

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.

LC-055264

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Grayburg Jackson San Andres

8. FARM OR LEASE NAME

9. WELL NO.

46

10. FIELD AND POOL, OR WILDCAT

Grayburg Jackson G-S

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec. 12-17S-30E

12. COUNTY OR PARISH 13. STATE

Eddy

New Mexico

1. OIL WELL ☐ GAS WELL ☐ OTHER ☒ Water Injection

2. NAME OF OPERATOR

WINDEFOR OIL COMPANY

3. ADDRESS OF OPERATOR

Box #198, Artesia, New Mexico 88210

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

See also space 17 below.
At surface

660' from north and 1980' from east lines,
Sec. 12-17S-30E

14. PERMIT NO.

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

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETION

SHOOT OR ACIDIZE

ABANDON*

REPAIR WELL

CHANGE PLANS

(Other)

X

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREATMENT

ALTERING CASING

SHOOTING OR ACIDIZING

ABANDONMENT*

(Other)

(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.)*

It appears that this well cannot be commenced within 90 days of approval

date, due to rig being delayed. It is requested that commencement date be extended

to Dec. 20, 1978.

RECEIVED

OCT 10 1978

U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

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

SIGNED

TITLE Consulting Engineer

DATE Oct. 10, 1978

(This space for Federal or State office use)

APPROVED BY

TITLE ACTING DISTRICT ENGINEER

DATE OCT 11 1978

CONDITIONS OF APPROVAL, IF ANY:

THIS APPROVAL IS RESCINDED IF OPERATIONS
ARE NOT COMMENCED WITHIN 3 MONTHS.

EXPIRES

JAN 11 1979

*See Instructions on Reverse Side

Instructions

General: This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law 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 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 17: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

100CC COPY

SUBMIT IN 1 LIGATE*
(Other instructions on
reverse side)Form approved.
Budget Bureau No. 42-R1425.UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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 ☒ Water InjectionSINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

WINDFOHR OIL COMPANY

3. ADDRESS OF OPERATOR

Box #198, Artesia, New Mexico 88210

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

At surface 660' from north and 1980' from east lines,
Sec. 12-17S-30E.

At proposed prod. zone

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

4 1/2 miles northeast of Loco Hills

15. DISTANCE FROM PROPOSED*

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

660'

18. DISTANCE FROM PROPOSED LOCATION*

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

1320'

16. NO. OF ACRES IN LEASE

320

19. PROPOSED DEPTH

3550'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

20. ROTARY OR CABLE TOOLS

Rotary

JUL 21 1978

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

3720 Gr.

22. APPROX. DATE WORK WILL START*

O. C. C.

23.

PROPOSED CASING AND CEMENTING PROGRAM

ARTESIA, OFFICE

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4	8-5/8"	24#	600	250 sx.
7-7/8"	4 1/2"	9.5#	3550	500 sx. Class C

Casing will be cemented near bottom, pays perforated and treated.

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

Ralph L May

TITLE Consulting Engineer

DATE June 14, 1978

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

JUL 19 1978

APPROVED BY

(Orig. Sgd.) ALBERT R. STALL

TITLE

ACTING DISTRICT ENGINEER

DATE

JUL 19 1978

CONDITIONS OF APPROVAL, IF ANY:

Subject to the attached

*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.

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.

**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

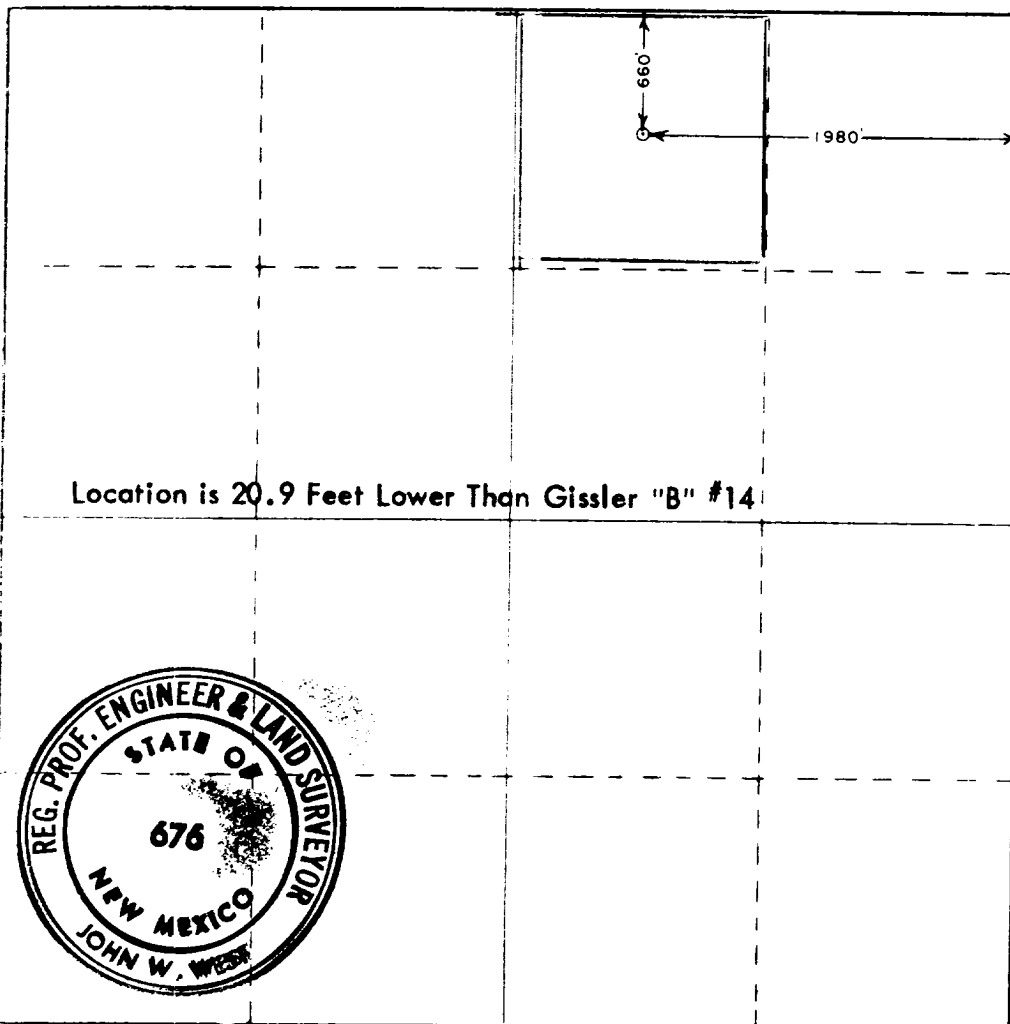
Operator Windfohr Oil Co.			Lease Grayburg Jackson S.A.		Well No. 46
Section B	Section 12	Township 17 South	Range 30 East	County Eddy	
Initial Location of Well: 1980 feet from the East line and 660 feet from the North line					
Initial Elev. 3720	Producing Formation San Andres		Pool Grayburg Jackson G-SA		Dedicated Acreage: RECEIVED

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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 _____

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 *Ralph L. May*
Position
Consultant

Company _____

Date
June 14, 1978

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
June 3, 1978

Registered Professional Engineer and Land Surveyor

John W. West
Certificate No. **John W. West 676**

Ronald J. Eidson 3239

660 90 1320 1680 1980 2340 2640 2000 1800 1000 800

SURFACE USE AND OPERATIONS PLAN

WINDFOHR OIL COMPANY
GRAYBURG JACKSON SAN ANDRES UNIT WELL #46
660' f. N. & 1980' f. E. Sec. 12-17S-30E
EDDY COUNTY, NEW MEXICO
LEASE #LC-055264
(Water Injection Well)

Following is the surface use and operations plan for the drilling of the Windfohr Oil Company-Grayburg Jackson San Andres Unit, well #46:

1 & 2. EXISTING ROADS AND PLANNED ACCESS

Exhibit "A" shows a map of the general area. The location of well can be reached by going east from Loco Hills on U.S. Highway #82 approximately two miles and turning north through cattleguard where a "Windfohr" sign is placed. Go north on paved road approximately $2\frac{1}{2}$ miles. Turn right for about 600' and location is 50' south. Exhibit "A" shows wells, roads, injection lines and other facilities in the area. Injection wells are shown by the double circles.

3. LOCATION OF EXISTING WELLS

See Exhibit "A".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

Proposed well location is shown on Exhibit "A" by the red circle and red arrow. Less than 50' of access road will be necessary, connecting to existing road to the north. Existing injection line runs north-south 126' east of location. The new injection line will be buried, as is the present line.

5. LOCATION AND TYPE OF WATER SUPPLY

Water for drilling well will be hauled or taken from present injection system.

6. SOURCE OF CONSTRUCTION MATERIALS

Caliche for surfacing access road and location pad will either be obtained near well, or taken from an existing pit in the area.

7. METHOD OF HANDLING WASTE DISPOSAL

- A. Drill cuttings will be disposed of in drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.
- C. Oil produced during tests will be stored in test tanks, or stored in battery until sold.
- D. Current laws and regulations pertaining to the disposal of human waste will be complied with.

- E. Trash, waste paper, garbage and junk will be buried in separate trash pit and covered with a minimum of 24 inches of dirt. Location of trash pit is shown on Exhibit "C".
- F. All trash and debris will be buried or removed from well site within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES

None.

9. WELLSITE LAYOUT

- A. Exhibit "B" shows the relative location and dimensions of the well pad, mud pits, reserve pit, trash pit and location of major rig components.
- B. Only minor levelling of the well site will be required.

10. PLANS FOR RESTORATION OF THE SURFACE

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and location cleaned of all trash and junk to leave wellsite in as good a condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. After abandonment of the well, surface restoration will be in accordance with agreement with the surface owner. Pits will be filled and location cleaned. The pit area, well pad, and all unneeded access roads will be ripped to promote revegetation. Rehabilitation should be accomplished within 90 days after abandonment.

11. OTHER INFORMATION

- A. Topography: Land surface is relatively flat with small hill areas and sand dunes.
- B. Soil: Soil is deep sand underlain by caliche.
- C. Flora and Fauna: The vegetative cover is generally sparse and consists of mesquite, yucca, shinny oak and very little native grass. Wildlife is typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove and quail.
- D. Ponds and Streams: There are no rivers, streams, lakes or ponds in the area.
- E. Residences and Other Structure: Camp in Section 14, Injection Plant and house in Section 13 are shown on Exhibit "A".

F. Land Use: Grazing and hunting in season, although the principal use is production of oil.

12. OPERATOR'S REPRESENTATIVE

The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

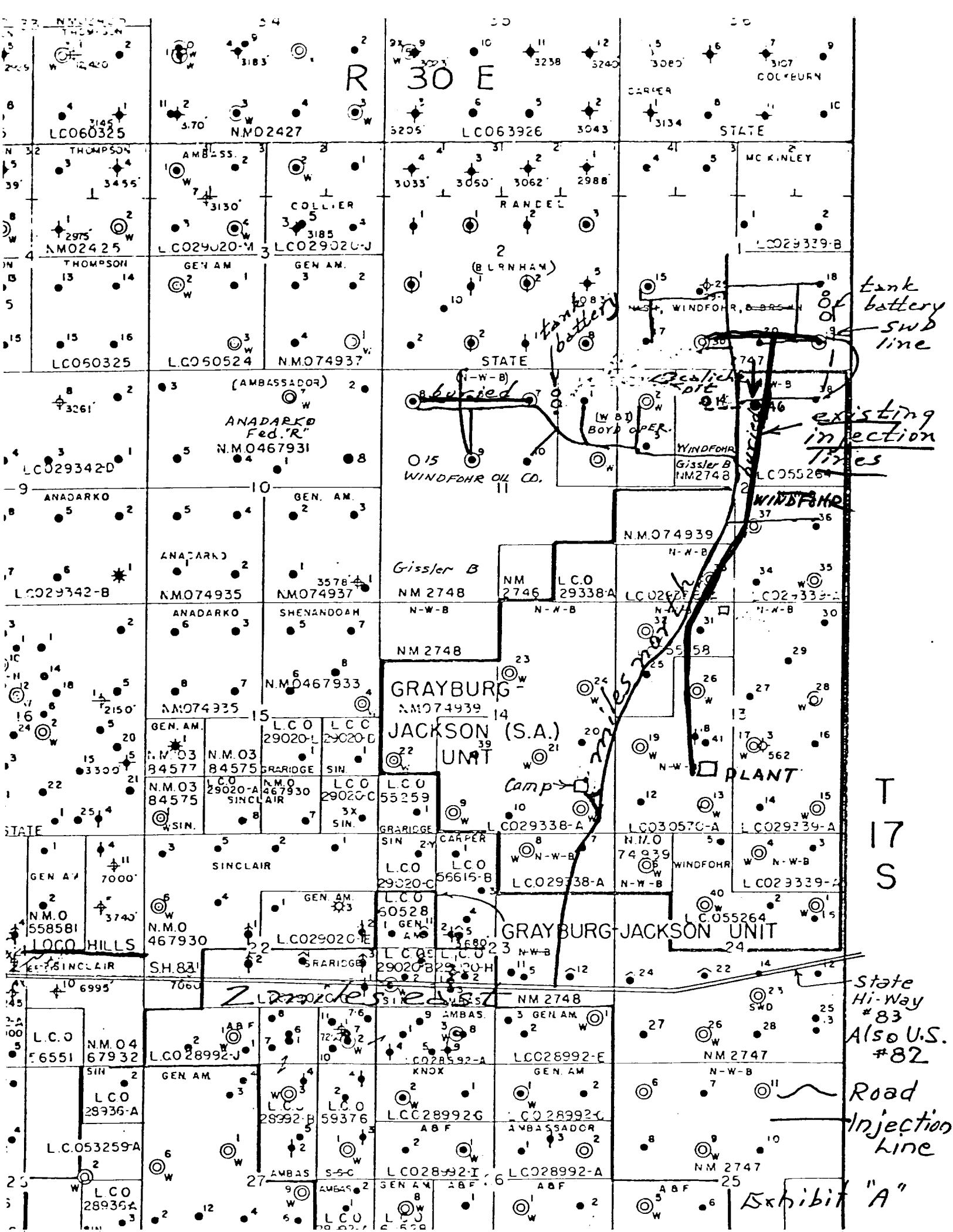
Dennis Peterson
Loco Hills, New Mexico
Phone: 677-3267

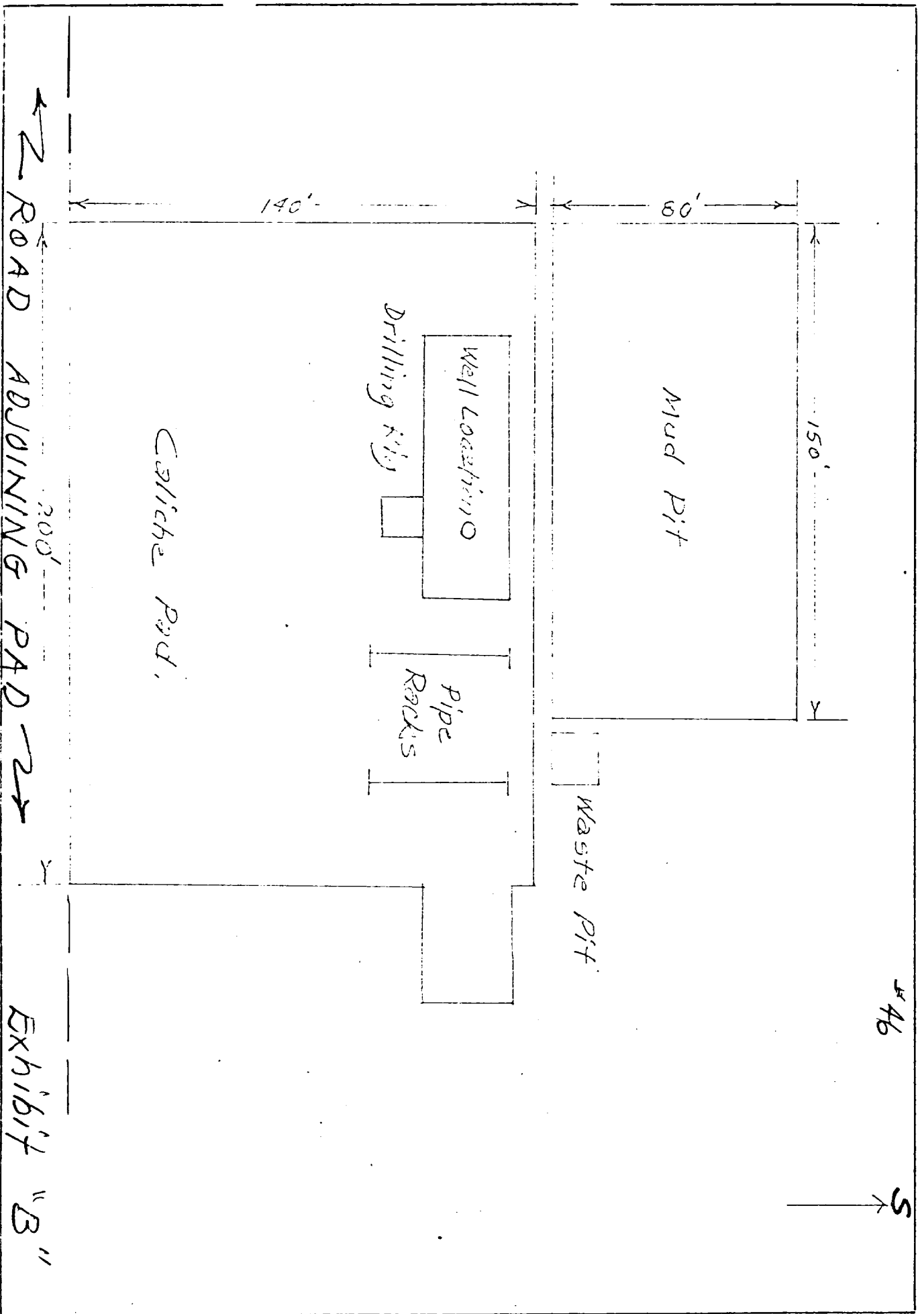
13. CERTIFICATION

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 WINDFOHR OIL COMPANY and their contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

June 14 1978
Date

John C. McPhaul
JOHN C. McPHAUL,
DISTRICT SUPERINTENDENT





U. S. GEOLOGICAL SURVEY
P. O. Drawer U
Artesia, NM 88210
PH: 505-746-9838

Windfohr Oil Company
Grayburg Jackson San Andres
Unit Well No. 46
660 FNL 1980 FEL Sec. 12-17S-30E
Eddy County Lease #LC-055264

Above Data Required on Well Sign

CONDITIONS OF APPROVAL FOR PERMIT TO DRILL

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 No. 595A, color 20318 or 30318.
5. Notify the Survey if any waterflows are encountered.

RECEIVED

JUL 21 1978

O. C. C.
ARTESIA, OFFICE

GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL LEASES

July 1, 1978

1. GENERAL:

- A. Full-compliance with applicable laws and regulations, with the approved Permit to Drill, and with the approved Surface Use and Operations Plan is required. Lessee's and/or operators are fully accountable for the actions of their contractors and subcontractors.
- B. Each drilling well shall have a well sign in legible condition from spud date to final abandonment. The sign should show the operator's name, lease name or unit name, well number, location of the well (including footage from section lines), and the lease serial number.
- C. A complete copy of the approved Application for Permit to Drill and the accompanying Surface Use and Operations Plan along with any conditions of approval shall be available to authorized personnel at the drillsite whenever active construction or drilling-operations are underway.
- D. No construction activities, such as roads, well sites, tank battery sites, pits, or other work involving significant surface disturbance will be commenced without prior approval.
- E. If, during operations, any archeological or historical sites, or any object of antiquity subject to the Antiquities Act of June 8, 1906, are discovered, all operations which would affect such sites are to be suspended and the discovery reported promptly to this office and the appropriate office of the Bureau of Land Management.
- F. All shows of fresh water and minerals will be reported and protected.
- G. Well area and lease premises will be maintained in a workmanlike manner with due regard to safety, conservation, and appearance. All waste associated with the drilling operations will be contained and will be buried in place (in a separate trash pit) or removed and deposited in an approved sanitary landfill. All garbage (metal containers will be crushed) and debris left on site will be buried at least two feet deep. All trash and debris will be buried or removed from the site within one month after removal of the drilling rig and/or completion rig, and the wellsite will be kept clean and in an aesthetically satisfactory condition for the life of the well.
- H. Unless drilling operations are commenced within three months, this approval will terminate. A written request for extension may be granted if timely submitted.

2. CONSTRUCTION ACTIVITIES (Also refer to 3. PITS):

- A. No caliche, gravel, or other related minerals from new or existing pits on Federal land will be used in construction of roads, well sites, etc., without prior approval from BLM.
- B. Materials removed during construction must be disposed of in such manner that it does not detract from the aesthetics of the area and does not accelerate erosion. Vegetation removed during clearing operations should be placed in drainages, washed, gullies, etc., and "walked down" by crawler type tractor. If there are no drainages in the immediate area, the vegetation should be "walked down" in place. All trash resulting from construction activities will be disposed of. Any large rocks resulting from construction activities will not be piled or left in rows but will be left so they do not detract from the natural appearance of the area. Any available topsoil encountered during construction should be stockpiled for use in restoring the pit area after the pits are covered.
- C. Unless otherwise approved, all access roads should be limited to 12 feet in width. If the well is a producer, roads should be adequately drained and maintained to control erosion. Drainage facilities may include ditches, water bars, culverts and/or any other measure deemed necessary by the surface management agency.
- D. Each existing fence to be crossed by the permittee will be braced and tied off before cutting so as to prevent slacking of the wire. The opening will be protected as necessary during construction to prevent the escape of livestock and upon completion of construction, the fence will be repaired back to the original standard of the existing fence. A cattleguard will be installed in any fence where a road is to be regularly traveled. A twelve feet gate will be installed adjacent to the cattleguard when directed by the BLM authorized officer.

Note: Sec. 2-B and 2-C above apply primarily to Federal lands. If the land is privately owned, these requirements may be varied to comply with the operator-landowner agreement.

3. PITS:

- A. Mud pits will be constructed so as not to leak, break or allow discharge of liquids. Pits are not to be located in natural drainage. Any plastic material used to line pits must be removed to below ground level before pits are covered.
- B. All unguarded pits containing liquids will be fenced. All pits containing toxic liquids will be covered with a fine mesh netting (i.e., Hardware cloth) with openings being $\frac{1}{2}$ inch or less for protection of wildlife.
- C. Liquids in pits will be allowed to evaporate, or be properly disposed of otherwise, before pits are broken. Under no circumstances will pits be allowed to be cut to be drained.

4. REPORTS (Also refer to ABANDONMENT):

A. The following reports shall be filed with the District Engineer within 15 days after the work is completed.

(1) Five copies of Sundry Report, Form 9-331, giving complete information concerning:

(a) Setting of each string of casing. Show size, grade, and weight of casing set, size hole, depth set, amount and type of cement used, whether cement circulated, top of cement behind casing if determined, depth of cementing tools if used, casing test method and results, and date work was done. Show spud date on first report submitted.

(b) Intervals tested, perforated, acidized, or fractured and results obtained.

(2) Five copies of Well Completion Report, Form 9-330. Show formation tops, drill stem test information, completion data, and four-point and other production tests. Show all oil and gas zones and important water sands under item 37. Data on water sands should include rate of water inflow and elevation to which water rose in hole.

(3) Two copies of all electrical and radioactivity logs run.

5. DRILLER'S LOG: The following shall be entered in the daily driller's log:

A. Blowout preventer pressure tests including test pressures and results.

B. Blowout preventer tests for proper function.

C. Blowout prevention drills conducted.

D. Casing run, including size, grade, weight and depth set.

E. How pipe was cemented, including amount of cement, type whether cement circulated, location of cementing tools, etc.

F. Waiting on cement time for each casing string.

G. Casing pressure tests after cementing including test pressure and results.

6. BLOWOUT PREVENTION:

A. Blowout preventers and related well-control equipment shall be installed, tested, and used in such manner necessary to prevent blowouts. BOP equipment is to be installed and in working order before drilling below the surface casing and shall be maintained ready for use until drilling operations are completed.

- B. Ram-type blowout preventers and related control equipment shall be pressure tested with water to the rated working pressure of the stack assembly, with the exception of the annular-type preventer, which may be tested: (a) when installed, (b) before drilling possibly abnormally pressured zones, and (c) following repairs that require disconnecting a pressure seal in the assembly.
- C. While drill pipe is in use, ram-type blowout preventers shall be actuated to test proper functioning once each trip, but in no event less than once each day. The annular-type blowout preventer shall be actuated on the drill pipe at least once each week.
- D. Blowout preventers are to have proper rams for the operations being performed. Casing rams are required when running casing.
- E. Blowout preventers are to have handwheels installed.
- F. A choke line and a kill line are to be properly installed. The kill line is not to be used as a fill-up line.
- G. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- H. Drill string safety valve(s) to fit all pipe in the drill string are to be maintained on the rig floor while drilling operations are in progress.
- I. Blowout prevention drills are to be conducted as necessary to assure that equipment is operational and that each crew is properly trained to carry out emergency duties. All BOP tests and drills are to be recorded in the driller's log.
- J. The maximum pressure to be allowed on blowout preventers during well control operations is to be posted for each casing string.
- K. The characteristics, use, and testing of drilling mud and the conduct of related drilling procedures shall be such as are necessary for well control. Quantities of mud materials sufficient to insure well control shall be readily accessible for use at all times.
- L. When coming out of the hole with drill pipe, the annulus shall be filled with mud before the mud level drops below 100 feet. The volume of mud required to fill the hole shall be watched, and any time there is an indication of swabbing, or influx of formation fluids, proper blowout prevention precautions must be taken. The mud shall not be circulated and conditioned except on or near bottom, unless well conditions prevent running pipe to bottom.
- M. From the time drilling operations are initiated and until the well is completed or abandoned, a member of the drilling crew or the toolpusher shall maintain rig floor surveillance at all times, unless the well is secured with blowout preventers or cement plugs.

7. UNDESIRABLE EVENTS:

- A. Immediate notice is required of all blowouts, fires, spills, and accidents involving life-threatening injuries or loss of life. (See NTL-3)

8. CASING:

- A. Notify the District Office in sufficient time for a representative to inspect any used casing planned for use in a casing string.
- B. Prior to drilling the plug after cementing, all casing strings shall be pressure tested. Test pressure shall not be less than 600 psi for surface casing, and a minimum of 1,500 psi or 0.2 psi/ft., whichever is greater, for other casing strings. If the pressure declines more than 10 percent in 30 minutes, or if there is other indication of a leak, the casing shall be re-cemented, repaired, or an additional casing string run, and the casing shall be tested again in the same manner.

9. WAITING ON CEMENT TIME:

- A. After cementing but before commencing any test, the casing string shall stand cemented under pressure until the cement has reached a compressive strength of at least 500 psi at the shoe, except that in no case shall tests be initiated until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log.

10. DRILLSTEM TESTS:

- A. Estimated amounts of oil and gas recovered and/or produced during drillstem tests are to be shown in the driller's log and reported in accordance with NTL-4.

11. FLARING GAS:

- A. Approval is granted to flare gas while drilling and testing.
- B. Failure to request permission to vent any gas after well is completed may result in compensation due the United States being the full value (100% royalty) of the gas so wasted. (See NTL-4)

12. SAFETY:

- A. All rig heating stoves are to be of the explosion-proof type.
- B. Drilling rig engines should have water cooled exhausts.
- C. Rig safety lines are to be installed.
- D. Hard hats must be utilized.

13. SUBSEQUENT OR CHANGE OF PLANS:

- A. Any additional construction, re-construction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, will require the filing of a suitable plan and prior approval by the Survey after clearance with the surface management agency.
- B. Secure prior approval of the District Engineer for variance from the approved drilling program and before commencing plugging operations, plugback work, casing repair work, corrective cementing operations, or suspending drilling operations indefinitely. Emergency approval may be obtained orally, but such approval does not waive the written report requirements.

14. REMOVAL OF DRILLING RIG:

- A. Unless a well has been properly cased and cemented, or properly plugged, the drilling rig must not be moved from the drillsite without prior approval from the Survey.

15. ABANDONMENT:

- A. If the well is dry and is to be plugged, approval of the proposed plugging program may be obtained orally. However, oral approval must be confirmed in writing by immediately filing a Notice of Intention to Abandon on Form 9-331 in quintuplicate with the District Engineer. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where cement plugs are to be placed, type of plugging mud, etc. Written approval will be given when restoration requirements are received from the surface management agency.
- B. Upon completion of approved plugging, erect a regulation well marker which should not be less than 4 inches in diameter and extend at least 4 feet above general ground level. Heap up the dirt around the base of the marker about 12 inches to take care of any settling of the cellar. The top of the marker must be closed or capped. The following minimum information shall be permanently placed on the marker with a plate, cap, or beaded-on with a welding torch:

- (1) Operator
- (2) Well number & name
- (3) Section-Township-Range
- (4) Footage location from section lines

- C. Any plastic material used to line pits must be removed to below ground level before pits are covered. If, upon abandonment of the wells, the retention of the well pad and/or access road is not considered necessary for the management and multiple use of the natural resources, they will be ripped a minimum of 12" in depth. All ripped surfaces are to be protected from vehicular travel by construction of a dead-end ditch and earthen barricade at the entrance to these ripped areas. (Reseeding of the affected areas may be required at the discretion of the BLM authorized officer).
- D. Within 15 days after plugging the well, a Subsequent Report of Abandonment is to be filed on Form 9-331 in quintuplicate showing the manner in which the well was plugged, including depths where casing was cut and pulled from, intervals, by depths, where cement plugs were placed, and the date plugging was completed. When all surface restoration work is completed, advise the District Office so that a field inspection of the wellsite can be made.



United States Department of the Interior

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

June 1, 1978

PAINTING REQUIREMENTS FOR OILFIELD EQUIPMENT AND STRUCTURES

Sec. 102 (a) (8) of the "Federal Land Policy and Management Act of 1976" states:

"the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use;"

In accordance with the above Act, the Bureau of Land Management has determined that all oilfield equipment and structures installed on Federal leases, whether the leases contain a camouflage stipulation or not, will require painting to reduce the visual impact of color.

The following painting guidelines and procedures apply to all oilfield equipment and structures installed after the date of this notice. Painting stipulations and requirements previously issued to operators are modified to meet these guidelines and procedures.

- A. All equipment and structures (except heater treater fireboxes and stacks, small wire or galvanized fencing, and flow lines and other lines on the ground) that are located within $\frac{1}{4}$ mile of any of the following will be camouflaged:
 - 1. A paved road.
 - 2. An unpaved road which is well-traveled by non-oil field personnel (at least 50 vehicles per 24 hours).
 - 3. An officially-designated public use site, observation area, or overlook.

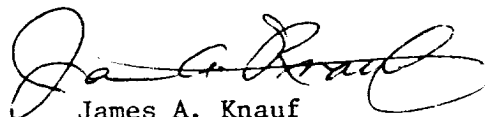
B. All equipment and structures not covered by A. above will be camouflaged using the following procedures:

1. The initial criteria to be used to determine what should be camouflaged will be the equipment or structures that can be seen one-quarter mile or beyond from the proposed location. The equipment or structures that cannot be seen from this distance should not require camouflaging.
2. As a general rule, all high-level equipment (six feet or higher) such as tanks, separators and heater treater (except the firebox and stack) will require camouflaging.
3. As a general rule, equipment such as pumping units (the tips of movable parts--such as the horsehead, weights and beam--will be painted according to OSHA requirements), flow lines or other lines on the ground, other small-size lines (4-inch diameter and smaller), low-level well head equipment and headers (up to five feet in height), and small and galvanized wire and pipe that are not normally painted will not require painting. If this type of equipment is normally painted, or painted from previous use, the contrast of color will be considered in visual assessment. It is desirable that as much equipment as possible be painted a uniform non-contrasting color if it's going to be painted anyway.

The use of semi-gloss paint in lieu of flat paint will be acceptable.

Exceptions to these requirements may be allowed (exceptions must be approved by BLM and USGS on a case-by-case basis), for the following reasons:

1. Safety as described by the Occupational Safety and Health Administration (OSHA) in part 1910.155, Title 29 of the Code of the Federal Regulations "Safety Color Code for Marking Physical Hazards".
2. Function identification which might aid in the identification of materials conveyed as described in the American National Standards Institute (ANSI) document A13.1 (Scheme for the Identification of Piping Systems"; or
3. To aid in the functional use of certain types of equipment (i.e., painting equipment a dark color to absorb heat to aid flow of high viscous liquids or a light color to prevent loss of hydrocarbons by evaporation).



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