

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

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Solar Petroleum, Inc.

3. ADDRESS OF OPERATOR

1660 Lincoln Street, Suite 1500 Denver, Colorado 80264

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

At surface

760 FNL

1330 FEL

At proposed prod. zone

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

14 miles NE of Shiprock

15. DISTANCE FROM PROPOSED*

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

760'

16. NO. OF ACRES IN LEASE

2560

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

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

1290

19. PROPOSED DEPTH

1130

20. ROTARY OR CABLE TOOLS

Rotary

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

5307 G.L.

22. APPROX. DATE WORK WILL START*

10-5-80

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/2	8 5/8	23#	6090'	20 sx
6 3/4	4 1/2	10.5#	1130'	200 sx

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO CONDITIONS WITH ATTACHEDThis action is subject to administrative
appeal pursuant to 30 CFR 290.

Drill to top of Gallup with air. Mud up. Drill Gallup to approximately 1300'. Run logs. Run 4 1/2" casing and cement to the surface. Perforate and frack producing zone. Run rods and tubing, set pumping unit. Put on production. If well is dry will plug and abandon as per USGS instructions. Blow out preventor will be installed and checked daily.



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

TITLE Agent

DATE 8-13-80

(This space for Federal or State office use)

PERMIT TO

APPROVAL DATE

APPROVED BY

APPROVED
AS AMENDED

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

NOV 24 1980
JAMES F. SIMS
DISTRICT ENGINEER

*See Instructions On Reverse Side

NW000

OIL CONSERVATION DIVISION

P. O. BOX 2048

SANTA FE, NEW MEXICO 87501

Form C-107
Revised 10-1-78STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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

Operator SOLAR PETROLEUM, INCORPORATED			Lease Navajo <i>Tribe of Indians F</i>		Well No. 149
Unit Letter B	Section 4	Township 31N	Range 17W	County San Juan	
Actual Footage Location of Well: 760 feet from the North line and 1330 feet from the East line					
Ground Level Elev: 5307	Producing Formation Gallup	Pool Horseshoe	Dedicated Acreage: 40 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

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

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.

<div style="text-align: center;">760'</div> <div style="text-align: center;">1330'</div>		<div style="text-align: center;">760'</div>	
		<div style="text-align: center;">1330'</div>	
<div style="text-align: center;">Sec.</div>		<div style="text-align: center;">4</div>	
<div style="text-align: center;"> </div>		<div style="text-align: center;"> </div>	

Scale: 1"=1000'

CERTIFICATION

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

Name
David W. E. E. E.

Position
Agent

Company
Solar Petroleum, Inc.

Date
August 12, 1980

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 1980

Registered Professional Engineer and Land Surveyor

Fred B. Kerr
Fred B. Kerr

Certificate No.
3950



operator Co,

P.O. BOX 819
Bloomfield, New Mexico 87413

(505) 632-3385

Before entering lands you will be required to notify:
Compliance Office, Navajo Tribe
Navajo Land Administration Office
P.O. Box 410
Montezuma Creek, Utah 84534
June 23, 1980
Phone: (801) 651-3208

Nellie Jackson

District Engineer
United States Geological Survey
P. O. Box 959
Farmington, New Mexico 87401

Dear Sir:

Solar Petroleum, Inc. Suite 1500, 1660 Lincoln Street, Denver,
Colorado 80264, proposes to stake the below listed oil wells on the
Navajo Reservation in San Juan County, New Mexico.

1. Section 1,	1320 FSL, 2640 FWL	T31N, R17W
2. Section 2,	1320 FNL, 1320 FEL,	T31N, R17W
3. Section 4,	760 FNL, 1320 FEL,	T31N, R17W
4. Section 4,	1420 FNL, 1320 FEL,	T31N, R17W
5. Section 4,	1320 FWL, 1320 FEL,	T31N, R17W
6. Section 9,	5' FNL, 2640 FEL,	T31N, R17W
7. Section 9,	1320 FNL, 1320 FEL,	T31N, R17W
8. Section 10,	2600 FWL, 2640 FNL,	T31N, R17W
9. Section 10,	2640 FNL, 1320 FWL,	T31N, R17W
10. Section 10,	1320 FSL, 1320 FWL,	T31N, R17W

C. C. Sherwin 6-25-80

C.C.S.

JFE/jr

C.C. Sherwin Artus
Solar Petroleum, Inc.
Denver, Colo. 80264.

Yours truly,

Joe F. Elledge
Joe F. Elledge

A 15 day waiting period
prior to staking will be
required in order to give
BLL an opportunity to
voice any objections they
may have to the location

wait on designation
of operator before staking
Sherwin will call when
ready.



P.O. BOX 819
Bloomfield, New Mexico 87413
(505) 632 - 3385

*Mission Field
Ray Padon
Western Energy Inc.
\$7.50 per foot*

July 1, 1980

Compliance Office-Navajo Tribe
Navajo Land Administration Office
P. O. Box 410
Montezuma Creek, Utah 84534

move 10' off line

Dear Sirs:

Solar Petroleum, Inc., Suite 1500, 1660 Lincoln Street, Denver, Colorado, 80264, will stake the below listed wells around July 15, 1980.

- | | | | | |
|-----------------|-----------|--|-------|------|
| • 1. Section 1, | 1320 FSL, | 2640 FWL, | T31N, | R17W |
| 2. Section 2, | 1320 FNL, | 1320 FEL, | T31N, | R17W |
| 3. Section 4, | 760 FNL, | 1320 FEL, | T31N, | R17W |
| 4. Section 4, | 1420 FNL, | 1320 FEL, | T31N, | R17W |
| 5. Section 4, | 1320 FWL, | 1320 FNL ,
2640 | T31N, | R17W |
| • 6. Section 9, | 105 FNL, | 2640 FEL, | T31N, | R17W |
| • 7. Section 9, | 1320 FNL, | 1320 FEL, | T31N, | R17W |
| 8. Section 10 | 2600 FWL, | 2640 FNL, | T31N, | R17W |
| 9. Section 10, | 2640 FNL, | 1320 FWL, | T31N, | R17W |
| 10. Section 10, | 1320 FSL, | 1320 FWL, | T31N, | R17W |

As per the attached copy of the letter to the U.S.G.S., surveying and staking approval has been obtained by Solar Petroleum, Inc.

If further information is needed please contact me at the letterhead address or phone number.

Sincerely yours,

[Signature]

JOE P. ELLEDGE

Joe P. Elledge

JFE/jr

C.C. U.S.G.S.-Farmington
Solar Petroleum, Inc.-Denver, Colo.

SOLAR PETROLEUM, INC.

Navajo "F" #149

OPERATION PLAN

- I. Location: B-4-31N-17W
Field: Horseshoe Gallup
Elevation: 5307
- II. Geology:
A. Formation Tops: Surface: Mancos
Gallup: 1085
Sanastee: 1105

B. Logging Program: I-ES and Gamma Ray-Density logs.
C. Coring Program: None
- III. Drilling:
A. Mud Program: Low solid mud-surface to T.D.
- IV. Materials:
A. Casing Program:

<u>Hole Size</u>	<u>Depth</u>	<u>Casing Size</u>	<u>Wt. & Grade</u>
12 $\frac{1}{2}$	60'	8 5/8	23# H-40
6 3/4	1200'	4 $\frac{1}{2}$	10.5# K-55

B. Float Equipment: Casing will be run with a regular guide shoe and float collar. Pipe will be centralized through pay zones.
C. Tubing: If commercial, 2 3/8" 4.7# EUE tubing will be utilized for the completion string.
D. Wellhead Eqpt. A series 600 flanged tree will be used to accommodate 4 $\frac{1}{2}$ " casing and the 2 3/8" tubing string.
- V. Cementing: The Gallup interval will be cemented conventionally with 100 sx 65/35 pozmix cement, 2% gel and 100 sx Class "B" neat. Loss circulation additives will be used if needed.

SOLAR PETROLEUM, INC.

Navajo "F" #149

1. Existing Roads

Refer to Map which shows the existing roads. New roads which will be required have been marked on this map. All existing and new roads will be properly maintained during this period.
2. Planned Access Roads

The grade of the access roads will be consistent with that of the local terrain. The road surface will not exceed 20 feet (20') in width. Upon completion all roads will be adequately drained to control said erosion. Drainage facilities may include ditches, water bars, culverts or other measures necessary to insure proper drainage.
3. Location of Existing Wells

See Attached map.
4. Location of Tank Batteries, Production facilities, and production gathering and service lines

If this well is productive, it would be oil. The facilities would be a wellhead, pumping unit and flow lines to an existing central battery.
5. Location and Type of water supply.

Produced water from the Navajo "F" lease will be used.
6. Source of Construction Materials

All construction material will be purchased and hauled to the location. No additional materials will be required.
7. Methods of Handling Waste Materials.
 - a. Cuttings will be buried 3' below surface.
 - b. Drilling fluid will be left in a fenced, open pit to evaporate.
 - c. Portable toilet to be provided.
 - d. Trash will be burned in burn pit then buried.
 - e. After pit area is dry, cuttings will be pushed into pit and sub soil will be placed on any remaining fluid and cutting then top soil will be placed over both pit and location area.
8. Ancillary Facilities

No camps or airstrip will be associated with this project.
9. Well Site Layout

Refer to attached plat.
10. Plans for Restoration of the surface

After completion of the proposed project, the

location will be cleaned and leveled.
The location will be left in such a
condition that will enable reseeding
operations to be carried out as controlled
by the regulatory body.

11. Other Information

The terrain is flat covered with grass.

12. Operator's Representative

Elledge Consulting & Production Company
P. O. Box 819
Bloomfield, New Mexico 87413

Harold Elledge-President
Office Phone: 632-3385
Home Phone: 632-8476


OR

Solar Petroleum, Inc.
1660 Lincoln Street
Suite 1500
Denver, Colorado 80264
Phone: 303-861-9561

13. Certification

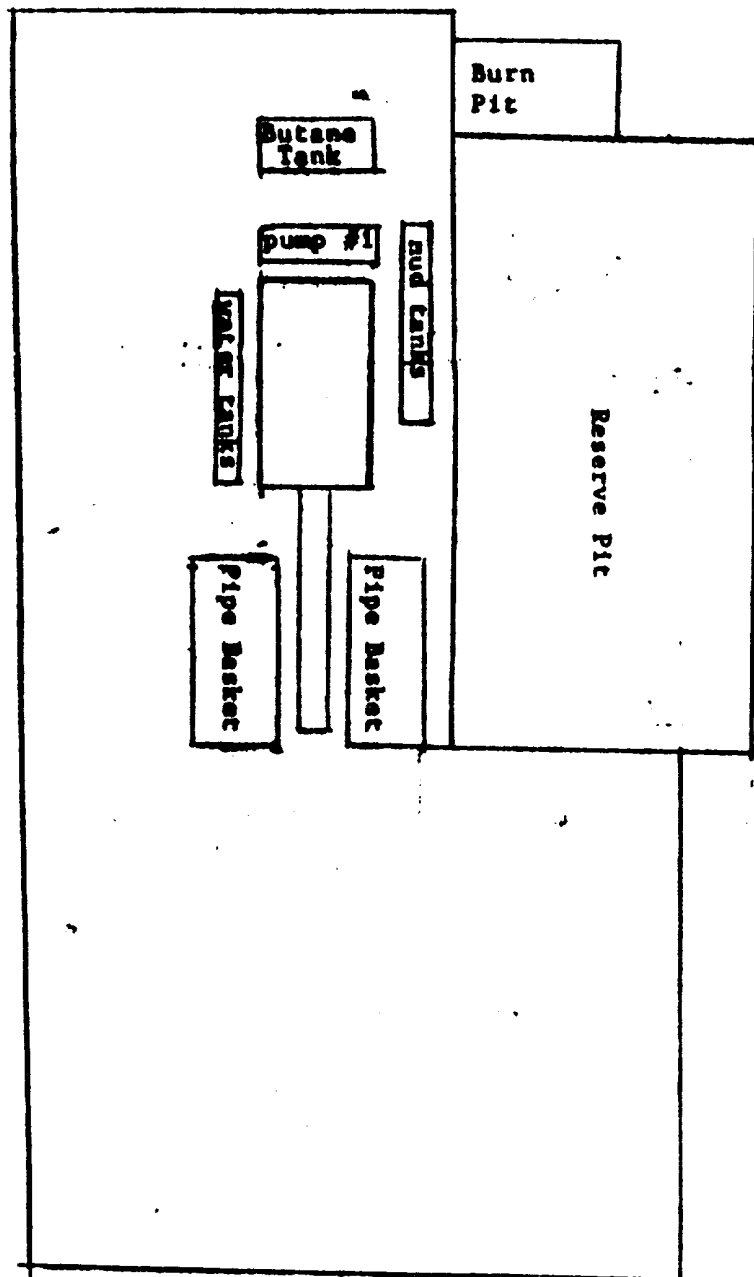
I hereby certify that I, or persons under
my supervision, have inspected the proposed
drill site and access route, that I am
familiar with the conditions which presently
exist; that the statements made in this plan
are, to the best of my knowledge, true and
correct; and, that the work associated with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

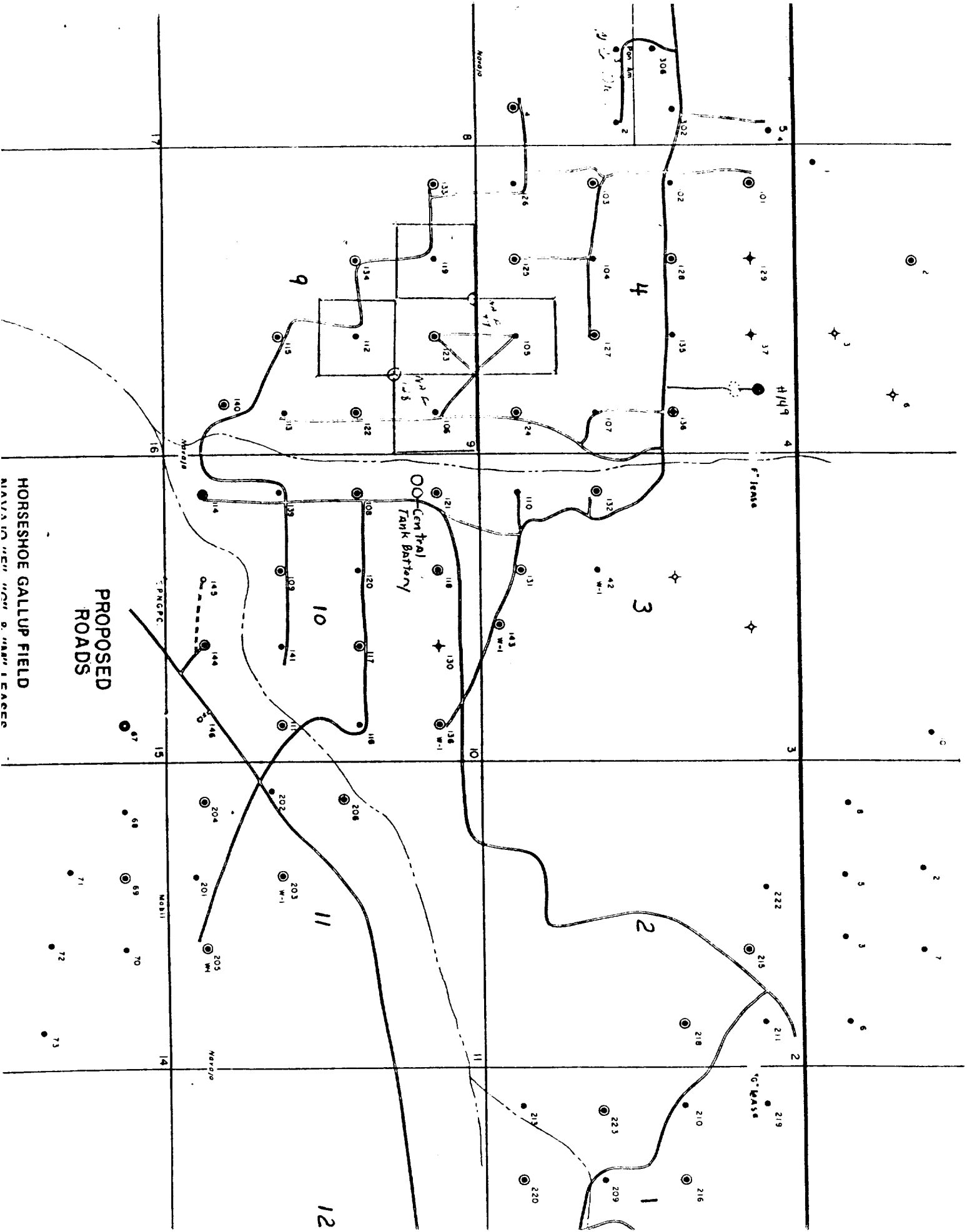
Date: August 13, 1980.


Harold W. Elledge

NAVAJO 'F' # 149

N

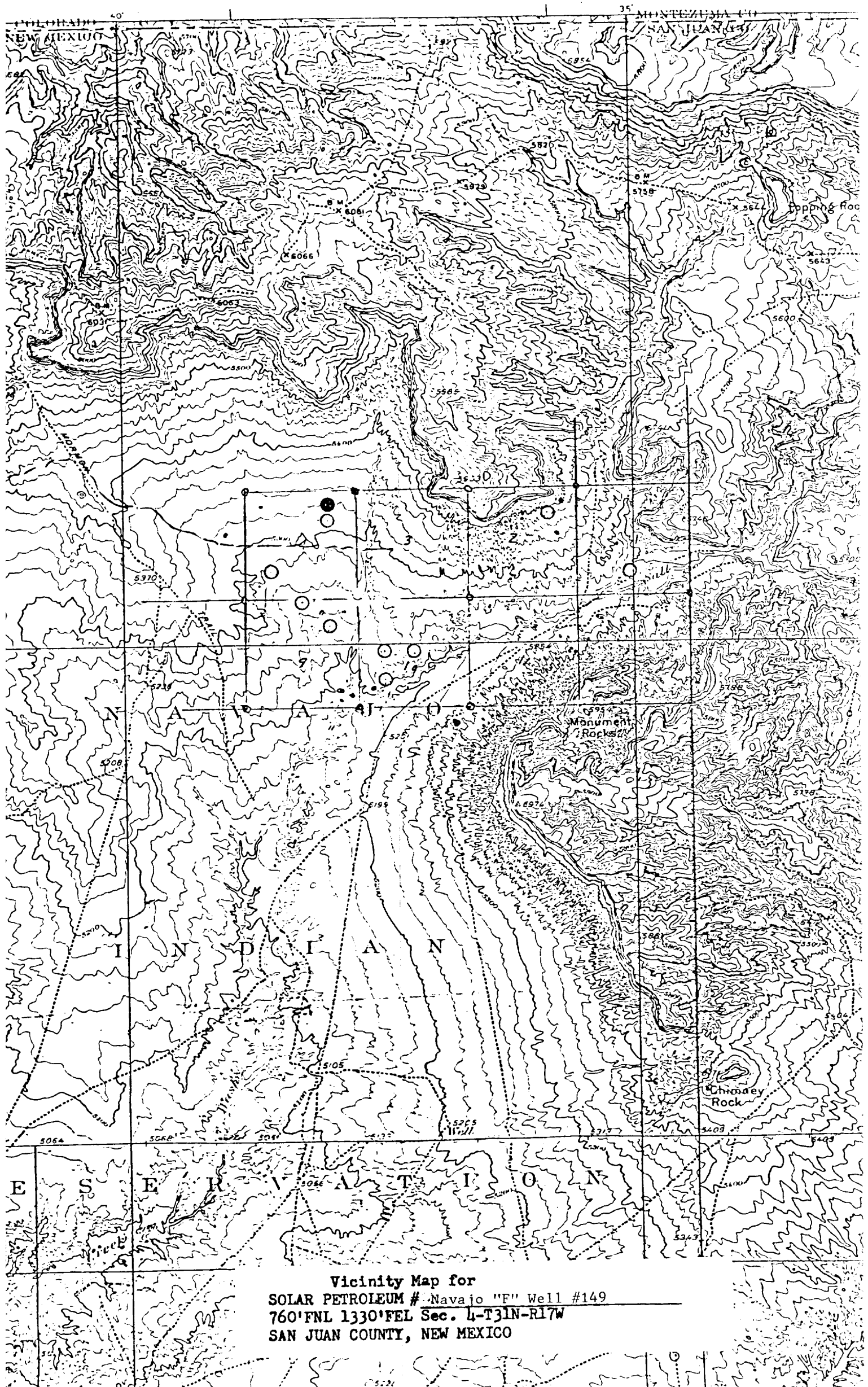




PROPOSED
ROADS

HORSESHOE GALLUP FIELD

NAVAJO "NEW" "OWN" & "HAW" LEAGUES



Vicinity Map for
SOLAR PETROLEUM # Navajo "F" Well #149
760'FNL 1330'FEL Sec. 4-T31N-R17W
SAN JUAN COUNTY, NEW MEXICO

November 20, 1974

MEMORANDUM

TO : Bruce Anderson, Division of Archaeology, National Park Service,
P.O. Box 728, Santa Fe, New Mexico 87501

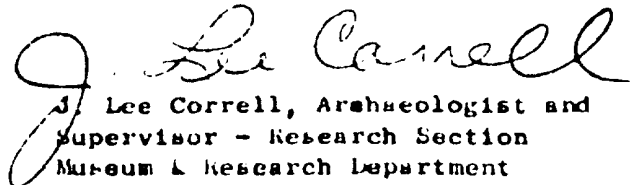
FROM : J. Lee Correll, Archaeologist and Supervisor of Research Section,
Museum and Research Dept., The Navajo Tribe

SUBJECT: Archaeological Clearance - Associated Royalties Lease, 10 Miles
North of Shiprock, New Mexico. Handled by Engineering & Production
Service, Farmington, New Mexico

Pursuant to the request of Mr. J. D. Hicks of the Engineering & Production Service Company of Farmington, New Mexico, accompanied by him, I examined the area held under lease by Associated Royalties. The region is something of a big sink, relatively flat with gravel mounds about the periphery. The area is criss-crossed by existing access roads, and there are a number of operating oil wells. Those areas examined, all in Township 31 N, Range 17 W, were:

Section	3 - W $\frac{1}{2}$ only
"	4 - All of Section
"	5 - E $\frac{1}{2}$ only
"	9 - All except the NW $\frac{1}{4}$
"	10 - All of Section
"	11 - W $\frac{1}{2}$ only

Other than one Navajo family who maintains a dwelling within the area, no evidence of either prehistoric or historic occupancy was noted, and archaeological clearance is hereby recommended.


J. Lee Correll, Archaeologist and
Supervisor - Research Section
Museum & Research Department
The Navajo Tribe

CC: ✓ J. D. Hicks
Martin A. Link
File
Chrono

Rev. # E-149

