

UNITED STATES
DEPARTMENT OF THE INTERIORGEOLOGICAL SURVEY **APJ 30-039-21232**

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☐MULTIPLE ☒

2. NAME OF OPERATOR

Amerada Hess Corporation, Att: Drlg. Services

3. ADDRESS OF OPERATOR

P.O. Box 2040, Tulsa, Oklahoma 74102

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

At surface ^{1590'}
~~1840'~~ FSL and ^{1180'}
~~800'~~ FWLAt proposed prod. zone
same

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

est. 20 miles NW of Lindrith, New Mexico

16. DISTANCE FROM PROPOSED*

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

800

18. NO. OF ACRES IN LEASE

2559.4

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

2640'

19. PROPOSED DEPTH

7,200

17. NO. OF ACRES ASSIGNED

TO THIS WELL ^{159.53}
~~320~~ to Dakota & ~~160~~ to balance

20. ROTARY OR CABLE TOOLS

Rotary

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

~~est. 6505'~~ Gr. Elev. ^{6501' gr}
(Proration Unit W/2 of Sec. 18)

22. APPROX. DATE WORK WILL START*

Aug. 15, 1976

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8" OD	32.3#	350'+/-	250 sx. and circ.
7-7/8"	5-1/2" OD	15.5#	7200'+/-	800 sx. & est. top @ surface.

Plan to drill a 12 1/4" hole surface to 350', run, set and cement 9-5/8" OD 32.3# new casing at 350' with 250 sx. cement (circ. cement), WOC for est. 18 hrs., drill out from under surface csg. with a 7-7/8" bit to a proposed TD of 7,200' or a sufficient depth to test the Dakota gas zone, log well and if productive in all zones, dual complete in the Dakota and Chacra gas zones and if the Dakota gas sand does not indicate productive, dual complete in the Chacra and Pictured Cliffs gas zones with 5 1/2" csg. (15.5# new) set and cemented at 7,200 or 4050' (which ever zone well is completed in) A 2 stage cement collar will be run in 5 1/2" csg. string.

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.

Gas not dedicated
Blowout equipment program, 12 point surface usage plan, location maps, plats and drilling rig layout plan to follow under separate cover.

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. Lugin

TITLE

Supervisor, Tech/Drlg. Adm. Serv. May 4, 1976

DATE

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

Okal

*See Instructions On Reverse Side

AMERADA HESS CORPORATION

J. Apache "F" 13

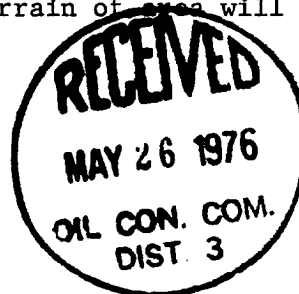
Sec. 18, T25N, R5W

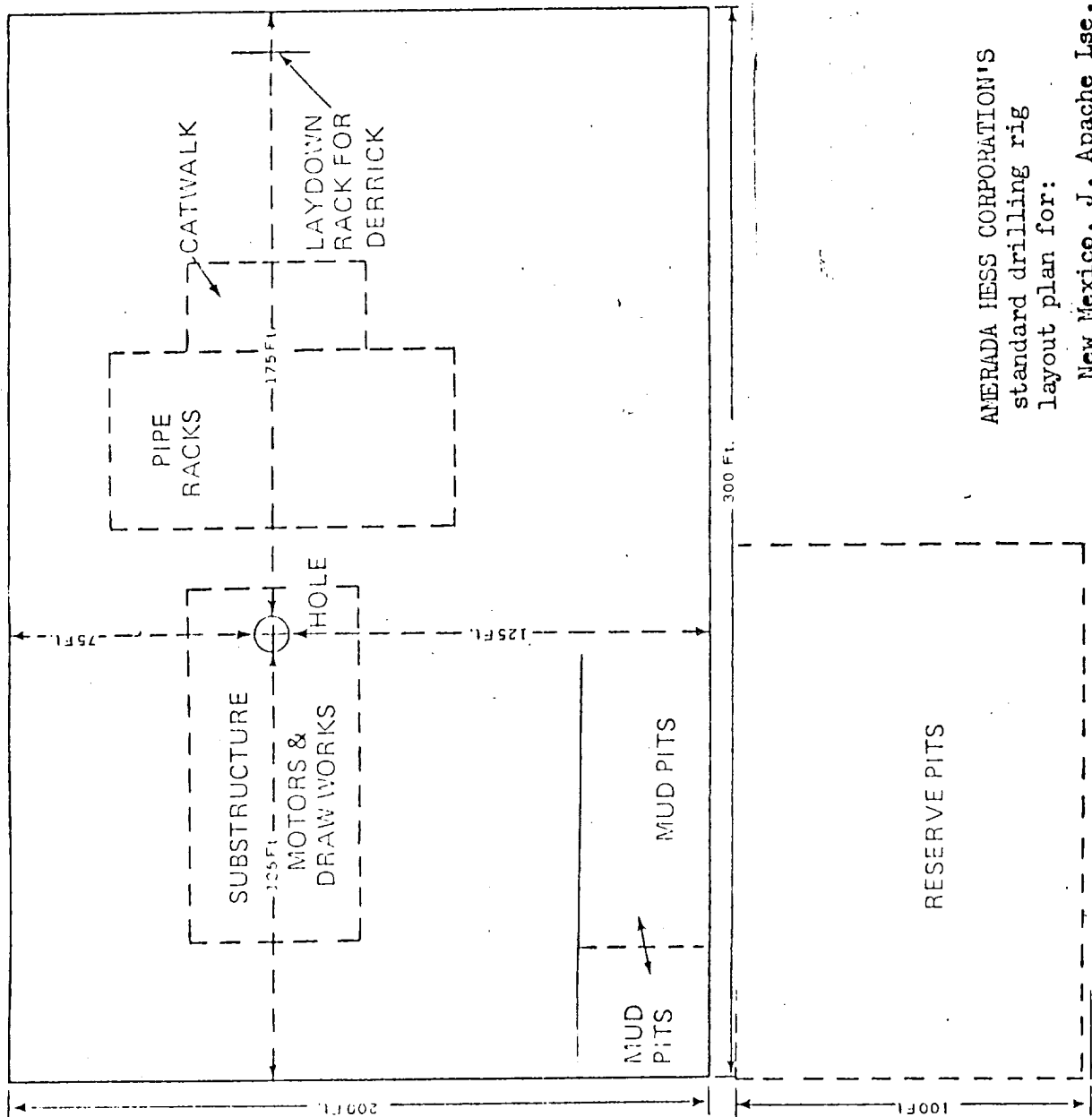
Rio Arriba County, New Mexico

May 21, 1976

12 Point Surface Usage Plan

1. Location of well is approximately 18 miles NE of Counselors, New Mexico and is est. 15 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

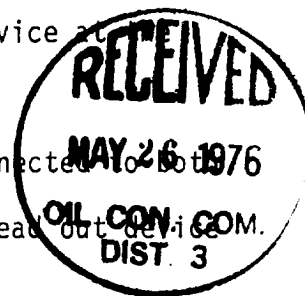


MAY 24 1976

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 least 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 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 materials.

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



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.



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 regularly 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.

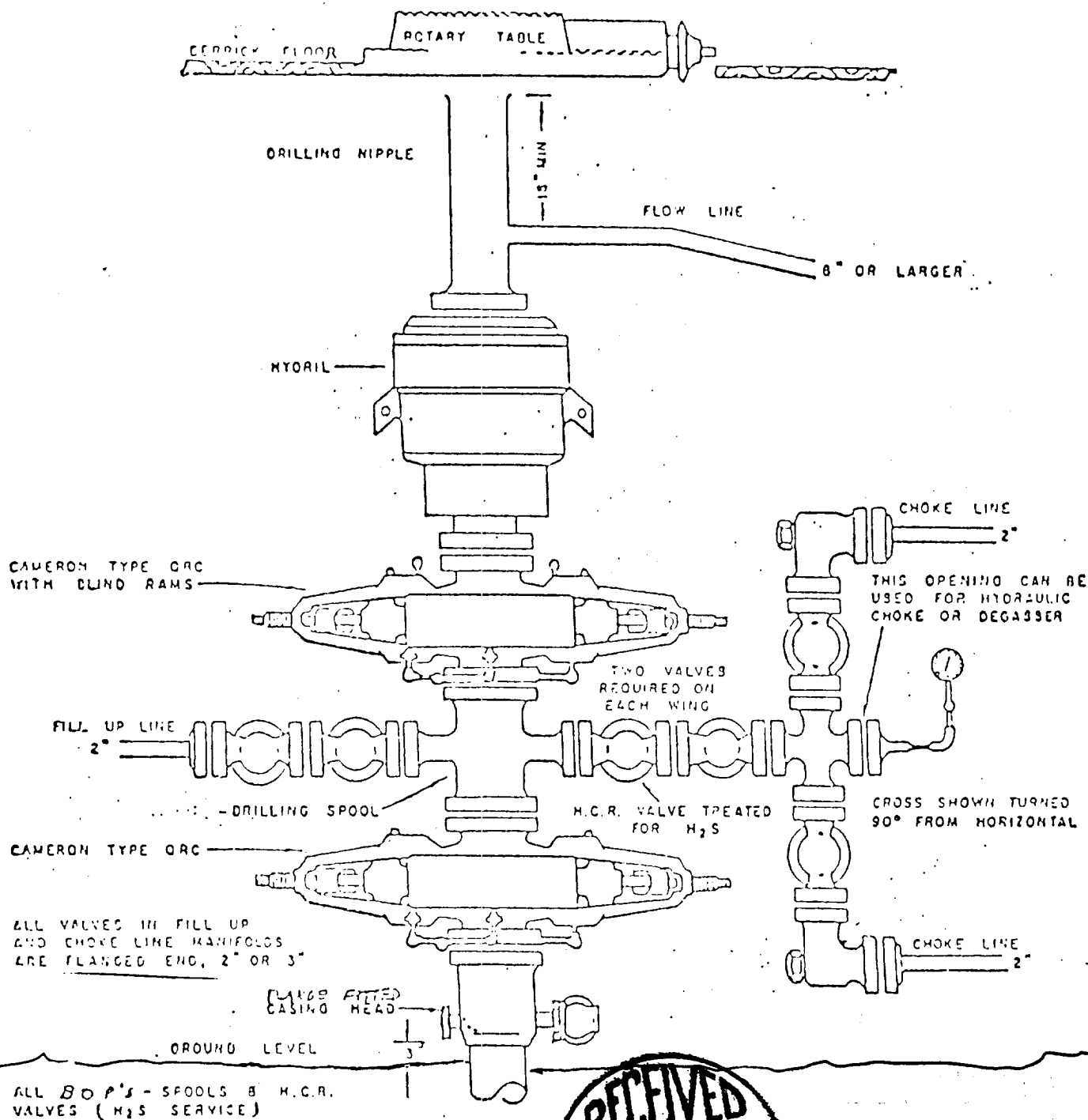


DETECTION

The importance of rapid kick detection and fast shut in cannot be overstressed. 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 occurrence of a high concentration of gas upon circulating bottoms up after a trip.



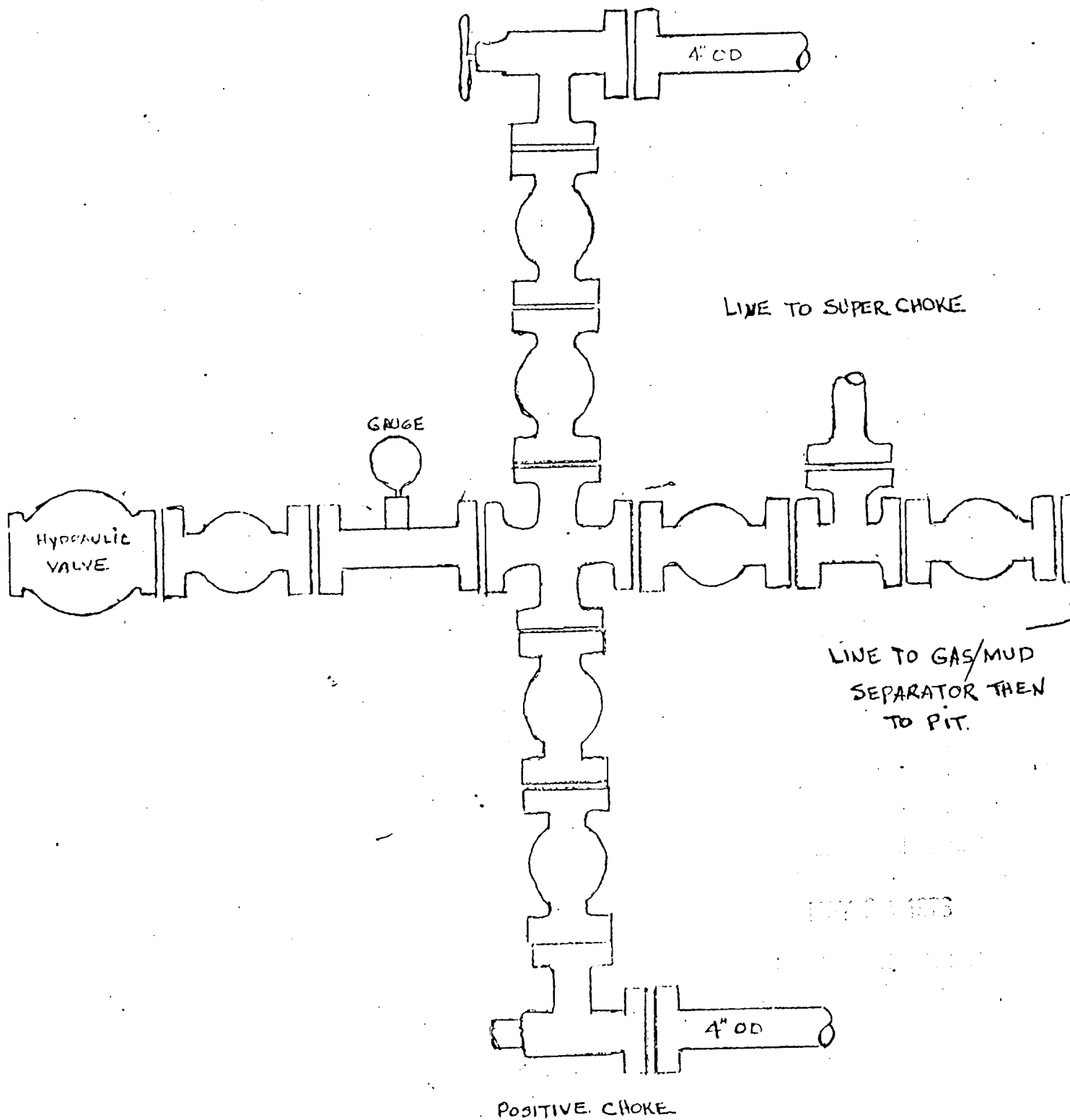


AMERADA HESS CORPORATION

LAYOUT PLAN FOR REQUIRED
BLOWOUT PREVENTER
ASSEMBLY

CHOKE. MANIFOLD ASSEMBLY
5000 PSI W. P. 10,000

ADJUSTABLE CHOKE.



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
Lease 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.
13

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

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA
Sec. 18, T25N, R5W

12. COUNTY OR PARISH
Rio Arriba

13. STATE
New Mexico

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

2. NAME OF OPERATOR
Amerada Hess Corporation

3. ADDRESS OF OPERATOR
P.O. Drawer 817, Seminole, Texas 79360

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
1590' FSL and 1180' FWL

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
Gr. 6501'

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐
FRACTURE TREAT ☐
SHOOT OR ACIDIZE ☐
REPAIR WELL ☐
(Other)

PULL OR ALTER CASING ☐
MULTIPLE COMPLETE ☐
ABANDON* ☐
CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☒
FRACTURE TREATMENT ☐
SHOOTING OR ACIDIZING ☐
(Other)

REPAIRING WELL ☐
ALTERING CASING ☐
ABANDONMENT* ☐

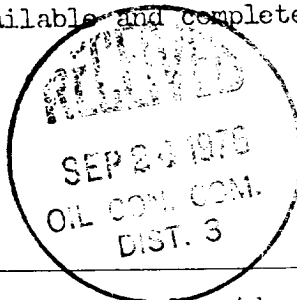
(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

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.)*

T.D. 7,180' by driller; 7,186' by Loggers

After WOC for 18 hrs. running 9-5/8" surface csg. (Re: Sundry Report dated 8/25/76), drilled to a total depth of 7,180' 9/13/76, Dresser Atlas logged well with Dual Ind. Laterolog W/SP & GR; Comp. Form. Density W/Comp. neutron GR & caliper 7184 to 2100' and GR 7184 to 300', conditioned hole 9/15/76, run, set and cemented 5 1/2" OD 17# K-55 & 15.5# K-55 new casing at 7,178' with fill collar @ 7131, stage collars at 5485 & 3695', 1st. stage cement W/350 sx. Dowell Class "B", good returns while cementing, plug down @ 9:45PM 9/15 W/max. PP 2000/#, WOC 6 hrs. and 2nd. stage cement by Dowell with 350 sx. Class B cement, plug down @ 4:30 AM 9/16/76, good returns W/2500/# max. PP, WOC 6 hrs. and Dowell cemented 3rd. stage W/1100 sx. Class B cement W/max. PP 2500/# @ 12 noon 9/16/76 and circ. out approx. 240 sx. cement. N.D. BOP, set 5 1/2" csg. slips, cut off 5 1/2" csg., released Cactus Drlg. Co. rig #19 at 2 PM 9/16/76.

Will be moving in a completion unit when available and completed by Production Dept.



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

SIGNED E. Griffin

TITLE Supervisor, Drlg. Adm. Serv. DATE 9/17/76

(This space for Federal or State office use)

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:

TITLE DATE

OIL CONSERVATION COMMISSION
Antic DISTRICT

OIL CONSERVATION COMMISSION
BOX 2088
SANTA FE, NEW MEXICO

DATE 4-22-77

RE: Proposed MC ✓
Proposed DHC _____
Proposed NSL _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Carl Ulvog

Gentlemen:

I have examined the application dated 4-14-77
for the Amurda Hys. Prop. J. Apache F #13 L. 18.25N.5W
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve

Yours very truly,

AR Kendrick

**NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
APPLICATION FOR MULTIPLE COMPLETION**

Form C-107
5-1-61

Operator Amerada Hess Corporation		County Rio Arriba		Date 4-14-77
Address Drawer D, Monument, New Mexico 88265		Lease J. Apache "F"		Well No. 13
Location of Well L	Unit 18	Section 25-N	Township 5-W	Range

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES _____ NO X
2. If answer is yes, identify one such instance: Order No. _____ ; Operator Lease, and Well No.: _____

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Otero Chacra		Basin Dakota
b. Top and Bottom of Pay Section (Perforations)	3434' to 3550'		6908' to 6955'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flow		Flow

4. The following are attached. (Please check YES or NO)

Yes	No	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*
<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

Amoco Production Company, Box 3092, Houston, Texas 77001

Getty Oil Company, Box 1650, Tulsa, Oklahoma 74102

Continental Oil Company, Box 2197, Greenway Plaza, Houston, Texas 77001

El Paso Natural Gas Company, Box 990, Farmington, New Mexico 87401

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO _____. If answer is yes, give date of such notification **4-14-77**.

CERTIFICATE: I, the undersigned, state that I am the Supv. Adm. Ser. of the Amerada Hess Corporation (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

E. B. Fisher
Signature

*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: Multiple completion will result in an unorthodox well location and/or a non-standard perforation unit in one or more of

J. APACHE "F" No. 13
Sec. 18, T25N, R5W
Rio Arriba County, New Mexico

