
Injection Well Permitting

Well # 223

DATE: 11/29/2000	REVISED: 00\00\00	GEOL : B. USZYNSKI		
J:\PER\NEDU\INJ223.DWG	DRAFTED BY: HGS	LANDMAN: M. MORENO		

Well: Northeast Drinkard Unit # 304

Field: Eunice N. Blinebry-Tubb-Drinkard

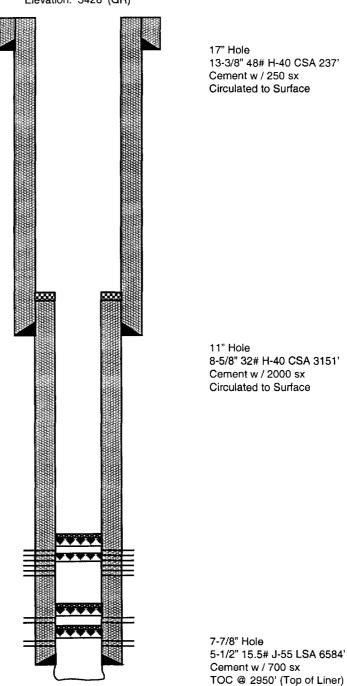
Location: 915' FSL & 2208' FWL

Unit V, Sec. 3, T21S, R37E Lea County, New Mexico

API#: 30-025-06520

Elevation: 3428' (GR)

Current Status: TA'd



CIBP @ 6315' w/ 35' cement

CIBP @ 5500' w/ 35' cement

Tubb Perfs:

Blinebry Perfs: 5558 - 6134 (576 Holes) CIBP @ 5577'

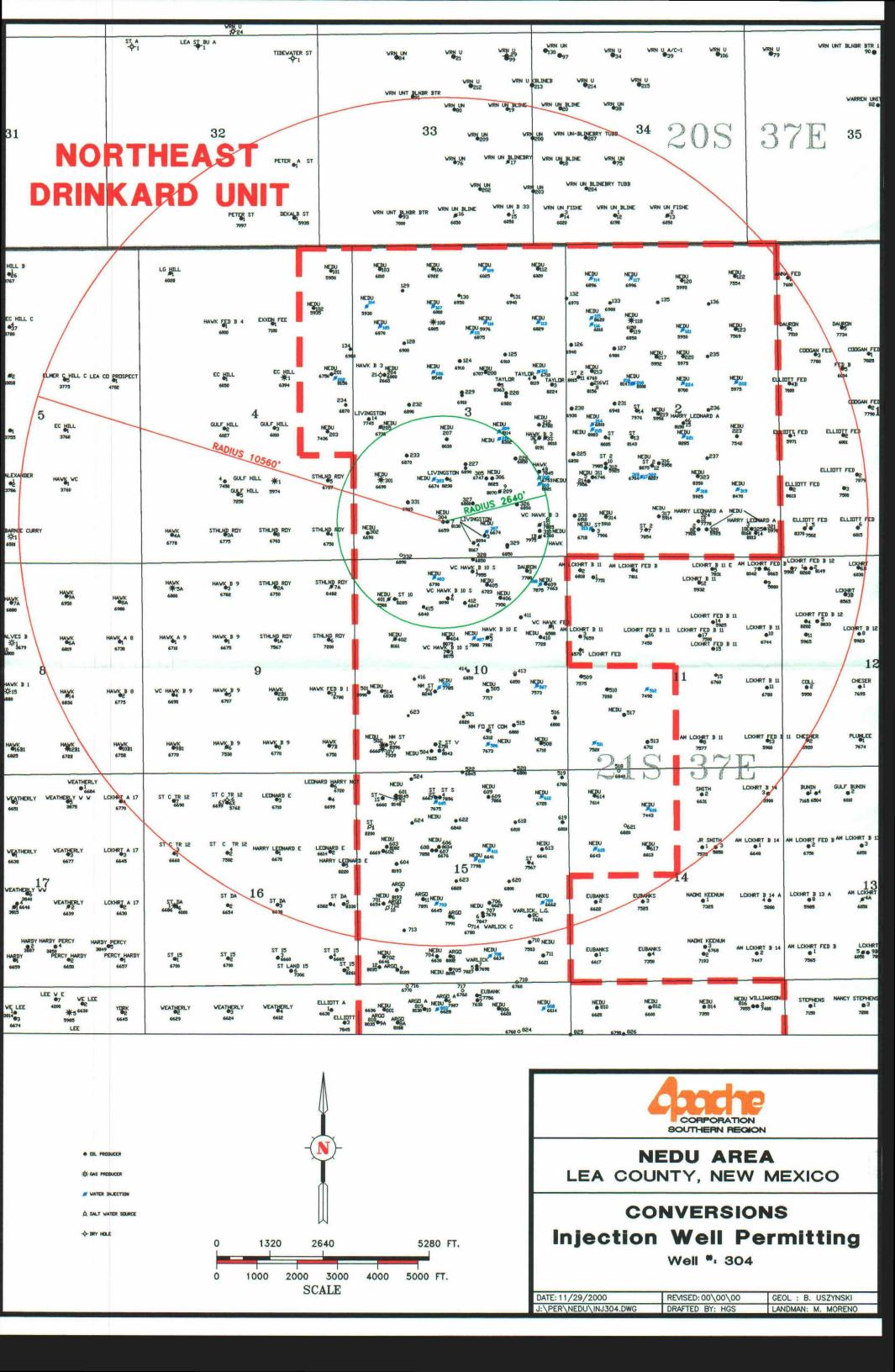
6381 - 6413 (10 Holes)

CIBP @ 6450' w/ 35' cement

Drinkard Perfs: 6520 - 6525 (6 Holes) **Open Hole:** 6584 - 6659

TD @ 6659'

OPERATOR	R Apache Corporation LEASE Northeast Drinkard Unit (formerly Livingston # 9)						
WELL NO.	304	915' FSL & 2208' FWL	V	3	21\$	37E	
		FOOTAGE LOCATION	UNIT	SECTION	TOWNSHIP	RANGE	
		14: 11:0					
Surface Casir	20	<u>Well Cor</u>	nstruction [<u>Data</u>			
Size				250 :	ey.		
	Oemented with						
TOC	Surface	feet determined by		Circula	tion		
	4=						
Hole Size	17	_					
Intermediate (Casing						
Size	8-5/8	Cementec with		2000	sx		
	· · · · · · · · · · · · · · · · · · ·						
TOC	Surface	feet determined !	ρy	Circula	tion		
Hole Size	11						
TIOIC GIZC		_					
Long String	Liner						
Size	5-1/2	Cemented with		700 :	SX		
~~~							
TOC	2950	feet deterrnined l	ру	Top of	Liner		
Hole Size	7-7/8						
		<del></del>					
Total Depth	6659	_					
Injection Inter	und.						
555	<del></del>	6659		feet <b>F</b>	Perforated & Open Hole		
	or open-hole; indicate wh				onorated a open note		
	•	,					
Tubing Size		2-3/8	_lined with		IPC	set in a	
	5-1/2" Rak	er Lok-Set		(type of in	iternal coating) <b>5450</b>	feet	
_	0-1/2 Buk	CI LOR-OCT		_packer at _			
Other type of	tubing / casing seal if ap	plicable			N/A		
				· ——			
Other Data		d for a last confidence					
1.	Is this a new well drilled	ior injection?	□,	Yes ☑ No			
	If no, for what purpose	was the well originally drille	d?		Prinkard Producer		
	Nicona dale di statione			B			
2.	Name of the Injection formation			Blinebry-11	ıbb-Drinkard	·	
3.	Name of Field or Pool (if applicable)		Eunice N., I	Blinebry-Tubb-Drinkard			
4.	Has the well ever been perforated in any other zone(s)? List all such perforated intervals						
	and give plugging detai	il, i.e., sacks of cement or p	lug(s) use	d. <u>N</u>	VA	·	
5.	Give the names and de	epths of any over or underly	ing oil or g	as zones (po	ols) in this area.		
See C-108 Attachment							
						·	
			<del></del>	·			



30-025-06493

OPERATOR	Apache Corporation	LEASE	Northeas	t Drinkard I	<u> Unit (forme</u>	rly Hawk B-3 #	12)
WELL NO.	305	1980' FSL & 1980' FEL	R	3		21S	37E
		FOOTAGE LOCATION	UNIT	SECTION	<del></del>	TOWNSHIP	RANGE
		Mall Co.	nstruction	Data			
Surface Casir	าต	<u>wen con</u>	15ti uction	<u>Dala</u>			
Size	13-3/8	Cemented with		250	sx		
TOC	Surface	_ feet determined	by	Circu	lation		
Hole Size	17-1/2						
11010 0.20	17 172	_					
Intermediate (	<u>Casing</u>						
Size	9-5/8	_ Cemented with		152	5 sx		
TOC	<b>72</b> 5	feet determined	hv	Temn	Survey		
100		_ leet determined	Бу	Temp	our vey		
Hole Size	12-1/4	_					
Long String Size	7	Cemented with		975	i sx		
Size	<u> </u>	_ Oemenied with					
TOC	3000	feet determined	by	Temp	Survey		
		_					
Hole Size	8-3/4	-					
Total Depth	6747						
rotal Boptii	0147	-					
Injection Inter	<u>val</u>						
561		6747		_feet	Perforated		
(perforated	or open-hole; indicate wi	nich)					
Tubing Size	2	2-3/8	lined with		II	PC	set in a
Ū			_		internal coa	iting)	
	7" Baker	Lok-Set		_packer at		5510	feet
Other type of	tubing / casing seal if ap	nlicable			N/A		
Other type of	tability / cability scal il ap	phoablo		<u> </u>	13/7		
Other Data							
1.	Is this a new well drilled	for injection?		Yes 🗹 No			
	If no for what nurnose:	was the well originally drille	2d2		Drinkard P	roducer	
	ii iio, ioi wiiai puipose	was the well originally unite	ou:		Dillikalu F	Toducei	
		·					· · · · · · · · · · · · · · · · · · ·
2.	Name of the Injection for	ormation		Blinebry-	Tubb-Drink	ard	
0	Name of Field or Book	if anniinable)		Eumine N	Dinahu. 7	Tubb Deinkoud	
3.	Name of Field or Pool (	іг арріісавіе)		Eunice N.	, Bilnebry-	Tubb-Drinkard	
4.	Has the well ever been	perforated in any other zon	ne(s)? Lis	t all such per	rforated inte	ervals	
		l, i.e., sacks of cement or p	olug(s) use	d.	Blinebry 5	670 - 5860 / Cer	ment squeezed
	w/ 175 sx	·				<del> </del>	
5.	Give the names and de	pths of any over or underly	ing oil or c	ias zones (n	ools) in this	area.	· · · · · · · · · · · · · · · · · · ·
	See C-108 Attachmen			,z			
				<u></u>			

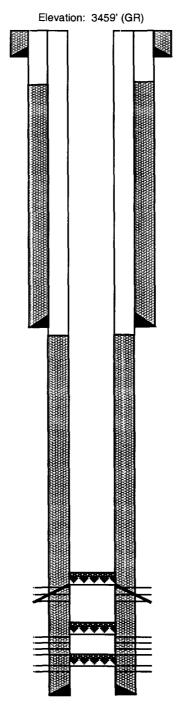
Well: Northeast Drinkard Unit # 305

Field: Eunice N. Blinebry-Tubb-Drinkard Current Status: TA'd

Location: 1980' FSL & 1980' FEL

Unit R, Sec. 3, T21S, R37E Lea County, New Mexico

API #: 30-025-06493



17-1/2" Hole 13-3/8" 36# Armco CSA 199' Cement w / 250 sx Circulated to Surface

12-1/4" Hole 9-5/8" 36/40# J-55 CSA 2969' Cement w / 1525 sx TOC @ 725' (TS)

CIBP @ 5650' w/ 35' cement

**Blinebry Perfs:** 

5670 - 5860 (270 Holes) Cement squeezed w/ 175 sx

CIBP @ 6150' w/ 35' cement

Tubb Perfs:

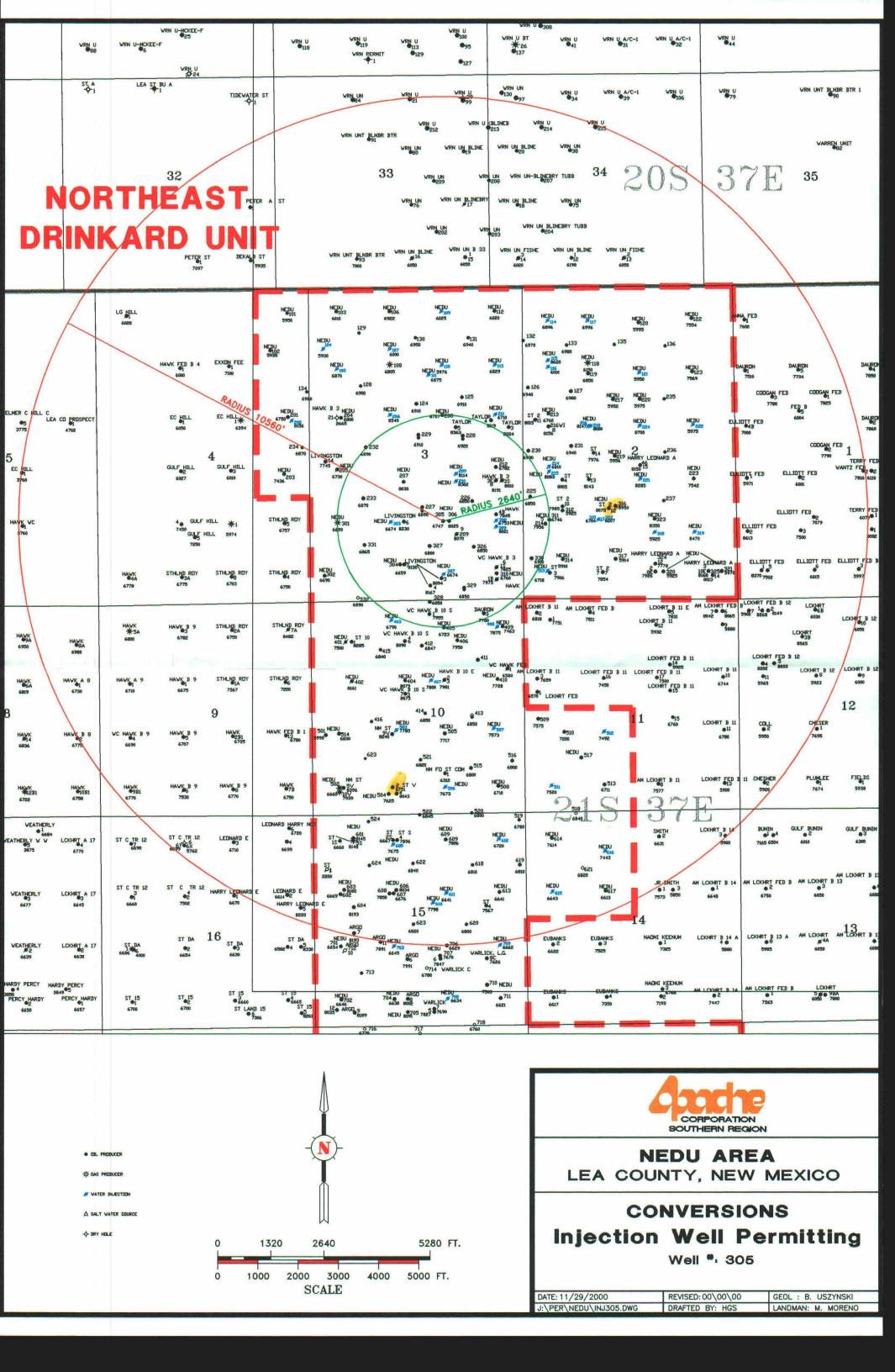
6180 - 6501 (100 Holes)

CIBP @ 6530' w/ 35' cement

**Drinkard Perfs:** 

6535 - 6689 (222 Holes)

8-3/4" Hole 7" 23# J-55 CSA 6746' Cement w / 875 sx TOC @ 3000' (TS)



OPERATOR Apache Corporation LEASE

30-025-06507

	Apache Corporation /	LEASE	Northeas	t Drinkard l	Jnit (formerly H	ławk B-3 # 5)	
WELL NO.	306	1980' FNL & 1830' FEL	R	3		21S	37E
		FOOTAGE LOCATION	UNIT	SECTION	TOV	VNSHIP	RANGE
0 ( 0		Well Co	nstruction [	<u>Data</u>			
<u>Surface Casir</u> Size	10-3/4	Cemented with		225	sx		
TOC	Surface	feet determined	by	Circul	lation		
Hole Size	13-3/4	-					
ntermediate (	Casing						
Size	7-5/8	Cemented with		1150	) sx		
ГОС	650	feet determined	by	Temp S	Survey		
Hole Size	9-7/8	-					
Long String Size	5-1/2	Cemented with		625	sx		
тос	3200	feet determined	by	Temp \$	Survey		
Hole Size	6-3/4	_					
Total Depth	8025	_					
njection Inter							
562 (perforated	reet to or open-hole; indicate wh	6800	) <u></u>	_feet	Perforated		
Tubing Size	2.	-3/8	lined with		IPC		set in a
rubing Cizo	5-1/2" Bake			(type of packer at	internal coating)		feet
Other type of	tubing / casing seal if app			<u>,</u>	N/A	-	,
	g ,g					· <del></del>	•
Other Data 1.	Is this a new well drilled	for injection?		∕es ☑ No			
	If no, for what purpose w	vas the well originally drille	ed?		McKee Produc	er	
2	Name of the Injection for	rmetion	··	Plinohm, T	ubb Drinkand		
2.	Name of the Injection for				ubb-Drinkard		
3.	Name of Field or Pool (if	f applicable)		Eunice N.,	Blinebry-Tubb	-Drinkard	<del></del>
4.	and give plugging detail,	perforated in any other zo , i.e., sacks of cement or p 522 - 6776 / <b>CIBP</b> @ 6475	olug(s) u <mark>s</mark> ed	i.	Blinebry 5646	- 5723 / Cement squ	
_		BP @ 7500' w/ 10' cemer					
5.	Give the names and dep See C-108 Attachment	oths of any over or underly	ing oil or g	as zones (po	ools) in this area	l. 	

Well: Northeast Drinkard Unit # 306

Blinebry Perfs: 5646 - 5723 (14 Holes) Cement squeezed w/ 200 sx 5773 - 6071 (69 Holes)

**Tubb Perfs:** 

**Drinkard Perfs:** 6522 - 6776 (36 Holes) **CIBP @ 6888**'

McKee Perfs: 7700 - 7856 (512 Holes)

6083 - 6169 (14 Holes) CIBP remnants @ 6240'

CIBP @ 6475' w/ 35' cement

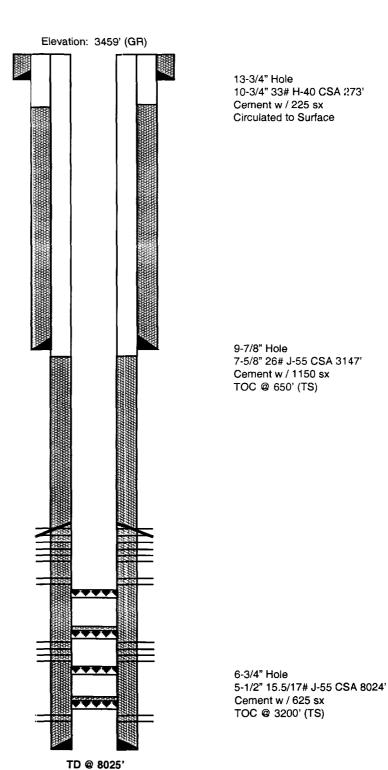
CIBP @ 7500' w/ 10' cement

Field: Eunice N. Blinebry-Tubb-Drinkard

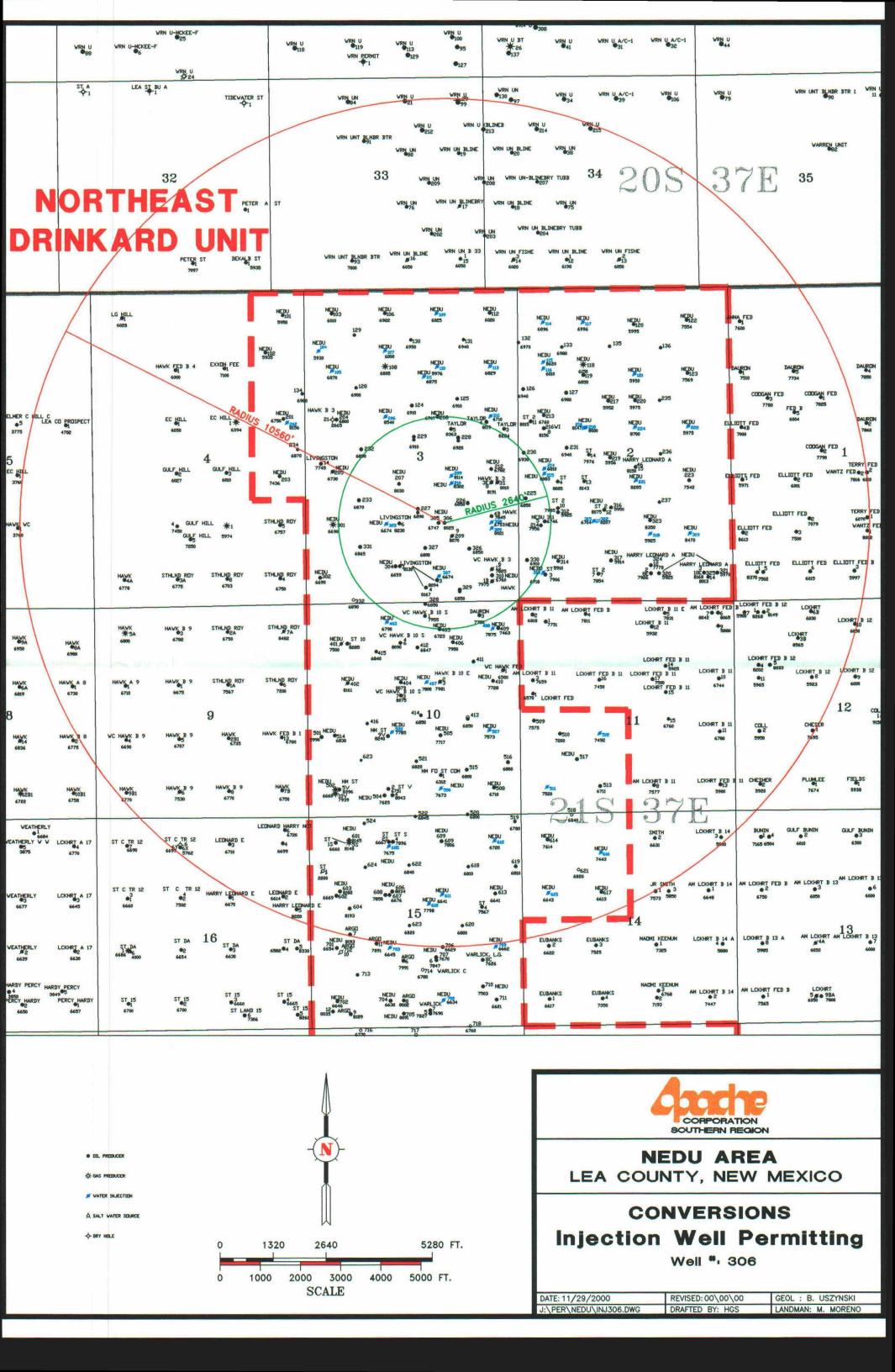
Location: 1980' FNL & 1830' FEL

Unit R, Sec. 3, T21S, R37E Lea County, New Mexico

API #: 30-025-06507



Current Status: Active Oil



30-025-06497

OPERATOR	<b>Apache Corporation</b>	LEASE	Northeas	t Drinkard Unit (	formerly Hawk B-3 # 13	3)
WELL NO.	310	660' FSL & 660' FEL	X	3	21\$	37E
		FOOTAGE LOCATION	UNIT	SECTION	TOWNSHIP	RANGE
Curtosa Casir	29	Well Co	<u>nstruction</u>	<u>Data</u>		
Surface Casir Size	13-3/8	Cemented with		250 sx		
тос	Surface	feet determined	by	Circulation	1	
Hole Size	17-1/2	_				
Intermediate (	Casing					
Size	9-5/8	Cemented with		1200 sx		
тос	1044	feet determined	by	Temp Surve	<u> </u>	
Hole Size	12-1/4	_				
Long String						
Size	7	Cemented with		775 sx		
тос	2975	feet determined	by	Temp Surve	<u> </u>	
Hole Size	8-3/4	_				
Total Depth	6760	_				
Injection Inter				f 1 B-1		
562 (perforated	or open-hole; indicate w	6760	<del>-</del>	_feet Perf	orated	
·•	·	2-3/8	lined with		IPC	set in a
Tubing Size		2-3/0	_ iiiieu wiiii	(type of interr		set in a
	7" Bake	Lok-Set		packer at	5520	feet
Other type of	tubing / casing seal if ap	plicable			N/A	
Other Data  1.	Is this a new well drilled	d for injection?	г	Yes 🗸 No		
1.		was the well originally drill		<del>_</del>	kard Producer	
		was the well originally drill	eu:		Raid Fioducei	
2.	Name of the Injection f	ormation		Blinebry-Tubb	-Drinkard	
3.	Name of Field or Pool	(if applicable)		Eunice N., Blin	ebry-Tubb-Drinkard	
4.		perforated in any other zo il, i.e., sacks of cement or			ed intervals	
-		AL	odnos ell -		in Aldia and	
5.	See C-108 Attachmen	epths of any over or underl t	ying oil or (	jas zones (pools)	ın mis area.	

Well: Northeast Drinkard Unit # 310

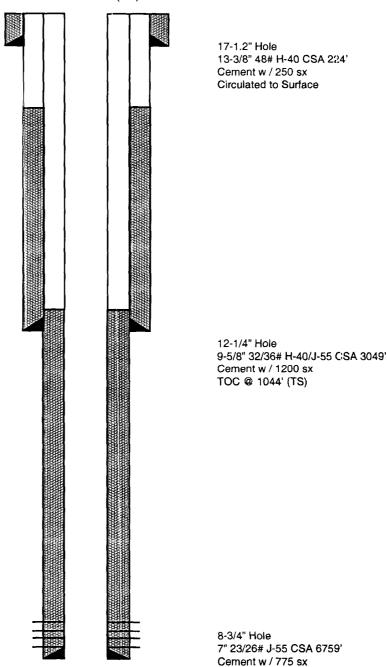
Current Status: Active Oil Field: Eunice N. Blinebry-Tubb-Drinkard

660' FSL & 660' FEL Location:

> Unit X, Sec. 3, T21S, R37E Lea County, New Mexico

API#: 30-025-06497

Elevation: 3456 (GR)



**Blinebry Perfs:** 

5760 - 6050 (175 Holes)

Tubb Perfs:

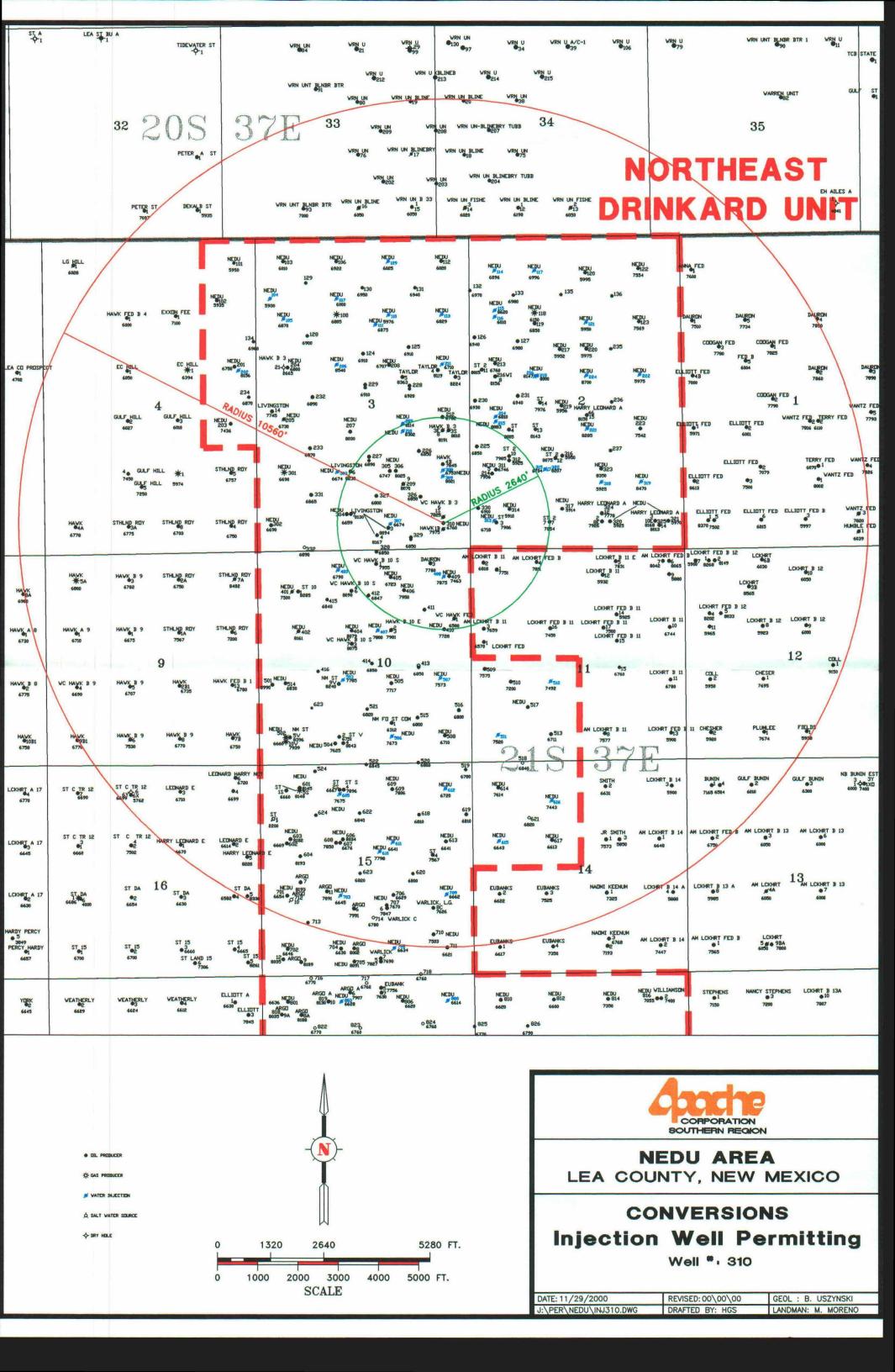
6109 - 6457 (39 Holes)

**Drinkard Perfs:** 

6512 - 6725 (317 Holes)

Cement w / 775 sx TOC @ 2975' (TS)

TD @ 6760'



30-025-06367

OPERATOR	<b>Apache Corporation</b>	LEASE	Northeas	st Drinkard Ur	nit (formerly State 2 # 1)	
WELL NO.	311	1980' FSL & 660' FWL	Т	2	21\$	37E
		FOOTAGE LOCATION	UNIT	SECTION	TOWNSHIP	RANGE
		Well Co	onstruction	<u>Data</u>		
Surface Casir		•				
Size	13-3/8	Cemented with		300 s	<u> </u>	
TOC	Surface	feet determined	by	Circula	tion	
Hole Size	17-1/2	_				
Intermediate	Casing					
Size	8-5/8	Cemented with		2000 :	SX	
	<del></del>	_			<u> </u>	
TOC	Surface	feet determined	by	Circula	tion	
Hole Size	11	_				
Long String						
Size	5-1/2	Cemented with		500 s	<u> </u>	
TOC	3450	feet determined	l by	Free Po	oint	
Hole Size	7-7/8	<del></del>				
Total Depth	6746	_				
Injection Inter	val					
565		6746	5	_feet P	erforated and Open Hole	
(perforated	or open-hole; indicate w	hich)				
Tubing Size	2	2-3/8	lined with	1	IPC	set in a
Ŭ			_	(type of in	ternal coating)	
<del></del>	5-1/2" Bak	er Lok-Set		_packer at _	5550	feet
Other type of	tubing / casing seal if ap	plicable			N/A	<del></del>
Other Data						
1.	Is this a new well drilled	d for injection?		Yes 🗸 No		
	If no for what nurnose	was the well originally drill	led?	ח	rinkard Producer	
				<u>_</u>	Tillikara i Todacci	
2.	Name of the Injection for	ormation		Blinebry-Tu	bb-Drinkard	
3.	Name of Field or Pool (	(if applicable)		Eunice N., E	Blinebry-Tubb-Drinkard	
4.	Has the well ever been	perforated in any other zo	ne(e)? Lis	t all such nerfo	orated intervals	
٦.		il, i.e., sacks of cement or			I/A	
5.	Give the names and de See C-108 Attachmen	epths of any over or underl	ying oil or (	gas zones (pod	ols) in this area.	

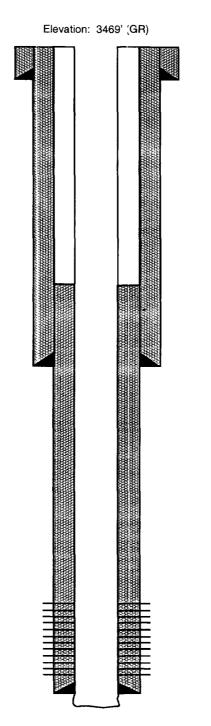
Well: Northeast Drinkard Unit # 311

Field: Eunice N. Blinebry-Tubb-Drinkard

Location: 1980' FSL & 660' FWL

Unit T, Sec. 2, T21S, R37E Lea County, New Mexico

API #: 30-025-06367



17-1/2" Hole 13-3/8" 32# H-40 CSA 225' Cement w / 300 sx Circulated to Surface

Current Status: Active Oil

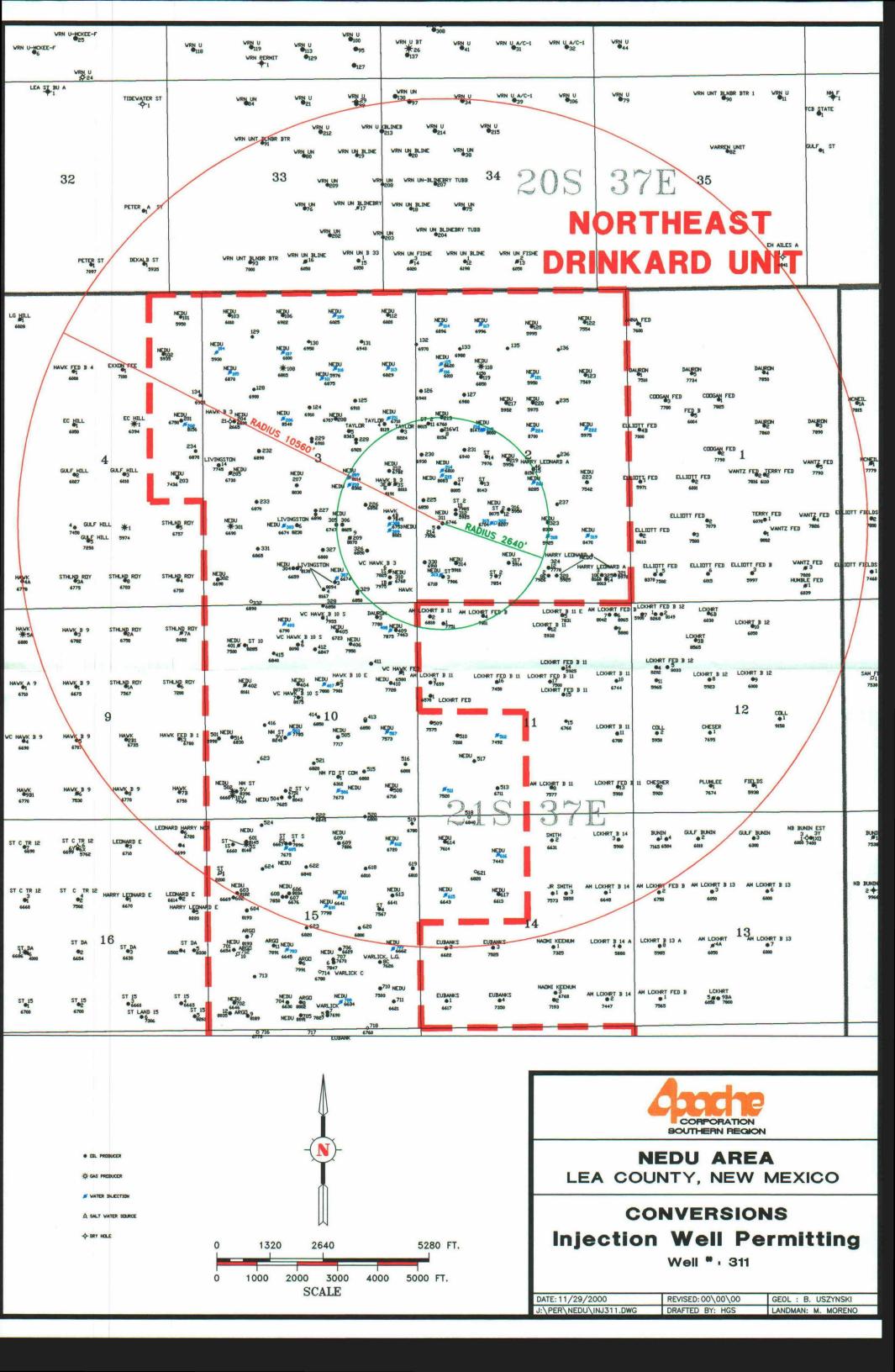
11" Hole 8-5/8" 28/32# J-55 CSA 3047' Cement w / 2000 sx Circulated to Surface

**Blinebry Perfs:** 5734 - 6149 (170 Holes)

**Tubb Perfs:** 6157 - 6508 (75 Holes)

**Drinkard Perfs:** 6534 - 6626 (40 Holes) **Open Hole:** 6670 - 6746

7-7/8" Hole 5-1/2" 15.5# J-55 CSA 6670' Cement w / 500 sx TOC @ 3450' (Free Point)



30-025-06454

OPERATOR	Apache Corporation	LEASE	Northeas	t Drinkard Un	it (formerly Hawk	B-10 # 2)
WELL NO.	404	1980' FNL & 2310' FWL	F	10	21\$	37E
		FOOTAGE LOCATION	UNIT	SECTION	TOWNSH	IIP RANGE
		Well Con	struction	Data		
Surface Casir	ng			<del></del>		
Size	10-3/4	_ Cemented with		250 s	<u>x</u>	
тос	Surface	feet determined b	ру	<u>Circulat</u>	ion	
Hole Size	13-3/4	_				
Intermediate	Casing					
Size	7-5/8	Cemented with		1360 s	SX	
тос	1125	feet determined b	ру	Temp Su	rvey	
Hole Size	9-7/8	_				
Long String						
Size	5-1/2	_ Cemented with		470 s	<u>x</u>	
TOC	3250	feet determined b	ру	Temp Su	rvey	
Hole Size	6-3/4	_				
Total Depth	8079	_				
Injection Inter	<u>val</u>					
558		6790		_feet Pe	erforated	
(репогатеа	or open-hole; indicate wl	nicn)				
Tubing Size		2-3/8	lined with		IPC	set in a
	5-1/2" Bak	or Lak-Sat		(type of int packer at	ernal coating) 5480	feet
	3-1/2 Dak	er Luk-Set		_packer at	3480	1661
Other type of	tubing / casing seal if ap	plicable			N/A	
Other Data		l fou inication O				
1.	Is this a new well drilled	i for injection?		Yes 🗸 No		
	If no, for what purpose	was the well originally drille	d?	<u>E</u> I	lenburger Produc	er
2.	Name of the Injection for	ormation		Blinebry-Tul	bb-Drinkard	
3.	Name of Field or Pool (	if applicable)		Eunice N., B	linebry-Tubb-Drin	kard
4.		perforated in any other zon				3073 / <b>CIBP @</b> 6800' w/
5.	Give the names and de See C-108 Attachmen	pths of any over or underly	ing oil or g	jas zones (poo	ls) in this area.	

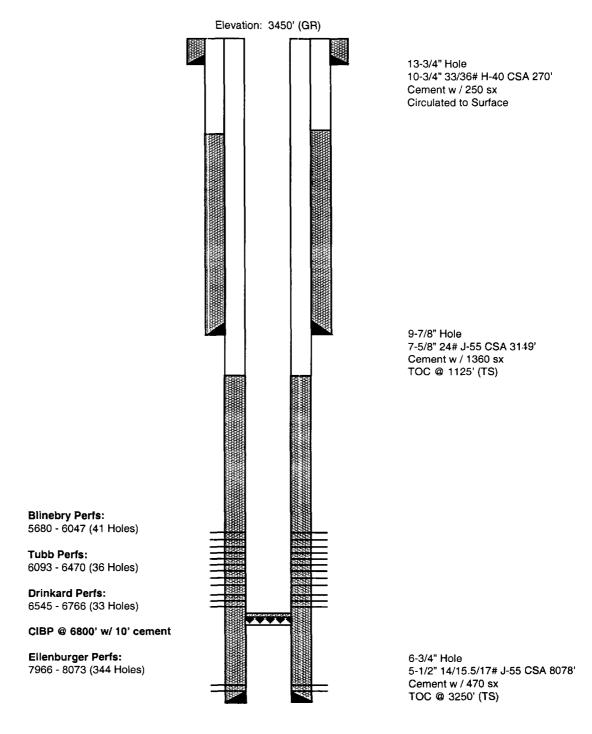
Well: Northeast Drinkard Unit # 404

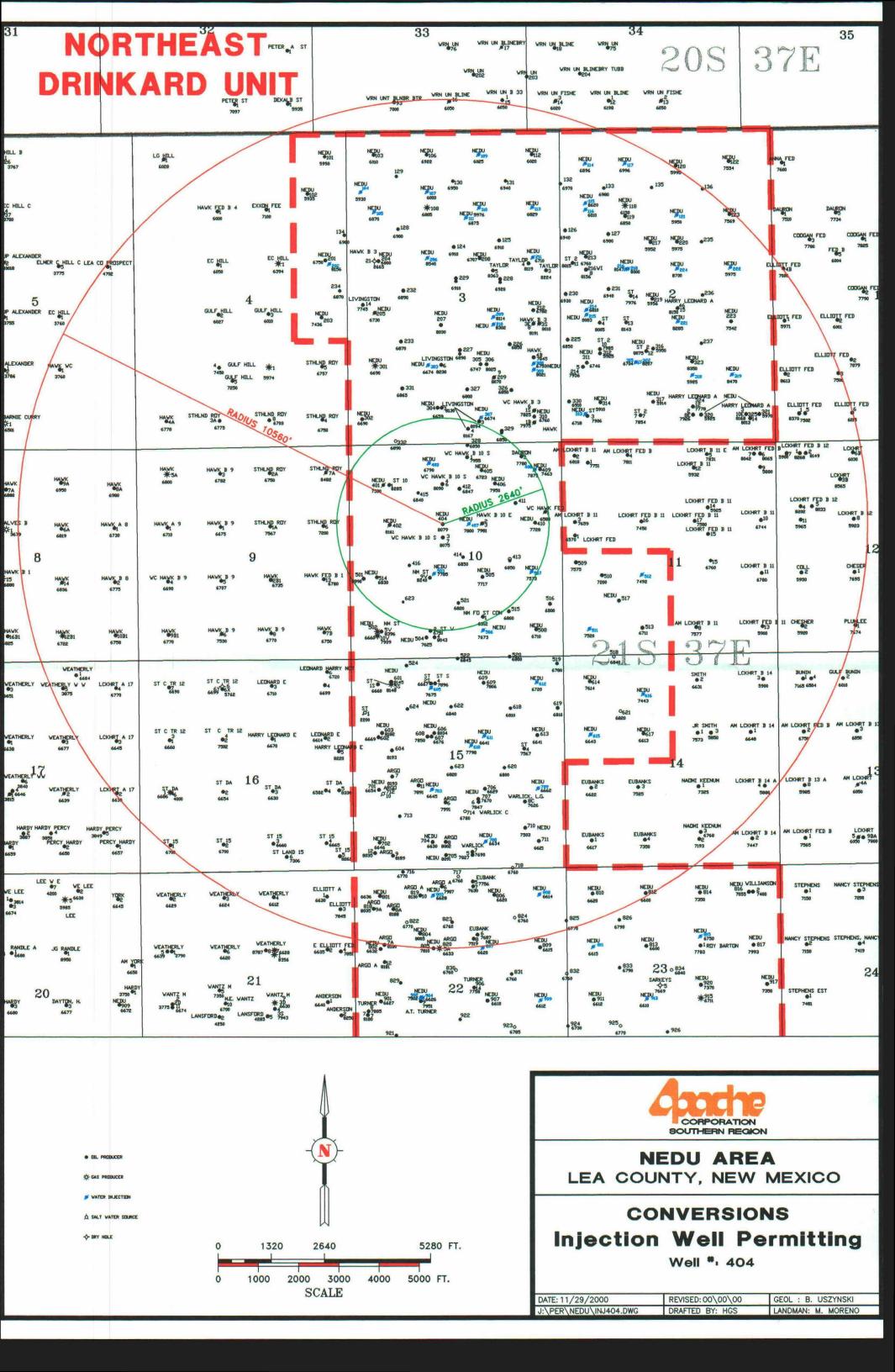
Field: Eunice N. Blinebry-Tubb-Drinkard Current Status: Active Oil

Location: 1980' FNL & 2310' FWL

Unit F, Sec. 10, T21S, R37E Lea County, New Mexico

API #: 30-025-06454





36 025-06453

	Apache Corporation	LEASE		st Drinkard	Unit (form	erly Hawk B-10 #	
WELL NO.	410	1980' FNL & 660' FEL	<u>H</u>	10		215	37E
		FOOTAGE LOCATION	UNIT	SECTION		TOWNSHIP	RANGE
0 ( 0		Well Co	nstruction	<u>Data</u>			
Surface Casir Size	<u>10</u> 10-3/4	Cemented with		25	) sx		
		_			-	•	
TOC	Surface	feet determined	by	Circu	lation	•	
Hole Size	13-3/4	<del>_</del>					
Intermediate	Casing						
Size	7-5/8	_ Cemented with		169	5 sx		
TOC	550	feet determined	by	Temp	Survey		
Hole Size	9-7/8	_					
Long String							
Size	5-1/2	_ Cemented with		529	9 sx		
TOC	Surface	feet determined	by	Circu	lation		
Hole Size	6-3/4	_					
Total Depth	7728	_					
Injection Inter							
556	or open-hole; indicate wh	6720		_feet	Perforated	d	
(periorated	or open-note, indicate wi	non)					
Tubing Size	2	2-3/8	_lined with		internal coa	IPC	set in a
	5-1/2" Bak	er Lok-Set		packer at	——	5460	feet
Other type of	tubing / casing seal if ap	plicable			N/A		
Other Data							
1.	Is this a new well drilled	for injection?		Yes 🗸 No			
	If no, for what purpose	was the well originally drille	∍d?		Ellenburg	er Producer	
2.	Name of the Injection for	ormation	1000.0	Blinebry-	Tubb-Drink	ard	
3.	Name of Field or Pool (	if applicable)		Eunice N.	, Blinebry-	Tubb-Drinkard	
4.	and give plugging detai	perforated in any other zon I, i.e., sacks of cement or p bo 6721 - 7366 / Cement s	olug(s) u <mark>s</mark> e	d.	rforated into	ervals <b>Ellenburger</b> 7584	- 7690 / <b>CIBP @</b>
5.	Give the names and de	pths of any over or underly	ying oil or c	gas zones (p	ools) in this	area.	
	See C-108 Attachmen	, -		(F			
				<del></del>		<u> </u>	

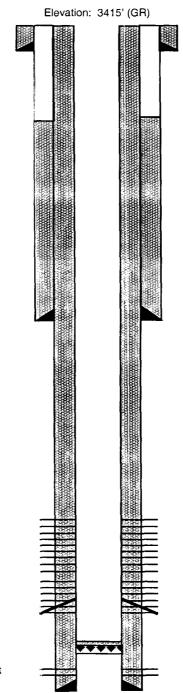
Well: Northeast Drinkard Unit # 410

Field: Eunice N. Blinebry-Tubb-Drinkard Current Status: Active Oil

Location: 1980' FNL & 660' FEL

Unit H, Sec. 10, T21S, R37E Lea County, New Mexico

API #: 30-025-06453



13-3/4" Hole 10-3/4" 36# H-40 CSA 260' Cement w / 250 sx Circulated to Surface

9-7/8" Hole 7-5/8" 26# J-55 CSA 3099' Cement w / 1695 sx TOC @ 550' (TS)

Blinebry Perfs:

5707 - 6104 (41 Holes)

**Tubb Perfs:** 

6246 - 6368 (10 Holes)

**Drinkard Perfs:** 

6472 - 6650 (18 Holes)

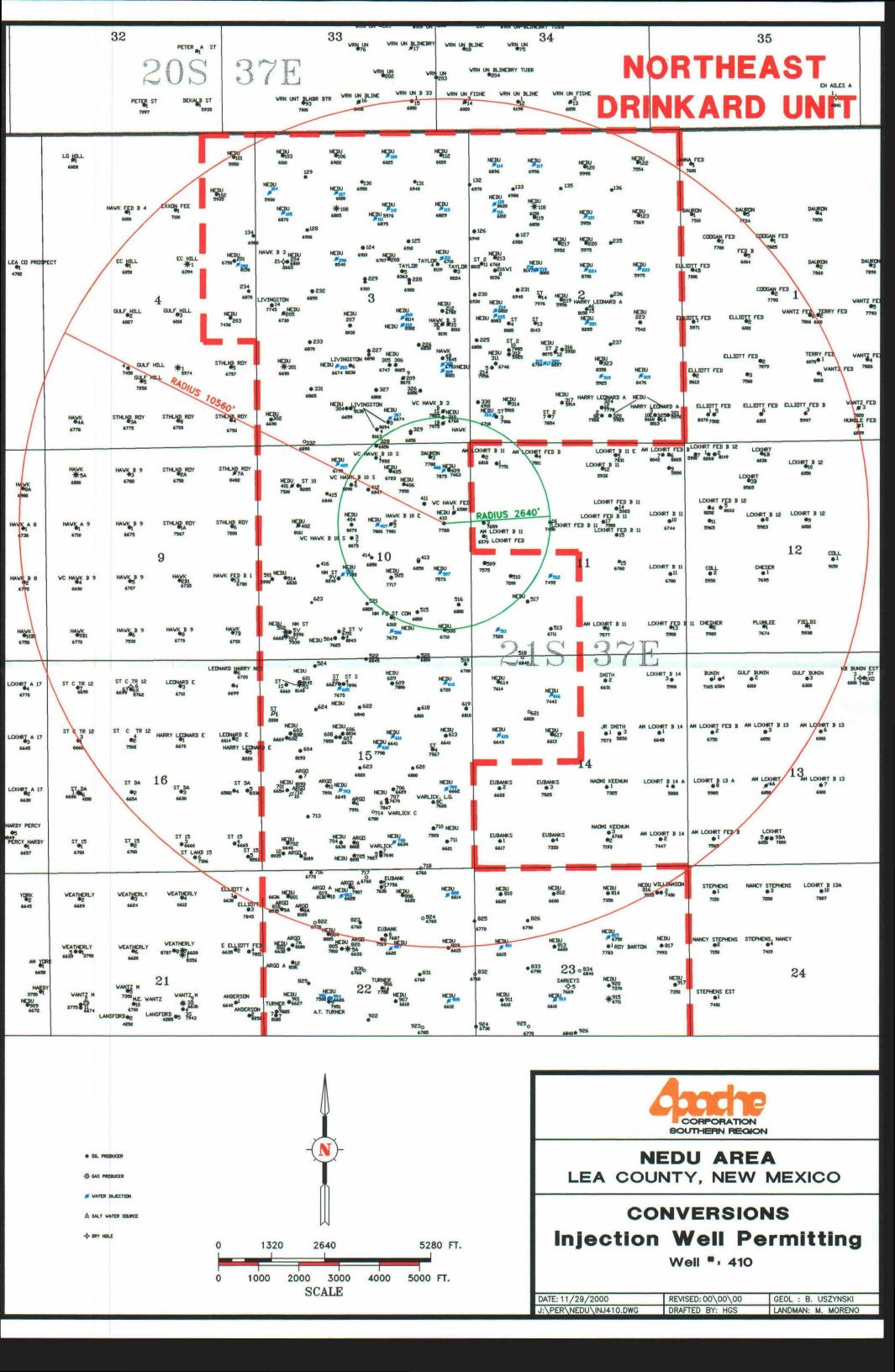
Abo Perfs:

6721 - 7366 (19 Holes)
Cement squeezed w/? sx

CIBP @ 7420' w/ 10' cement

Ellenburger Perfs: 7584 - 7690 (356 Holes) 6-3/4" Hole 5-1/2" 15.5# J-55 CSA 7727' Cement w / 529 sx Circulated to Surface

TD @ 7728'



### AFFIDAVIT OF PUBLICATION

State of New Mexico, County of Lea.

I, KATHI BEARDE	ľ
-----------------	---

Publisher

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
weeks.
Beginning with the issue dated
November 26 2000
and ending with the issue dated
November 26 2000
Hathi Brance
Publisher Sworn and subscribed to before

November 2000

day of

Notary Public.

me this.

My Commission expires October 18, 2004 (Seal)

27th

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.

### LEGAL NOTICE November 26, 2000

Notice is hereby given of the application of Apache Corporation, 2000 Post Oak Blvd., Ste. 100, Houston, TX 77056, (713) 296-6000, to the Oil Conservation Division, New Mexico Energy, Minerals and Natural Resources Department for approval of the following injection wells for the purpose of secondary recovery.

Pool Name: Eunice, Blinebry-Tubb-Drinkard, North All wells are located in Lea County, New Mexico Lease/Unit Name: Northeast Drinkard Unit Well No. 102 - (formerly Taylor Glenn # 7)

Location: 1582' FNL & 990' FEL, Section 4, T21S, R37E,

Unit H

Well No. 103 - (formerly Hawk B-3 # 17)

Location: 660' FNL & 660' FWL, Section 3, T21S, R37E,

Unit D

Well No. 106 - (formerly Hawk B-3 # 16)

Location: 660' FNL & 1980' FWL, Section 3, T21S, R37E,

Unit C

Well No. 112 - (formerly Hawk B-3 # 14)

Location 660' FNL & 660' FEL, Section 3, T21S, R37E,

Unit /

Well No. 122 (formerly Harry Leonard # 17)

Location: 897' FNL & 990' FEL, Section 2, T21S, R37E,

Unit A

Well No. 123 (formerly Harry Leonard # 16)

Location: 2217' FNL & 989' FEL, Section 2, T21S, R37E,

Unit H

Well No. 204 - (formerly Hawk B-3 # 22)

Location: 3300' FNL & 760' FWL, Section 3, T21S, R37E,

Unit L

Well No. 207 - (formerly Livingston # 8)

Location: 2970' FSL & 2308' FWL, Section 3, T21S, R37E,

Unit N

Well 223 - (formerly Harry Leonard # 11)

Location: 2970' FSL & 990' FEL, Section 2, T21S, R37E,

Unit P

Well No. 304 - (formerly Livingston # 9)

Location: 915' FSL & 2208' FWL, Section 3, T21S, R37E,

Unit V

Well No. 305 - (formerly Hawk B-3 # 12)

Location: 1980' FSL & 1980' FEL, Section 3, T21S, R37E,

Unit R

Well No. 306 - (formerly Hawk B-3 # 5)

Location: 1980' FNL & 1830' FEL, Section 3, T21S, R37E,

Unit R

Well No. 310 - (formerty Hawk B-3 # 13)

Location: 660' FSL 660' FEL, Section 3, T21S, R37E,

Unit X

Well No. 311 - (formerly State 2 # 1)

Location: 1980' FSL & 660' FWL, Section 2, T21S, R37E,

Unit

Well No. 404 - (formerly Hawk B-10 # 2)

Location: 1980' FNL & 2310' FWL, Section 10, T21S, R37E,

Unit F

Well No. 410 - (formerly Hawk B-10 # 4)

Location: 1980' FNL & 660' FEL, Section 10, T21S, R37E,

Unit F

The injection formations are the Blinebry, Tubb and Drinkard located between the interval of 5450' MD to 7050' MD below the surface of the ground. Expected maximum injection rate is 2000 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, 2040 S. Pacheco, Santa_Fe, NM 87505 within fifteen days.

02102716000

02543116

Apache Corporation 2000 Post Oak Boulevard Suite 100 Houston, TX 77056-4400

### APPLICATION TO EXPAND WATERFLOOD NORTHEAST DRINKARD UNIT SURFACE OWNERS

State of New Mexico
Office of Land Commissioner
P O Box 1148
State Land Office Bldg.
Santa Fe, New Mexico 87504-1148
Certified Rcpt. # Z 116 149 401

Bureau of Land Management 2909 West 2nd Street Roswell, New Mexico 88201 Certified Rcpt. # Z 116 149 402

Farm & Ranch Ltd Ptn Robert McCasland P O Box 206 Eunice, New Mexico 88231 Certified Rcpt. # Z 116 149 403

William F McNeill Et Al c/o Page McNeill McNeill Ranch P O Box 1092 Eunice, New Mexico 88240 Certified Rcpt. # Z 116 149 404 Dora "B" Newson for Joe Taylor Et Al & RB Glenn c/o Florence Newson 3383-C Punta-Alta Laguna Hills, California 92653 Certified Rcpt. # Z 116 149 407

GP Sims
P O Box 1046
Eunice, New Mexico 88231
Certified Rcpt. # Z 116 149 408

Will N. Terry Trust, et al c/o Page McNeill McNeilL Ranch P O Box 1092 Eunice, New Mexico 88240 Certified Rcpt. # Z 116 149 409

A copy of the application to expand the Northeast Drinkard Waterflood was mailed to the Surface Land Owners listed above on April 12, 2001.

Debra J. Anderson, Sr. Engineering Technician

Date



WWW.APACHECORP.COM (713) 296-6000

April 12, 2001

**Surface Owner** 

Re: Application to Expand Waterflood Project

Northeast Drinkard Unit

Well No. 102, 103, 106, 112, 122, 123, 204, 207, 223,

304, 305, 306, 310, 311, 404, 410

Eunice N., Blinebry-Tubb-Drinkard

Lea County, New Mexico

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

Sincerely,

APACHE CORPORATION

Debra J. Anderson

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

### **APPLICATION TO EXPAND WATERFLOOD** NORTHEAST DRINKARD UNIT **OFFSET OPERATORS**

Lewis B Burleson Inc. Box 2479

Midland, Texas 79702

Certified Rcpt. # Z 116 149 410

Campbell & Hedrick

Box 401

Midland, Texas 79701

Certified Rcpt. # Z 116 149 411

Chevron USA Inc.

Box 688

Eunice, New Mexico 88231

Certified Rcpt. # Z 116 149 412

J R Cone Box 10217

Lubbock, Texas 79408

Certified Rcpt. # Z 116 149 413

Conoco Inc

10 Desta Drive, Ste. 100W Midland, Texas 79705

Certified Rcpt. # Z 116 149 414

Exxon Company USA

Box 1600

Midland, Texas 79702

Certified Rcpt. # Z 116 149 415

Gruy Petroleum Management 600 E Las Colinas Blvd., Ste1200

Irving, Texas 75014-0907 Certified Rcpt. # Z 116 149 416

John H Hendrix Corporation

Box 3040

Midland, Texas 79702

Certified Rcpt. # Z 116 149 417

Lynx Petroleum Consultants Inc.

Box 1708

Hobbs, New Mexico 88241-1708

Certified Rcpt. # Z 116 149 418

Marathon Oil Company

Box 2409

Hobbs, New Mexico 88240

Certified Rcpt. # Z 116 149 419

Mayne & Mertz Inc.

Box 183

Midland, Texas 79702

Certified Rcpt. # Z 116 149 420

Mewbourne Oil Company

Box 5270

Hobbs, New Mexico 88241

Certified Rcpt. # Z 116 149 421

MGM Oil & Gas Company

P O Box 891

Midland, Texas 79702

Certified Rcpt. # Z 116 149 422

Mirage Energy Inc.

7915 N Llewelyn Hobbs, New Mexico 88242

Certified Rcpt. # Z 116 149 423

Morexco Inc.

1211 W Chisum Avenue Artesia, New Mexico 88211

Certified Rcpt. # Z 116 149 424

Permian Resources Inc. 608 N Main Street, Suite 200

Midland, Texas 79702

Certified Rcpt. # Z 116 149 425

SDX Resources Inc.

511 W Ohio Avenue, Suite 601

Midland, Texas 79704

Certified Rcpt. # Z 116 149 426

Stephens & Johnson Oper. Co.

Box 2249

Wichita Falls, Texas 76307-2249

Certified Rcpt. # Z 116 149 427

Texaco Expl & Prod Inc. Hobbs Operating Unit

P O Box 3109

Midland, Texas 79702

Certified Rcpt. # Z 116 149 428

Xeric Oil & Gas Corporation 201 W Wall, Suite 700

Midland, Texas 79702

Certified Rcpt. # Z 116 149 431

Zia Energy Inc.

Box 2510

Hobbs, New Mexico 88241-2510 Certified Rcpt. # Z 116 149 432

A copy of the application to expand the Northeast Drinkard Waterflood was mailed to the Offset Operators listed

above on April 12, 2001



WWW.APACHECORP.COM (713) 296-6000

April 12, 2001

### **Offset Operator**

Re: Application to Expand Waterflood Project

Northeast Drinkard Unit

Well No. 102, 103, 106, 112, 122, 123, 204, 207, 223,

304, 305, 306, 310, 311, 404, 410 Eunice N., Blinebry-Tubb-Drinkard

Lea County, New Mexico

Attached please find a copy of completed form C-108 with attachments and a plat of Apache Corporation's lease, which we have filed with the New Mexico Oil Conservation Division. The plat shows the referenced wells in relation to your offset operations.

Sincerely,

APACHE CORPORATION

Debra J. Anderson

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

Y.
DA.
ÆLL
<b>*</b>
/EM
RE
P
REA
Ā

WELL NAME	API NO.	S/T/R	LOCATION	WELL	COMP DATE T	SU TD HOLE	RFACE (	SASING SET CMT	INTER	MEDIATE CSG SI	E CASING SET CMT	HOLE		SET (	PRODUCTION CASING CSG SET CMT	 ပို	HOLE LIP	L LINER DE	LINER DEPTH C	CMT TOC	
Peter State # 1	30-025-27048	32/20S/38E	660 F	0	12/23/80 70	ᅚ	8-5/8	1406 725		11-			11		2250	(0) 0		L			ì
DeKalb State # 1	30-025-07871	32/20S/38E	660 FSL-660 FEL	Per		5935 17-1/2	13-3/8	265 250	12-1/4	9-5/8 29	2900 250	0 7-7/8	5-1/2	5935	200	4792 (C)		_			
Warren Unit # 15	30-025-07875	33/20S/38E	_	0	_	6050 13-3/4	10-3/4	249 250	8/2-6	-	3049 1150	0 6-3/4	5-1/2	6048	089	(C) 0					$\frac{\lambda}{\lambda}$
Warren Unit # 16	30-025-07876	33/20S/38E	${}^{-}$	0		6050 13-3/4	10-3/4		8/2-6	7-5/8 30	3049 1111		5-1/2		541	(C) 0	+	1			\   
Warren Unit # 76	30-025-26313	33/20S/38E			_	6150 12-1/4	8-2/8			$\dagger$	+	8//-/	5-1/2		1693	(3)	+	1	1	_	, ,
Warren Unit # 93	30-025-27584	33/20S/38E		0	-	7000 12-1/4	9-2/8	1400 525			+	8-3/4	7	1 5669	1192	() () ()	+	1		-	1 
Warren Unit # 202	30-025-33624	33/203/38E	1330 FSL-1310 FEL		10/21/64 61	6109 12.3/4	9/2-04	250 750	0/2/0	7 5/0 3/	2040 1120	2//-/	2/1-0	0000	1302	(0) 0(4)	+	-			
Warren Unit # 12	30-023-07660	34/203/38E	_		-	6050 13-3/4	10-0/4	_	0//-6	+		1000	7-1/2	6040		505 (0)	+			_	<u> </u>
Warren Unit # 13	30-025-07889	34/20S/38E			_	6020 13-3/4	10-3/4	┸	9-7/8	+	3051 1150	9.5/4	5-1/2	8043		2036 (C)	+		+		<u> </u>
Warren Unit # 18	30-025-07883	34/20S/38F				6008 17-1/2	13-3/8		12-1/4	+		8-3/4	7 7	8007		2451 (C)				-	$\frac{1}{1}$
Warren Unit # 203	30-025-32995	34/20S/38E		0		6982 12-1/4	8-5/8	ᆚ	7	+		7-7/8	5-1/2		1_	000		<u> </u>			1
Warren Unit # 204	30-025-33640	34/20S/38E		0		6750 12-1/4	8-2/8			+	+	7-7/8	5-1/2		1205	0(0)				-	$\frac{1}{1}$
Anna Federal # 1	30-025-23355	1/21S/37E	990 FNL-330 FWL	0	1/17/70	7600 12-1/4	8/2-6	808 300			_	8-3/4	7	7593	750 2	2654 (C)				_	<u> </u>
Coogan Federal # 3	30-025-30640	1/21S/37E	2875 FNL-990 FWL	0	8/25/89 77	7780 12-1/4	8-2/8	1560 600				2-2/8	5-1/2	7780 1	1275	494 (C)	_				1
Dauron # 1	30-025-06338	1/21S/37E	2214 FNL-330 FWL	0	2/15/55 59	5960 13-3/4	10-3/4	224 200	8/2-6	7-5/8 30	3045 1100	0 6-3/4	5-1/2	5935	200	3564 (C) 4-	4-3/4 4		7510	150 3361 (C)	<u>(5</u>
Dauron # 5	30-025-30835	1/21S/37E	2214 FNL-1650 FWL	0		7734 12-1/4	8/2-8	1650 <b>345</b>		-			5-1/2			298 (C)					)   
Elliott Federal B # 1	30-025-06325	1/21S/37E	2970 FSL-330 FWL	0	$\rightarrow$	ightarrow	10-3/4	77 200	8/2-6	-	- 4		5-1/2	5880		1731 (C)					1
Elliott Federal B # 2	30-025-06326	1/21S/37E	2970 FSL-1650 FWL	0		6001 13-3/4	10-3/4	278 250	9-7/8	7-5/8   30	3087 1150	0 6-3/4	5-1/2	5885		1736 (C)					<u>1</u>
Elliott Federal B # 4	30-025-06328	1/21S/37E	3630 FNL-330 FWL	0		7000 12-1/4	8-2/8	1029 1300		-		2-2/8	5-1/2	5890			4-3/4 4	5663-	2663-7000	909	5663
Elliott Federal # 1	30-025-06332	1/21S/37E	1650 FSL-330 FWL	0		8613 17-1/2	13-3/8	240 225	11	-	3157 1500	0 7-7/8	5-1/2	7370		5074 (C)		-			<u>,</u>
NEDU # 114 (State # 6)	30-025-06344	2/21S/37E	906 FNL-660 FWL	<u>×</u>	_	6896 17-1/2	13-3/8	208 240	11	-+	3008 1750	0 7-7/8	5-1/2	9030		4780 (T) 4		3-1/2 5645	5645-6896 1	100	5645
NEDU # 115 (State # 2)	30-025-06340	2/21S/37E	1896 FNL-660 FWL	<u>×</u>		8620 17-1/2	13-3/8	152 165	12-1/4	_	3005 1600	0 7-7/8	5-1/2	8200		4255 (T)					1
NEDU # 116 (State # 8)	30-025-06346	2/21S/37E	5790 FSL-660 FWL	<u>×</u>		6010 17-1/2	13-3/8	218 200	11	8-5/8		0 7-7/8	5-1/2	6010		4200 (T)		$\dashv$			) 
NEDU # 117 (State # 7)	30-025-06345	2/21S/37E	921 FNL-1650 FWL	<u>=</u>	6/23/54 69	6996 17-1/2	13-3/8	215 245	11	$\vdash$	3030 2100	0 7-7/8	5-1/2	9030	- 1	4930 (T) 4		3-1/2 5708	5708-6945	100	7
NEDU # 118 (State # 9)	30-025-06347	2/21S/37E	1973 FNL-1650 FWL	0		6150 17-1/2	13-3/8					2-2/8	4-1/2	5682	570 2	2560 (T)		$\dashv$			1
NEDU # 119 (State # 5)	30-025-06343	2/21S/37E	5610 FSL-1650 FWL	0	_	6850 17-1/2	13-3/8	_	1			0 7-7/8	5-1/2	2980	- 1	4715 (T) 4		3-1/2 5955	5955-6850	75	<u> </u> 1
NEDU # 120 (Harry Leonard NCT-F # 13)	30-025-06357	2/21S/37E	990 FNL-2310 FEL	0		5995 17-1/2	13-3/8		11	$\dashv$	_	5 7-7/8	5-1/2	5879		2760 (T)		_			$\frac{1}{1}$
NEDU # 121 (Harry Leonard NCT-F # 10)	30-025-06354	2/21S/37E	2220 FNL-2307 FEL	ž	_	5950 17-1/2	13-3/8		11	8-5/8	3021 1550	0 7-7/8	5-1/2			3100 (T)					ე 
NEDU # 126	30-025-34415	2/21S/37E	2500 FNL-130 FWL	0		6940 11	$\dashv$					2-2/8	5-1/2			Surface					1
NEDU # 127	30-025-34426	2/21S/37E	2600 FNL-1200 FWL	0	_		8-2/8	_		-	_	7-7/8	5-1/2			Surface					, 
NEDU # 132	30-025-34601	2/21S/37E	1339 FNL-130 FWL	0		6970 12-1/4	8-2/8		1	-		7-7/8	5-1/2			Surface	1				!
NEDU # 133	30-025-34600	2/21S/3/E	1458 FNL-1098 FWL	0	_		8-5/8	Ш		+	+	8//-/	5-1/2			Surface	+	1	+	-	
NEDU # 135	30-025-34796	2/21S/37E	1450 FNL-2280 FWL	0	2/27/00 66	6610 12-1/4	8-5/8	1273 460	+	+	+	7-7/8	5-1/2	6610	1300	Surface		1			7
NEDL # 130 NEDL # 213 (State Sec 2 # 2)	30-023-34-882	2/213/37E	4620 FSI -660 FWI	o		6760 17-1/2	13-3/8	1	+	8-5/8	2936 2200	0//-/0	5-1/2			3610 (T)	+	-		+	<u> 1</u>
	30-025-06491	2/21S/37E	3300 FSL-660 FWL	₹			13-3/8	_	12-1/4	+-		0 8-3/4	2 _	6810		1970 (T)	+			<u> </u>	$\frac{1}{7}$
NEDU # 215 (State # 3)	30-025-06341	2/21S/37E	3175 FSL-660 FWL	₹	_		13-3/8	240 200	=	┿		0 7-7/8	5-1/2	8010	Ĺ	4060 (T)					$\frac{l}{l}$
NEDU # 216 (State # 15)	30-025-06483	2/21S/37E	3546 FNL-1650 FWL	₹			13-3/8	223 250	=	+						_	7-7/8 5-1	5-1/2 2991	2991-8010	800	2991
NEDU # 217 (State # 17)	30-025-06485	2/21S/37E	2886 FNL-2970 FEL	0		5952 17-1/2	13-3/8	250 250	11	-	3127 1500	0 7-7/8	5-1/2	5816	100	5245 (C)					1
NEDU # 218 (State # 16)	30-025-06484	2/21S/37E	3546 FNL-1700 FWL	M	_	8000 17-1/2	13-3/8	222 250	11	8-5/8 31		C					7-7/8 5-1	5-1/2 2932	2932-7997	825 2	2932 C
NEDU # 219 (State # 18)	30-025-06486	2/21S/37E	3550 FSL-2300 FWL	0	_	5956 17-1/2	13-3/8		11	1		0 7-7/8	5-1/2	5955		4812 (C)					7
NEDU # 220 (Harry Leonard NCT-F # 14)	30-025-06358	2/21S/37E	FNL-2307	0		5975 17-1/2	13-3/8	330 350	11			0 7-7/8	5-1/2	5829		2727 (T)					7
NEDU # 221 (Harry Leonard NCT-F # 6)	30-025-06350	2/21S/37E	FSL-231	₹	_		13-3/8	_	=	-		0 7-7/8	5-1/2	8285		4085 (T)		_		_	$\frac{1}{1}$
NEDU # 222 (Harry Leonard # 12)	30-025-06356	2/21S/37E	3534 FNL-990 FEL	₹ :		5975 17-1/2	13-3/8	4	11	-+		0 7-7/8	5-1/2	5859		2480 (T)	+	1			7
NEDU # 224 (Harry Leonard # 7)	30-025-06351	2/215/3/E	4303 FSL-231 / FEL	<u>\$</u>		8/00 17-1/2	13-3/8	_	12-1/4	9-5/8	2999 1320	1//8	5/1-5	8280	"	3/50(1)	+				)   
NEUU # 225	30-023-34243	2/2/3/3/E	7040 LOL-170 LANE	2	06/5/0	100	16-5/8	1402 410		-	-	9//-/	2/1-6	Incoo	nc27	Surface	-			$\frac{1}{1}$	) ]

Page 1

1-013

## **AREA OF REVIEW / WELL DATA**

E WAN	ONIGA	S/T/B	LOCATION	WELL	COMP DATE TD	9	RFACE CSG	CASING SET CMT		MEDIATE CSG S	INTERMEDIATE CASING	HOLE		SET C	PRODUCTION CASING CSG SET CMT TOC		HOLE LINER	LINER ER DEPTH	ER CMT	T0C	
	12	S/37E	3677 FSL-135 FWL	0	╢ळ	0111	8-2/8	1		-	-	7-7/8	5-1/2	6930 1305	L	18	-			L	<u>]</u>
NEDU # 231	-	1	3800 FSL-1200 FWL	0	8/26/98 69	6940 11	8-5/8	1382 410				2-2/8	5-1/2	6940	1450 Su	Surface					<u> </u>
NEDU # 235	30-025-34883	2/21S/37E	2800 FNL-1700 FEL	0		12-1/4	8-5/8 13	1347 460				2-2/8	5-1/2	6370 1		Surface					$\frac{1}{1}$
NEDU # 236		2/21S/37E	2650 FSL-1700 FEL	0	1	12-1/4	8-5/8	1290 460				2-2/8	2/1-9	6304 1		Surface					
NEDU # 237			2450 FSL-1700 FEL	0		12-1/4	8-2/8			$\vdash$		2-2/8		T		Surface					1
NEDU # 312 (State # 21)	ヿ		2205 FSL-988 FWL	┪	_	17-1/2	13-3/8		11			7-7/8	$\neg$	- 1		3140 (B)	-		1		<u> </u>
NEDU # 313 (State Sec 2 # 4)	$\neg$	┪	710 FSL-610 FWL			17-1/2	_	_	11	-		2-2/8	_			3679 (C)					7
NEDU # 314 (State # 22)	$\neg$	Ш	990 FSL-990 FWL	┪		17-1/2	_	_	11	$\dashv$		1100 7-7/8	5-1/2	5812	200 466	4669 (C)	$\neg$	-	_		$\frac{1}{l}$
NEDU # 315 (State Sec 2 # 9)		コ	1980 FSL-1880 FWL		_	17-1/2	13-3/8		11				_	ı		1-7/8	8 5-1/2	2 2940-6701	3701 755		2940 7
NEDU # 316 (State # 19)	╗		2310 FSL-2307 FWL			17-1/2	13-3/8		11	-		1450 7-7/8	-			4800 (C)					7
NEDU # 317 (State # 20)		2/21S/37E	990 FSL-2300 FWL	0		17-1/2	13-3/8		11	$\overline{}$	3148 1500	2-2/8	-	-		1723 (C)					<u>\</u>
NEDU # 318 (Harry Leonard NCT-F # 18)	$\neg$		1650 FSL-1980 FEL	<u>×</u>		17-1/2	13-3/8	312 375	12-1/4	$\overline{}$	3340 1655	5 7-7/8	_			3375 (T)					1
NEDU # 319 (Harry Leonard NCT-F # 9)	30-025-06353	2/21S/37E	1650 FSL-990 FEL	<u>\$</u>	8/3/53 84	8470 17-1/2	13-3/8		ᆿ	8-5/8	3099 1375	2/2-2/8	5-1/2	- 1							7
						Cut oric	Cut original 5-1/2" @	" @ 7095'	& pulled / reran 5-1/2" to	reran 5-	1/2" to		┪	ŀ		2400 (T) 4-3/4	4	5571-7587	7587 825		1 1 1
NEDU # 320 (Harry Leonard NCT-F # 19)	_	コ	660 FSL-1780 FEL	×	_	17-1/2	13-3/8	1	11	-	3049 2000 7-7/8	37-7/8	_			2080 (T)			-		$\frac{1}{l}$
NEDU # 321 (Harry Leonard # 8)	┪	╅	660 FSL-330 FEL	0	_	15	_	_	=	_	3099 2300	2-2/8	_	Į		4623 (T)	1		1		$\frac{1}{l}$
NEDU # 322 (State Sec 2 # 6)	_	ш	1980 FSL-1980 FWL	₹	-	17-1/2	8 8 8	_	1			2000 7-7/8	5-1/2	-1		Surface	1		1		1
NEDU # 323 (Harry Leonard NTC-F # 1)	_	ш	1980 FSL-1980 FEL	0	$\rightarrow$	19-1/2	4	_	13-3/4	- 4		1600 8-3/4	_	_		3665 (T)	1		+		<u>.</u> [
NEDU # 324 (Harry Leonard # 12)	┪	2/21S/37E	860 FSL-1980 FEL	0		7778 17-1/4	12-3/4		=	_	2989 1100	1100 7-7/8	_			3320 (T)					l
NEDU # 325 (Harry Leonard # 5)	30-025-06349	2/21S/37E	555 FSL-555 FEL	0		8013 17-1/2	12-3/4	287 300	11	8-5/8	3049 1100	1100 7-7/8	ヿ			3075 (T)					<u>]</u>
NEDU # 330		2/21S/37E	1004 FSL-200 FWL	0	11/5/98 69	6910 11	8-5/8 11	1350 410		-		2-2/8	5-1/2			Surface					7
Harry Leonard NCT-F # 2		2/21S/37E	660 FSL-1980 FEL	G	2/3/52 79	7926 17-1/2	13-3/8	264 300	12-1/4	-		1200 8-3/4			850 306	3068 (C)					$\Box$
	$\overline{}$	2/21S/37E	660 FSL-660 FEL	0	3/26/52 81	8168 17-1/2	13-3/8	225 350	11	-	2084 1075	2/2-2	5	8167	975 338	3386 (C)					l
Harry Leonard NCT-F # 15		2/21S/37E	3312 FSL-2317 FEL	0		8150 17-1/2		325 375	11	_		2-2/8	5-1/2			2721 (C)					$\Box$
State # 4		Е	2970 FSL-990 FWL	0		8005 17-1/2	13-3/8	253 240	11			2400 7-7/8	5-1/2			4861 (C)					7
State Sec 2 # 3		$\neg$	660 FSL-660 FWL	0	_	7906 17-1/2		$\Box$	11	-		7-7/8	5-1/2			4902 (C)					7
State Sec 2 # 5	_	ヿ	1880 FSL-560 FWL	0		17-1/2		_	7	-		2000 7-7/8	5-1/2	- 1		4953 (C)					$\frac{\mathcal{I}}{\mathcal{I}}$
State Sec 2 # 7	ᆿ	$\neg$	660 FSL-1980 FWL		-	17-1/2	_	_	<u>-</u>	$\rightarrow$		2/2-2/	╛			3138 (C)					$\frac{1}{l}$
State Sec 2 # 8	$\neg$	2/21S/37E	3546 FNL-660 FWL	0	_	17-1/2	13-3/8	219 250	-1	┪		9/2-2	5-1/2	[		5161 (C)	-		+		<u>]</u>
State Sec 2 # 10		2/21S/37E	2310 FSL-988 FWL	0		7985 17-1/2	13-3/8	211 250	-1	$\dashv$		7-7/8	5-1/2			3013 (C)					<u>]</u>
State Sec 2 # 11	_	ш	3376 FNL-330 FWL	0		17-1/2	_	211 250	11	-		7-7/8	_	- 1		3157 (C)					1
State Sec 2 # 12	$\neg$	_	2250 FSL-2140 FWL		_	17-1/2		_	=	_		2/2-2/8	_	_		3215 (C)			1		1
State Sec 2 # 13	┪	Ш	2970 FSL-1650 FWL	0		17-1/2	13-3/8	4	=	_	_	7-7/8	5-1/2	8032	500 517	5175 (C)	$\neg$	+			$\frac{1}{1}$
State Sec 2 # 14	30-025-06380	$\neg$	3630 FSL-1770 FWL	+	6/3/52 79		13-3/8	222 250	;	8-5/8	3120 1700	7 7 7	_	070		8//-7	8 5-1/2	2 2908-7995	7995 300		308 1
NEDU # 104 (Taylor Glenn # 1)	╅	3/213/3/E	1362 FINE-330 FWL	3		11	8-5/8	4		+		9/2-/	5-1/2	ı	860 195	3011aCe	+		$\frac{1}{1}$	-	$\frac{\mathcal{U}}{\mathcal{U}}$
NEDU # 106 (Hawk B-3 # 16)	1		660 FNL-1980 FWL	╁		13-3/4	†∓	┸	9-7/8	7-5/8 3(	3049 1805	6-3/4	+			2903 (T) 4-3/4	4	6237-6922		35 6	6237
NEDU # 107 (Taylor Glenn # 9)	1	1	1585 FNL-1980 FWL	t		8/2-6	╀-	L		+		6-3/4	+	1		3370 (T)	1		L		7
# uue	1	ш	1980 FNL-1980 FWL	0		Т	╁	1361 600				7-7/8	1			Surface			<u> </u>		7
NEDU # 109 (Hawk B-3 # 15)	30-025-06510		660 FNL-1980 FEL	×		6025 15	11-3/4	270 375	2 8/2-6	7-5/8 3(	3061 1066	3 6-3/4	5-1/2	1	375 319	3190 (T)			_		7
NEDU # 110 (Hawk B-3 # 18)	30-025-06495	Ш	1980 FNL-1980 FEL	×	5/24/57 59	5976 13-3/4	10-3/4	268 250	8/2-6	7-5/8 3	3119 1150	6-3/4	5-1/2		400 300	3000 (T)					$\frac{1}{1}$
NEDU # 111 (Hawk B-3 # 24)	30-025-26670	3/21S/37E	2232 FNL-2310 FEL	l MI	6/19/80 68	6875 11		1395 674	-  1			2-2/8	5-1/2	6875 2	2780 Su	Surface				_	
NEDU # 113 (Hawk B-3 # 4)		3/21S/37E	1980 FNL-660 FEL	l M		17-1/2	13-3/8	211 250	12-1/4	9-5/8	3029 1210	8-3/4			2	3038 (T)					$\Box$
NEDU # 124	_	ш	2879 FNL-2650 FEL	0	_	11	$\dashv$	1309 410				7-7/8	$\neg$	6910 1		Surface					7
NEDU # 125		ヿ	2727 FNL-1511 FEL	ᅥ		=	$\dashv$					7-7/8	7	6910 1		Surface					7
NEDU # 128	$\neg$	_	2483 FNL-1277 FWL	0			8-5/8 10	_		$\dashv$	$\frac{1}{1}$	7-7/8	_	6930		Surface					. <i>l</i>
NEDU # 129	30-025-34938	3/21S/37E	1100 FNL-1270 FWL		9/1/00 69	6980 12-1/4	┥	1321 460		$\dashv$	$\dashv$	17-7/8	5-1/2	6980	1275 Su	Surface	$\dashv$	_	4		ر ا

Page 2

۲
M
긤
竝
₹
$\geq$
Щ
⋝
Ш
$\alpha$
<u>Н</u>
0
Ø
Ű
Œ
4
•

												$\ \cdot\ $								1		_
MAN LIEW	API NO.	S/T/B	LOCATION	WELL	COMP	2	SURFACE CASING HOLE CSG SET C	ECASING SET C	Ę	INTERMEDIATE CASING HOLE CSG SET CMT	ATE CASING	_	PR HOLE CS	PRODUCTION CASING CSG SET CMT	CTION CAS	SING	HOLE	HOLE LINER	LINER	CMT	100	
	12	3/21S/37E	1254 FNL-2625 FWL	╗	П	6950	12-1/4 8-5/8	<b>I</b>	460	-	#—			╟	0 1400		ル—					7
NEDU # 131	30-025-34609	3/21S/37E	1253 FNL-1244 FEL	0	8/20/99	0669	12-1/4 8-5/8	1365	460			7.	7-7/8 5-1/2		0 1525	Surface	ë					7
NEDU # 205 (Livingston # 11)	30-025-06521	3/21S/37E	3300 FSL-660 FWL		1/1/62	6730	12-1/4 9-5/8	271	250			8	8-3/4 2-7/8*	/8* 6724	4 635	*Triple-Tubingless Completion	bingless	Complet	lion			7
NEDU # 206 (Taylor Glenn # 1)		3/21S/37E	3226 FNL-1980 FWL	IM	3/1/48	8590	17-1/2 13-3/8	3 301	250 11	8-2/8	3879	3000	7-7/8   5-1/2	/2 8060	0 675	2915 (T)						7
NEDU # 208 (Taylor Glenn # 6)		3/21S/37E	4620 FSL-1979 FEL	0	8/28/52	6707		$\dashv$			3147		$\neg$				7-7/8	5/12	2917-6660	8	2917	)
NEDU # 209 (Hawk B-3 # 2)	$\neg$	3/21S/37E	3150 FSL-1650 FEL	<u> </u>	1/29/53	8114		4			3133	1300	3/4 7	8113				1				`. l
3 # 5)	┪	3/21S/37E	2970 FSL-1650 FEL	\$	10/16/52	8302		4	_		3149	1300	T	-+			1			1		7
NEDU # 211 (Taylor Glenn # 2)	一	3/21S/37E	4620 FSL-660 FEL	× (	2/10/50	6710	_	4	-		2920	2200	7-7/8 5-1/2	-						]		1 7
NEDU # 212 (Hawk B-3 # 1)	┪	3/21S/37E	3300 FSL-660 FEL	0	11/10/49	6782	17-1/2 13-3/8	$\rightarrow$	250 12-1/4	1/4 9-5/8	2819	650 8-3/4	П	┰			=					' 1
NEDU # 226		3/21S/37E	2449 FSL-1266 FEL	0	7/18/98	_	1 8-5/8	1370	410			2	7-7/8 5-1/2	_			روز					) '
NEDU # 227	30-025-34428	3/21S/37E	2225 FSL-2507 FEL	0	12/6/98	8 6890 11	1 8-5/8	1310	410			7	7-7/8 5-1/2		0 1315		æ					/
NEDU # 228	30-025-34427	3/21S/37E	3768 FNL-1493 FEL	0	12/4/98		1 8-5/8	1311	410			7	7-7/8 5-1/2	$\neg$			<u>@</u>					7
NEDU # 229	30-025-34429	3/21S/37E	3730 FNL-2594 FEL	0	12/12/98	8 6910 11	1 8-5/8	1309	410			7.	7-7/8 5-1/2	/2 6910	0 1325	Surface	Ģ					. L
NEDU # 232		3/21S/37E	3828 FSL-1397 FWL	0	11/8/98	8 6890 11	1 8-5/8	1302	410			7	7-7/8 5-1/2	$\dashv$	1225		g)					١.
NEDU # 233	_	3/21S/37E	2562 FSL-1330 FWL	0	1/30/99	6870	_	듸	_		_	7		一十	-	1	8	1		]		];
NEDU # 301 (JC Estlack # 1)	$\neg$	3/21S/3/E	1980 FSL-660 FWL	<u>ا</u>	05/21/4	0500	_	4	_	8/0-8	-+		7/1-9 2/1-/	72 6620	2	2620 (1)	=+	$\overline{}$		_	0,00	<u></u>
NEDU # 302 (Livingston # 5)	7	3/21S/37E	660 FSL-330 FWL	٥	2/27/52	9690	_	4	_	8-5/8	-	2200		_	- 1		7-7/8	5-1/2	2943-6689	200	2943	1
NEDU # 303 (Livingston # 1)	_	3/21S/3/E	1980 FSL-1980 FWL	\$	11/14/49	96/4	+	4	_	8-5/8	2900	1800	Т	-+					;	$\downarrow$		<u> </u>
NEDU # 307 (Livingston # 2)	$\neg$	3/21S/37E	660 FSL-1980 FEL	₹ :	3/24/50	6674	_	4			3148	2200 7.	ヿ	-			<u></u>					<u>,</u>
#	_	3/21S/37E	1980 FSL-660 FEL	℥	12/17/49	6753		_			2895			-								1
NEDU # 309 (Hawk B-3 # 7)		3/21 <b>S</b> /37E	1830 FSL-660 FEL	≷	5/9/51	8021	13-3/4 10-3/4	4 268	250 9-7/8	8 7-5/8	3128	1000	3/4 5-1/2	$\dashv$			1					)!
NEDU # 326		3/21S/37E	1310 FSL-1233 FEL	0	11/5/98		$\dashv$		410			7	一	┪			e l					\
NEDU # 327		3/21S/37E	1348 FSL-2330 FEL	0	8/20/98	_			410			7		$\dashv$			g					7
NEDU # 329		3/21S/37E	249 FSL-1478 FEL	0	10/28/98		1		410			<del>   </del>		╛			g					<i>'</i>
NEDU # 331		3/21S/37E	1400 FSL-1350 FWL	0	12/13/98	6865	7		410					$\dashv$			g					7
NEDU # 332	_	3/21S/37E	140 FSL-1174 FWL	ô	4/1/00	0689	$\rightarrow$							_	Ι		g					7
Hawk B-3#1	$\neg$	3/21S/37E	510 FSL-660 FEL		2/25/51	7975	_				3149	1175		<b>-</b> †								1
Hawk B-3 # 3	$\neg$	3/21S/37E	2970 FSL-510 FEL		1/22/52	8010	-	4			_	1045 6		_								1
Hawk B-3#4	$\neg$	3/21S/37E	2130 FSL-660 FEL	0	11/18/51	7845	-	_	250 9-7/8		$\dashv$	942 6		→	_		귿					1
Hawk B-3 # 6	$\neg$	3/21S/37E	810 FSL-660 FEL		10/11/51	7825					- 1	1420 6-		一			占					1
Hawk B-3 # 8	_1	3/21S/37E	2970 FSL-660 FEL		6/15/51	8191	-			Т	_	11106	Т	_								
Hawk B-3 # 9		3/21S/37E	1650 FSL-1650 FEL		11/29/51	8070	13-3/4 10-3/4	4 266		8 7-5/8	3154	1335 6-3/4	-3/4 5-1/2	/2 8069	902	(L) 860E		_			1	
Hawk B-3 # 21	_	3/21S/37E	3300 FNL-660 FWL	3	8/13/62	2665	۷,	ENETRA		JECTION ZONE		$\dagger$	$\neg \tau$	╅							1	
Livingston # 3	_	3/21S/37E	560 FSL-2030 FEL	0	5/9/51	8094	-	_		8-2/8	3147		7-7/8 5-1/2	/2 7968	200	5100 (C)	_	Т			)	,
Livingston # 4	30-025-06515	3/215/3/E	380 FSL-2310 FEL		3/14/52	\dl8		151		8/2-8	3147	0002	+	+	_		8//-/	Т	8108-1962	i_	2961	1
Livingston # 6	1	3/213/3/E	1980 FSL-2308 FWL		6/1/52	9230	17-1/2 13-3/8	777	7 7 7	9/2/9	147	2000			+		0-3/4	2/1-0	2020 0100	820	25 PF (T)	] [
LIVINGSton # /	_	3/213/3/5	913 F3L-2300 FWL		8/18/2	0130				0/0-0	2146		Т	+			_	Т	230-262		(1)	<i>l 1</i>
Livingston # 14	30-025-28071	3/215/3/E	3300 FSL-367 FWL		1/26/01	4500	1/-1/2 13-3/8 461 4/2	SI 461		11 8-5/6 24	<u> </u>	1472	7/1-0 9//-/	2// 7/	C671 C1	304 (C)	<u></u>	1				7
Livingston # 10	_	3/215/37E	990 FSI -990 FWI		2/1/01	4455	DOES NOT P	PENETRATE		JECTION ZONE	NE L	$\dagger$	+	╁	$\downarrow$		1					7
Taylor Glenn # 3	$\top$	3/21S/37E	3546 FNL-330 FEL	0	1/10/52	8224		8 219		8-2/8	3150	2000	+	╁	_		6-3/4	5-1/2	2960-8102	870	2960	7
Taylor Glenn # 4	1	3/21S/37E	3376 FNL-764 FEL	0	5/12/52	8119	+	200	-	8-2/8	3147						6-3/4	Т	2999-8115	┸	2999	Ĺ
Taylor Glenn # 5	1	3/21S/37E	3546 FNL-1650 FEL	0	10/25/52	8361	+	225	_	8-2/8	3147	2200		ŀ			6-3/4	т	2939-8355		2943	
Taylor Glenn # 13	1	3/21S/37E	2310 FNL-990 FWL	0		4450	1~	ENETRA		JECTION ZONE	JNE							т		丄		1
Taylor Glenn # 15	_	3/21S/37E	3448 FNL-1576 FWL	0		4450 D(	DOES NOT PENETRATE IN	ENETRA		JECTION ZONE	ONE						-					7
NEDU # 101 (Hawk B-3 # 23)	30-025-06390	4/21S/37E	660 FNL-560 FEL	0	6/8/57		_	270	_	12-1/4 9-5/8	3149	1100 7-7/8	-7/8 5-1/2	$\vdash$		6	Ĺ					Ĺ
NEDU # 134		4/21S/37E	2620 FNL-116 FEL		2/13/00	0 6900 12-1/4	2-1/4 8-5/8	8 1315	460				7-7/8 5-1/2	/2   6900	00 1170	(B) 088	3)	$\Box$				1

Page 3

•	•
ì	(
2	ſ
Ċ	ī
Ξ	_
Ξ	i
п	j
N	2
<	_
>	•
S	•
Щ	4
>	>
2	<b>&gt;</b>
	>   
	בוב כ
	5 1

WELL NAME	API NO.	T/R LOCATION	WELL	COMP DATE TD	오	SURFACE CASING LE CSG SET C	¥	INTERMEDIATE CASING HOLE CSG SET CMT	OIATE CAS		PRODI HOLE CSG	PRODUCTION CASING CSG SET CMT	N CASII CMT	NG TOC	HOLE LINER	۵	œ	CMT T	ည
	399 4/	4620	0	Ш		1	250			<del> </del>	8-3/4 2-7/8*	1	635	Triple-Tub	*Triple-Tubingless Completion	npletion	┢	L	2200 (T) L
NEDU # 202 (Livingston # 13)	30-025-26990 4/21S/37E	3/37E 3330 FNL-467 FEL	W	11/18/81 8156	17-1/2	13-3/8 1190	935	12-1/4 9-5/8	3500	1200 8-3/4	3/4 7	8153	1720	Surface					7
NEDU # 203 (Livingston # 10)			0	3/29/53 7436	17-1/2	13-3/8 283	250	11 8-5/8	3151	2300 7-7	7-7/8 5-1/2	-		4255 (T)					1
NEDU # 234	30-025-34738 4/21S/37E		0	-		8-5/8 1275				7-	7-7/8 5-1/2	2 6900	1740	Surface					1
Livingston # 15	30-025-35224 4/21S/37E		0			NOT PENET	PENETRATE INJ	JECTION ZONE	ONE									_	. <i>l</i>
Livingston # 19	30-025-35341 4/21S/37E	$\neg$	0	2/28/01 4450		OT PENET	RATE IN.	PENETRATE INJECTION ZONE	ONE									_	1
Taylor Glenn # 12	4/21	S/37E 2310 FNL-810 FEL	0		0 DOES NOT	OT PENET	ATE IN	JECTION ZONE	ONE			$\dashv$							7
Exxon Fee # 1					11	_	750			-2			1200	243 (C)			-		<i>J</i>
Hawk B-4 # 1	30-025-06391 4/21S/37E		0 7	12/4/55 6000	13-3/4	10-3/4 231	250	8/2-2 8/2-6	_	895 6-3	6-3/4 5-1/2	2 5998	l i	1043 (C)					7
EC Hill # 1	30-025-06394 4/21S/37E	3/37E 3300 FNL-1730 FEL	0	8/27/54 6394	4 17-1/2	13-3/8 265	250	12-1/4 9-5/8	8 2935	200 7-7	7-7/8 5-1/2	2 6394	900	1823 (C)					1
NEDU #328	-	10/21S/37E 42 FNL-2334 FEL	0	7/20/98 6850	0 11	8-5/8 1365	55 410				7-7/8 5-1/2	2 6850	1330	Surface					7
NEDU #401 (State 10 #3)	30-025-06459 10/21	10/21S/37E 990 FNL-840 FWL	0	6/1/54 7500	17-1/2	13-3/8 240	250	12-1/4 9-5/8	3150	1612 8-3	8-3/4 7	7499	835	3275 (T)					7
NEDU #402 (State 10 #2)	$\overline{}$		0	6/1/54 8161	13-3/4	10-3/4 249	250	8/2-2/8 2-2/8	3128	1275 6-3	6-3/4 5-1/2			3180 (T)					7
NEDU #403 (Hawk B-10 #10)		10/21S/37E 460 FNL-1980 FWL	WI	6/19/62 6790	0 17-1/2	13-3/8 337	300		3000	350 7-7	7-7/8 5-1/2	2 6485	505	3150 (T)	4-3/4 4	6413	6413-6790	35	6413
NEDU #405 (Hawk B-10 #9)	10/2	S/37E	0		13-3/4		200		$\neg$	750 6-3/4		-		3155 (T)				4	1
NEDU #406 (Hawk B-10 #1)	10/5	10/21S/37E 990 FNL-1650 FEL	0		13-3/4	10-3/4 253	250	8	3071	1000 6-3/4	T	$\dashv$		3180 (T)			_	_	_
NEDU #407 (Hawk B-10 # 8)	10/2	S/37E	<u>×</u>	-		_	250	11 9-5/8	3099	1000 8-3/4	$\neg$	-1	۳1	Surface				_	1
NEDU #408 (Dauron #1)	10/2	S/37E	×	11/26/50 7875	17-1/2	13-3/8 228	175	12-1/4 9-5/8	$\dashv$	1200 7-7	П	_		4815 (T)				_	<b>3</b> .
NEDU #409 (Dauron #2)		10/21S/37E 660 FNL-525 FEL	0		17-1/2	13-3/8 196	200	11 8-5/	8 2995	1500 7-7	7-7/8 5-1/2			4540 (T)					1
NEDU #412	30-025-34490 10/21	10/21S/37E 1124 FNL-2541 FEL	0	10/7/98 6847	11	8-5/8 1280	30 410			7.	7-7/8 5-1/2			Surface					•
NEDU #413	30-025-34434 10/21	10/21S/37E 2388 FSL-1306 FEL	0	9/16/98 6850	11	8-5/8 1325	5 410			7-		_	1350	Surface					7
NEDU #414	_	10/21S/37E 2499 FSL-2470 FEL	0	9/24/98 6850	0 11	8-5/8 1306	96 410			7-	7-7/8 5-1/2	2 6850	1490	Surface					_
NEDU #415	30-025-34661 10/21	10/21S/37E 1208 FNL-1745 FWL	0 7	10/15/99 6870	0 12-1/4		35 460			-2	7-7/8 5-1/2	-	1500	Surface					4
NEDU #416	30-025-34798 10/21	10/21S/37E 2304 FSL-1431 FWL	- 0		12-1/4	_				7-				Surface					7
NEDU #501 (NM State V #12)			Н		13-3/4	10-3/4 310	200		_	200 6-3/4	3/4 2-7/8*	-	-	3000 (T)	*Slimhole Completion	Completion	_		J
NEDU #503 (NM State V #11)			_	12/4/52 7785	17-1/2	13-3/8 333	275	12-1/4 9-5/8		1400 7-7	7-7/8   5-1/2	7785	1	2500 (T)					7
		10/21S/37E 1980 FSL-1980 FEL	0		15		350		_	1400 7-7				2100 (T)					<u>د</u>
NEDU #507 (NM State V #8)		10/21S/37E 2100 FSL-760 FEL	WI	2/2/52 7573	13-3/4	10-3/4 305	350	8/4-2/8   2-5/8		1100 6-3				2950 (C)					1
NEDU #508 (State S #9)	-	660 F	0	_	17-1/2	13-3/8 336	325	11 8-5/8		2 096		6209		Surface					
NEDU #514			0		17-1/2	13-3/8 410	450	11 8-5/8	8 3014	1650 7-		$\dashv$	1055	3010 (B)					
NEDU #515		10/21S/37E 1131 FSL-1342 FEL	0	_	0 11	8-5/8 1310				7-		-		1260 (B)					7
NEDU #516	_		0		1		_			7-	$\neg$	-		Surface		_			7
NEDU #521	10/21	S/37E	0	8/7/99 6890	0 12-1/4					7-	Т	_		750 (B)		_			7
NEDU #523	10/21	S/37E	0	-	12-1/4	디	460		-+		Т	-	-1	Surface				1	$\frac{\iota}{ }$
Dauron #3	_	S/37E	9	-	17-1/4	_	500 500	Т	-+	1800 7-	T	_		4860 (T)				7	
Hawk B-10 #1	10/21	S/37E		-	13-3/4	4	150	Т	-+	700	ヿ	+	-	4060 (T)		-		7	
Hawk B-10 #3	-	_	5		13-3/4	4	520	Т	-+	1250 6-0	Т	-		3140 (T)				7	
Hawk B-10 #5	1	S/37E	0			_	225	$\neg$	-	1308 6-0	$\neg$	_		3275 (T)				7	
Hawk B-10 #6	10/21	S/37E	0	_	0 13-3/4	_	250	9-2/8 7-5/8	-+	1250 6-0	6-3/4 5-1/2	7		3350 (T)			1	7	
Hawk B-10 #7	_	_	╗		5 17-1/2	_	260	1/4	3449	1500 8-3/4		┪	-	3200 (T)			-	7	
NM 'FO' State Com #1		$\rightarrow$	0	7/13/55 6312	17-1/2	_	300		3200	1500 7-	П	_		4454 (C)				7	
NM State V #2	_	_	Y Y	_	13-3/8	_	275	T	-	1250 6-3/4	П	_	- 1	2200 (C)				7	
NM State V #9	$\neg$	$\rightarrow$	0	_	13-3/4	_	375	9-2/8 7-5/8	3079	1000 6-3/4	3/4 5-1/2	_		2906 (C)			-	7	
State 10 #1	ᄀ	$\rightarrow$	0	_	17-1/2	_	250	<u>\$</u>	3128	1308 8-0	Т	_	-1	0 (C)		1		7	
NEDU # 509 (Gutman # 1)	_		0	_	17-1/2		275	11 8-5/8	-+	2450 7-	7-7/8 5-1/2	$\dashv$	- 1	Surface		+		7	Įį
NEDU # 510 (Gutman # 2)	十		<b>)</b> (	- 1	7/1-/1	13-3/8 366	200	-1	-	900 8-3/4	Т	+	25 1	£) 0000	6-3/4 4-1/2	+	e000-7200	930	3400(1)
Locknan 6-11#1	30-023-06324	11/213/3/E 310 FINE-560 FWE		16/1 06/6/71	13-3/4		007	9-1/0 1-9/0	8 3049	600 0-3/4	2/1-0 4/6	ne// >	_	3030(1)				$\dashv$	]

Page 4

## **AREA OF REVIEW / WELL DATA**

				WELL	WELL COMP	<u> </u>	SUR	SURFACE CASING	SING	INTE	INTERMEDIATE CASING	ATE C	SNIS		PRODU	PRODUCTION CASING	CASIN	/=		_	LINER		
WELL NAME	API NO.	S/T/R	LOCATION	TYPE	TYPE DATE TD HOLE CSG SET CMT	TO.	40LE	csg s	ET CN	_	E CSC	S SET	CMT	HOLE	csg	SET (	XMT	T0C	HOLE CSG SET CMT HOLE CSG SET CMT TOC HOLE LINER DEPTH CMT TOC	ER DE	ртн (	.MT	тос
Lockhart B-11 #2	30-025-06477	11/21S/37E	30-025-06477   11/21S/37E   330 FNL-330 FWL	0	O 9/10/51 6818 13-3/4 10-3/4 266	6818 1	3-3/4	10-3/4	266 250		17-5/8	3048	1230	9-7/8 7-5/8 3049 1230 6-3/4 5-1/2 6817	5-1/2	6817	375	Surface			 		
Lockhart B-11 #3	30-025-06525	11/21S/37E	30-025-06525 11/21S/37E 1980 FNL-330 FWL	0	10/4/51 7659 13-3/4 10-3/4	7659 1	3-3/4	10-3/4	262 25	250 9-7/8	6608 8/2-2 8/2-6	3006		100 6-3/4 5-1/2 7658	5-1/2	ı	250	3380 (T)					
Lockhart B-11 #4	30-025-06476	11/21S/37E	30-025-06476 11/21S/37E 330 FNL-1650 FWL	0	1/24/52 7811 13-3/4 10-3/4	7811 1	3-3/4	10-3/4	272 25	250 9-7/8	1-5/8	3148	1200	9-7/8 7-5/8 3149 1200 6-3/4 5-1/2 7805	5-1/2	7805	835	Surface	-			_	
Lockhart B-11 # 16	30-025-06531	11/21S/37E	30-025-06531 11/21S/37E 1980 FNL-1980 FWL	0	3/4/62 7450 17-1/2 13-3/8	7450 1	7-1/2	13-3/8	322 25	250 12-1/	4 9-5/8	2912	12-1/4 9-5/8 2912 950 8-3/4	8-3/4	7	7450	270	1200 (T)		_			
Lockhart B-11 E # 1	30-025-06535	11/21S/37E 2	30-025-06535 11/21S/37E 2310 FNL-330 FWL	0	3/8/23	6570 1	7-1/2	3/8/53 6570 17-1/2 13-3/8 174 250	174 23	50 11	8-2/8	3044	006	8-5/8 3044 900 7-7/8 5-1/2 6453 250	5-1/2	6453		4650 (T)					
						_	_					_											
																	L						

Top of Cement Legend:
B = Cement Bond Log
C = Calculated
Surface = Circulated
T = Temperature Survey

せら

Well: Dauron # 3

Field: Hare

Location: 330' FNL & 990' FEL

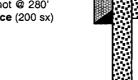
Unit A, Sec. 10, T21S, R37E Lea County, New Mexico

API #: 30-025-06448

Elevation: 3414' (GR)

TD @ 7780'

Install P&A Marker Perf 4-way shot @ 280' Cmt to Surface (200 sx)



17-1/4" Hole 13-3/8" 48# H-40 CSA 225' Cement w / 200 sx Circulated to Surface

Current Status: P&A (3/93)

Cmt Plug @ 1540' (35 sx)

Cmt Plug @ 2560' (35 sx)

Cut & Pull 5-1/2" Casing @ 3119' Cmt Plug 2941'-3119' (50 sx)

Cmt Plug @ 4350' (35 sx)

Cmt Plug @ 5360' (25 sx)

Cmt Plug thru packer stuck @ 6717' (200 sx)

**Abo Perfs:** 6847-7377 **Cmt sqz** w/ 200 sx

Hare Perfs: 7460-7692



7-7/8" Hole 5-1/2" 15.5/17# J-55 CSA 7772' Cement w / 350 sx TOC @ 4860' (Temp Survey) Well:

DeKalb State # 1

Field:

Blinebry

Location:

660' FSL & 660' FEL

Unit P, Sec. 32, T20S, R38E Lea County, New Mexico

API #:

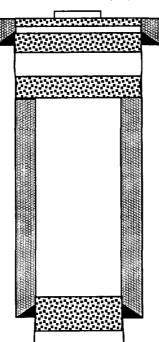
30-025-07871

Elevation: 3491' (GR)

Install P&A Marker Cmt Plug @ Surface (10 sx)

Cmt Plug @ 250' (70 sx)

Cmt Plug @ 853' (65 sx) Shot off & Pulled 8-5/8" Casing @ 853'



17-1/2" Hole 13-3/8" 56# H-40 CSA 265' Cement w / 250 sx Circulated to Surface

Current Status: P&A (3/74)

Cmt Plug @ 2985' (35 sx)

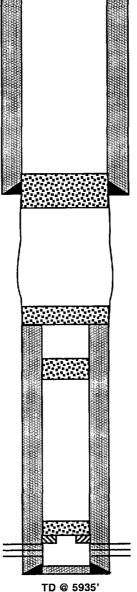
Cmt Plug @ 4700' (100')

Cmt Plug @ 4822' (35 sx) Shot off & Pulled 5-1/2" Casing @ 4822'

Cmt Plug @ 5330' (100')

Cmt Plug on KV-Packer @ 5803' (25 sx)

**Blinebry Perfs:** 5810-5930



10-3/4" Hole 8-5/8" 32# J-55 CSA 2900' Cement w / 200 sx TOC @ 853'

7-7/8" Hole 5-1/2" 20# J-55 CSA 5935' Cement w / 200 sx TOC @ 4822'

Well: Hawk B-3 # 1

Field: Hare (Simpson)

Location: 510' FSL & 660' FEL

Unit X, Sec. 3, T21S, R37E Lea County, New Mexico

API#: 30-025-06498

Elevation: 3453' (GR)

Install P&A Marker Perf 5-1/2" casing @ 310' Cmt sqz inside & outside casing circulating to surface (65 sx)

Cmt 10-3/4" x 7-5/8" annulus to surface (65 sx)

Cmt Plug 1334'-1440' (11 sx)

13-3/4" Hole 10-3/4" 32.75# H-40 CSA 259' Cement w / 250 sx Circulated to Surface

Current Status: P&A (5/90)

Cmt Plug 3094'-3200' (11 sx)

Cmt Plug 5594'-5795' (23 sx)

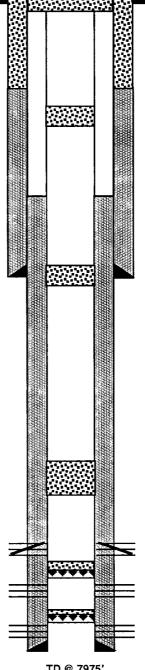
Abo Perfs: 6890-7275 Cmt sqz w/ 450 sx

**CIBP** @ 7455' Cmt 7352'-7460' (12 sx)

Hare Perfs: 7517-7776

**CIBP** @ 7850' Cmt 7815'-7850'

Ellenburger Perfs: 7868-7966



9-7/8" Hole 7-5/8" 24# H-40 CSA 3149' Cement w / 1392 sx TOC @ 1225' (Temp Survey)

7-7/8" Hole 5-1/2" 14/15.5/17# J-55 CSA 7974' Cement w / 550 sx TOC @ 2275' (Temp Survey)

TD @ 7975'

Well: Hawk B-3 # 3

Field:

Hare

2970' FSL & 510' FEL Location:

> Unit P, Sec. 3, T21S, R37E Lea County, New Mexico

API#: 30-025-06505

Elevation: 3470' (GR)

TD @ 8010'

Install P&A Marker Perf 5-1/2" casing @ 315' Cmt sqz inside & outside casing circulating to surface (60 sx)

Cmt 10-3/4" x 7-5/8" annulus to surface (55 sx)

Cmt Plug 1391'-1500' (11 sx)

13-3/4" Hole 10-3/4" 33# H-40 CSA 265' Cement w / 250 sx Circulated to Surface

Current Status: P&A (5/90)

Perf 5-1/2" casing @ 3200'

Cmt sqz inside & outside casing (25 sx)

Cmt Plug 5630'-5831' (25 sx)

**CIBP @** 7450' Cmt 7346'-7450' (15 sx)

Hare Perfs: 7499-7967

9-7/8" Hole 7-5/8" 26# H-40 CSA 3149' Cement w / 1045 sx TOC @ 585' (Temp Survey)

7-7/8" Hole 5-1/2" 15.5/17# J-55 CSA 8009' Cement w / 573 sx TOC @ 3500' (Temp Survey)

Well: Hawk B-3 # 6

Field: Hare

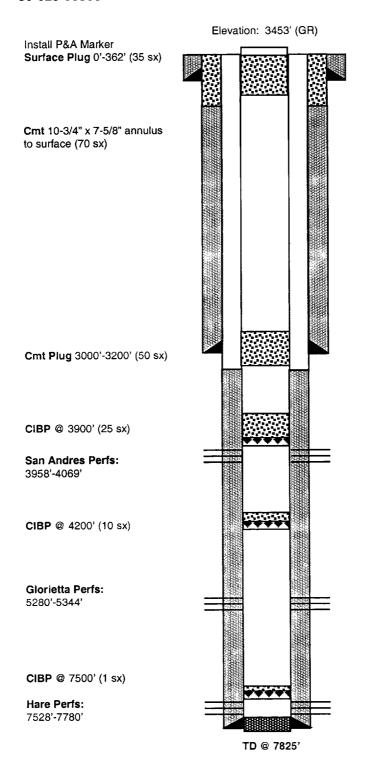
Location: 810' FSL & 660' FEL

Unit P, Sec. 3, T21S, R37E Lea County, New Mexico

API#: 30-025-06503







13-3/8" Hole 10-3/4" 32# H-40 CSA 260' Cement w / 250 sx Circulated to Surface

Current Status: P&A (11/89)

9-7/8" Hole 7-5/8" 26# H-40 CSA 3149' Cement w / 1420 sx TOC @ 575' (Temp Survey)

6-3/4" Hole 5-1/2" 14/15.5/17# J-55 CSA 7805' Cement w / 625 sx TOC @ 3230' (Temp Survey)

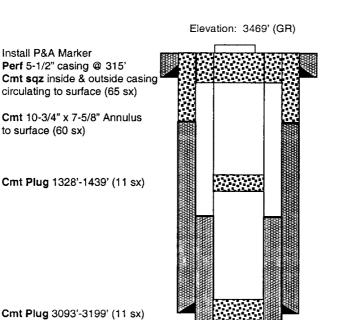
Well: Hawk B-3 # 8

Field: Tubb Current Status: P&A (5/90)

Location: 2970' FSL & 660' FEL

Unit P, Sec. 3, T-21S, R-37E Lea County, New Mexico

API#: 30-025-06500



13-3/4" Hole 10-3/4" 32# H-40 CSA 265' Cement w/ 250 sx Circulated to Surface

8-3/4" Hole 7-5/8" 24# H-40 CSA 3149' Cement w/ 1235 sx TOC @ 975' (Temp Survey)

Cmt Plug 5629'-5830' (23 sx)

CICR @ 6205' Cmt 6100'-6205'

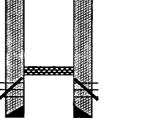
**Tubb Perfs:** 6265-6337 **Cmt sqz** w/ 50 sx

CIBP @ 6345'

Tubb Perfs: 6360-6420

**CICR** @ 8017'

Ellenburger Perfs: 8062-8172 Cmt sqz w/ 100 sx



TD @ 8191'

6-3/4" Hole 5-1/2" 14/15.5/17# J-55 CSA 8187' Cement w/ 650 sx TOC @ 3115' (Temp Survey) Well:

Hawk B-3 # 9

Field:

Tubb

Location:

1650' FSL & 1650' FEL

Unit R, Sec 3, T-21S, R-37E Lea County, New Mexico

API #:

30-025-06501



Install P&A Marker Perf 5-1/2" casing @ 316' Cmt sqz inside & outside casing circulating to surface (65 sx)

Cmt Plug 1384'-1490' (11 sx)

Cmt Plug 3098'-3204' (11 sx)

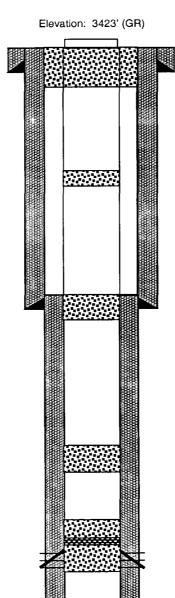
Cmt Plug 5583'-5784' (23 sx)

CICR @ 6160' Cmt 6055'-6160'

Tubb Perfs: 6220-6345 Cmt sqz w/ 60 sx

CIBP @ 7515' Cmt - 3 sx

Ellenburger Perfs: 7948-8038



TD @ 8070'

13-3/4" Hole 10-3/4" 32# H-40 CSA 266' Cement w/ 250 sx Circulated to Surface

Current Status: P&A (5/90)

8-3/4" Hole 7-5/8" 26# J-55 CSA 3154' Cement w/ 1335 sx Circulated to Surface

6-3/4" Hole 5-1/2" 14/15.5/17# J-55 CSA 8069' Cement w/ 680 sx TOC @ 3098' (Temp Survey) Well: Hawk B-10 No. 1

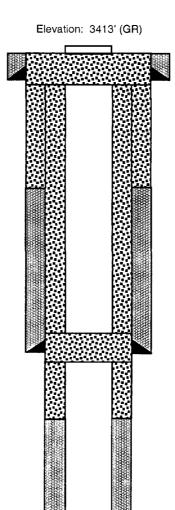
Field: Drinkard

Location: 1715' FNL & 409' FEL

Unit H, Sec. 10, T21S, R37E Lea County, New Mexico

API #: 30-025-06475

Perf casing @ 180'
Cmt to Surface inside & outside casing (100 sx)



13-3/8" Hole

10-3/4" 32# H-40 CSA 180' Cement w / 150 sx Circulated to Surface

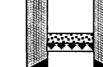
Current Status: P&A (3/93)

Perf 5-1/2" casing @ 3005' Cmt plug inside & outside casing 2900'-3050' (40 sx)

8-3/4" Hole 7-5/8" 26# H-40 CSA 3005' Cement w / 900 sx TOC @ 1415' (Temp Survey)

CIBP @ 6400' (15 sx)

**Drinkard Open Hole:** 6453'-6625'



TD @ 6625'

6-3/4" Hole 5-1/2" 15.5# J-55 CSA 6453' Cement w / 250 sx TOC @ 4060' (Temp Survey) Well:

Hawk B-10 No. 3

Field:

Hare

Location:

1980' FNL & 1980' FEL Unit G, Sec. 10, T21S, R37E Lea County, New Mexico

API#:

30-025-06452

Elevation: 3450' (GR)

Perf 5-1/2" casing @ 320' Cmt to Surface inside & outside casing (65 sx)

Cmt 10-3/4" x 7-5/8" annulus to 320' (60 sx)

Cmt Piug 1314'-1420' (11 sx)

12-1/4" Hole 10-3/4" 32.75# H-40 CSA 268' Cement w / 250 sx Circulated to Surface

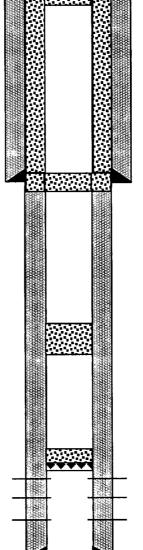
Current Status: P&A (9/90)

Perf 5-1/2" casing @ 3135' Cmt plug inside & outside casing 3044'-3150' (25 sx)

Cmt Plug 5544'-5750' (23 sx)

Cmt Plug 7312'-7420' (12 sx) CIBP @ 7420'

Hare Simpson (McKee) Perfs: 7470-7736



TD @ 7981'

9-7/8" Hole 7-5/8" 24# H-40 CSA 3099' Cement w / 1150 sx TOC @ 1350' (Temp Survey)

6-3/4" Hole 5-1/2" 14/15.5/17# J-55 CSA 7980' Cement w / 750 sx TOC @ 3140' (Temp Survey) Well:

Livingston # 4

Field:

Hare

Location:

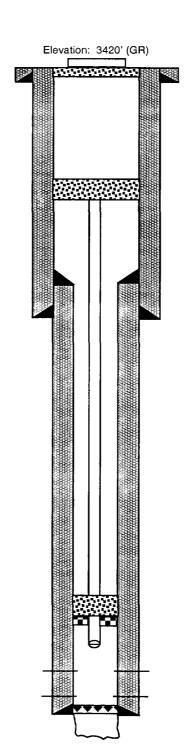
380' FSL & 2310' FEL Sec. 3, T21S, R37E Lea County, New Mexico

API#:

30-025-06515

0 - 30' - 15 sx Install P&A marker

1670' - 1770' - 30 sx Top of tubing @ 1720' left in hole (unable to fish)



17-1/2" Hole 13-3/8" 48# H-40 CSA 151' Cement w / 200 sx Circulated to Surface

Current Status: P&A (8/59)

11" Hole 8-5/8" 32# J-55 CSA 3147' Cement w / 2000 sx Circulated to Surface

7255' - 7400' - 25 sx Spotted thru split in tubing left in hole (unable to fish)

McKee Perfs: 7641-7826

Ellenburger Perfs: 7933-59

CIBP @ 8000'

Ellenburger Open Hole: 8018-8167

Packer @ 7400'

7-7/8" Hole 5-1/2" 15.5/17# J-55 LSA 8018' Cement w / 870 sx TOL @ 2961'

TD @ 8167'

Well: Northeast Drinkard Unit # 205

Field: Eunice N., Blinebry-Tubb-Drinkard

Location: 3300' FSL & 660' FWL

> Unit M, Sec. 3, T21S, R37E Lea County, New Mexico

API#: 30-025-06521 Current Status: P&A B & D (3/83) T(2/96)

**B** - Hole in Casing @ 650' & 700' Pumped 185 sx thru holes and circulated to surface inside & outside casing

B - 950 - 1050 - 5 sx

T - 0 - 6730 - Fill 2-7/8" Casing String w / cement Install P&A Marker

**B** - 2500 - 2600 - 5 sx

B - 3330 - 3430 - 5 sx

**B** - 3887 - 3987 - 5 sx

B- 5620 - 5450 - 25 sx

**Blinebry Perfs:** 

5618-5839 (39 Holes) P&A - 3/83 5714-6029 (67 Holes)

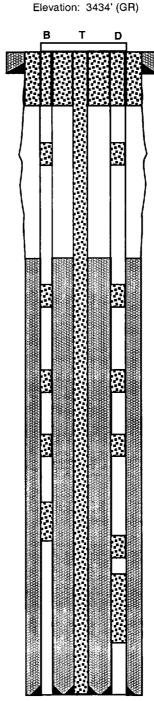
**Tubb Perfs:** 

6133-6363 (12 Holes) 6099-6145 (15 Holes)

**Drinkard Perfs:** 

6519-6635 (12 Holes) P&A - 3/83

6508-6687 (63 Holes)



12-1/4" Hole 9-5/8" 36# CSA 271' Cement w / 250 sx Circulated to Surface

D - Hole in Casing @ 690' Pumped 115 sx thru hole and circulated to surface inside & outside casing

D - 950 - 1050 - 5 sx

D - 2500 - 2600 - 5 sx

D - 3330 - 3430 - 5 sx

**D** - 3887 - 3987 - 5 sx

D - 5605 - 5705 - 5 sx

D - 5836 - 6520 - 25 sx

8-3/4" Hole 2-7/8" 6.5# J-55 3-String CSA 6726' Cement w / 635 sx TOC @ 2400' (Temp Survey)

TD @ 6730'

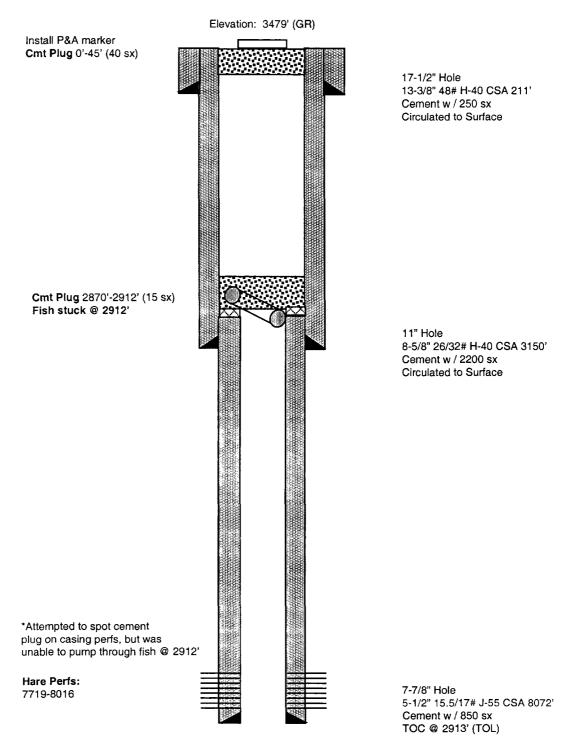
Well: State Sec 2 # 12

Field: Hare Current Status: P&A (1/62)

Location: 2250' FSL & 2140' FWL

Unit S, Sec. 2, T21S, R37E Lea County, New Mexico

API#: 30-025-06378



TD @ 8072'

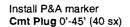
Well: New Mexico State V # 2

Field: Drinkard Current Status: P&A (3/54)

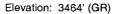
Location: 660' FSL & 1980' FWL

Unit N, Sec. 10, T21S, R37E Lea County, New Mexico

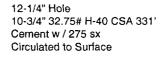
API #: 30-025-06464

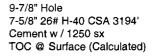


Cmt Plug 277'-477' (200 sx)



TD @ 6751'





Drinkard Perfs: 6536-6643

6-3/4" Hole 5-1/2" 14# J-55 CSA 6655' Cement w / 575 sx TOC @ 2200 (Calculated)

Crowford Est M. 1 Est M. 2261 8-230	KM B-2366 Conoco	8 Sh	Gulf Visto  Bu HBP US (Tree We')  ElkOll E. 20 77 Mag V	BA ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	
MS   MSP	KK ji jež ja	Ch H H B B	8 P V-15 HBP Vista 12-180 V.3	91 980 Warren	(entil etal wi # 120 063450 Werren-Wait 3.4
M.B.P. B-1553	11.24	Dallas McCasland,(5) 2  Meyer  Dallas McCasland,(5) 2  Meyer  Two States	Bris A-1541 Wartindale	S.M.I #76   #17   plits   #16   plits	e ¹⁸ # ⁷⁵ Conoc oc 8E "Warren Unit"
11-Ramsey" E-5347 (Aztec) 25 homber for the limit of the	(OPER) WI stee	Dallas MaCasland(S)	State Peter St.	U.S. D. McCasionau)	# 14 Fize 12 U.S. # 9 Fize Dalfas McCas
167 Contl® Trauss	Texaco (Lynn Pet) (1.1 card 7 to ma 36.56 ts (Sketly) 12.5 Tool JAmeso 1 Africa 33 34 35 35 36 36 37 10 70 70 70 70 70 70 70 70 70 70 70 70 70	Appendix of the second	6 Joe 5 6 Conft lengt	1 0104 3 0107 2512 +Hg	3" (90) Poddeck
an Oil State (H-H-2) DIA 2-25-64 State   1	D. Accasionals) (100 feet) (2 C H. Session 100 feet) (100 feet) (1	Share Stone 23 SC 1	Conti., etal. Ener. Shel	JA 2665 D.McCoglan	113 (502) 211 (502)
State 2 (968) CTr II 47 (155), S	Plos E. Hill gan	Stand Apco 1 A Fifter C. Hill B. McCasianata	(Bionco) (DO) (Chevron) (Bionco) (Dun) 2	03  Shell 8-3"	So floy a
helder   3 cc s. 95 c	Anodorko (Guif) m (Guif) m (Guif) m (Guif) m (Guif) m (Guif) m (Guif) m (Guif) m	Currie" #1 031741	Cart And Guff-Hill Amount of MI Date 5 Mance (Due 5 Mance Casignoids)	Texace 309 6 305 4-5	TA (PVE) Town  TO 211 Significant Section  TA Shell websel.
Crates Amoco	Anodorko  [Gurt] Maria Maria  [Gurt] Maria	M. Deck, Est.(5) M.Deck, Est.(5)	Osiron g Triple Triple Triple Supplied Sputhland But frip	Oelias (PIB)  Ch Livingsten	313 314 317 15 313 77B 117 11
(heuron Wiser Dig 19 19 19 19 19 19 19 19 19 19 19 19 19	# ARCO	**************************************	Conoce, etcal Arnoce  \$ \$3 \$2  Ouel B-1 (mg) or ©  O31741 2512	Due (A Continental etaliana)	on Control Cono
8 2527 M. C. W. Qualters in the second secon	Assembly Henry Company	Page 18C Phoc Whow a bed of the page 18C Phoc Whow a bed of the page 18C Phoc Phoc Phoc Phoc Phoc Phoc Phoc Phoc	Ound Southland Ray	O STATE - (S) (MET POMBUN-PAR.	Hando Drig
348 349 Marshall St. 2 Riddel	H MA KernCo. Chemen Marrier n	D Alves (Size Movel & Sur (Out) (Out	B////EB/R/	Bool EXECUTION AND LINES INC.	Duel Sutman
Chevron Chevron 953 Days Chevron Chevron 1553 Conoco Leck 8 14 Gutman	Har man Texaco (Sulf) H B P Dug Free (Sulf) H B P Dug Free (Sulf) H B P Dug Free (Sulf) H B P Dug Har (Sulf) H B P Dug Har (Sulf) H B P Dug Har (Sulf) H B P Dug	Company 3 (Company) (Triple)	Amoco Chevron 66	TAState  Set TexasCO (999  INCO (978) D	J M Nojan  Brownia Shell s
391 391 0001 (000) Tideworter	Choren Solvio	C Super Control of Con	(Mo Dia	Cities Service Street City Shell et	Moranco (Moranco,
Skelly Lockhorf Jackbart 1 M. Manalel 1 M. M. Manalel 1 M. M. Manalel 1 M. M. Manalel 1 M.	3 (male 4 Accom)	Duol Tong County	TMAN Amerado (Dual YM DA Dual	Moratha Morath	Duoy Oue!
Etron Chevren (19) 451 Lockhorf (R.M. Marshall Desco Ld. Corp.(9) 452 U.S. Chevren (19) 10 Grands	(Amocol see)   Right	Duol of Sample Land Lockhorn Million Deck getter	(eve) the state (eve) State (eve)	TOE TOWN INVESTIGATION TO STATE OF THE STATE	Euboriks  S) Charie Bettis (5) K
B-1732 KirbyExpl.	M 42/4 _{G (m)} Propis Greener Res. Terrespo 9-7722   Mercetten Res. Sun Marge 55: 14 Bit. Greener Res. 2 Continue Res. 2 Contin	Ellio Pa S3 See Variable Par Sun A Graham Ray Million		(Pries) Answerson Answerson	ol Duel
City of Chevron (W		Gulf 20 (mg/l)	America (Section 1)  Affined Deck, Est (S)  J.H. Jendrig (A)  J.H. J.	4. 901 902 (PIECE SOT WOOD	909 911 10 765 0 55
H T. Mottern Tr. 3	A-1543 A-1543 A-1543 A-1543 A-1543 A-164 A	Marothes"	Construct Connect (April 2) Anderson Connect C	Sheli (But	Shell - Duging
Chevron on (Dee	Triple	Mebil 158 105 Sur 165 Mebil 168 107 Mebil 168	104 22 (000 10 10 10 10 10 10 10 10 10 10 10 10		Texaco Ac
26 Store 51 (1)	Triple M. Heriderson Triple (wo)	Cordele Haray  107 107 107 107 107 107 107 107 107 10	(Oues) 110 3 THE STORY OF STOR	3 Smell Treete Du	(S) I I (WO) A Duell I
TO 3040 43 CONTROL OF THE PROPERTY OF THE PROP	Gillon Adobe  Jane (G. Knoz) Guir Mottern  Jane Mottern	(1000) gridz 4 gridz 910 010 010 001	Doubles (A. D. C. A. D. C. D. C. A. D. D. C. A. D. D. C. A. D. D. C. D. D. C. D. D. C. D. D. C. D. D. D. D. C. D.	Duoffine) Their	A.R.Ca., Chevren H  #2    Duet
Science J. Browniee J. Glasses Good Science J. Browniee J. Glasses Good Science J. Browniee J. Glasses Good Good Good Good Good Good Good Goo	Warrier 1800 Seedy Hot Mattern July 197 Chevron Polymore 1800 18 22 24	APMitchelis	E.O. carson N Carson	W S Marshall A A hardisol	(Ough) Dudl & Rich R (one) Cone
Chevron (197) (198) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199) (199	25 (P/H)	CHÉVRONIOPER)	Maphil 229 MARCON 227	(000) (000) Phillips (000) Small 17	A-35" Maranad A.M.Leck
Cit Serv 1 36 Out (1) 1 2 1 2 1 4 A C Co. Markham 2 1 2 1 2 1 4 A C Co. Markham 2 1 2 1 2 1 4 A C Co. Markham 2 1 2 1 2 1 4 A C Co. Markham 2 1 2 1 4 A C Co. Markham 2 1 2 1 4 A C C C C C C C C C C C C C C C C C C	Amerodo Pamerodo Pame	Wiser Oil	Amerada 49 Da Wasan 1	"B" Arroco (3-10ue) Chevron	Marating C
Stole Pres	SITUE OF JOICE Pruit Schio	20.40 20 43405 ST. A Downes (we) W.T.M.C. Com. Sec.	To a ics 5 problem (Quory ids 5 problem )	FUNICE	Dugi Bunda (
Conoco 300 4 13 Sources Supplement Supplemen	J774de alad Tite See 118 (arbarraug) [1000gf i. A.A. Dawler Sip i. O. Chavres A.A. Dawler Sip i. O. S. Trusquel Bu Shelly   Stimut Sip i.	Wiser Oil behavior Chevron Out 2 18 Syrbing Of A / Downess 10 Sonig S. Tr. (Visit S. P. Sirris Stephens	Wiger Oil Shell Amerodo	Sun James Sun Life Common Marian Chevron Chevr	County Agentic
				ELITOTONIA I DALL	

# LARGE FORMAT EXHIBIT HAS BEEN REMOVED AND IS LOCATED IN THE NEXT FILE



## NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

OIL CONSERVATION DIVISION

SANTA FE, NEW MEXICO 87501

P. O. BOX 2088

Proposed:

4/17/2001

Lori Wrotenbery
Director
Oil Conservation Division

MC	<del></del>		
DHC			
NSL			
NSP	· · · · · · · · · · · · · · · · · · ·		
SWD			
WFX			
PMX			
entlemen:			
have examined the	application for the:		
Apache Corp.			_
perator	Lease & Well No.	Unit S-T-R	
		Northeast Drinkard	Unit
	ons are as follows:	#102-H, 4-21s-37e	API #30-025-0
bub B-10 #1	il in a may need to	#103-D, 3-21s-37e	30-025-0
WW-17 10 # 1 1	7-10-21-37 be realized	#106-C, 3-21s-37e	30-025-0
1,	and the second	#112-A, 3-21s-37e	30-025-0
, , , , , , , , , , , , , , , , , , ,	and alman		
eringston # 4 3-2	4-37 property	• -	
	4-37 property	#122-A, 2-21s-37e	30-025-0
	1-37 pagerey ?	#122-A, 2-21s-37e #123-H, 2-21s-37e	30-025-0 30-025-0
	N-10-21-37 not	#122-A, 2-21s-37e #123-H, 2-21s-37e #204-L, 3-21s-37e	30-025-0 30-025-0 30-025-0
	N-10-21-37 not plugged properly	#122-A, 2-21s-37e #123-H, 2-21s-37e #204-L, 3-21s-37e #207-N, 3-21s-37e	30-025-0 30-025-0 30-025-0 30-025-0
w Mexico 37 V # 2	N-10-21-37 not plugged properly	#122-A, 2-21s-37e #123-H, 2-21s-37e #204-L, 3-21s-37e #207-N, 3-21s-37e #223-P, 2-21s-37e	30-025-0 30-025-0 30-025-0 30-025-0 30-025-0
talle pec 2 11/17	N-10-21-37 not properly	#122-A, 2-21s-37e #123-H, 2-21s-37e #204-L, 3-21s-37e #207-N, 3-21s-37e #223-P, 2-21s-37e #304-V, 3-21s-37e	30-025-0 30-025-0 30-025-0 30-025-0 30-025-0
We Mexico 97 V # 2	N-10-21-37 not properly not plugged properly	#122-A, 2-21s-37e #123-H, 2-21s-37e #204-L, 3-21s-37e #207-N, 3-21s-37e #223-P, 2-21s-37e #304-V, 3-21s-37e #305-R, 3-21s-37e	30-025-0 30-025-0 30-025-0 30-025-0 30-025-0 30-025-0
We Mexico 97 V # 2	N-10-21-37 not properly not plugged properly	#122-A, 2-21s-37e #123-H, 2-21s-37e #204-L, 3-21s-37e #207-N, 3-21s-37e #223-P, 2-21s-37e #304-V, 3-21s-37e #305-R, 3-21s-37e #306-R, 3-21s-37e	30-025-0 30-025-0 30-025-0 30-025-0 30-025-0 30-025-0 30-025-0
W Mexico 57 V # 2	N-10-21-37 not properly mot properly	#122-A, 2-21s-37e #123-H, 2-21s-37e #204-L, 3-21s-37e #207-N, 3-21s-37e #223-P, 2-21s-37e #304-V, 3-21s-37e #305-R, 3-21s-37e #306-R, 3-21s-37e #310-X, 3-21s-37e	30-025-00 30-025-00 30-025-00 30-025-00 30-025-00 30-025-00 30-025-00 30-025-00
ours very truly,	N-10-21-37 not plugged properly not plugged properly	#122-A, 2-21s-37e #123-H, 2-21s-37e #204-L, 3-21s-37e #207-N, 3-21s-37e #223-P, 2-21s-37e #304-V, 3-21s-37e #305-R, 3-21s-37e #306-R, 3-21s-37e #310-X, 3-21s-37e #311-T, 2-21s-37e	30-025-00 30-025-00 30-025-00 30-025-00 30-025-00 30-025-00 30-025-00 30-025-00 30-025-00
en Mexico 57 V # 2	plugged property	#122-A, 2-21s-37e #123-H, 2-21s-37e #204-L, 3-21s-37e #207-N, 3-21s-37e #223-P, 2-21s-37e #304-V, 3-21s-37e #305-R, 3-21s-37e #306-R, 3-21s-37e #310-X, 3-21s-37e	30-025-06 30-025-06 30-025-06 30-025-06 30-025-06 30-025-06 30-025-06 30-025-06 30-025-06 30-025-06