

OPER. OGRID NO. 962
PROPERTY NO. 14898
POOL CODE 37240
EFF. DATE _____
API NO. 30-025-36722

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

APPLICANT

1a. TYPE OF WORK

DRILL ☒

b. TYPE OF WELL

OIL WELL ☒

GAS WELL ☐

OTHER ☐

SINGLE ZONE ☒

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

ARCH PETROLEUM, INC. 962 (RICHARD WRIGHT 915-685-8140)

3. ADDRESS AND TELEPHONE NO.

P.O. BOX 10340 MIDLAND, TEXAS 79702-7340 (915-685-8100)

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

At surface 1310' FNL & 1650' FEL SEC. 27 T23S-R37E LEA CO. NM

At proposed prod. zone SAME B

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

Approximately 15 miles Southeast of Eunice New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. 1310'

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

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 990'

16. NO. OF ACRES IN LEASE

1520

17. NO. OF ACRES ASSIGNED TO THIS WELL

40

19. PROPOSED DEPTH

3900'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3270' GR.

22. APPROX. DATE WORK WILL START*

WHEN APPROVED

PROPOSED CASING AND CEMENTING PROGRAM

CAPITAN CONTROLLED WATER BASIN

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	Conductor	NA	40'	Redi-mix cement to surface
12 1/4"	J-55 8 5/8"	32	1100'	650 Sx. circulate to surface
7 7/8"	J-55 4 1/2"	11.6	3900'	750 Sx. Estimate TOC 750' ES

1. Drill 25" hole to 40'. Set 40' of 20" conductor and cement to surface with Redi-mix.
2. Drill 12 1/4" hole to 1100'. Run and set 1100' of 8 5/8" 32# J-55 ST&C casing. Cement with 650 Sx. of Class "C" cement + 2% CaCl₂ + 1/4# Flocele/Sx. Circulate cement to surface.
3. Drill 7 7/8" hole to 3900'. Run and set 3900' of 4 1/2" 11.6# J-55 ST&C casing. Cement with 750 Sx. of Class "C" cement + additives, estimate top of cement 750' from surface.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

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.

SIGNED Joe T. Larina TITLE Agent

DATE 04/09/04

(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:

ACTING

FIELD MANAGER

APPROVED BY /s/ Joe G. Lara

TITLE _____

DATE

4 JUN 2004

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-36722	Pool Code 37240	Pool Name LANGLIE MATTIM-7 RIVERS, QUEEN, GRAYBURG
Property Code 14898	Property Name C. E. LAMUNYON	Well Number 86
OGRID No. 962	Operator Name ARCH PETROLEUM, INC.	Elevation 3270'

Surface Location

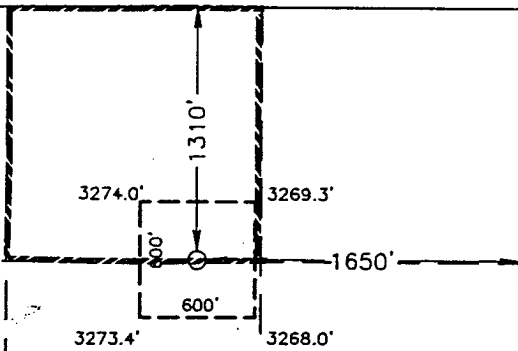
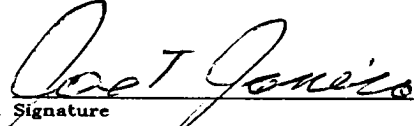
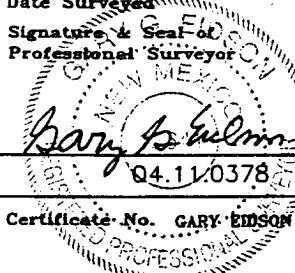
UL or lot No. B	Section 27	Township 23-S	Range 37-E	Lot Idn	Feet from the 1310	North/South line NORTH	Feet from the 1650	East/West line EAST	County LEA
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Bottom Hole Location If Different From Surface

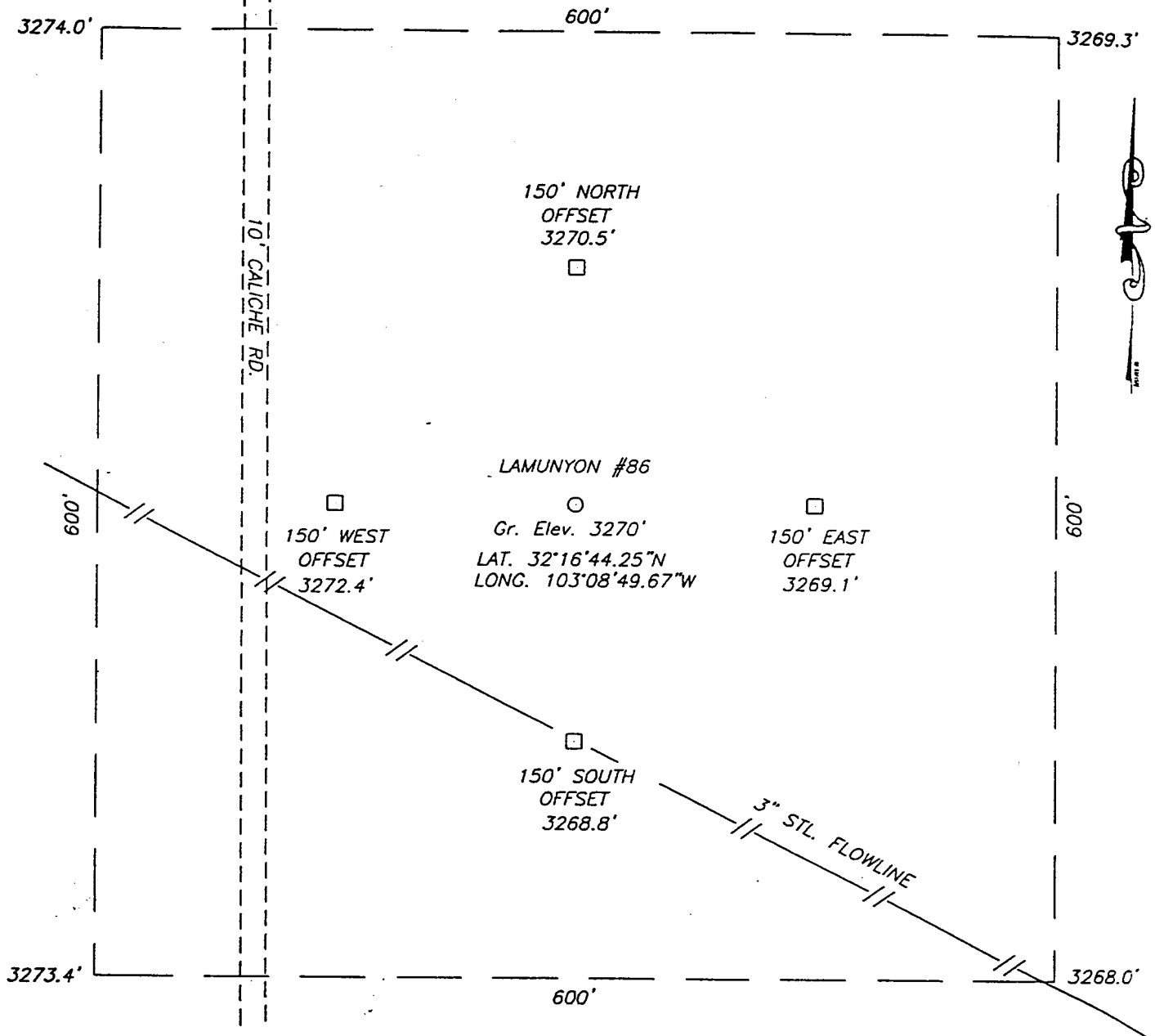
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

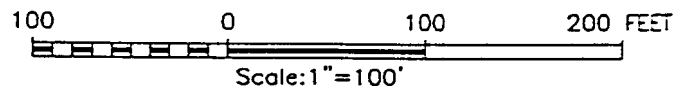
	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature Joe T. Janica Printed Name Agent Date 04/09/04
GEODETIC COORDINATES NAD 27 NME Y = 467229.3 N X = 866610.6 E LAT. 32°16'44.25"N LONG. 103°08'49.67"W	SURVEYOR 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. March 31, 2004 Date Surveyed Signature & Seal of Professional Surveyor  Certificate No. GARY EDMON 12641
EXHIBIT "A"	

SECTION 27, TOWNSHIP 23 SOUTH, RANGE 37 EAST, N.M.P.M.,
 LEA COUNTY, NEW MEXICO.



DRIVING DIRECTIONS

ON STATE HWY #18 AT MILEPOST #21. TURN EAST ON GOOD CALICHE RD. AND GO 2.0 MILES VEER TO THE SOUTH AND GO 1.0 MILES TO A INTERSECTION. TURN LEFT (EAST) AND GO 0.25 MILES TO OLD CALICHE RD ON RIGHT. TURN RIGHT (SOUTH) AND GO 0.1 MILES. THIS LOCATION IS APPROX. 200' EAST.



ARCH PETROLEUM, INC.

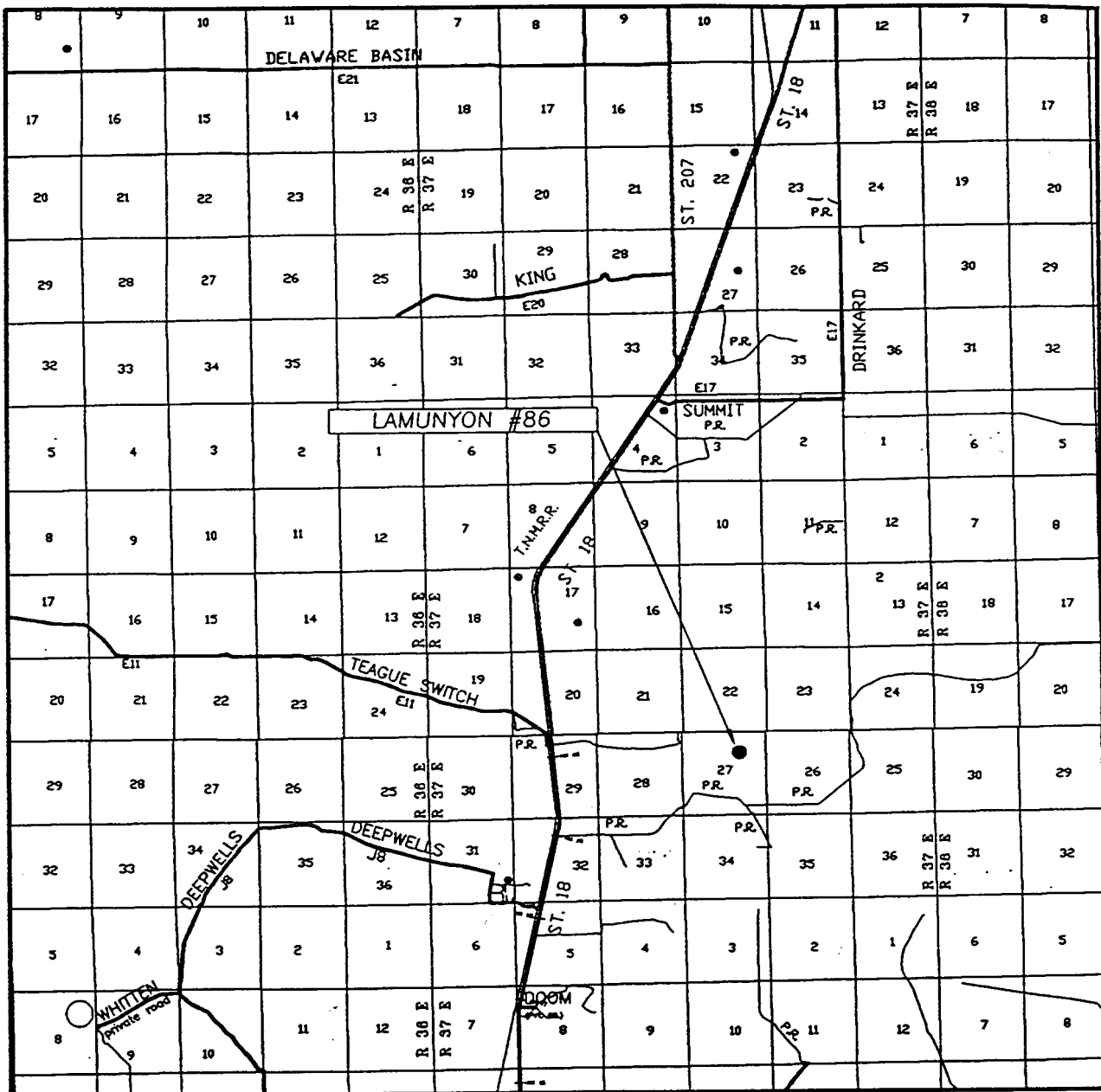
LAMUNYON #86 LOCATED 1310' FROM THE NORTH LINE AND 1650' FROM THE EAST LINE OF SECTION 27, TOWNSHIP 23 SOUTH, RANGE 37 EAST, LEA COUNTY, NEW MEXICO



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

Survey Date: 03/30/04	Sheet 1 of 1 Sheets
W.O. Number: 04.11.0378	DRAWN BY: A.W.B
Date: 04/02/04	DISK: CD#10
04.11.0378	Scale: 1"=100'

VICINITY MAP

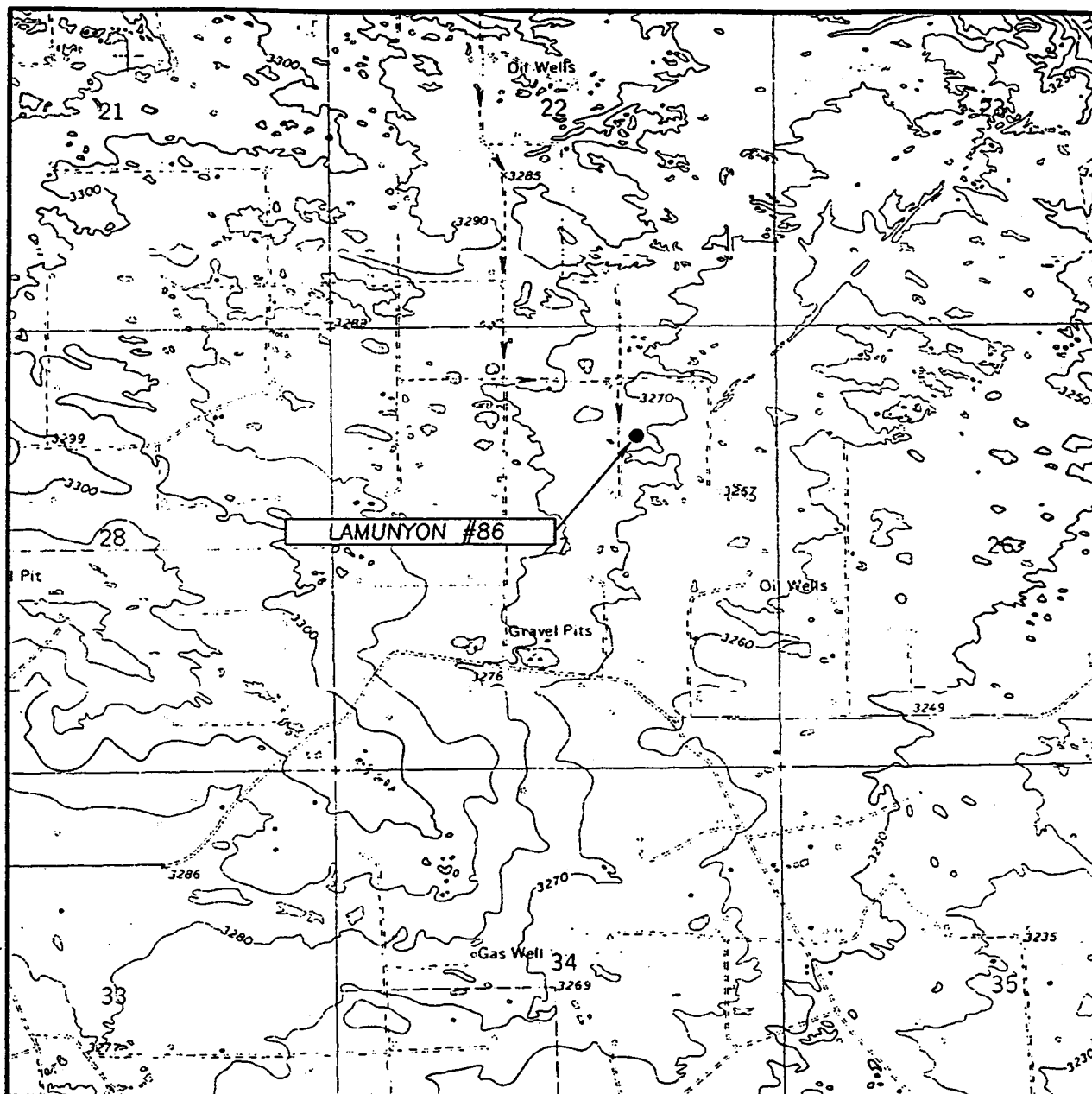


SCALE: 1" = 2 MILES

SEC. 27 TWP. 23-S RGE. 37-E
 SURVEY N.M.P.M.
 COUNTY LEA
 DESCRIPTION 1310' FNL & 1650' FEL
 ELEVATION 3270'
 OPERATOR ARCH PETROLEUM, INC
 LEASE LAMUNYON

JOHN WEST SURVEYING
 HOBBS, NEW MEXICO
 (505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
RATTLESNAKE CANYON, N.M.

SEC. 27 TWP. 23-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1310' FNL & 1650' FEL

ELEVATION 3270'

OPERATOR ARCH PETROLEUM, INC.

LEASE LAMUNYON

U.S.G.S. TOPOGRAPHIC MAP
RATTLESNAKE CANYON, N.M.

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

APPLICATION TO DRILL

ARCH PETROLEUM, INC.
C. E. LAMUNYON # 86
UNIT "G" SECTION 27
T23S-R37E LEA CO. NM

In response to questions asked under Section II of Bulletin NTL-6 the following information on the above well is provided for your consideration.

1. Location of well: 1310' FNL & 1650' FEL SECTION 27 T23S-R37E LEA CO. NM

2. Ground Elevation above Sea Level: 3270'

3. Geological age of surface formation: Quaternary Deposits:

4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium to remove solids from hole.

5. Proposed drilling depth: 3900'

6. Estimated tops of geological markers:

Rustler Anhydrite	1045'	Queen	3325'
Basal Salt	2383'	Penrose	3443'
Yates	2538'	Grayburg	3604'
7 Rivers	2815'	San Andres	3800'

7. Possible mineral bearing formations:

Yates	Oil	Penrose	Oil
7 Rivers	Oil	Grayburg	Oil
Queen	Oil		

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
25"	0-40	20"	NA	NA	NA	Conductor
12½"	0-1100'	8 5/8"	32#	8-R	ST&C	J-55
7 7/8"	0-3900'	4½"	11.6#	8-R	ST&C	J-55

APPLICATION TO DRILL

ARCH PETROLEUM, INC.
C. E. LAMUNYON # 86
UNIT "G" SECTION 27
T23S-R37E LEA CO. NM

9. CASING CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor and cement to surface with Redi-mix.
8 5/8"	Surface	Set 1100' of 8 5/8" 32# J-55 ST&C casing. Cement with 650 Sx. of Class "C" cement + 2% CaCl, + 1/4# Flocele/Sx. Circulate cement to surface.
4 1/2"	Production	Set 3900' of 4 1/2" 11.6# J-55 ST&C casing. Cement with 750 Sx. of Class "C" cement + additives, estimate top of cement 750' from surface.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 900 series 3000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middle blind rams, and bottom pipe rams. The B.O.P. will be nipped up on the 8 5/8" casing and tested to API specifications. The B.O.P. will be operated at least once each 24 Hr. period and the blind rams will be operated when the drill pipe is out of on trips. Full opening stabbing valve and upper kelly cock will be available in case if needed. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 3000 PSI choke manifold with adjustable chokes. No abnormal pressures or temperatures are expected while drilling this well. No problems in offset wells.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-1100'	8.4-8.7	29-34	NC.	Fresh water Spud Mud use paper to control seepage.
1100-3900'	10.0-10.2	29-38	NC*	Brine water use paper to control seepage and high viscosity sweeps to clean hole.

* Water loss may have to be controlled in order to run logs, DST's and/or casing. In this case go to a Dris-pac system.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing, viscosity, and water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

ARCH PETROLEUM, INC.
C. E. LAMUNYON # 86
UNIT "G" SECTION 27
T23S-R37E LEA CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Dual Laterolog, SNP, LDT, Gamma Ray & Caliper from TD back to 8 5/8" casing shoe.
- B. Cased hole logs Gamma Ray, Neutron from 8 5/8" casing shoe to surface. Run correlation logs in order to determine zones to be perforated.
- C. No DST's, cores are planned at this time.
- D. Mud logger may be used at the Geologists discretion.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H²S in this area. If H²S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 1850 PSI, and Estimated BHT 125°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 7 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Queen formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialized as an oil well.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H₂S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
2. H₂S Detection and Alarm Systems
 - A. H₂S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
3. Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
 - C. There should be a windsock at entrance to location.
4. Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H₂S present in dangerous concentration. Only emergency personnel admitted to location.
5. Well control equipment
 - A. See exhibit "E" & "E-1"
6. Communication
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned will be available at most drilling foreman's trailer or living quarters.
7. Drillstem Testing
 - A. Exhausts will be watered.
 - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
 - C. If the location is near to a dwelling a closed DST will be performed.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

8. Drilling contractor supervisor will be required to be familiar with the effects H₂S has on tubular goods and other mechanical equipment.
9. If H₂S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H₂S scavengers if necessary.

SURFAEE USE PLAN

ARCH PETROLEUM, INC.
C. E. LAMUNYON # 86
UNIT "G" SECTION 27
T23S-R37E LEA CO. NM

1. EXISTING ROADS: Area maps, Exhibit "B" is a reproduction of a County General Highway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing roads and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.
 - A. Exhibit "A" shows the proposed well site as staked.
 - B. From junction of State Hi-way 176 & State Hi-way 18 two miles East of Eunice New Mexico go South 13 miles to Mile Post 19 turn East follow Caliche Road 1 mile bear Northeast for .75 miles turn East go .25 miles, turn North go .7- miles, turn Right)East) go .25 miles turn Right (South and go 600' to location on the East side of road.
 - C. Lay necessary pipelines and construct powerlines along existing roads or existing R-O-W's in order to produce this well.
2. PLANNED ACCESS ROADS: Reclaim approximately 600' of road.
 - A. The access road will be crowned and dirched to a 12'00" wide travel surface with a 40' right-of-way.
 - B. Gradient on all roads will be less than 5.00%.
 - C. No turnouts will be necessary.
 - D. If needed, road will be surfaced with a minimum of 4" of caliche. This material will be obtained from a local source.
 - E. Centerline for the new access road has been flagged. Earthwork will be as required by field conditions.
 - F. Culverts in the access road will not be used. The road will be constructed to utilize low water crossings for drainage as required by the Topography.
3. LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A-1"

A. Water wells	-	None known
B. Disposal wells	-	None known
C. Drilling wells	-	None Known
D. Producing wells	-	As shown on Exhibit "A-1"
E. Abandoned wells	-	As shown on Exhibit "A-1"

SURFAEE USE PLAN

ARCH PETROLEUM, INC.
C. E. LAMUNYON # 86
UNIT "G" SECTION 27
T23S-R37E LEA CO. NM

4. If on completion this well is a producer the operator will lay pipelines and construct powerlines along existing road R-O-W's or other existing R-O-W's. Possible routes of pipelines, flowlines and powerlines are shown on Exhibit "F".

5. LOCATION AND TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the access roads or piped to location in flexible lines laid on top of the ground.

6. SOURCE OF CONSTRUCTION MATERIAL:

If possible construction material will be obtained from the excavation of drill site, if additional material is needed it will be obtained from a local source and transported over the access roads as shown on Exhibit "C".

7. METHODS OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in a approved sanitary land fill.
- C. Salts remaining after completion of well will be picked up by the supplier, including broken sacks.
- D. Waste water from living quarters will be drained into holes with a minium of 10'. These holes will be covered during drilling and will be back filled when the well is completed. A Porto-John will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- E. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for furthred drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approve disposal site. Later pips will be broken out to speed drying. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in storage tanks and sold.

8. ANCILLARY FACILITIES:

- A. No camps or air strips will be constructed on location.

SURFAEE USE PLAN

ARCH PETROLEUM, INC.
C. E. LAMUNYON # 86
UNIT "G" SECTION 27
T23S-R37E LEA CO. NM

9. WELL SITE LAYOUT

- A. Exhibit "D" shows the proposed well site layout.
- B. This exhibit indicated proposed location of reserve and sump pits and living facilities.
- C. Mud pits in the active circulating system will be steel pits & the reserve pit is proposed to be unlined unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- D. If needed, the reserve pit is to be lined with polyethelene. The pit liner will be 6 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be anchored down.
- E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be contoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.

SURFAEE USE PLAN

ARCH PETROLEUM, INC.
C. E. LAMUNYON # 86
UNIT "G" SECTION 27
T23S-R37E LEA CO. NM

11. OTHER INFORMATION:

- A. Topography consists of sand dunes with a slight dip to the West. Deep sandy soil supports shinnery oak, native grasses, and an occasional mesquite tree.
- B. The surface is owned by G. K. Boyd of Midland, Texas and the minerals are owned by The U.S. Department of Interior and is administered by The Bureau of Land Management, Carlsbad Field Office.
- C. An archaeological survey will be conducted on the location and access roads. This report will be filed with The Bureau of Land Management in the Carlsbad field office.
- D. There are no dwellings near this location.

12. OPERATORS REPRESENTIVES:

Before construction:

TIERRA EXPLORATION, INC
P.O. BOX 2188
HOBBS, NEW MEXICO 88241
OFFICE Ph. 505-391-8503
JOE T. JANICA

During and after construction:

POGO PRODUCING COMPANY
P.O. BOX 10340
MIDLAND, TEXAS 79702-7340
OFFICE Ph. 432-685-8100
Mr. RICHARD WRIGHT 432-658-8140

13. CERTIFICATION: I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access roads, and that I am familiar with the conditions which currently exist, that the statements made in this 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 POGO PRODUCING COMPANY it's contractors/subcontractors is in compformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false report.

NAME : Joe T. Janica

DATE : 04/09/04

TITLE : Agent

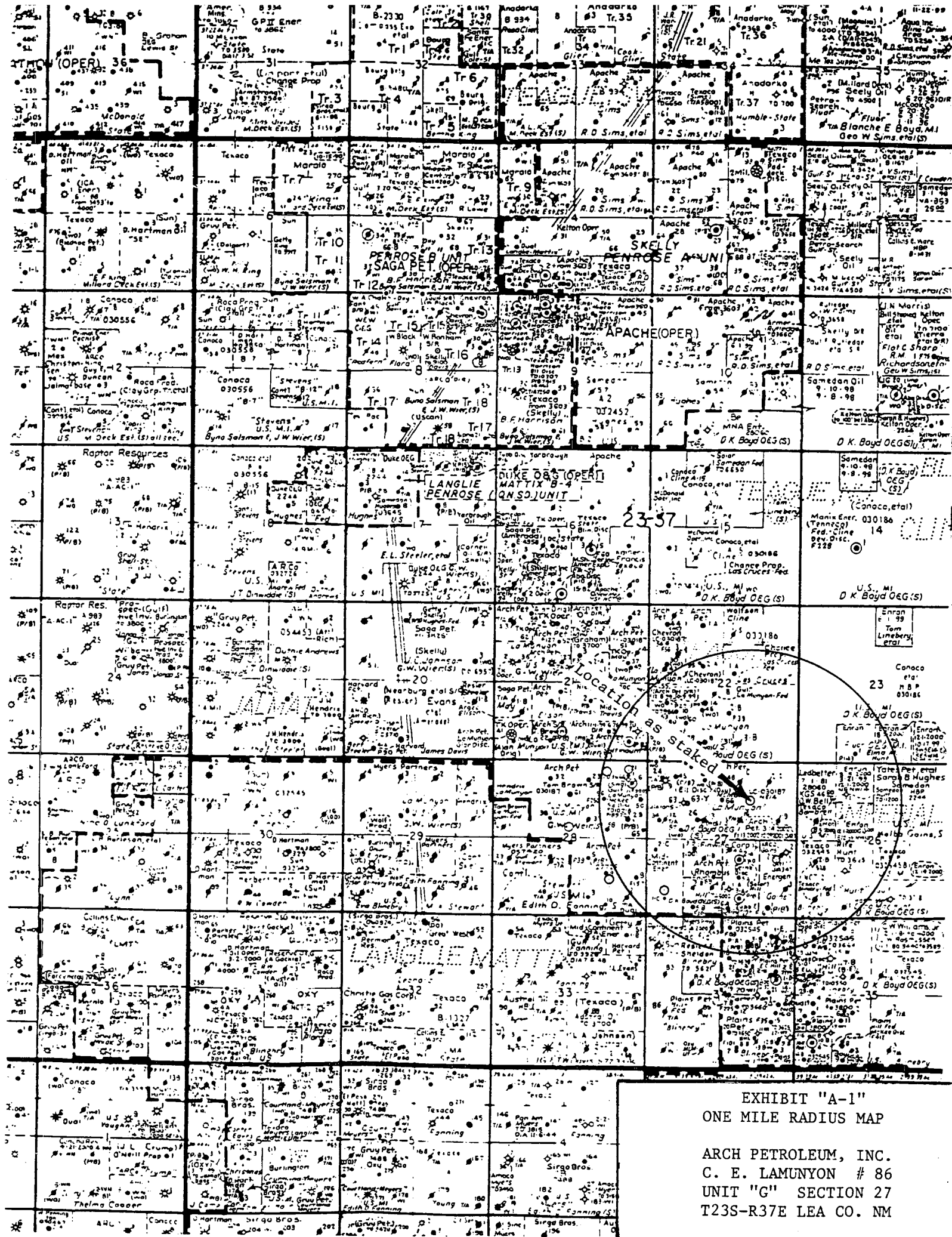


EXHIBIT "A-1"
ONE MILE RADIUS MAP

ARCH PETROLEUM, INC.
C. E. LAMUNYON # 86
UNIT "G" SECTION 27
T23S-R37E LEA CO. NM

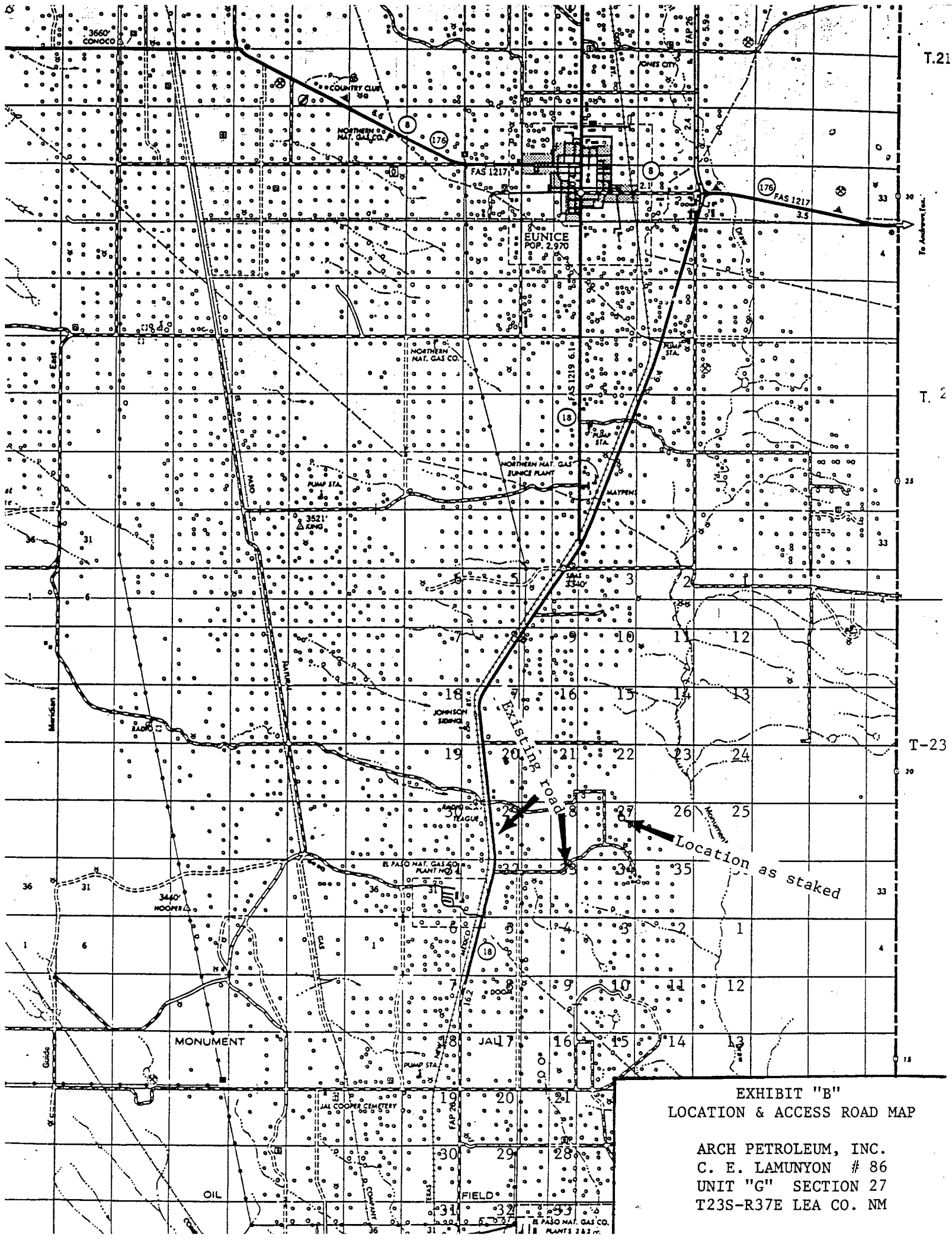


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

ARCH PETROLEUM, INC.
C. E. LAMUNYON # 86
UNIT "G" SECTION 27
T23S-R37E LEA CO. NM

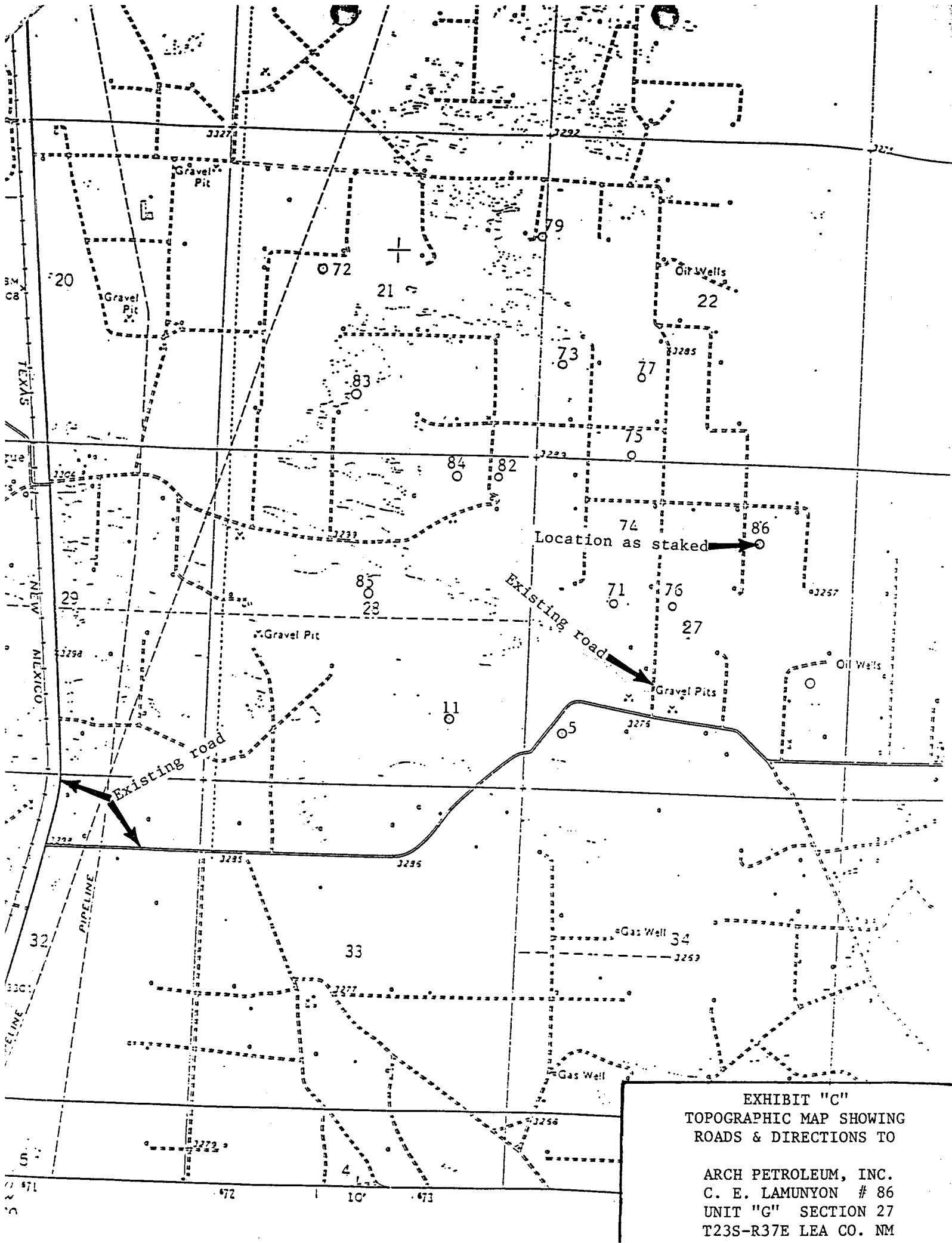
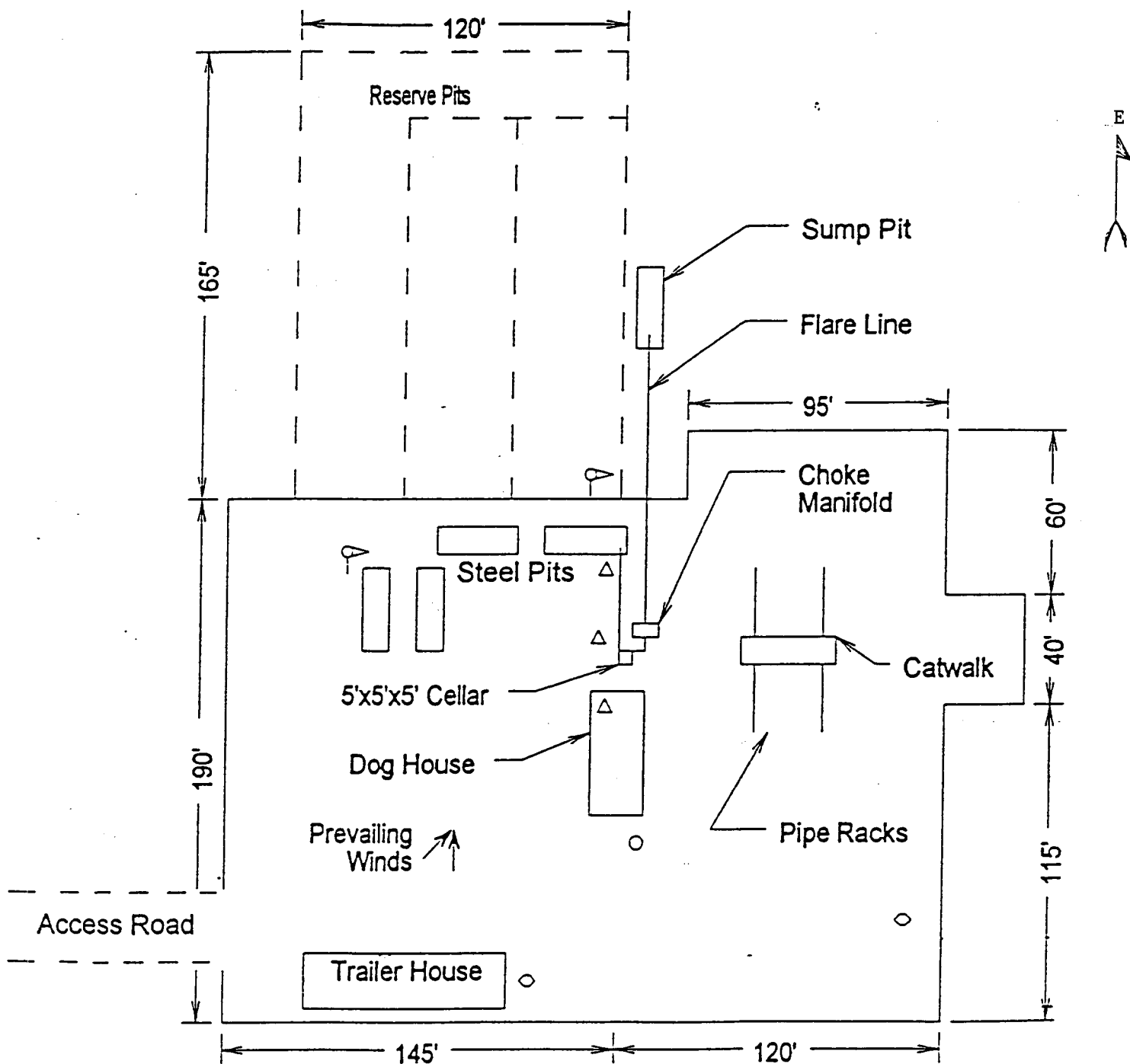


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

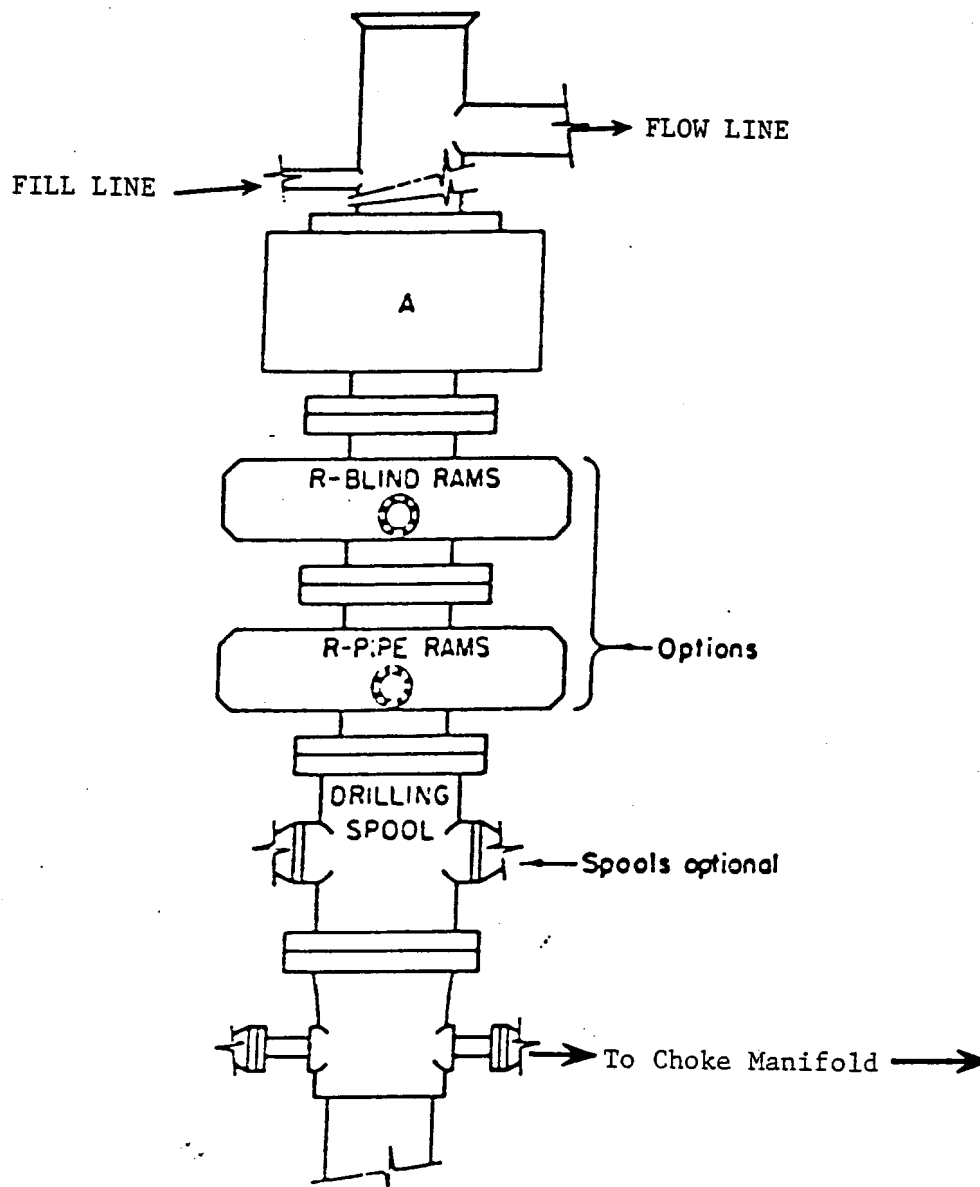
ARCH PETROLEUM, INC.
C. E. LAMUNYON # 86
UNIT "G" SECTION 27
T23S-R37E LEA CO. NM



- ⏏ 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

EXHIBIT "D"
RIG LAY OUT PLAT

ARCH PETROLEUM, INC.
C. E. LAMUNYON # 86
UNIT "G" SECTION 27
T23S-R37E LEA CO. NM



ARRANGEMENT SRRA

900 Series
3000 PSI WP

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

ARCH PETROLEUM, INC.
C. E. LAMUNYON # 86
UNIT "G" SECTION 27
T23S-R37E LEA CO. NM

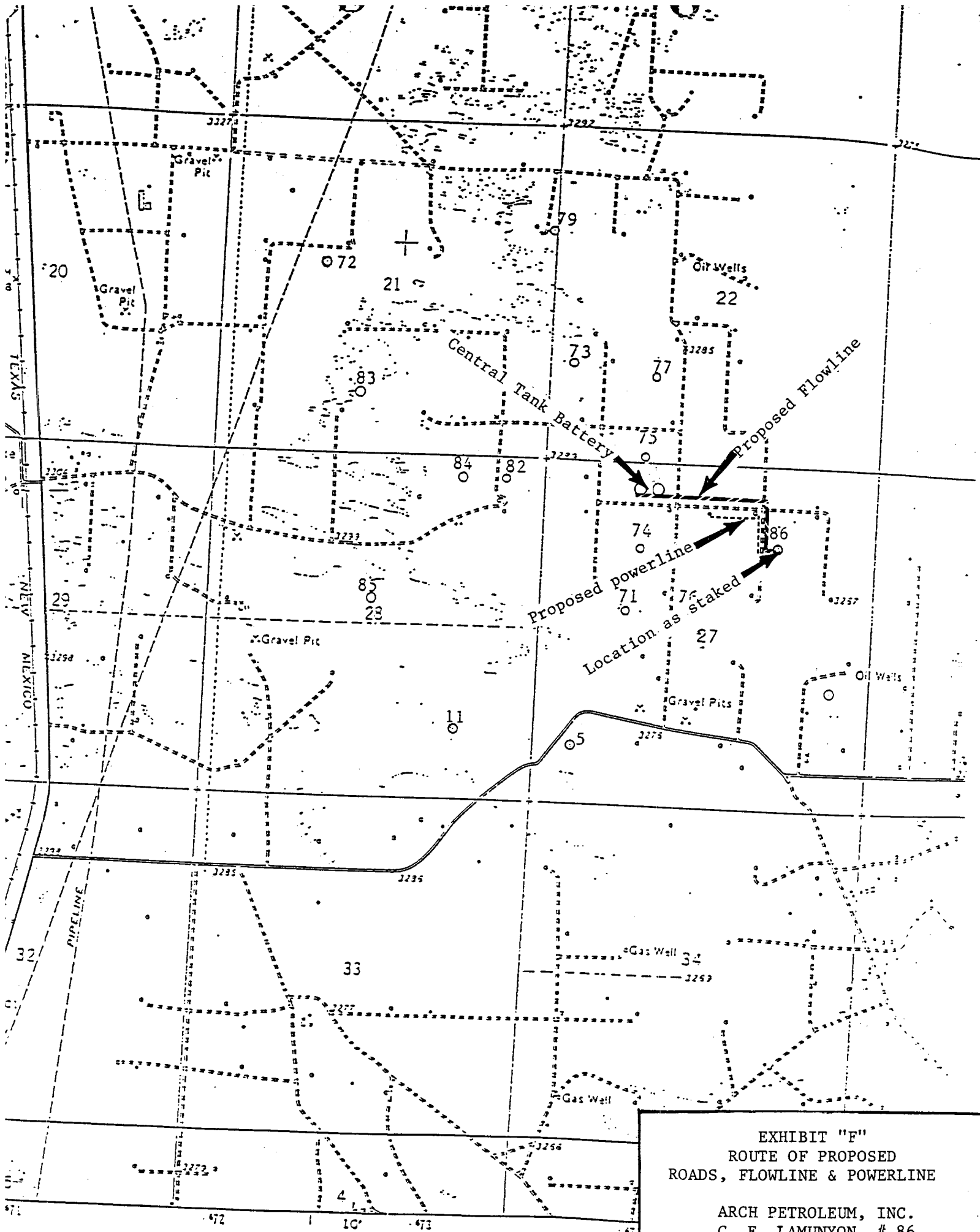


EXHIBIT "F"
ROUTE OF PROPOSED
ROADS, FLOWLINE & POWERLINE

ARCH PETROLEUM, INC.
C. E. LAMUNYON # 86
UNIT "G" SECTION 27
T23S-R37E LEA CO. NM

District I
1625 N. French Dr., Hobbs, NM 88240
District II
301 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
March 12, 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: Arch Petroleum Inc. Telephone: 432-685-8100 e-mail address: wrightc@pogoproducting.com
Address: P. O. Box 10340, Midland, TX 79702-7340
Facility or well name: C.E. Lamunyon #86 API #: U/L or Qtr/Sec NW/NE Sec 27 T 23 R 37
County: Lea Latitude 32 16 44.25N Longitude 103 08 49.67W
WAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit	Below-grade tank						
Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlined ☐ Liner type: Synthetic ☐ Thickness 12 mil Clay ☐ Volume 8400 bbl	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.)	<table border="1"><tr><td>Less than 50 feet</td><td>(20 points)</td></tr><tr><td>50 feet or more, but less than 100 feet</td><td>(10 points) 10</td></tr><tr><td>100 feet or more</td><td>(0 points)</td></tr></table>	Less than 50 feet	(20 points)	50 feet or more, but less than 100 feet	(10 points) 10	100 feet or more	(0 points)
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.)	<table border="1"><tr><td>Yes</td><td>(20 points)</td></tr><tr><td>No</td><td>(0 points) 0</td></tr></table>	Yes	(20 points)	No	(0 points) 0		
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.)	<table border="1"><tr><td>Less than 200 feet</td><td>(20 points)</td></tr><tr><td>200 feet or more, but less than 1000 feet</td><td>(10 points)</td></tr><tr><td>1000 feet or more</td><td>(0 points) 0</td></tr></table>	Less than 200 feet	(20 points)	200 feet or more, but less than 1000 feet	(10 points)	1000 feet or more	(0 points) 0
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)							

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: 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.

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: 05/18/04
Printed Name/Title Cathy Wright, Sr. Oper. Tech Signature *Cathy Wright*

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:

Date: _____

Printed Name/Title _____ Signature _____

Site Map for New Mexico

USGS 321513103101501 23S.37E.33.323241

Available data for this site

Station site map

GO

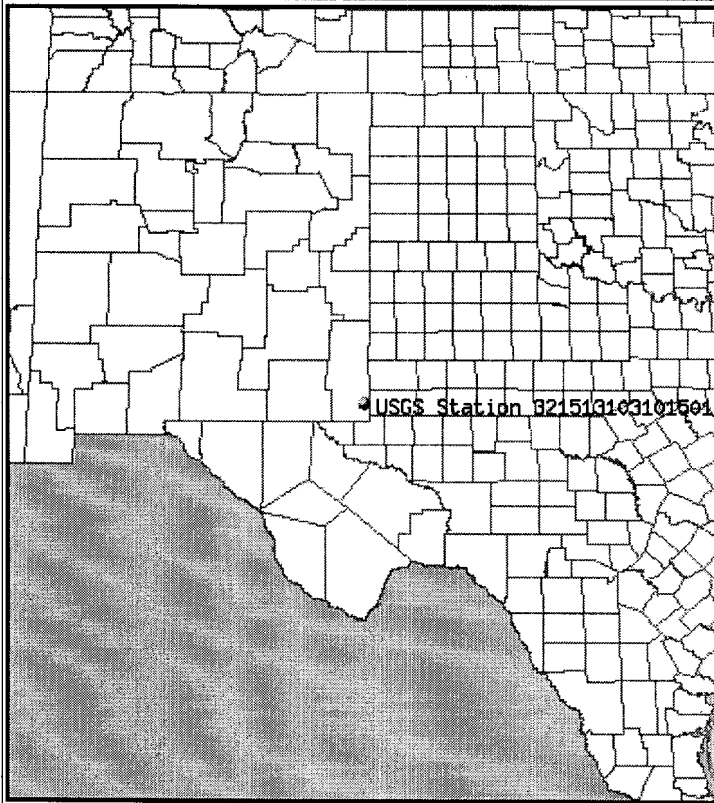
Lea County, New Mexico

Hydrologic Unit Code 13070007

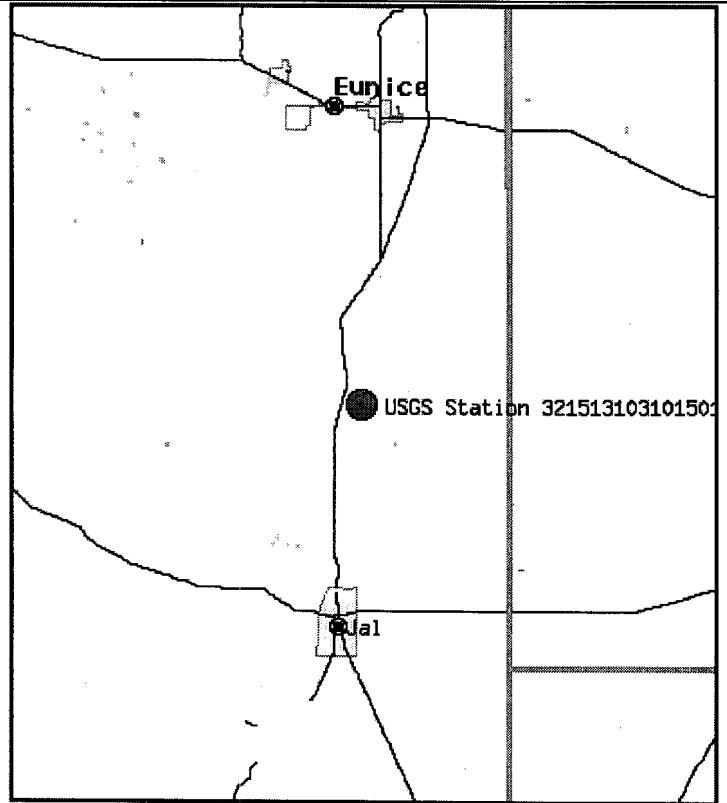
Latitude 32°15'13", Longitude 103°10'15" NAD27

Gage datum 3,275.20 feet above sea level NGVD29

Location of the site in New Mexico.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X, 4X, 6X, 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-nm_NWISWeb_Data_Inquiries@usgs.gov

Feedback on this website gs-w-nm_NWISWeb_Maintainer@usgs.gov

NWIS Site Inventory for New Mexico: Site Map

<http://waterdata.usgs.gov/nm/nwis/nwismap?>

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[Explanation of terms](#)

Retrieved on 2004-05-18 15:10:18 EDT

Department of the Interior, U.S. Geological Survey

USGS Water Resources of New Mexico

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0.66 0.66 nadww01

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321513103101501

Save file of selected sites to local disk for future upload

USGS 321513103101501 23S.37E.33.323241

Available data for this site

Ground-water: Levels

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°15'13", Longitude 103°10'15" NAD27

Gage datum 3,275.20 feet above sea level NGVD29

The depth of the well is 140 feet below land surface.

This well is completed in ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB)

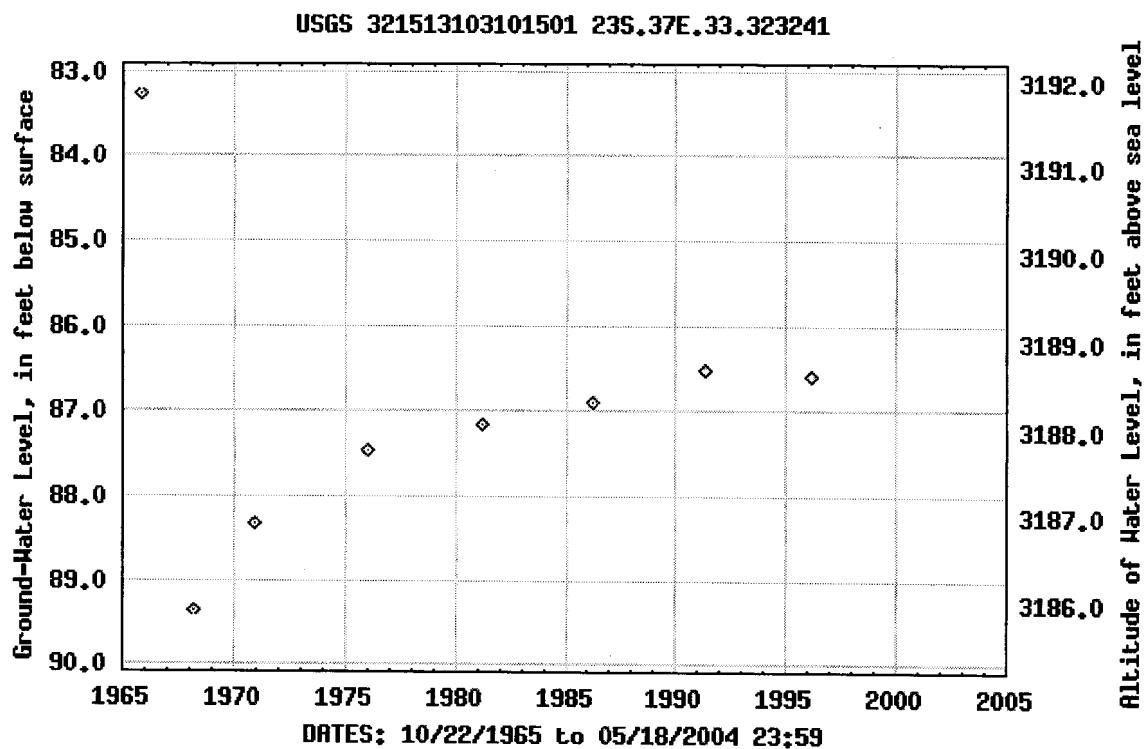
Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

[Download a presentation-quality graph](#)

Questions about data gs-w-nm_NWISWeb_Data_Inquiries@usgs.gov

Feedback on this website gs-w-nm_NWISWeb_Maintainer@usgs.gov

Ground water for New Mexico: Water Levels

<http://waterdata.usgs.gov/nm/nwis/gwlevels?>

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[Explanation of terms](#)



The World Air Sports Federation

Fédération Aéronautique Internationale



WORLD DISTANCE CALCULATOR

Version 1.0 dated 30 October 2001

[Click here to download a version of this page suitable for offline use](#)

(operation instructions available at the end of this page)

Input = Lat/Longs to the same Geodetic Datum, preferably WGS84

Lat 1		Long 1	
32:16:44.25	N	103:08:49.67	W
Lat 2		Long 2	
32:15:13	N	103:10:15	W

Distance Units:

Earth model:

COMPUTE

RESET

Output = true courses, then shortest distance on the surface of the selected world model

Course 1-2 (deg)	218.34038154770408
Course 2-1 (deg)	38.327727703955276
Shortest distance	2.232669899188688

FAI Web Site Directions :

Air sports:

Technical Commissions:

Other sections of the Web Site:

events.fai.org

The home of Air Sport Competition Information. The FAI Sporting Calendar and results of all major FAI Championships are available at this address.

Communication Links

Receive automatically [FAI's News releases](#) and other information such as world record notifications. We have a number of mailing lists to which you can [freely subscribe](#).

Our Discussion Board at board.fai.org gives you the opportunity to publicly discuss issues relating to air sports.

OPERATION:

1. For the calculator to operate, Javascript must be enabled. With MS Windows 98 or later and MS Internet Explorer, Javascript is normally enabled by default. For Netscape Navigator, see Options/ Network Preferences/ Languages, for Netscape Communicator see Edit/ Preferences/ Advanced.
2. Read the operating instructions below and the notes at the end. Scroll the display so that all of the boxes are on screen with the Lat/Long boxes at the top and the output boxes towards the bottom of the screen. You are now ready to make calculations.
3. Enter Latitude and Longitude for the points at the beginning and