Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

API 30-039-21233

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [X]

2. NAME OF OPERATOR: Amerada Hess Corporation, Att: Drilling Services

3. ADDRESS OF OPERATOR: P.O. Box 2040, Tulsa, Oklahoma 74102 So. Blanco

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: ~~1320'~~ 990' FNL and ~~1320'~~ 1650' FEL
At proposed prod. zone: same

5. LEASE DESIGNATION AND SERIAL NO.: Lse. Contract #149

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Jicarilla Apache

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: J. Apache "F"

9. WELL NO.: 12

10. FIELD AND POOL, OR WILDCAT: [redacted] Pictured Cliffs and Otero Chacra

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 22, T25N, R5W

12. COUNTY OR PARISH: Rio Arriba | 13. STATE: N. Mexico

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: est. 20 miles NW of Lindrith, New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 1320'

16. NO. OF ACRES IN LEASE: 2559.4

17. NO. OF ACRES ASSIGNED TO THIS WELL: 160 to each

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 2640'

19. PROPOSED DEPTH: 4150'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): ~~Est. 6910' Gr. Elev.~~ 6869' GR (Proration Unit NE/4 Sec. 22)

22. APPROX. DATE WORK WILL START*: Aug. 1, 1976

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" OD	24#	350' +/-	200 sx. and circ.
7-7/8"	5-1/2" OD	15.5#	4050' +/-	750 sx. to est. top at surface.

Plan to drill a 12¼" hole surface to 350', set and cement 8-5/8" csg. at 350' with 200 sx. cement (circ. cmt.) WOC approx. 18 hrs., drill out from under surface csg. W/7-7/8" bit to a proposed TD of 4050' or a sufficient septh to test the Chacra gas sand, log well and if productive, set and cement 5½" OD 15.5# new csg. at 4050' W/750 sx. cement with a 2 stage collar in string and complete as a dual gas well.

No cores or drill stem tests are anticipated.

Mud program is to use low visc. and low water loss mud out from under surface csg. to TD with visc. 60/70 for logging.

Blowout equipment program, 12 point surface usage plan, location maps, plats, drilling rig layout plan to follow under seperate cover.

Gas not dedicated

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 E. Gwynn TITLE Supervisor, Texh/Dplg. Adm. Serv. DATE May 4, 1976

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Olaf

RECEIVED
JUN 3 1976
OIL CON. COM.
DIST 3

*See Instructions On Reverse Side

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

5. LEASE DESIGNATION AND SERIAL NO.: Lse. Contract #149

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Jicarilla Apache

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: Amerada Hess Corporation, Att: Drilling Services

8. FARM OR LEASE NAME: J. Apache "F"

3. ADDRESS OF OPERATOR: P.O. Box 2040, Tulsa, Oklahoma

9. WELL NO.: 12

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: Amended as follows: 990' FNL & 1650' FEL

10. FIELD AND POOL, OR WILDCAT: Pictured Cliffs and Otero: Chacra

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 22, T25N, R5W

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): Amended to 6869' Gr. Elevation

12. COUNTY OR PARISH: Rio Arriba

13. STATE: New Mex.

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			☐
(Other) Amend location & Gr. Elev.			☒	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Sundry Notice and Report to amend original Form 9-331C "Application for Permit to Drill" dated May 4, 1976

RECEIVED
JUN 3 1976
OIL CON. COM.
DIST 3

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

SIGNED [signature] TITLE Supervisor, Drlg. Adm. Serv. DATE May 28, 1976

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
Amerada Hess Corporation	Jicarilla Apache	F-12

Unit Letter	Section	Township	Range	County
B	22	25N	5W	Rio Arriba

Actual Footage Location of Well:
990 feet from the North line and 1650 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6869	Pictured Cliffs-Chacra	~~La Blanca~~ Otero Pictured Cliffs/Chacra	~~160~~ 160 each Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

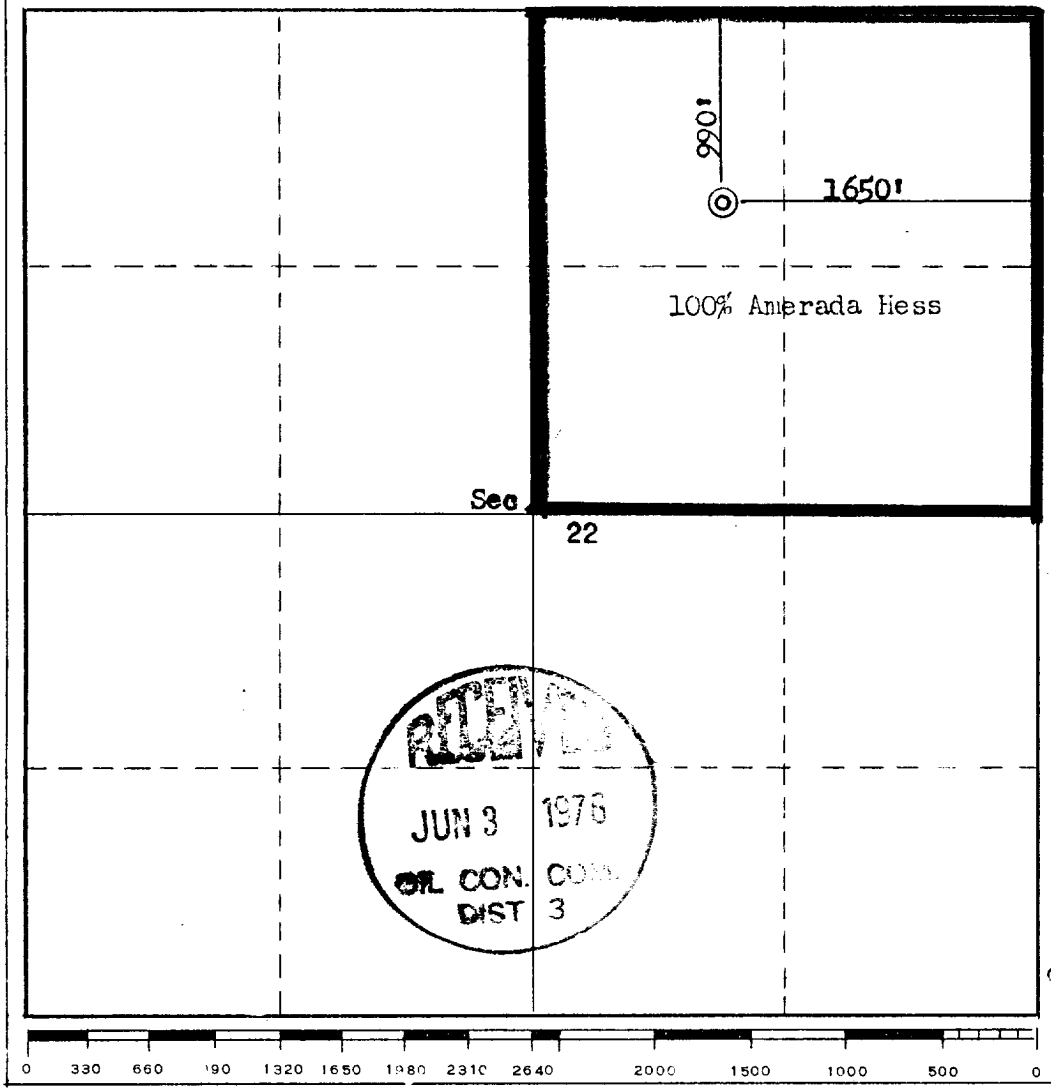
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

☐ Yes ☐ No If answer is "yes," type of consolidation NA

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) NA

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

E. Griffin

Name: E. Griffin

Position: Supervisor, Drlg. Adm. Serv.

Company: Amerada Hess Corporation

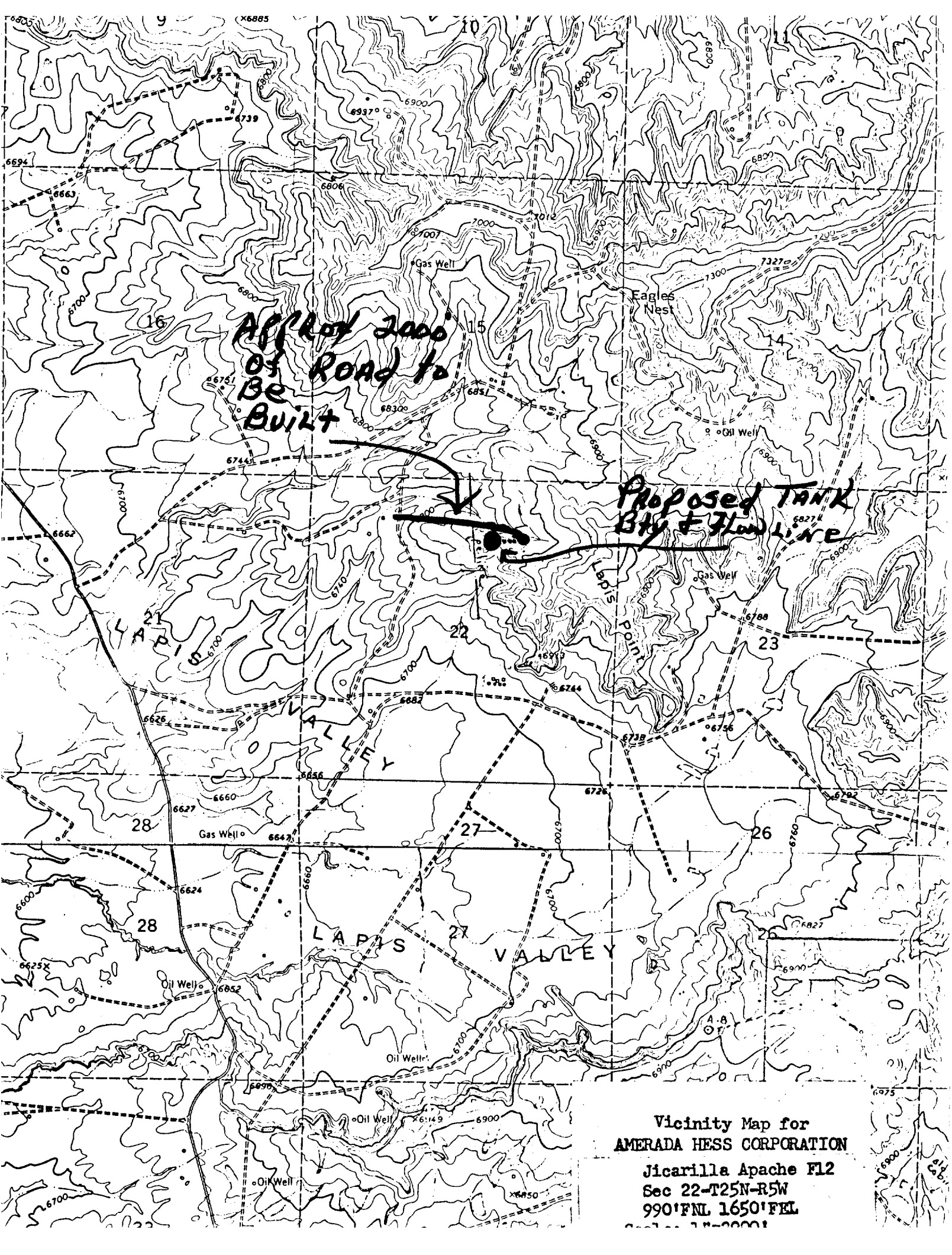
Date: May 18, 1976

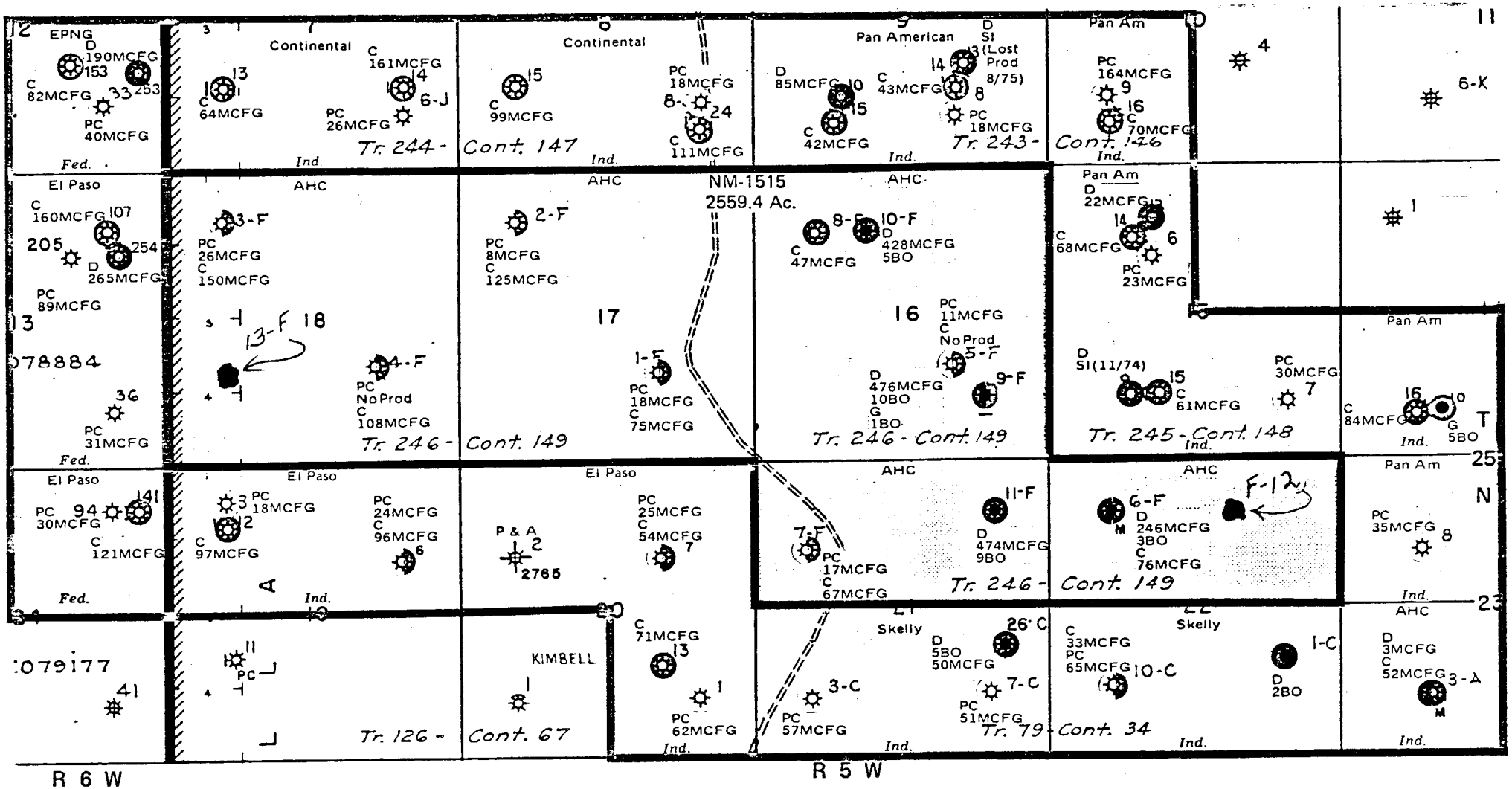
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: May 12, 1976

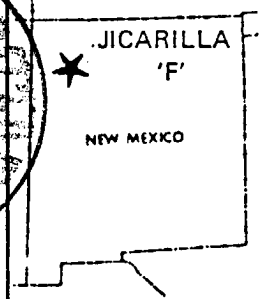
Registered Professional Engineer and/or Land Surveyor: Fred B. Kerr Jr.

Certificate No. 3950


Approx 2000' of Road to Be Built
Proposed Tank Btry & Flow Line
Eagles Nest
Gas Well
Oil Well
Lapis Point
LAPIS VALLEY
LAPIS VALLEY
A-B
Vicinity Map for
AMERADA HESS CORPORATION
Jicarilla Apache F12
Sec 22-T25N-R5W
990'FNL 1650'FEL



ORIENTATION MAP



GEOL / GEOPH DATA

- Pictured Cliffs
- Chacra
- Gallup
- Dakota/Graneros
- Dual Completion (Zones as color coded)

Proposed Location

LEGEND

- AHC
- AHC Joint
- Lease Outline
- Offsetting Wells Outline

TYPE OF OWNERSHIP

Ind. - Jicarilla Apache
Fed. - Federal
St. - State

TULSA EXPLORATION REGION

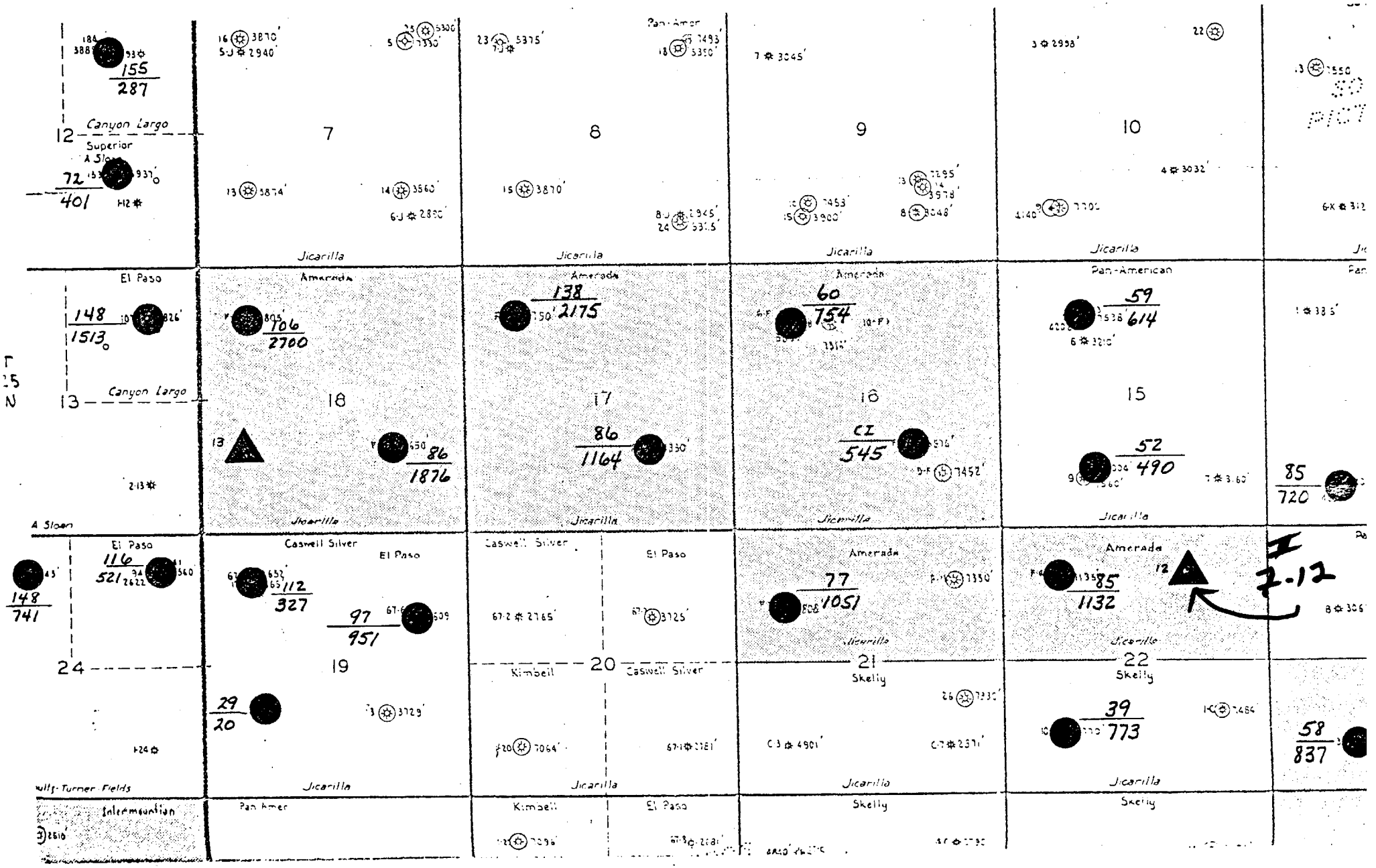
AMERADA HESS

JICARILLA APACHE "F"
Rio Arriba Co., New Mexico

CONTRACT NO. 149, LEASE N.M.-1515

0 1/2 1MILE

Volumes indicate average daily production.

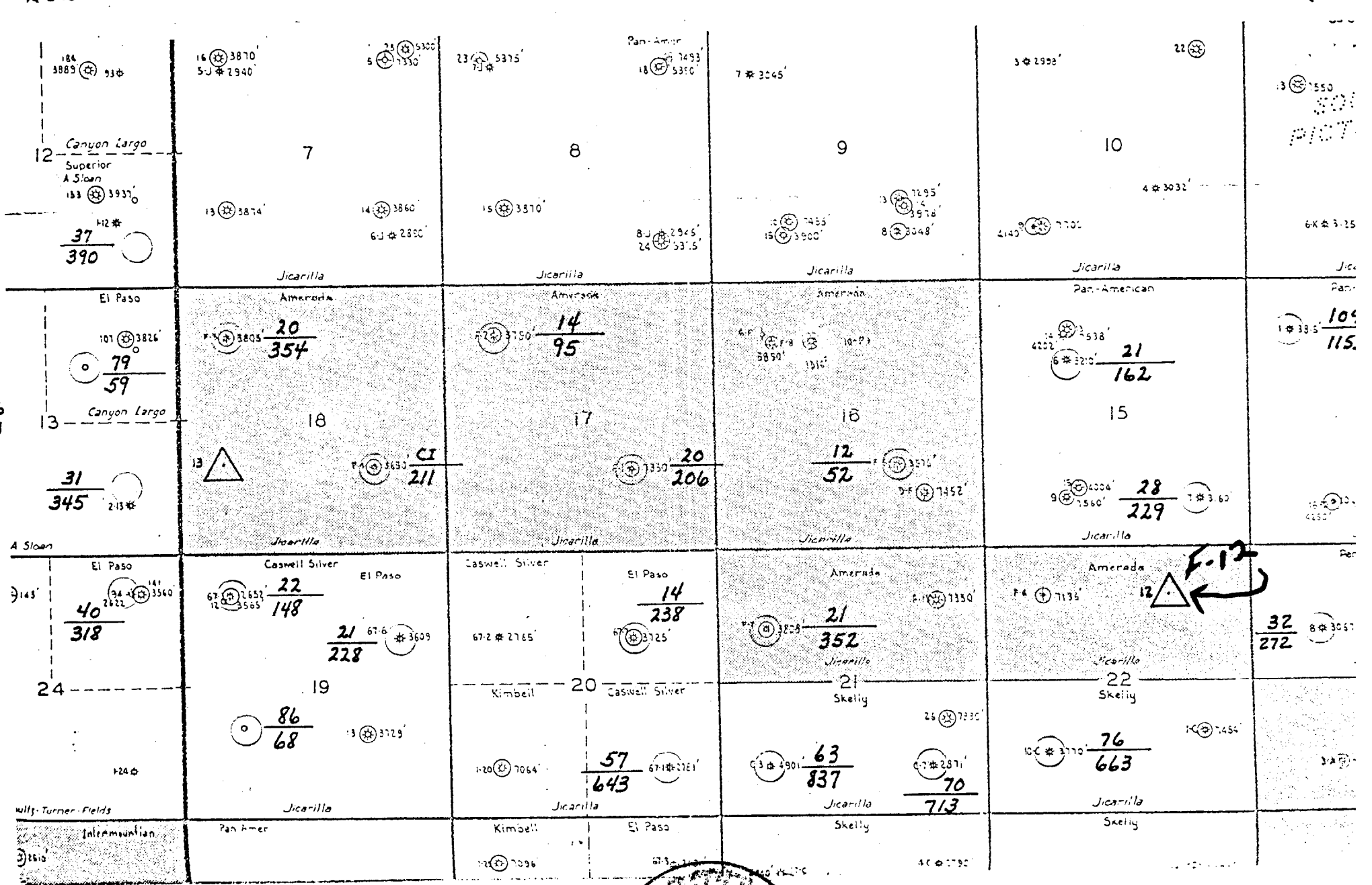


● CURRENT CHACRA COMPLETION

▲ PROPOSED CHACRA COMPLETION

FEB. 1976 DATA

MCFD
CUM. MMCF



○ CURRENT PICTURED CLIFFS COMPLETION

△ PROPOSED PICTURED CLIFFS COMPLETION

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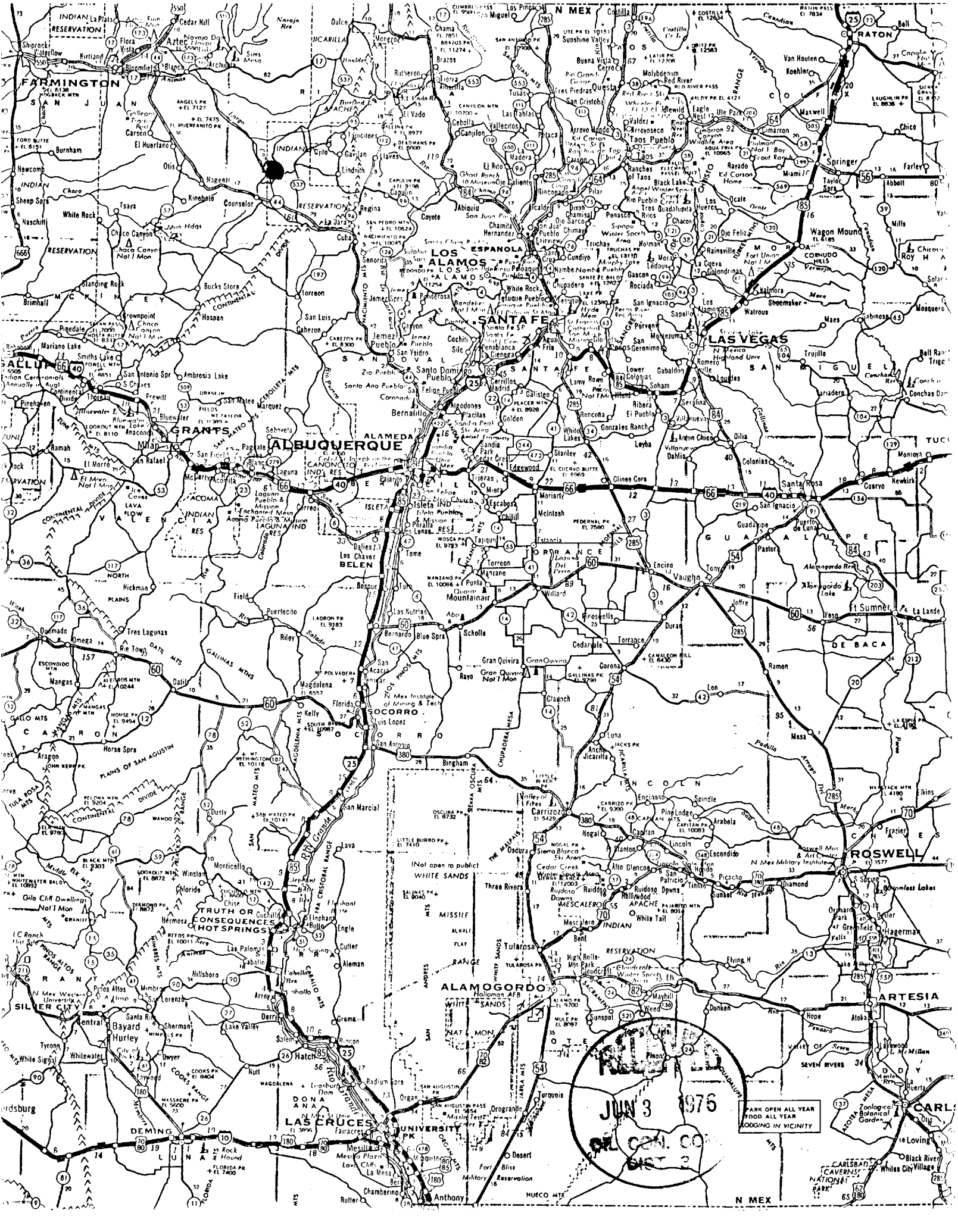
JUN 3 1976
OIL CON. COM.
DIST. 3

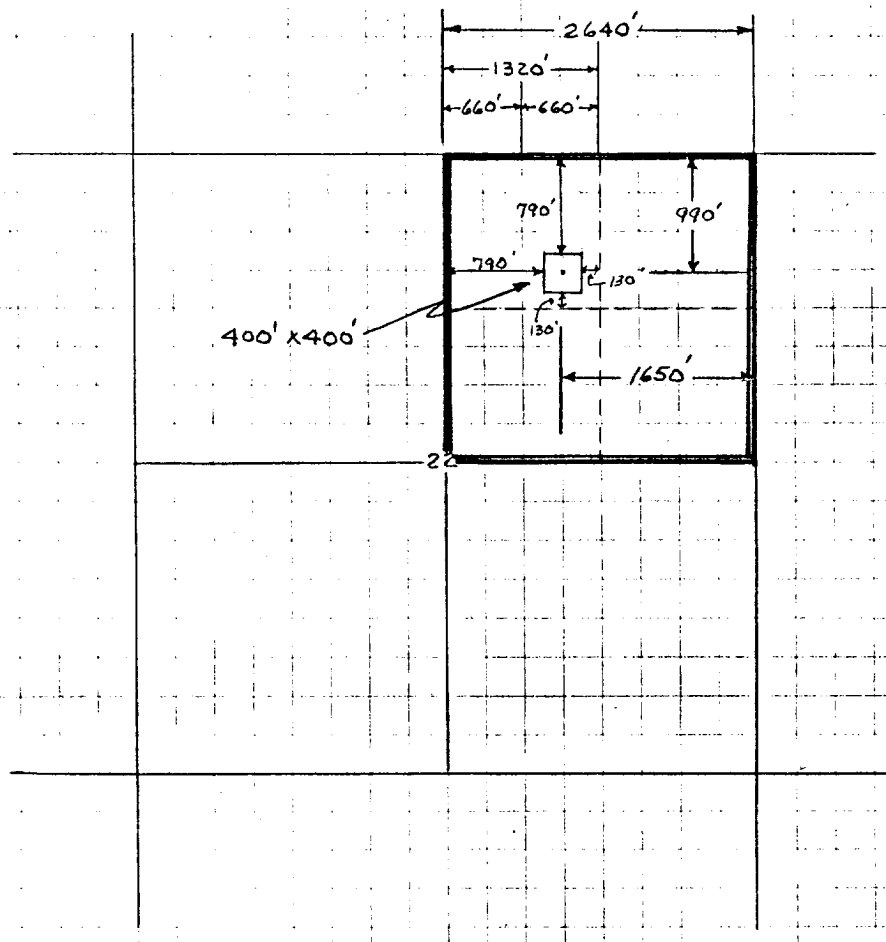
FEB. 1976 DATA
MCFD
CUM. MMCF


FARMINGTON
GALLUP
GRANTS
ALBUQUERQUE
SANTA FE
LOS ALAMOS
LAS VEGAS
RATON
ROSWELL
ARTESIA
CARLSBAD
SILVER CITY
DEMING
LAS CRUCES
ALAMOGORDO
TRUTH OR CONSEQUENCES
HOT SPRINGS
BELEN
SOCORRO
CLOVIS
TUCUMCARI
PORTALES
HOBBS
LOVINGTON
CARLSBAD CAVERNS NATIONAL PARK
N MEX
JUN 3 1976
PARK OPEN ALL YEAR
FOOD ALL YEAR
LODGING IN VICINITY

JICARILLA APACHE "F" No. 12
PICTURED CLIFF & CHACRA APPROVED GAS WELL LOCATION.

LOC. NE/4, SEC. 22, T 25 N, R 5 W; RIO ARRIBA CO., N. MEX.

990' FNL & 1650' FEL OF SEC. 22 Staked 990' FNL & 1650' FEL



160 AC.	ASSIGNED ACREAGE FOR A GAS WELL IN THE PICTURED CLIFF Ss.
160 AC.	ASSIGNED ACREAGE FOR A GAS WELL IN THE CHACRA Ss.

5-10-76 / APAV-

AMERADA HESS CORPORATION

J. Apache "F" 12

Sec. 22, T25N, R5W

Rio Arriba County, New Mexico

May 28, 1976

12 Point Surface Usage Plan

1. Location of well is approximately 18 miles NE of Counselors, New Mexico and is est. 12 miles from State Hiway 537. The attached maps will show existing lease roads in the area.

2. Attached are copies of map and profile USGS topographic/county road map showing proposed well location and access lease road for the well.

3. Plat showing all existing locations within 1/2 mile radius of proposed well is attached.

4. No lateral roads to other well locations are planned at this time.

5. If the well is a producer, a small tank battery will have to be erected near well site.

6. Drilling water purposes will come from Largo Canyon, by water trucks.

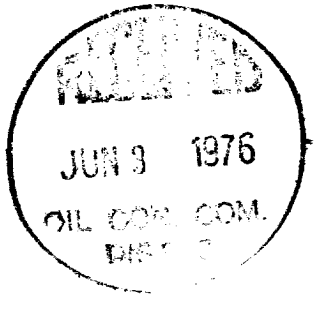
7. A reserve pit of adequate size will be used to handle waste disposal and a trash pit for garbage and trash disposal.

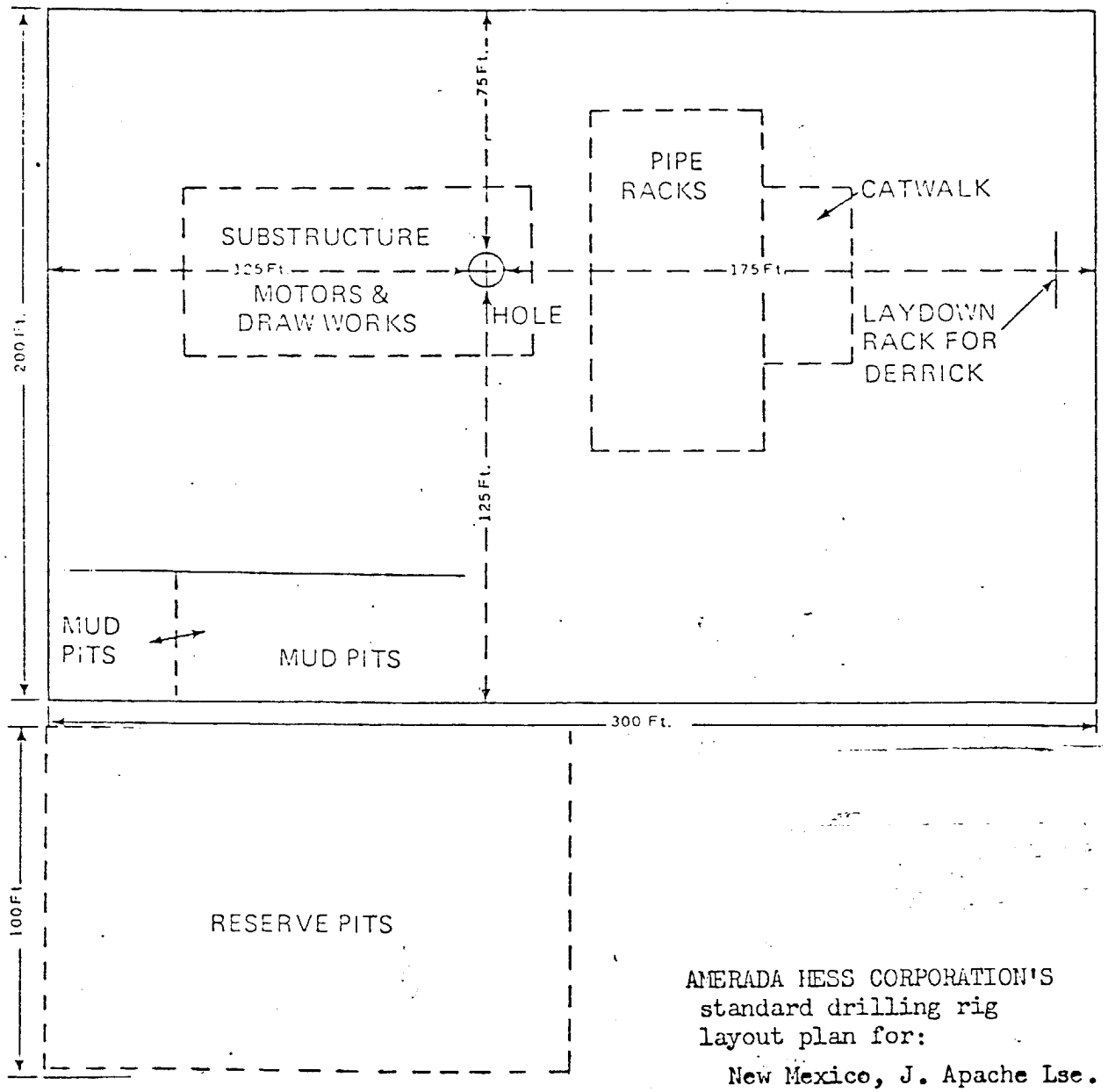
8. &
9. No camps or air strip will be constructed.

10. Plat showing rig layout is attached.

11. Restoration of the Surface will include filling and levelling of all pits as soon as possible and grading and levelling of the location. The surface will be cleaned and reseeded according to instructions from the proper agency for adequacy.

12. The location is on a drainage divide consisting of gullies and hills and the only cuts to be made is a cut approx. 2 1/2 ft. deep to drain well site location. Natural terrain of area will handle balance of the drainage.





AMERADA HESS CORPORATION'S
standard drilling rig
layout plan for:

New Mexico, J. Apache Lse. Drilling Wells

AMERADA HESS CORPORATION

STANDARD PROCEDURES

FOR

BLOW OUT PREVENTION

AND CONTROL

EQUIPMENT

The following blow out prevention, monitoring and control equipment is to be installed on all AHC operated drilling wells.*

1. Minimum of 2 ram type B.O.P.'s with pipe rams in lower preventor and blind rams in the upper preventor with a flow cross flanged between. A third B.O.P. should be required when operating with a tapered drill string. The B.O.P.'s should have at lease the same pressure rating as the well head on which they are installed. The preventors are to be operated hydraulically by an adequate opening and closing system. Manual hand wheels with extensions are to be attached to the B. O. P. 's.
2. 1-bag type B.O.P., hydraulically operated as above, with an element in good condition, and to be of at least the same pressure rating as the ram type B.O.P. -- up to 10,000 PSI.
3. B.O.P. manifold with hydraulic and manual inside valves and with two choke lines and one open line with proper block valves. All piping and valves to be of at least the same pressure rating as the B.O.P. stack.
4. Pit level monitoring device with at least one read out device at the driller's station.
5. Flow rate monitoring device with pump stroke counters connected to both pumps and with automatic trip fill up device with total read out device at the driller's station.

In addition to the equipment listed above, the following equipment is to be installed on any AHC operated drilling well that expects to drill an abnormally pressured zone, or is considered a wildcat well:

6. Hydraulically operated adjustable choke of at least the same pressure rating as the manifold to which it is connected.
7. Adequate mud gas atmospheric separator and mechanical degasser.
8. Automatic mud weighing device with chart read out recording at least the return mud weight.

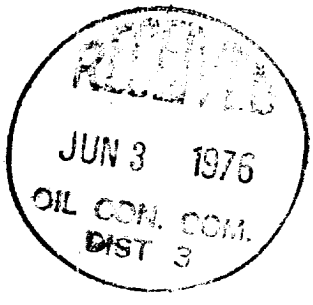
(EQUIPMENT-cont'd.)

9. Chart read out of the flow rate, and pit volume totalizer devices listed above.
10. At least a portable mud gas detector and shale density kit, or when conditions or expectations warrant -- a complete mud logging unit is to be installed.
11. Adequate mixing facilities and storage for bulk barite materilas.

* Items 1through 5 may be subject to some variations, as unusual conditions arise.

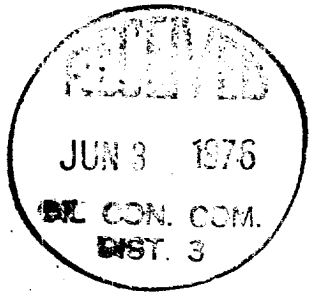
PREPARATIONS

1. Maximum safe pressure valves are calculated and made known for surface equipment and all casing strings, along with fracture pressure at deepest casing shoe or weakest exposed formation.
2. Conduct regularily scheduled (every 5-7 days or as conditions warrant) pressure tests of blow out preventors and control equipment to maximum working pressure with clear water. Check flange bolts for tightness.
3. Work blow out preventors, hydraulic valves, and adjustable choke every trip and pump through choke manifold every other trip.
4. Have choke lines tied into a stack (atmospheric) separator.
5. Establish who has the responsibility for detecting a kick and shutting the well in. This should include checking fill up on trips and watching the hole while other operations are being conducted.
6. Establish who will do what during the killing operations explain to all why each job is important to the success of killing the well.
7. Conduct surprise drills on kick detection and shut in procedures.
8. For maximum safety it is important that pipe rams be placed in the bottom ram type preventor so the well can be shut in if something cuts out in the upper section of the B.O.P. stack or if it is necessary to change rams.
9. Use clean hydraulic oil in the accumulator unit and check level weekly.
10. Each person who is to operate the hydraulic adjustable choke should be completely familiar with the mechanics and operation of the choke.
11. In order to provide necessary data for the killing operation, pump pressures are recorded each tour for pump speeds of 20 and 30 strokes per minute. This data is also repeated if the mud weight is increased during a tour.



PRECAUTIONS

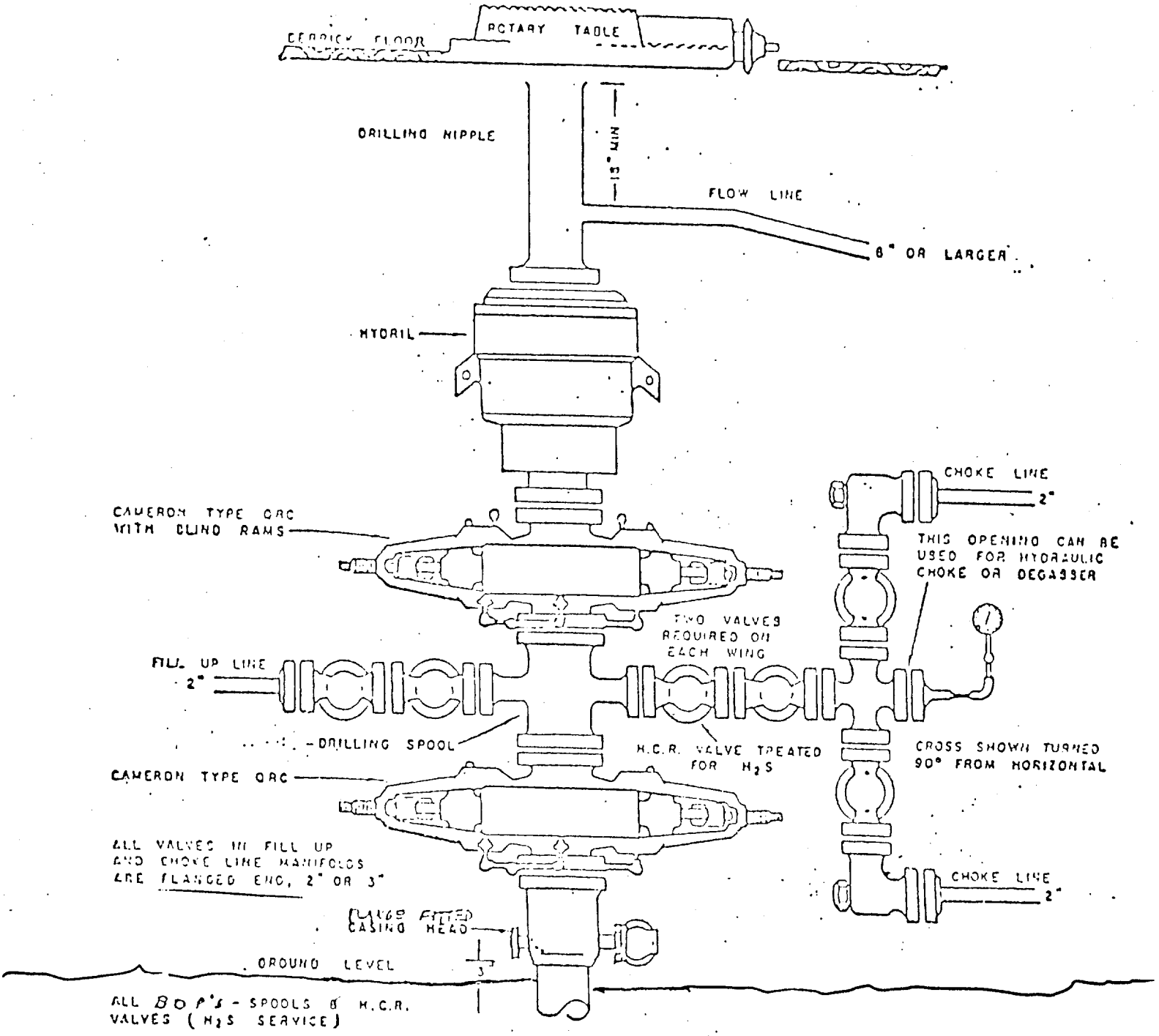
1. Properly rated and perfectly operating blow out preventors and control equipment are installed on the well.
2. At least the following devices are installed and monitored: Pit volume totalizer, flow rate recorder, and trip fill up counter. In addition, pump strokes, pump pressure, mud weight, and bit weight are analyzed for unusual values. On some of the more complex wells, an adjustable choke, degasser, mud weighing device, mud logging unit and bulk barite facilities will also be installed and monitored.
3. Drilling breaks are checked for flow at 3 feet and 10 feet into the break. If the break is of considerable magnitude, it is circulated out, especially if drilling in the proximity of a transition zone.
4. Gas cut mud is considered as a warning, and its cause and extent examined to satisfaction.
5. The hole is filled each 5 stands while pulling out of the hole and pump strokes and pit level decrease are measured and compared against calculated displacement values.
6. Formation pore pressures and fracture pressures are calculated from electric logs and used to aid in proper casing seat selection and mud weight ranges.



DETECTION

The importance of rapid kick detection and fast shut in cannot be over-stressed. Kicks can be detected by the following indications, or combinations thereof:

1. Increase in surface pit volume as detected by pit volume totalizer or a man on the pits.
2. Increase in return mud flow rate as detected by the flow rate monitor.
3. Decrease in drill pipe pressure, caused by oil, gas, or salt water entering the annulus and unbalancing the hole.
4. Gas or salt water cut mud returns caused by a kelly cut, shale gas, drilled pore volume, trip bottoms up, or drilling a high pressure-low volume formation.
5. Rate of penetration increase, especially if drilling in the proximity of an abnormally pressured zone.
6. Hole swabbing on trips as detected by the hole taking an insufficient amount of mud for the calculated pipe displacement, or the occurence of a high concentration of gas upon circulating bottoms up after a trip.



AMERADA HESS CORPORATION'S

LAYOUT PLAN FOR REQUIRED
BLOWOUT PREVENTER
ASSEMBLY