

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPPLICATE *
(Other Instructions on
reverse side)

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☒

GAS
WELL ☐

OTHER

2. NAME OF OPERATOR

Apache Corporation (CO1463 Bond No. 873-0GRD)

3. ADDRESS AND TELEPHONE NO. Agent: P.O.Box 8309, Roswell, NM 88202, 505-424-2282 (Bonnie Jones)

Apache: 6120 S. Yale Ave., #1500, Tulsa, OK 74136 918-491-4801 (Terry Gilbert)

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. *)

At Surface 2360' FNL, 1650' FEL, Unit G (SW 1/4 NE 1/4)

At proposed prod. Zone 2360' FNL, 1650' FEL, Unit G (SW 1/4 NE 1/4)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE *

±3 miles North of Eunice, NM

Capitan Controlled Water Basin

15. DISTANCE FROM PROPOSED *

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT. 280'
(Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE

708.67

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40.00

18. DISTANCE FROM PROPOSED LOCATION *

TO NEAREST WELL, DRILLING, COMPLETED 506'
OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

6,900'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3436' (KB)

22. APPROX. DATE WORK WILL START *

ASAP

Witness Surface Casing

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
		See Exhibit A		

Anticipated Duration of Program: Drilling - 14 days
Completion - 28 days
See attached Exhibit A for complete Drilling Program

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

EXHIBITS

Exhibit A: Drilling Program

Exhibit D: Survey Plat

Exhibit G: Rig Layout

Exhibit B: H₂S Plan

Exhibit E: Location Plat

Exhibit H: BOP Layout

Exhibit C: Surface Use Plan

Exhibit F: Existing Well Plat

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

Bonita L. L. Jones, RPL (Bonnie)

TITLE Permit Agent for

Apache Corporation

DATE

2-27-06

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY /S/ Russell E. Sorensen

ACTING

FIELD MANAGER

DATE

MAY 16 2006

*See Instructions On Reverse Side

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

APPROVAL FOR 1 YEAR

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-HOBBS

FORM APPROVED
Budget Bureau No. 1004-0135
Expires March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or re-entry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals.

SUBMIT IN TRIPLICATE

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Apache Corporation (Bond: CO1463) (OGRID: 0873)

3. Address and Telephone No.

6120 S. Yale, #1500, Tulsa, OK 74136, Terry Gilbert 918-491-4801

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2360' FNL, 1650' FEL, Unit G (SW $\frac{1}{4}$ NE $\frac{1}{4}$)

5. Lease Designation and Serial No.

NMNM-2512

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

Northeast Drinkard Unit

8. Well Name and No.

NEDU #423

9. API Well No.

30-025-

10. Field and Pool, or Exploratory Area

Wantz; Abo (62700)

11. County or Parish, State

Lea County, NM

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☐ Other Change Deepest Pool
☒ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

The original APD for this well erroneously cited the deepest pool for this well as the Eunice Monument; Grayburg-San Andres (23000). In fact, the deepest pool should be the Wantz; Abo (62700). Attached is a revised Exhibit D-1 (C-102) reflecting the proper pool.

Also, Exhibit E-3 to the original APD showed the well and its respective flow-lines in the wrong section. Attached is a revised Exhibit E-3.

14. I hereby certify that the foregoing is true and correct.

SIGNED Bonita (Bonnie) L. L. Jones TITLE Permit Agent DATE 3-7-06
Bonita (Bonnie) L. L. Jones, Permit Agent, P.O. Box 8309, Roswell, NM 88202-8309 505-624-9799

(This space for Federal or State office use)

APPROVED /s/ Russell E. Sorensen TITLE ACTING FIELD MANAGER DATE MAY 16 2006
CONDITIONS OF APPROVAL, IF ANY:

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

*See Instruction On Reverse Side

DISTRICT I
1625 N. FRANCE DR., HOBBES, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Exhibit D-1
Revised 3-7-06

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-	Pool Code 62700	Pool Name Wantz; Abo
Property Code 22503	Property Name NEDU	Well Number 423
OGRID No. 0873	Operator Name APACHE CORPORATION	Elevation 3436'

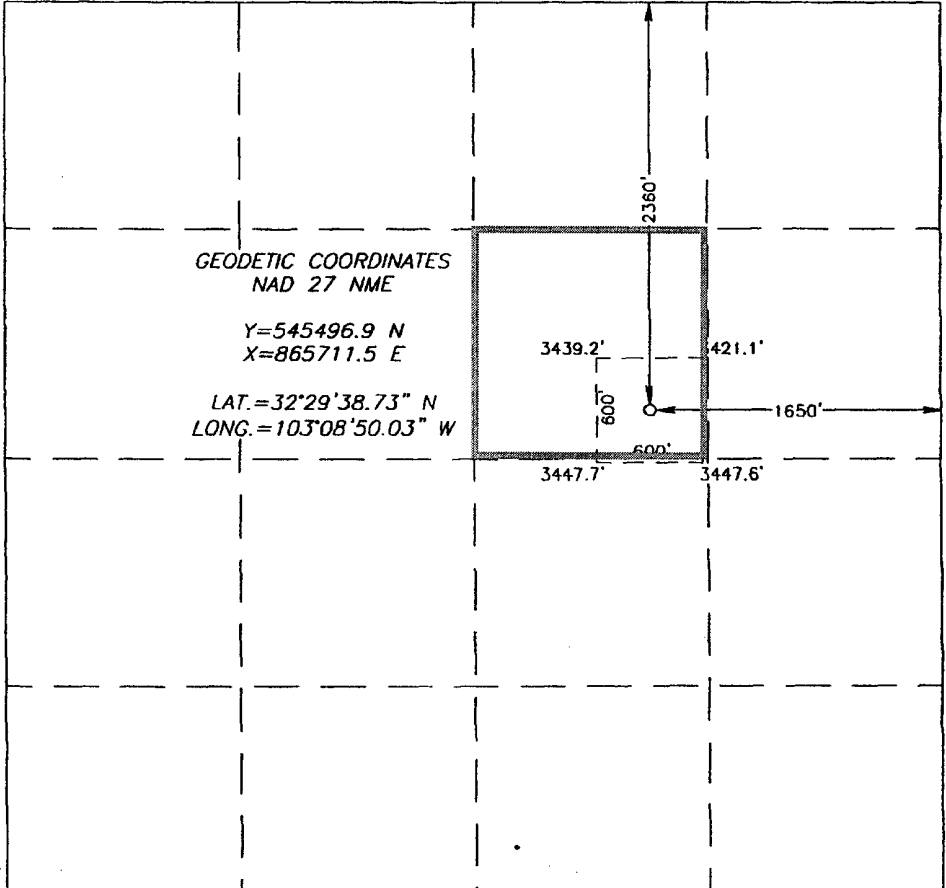
Surface Location

UL or lot No. G	Section 10	Township 21-S	Range 37-E	Lot Idn	Feet from the 2360	North/South line NORTH	Feet from the 1650	East/West line EAST	County LEA
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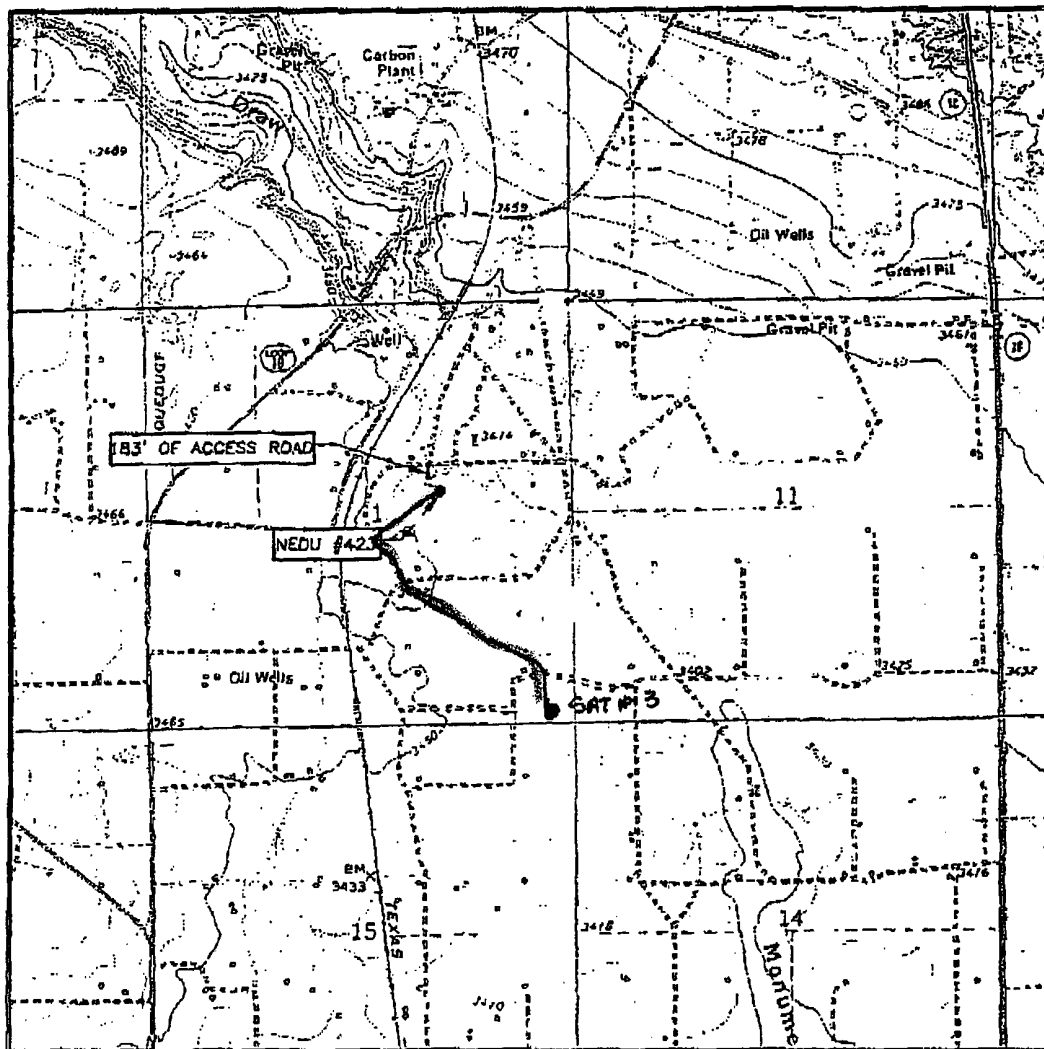
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40.00					Joint or Infill	Consolidation Code	Order No.		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>GEODETIC COORDINATES NAD 27 NME Y=545496.9 N X=865711.5 E LAT.=32°29'38.73" N LONG.=103°08'50.03" W</p> 	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Lana Williams</i> Signature Lana Williams Printed Name Sr. Dept. Clerk Title 2/1/06 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>MAY 27, 2005 Date Surveyed Signature & Seal of Professional Surveyor GARY EIDSON Professional Surveyor 05-11-0812 Certificate No. GARY EIDSON 12641</p>
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LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
EUNICE, N.M. - 10'

SEC. 10 TWP. 21-S. RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 2360' FNL & 1650' FEL

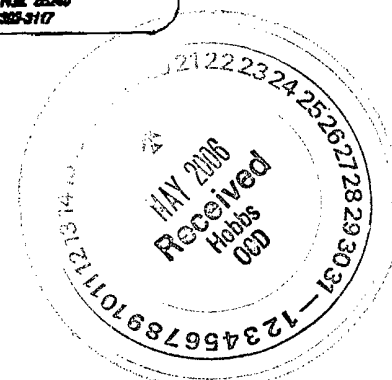
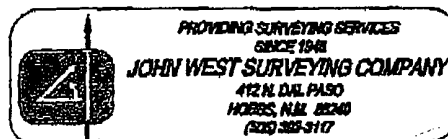
ELEVATION 3436'

OPERATOR APACHE CORPORATION

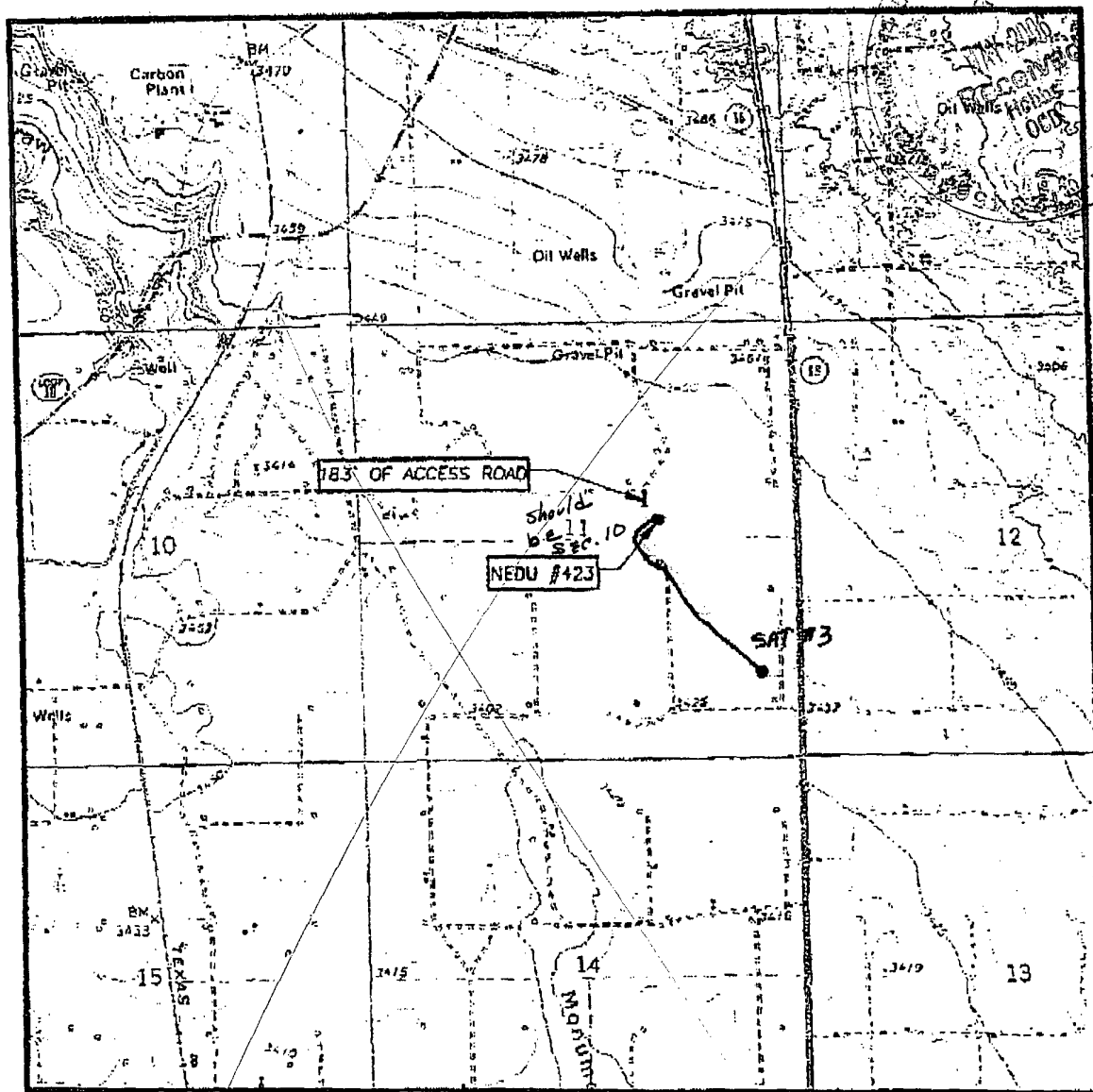
LEASE NEDU

U.S.G.S. TOPOGRAPHIC MAP
EUNICE, N.M.

Flow Lines



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
EUNICE, N.M. - 10'

SEC. 10 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 2360' FNL & 1650' FEL

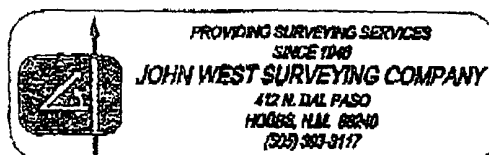
ELEVATION 3436'

OPERATOR APACHE CORPORATION

LEASE NEDU

U.S.G.S. TOPOGRAPHIC MAP
EUNICE, N.M.

Flow Lines



DISTRICT I

1625 N. FRANCE DR., HOHES, NM 88240

Energy, Minerals and Natural Resources Department

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505Form C-102
Revised JUNE 10, 2003
Subject to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025- <u>37876</u>	Pool Code <u>23000 22900</u>	Pool Name <u>Blinenberg-4456-Drinkard North</u>
Property Code 22503	Property Name NEDU	Well Number 423
GRID No. 0873	Operator Name APACHE CORPORATION	Elevation 3436'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	10	21-S	37-E		2360	NORTH	1650	EAST	LEA

Bottom Hole Location If Different From Surface

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40.00			

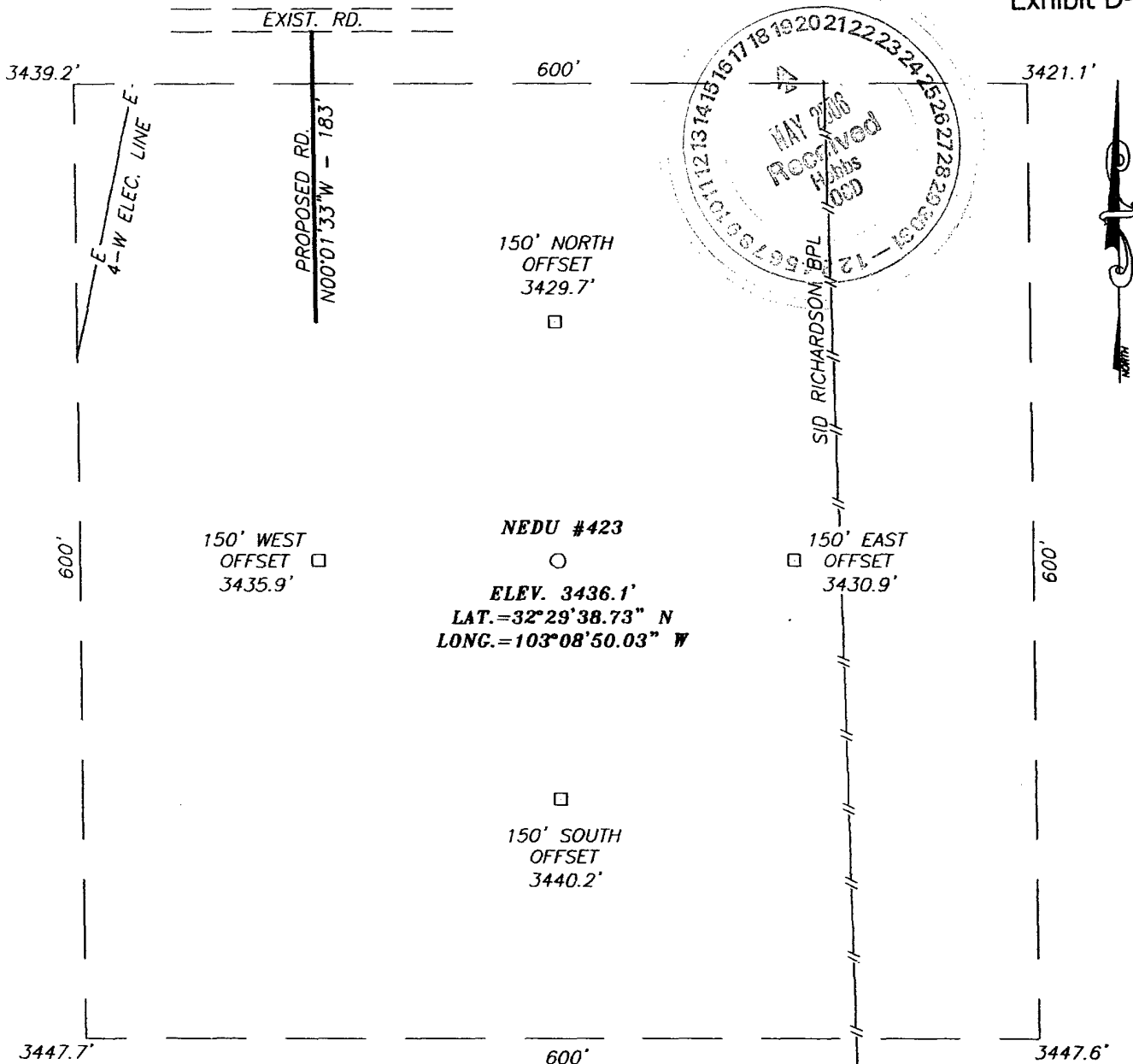
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=545496.9 N X=865711.5 E</p> <p>LAT.=32°29'38.73" N LONG.=103°08'50.03" W</p>			<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Lana Williams</u> Signature</p> <p><u>Lana Williams</u> Printed Name</p> <p><u>Sr. Dept. Clerk</u> Title</p> <p><u>2/1/06</u> Date</p>
	<p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>MAY 27, 2005</p>		<p>Date Surveyed</p> <p>Signature & Seal of Professional Surveyor</p> <p><u>GARY EIDSON</u> Professional Surveyor</p> <p><u>05-11-0812</u> Certificate No.</p>
	<p>LA</p>		<p>12641</p>
	<p>NEW MEXICO</p>		<p>12641</p>

SECTION 10, TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,

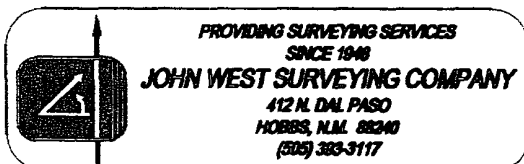
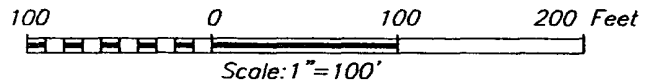
LEA COUNTY,

Exhibit D-2



DRIVING DIRECTIONS:

FROM THE INTERSECTION OF ST. LOOP RD. #18 (ST. HWY. #207) AND APACHE ROAD #16 GO SOUTH ON ROAD 16 FOR APPROX. 200' TO A CALICHE ROAD ON THE RIGHT. TURN RIGHT AND GO SOUTH-SOUTHWEST FOR APPROX. 0.6 MILES TO A PROPOSED ROAD SURVEY. FOLLOW PROPOSED ROAD SURVEY FOR APPROX. 183' TO THIS LOCATION.



APACHE CORPORATION

NEDU #423 WELL
LOCATED 2360 FEET FROM THE NORTH LINE
AND 1650 FEET FROM THE EAST LINE OF SECTION 10,
TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

Survey Date: 5/27/05	Sheet 1 of 1 Sheets
W.O. Number: 05.11.0812	Dr By: LA
Date: 6/3/05	Disk: CD#4
05110812	Scale: 1"=100'

DISTRICT I

1625 N. FRENCH DR., HOBBES, NM 88240

State of New Mexico

Energy, Minerals and Natural Resources Department

Exhibit D-3

Form C-102

Revised JUNE 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.

Santa Fe, New Mexico 87505

DISTRICT III

1000 Rio Brazos Ed., Aztec, NM 87410

DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name NEDU	Well Number 423
OGRID No.	Operator Name APACHE CORPORATION	Elevation 3436'

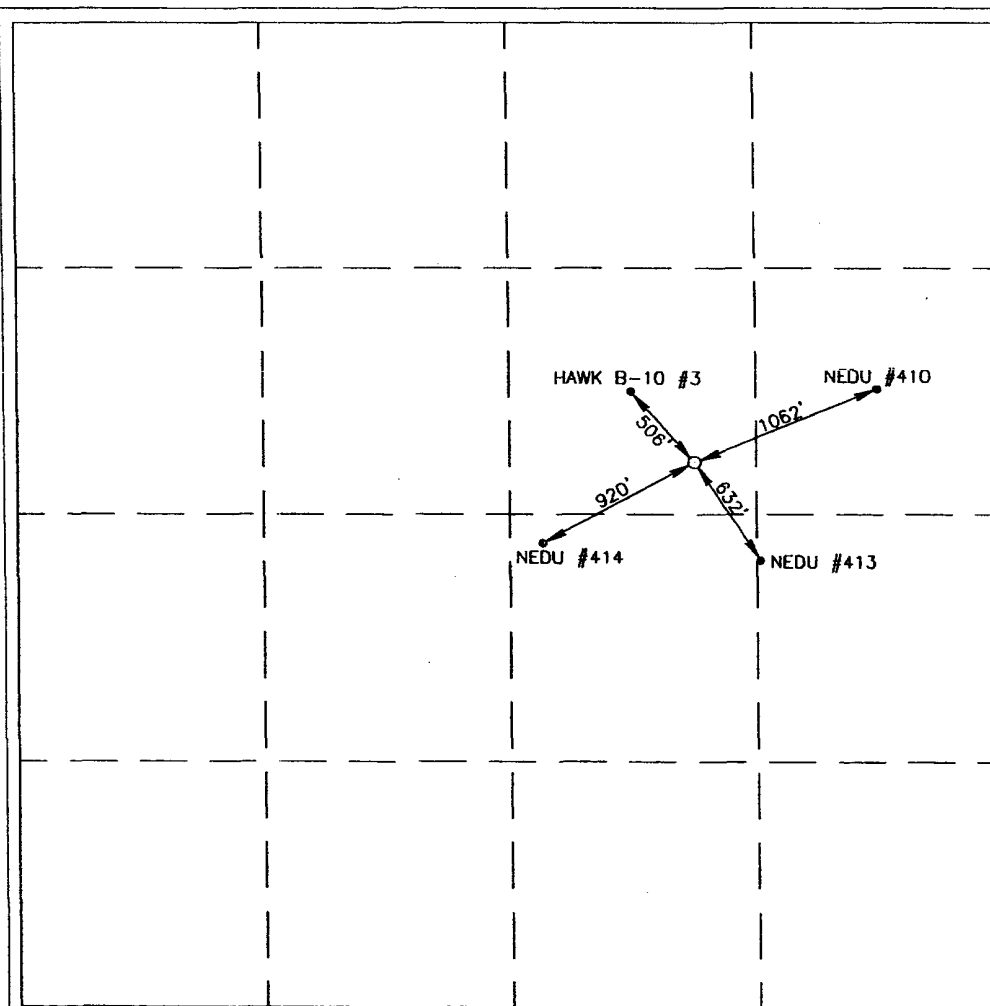
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	10	21-S	37-E		2360	NORTH	1650	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify the the information
contained herein is true and complete to the
best of my knowledge and belief.

Lana Williams
Signature

Lana Williams
Printed Name

Sr. Dept. Clerk
Title

2/1/06
Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown
on this plat was plotted from field notes of
actual surveys made by me or under my
supervision, and that the same is true and
correct to the best of my belief.

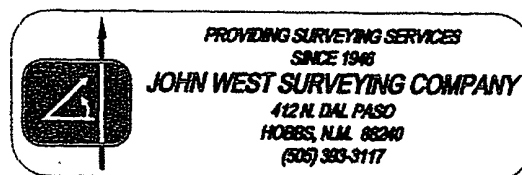
MAY 27, 2005

Date Surveyed LA

Signature & Seal of
Professional Surveyor

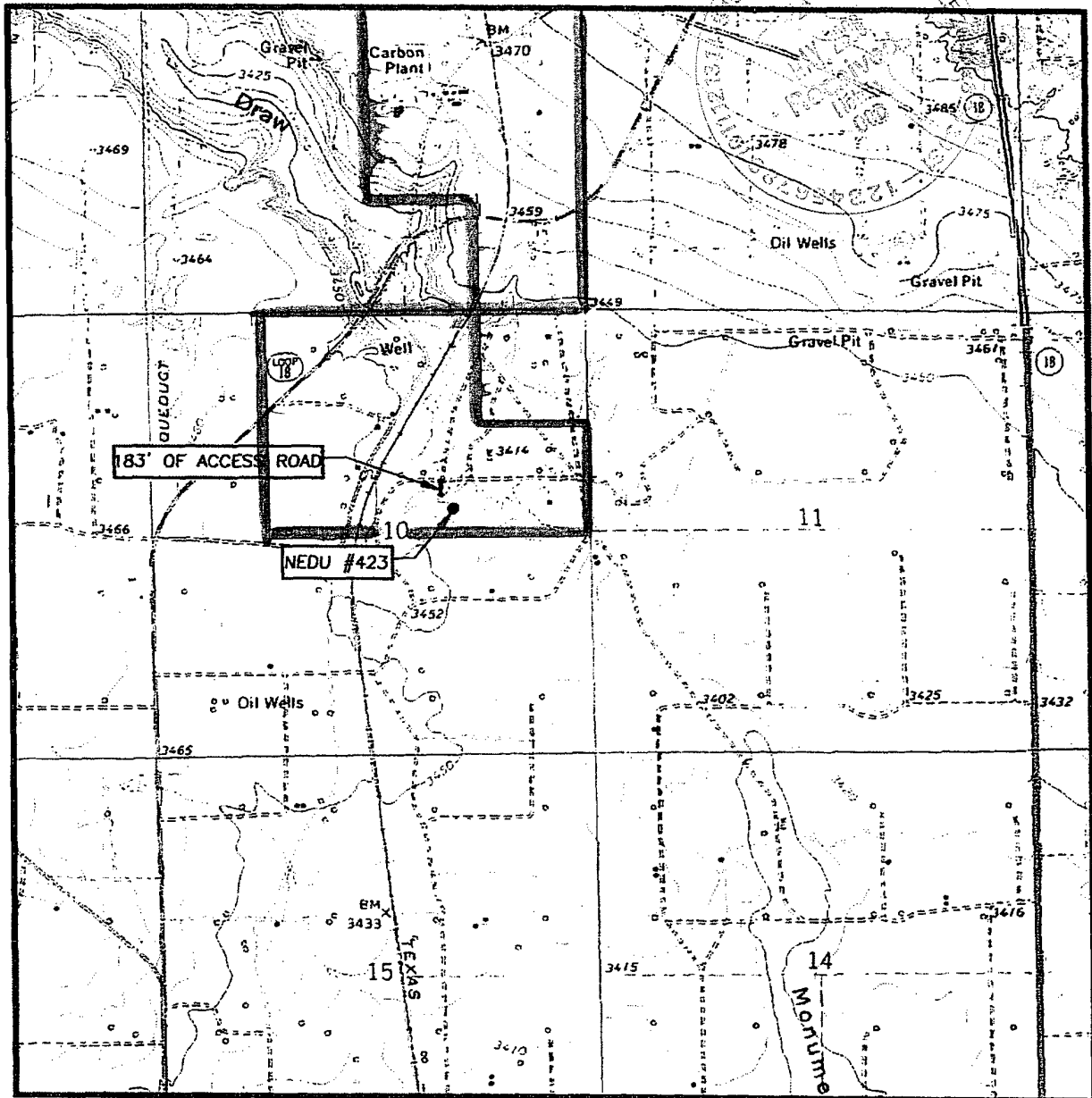
05.11.0812

Certificate No. GARY EIDSON 12641



LOCATION VERIFICATION MAP

EXHIBIT E-2



SCALE: 1" = 2000'

CONTOUR INTERVAL:
EUNICE, N.M. - 10'

SEC. 10 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 2360' FNL & 1650' FEL

ELEVATION 3436'

OPERATOR APACHE CORPORATION

LEASE NEDU

U.S.G.S. TOPOGRAPHIC MAP
EUNICE, N.M.

 LEASE BOUNDARY

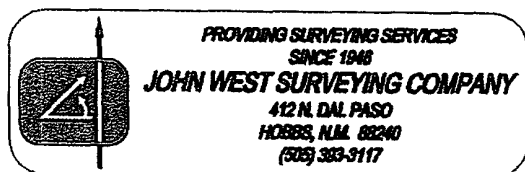


Exhibit "F"
NEDU #423

Township 21 South, Range 37 East, NMPM

Section 10: SWNE

2,360' FNL, 1,650' FEL

Lea County, New Mexico

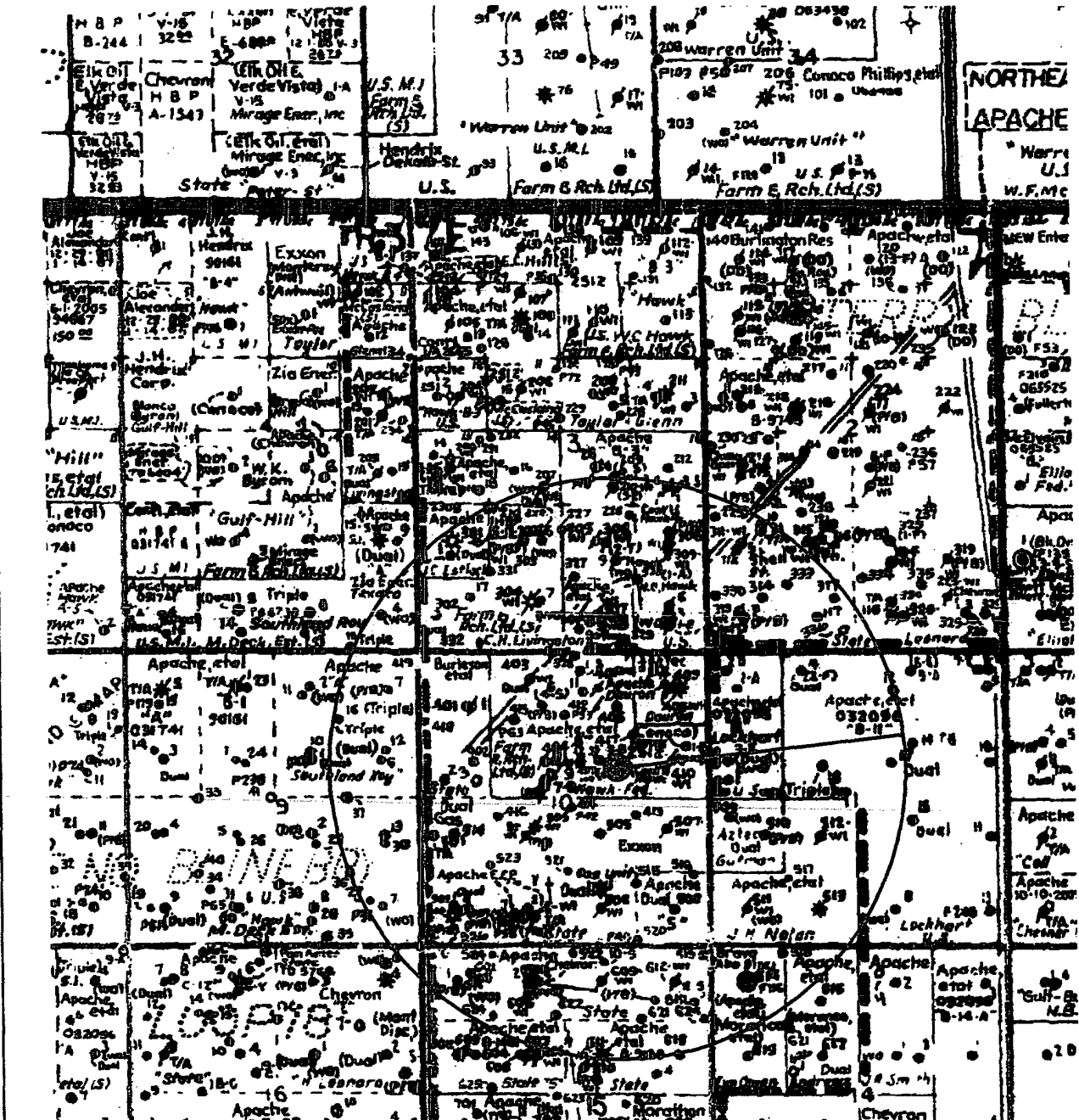


EXHIBIT "A"
Northeast Drinkard Unit (NEDU) #423

DRILLING PROGRAM

I. The geological surface formation is recent Permian with quaternary alluvium and other surficial deposits.

II. Estimated Tops of Geological Markers:

<u>FORMATION</u>	<u>DEPTH</u>
Quaternary alluvials	Surface
Rustler	1253'
Yates	2585'
Queen	3386'
Grayburg	3727'
San Andres	3964'
Glorieta	5197'
Blinebry	5642'
Tubb	6123'
Drinkard	6477'
Abo	6737'
TD	6900'

III. Estimated depths at which water, oil, gas, or other mineral-bearing formations are expected to be encountered:

<u>SUBSTANCE</u>	<u>DEPTH</u>
Oil	Grayburg@3727' San Andres@3964' Blinebry@5642' Tubb@6123' Drinkard@6477' Abo@6737' Blinebry@5642' Tubb@6123'
Gas	None anticipated
Fresh Water	

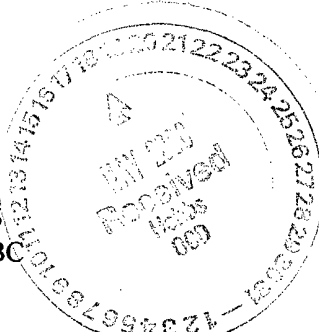
All fresh water and prospectively valuable minerals (as described by BLM) encountered during drilling will be recorded by depth and adequately protected. All oil and gas shows within zones of correlative rights will be tested to determine commercial potential.

IV. A. Proposed Casing Program:

<u>HOLE</u>	<u>CASING</u>		<u>WEIGHT</u>		<u>SACKS</u>	<u>ESTIMATED TOC -</u>
<u>SIZE</u>	<u>OD / ID</u>	<u>GRADE</u>	<u>PER</u>	<u>DEPTH</u>	<u>CEMENT</u>	<u>REMARKS</u>
12 1/4"	8 5/8" 8.097"	J55 STC	24#	1300'	600	TOC - Surface 8.9 ppg Water-based Mud; 89 ° F Est. Static Temp; 83 ° F Est. Circ. Temp.
7 7/8"	5 1/2" 4.892"	J55 LTC	17#	6900'	1,400	TOC - Surface Float Collar set @ 6855"/ 10.10 ppg Brine Mud; 141 ° F Est. Static Temp; 117 ° F Est. Circ. Temp.

B. Proposed Cement Program:

CASING	LEAD SLURRY	TAIL SLURRY	DISPLACEMENT
8 5/8"	400 sacks 35:65 Poz:Class C Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.003 gps FP-6L + 6% bwoc Bentonite gel 752 Vol. Cu Ft 1.94 Vol. Factor Slurry Weight (ppg) 12.7 Slurry Yield (cf/sack) 1.88 Amount of Mix Water (gps) 10.7; <u>Estimated Pumping Time – 70 BC (HH:MM)-4:00;</u>	200 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water 270 Vol. Cu Ft 1.94 Vol. Factor Slurry Weight (ppg) 14.8 Slurry Yield (cf/sack) 1.35 Amount of Mix Water (gps) 6.35 Estimated Pumping Time – 70 BC (HH:MM)-3:00;	80 bbls Fresh Water @ 8.33 ppg



8 5/8" Casing: Volume Calculations:

1260 ft	x	0.4127 cf/ft	with 100% excess	=	1040.0 cf
40 ft		x 0.8214 cf/ft	with 0% excess	=	32.8 cf
40 ft	x	0.3576 cf/ft	with 0% excess	=	14.3 cf (inside pipe)
TOTAL SLURRY VOLUME					= 1087.1 cf
					= 193.6 bbls

Spacer 20.0 bbls Water @ 8.33 ppg

CASING	LEAD SLURRY	TAIL SLURRY	DISPLACEMENT
5 1/2"	950 sacks (50:50) Poz (Fly Ash): Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.003 gps FP-6L + 10% bwoc Bentonite 2318 Vol. Cu Ft 2.66 Vol. Factor Slurry Weight (ppg) 11.8 Slurry Yield (cf/sack) 2.44 Amount of Mix Water (gps) 14.07; Amount of Mix Fluid (gps) 14.07 <u>Estimated Pumping Time – 70 BC (HH:MM)-4:00;</u>	450 sacks (50:50) Poz (Fly Ash): Class C Cement + 5% bwow Sodium Chloride + 0.003 gps FP-6L 581 Vol. Cu Ft 1.84 Vol. Factor Slurry Weight (ppg) 14.2 Slurry Yield (cf/sack) 1.29 Amount of Mix Water (gps) 5.91; Amount of Mix Fluid (gps) 5.91; Estimated Pumping Time – 70 BC (HH:MM)-3:00;	160 bbls 2% Kcl Water @ 8.43 ppg

5 1/2" Casing: Volume Calculations:

1300 ft	x	0.1926 cf/ft	with 0% excess	=	250.4 cf
3750 ft	x	0.1733 cf/ft	with 159% excess	=	1683 cf
1850 ft	x	0.1733 cf/ft	with 85% excess	=	593.0 cf
40 ft	x	0.1305 cf/ft	with 0% excess	=	5.2 cf (inside pipe)
TOTAL SLURRY VOLUME					= 2531.6 cf
					= 450.86 bbls

All slurries will be tested prior to loading to confirm thickening times and a lab report furnished to Apache. Fluid loss will be tested and reported on slurries with fluid loss additives. Lab test report will be furnished prior to pumping cement.

V. A. Proposed Mud Program

<u>DEPTH</u>	<u>MUD PROPERTIES</u>	<u>REMARKS</u>
0 – 1,300'	Weight: 8.6 – 9.6 ppg Viscosity: 34 – 36 sec/qt pH: NC Filtrate: NC	Spud with a Conventional New Gel/Lime "Spud mud". Use NewGel and native solids to maintain a sufficient viscosity to keep the hole clean. Mix Paper one-two sacks every 100 feet drilled to minimize wall cake build up on water sands and to control seepage loss. At TD of interval, mix in pre-mix pit, 100 barrels of system fluid, NewGel viscosity of 60 sec/100cc, add 0.25 ppb of Super Sweep.
1300' – 5600'	Weight: 9.9 – 10.1 ppg Viscosity: 28 – 29 sec/qt pH: 9-10 Filtrate: NC	Drill out from under the surface casing with Brine Water. Paper should be added at 2 bags after every 100' drilled to control seepage losses. Use Lime to maintain pH at 9-10. Mix one gallon of New-55 at flowline every 250 feet drilled to promote solids settling. Sweep hole with 5-ppb of Super Sweep every 500 feet.
5600' – TD	Weight: 9.9 – 10.1 ppg Viscosity: 30 – 40 sec/qt pH: 9-10 Filtrate: 8-15 cm/30 min	From 5600' to Total Depth, it is recommended the system be restricted to the working pits. Adjust and maintain pH with Caustic Soda. Treat system with Newcide to prevent bacterial degradation of organic materials. Mix Starch (yellow) to control API filtrate at <15cc.

VI. Proposed Control Equipment:

Will install on the 8 5/8" surface casing a 9" x 3000 psi WP Double Ram BOP and will test before drilling out of surface casing. **As expected pressures will not exceed 2000 psi, we request a waiver of the remote control requirement on the accumulator of the 3M BOP and a variance to run a 2M BOP, if available.** See Exhibit "H" for BOP layout.

VII. Auxiliary Equipment:

9" x 3000 psi double BOP/blind & pipe ram **(2M BOP if available)**
 4 1/2" x 3000 psi Kelly valve
 9" x 3000 psi mud cross – H₂S detector on production hole
 Gate-type safety valve 3" choke line from BOP to manifold
 2" adjustable chokes – 3" blowdown line

VIII A. Testing Program: None planned

B. Logging Program: The following logs may be run:

CNL, LDT, GR, CAL, DLL, MSFL, NGT, Sonic from TD-1300'
 CNL, GR from TD-Surface

C. Coring Program: None planned

D. Mudlogging Program: None planned

IX. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, however, the proposed mud program will be modified to increase the mud-weight. The estimated maximum bottom hole pressure is 2700 psi.

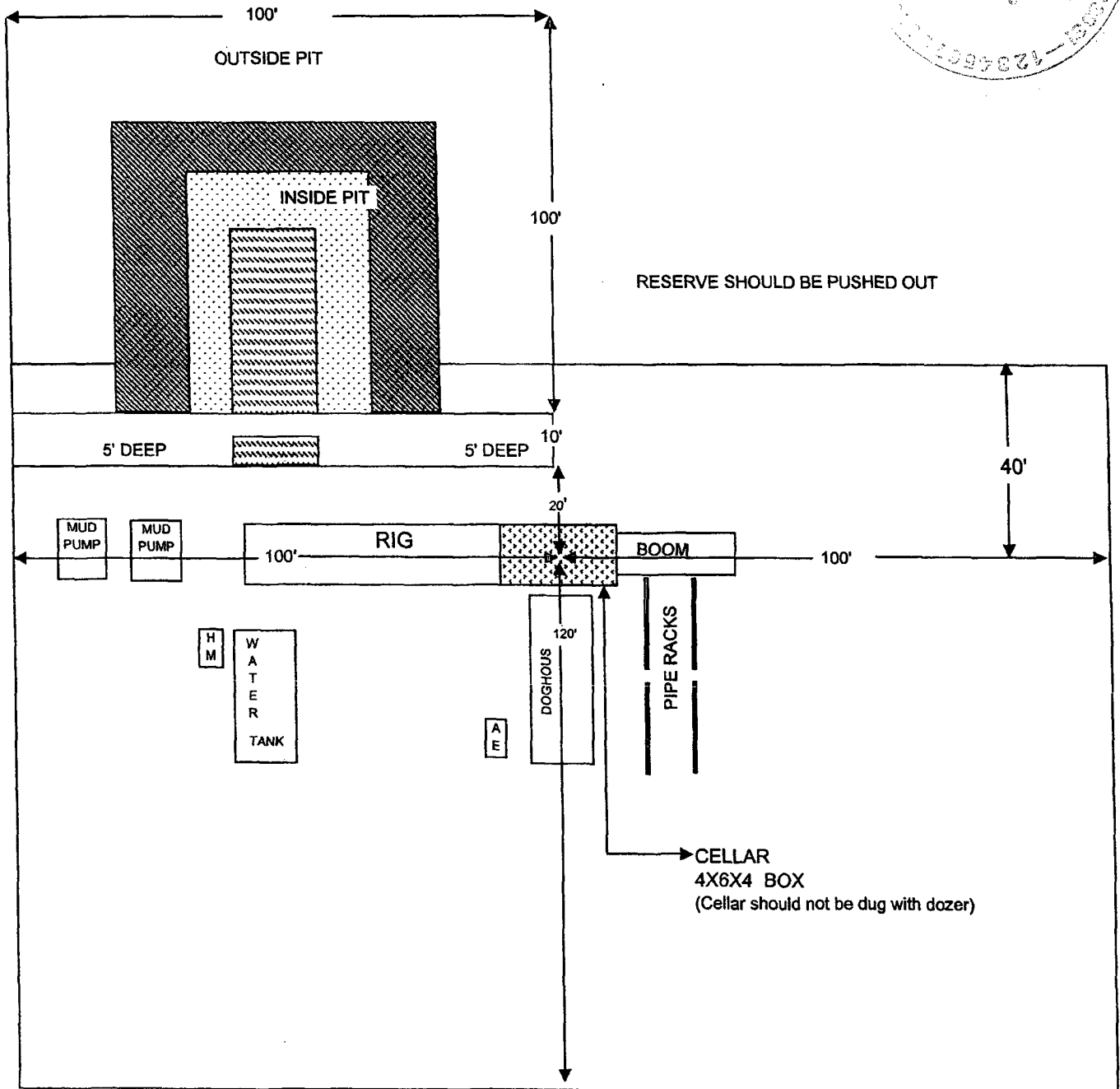
EXHIBIT "B"
Northeast Drinkard Unit (NEDU) #423

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

No H₂S is anticipated.



Exhibit G
CapStar Drilling, Inc.
LOCATION SPECIFICATIONS AND RIG LAYOUT
FOR EARTH PITS



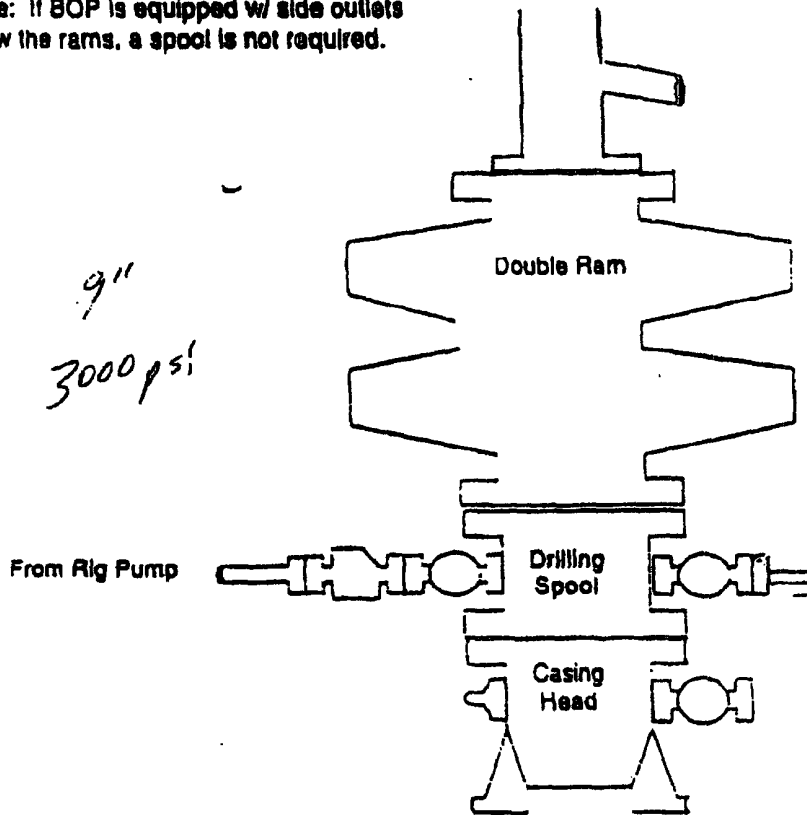
Cellar can be 4X4X4 if using a screw-on wellhead
Working Pits dug 5' below ground level

BOP Schematic

*Note: If BOP is equipped w/ side outlets below the rams, a spool is not required.

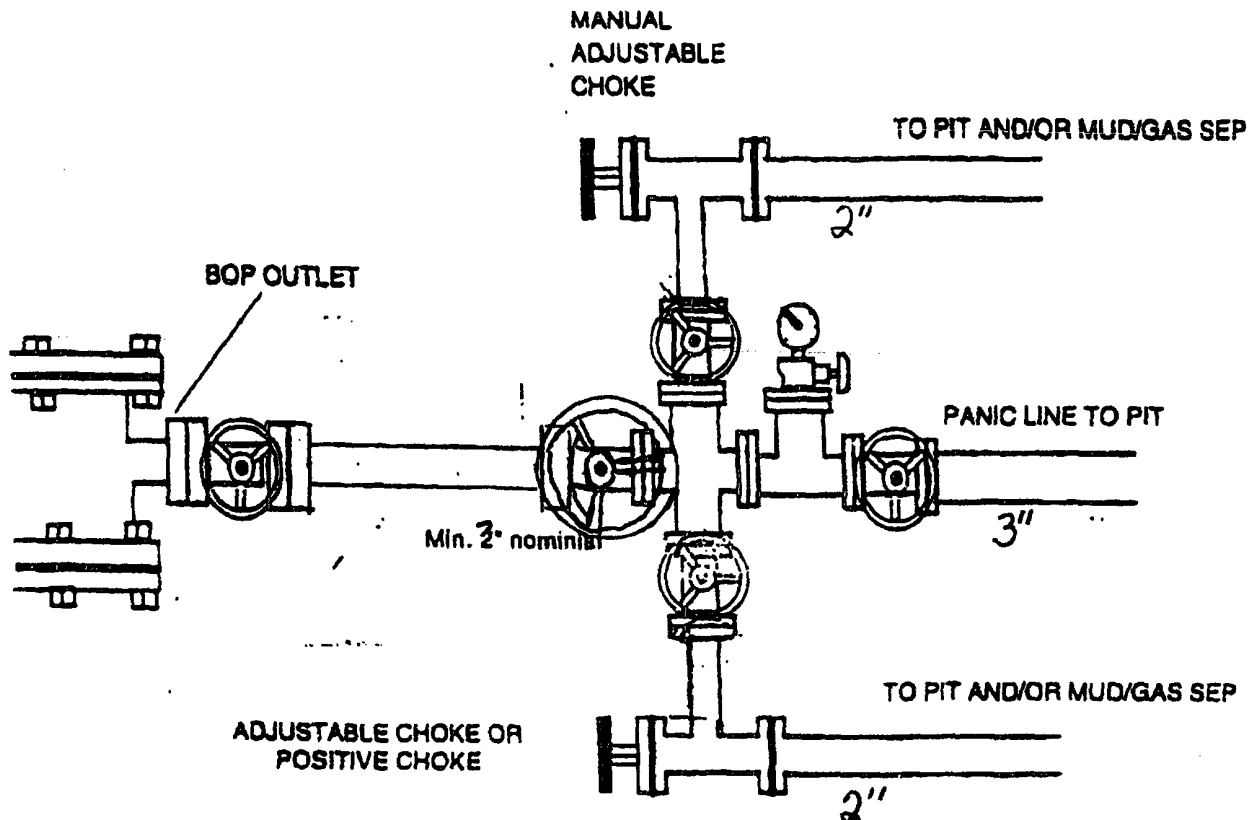
3000 psi WP Double Ram
Blow-out Preventor. Must be tested
to 1000 psi prior to drilling out
8-5/8" surface casing.

9"
3000 psi



Minimum 2" nominal
to choke manifold

Choke Manifold Schematic



OCD- HOBBS

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires March 31, 1993
5. Lease Designation and Serial No.
NMNM-2512

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or re-entry to a different reservoir.
Use "APPLICATION FOR PERMIT - " for such proposals.

SUBMIT IN TRIPLICATE

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Apache Corporation (CO 1463 Bond) (0873 OGRID)

3. Address and Telephone No.

Agent: Bonnie Jones, 705 W. Mescalero Rd., Roswell, NM 88201 505-624-9799

Apache: 6120 S. Yale Ave., #1500, Tulsa, OK 74136 918-491-4801 (Terry Gilbert)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2360' FNL, 1650' FEL, Unit G (SW 1/4 NE 1/4)

7. If Unit or CA, Agreement Designation

Northeast Drinkard Unit

8. Well Name and No.

NEDU #423

9. API Well No.

30-025-

10. Field and Pool, or Exploratory Area

Eunice Monument; Grayburg-San Andres (23000)

11. County or Parish, State

Lea, NM

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

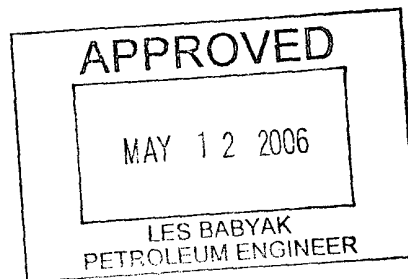
TYPE OF ACTION

☐ Abandonment ☐ Change of Plans
☐ Recompletion ☐ New Construction
☐ Plugging Back ☐ Non-Routine Fracturing
☐ Casing Repair ☐ Water Shut-Off
☐ Altering Casing ☐ Conversion to Injection
☐ Other H2S Plan Attached ☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Per request of Carlsbad Field Office, H2S Plan is attached as Exhibit "B" to APD.



14. I hereby certify that the foregoing is true and correct.

SIGNED Bonita (Bonnie) L. L. Jones TITLE Permit Agent for Apache Corporation DATE 4-27-06

Bonita (Bonnie) L. L. Jones

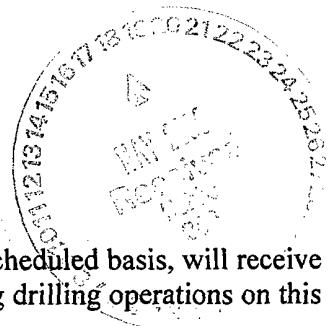
(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

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

*See Instruction On Reverse Side

Exhibit "B"
HYDROGEN SULFIDE DRILLING OPERATIONS PLAN



I. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H₂S).
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

II. H₂S Safety Equipment and Systems

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating, the first zone containing, or reasonably expected to contain, H₂S.

1. Well Control Equipment:
 - A. Flare line with electronic igniter or continuous pilot.
 - B. Choke manifold with a minimum of one remote choke.
 - C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - D. Auxiliary equipment to include annular preventer, mud-gas separator, rotating head, and flare gun with flares.
2. Protective equipment for essential personnel:
 - A. Mark II Surviveair 30-minute units located in the dog house and at briefing areas.
3. H₂S detection and monitoring equipment:
 - A. Two portable H₂S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 ppm are reached.
 - B. One portable SO₂ monitor positioned near flare line.
4. Visual warning systems:
 - A. Wind direction indicators.
 - B. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used when appropriate.
5. Mud program:
 - A. The mud program has been designed to minimize the volume of H₂S circulated to the surface. Proper mud weight, safe drilling practices, and the use of H₂S scavengers will minimize hazards when penetrating H₂S-bearing zones.

Exhibit "B"

- B. A mud-gas separator and an H₂S gas buster will be utilized.
- 6. Metallurgy:
 - A. All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.
 - B. All elastomers used for packing and seals shall be H₂S trim.
- 7. Communication:
 - A. Radio communications in company vehicles including cellular telephone and 2-way radio.
 - B. Land Line (telephone) communications at field office.
- 8. Well testing:
 - A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours, and formation fluids will not be flowed to the surface. All drill stem testing operations conducted in an H₂S environment will use the closed chamber method of testing.



District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-14
June 1, 200

For drilling and production facilities, submit to
appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe
office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☐

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☐

Operator: <u>Apache Corporation (0873)</u> Telephone: <u>918-491-4801</u> e-mail address: <u>terry.gilbert@usa.apachecorp.com</u>	
Address: <u>6120 S. Yale Ave., Ste. 1500, Tulsa, OK 74136</u>	
Facility or well name: <u>NEDU # 423</u> API #: <u>30-025-37876</u> U/L or Qtr/Qtr <u>G</u> Sec <u>10</u> T <u>21S</u> R <u>37E</u>	
County: <u>Lea</u> Latitude <u>32°29'38.73" N</u> Longitude <u>103°08'50.03"</u> NAD: 1927 <input checked="" type="checkbox"/> 1983 <input type="checkbox"/>	
Surface Owner: Federal <input type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Indian <input type="checkbox"/>	
Pit Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>20</u> mil Clay <input type="checkbox"/> Pit Volume <u>7105</u> bbl	Below-grade tank Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. _____
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	<u>Less than 50 feet</u> (20 points) 20 50 feet or more, but less than 100 feet (10 points) 100 feet or more (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	<u>Yes</u> (20 points) 20 No (0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	<u>Less than 200 feet</u> (20 points) <u>200 feet or more, but less than 1000 feet</u> (10 points) 10 1000 feet or more (0 points)
Ranking Score (Total Points) 50	

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☐ offsite ☐ If offsite, name of facility _____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.


Additional Comments: <u>DEPENDING ON EQUIPMENT AVAILABILITY WE COULD POSSIBLY BE UTILIZING CLOSED LOOP SYSTEM CONSISTING OF STEEL PITS AND COMPLETE HAUL OFF OF ALL LIQUIDS AND SOLIDS.</u>

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☒.

Date: 2-28-06
Printed Name/Title: Terry Gilbert Jr. Signature: _____

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval: PAUL F. KAUTZ
Printed Name/Title: PETROLEUM ENGINEER Signature: _____ Date: MAY 22 2006

 The sender of this message has requested a read receipt. [Click here to send a receipt.](#)

Mull, Donna, EMNRD

From: Phillips, Dorothy, EMNRD
To: Mull, Donna, EMNRD
Cc:
Subject: RE: Financial Assurance Requirement
Attachments:

Sent: Mon 5/22/2006 9:24 AM

All but Apache are okay.

From: Mull, Donna, EMNRD
Sent: Monday, May 22, 2006 8:27 AM
To: Phillips, Dorothy, EMNRD
Cc: Macquesten, Gail, EMNRD; Sanchez, Daniel J., EMNRD
Subject: Financial Assurance Requirement

Dorothy,

Is the Financial Assurance Requirement for these Operators OK?

Cimarex Energy Co of Colorado (162683)
ConocoPhillips Co (217817)
Fasken Oil & Ranch LTD (151416)
Range Operating New Mexico Inc (227588)
Apache Corp (873)
Nadel and Gussman Permian LLC (155615)

I have checked each operator for Inactive wells.

Please let me know. Thanks and have a nice day. Donna