

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM 021029
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR DAVID FASKEN		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR 608 First National Bank Bldg., Midland, Texas 79701		8. FARM OR LEASE NAME SHELL FEDERAL COMM.
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1835' FWL 1980' FWL 5460' FWL Sec. 5, T-21-S, R-24-E, NMPM, Eddy Co., New Mexico At proposed prod. zone Same		9. WELL NO. 3
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 14 Mi. SW Lakewood, New Mexico		10. FIELD AND POOL, OR WILDCAT Cemetery Morrow Gas
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1980'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 5, T-21-S, R-24-E NMPM
16. NO. OF ACRES IN LEASE 926.46 640 Comm. Tract		12. COUNTY OR PARISH 13. STATE Eddy N.M.
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 2951.6		17. NO. OF ACRES ASSIGNED TO THIS WELL 286.46
19. PROPOSED DEPTH 9900'		20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3743 GR		22. APPROX. DATE WORK WILL START* Dec. 15, 1978

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8" API	48# H-40	400'	To circulate Est. 250 Sx
12-1/4"	8-5/8" API	24# & 32# K-55	3000'	To circulate Est. 1100 Sx
7-7/8"	4-1/2" API	11.6# J-55 & N-80	9900'	775 Sx

- (1) Proposed drilling program - see Attachment #1
(2) The surface formation is the Queen gypsum of Permian Age
(3) Estimated Tops - Queen ----- 0
3rd Bone Springs -- 6650
Wolfcamp ----- 7100
Cisco ----- 7808
Morrow ----- 9433
(4) Blow Out Preventer Specifications - See Attachment #2
(5) No abnormal pressure zones anticipated
(6) Duration of drilling operation estimated 40 days
(7) Acreage dedicated to gas contract

RECEIVED

SEP 22 1978

O. C. C.
ARTESIA, OFFICE

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 <u>James B. Henry</u>	TITLE <u>Agent</u>	DATE <u>Sept. 1, 1978</u>
	(This space for Federal or State office use)		
	PERMIT NO. _____	APPROVAL DATE _____	
	APPROVED BY _____	TITLE _____	DATE _____
	CONDITIONS OF APPROVAL, IF ANY:		

*See Instructions On Reverse Side

Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well. Consult State or Federal office for specific instructions.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.



MOCC COPY
United States Department of the Interior

GEOLOGICAL SURVEY
P. O. Drawer U
Artesia, New Mexico 88210

September 19, 1978

David Fasken
608 First National Bank Bldg.
Midland, Texas 79701

DAVID FASKEN Shell Federal Com. No. 3 1835 FNL 1980 FWL Sec. 5, T21S, R24E Eddy County Lease No. NM-021029 Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 9,900 feet to test the Morrow is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

1. Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal Leases, dated July 1, 1978.
2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.
3. Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should be not less than 8" x 5" in size and each page should identify the well.
4. All above-ground structures and equipment shall be painted in accordance with the attached Painting Guidelines. The color used should simulate sandstone brown (Federal Standard Color No. 595A, color 20318 or 30318).
5. Before drilling below the 8-5/8" casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.
6. A kelly cock will be installed and maintained in operable conditions.
7. After setting the 8-5/8" casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the test and shall be furnished a copy of the pressure test report.

8. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Wolfcamp formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:
 - (1) A recording pit level indicator to determine pit volume gains and losses.
 - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
 - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
9. Notify the Survey in sufficient time to witness the cementing of the 8-5/8" casing.
10. Cement behind the 13-3/8" and 8-5/8" casing must be circulated.

Sincerely yours,

(Orig. Sgd.) ALBERT R. STALL

Albert R. Stall
Acting District Engineer

**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

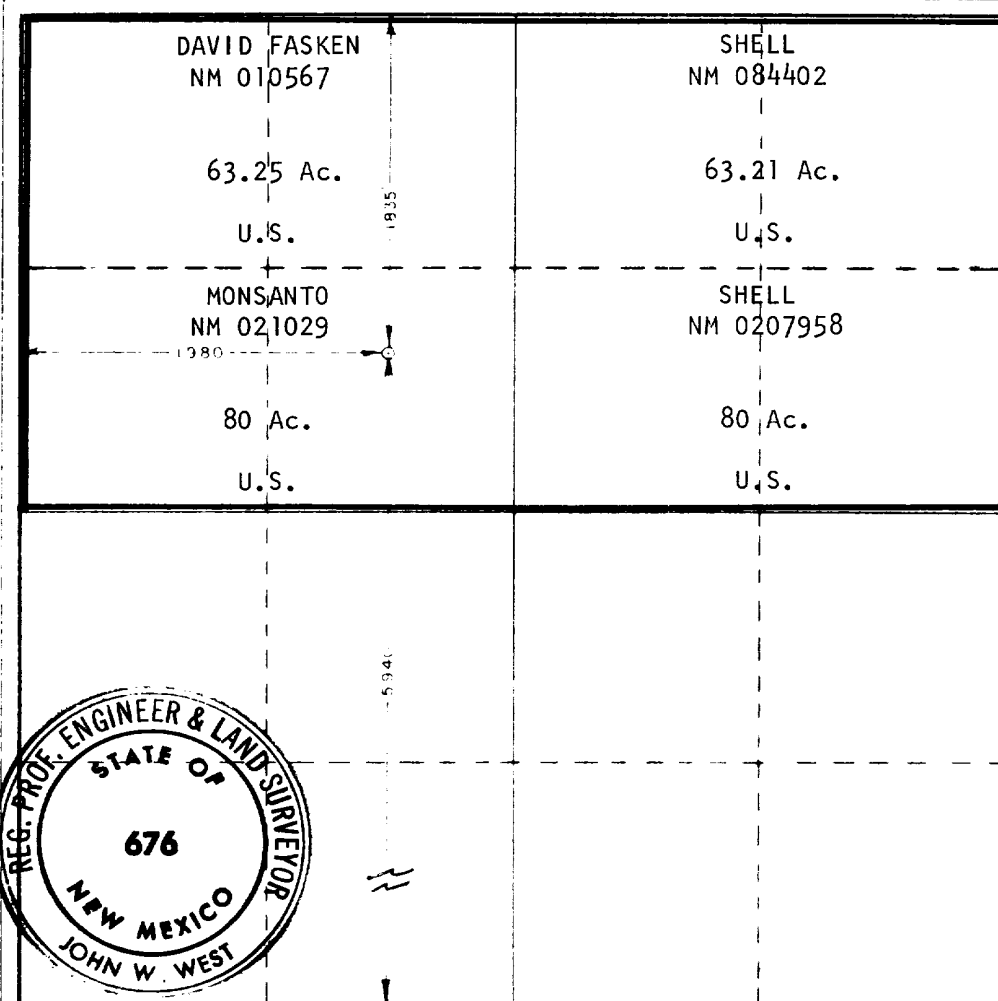
Operator David Fasken			Lease Shell Federal Comm.		Well No. 3
Tract Letter F	Section 5	Township 21 South	Range 24 East	County Eddy	
Actual Footage Location of Well: 1835 feet from the North line and 1980 feet from the West line					
Ground Level Elev. 3743.0	Producing Formation Morrow		Pool Cemetery Morrow Gas	Dedicated Acreage: 286.46 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 Communitization - All of Sec. 5

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

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.

Name

AGENT

Position

DAVID FASKEN

Company

SEPTEMBER 1, 1978

Date

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

August 29, 1978

Registered Professional Engineer and/or Land Surveyor

Certificate No. **John W. West**

676

Ronald J. Eidson

3239

RECOMMENDED DRILLING & COMPLETION PROCEDURE

A.F.E. NO. 412

David Fasken ----- SHELL FEDERAL COMM. NO. 3 --- Cemetery Morrow Field
Eddy County, New Mexico

1. Drill 17-1/2" hole to 400' with spud mud.
2. Set 13-3/8" casing at 400', cement to surface and install 12" x 3000 PSI W.P. casinghead and B.O.P. stack. (Est. 250 sx Class "C" w/2% CaCl.)
3. Drill 12-1/4" hole with water from 400' to 3000', control seepage with paper. Dry drill if complete loss of returns is experienced.
4. Load hole with 34 sec. viscosity mud at 3000', if hole is showing severe seepage, otherwise run casing with water in hole.
5. Set and cement 8-5/8" casing at 3000' with sufficient cement to circulate. (Estimate 900 sxs. Halliburton Lite, 1/2# Flocele, slurry wt. 12.8#/gal. + 200 sxs. Incor Neat with 2% CaCl, slurry wt. 14.8#/gal.). W.O.C. 24 hrs. Install 12" - 3000 PSI W.P. X 10" - 3000 PSI W.P. spool with secondary seal and bit guide, choke manifold, B.O.P., and Hydril.
6. Test casing, casing spool, B.O.P., and choke manifold to 3000 psig with Yellow Jacket. Install P.V.T. equipment and flow sensor at nipple up or before 7500' is reached.
7. Drill 7-7/8" hole to a total depth of 9900' using water to drill to 6500', use 4% KCl brine to 9400', mud up with polymer starch mud with 8.7#/gal., 45 sec. viscosity, 10 cc water loss. At 9400' increase viscosity as necessary to maintain hole to total depth.
8. Drill stem test all shows.
9. Run logs (Combination CNL-FDC w/Gamma Ray, DLL, and Dip Meter).
10. Set and cement 4-1/2" oil string (resin coated and centralized through pay zone) with 775 sxs. Class "H" cement with 5.4# KCl and 0.8% Halad-22. Pump plug down with 5% KCl packer fluid. Run temperature survey to locate cement top.
11. Install 10" - 3000 PSI W.P. X 6" - 3000 PSI W.P. tubinghead and Christmas Tree.
12. Move out rotary rig and move in pulling unit.
13. Pressure test casing and head to 3000 psig.
14. Install B.O.P.

- 1 -

JBH:8-21-78

Recommended Drilling and Completion Procedure
A.F.E. No. 412
Shell Federal Comm. No. 3

15. Run tubing, 2-3/8" EUE AB modified, and packer.
16. Swab well down.
17. Control pressure perforate with "thru-tubing" perforating gun.
18. Production test well.
19. Stimulate well as necessary.
20. Clean up treating fluid.
21. Flow test well.
22. Run C.A.O.F.P. and pressure build up.
23. Connect surface equipment.

MULTIPOINT SURFACE USE AND OPERATIONS PLAN

for

DAVID FASKEN

Ross Federal Comm. No. 2

660' FWL 3300' FSL Sec. 4, T-21-S, R-24-E, NMPM

Ross Federal Comm. No. 3

460' FWL 6040' FSL Sec. 4, T-21-S, R-24-E, NMPM

Shell Federal Comm. No. 2

660' FWL 3300' FSL Sec. 5, T-21-S, R-24-E, NMPM

Shell Federal Comm. No. 3

1980' FWL 5940' FSL Sec. 5, T-21-S, R-26-E, NMPM

EDDY COUNTY, NEW MEXICO

1. Existing Roads. The attached plat of a portion of the FOSTER RANCH NEW MEXICO quadrangle sheet shows all existing roads in the Cemetary Morrow Field in the area of these proposed wells. No improvement of existing road is planned except for 1000' of ranch road to Shell Federal Comm. No. 2 (highlighted in green). Existing lease roads used will be maintained by blading and watering as necessary.
2. Planned Access Roads. The attached plat referenced in Item 1 shows the planned new access roads as a single dashed line highlighted in red. The footage of new road to each well is:

Ross Federal Comm. No. 2	- 1060'
Ross Federal Comm. No. 3	- 500'
Shell Federal Comm. No. 2	- 230'
Shell Federal Comm. No. 3	- 1380'

The road beds will follow the surface contour and no cut or fill is anticipated.

The road bed will be 12' in width. Due to the short lengths of new road no turnouts are planned. No fences will be cut and no cattleguards are required.

3. Location of Existing Wells. Existing wells are shown on the attached plat.
4. Location of tank batteries, production facilities, etc. The gas line operated by David Fasken connecting the Ross Federal No. 1 to the N.G.P.L. System at Shell Federal No. 1 is shown on the attached plat - highlighted in yellow. All condensate tanks, separating equipment, dehydrators, and gas meters are located on the well pads. It is anticipated that a new gas gathering system will be constructed to the successful wells, however, this cannot be planned until (1) production is established, and (2) negotiations between producer and purchaser are completed.
5. Location and type of water supply, etc. Windmills and springs are shown on the attached plat. The source of drilling water will be from a private well on fee land in the SE-1/4 of Section 32, T-20-S, R-25-E, NMPM. Temporary lines on the surface will be laid to each proposed well.
6. Source of construction materials. Road surfacing caliche will be supplied from existing pits on Federal Lands in the SW-1/4 of Section 5 and the SW-1/4 of Section 4, T-21-S, R-24-E, NMPM as shown on the attached plat by purple triangles.

7. Methods for handling waste disposal. Cuttings from the well bore will be contained in conventional earth reserve pits. The top soil will be used in the pit walls and used to cover the pits after they have been dried and leveled.

Garbage will be burned in a burner pit dug in the reserve pit excavation in an area cleared of all flammable vegetation and materials.

The only salts and chemicals anticipated to be used will be in the drilling mud and will be buried after the mud in the reserve pit with the cuttings has dried.

Sewage will be disposed of into a temporary septic tank dug at the rig trailer house. This will be filled with dirt, covered with top soil and leveled at the completion of the well.

Drilling fluids will be allowed to dry in the reserve pits and will be buried with the cuttings and backfilled with top soil.

Produced oil and water will be contained in test tanks and the oil trucked to the nearest pipeline and the water hauled by transport truck to the nearest commercial disposal well and injected therein.

8. Ancillary facilities. None are planned.
9. Well site layout. See attached plat.
10. Restoration of the Surface. The location will be reshaped to the original contour of the surface except for the area needed to service the well. Unnecessary pad and roadway will be "ripped" to help with recovery of natural plants.

START: 60 Days after completion of well.

END: 120 Days after completion of well.

11. Other information. All lands are Federal ownership for roads and locations administered by the Bureau of Land Management and utilized for cattle grazing by the Richard Howell, et al Ranch.

The land is a gypsum soil sparsely vegetated with grease wood, grass, spanish dagger and mesquite scrub. The U.S. Soil Conservation Service describes this soil officially as Reeves Gypsum land complex and Gypsum land cottonwood complex with zero to 3° slopes.

There are no geologic or geographic hazards and the land has been checked and found devoid of archeological sites (see special report by Eastern New Mexico University forwarded to your office.)

12. Operator's representative.

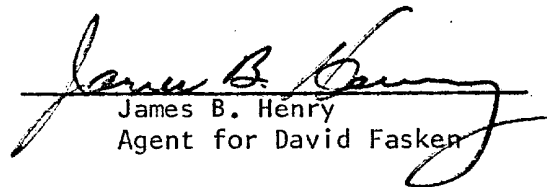
James B. Henry, Agent for David Fasken
Henry Engineering
807 First National Bank Building
Midland, Texas 79701

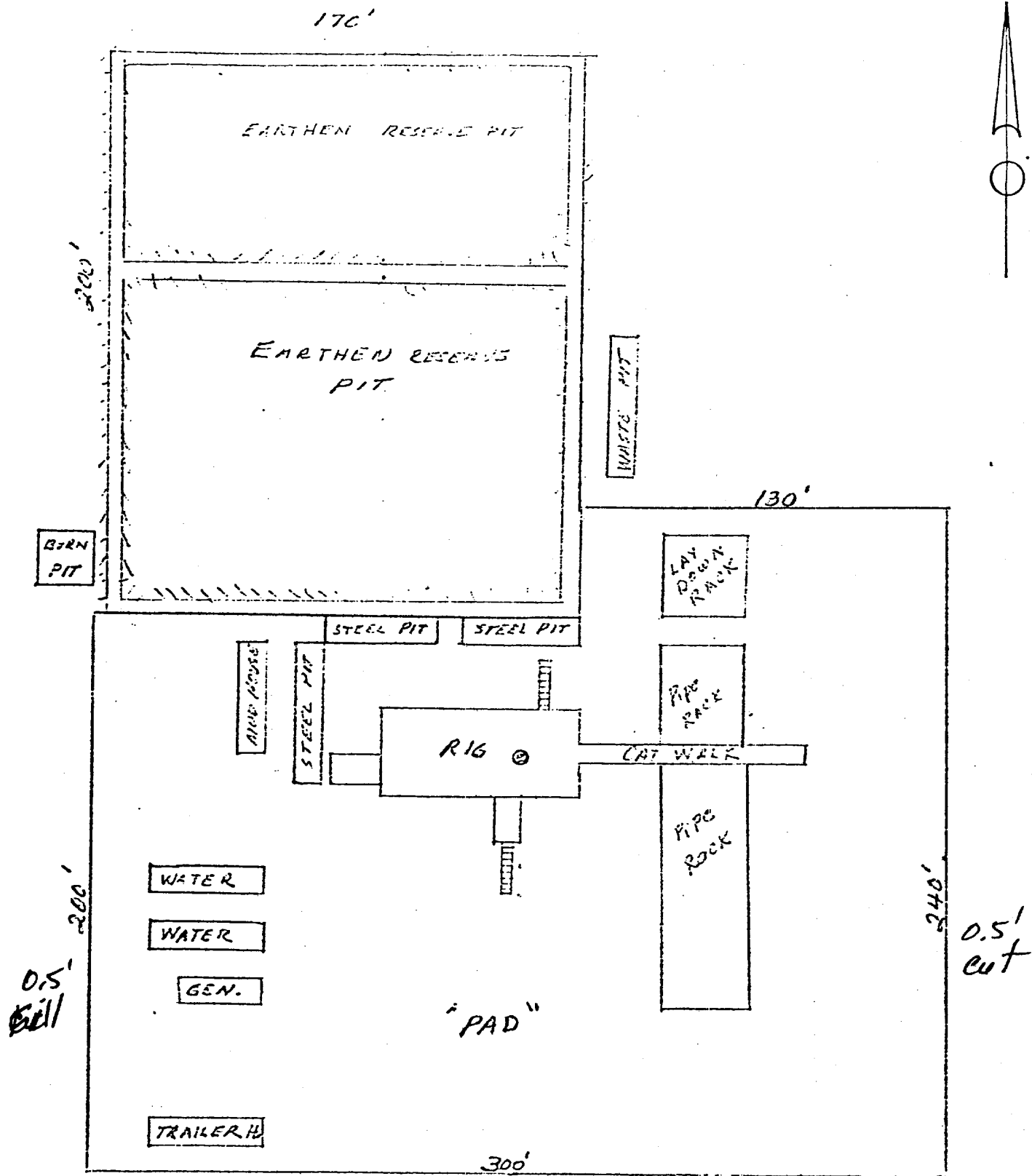
Business Phone: 1-915-683-1893
Home Phone: 1-915-694-0137

13. Certification.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently 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 David Fasken and his contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

September 1, 1978


James B. Henry
Agent for David Fasken



HENRY ENGINEERING
MIDLAND, TEXAS

RIG & WELL SITE PLAT
SHELL FED COMM.
No 3

HENRY ENGINEERING

SUBJECT: BLOWOUT PREVENTER

FILE: _____

STACK

DATE: _____

ENGINEERING MEMORANDUM

