

UNITED STATES OF AMERICA  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
New Mexico Oil Conservation  
1625 N. French Drive  
Hobbs, NM 88240

Expires: February 28, 1995

5. LEASE DESIGNATION AND SERIAL NO.

NMLC-032096-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO. 24430  
Lockhart A-17 #10

9. API WELL NO.

30-025-37379

10. FIELD AND POOL OR WILDCAT 96601  
Lara, Eunice, San Andres, (24150) East11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA

Sec. 17, T21S-R37E, NMPM

12. COUNTY FOR PARISH

Lea

13. STATE

NM

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 (OGRID 0873) ✓

3. ADDRESS AND TELEPHONE NO.

Agent: P.O. Box 8309, Roswell, NM 88202 505-624-9799 (Bonnie Jones)

Apache: 6120 S. Yale Ave., #1500, Tulsa, OK 74136 918-491-4907 (Glenn Bone)

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

At Surface 330' FNL, 990' FEL (NE 1/4 NE 1/4), Unit A

At proposed prod. Zone

330' FNL, 990' FEL (NE 1/4 NE 1/4), Unit A

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

3.2 miles North of Eunice, NM

15. DISTANCE FROM PROPOSED \*

LOCATION TO NEAREST

330'

PROPERTY OR LEASE LINE, FT.

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

16. NO. OF ACRES IN LEASE

640.00

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40.00

18. DISTANCE FROM PROPOSED LOCATION \*

TO NEAREST WELL, DRILLING, COMPLETED

935'

OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

4,350'

20. ROTARY OR CABLE TOOLS  
Rotary

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

3493' GR

Carrizo Controlled Water Basin

22. APPROX. DATE WORK WILL START \*

ASAP

23. PROPOSED CASING AND CEMENTING PROGRAM

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

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHEDAnticipated Duration of Program: Drilling - 8 days  
Completion - 21 days  
See attached Exhibit A for complete Drilling Program

## EXHIBITS

Exhibit A: Drilling Program

Exhibit D: Survey Plat

Exhibit G: Rig Layout

Exhibit B: H<sub>2</sub>S 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 6-22-05

(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/ Joe G. Lara

TITLE

FIELD MANAGER

DATE

JUL 14 2005

\*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

EXHIBIT "A"  
Lockhart A-17 # 10

**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	1,268'
Yates	2,677'
Seven Rivers	2,892'
Queen	3,432'
Penrose	3,538'
Grayburg	3,699'
Grayburg B	3,827'
Grayburg C	3,930'
San Andres	3,989'
TD	4,350'

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@3,699' San Andres@3,989'
Gas	Grayburg@3,699' San Andres@3,989'
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>PER</u>	<u>FOOT</u>	<u>DEPTH</u>	<u>SACKS</u>	<u>REMARKS</u>
	<u>OD / ID</u>	<u>GRADE</u>			<u>CEMENT</u>	
12 ¼"	8 5/8" 8.097"	J55 STC	24#	400'	325	TOC - Surface 8.9 ppg Water-based Mud; 83 ° F Est. Static Temp; 80 ° F Est. Circ. Temp.
7 7/8"	5 ½" 4.892"	J55 LTC	17#	4,350'	900	TOC – Surface Float Collar set @ 4,306'/ 10.0 ppg Brine Mud; 120 ° F Est. Static Temp; 103 ° 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"	None	325 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water 439 Vol. Cu Ft 1.35 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 (HR:MM)-3:00	23.5 bbls Fresh Water @ 8.34 ppg

8 5/8" Casing: Volume Calculations:

400 ft	x	0.4127 cf/ft	with 156% excess	=	423.0 cf
40 ft	x	0.3576 cf/ft	with 0% excess	=	14.3 cf (inside pipe)
TOTAL SLURRY VOLUME					= 437.3 cf
					= 77.9 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"	500 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 1220 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> <u>BC (HH:MM)-4:00;</u>	300 sacks (50:50) Poz (Fly Ash): Class C Cement + 5% bwow Sodium Chloride + 0.003 gps FP-6L 387 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;	99.9 bbls Fresh Water @ 8.33 ppg

5 1/2" Casing: Volume Calculations:

400 ft	x	0.1926 cf/ft	with 0% excess	=	77.0 cf
3000 ft	x	0.1733 cf/ft	with 134% excess	=	1216.6 cf
1350 ft	x	0.1733 cf/ft	with 62% excess	=	379.0 cf
40 ft	x	0.1305 cf/ft	with 0% excess	=	5.2 cf (inside pipe)
TOTAL SLURRY VOLUME					= 1677.8 cf
					= 298.8 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 – 400'	Weight: 8.6 – 9.2 ppg Viscosity: 33 – 37 sec/1000cc pH: 9-10 Filtrate: NC Chlorides: < 4,000 mg/l	Spud with a Conventional New Gel/Lime "Spud mud". Use NewGel and native solids to maintain a sufficient viscosity to keep the hole clean.
400' – 3,650'	Weight: 8.9 – 10.4 ppg Viscosity: 32 – 35 sec/1000cc pH: 9-10 Filtrate: NC	Drill out from under the surface casing with Fresh Water. Periodically sweep the hole with viscous low water loss pills to help build a filter cake across useable water zones in the redbeds. At 1,300' begin brine additions at the flow line to prevent excess salt leaching. At 1,500' add 2-3% oil for lubricity as needed. Paper should be added at 2 bags after every 100' drilled to control seepage losses. Use Lime to maintain pH at 9-10(below 1,300' only). Mix one gallon of New-55 at flowline every 250 feet drilled to promote solids settling. Sweep hole with 3-ppb of Super Sweep every 500 feet. <span style="float: right;">USE LEACOA ✓</span>
3,650' – TD	Weight: 9.9 – 10.4 ppg Viscosity: 35 – 40 sec/1000cc pH: 9-10 Filtrate: 10-20 cc/30 min	From 3,650' to Total Depth, it is recommended the system be restricted to the steel 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 10-20cc. <span style="float: right;">bacterial</span>

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)**  
41/2" x 3000 psi Kelly valve  
9" x 3000 psi mud cross – H<sub>2</sub>S 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:

Litho-Density, Dual Laterolog/MSFL, Sonic, Caliper from TD-400'  
GR from TD-Surface

C. Coring Program: None planned

D. Mudlogging Program: 3,200 – TD, Samples every 10 ft

V. A. Proposed Mud Program

<u>DEPTH</u>	<u>MUD PROPERTIES</u>	<u>REMARKS</u>
0 – 400'	Weight: 8.6 – 9.2 ppg Viscosity: 33 – 37 sec/1000cc pH: 9-10 Filtrate: NC Chlorides: < 4,000 mg/l	Spud with a Conventional New Gel/Lime "Spud mud". Use NewGel and native solids to maintain a sufficient viscosity to keep the hole clean.
400' – 3,650'	Weight: 8.9 – 10.4 ppg Viscosity: 32 – 35 sec/1000cc pH: 9-10 Filtrate: NC	Drill out from under the surface casing with Fresh Water. Periodically sweep the hole with viscous low water loss pills to help build a filter cake across useable water zones in the redbeds. At 1,300' begin brine additions at the flow line to prevent excess salt leaching. At 1,500' add 2-3% oil for lubricity as needed. Paper should be added at 2 bags after every 100' drilled to control seepage losses. Use Lime to maintain pH at 9-10(below 1,300' only). Mix one gallon of New-55 at flowline every 250 feet drilled to promote solids settling. Sweep hole with 3-ppb of Super Sweep every 500 feet.
3,650' – TD	Weight: 9.9 – 10.4 ppg Viscosity: 35 – 40 sec/1000cc pH: 9-10 Filtrate: 10-20 cc/30 min	From 3,650' to Total Depth, it is recommended the system be restricted to the steel 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 10-20cc.

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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 – H<sub>2</sub>S 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:

Litho-Density, Dual Laterolog/MSFL, Sonic, Caliper from TD-400'  
 GR from TD-Surface

C. Coring Program: None planned

D. Mudlogging Program: 3,200 – TD, Samples every 10 ft

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 1,500 psi.

**EXHIBIT "B"**  
**Lockhart A-17 # 10**

**HYDROGEN SULFIDE DRILLING OPERATIONS PLAN**

**No H<sub>2</sub>S is anticipated.**

EXHIBIT "C"

SURFACE USE AND OPERATIONS PLAN  
CULTURAL RESOURCES SURVEY  
APPROXIMATE REHABILITATION SCHEDULE

LOCALITY: **Lockhart A-17 # 10**  
OPERATOR: **APACHE CORPORATION**

LOCATION: NE¼ OF SECTION 17, T21S-R37E, N.M.P.M.  
LEA COUNTY, NEW MEXICO

SUBMITTED TO:

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
ROSWELL DISTRICT OFFICE  
2909 WEST 2<sup>ND</sup> STREET  
ROSWELL, NEW MEXICO 88201  
TELEPHONE (505) 627-0272

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:

NE¼NE¼ of Section 17, Township 21 South, Range 37 East, N.M.P.M.  
Lea County, New Mexico  
330' FNL, 990' FEL, Unit A  
See attached Exhibits "D" and "E"

2) Bottom Hole Location:

NE¼NE¼ of Section 17, Township 21 South, Range 37 East, N.M.P.M.  
Lea County, New Mexico  
330' FNL, 990' FEL, Unit A  
See attached Exhibits "D" and "E"

3) Leases Issued: NMLC-032096-A

4) Record Lessee:

Apache Corporation	75%
Chevron	25%

5) Acres in Lease:

Township 21 South, Range 37 East, NMPM  
Section 17: W½SW¼, E½NE¼, NE¼SE¼  
Section 27: N½  
Section 35: NW¼NW¼, E½NW¼

Total Acres: 640.00



6) Acres Dedicated to Well:

There are 40.00 acres dedicated to this well, which takes in the NE¼NE¼ 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. The well is approximately 3.2 miles North of Eunice, NM. From the intersection of Main Street (Loop Road 207) and Highway 8 in Eunice, NM, go on Loop road 207 North for 2.7 miles, turn West on Hill Road, go 1.1 mile, turn South 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 A-17 # 10 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.

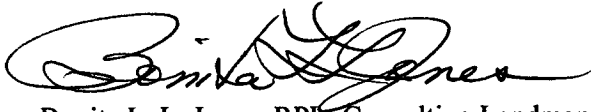
9) Well Site Layout:

- 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 230' 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 6 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. P. O. Box 270, Midland, TX 79701, 432-685-2064. A Surface Damage Release agreement for this tract has been executed by the Miller Deck Estate and Apache Corporation.
  - 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):  
Glenn Bone  
Apache Corporation  
Suite 1500 – Two Warren Place  
6120 South Yale Avenue  
Tulsa, Oklahoma 74136  
(918) 491-4907

## CERTIFICATION

I hereby certify that Apache Corporation has inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Apache Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.



Bonita L. L. Jones, RPL, Consulting Landman  
Agent for Apache Corporation  
P. O. Box 8309  
Roswell, New Mexico 88202-8309  
(505) 624-9799 FAX (505) 624-9799  
E-Mail: bonitaj@cableone.net

Date: June 22, 2005

## DISTRICT I

1625 N. FRENCH DR., HOBBS, NM 86240

Energy, Minerals and Natural Resources Department

Form C-102

## DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

## OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.

Santa Fe, New Mexico 87505

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

## DISTRICT III

1000 Rio Brazos Rd., Artec, NM 87410

## DISTRICT IV

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number <b>30-025-37379</b>	Pool Code <b>24450 9660'</b>	Pool Name <b>Ilare Conice; San Andres, East</b>
Property Code <b>24430</b>	Property Name <b>LOCKHART A-17</b>	Well Number <b>10</b>
OGRID No. <b>0873</b>	Operator Name <b>APACHE CORPORATION</b>	Elevation <b>3493'</b>

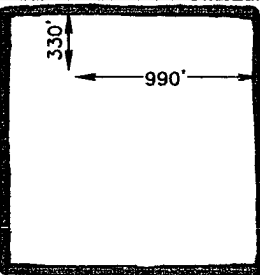
## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	17	21-S	37-E		330	NORTH	990	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 <b>40.00</b>	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</p> <p>Y=542137.3 N X=855852.3 E</p> <p>LAT.=32°29'06.56" N LONG.=103°10'45.55" W</p>		<p><b>OPERATOR CERTIFICATION</b></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><b>Lana Williams</b> Printed Name</p> <p><b>Drilling Clerk II</b> Title</p> <p><b>6/2/05</b> Date</p>
	<p><b>SURVEYOR CERTIFICATION</b></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><b>DECEMBER 16, 2004</b></p> <p>Date Surveyed</p> <p><i>GARY EIDSON</i> Signature and Seal of Professional Surveyor</p> <p><b>GARY EIDSON</b> Printed Name</p> <p><b>04.11.1726</b> Date</p> <p>Certificate No. <b>GARY EIDSON</b> 12641</p>		
	<p><b>LA</b></p>		
	<p><b>12/30/04</b></p>		

DISTRICT I  
1625 N. FRENCH DR., HOBBBS, NM 88240

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

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

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

EXHIBIT D -2

32

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

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	Pool Code	Pool Name
Property Code	Property Name <b>LOCKHART A-17</b>	Well Number <b>10</b>
OGRID No.	Operator Name <b>APACHE CORPORATION</b>	Elevation <b>3493'</b>

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	17	21-S	37-E		330	NORTH	990	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

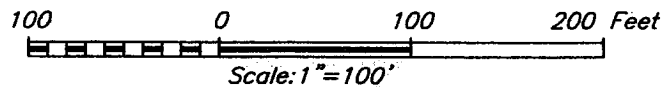
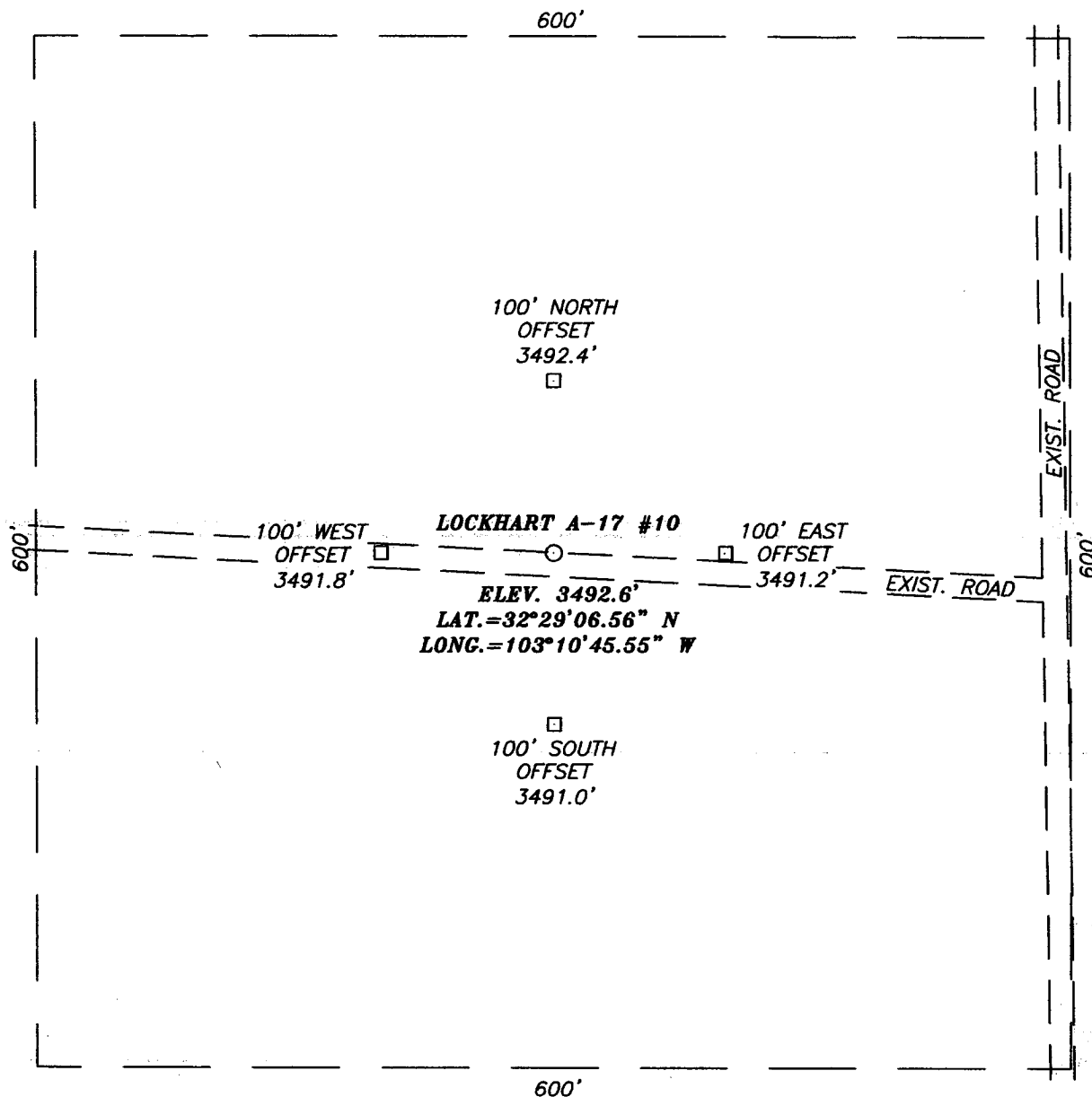
<p>8 17</p> <p>HAWK B-1 #12</p> <p>HAWK B-1 #18</p> <p>LOCKHART A-17 #9</p> <p>LOCKHART A-17 #6</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Lana Williams</i> Signature</p> <p>Lana Williams Printed Name</p> <p>Drilling Clerk II Title</p> <p>6/2/05 Date</p>
	<p><b>SURVEYOR CERTIFICATION</b></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, 2004</p> <p>Date Surveyed LA</p> <p>Signature &amp; Seal of Professional Surveyor</p>
	<p>04.11.1726</p>
	<p>Certificate No. GARY EIDSON 12641</p>

# SECTION 17, TOWNSHIP 21 SOUTH, RANGE 37 EAST

EXHIBIT D-3

LEA COUNTY,

NEW MEXICO



## APACHE CORPORATION

LOCKHART A-17 #10 WELL  
LOCATED 330 FEET FROM THE NORTH LINE  
AND 990 FEET FROM THE EAST LINE OF SECTION 17,  
TOWNSHIP 21 SOUTH, RANGE 37 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.

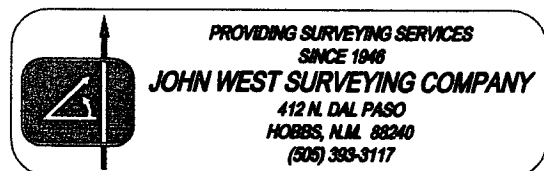
Survey Date: 12/16/04	Sheet 1 of 1 Sheets
W.O. Number: 04.11.1726	Dr By: LA
Date: 12/28/04	Rev 1: N/A
Disk: CD#3	04111726
	Scale: 1" = 100'



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

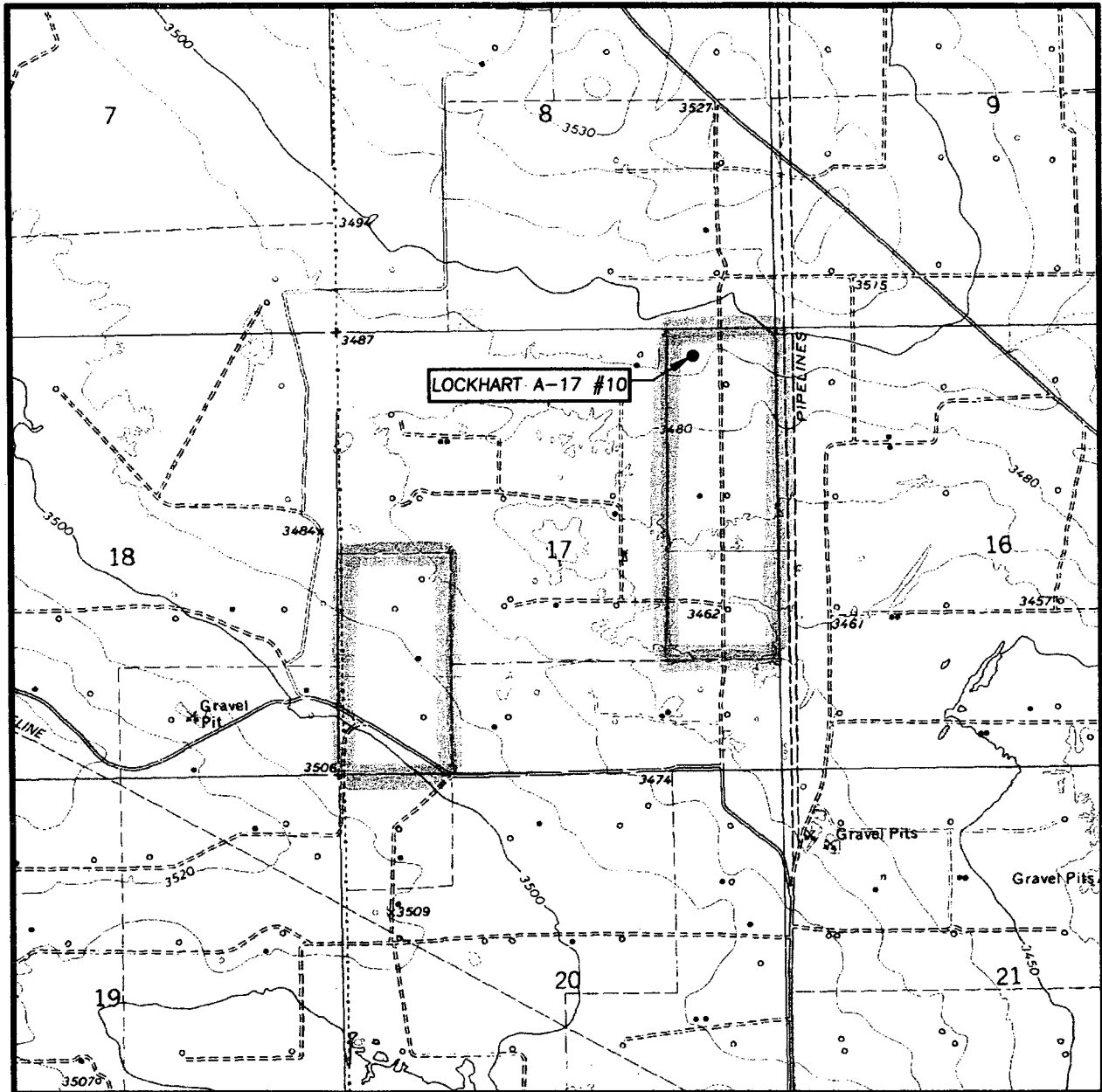


SEC. 17 TWP. 21-S RGE. 37-E  
SURVEY \_\_\_\_\_ N.M.P.M. \_\_\_\_\_  
COUNTY \_\_\_\_\_ LEA \_\_\_\_\_  
DESCRIPTION 330' FNL & 990' FEL  
ELEVATION \_\_\_\_\_ 3493' \_\_\_\_\_  
OPERATOR APACHE CORPORATION  
LEASE LOCKHART A-17



# LOCATION VERIFICATION 1

EXHIBIT E-2



SCALE: 1" = 2000'

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

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

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 330' FNL & 990' FEL

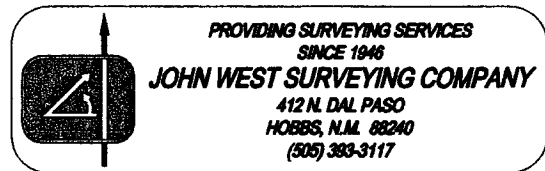
ELEVATION 3493'

OPERATOR APACHE CORPORATION

LEASE LOCKHART A-17

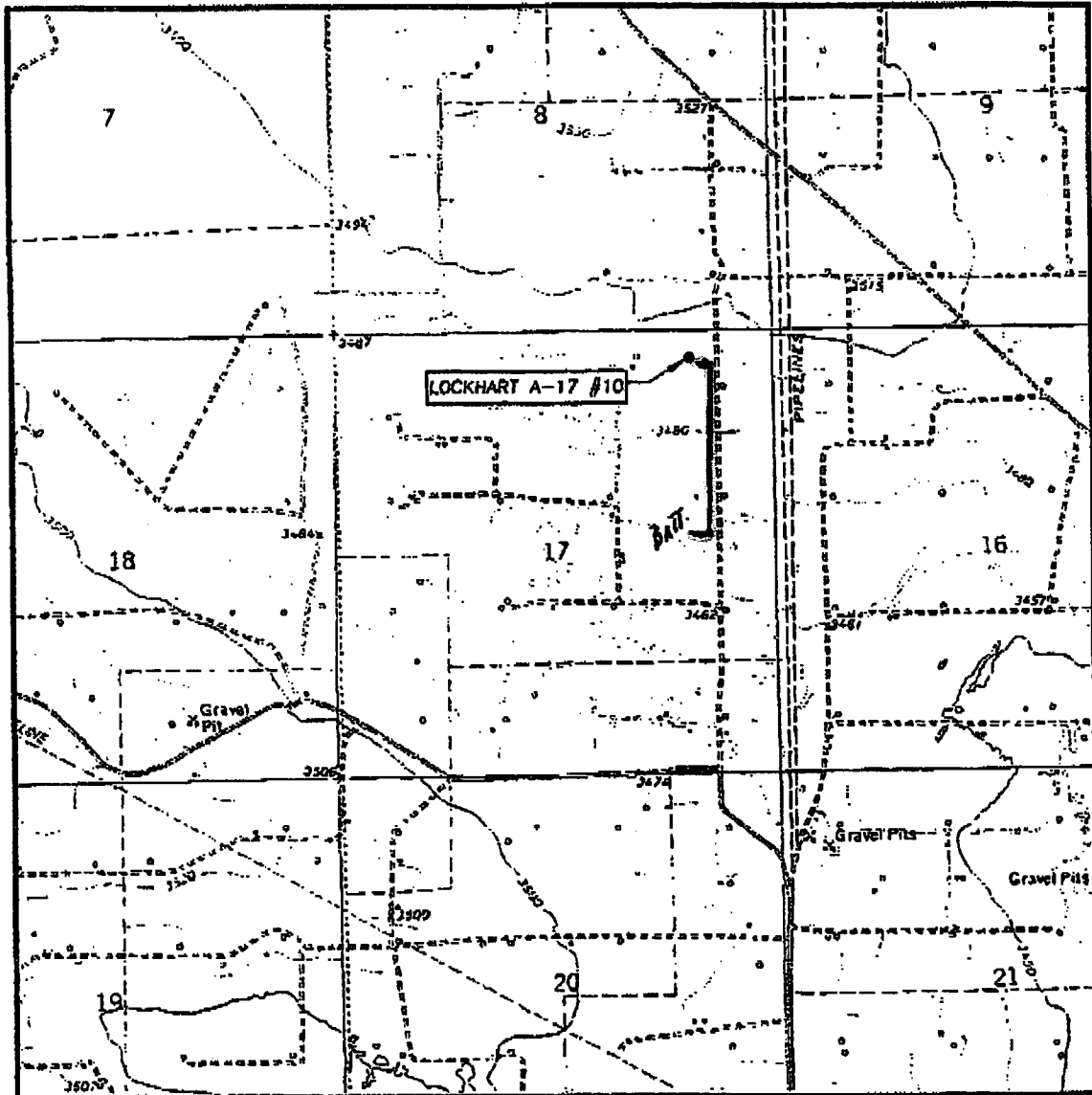
U.S.G.S. TOPOGRAPHIC MAP  
EUNICE, N.M.

LEASE BOUNDARY

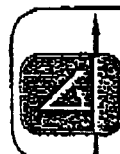




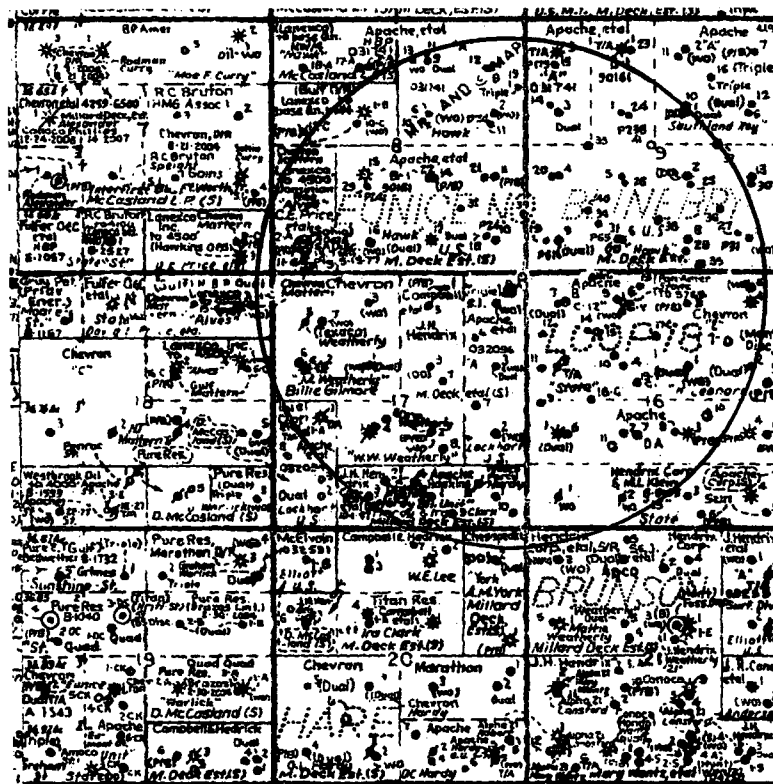
# LOCATION VERIFICATION MAP



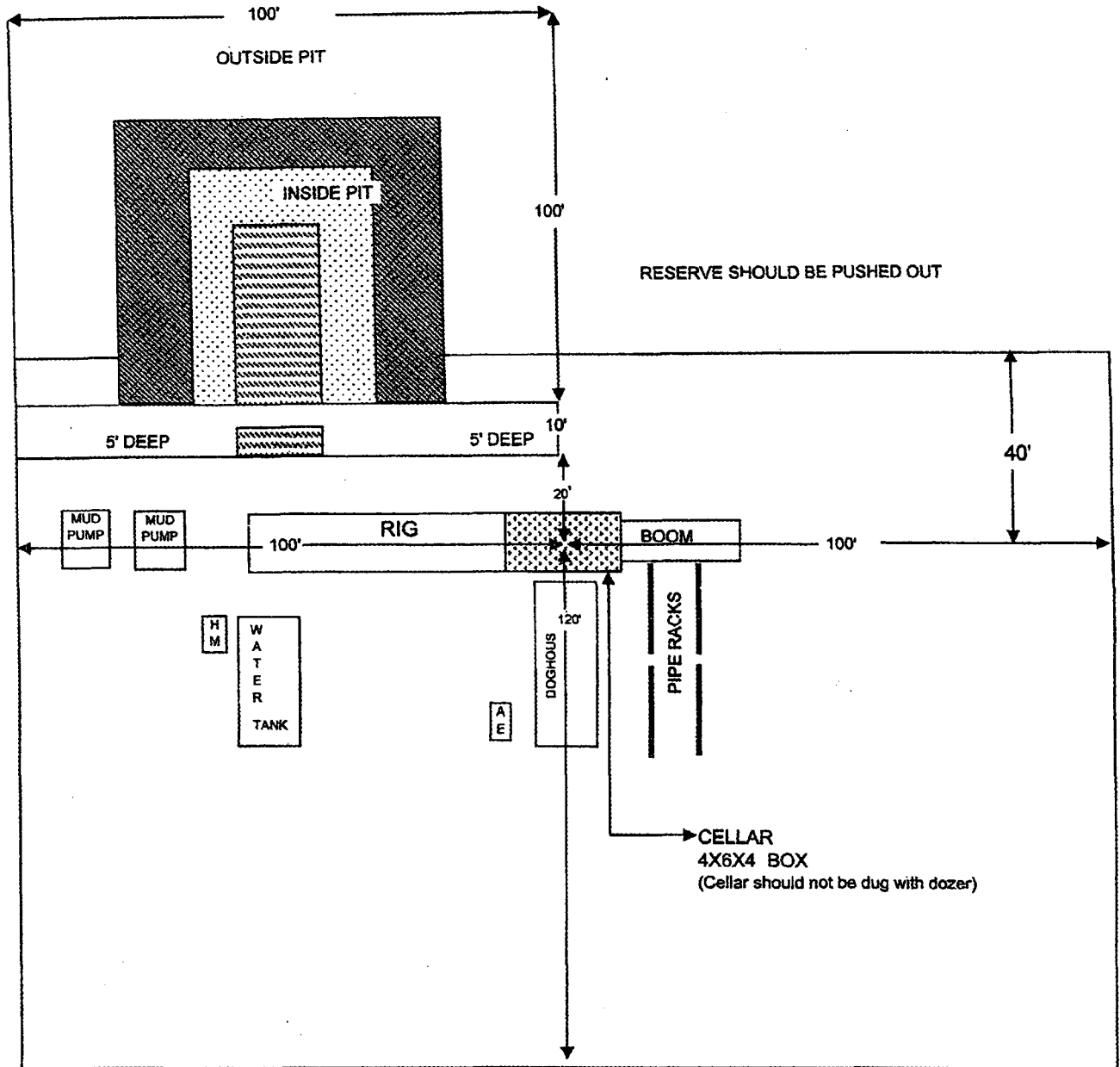
SCALE: 1" = 2000'

CONTOUR INTERVAL:  
EUNICE, N.M. - 10'SEC. 17 TWP. 21-S RGE. 37-ESURVEY N.M.P.M.COUNTY LEADESCRIPTION 330' FNL & 990' FELELEVATION 3493'OPERATOR APACHE CORPORATIONLEASE LOCKHART A-17U.S.G.S. TOPOGRAPHIC MAP  
EUNICE, N.M. Flow linesPROVIDING SURVEYING SERVICES  
SINCE 1948  
**JOHN WEST SURVEYING COMPANY**  
412 N. DAL PASO  
HOBBBS, N.M. 88240  
(505) 353-3117

Lockhart A-17 #10  
NE¼NE¼ of Section 17, T21S-R37E, NMPM



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

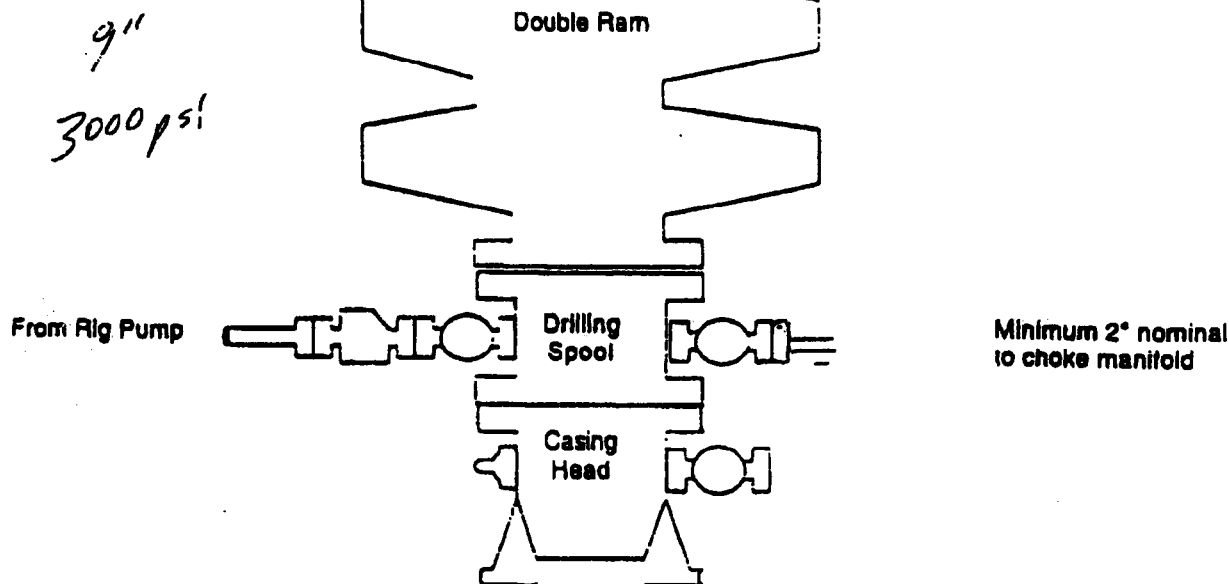


Cellar can be 4X4X4 if using a screw-on wellhead  
Working Pits dug 5' below ground level

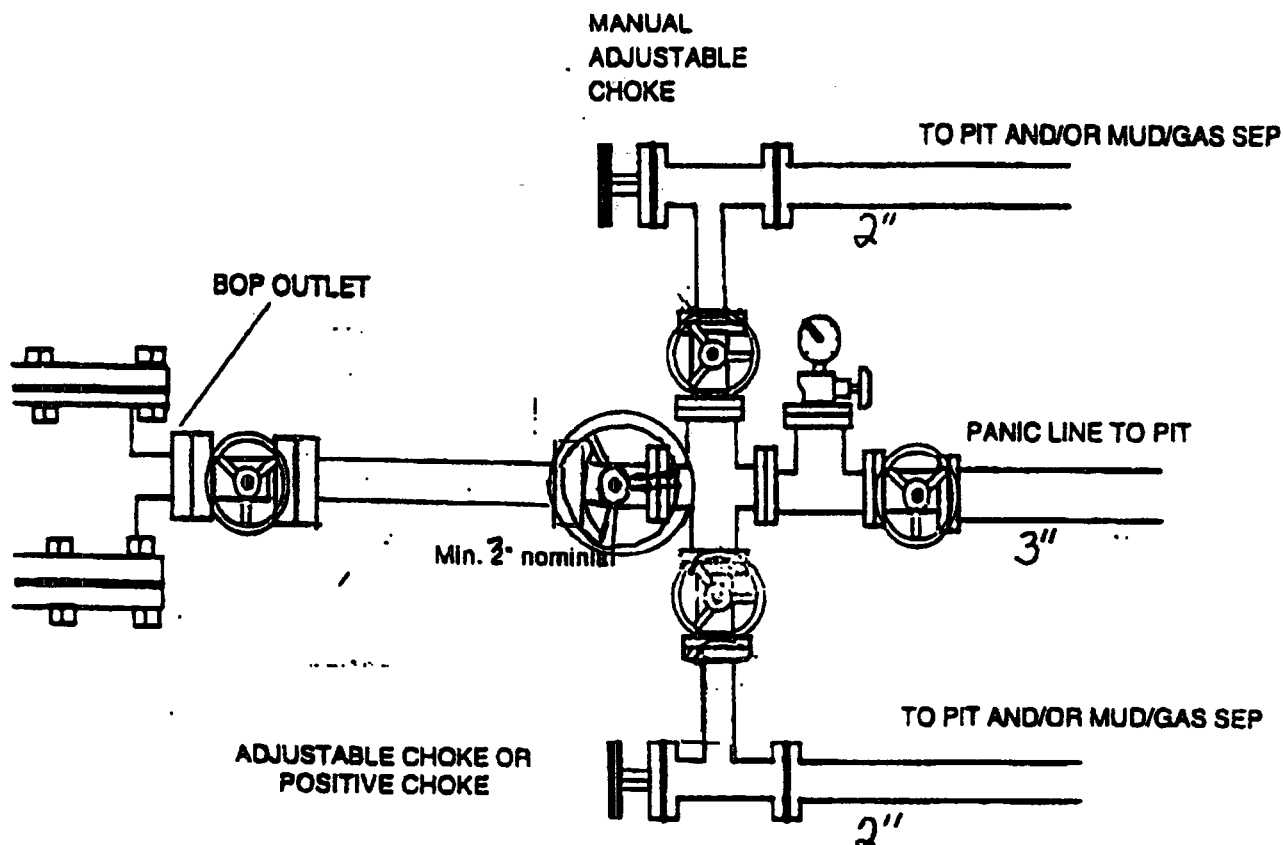
## BOP Schematic

\*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.



## Choke Manifold Schematic



## SPECIAL DRILLING STIPULATIONS

### THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name Apache Corp. Well Name & No. Lockhart A-17 #10  
Location 330 F N L & 990 F E L Sec. 17, T. 21 S, R. 37 E.  
Lease No. LC-032096-A County Lea State New Mexico

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CRF 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

#### I. SPECIAL ENVIRONMENT REQUIREMENTS

- ( ) Lesser Prairie Chicken (stips attached) ( ) Flood plain (stips attached)  
( ) San Simon Swale (stips attached) ( ) Other

#### II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

( X ) The BLM will monitor construction of this drill site. Notify the ( X ) Carlsbad Field Office at (505) 234-5972 ( ) Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

( X ) Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche upon completion of well and it is determined to be a producer.

( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately \_\_\_\_\_ inches in depth. Approximately \_\_\_\_\_ cubic yards of topsoil material will be stockpiled for reclamation.

( ) Other.

#### III. WELL COMPLETION REQUIREMENTS

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

( x ) Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of ½ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

- |   |   |
|---|---|
| ( X ) A. Seed Mixture 1 (Loamy Sites)                 | ( ) B. Seed Mixture 2 (Sandy Sites)                     |
| Side Oats Grama ( <i>Bouteloua curtipendula</i> ) 5.0 | Sand Dropseed ( <i>Sporobolus cryptandrus</i> ) 1.0     |
| Sand Dropseed ( <i>Sporobolus cryptandrus</i> ) 1.0   | Sand Lovegrass ( <i>Eragrostis trichodes</i> ) 1.0      |
|   | Plains Bristlegrass ( <i>Setaria magrostachya</i> ) 2.0 |
| ( ) C. Seed Mixture 3 (Shallow Sites)                 | ( ) D. Seed Mixture 4 (Gypsum Sites)                    |
| Side oats Grama ( <i>Boute curtipendula</i> ) 1.0     | Alkali Sacaton ( <i>Sporobolus airoides</i> ) 1.0       |
|   | Four-Wing Saltbush ( <i>Atriplex canescens</i> ) 5.0    |

( ) OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

( ) Other.

## RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic. Mineral material extracted from within the boundary of the APD during construction of the well pad and reserve pits and be used for the construction of this well pad and its immediate access road only, as long as that portion of the access road it is use on remains on-lease. Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

## OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- (1) Lined as specified above and
- (2) A temporary or emergency pit may be constructed immediately adjacent to the reserve pit as long as the pit remains within the APD boundary. Mineral material removed from this pit may be used for the construction of this well pad only and its immediate access road, as long as that portion of the access road the material is used on remains on-lease. Removal of any material from the APD boundary for use on other well locations or roads must first be purchased from BLM.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.

## CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to processed by BLM.

## TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Apache Corporation

Well Name & No: Lockhart A-17 # 10

Location: Surface 330' FNL & 990' FEL, Sec.17, T. 21 S. R. 37 E.

Lease: NMLC 032096-A

Lea County, New Mexico

.....

### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell, NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; 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: 8 5/8 inch; 5 1/2 inch;

C. BOP Tests

2. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan is not required for this wellbore.

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.

### II. CASING:

1. The 8 5/8 inch shall be set at 1,260 Feet or Use the Lea County Alternative (LEACOA) (attached) with 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 to circulate to surface.

### 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) shall be 2 M psi.

### **III. Pressure Control (continued):**

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

- The test 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 safe workman-like manner. Hard line connections shall be required.



## **ALTERNATIVE CONDITIONS OF APPROVAL - DRILLING**

### **Drilling Fluids, Casing and Cementing Requirements for Most of Lea County:**

#### **Casing and Cementing**

Surface casing is to be set at a sufficient depth to protect useable water zones and cement circulated to surface. In areas where the salt section (Salado) is present, surface casing should be set at least 25 feet into the top of the Rustler Anhydrite and cement circulated to the surface.

As an alternative, surface casing may be set through the Santa Rosa Formation or other potable water bearing zones and circulate cement to surface. For wells requiring an intermediate casing string, such string shall be cemented to the ground surface. In the case where intermediate casing is not required the operator shall case and cement the production hole to the ground surface.

While drilling from the surface casing to the Rustler formation it is recommended that operators periodically sweep the hole with viscous low water loss pills to help build a filter cake across useable water zones in the redbeds.

#### **Drilling Fluid**

Fresh water or fresh water spud mud shall be used to drill to surface casing depth. If surface casing is set at a lesser depth than the top of the Rustler formation, fresh water spud mud may be used to drill down to the first salt in the Rustler Formation. after which brine or fresh water may be used.

Non-toxic or biodegradable water based polymers, drilling paper, starch and gels may be used in the mud system in order to retard seepage into the redbeds.

Two to five percent diesel or crude oil may be used in the redbed section in order to control heaving shales and mudstones.

Caustics and Lime shall not be used in the red beds but may be added when the Rustler formation is reached. However, sodium carbonate maybe used for alkalinity or ph control while drilling the redbeds above the Rustler formation.

Additionally, questions of whether an additive may be used should be referred to the Roswell Field office.

BLM Serial Number: LC-032096-A  
Company Reference: Apache Corp.  
Well No. & Name: Lockhart A-17 #10

STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS  
CARLSBAD FIELD OFFICE

A copy of the grant and attachments, including stipulations and map, will be on location during construction. BLM personnel may request to view a copy of your permit during construction to ensure compliance with all stipulations.

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

GENERAL REQUIREMENTS

A. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

B. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, *et. seq.*) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized by this grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

C. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, *et. seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et. seq.*) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

D. If, during any phase of the construction, operation, maintenance, or termination of the road, any oil or other pollutant should be discharged, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting there from, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

E. The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times.

The holder will make a documented good-faith effort to contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence.

F. The Holder shall ensure that the entire right-of-way, including the driving surface, ditching and drainage control structures, road verges and any construction sites or zones, will be kept free of the following plant species: Malta starthistle, African rue, Scotch thistle and salt cedar.

Holder agrees to comply with the following stipulations:

1. ROAD WIDTH AND GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

☐ Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).

/ ☒ / Ditching will be required on both sides of the roadway as shown on the attached map or as staked in the field.

    
/ ☐ / Flat-blading is authorized on segment(s) delineated on the attached map.

### 3. DRAINAGE

Drainage control shall be ensured over the entire road through the use of borrow ditches, outsloping, insloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

A. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

#### SPACING INTERVAL FOR TURNOUT DITCHES

Percent slope	Spacing interval
0% - 4%	400' - 150'
4% - 6%	250' - 125'
6% - 8%	200' - 100'
8% - 10%	150' - 75'

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at

    
/ ☒ / 400 foot intervals.

    
/ ☐ / \_\_\_\_ foot intervals.

    
/ ☐ / locations staked in the field as per spacing intervals above.

    
/ ☐ / locations delineated on the attached map.

B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).

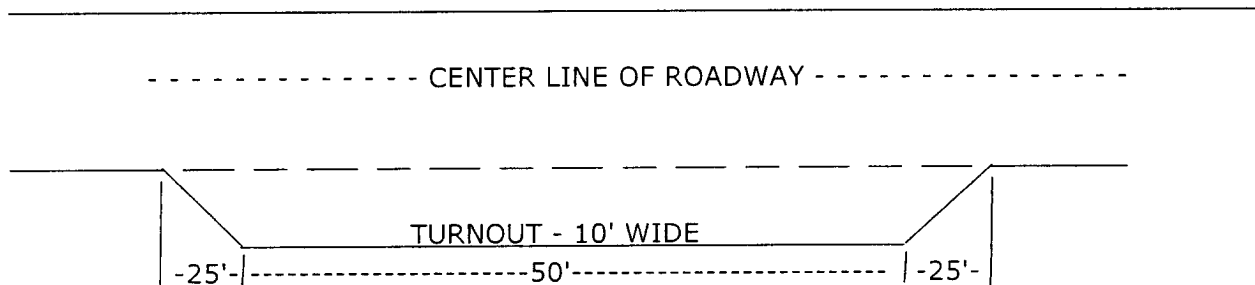
C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead-off ditch. Drainage dip location and spacing shall be determined by the formula:

$$\text{spacing interval} = \frac{400'}{\text{road slope in \%}} + 100'$$

Example: 4% slope: spacing interval =  $\frac{400}{4} + 100 = 200$  feet

#### 4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:



STANDARD TURNOUT - PLAN VIEW

#### 5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

A sales contract for the removal of mineral materials (caliche, sand, gravel, fill dirt, etc.) from an authorized pit, site, or on location must be obtained from the BLM prior to using any such mineral material from public lands. Contact the BLM solid minerals staff for the various options to purchase mineral material.

#### 6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

7. MAINTENANCE

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

9. CULTURAL RESOURCES

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the authorized officer after consulting with the holder.

10. SPECIAL STIPULATIONS:

BLM Serial Number: LC-032096- A  
Company Reference: Apache Corp.  
Well No. & Name: Lockhart A-17 #10

### STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:
  - a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
  - b. Activities of other parties including, but not limited to:
    - (1) Land clearing.
    - (2) Earth-disturbing and earth-moving work.

- (3) Blasting.
- (4) Vandalism and sabotage.

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of 25 feet.

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline will be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of 24 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.



11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.
13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.
14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.
15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.
16. Special Stipulations:

(March 1989)

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: Apache Corp. Telephone: (918)491-4900 e-mail address: glenn.bone@apachecorp.com  
Address: 6120 S. Yale Ave., Suite 1500, Tulsa, OK 74136  
Facility or well name: Lockhart A-17 # 10 API #: 30-025-37379 U/L or Qtr/Qtr A Sec 17 T 21S R 37E  
County: Lea Latitude 32°29'06.56" N Longitude 103°10'45.55" W NAD: 1927 ☒ 1983 ☐  
Surface Owner: Federal ☐ State ☐ Private ☐ Indian ☐

**Pit**

Type: Drilling ☒ Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness 12 mil Clay ☐

Pit Volume 7090 bbl

**Below-grade tank**

Volume:        bbl Type of fluid:       

Construction material:       

Double-walled, with leak detection? Yes ☐ If not, explain why not.       

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)

Less than 50 feet	(20 points)
<del>50 feet or more, but less than 100 feet</del>	<del>(10 points)</del>
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)
<del>No</del>	<del>(0 points)</del>

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)
<del>1000 feet or more</del>	<del>(0 points)</del>

Ranking Score (Total Points)	10 points
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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:**

Apache Corp will close this pit according to NMOCD pit closure guidelines.

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: 7/21/05

Printed Name/Title Glenn Bone / Drilling Engineer Signature Glenn Bone

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       

Signature       

Date: JUL 20 2005

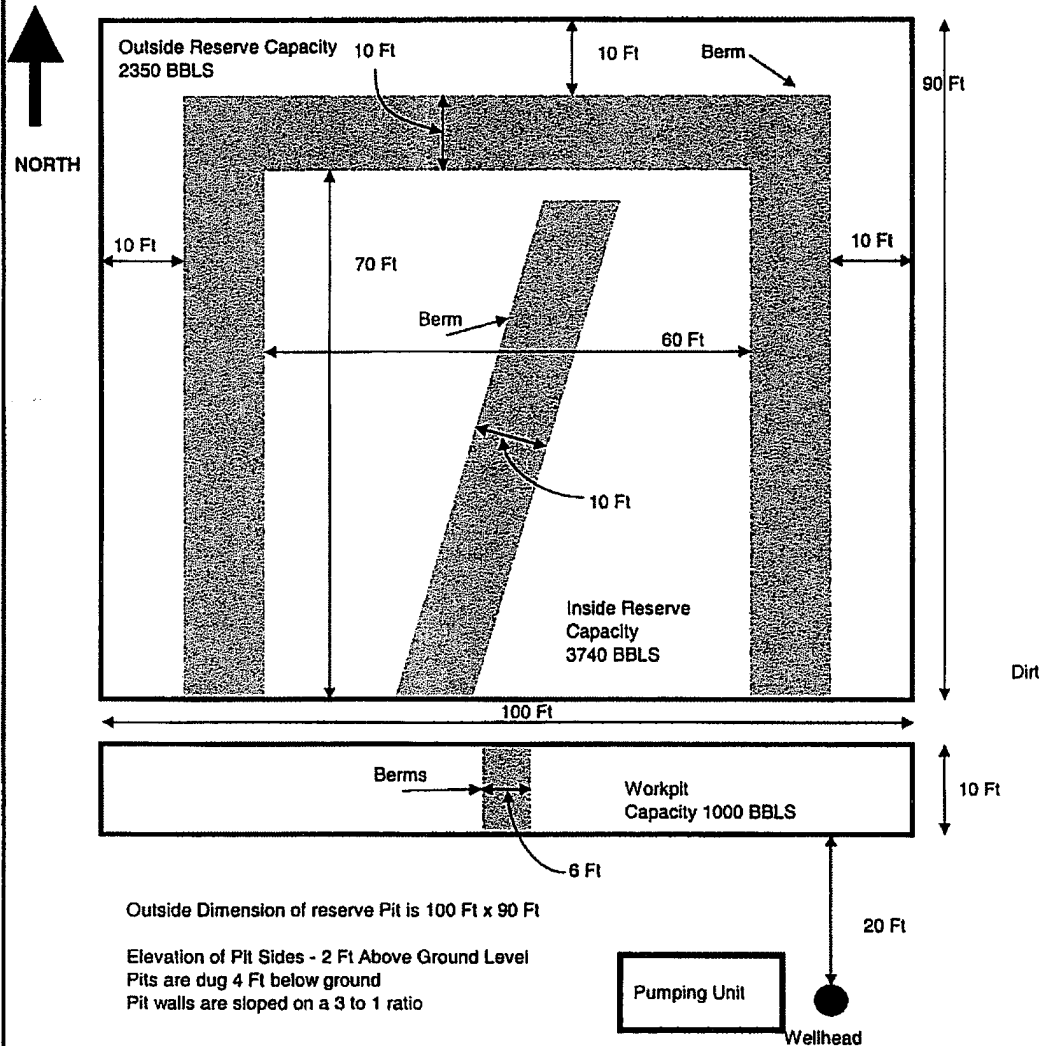
**PETROLEUM ENGINEER**

**Lockhart A-17 # 10  
Drilling Reserve Pit Closure**

Lot A, Sec 17-R21S-R37E  
Lea County, NM



Top Soil pushed back off of Reserve pit prior to digging pits



Outside Dimension of reserve Pit is 100 Ft x 90 Ft

Elevation of Pit Sides - 2 Ft Above Ground Level  
Pits are dug 4 Ft below ground  
Pit walls are sloped on a 3 to 1 ratio

**Closure Procedure:**

Pits will be de-watered as soon as practical.

After allowing sufficient time for the drilling cuttings to dry  
the pit liner will be folded in to cover the pits

This will be covered with 12" of clean soil

A 20 mil approved plastic liner will be placed over the pits as a cap

Pit covered with not less than 36" of clean soil

Reseeded with approved BLM mixture of grass seed