

N.M.O.C.D. COPY

SUBMIT IN TRIPLICATE*
(Other ins. revers. ions on e)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 <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		7. UNIT AGREEMENT NAME	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		8. FARM OR LEASE NAME Shugart Federal Com.	
2. NAME OF OPERATOR Holly Energy Inc.		9. WELL NO. 1	
3. ADDRESS OF OPERATOR P.O. Box 726 Artesia, New Mexico 88210		10. FIELD AND FOOT OR SURFACE UNDER NORTH SHUGART Morrow	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 1980 FSL 660 FWL At proposed prod. zone		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec 7 T-18S R-31E	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 7 miles from Loco Hills, New Mexico 88210		12. COUNTY OR PARISH Eddy	
16. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 660'		13. STATE N.M.	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		17. NO. OF ACRES ASSIGNED TO THIS WELL 320	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3573.7		20. ROTARY OR CABLE TOOLS Rotary	
23. PROPOSED CASING AND CEMENTING PROGRAM		22. APPROX. DATE WORK WILL START* soon as possible after approval	

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2	13 3/8	48#	650	700 sacks circulated
11	8 5/8	32#	4550'	1270 sacks
7 7/8	5 1/2	17# & 20#	11,875	Cement to cover all potential pay zones

Mud Program: Native Mud 0'-4500
Fresh water mud 4500-9000' 8.6 lbs. per gallon Vis. 28
Water Loss N.C.
Fresh water mud 9000' to 12000' 9.6-9.8 lbs. per gallon
Vis. 32-35 Water loss-8CC

B.O.P. Program: one (1) Hydril 10" Type B
one (1) Schaffer Double 10" Type B
Both 1500 Series, Hydraulic operated

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.

SIGNED <u>Robert Loyd</u>	TITLE <u>Superintendent</u>	DATE <u>9-12-80</u>
(This space for Federal or State office use)		
PERMIT NO. <u> </u>	APPROVAL DATE <u>OCT 31 1980</u>	
APPROVED BY <u> </u>	TITLE <u> </u>	DATE <u>OCT 2 1980</u>
CONDITIONS OF APPROVAL, IF ANY: <u>OCT 3 1980</u>		

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION
WE 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.

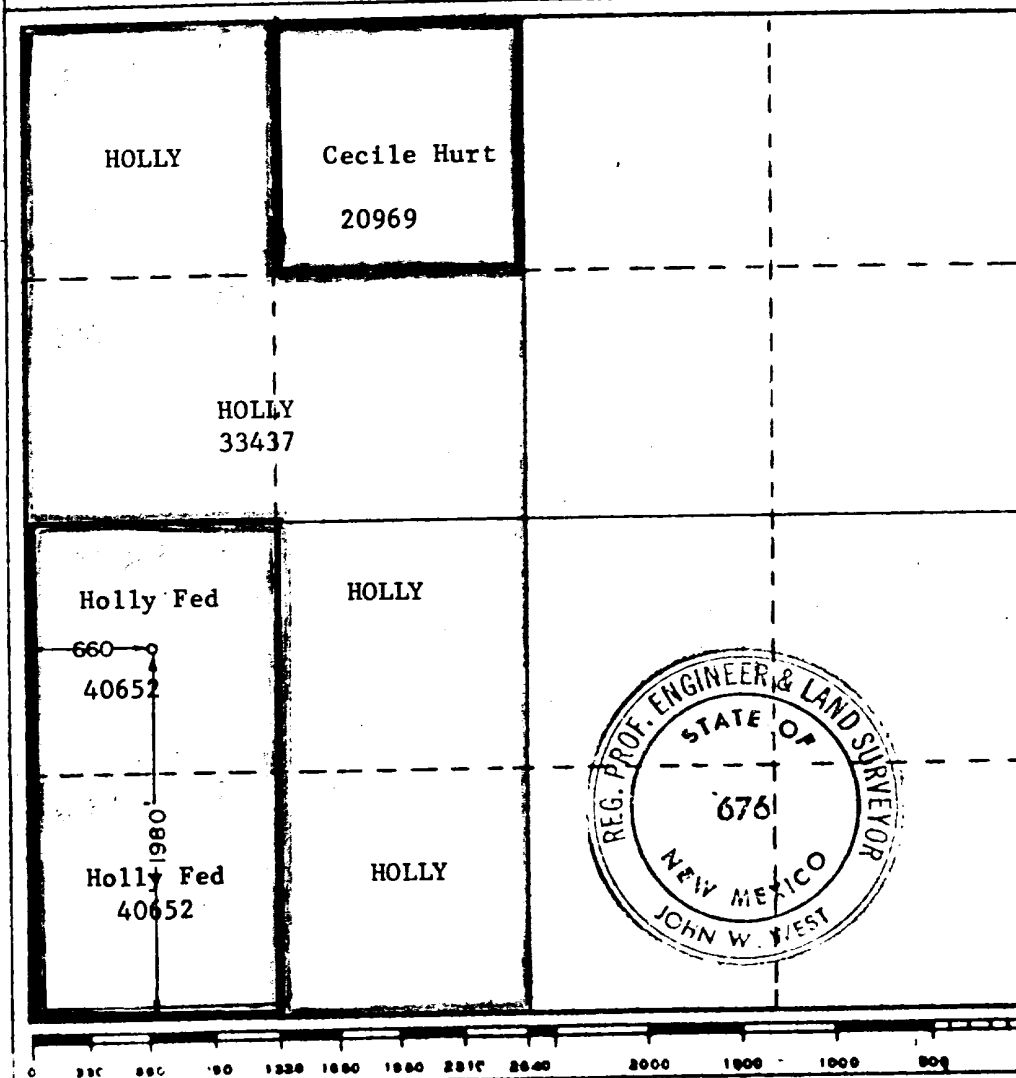
Operator Holly Energy Inc.		Lease Shugart Federal Com.		Well No. 1
Unit Letter L	Section 7	Township 18 south	Range 31 east	County Eddy
Actual Footage Location of Well: 1980 feet from the south line and 660 feet from the west line				
Ground Level Elev. 3573.7	Producing Formation Morrow	Pool Unders. North Shugart Area Morrow	Dedicated Acreage: 320 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, or force-pooling, etc.

☒ Yes ☐ No . If answer is "yes," type of consolidation Communitization

If answer is "no," list the owners and their acreage interests 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.

Robert Loyd

Name
Robert Loyd
Position
Superintendent
Company
Holly Energy Inc.
Date
9-22-80

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
9-5-80
Registered Professional Engineer and/or Land Surveyor

John W. West

Continuation No. **JOHN W. WEST 676**
PATRICK A. ROMERO 6863
Ronald J. Eldon 3239



United States Department of the Interior

GEOLOGICAL SURVEY

SPECIAL APPROVAL STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN:

HOLLY ENERGY INC.
 Shugart Federal Com No. 1
 NW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 7 T. 18S R. 31E
 Eddy County New Mexico
 Lease No. NM-40652

RECEIVED

NOV 05 1980

O. C. D.
 ARTESIA, OFFICE

THE SPECIAL STIPULATIONS CHECK MARKED BELOW ARE APPLICABLE TO THE ABOVE-DESCRIBED WELL AND APPROVAL OF THIS APPLICATION TO DRILL IS CONDITIONED UPON COMPLIANCE WITH SUCH STIPULATIONS. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE SPECIAL STIPULATIONS PURSUANT TO TITLE 30 CFR 290.

- ☒ A. 13 $\frac{3}{8}$ " surface casing should be set in the Rustler Anhydrite formation and cement circulated to the surface. If surface casing is set at a lesser depth, the _____ casing must be cemented from the casing shoe to the surface or cemented to the surface through a stage tool set at least 50 feet below the top of the Rustler after cementing around the shoe with sufficient cement to fill _____ to the base of the salt section.
- ☒ B. Before drilling below the 8 $\frac{7}{8}$ " casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.
- ☐ C. Casing protectors will be run on drill pipe while drilling through the _____ casing. Protectors will be of sufficient number and of sufficient outside diameter to protect the casing.
- ☒ D. Minimum required fill of cement behind the 8 $\frac{7}{8}$ " casing is to circulate to surface.
- ☒ E. After setting the 8 $\frac{7}{8}$ " casing string and before drilling into the WOLF CAMP 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 tests and shall be furnished a copy of the pressure test report.
- ☒ F. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the WOLF CAMP 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.
- ☒ G. All pits containing toxic liquids will be fenced and covered with a fine mesh netting, if necessary for the protection of livestock or wildlife.
- ☒ H. Above ground permanent structures and equipment shall be painted in accordance with the Painting Guidelines. The paint color is to simulate:

☒ Sandstone Brown, Fed. Std. 595-20312 or 30318

OR ☒ Sagebrush Gray, Fed. Std. 595-26357 or 36357

☐

☒ ☒

1. A well cover will be installed and maintained in operable condition.

2. The ARTESIA Sub-District Office is to be notified in sufficient time for a representative to witness:

(a) Spudding ☒

(b) Cementing casing

8 5/8" inch

_____ inch

_____ inch

(c) ~~300~~ tests

☐

3. A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the U. S. Geological Survey, P. O. Box 26124, Albuquerque, New Mexico 87125. The effective date of the agreement must be prior to any sales.

☐

4. A Gamma Ray-Compensated Neutron log is required from the base of the salt section to the surface with cable speed not to exceed 30 feet per minute.

☒

5. At least one working day prior to constructing the well pad, access roads and/or related facilities, the operator or dirt contractor shall notify the authorized officer (Bureau of Land Management, CARLSBAD area). He shall also notify the Authorized Officer within two working days after completion of earth-moving activities.

☒

6. All access roads constructed in conjunction with the drilling permit (APD) will be limited to a 12 foot wide driving surface, excluding turn-arounds. Surface disturbance associated with construction and/or use of the road will be limited to 20 feet in width. If well is a producer, all roads will be adequately drained to control runoff and soil erosion. Drainage facilities may include ditches, water bars, culverts and/or any other measures deemed necessary by the authorized officer of the BLM. The following is a general guide for the spacing of water bars:

Slope

less than 2%	200 ft.
2% to 4%	100 ft.
4% to 5%	75 ft.
more than 5%	50 ft.

☒

7. Other special stipulations

a. Any permanent pit containing waste oil must be fenced and covered with mesh wire.

Utilize existing pipeline road in the NW
b. NW 1/4 NENW of sec 18 T18S R31E
and the SWSE Sec 7 T18S R31E.
See Attached Map.

APPLICATION FOR DRILLING

Holly Energy Inc.
Shugart Federal Com #1
Section 7 T-18S R-31E
Eddy County, New Mexico

In conjunction with form 9-113C, application for permit to drill subject well in Section 7, Township 18 South, Range 31 East, Eddy County, New Mexico, Holly Energy Inc., submits the following 12 items of pertinent information in accordance with U.S.G.S. requirements:

1. The geologic surface formation is quaternary alluvium.

2. The estimated tops of geologic markers are as follows:

1950' Yates
3050' Queen
6100' Bone Spring
9750' Wolf Camp
10,750' Strawn
11,065' Atoka
11,550' Morrow

3. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered are:

Water: Water at approximately 300' base 500'
Oil or Gas:

4. Proposed Casing Program: See form 9-331C

5. Pressure Control Equipment: See form 9-331C and Exhibit E

6. Mud Program: See form 9-331C

7. Auxiliary Equipment: Blowout Preventer, Inside Blowout Preventer, Kelly Cock.

8. Testing, Logging and Coring Program:

Pressure test: Surface casing to 1000 psig and Production casing
to 1500 psig.

Drilling samples: 10' samples 4500' to TD

Electric Logging: Dual induction Lateral log and Compensated Neutron
Log-formation and Density log TD to
CLN- gamma ray TD to surface

9. No abnormal pressures or temperatures are anticipated.

10. Anticipated Starting Date: as soon as possible after approval.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Holly Energy Inc.
Shugart Federal Com #1
1980 FSL & 660 FWL
Section 7 T-18S R-31E
Eddy County, New Mexico

RECEIVED
OCT 2 1980
U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

This plan is submitted with Form 9-331C, Application for Permit to Drill covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effects associated with the operations.

1. EXISTING ROADS.

A. Exhibit A is a portion of B.L.M. quad-color map no. SE-19 on a scale of 1/3" to a mile, showing the proposed location and the surrounding area. Exhibit B is a portion of U.S.G.S. topographical map, on a scale of approximately 2" to a mile, showing the wellsite area and existing roads in the immediate vicinity of the proposed location. The proposed location is a driving distance of approximately 38 miles east of Artesia, New Mexico.

(1) Proceed east on highway 82 from the intersection of highways 82 and 285 in Artesia, New Mexico for a distance of approximately 31 miles. At this point highway 31 intersects highway 82, turn right for approximately 5 miles. At this point there will be a Mewborne Oil and Texaco sign on the west side of the highway. Turn right, at this point, Mewborne Oil Co. has a water injection well., turn right(North) on a new lease road to Holly Energy Inc., Canadian Kenwood Federal 18 #1.

2. PLANNED ACCESS ROAD

A. The newly constructed access road will run North of Canadian Kenwood Federal 18 #1 for 1 mile and West 1900' to the Southeast corner of location. The access road will be 12' in width and the surface will be crowned in the center with drainage on both sides.
No culvert or cattleguard will be needed.

B. The center line of the proposed new road has been staked and flagged and is clearly visible.

3. LOCATION OF EXISTING WELLS

A. Existing wells in the vicinity are shown on Exhibit C.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

A. There are no existing production facilities on the lease .

B. In the event that the proposed well is productive, the necessary production facilities will be installed on the drilling pad.

5. LOCATION AND TYPE OF WATER

A. Any water used in the drilling operation will be fresh or brine water. The water will be purchased from commercial sources and will be hauled to the location by truck over the existing and planned roads shown on Exhibits A and B.

6. SOURCE OF CONSTRUCTION MATERIALS

- A. Caliche for construction of the drilling pad and resurfacing of the existing access road, will be obtained from Sec 13 T-18S R-31E

7. METHODS OF HANDLING WASTE DISPOSAL.

- A. Drill cuttings will be disposed of in the reserve pit.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pit is dry.
- C. Water produced during operations will be disposed of in the reserve pit. Oil produced during operations will be stored in tanks until sold.
- D. Current laws and regulation pertaining to the disposal of human waste will be complied with.
- E. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.
- F. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES.

- A. None required.

9. WELLSITE LAYOUT.

- A. Exhibit D shows the relative location and demensions of the well pad, reserve pit and major rig components.
- B. Leveling will be required to construct the location. The ground surface at the wellsite is relatively flat with a 2' slope from East to West with sand dunes to the Northeast and South, the sanddunes will be leveled and pushed to east side of wellsite to level location and covered with 6 inches of compacted caliche.

10. PLANS FOR RESTORATION OF THE SURFACE.

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. Pits will be filled and the location will be cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they have been filled.
- C. If the proposed well is nonproductive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management and the United States Geological Survey will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment.

11. OTHER INFORMATION

- A. Topography: The proposed wellsite is located in a relatively flat area, with undulations 6 to 8 feet in height.
- B. The topsoil at the wellsite is moderately soft sand.
- C. Flora and Fauna: The vegetation cover at the wellsite is moderately sparse, consisting of mesquite, shinnery oak, prairie flowers and weeds. The only wildlife observed were lizards and rabbits, but it is likely that other wildlife typical of semi-arid desert land also inhabit the area. The area is used for cattle grazing.
- D. There are no ponds, lakes, streams or rivers within several miles of the wellsite.
- E. The nearest occupied dwellings are south of the proposed location approximately 3 miles. There are no windmills within the immediate area.
- F. The wellsite is on Federal surface, with federal control of minerals.
- G. There is no evidence of any archeological, historical or cultural sites in the area of the wellsite.

12. OPERATOR'S REPRESENTATIVE.

- A. The field representative responsible for accuring compliance with the approved surface use and operations plan is:

Robert Loyd
Production Supervisor
Holly Energy Inc.
P.O. Box 726
Artesia, New Mexico 88210
Telephone: 505-746-6161 (Office)
505-365-2521 (Mobil)
505-365-2391 (Home)

13. CERTIFICATION

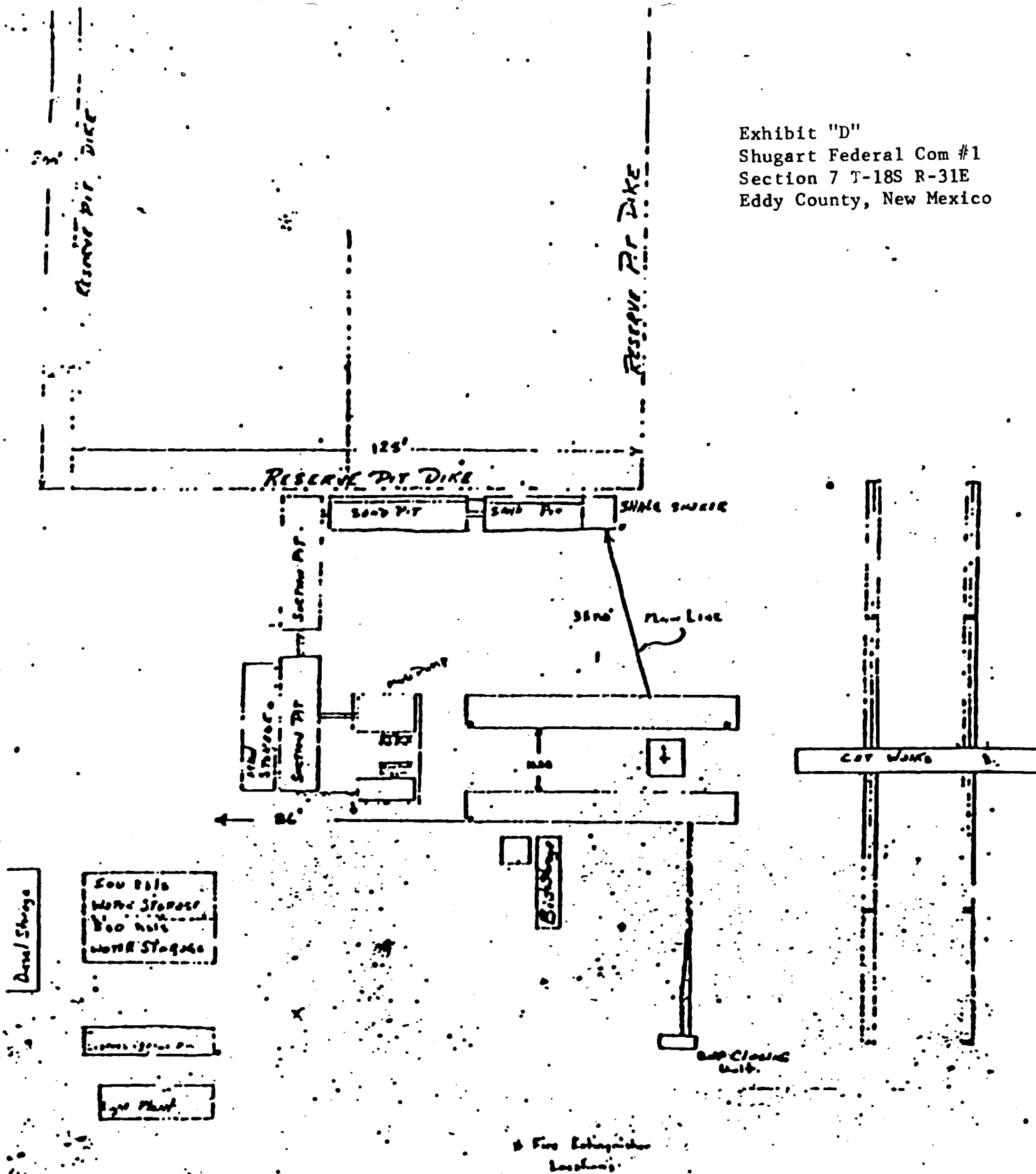
I hereby certify that I, as persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the consultations which presently exist; that the commitments made in this plan are to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Holly Energy Inc. and its contractors and its subcontractors in conformity with this plan and terms and conditions under which it is approved.

9-29-80

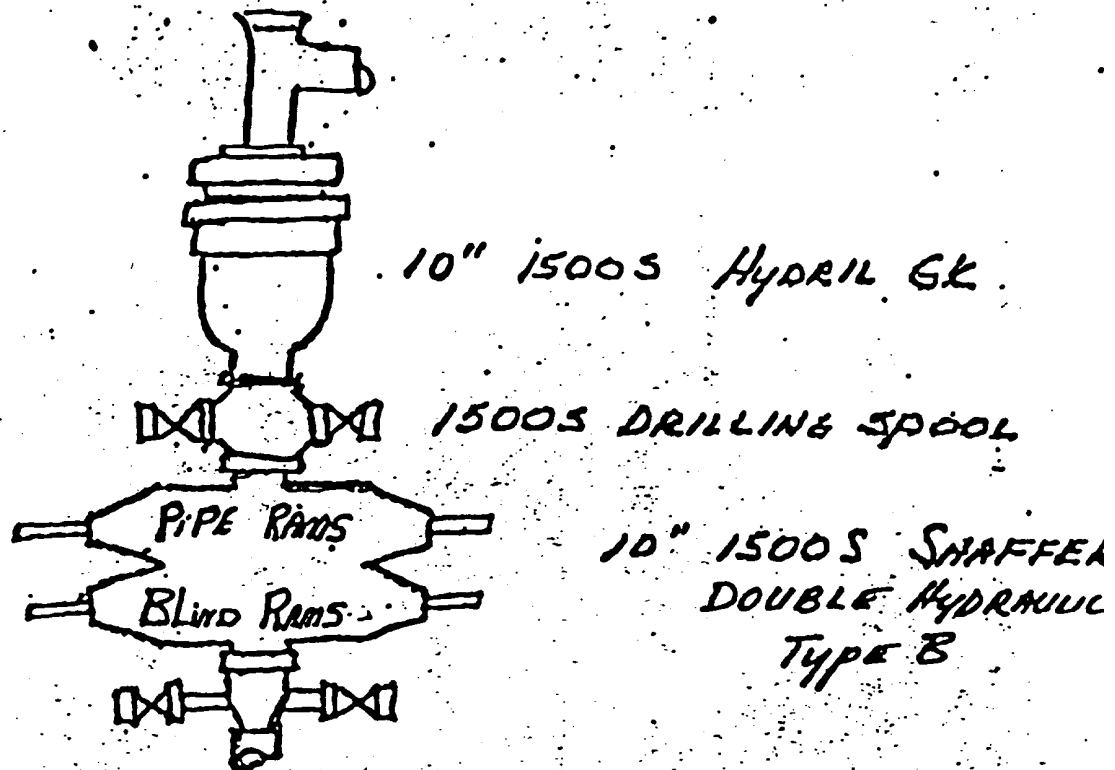
DATE

Robert Lloyd Superintendent

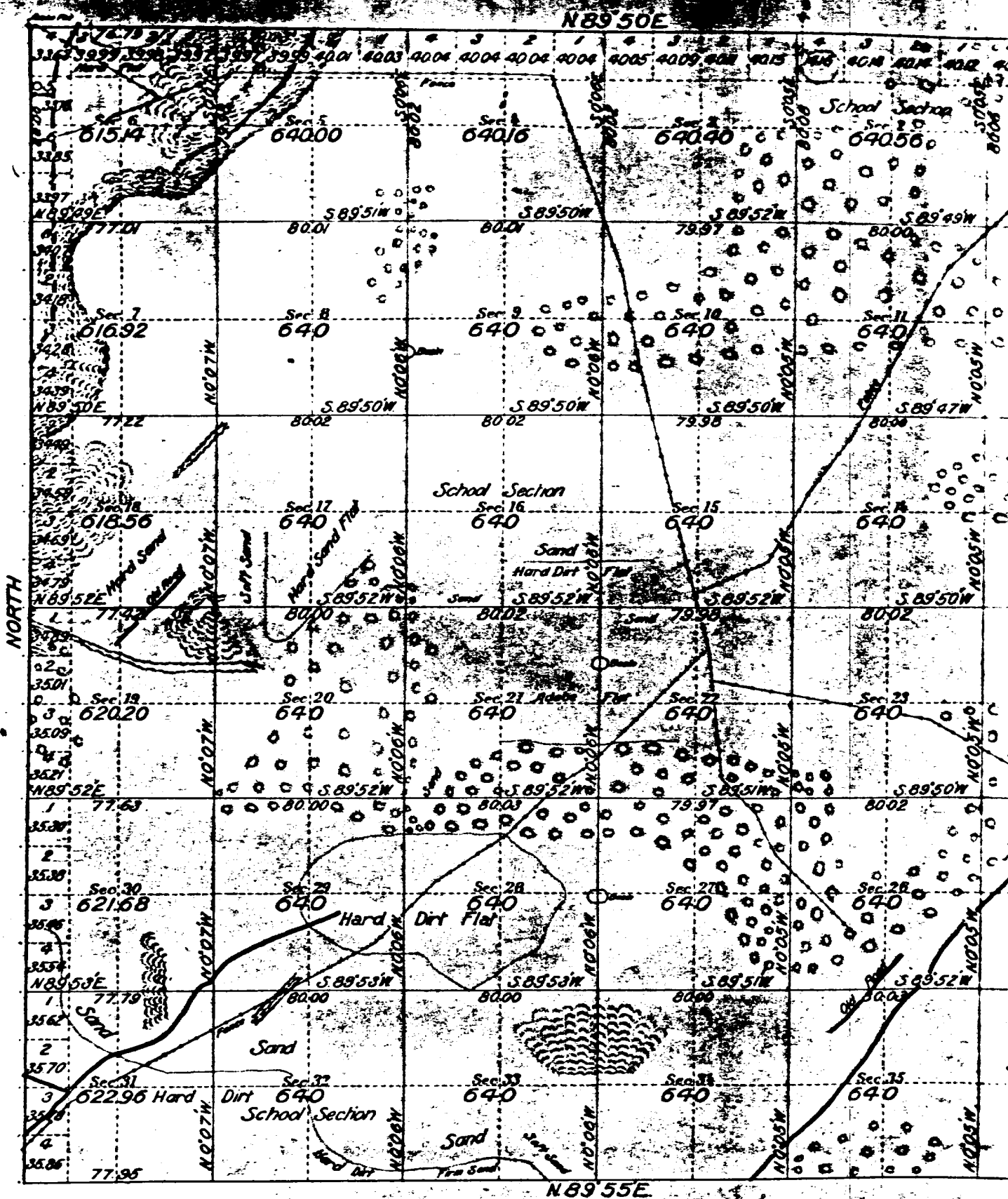
Exhibit "D"
 Shugart Federal Com #1
 Section 7 T-18S R-31E
 Eddy County, New Mexico



Location Size:
 North 40'
 East 150'
 South 140' to 150'
 West 140'



Township No 18 South Range No 31 East of the New Mex Prin Merid



Surveys Designated	By Whom Surveyed	Group		Amount of Surveys			When Surveyed	
		No.	Date	Mls.	chs.	fts.	Began	Completed
Fourth Guide Meridian E.M. N° C. Perkins U.S.T.		53	Feb. 15, 1916	6	00	00	May 24, 1916	May 26, 1916
Twp. Lines W.R.N.		-	-	11	76	79	-	-
Twp. Line S.	W. K. Hall U.S.S.	-	-	5	77	95	-	20
Subdivisions	W. C. Perkins U.S.T.	-	-	59	67	30	-	26

The above map of Town
Meridian in New Mexico
in this office, which have I
U. S. Surveyor
Santa Fe, N.M. Dec. 16,