

OCD-OCD-HOBBS

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTSUBMIT IN TRIPLICATE*
(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

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

APACHE CORPORATION

(LANA WILLIAMS 918-491-4980) <923>

3. ADDRESS AND TELEPHONE NO.

6120 SOUTH YALE SUITE 1500 TULSA, OKLAHOMA 74136 (918-491-4980)

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

At surface

2630' FSL & 120' FEL SECTION 17 T21S-R37E LEA CO. NM
At proposed prod. zone SAMECAPITAN CONTROLLED WATER BASIN
Unit I

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

2.5 Miles North of Eunice New Mexico.

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any) 120'

16. NO. OF ACRES IN LEASE

640

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

863'

19. PROPOSED DEPTH

6875'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3465' GR.

22. APPROX. DATE WORK WILL START*

WHEN APPROVED

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26"	Conductor 20"	NA	40'	Redi-mix cement to surface
12 1/2"	J-55 8 5/8"	24#	1300'	600 Sx. " " "
7 7/8"	J-55 5 1/2"	17#	6875'	1400 Sx. " " "

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

SEE ATTACHED SHEETS FOR DETAIL.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

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

TITLE Agent

DATE 09/25/06

(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/ James Stovall

TITLE

ACTING

FIELD MANAGER

DATE

DEC - 1 2006

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

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 omissions as to any matter within its jurisdiction.

DISTRICT I

1625 N. FRENCH DR., BOBBS, 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

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 30-025-38204	Pool Code 10190 22000	Owner Name Eunice Blinberry Tubb DRINKARD, North
Property Code 24430	Property Name LOCKHART A-17	Well Number 23
OGRID No. 0837	Operator Name APACHE CORPORATION	Elevation 3465'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	17	21-S	37-E		2630	SOUTH	120	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 40	Joint or Infill	Consolidation Code	Order No. NSL-5504						

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>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</p> <p>Lana Williams Printed Name</p> <p>Eng. Tech Title</p> <p>7/27/06 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>DECEMBER 16, 2005</p> <p>Date Surveyed JR</p> <p>Signature & Seal of Professional Surveyor <i>Ronald E. Edson</i> 01/08/06 05.11.1981</p> <p>Certificate No. GARY EDSON 12641 RONALD E. EDSON 3239</p>
	<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=539823.7 N X=856742.9 E</p> <p>LAT.=32°28'43.57" N LONG.=103°10'35.44" W</p>

State of New Mexico

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WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

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Property Code	Property Name LOCKHART A-17		Well Number 23
OGRID No.	Operator Name APACHE CORPORATION		Elevation 3465'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	17	21-S	37-E		2630	SOUTH	120	EAST	LEA

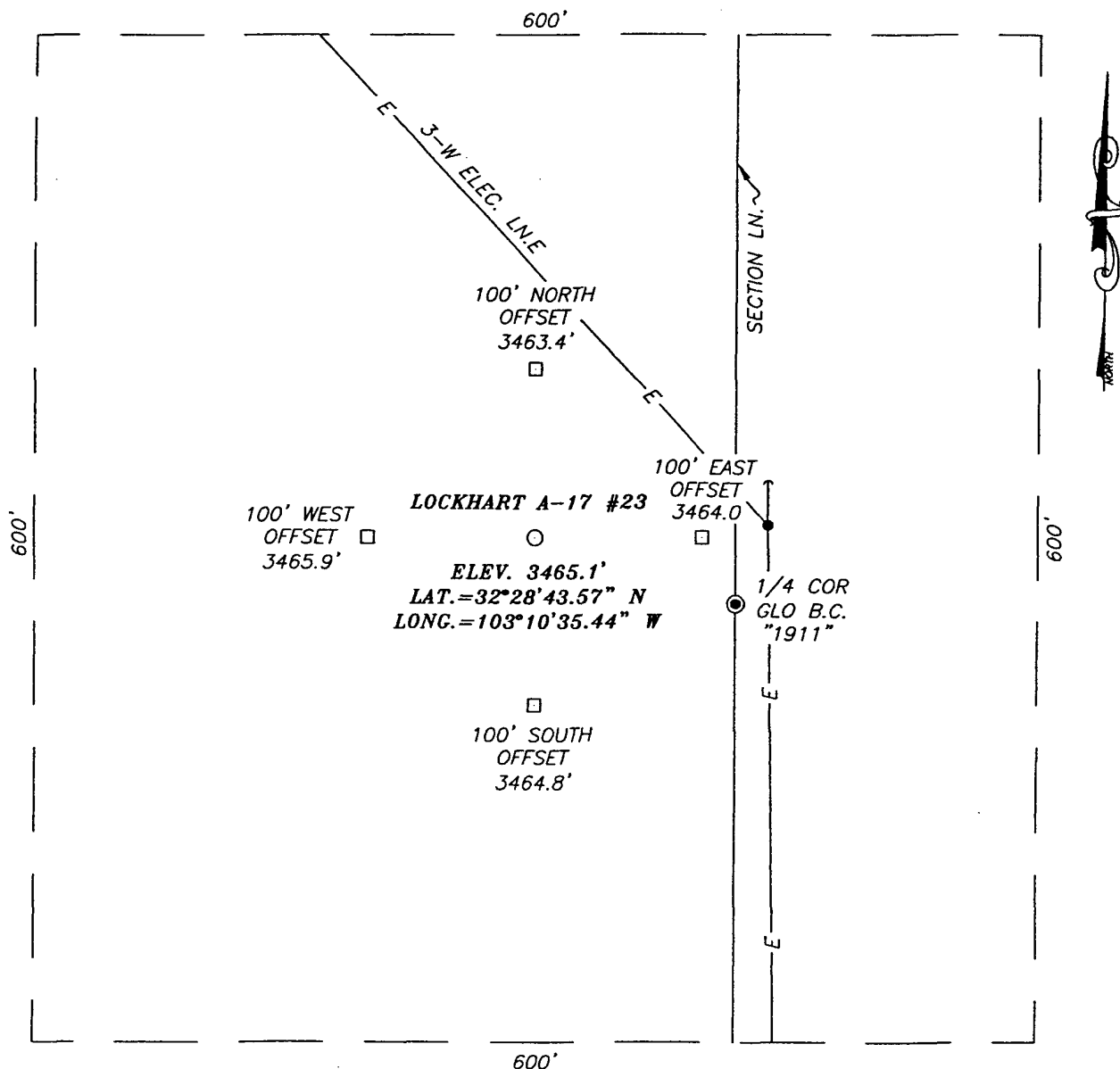
Bottom Hole Location If Different From Surface

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

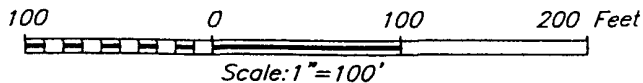
	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. <u>Lana Williams</u> Signature <u>Lana Williams</u> Printed Name <u>Eng. Tech</u> Title <u>7/27/06</u> Date
	SURVEYOR CERTIFICATION I hereby certify that the well 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. DECEMBER 16, 2005 Date Surveyed JR Signature & Seal of Professional Surveyor
	05.11.1981
	Certificate No. GARY EIDSON 12641 RONALD J. EIDSON 3239

SECTION 17, TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. #207 AND HILL RD., GO SOUTH ON ST. HWY. #207 FOR APPROX. 0.3 MILES. TURN RIGHT (WEST-THRU CATTLEGAUD) AND GO APPROX. 0.9 MILES TO AN INTERSECTION. TURN RIGHT AND CONTINUE ON APPROX. 0.1 MILES, TURN LEFT (WEST) AND GO APPROX. 0.1 MILES TO THE EXISTING STATE DA #9 WELL. THIS LOCATION IS APPROX. 400' WEST.



APACHE CORPORATION

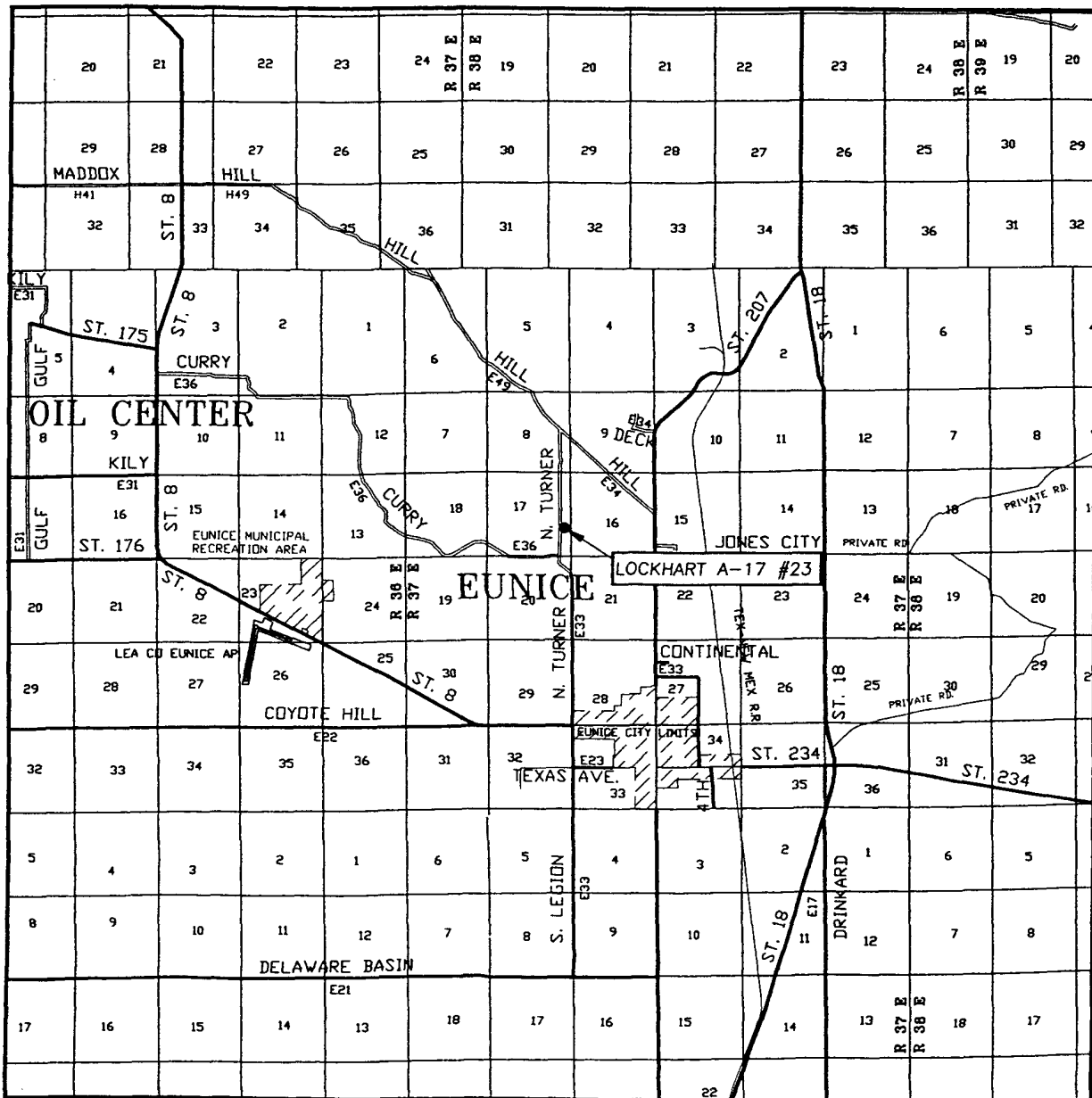
LOCKHART A-17 #23 WELL
 LOCATED 2630 FEET FROM THE SOUTH LINE
 AND 120 FEET FROM THE EAST LINE OF SECTION 17,
 TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO.

Survey Date: 12/16/06	Sheet 1 of 1 Sheets
W.O. Number: 05.11.1981	Dr By: J.R.
Date: 1/03/06	Rev 1:N/A
Disk: CD#5	05111981
	Scale: 1"=100'



PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 393-3117

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 17 TWP. 21-S RGE. 37-E

SURVEY N.M.P.M.

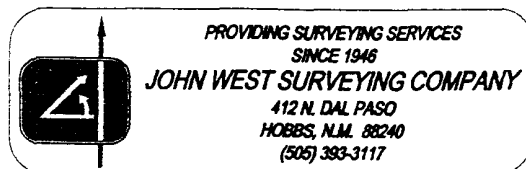
COUNTY LEA

DESCRIPTION 2630' FSL & 120' FEL

ELEVATION 3465'

OPERATOR APACHE CORPORATION

LEASE LOCKHART A-17



This topographic map depicts a section of land with various features. A central rectangular area is labeled "LOCKHART A-17 #23". To the right, a road labeled "HILL RD." runs diagonally. A vertical road labeled "N. TURNER" is also present. A dashed line labeled "PIPELINES" runs vertically. The map includes contour lines with elevations such as 3500, 3492, 3487, 3480, 3462, 3457, 3461, 3474, 3506, 3509, 3520, and 3507. Several areas are marked as "Gravel Pit" or "Gravel Pits". The map is divided into sections numbered 7, 8, 9, 16, 17, 18, 19, 20, and 21. A dashed line labeled "LINE" is visible on the left side.

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

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

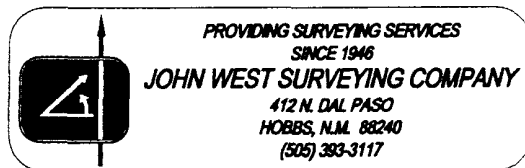


EXHIBIT "A"
Lockhart A-17 #23
DRILLING PROGRAM

- 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	1247'
Yates	2651'
Queen	3418'
Grayburg	3695'
San Andres	3977'
Glorieta	5171'
Blinebry	5658'
Tubb	6145'
Drinkard	6472'
Abo	6708'
TD	6875'

- 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	Blinebry@5658' Tubb@6145' Drinkard@ 6472'
Gas	None anticipated
Fresh Water	None anticipated

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>ESTIMATED TOC -</u>
<u>SIZE</u>	<u>SIZE</u>	<u>GRADE</u>	<u>PER</u>	<u>DEPTH</u>	<u>SACKS</u>	<u>REMARKS</u>
	OD / ID		FOOT		CEMENT	
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#	6875'	1,400	TOC - Surface Float Collar set @ 6830"/ 10.10 ppg Brine Mud; 141 ° F Est. Static Temp; 117 ° F Est. Circ. Temp.

B. Proposed Cement Program:

<u>CASING</u>	<u>LEAD SLURRY</u>	<u>TAIL SLURRY</u>	<u>DISPLACEMENT</u>
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</u> - 70 BC (HH:MM)-4:00;	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

<u>CASING</u>	<u>LEAD SLURRY</u>	<u>TAIL SLURRY</u>	<u>DISPLACEMENT</u>
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</u> BC (HH:MM)-4:00;	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
3675 ft	x	0.1733 cf/ft	with 159% excess	=	1649.5 cf
1900 ft	x	0.1733 cf/ft	with 85% excess	=	609.0 cf
40 ft	x	0.1305 cf/ft	with 0% excess	=	5.2 cf (inside pipe)
TOTAL SLURRY VOLUME					= 2514.1 cf
					= 447.8 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 dacterial 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.

EXHIBIT "B"
Lockhart A-17 #23

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

No H₂S is anticipated.

EXHIBIT "C"

SURFACE USE AND OPERATIONS PLAN
CULTURAL RESOURCES SURVEY
APPROXIMATE REHABILITATION SCHEDULE

LOCALITY: Lockhart A-17 #23
OPERATOR: APACHE CORPORATION

LOCATION: SE ¼ OF SECTION 17, T21S-R37E, N.M.P.M.
LEA COUNTY, NEW MEXICO

SUBMITTED TO:

UNITED STATES DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE
620 EAST GREENE STREET
CARLSBAD, NEW MEXICO 88220-6292
TELEPHONE 505-234-5972

This plan is submitted to provide permitting agencies with information necessary to allow an appraisal of the environmental effects associated with the proposed drilling operations. Within the context of typical drilling operations, this plan provides for protection of surface resources and other environmental components. This plan has been developed in conformity with the United States Geological Survey NTL-6 guidelines, Bureau of Land Management Oil and Gas Order No. 1, and in connection and consultation with the private surface owner of record, if other than the United States of America, as well as the Roswell District Office for the Bureau of Land Management and the United States Department of the Interior personnel.

PART #1:

1) Surface Location:

SE ¼ of Section 17, Township 21 South, Range 37 East, N.M.P.M.
Lea County, New Mexico
2630' FSL, 120' FEL, Lot No. I
See attached Exhibits "D" and "E"

2) Bottom Hole Location:

SE ¼ of Section 17, Township 21 South, Range 37 East, N.M.P.M.
Lea County, New Mexico
2630' FSL, 120' FEL, Lot No. I
See attached Exhibits "D" and "E"

3) Leases Issued: NMLC-032096-A

4) Record Lessee:

Apache Corporation	75%
Chevron USA	25%

5) Acres in Lease:

Township 21 South, Range 37 East, NMPM
Section 17: W1/2SW1/4, E1/2NE1/4, NE1/4SE1/4
Section 27: N1/2
Section 35: NW1/4NW1/4, E1/2NM1/4

6) Acres Dedicated to Well:

There are 40.00 acres dedicated to this well, which takes in the UL 1 of Section 17, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico.

PART #2:

1) Existing Roads:

Exhibits "E-1" & "E-2" comprise maps showing the proposed well site in relation to existing roads. From the intersection of State Highway 207 (Main Street) and State Highway 8 in Eunice, New Mexico, go 1/0 miles west on Highway 8 and then turn right (north) on Turner Road. Go 2 6/10 miles and then turn right (east) and go 3/10 of a mile to location as illustrated on Exhibit "E-2".

2) Planned Access:

- A. Length and Width: Existing lease/access roads will be used into the well site. Application for a buried pipeline will be made if it becomes necessary.
- B. Construction: The existing roads will be lightly graded and topped with compacted caliche as needed.
- C. Turnouts: None required.
- D. Culverts: None required.
- E. Cuts and Fills: As needed.
- F. Gates and Cattleguards: None required.

3) Location of Existing Wells:

Exhibit "F" shows existing wells within a 1-mile radius of the proposed well.

4) Location of Existing and/or Proposed Facilities:

- A. There are production facilities within the area of the Lockhart Lease.
- B. If the oil well proves to be commercial, any necessary production facilities will be installed on the drilling pad, and flow lines will be installed along the proposed and existing roads to the production facilities and storage tanks. See Exhibit "E-3" for flow-line route.

5) Location and Type of Water Supply:

Apache Corporation plans to drill the proposed well with fresh and brine water which will be transported by truck over proposed and existing access roads.

6) Source of Construction Materials:

Caliche for surfacing access roads and the wellsite pad will be obtained from the location itself or from BLM pits in the area.

7) Method of Handling Waste Material:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system.
- E. Oil produced during operation will be stored in tanks until sold.
- F. Apache Corporation will comply with current laws and regulations pertaining to the disposal of human waste.
- G. All waste materials will be contained to prevent scattering by the wind and will be removed from the well site within 30 days after drilling and/or completion operations are finished.

8) Ancillary Facilities: None planned.

9) Well Site Layout:

- A. Exhibit "G" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area have been staked and flagged.
- B. Mat Size: 150' x 210' plus reserve pits as shown on Exhibit "G".
- C. Cut & Fill: Only minor leveling of the drilling site is anticipated.
- D. The surface will be topped with compacted caliche and the reserve pits will be lined with 20 mil plastic.

- 10) Plans for Restoration of the Surface:
- A. After completion of drilling and/or completion operations, all equipment and other material, not needed for operations, will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in as aesthetically pleasing a condition as possible.
 - B. Any unguarded pits containing fluids will be fenced until they are filled.
 - C. If the proposed well is non-productive, Apache Corporation will comply with all rehabilitation and/or vegetation requirements of the Bureau of Land Management, and such rehabilitation will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment.
- 11) Other Information:
- A. Topography: The wellsite and access road are located in the Querecho Plains and are relatively flat.
 - B. Soil: The proposed location, access road and production facilities consist of sandy soil. Slope in the proposed area ranges from zero (0) to five (5) degrees.
 - C. Flora and Fauna: Vegetation is one of a grassland environment and a scrub-grass, scrub disclimax community. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
 - D. Ponds and Streams: There are no ponds, lakes, streams or feeder creeks in the immediate area.
 - E. Residences and Other Structures: There are no occupied residences or other structures on or near the proposed location.
 - F. Land Use: The land is used for grazing cattle.
 - G. Surface Ownership: The surface is owned by the Miller Deck Estate , c/o Bank of America NA, attention Tim Wolters, PO Box 270, Midland, TX 79701, 432-685-2064.
 - H. Archaeological, Historical, and Other Cultural Sites:
Don Clifton, Archaeological Consultant, of Pep, New Mexico, will be conducting an archaeological survey of the proposed well which covers the drilling location, production facilities, and access road, including a corridor along said access road for power and flow lines. His report will be filed under separate cover.
 - I. Senior Representative (Manager, Engineering & Production):
Ross Murphy
Apache Corporation
Suite 1500 – Two Warren Place
6120 South Yale Avenue
Tulsa, Oklahoma 74136
(918) 491-4834
- Project (Operations Engineer):
Kevin Mayes
Apache Corporation
Suite 1500 – Two Warren Place
6120 South Yale Avenue
Tulsa, Oklahoma 74136
(918) 491-4972
- Drilling Operations (Operations Engineer):
Terry Gilbert
Apache Corporation
Suite 1500 – Two Warren Place
6120 South Yale Avenue
Tulsa, Oklahoma 74136
(918) 491-4801

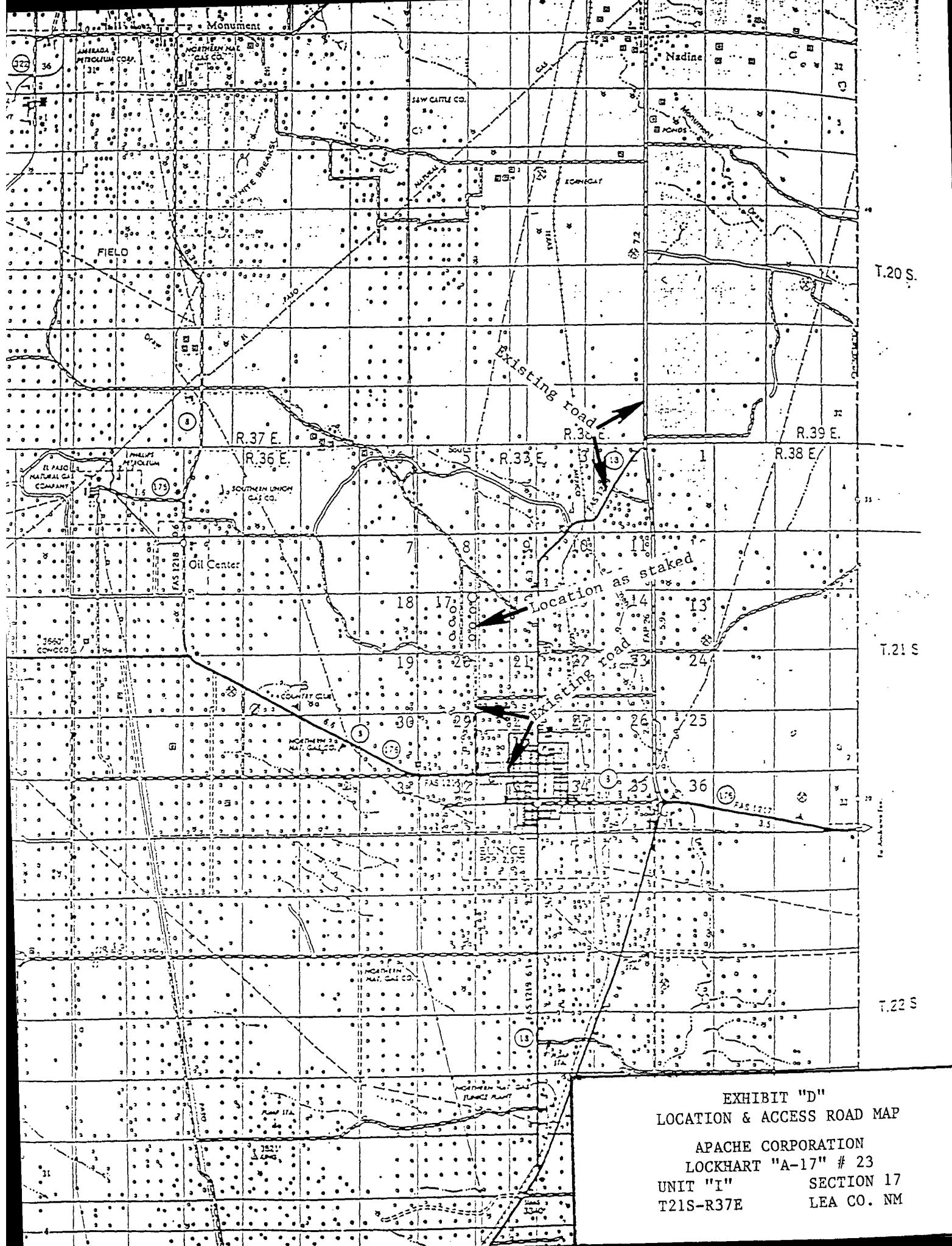
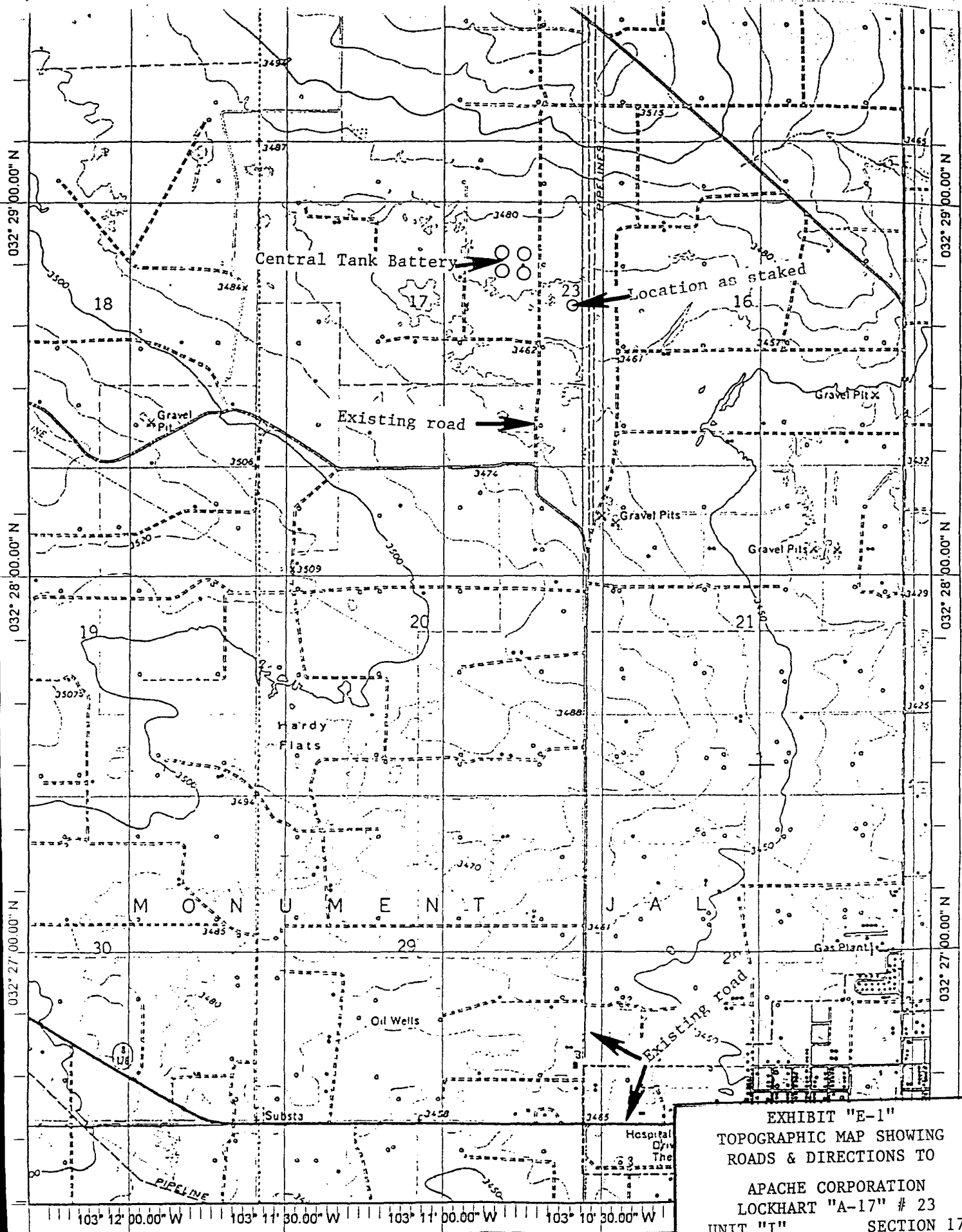


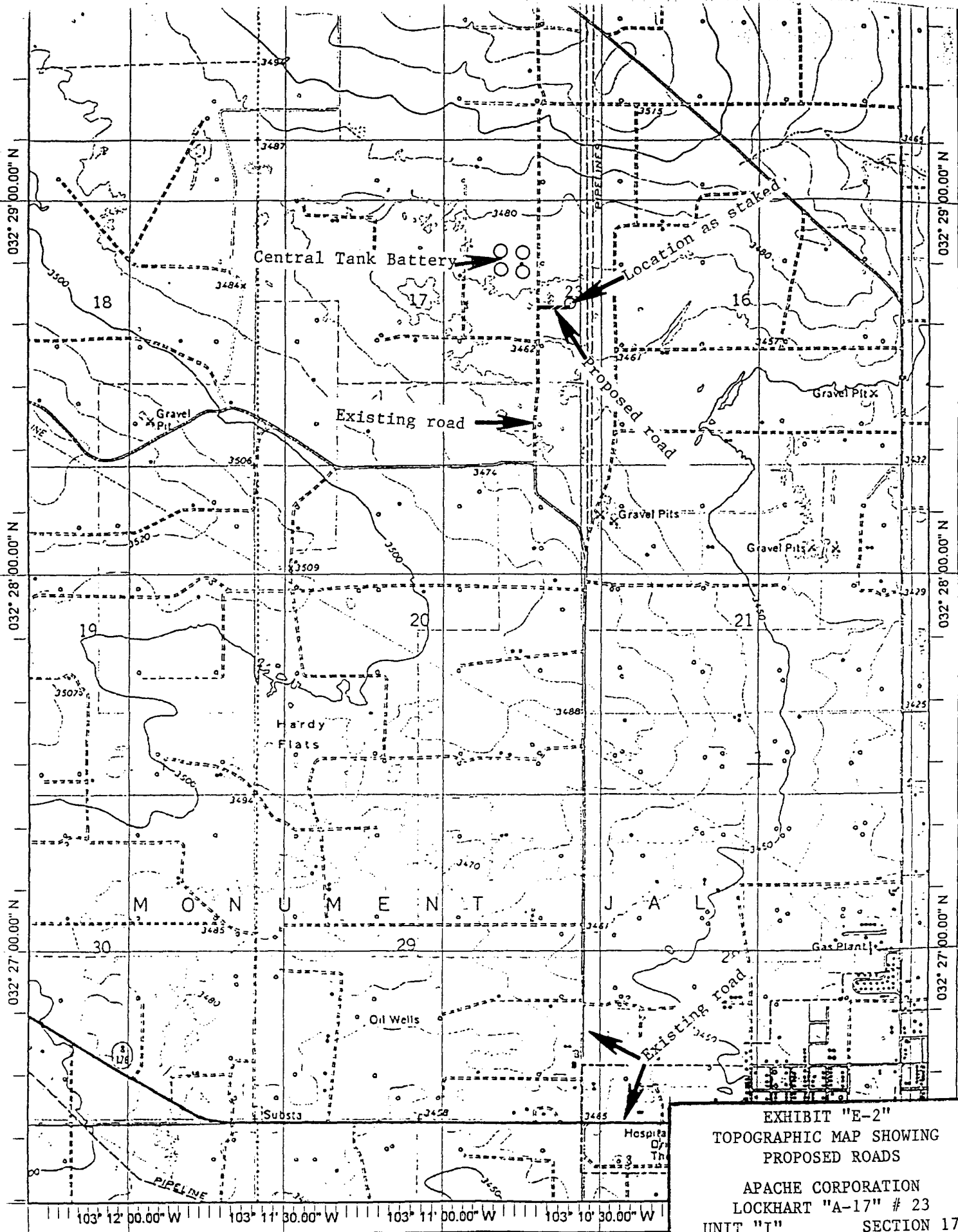
EXHIBIT "D"
LOCATION & ACCESS ROAD MAP
APACHE CORPORATION
LOCKHART "A-17" # 23
UNIT "I" SECTION 17
T21S-R37E LEA CO. NM



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EXHIBIT "E-1"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

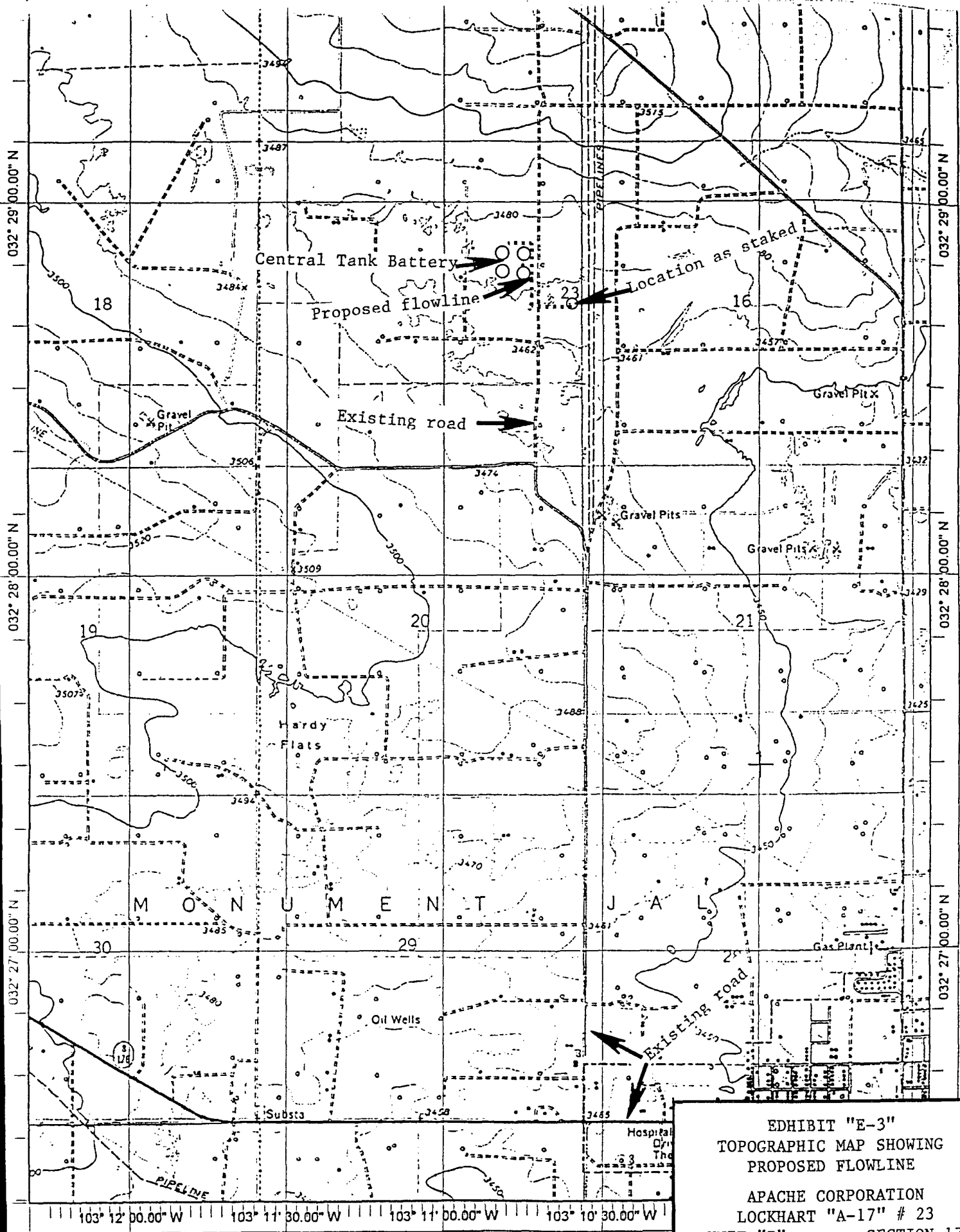
APACHE CORPORATION
LOCKHART "A-17" # 23
UNIT "I" SECTION 17
T21S-R37E LEA CO. NM



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EXHIBIT "E-2"
TOPOGRAPHIC MAP SHOWING
PROPOSED ROADS

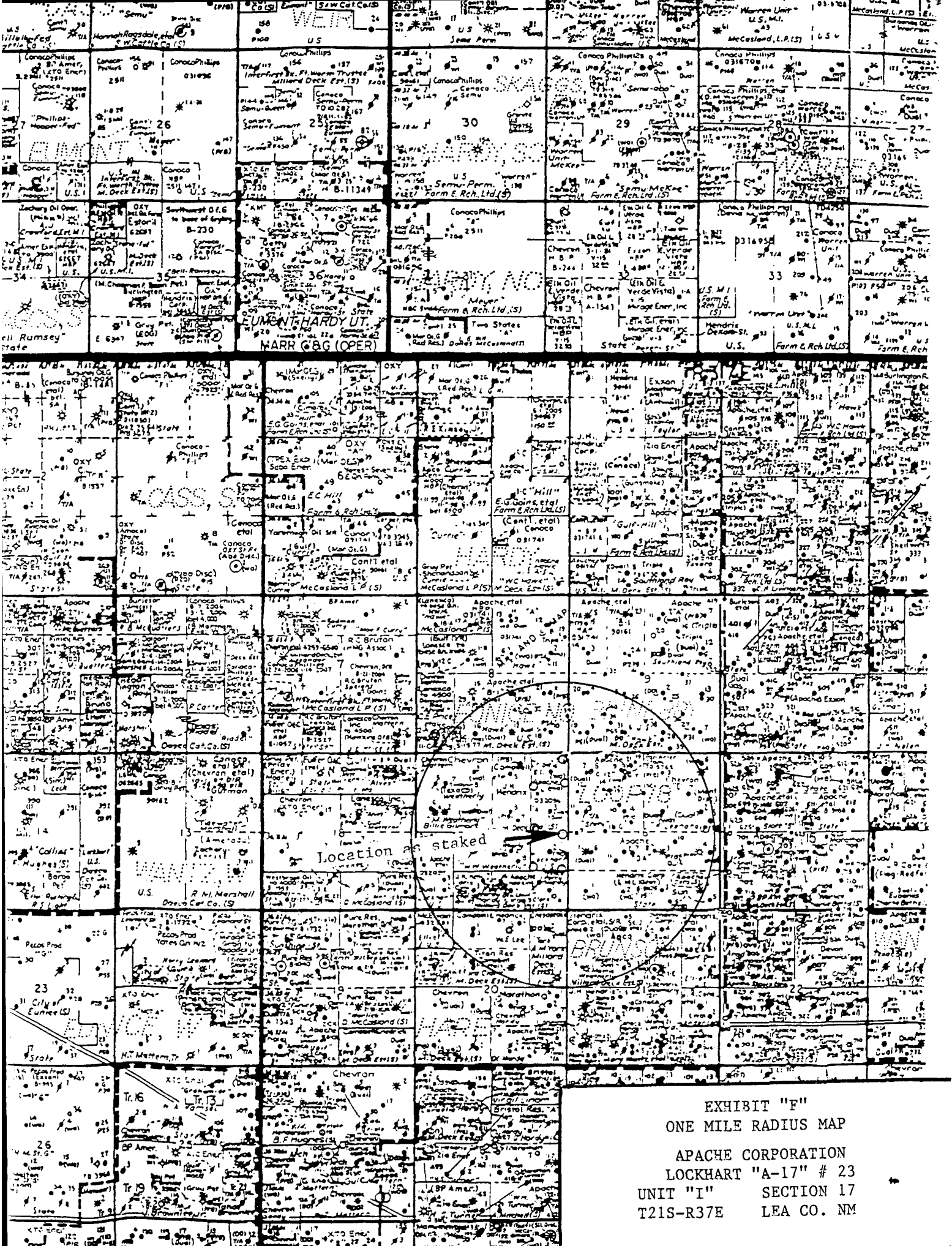
APACHE CORPORATION
LOCKHART "A-17" # 23
UNIT "I" SECTION 17
T21S-R37E LEA CO. NM



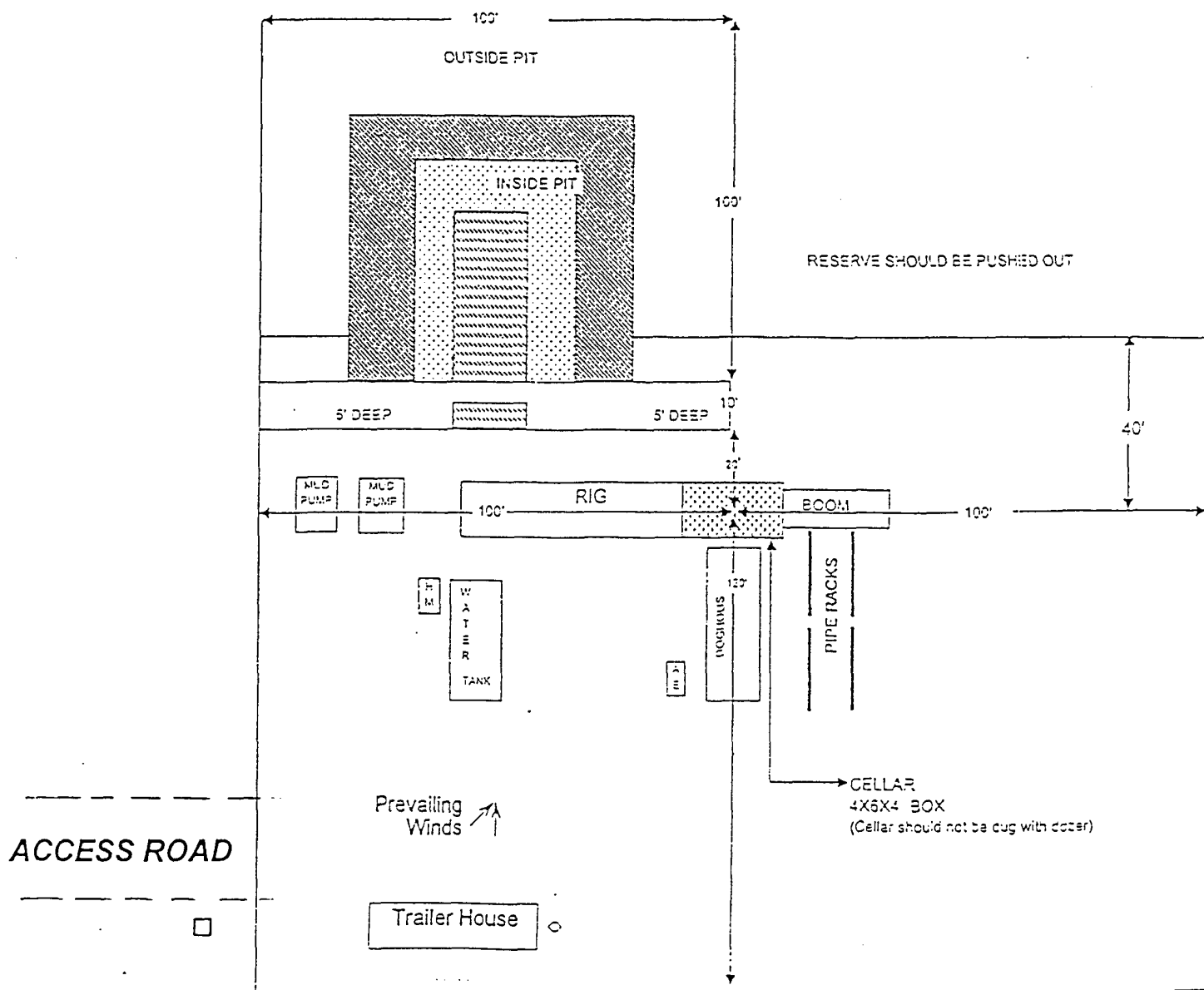
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EDHIBIT "E-3"
TOPOGRAPHIC MAP SHOWING
PROPOSED FLOWLINE

APACHE CORPORATION
LOCKHART "A-17" # 23
UNIT "I" SECTION 17
T21S-R37E LEA CO. NM



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

- Wind Direction Indicators (wind sock or streamers)
- △ H2S Monitors (alarms at bell nipple and shale shaker)
- Briefing Areas
- Remote BOP Closing Unit
- Sign and Condition Flags

Locate

EXHIBIT "G"
RIG LAY OUT PLAT
APACHE CORPORATION
LOCKHART "A-17" # 23
UNIT "I" SECTION 17
T21S-R37E LEA CO. NM

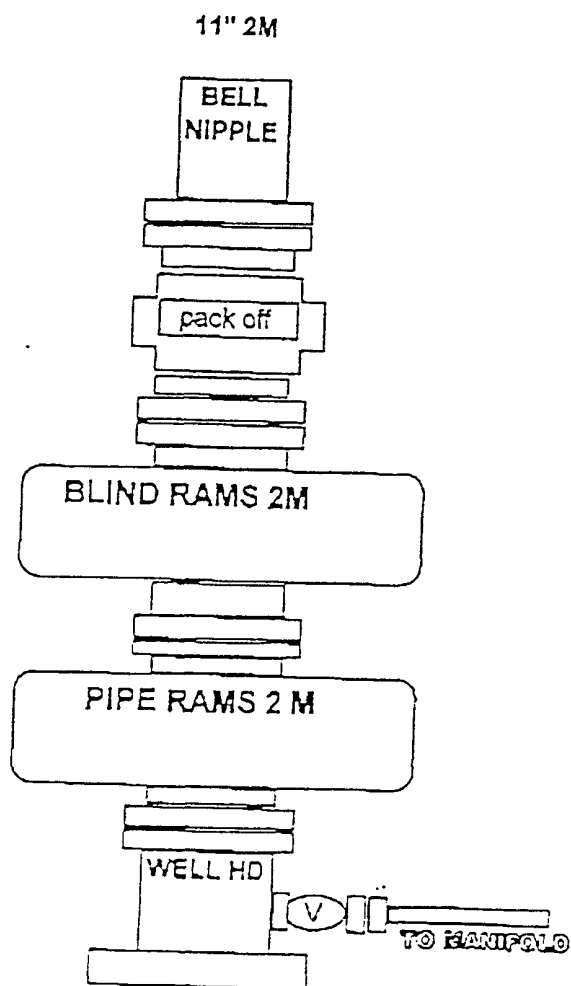


EXHIBIT "H"
 SKETCH OF B.O.P. TO BE USED ON
 APACHE CORPORATION
 LOCKHART "A-17" # 23
 UNIT "I" SECTION 17
 T21S-R37E LEA CO. NM

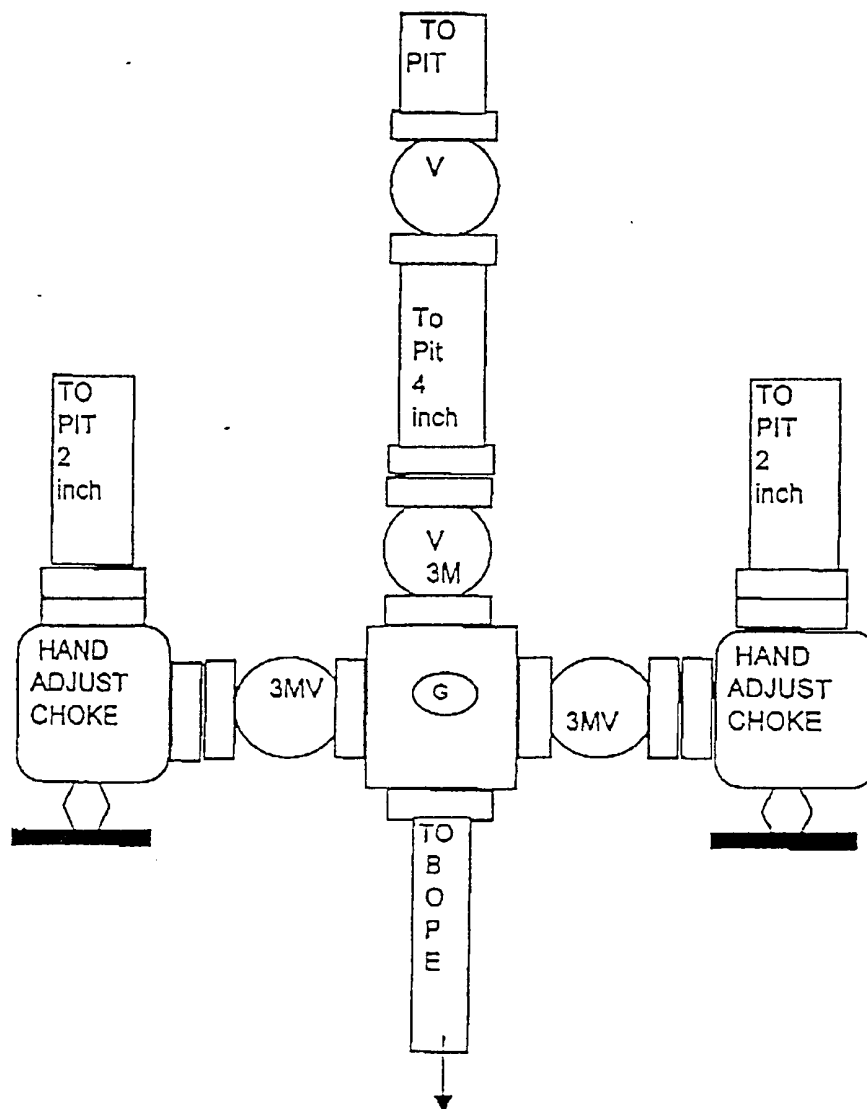


EXHIBIT "H-1"
CHOKE MANIFOLD

APACHE CORPORATION
LOCKHART "A-17" # 23
UNIT "I" SECTION 17
T21S-R37E LEA CO. NM

CONDITIONS OF APPROVAL - DRILLING

Well Name & No. Lockhart A-17 # 23
Operator's Name: Apache Corporation
Location: 2630' FSL, 120' FEL, SEC 17, T21S, R37E, Lea County, NM
Lease: LC-032096A

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: 20 inch 8 5/8 inch 5 1/2 inch

C. BOP tests

2. A Hydrogen Sulfide (H₂S) Drilling Plan should be activated prior to drilling into the N/A Formation. A copy of the plan shall be posted at the drilling site.

3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

7. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

II. CASING:

1. The 8 5/8 inch surface casing shall be set ABOVE THE SALT, AT LEAST 25 feet INTO THE RUSTLER ANHYDRITE @ APPROXIMATELY 1300 FEET, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the 5-1/2 inch production casing is cement shall CIRCULATE TO THE SURFACE.

3. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 8 5/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) is 2000 psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- A variance to test the _____ to the reduced pressure of _____psi with the rig pumps is approved.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

IV. The mud used to drill the conductor and 8 5/8 inch well bores will be a fresh water based mud.

V. Engineers can be reached at 505-706-2779 for any variances that might be necessary.

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-144
June 1, 2004

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</u>		Telephone: <u>918-491-4980</u>		e-mail address: <u>lana.williams@apachecorp.com</u>	
Address: <u>6120 S. YALE STE. 1500, TULSA, OK</u>					
Facility or well name: <u>LOCKHART A-17 # 23</u>		API #: <u>30-025-38204</u>		U/L or Otr/Otr <u>I</u> Sec <u>17</u> T <u>21S</u> R <u>37E</u>	
County: <u>LEA</u>		Latitude		Longitude	
NAD: 1927 <input type="checkbox"/> 1983 <input type="checkbox"/>					
Surface Owner: Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Indian <input type="checkbox"/>					
Pit			Below-grade tank		
Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/>			Volume: <u> </u> bbl Type of fluid: <u> </u>		
Workover <input type="checkbox"/> Emergency <input type="checkbox"/>			Construction material: <u> </u>		
Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/>			Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. <u> </u>		
Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>20</u> mil Clay <input type="checkbox"/>					
Pit Volume <u>7000</u> bbl					
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) <u>~ 72'</u>			Less than 50 feet		(20 points)
			50 feet or more, but less than 100 feet		(10 points) 10
			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.)			Yes		(20 points)
			No		(0 points) 0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)			Less than 200 feet		(20 points)
			200 feet or more, but less than 1000 feet		(10 points)
			1000 feet or more		(0 points) 0
			Ranking Score (Total Points)		10

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:

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: 12/7/2006

Printed Name/Title TERRY GILBERT

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:

Printed Name/Title CHRIS WILLIAMS / DIST. SUPERV

Signature 

Date: 12/8/06