

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

1200 FNL

1410 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 drilg. unit line, if any)

1200'

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

900'

## 16. NO. OF ACRES IN LEASE

2560

## 19. PROPOSED DEPTH

1030

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

## 20. ROTARY OR CABLE TOOLS

Rotary

## 22. APPROX. DATE WORK WILL START\*

10-10-80

## 23.

5221 G.L.

## 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#	60'	20 SX
6 3/4	4 1/2	10.5#	1030'	200 SX

This proposal is for administrative  
approval only. It is not a permit to drill.

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.



18. 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 stratigraphic depths. Give blowout preventer program, if any.

24

SIGNED

TITLE

Agent

DATE

8-13-80

(This space for Federal or State office use)

PERMIT NO.

APPROVED  
AS AMENDED

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL

NOV 24 1980  
JAMES F. SIMS  
DISTRICT ENGINEER

TITLE

DATE

\*See Instructions On Reverse Side

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088  
SANTA FE, NEW MEXICO 87501Form C-107  
Revised 10-1-

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

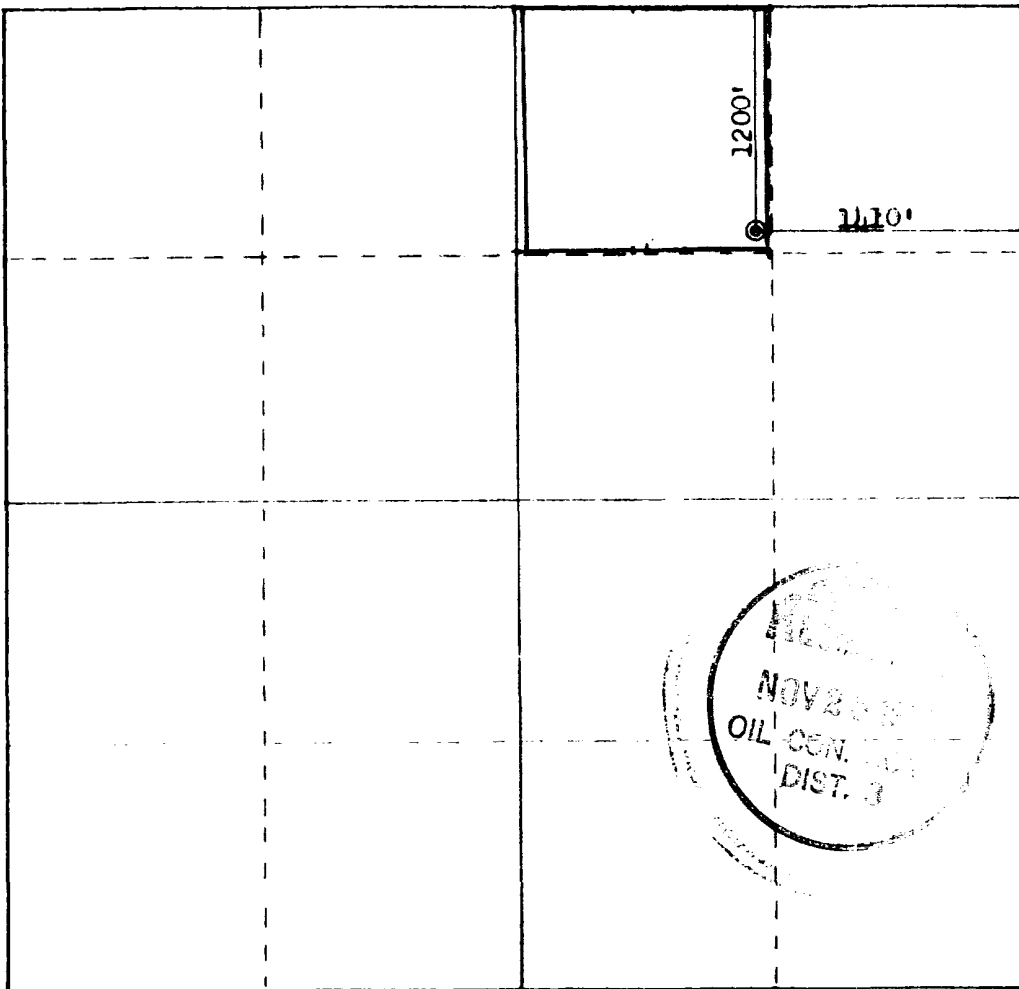
Operator <b>SOLAR PETROLEUM, INCORPORATED</b>			Lease Navajo "F"		Well No. 148
Unit Letter B	Section 9	Township 31N	Range 17W	County San Juan	
Actual Footage Location of Well:					
1200	feet from the	North	line and	1410	feet from the East line
Ground Level Elev. 5221	Producing Formation Gallup		Pool Horseshoe	Dedicated Acreage: 40 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 \_\_\_\_\_

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.



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 \_\_\_\_\_  
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 2, 1980  
Registered Professional Engineer and Land Surveyor  
Fred B. Kern, Jr.  
Certificate No. 3959 B. KERN, JR.

SOLAR PETROLEUM, INC.

Navajo "F" #148

OPERATION PLAN

- I. Location: B-9-31N-17W  
Field: Horseshoe Gallup  
Elevation: 5221
- II. Geology:  
A. Formation Tops: Surface: Mancos  
Gallup: 970  
Sanastee: 1010  
  
B. Logging Program: I-ES and Gamma Ray-Density logs.  
C. Coring Program: 35' core through Gallup formation
- III. Drilling:  
A. Mud Program: Low solid mud-surface to T.D.
- IV. Materials:  
A. Casing Program: 

Hole Size	Depth	Casing Size	Wt. & Grade
12 $\frac{1}{4}$	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" #148

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 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 low sand hills with a deep wash  
south, east, and west on the location. It is  
covered with very sparse 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

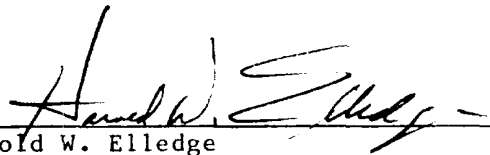
OR

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



P.O. BOX 819  
Bloomfield, New Mexico 87413

(505) 632-3385

*Mission Field  
Ray Padua  
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 <del>FSL</del> , <sup>*</sup> | 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]*

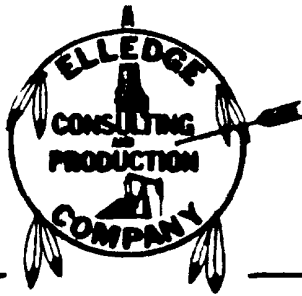
JOE F. ELLEDGE

Joe F. Elledge

JFE/jr

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

1.



operator 6,

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

*6-25-80*  
JFW/jr

6-25-80

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

Yours truly,

*J. F. Elledge*  
Joe F. Elledge

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

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

DATE <u>11-14-79</u>		RECEIPT NO. <u>159244</u>	
BOOK NO. <u>3142</u>		VENDOR NO. <u>11721</u>	
RECEIVED FROM	NAME <u>Exc. Drills</u>	ADDRESS <u>2232 2313 Santiago</u>	
		ADDRESS <u>Farmington, N.M.</u>	
O.K. <u>Shawanda Fine</u> AND <u>100</u> DOLLARS (\$1,585.00) <u>Eight One Dollars</u>		REMITTANCE, IF NOT IN CASH, IS ACCEPTED, SUBJECT TO COLLECTION.	
DESCRIPTION	ACCOUNT NO.	AMOUNT	
<u>Damaged drilling</u>	<u>2016-105</u>	<u>\$1,585.00</u>	
TOTAL		<u>\$1,585.00</u>	
CASH	CHECK NUMBER <u>258</u>	OTHER	
SIGNATURE OF COLLECTING EMPLOYEE <u>Shawanda Fine</u>		POSITION TITLE <u>Sec. II</u>	



# HICKS ENCO, INC.

P. O. Box 176      PHONE: (505) 327-3788  
FARMINGTON, NEW MEXICO 87401

March 31, 1980

Mr. Donald Benally *- To settle  
damages on grazing*  
Counsellor at Law  
P. O. Box 2219  
Shiprock, New Mexico 87420


Dear Sir:

The drilling we proposed has been postponed indefinitely.

In November, 1979 we reached an agreement with Donald Badoni of the Navajo Tribal Land Administration as to the amount of damages we would cause by drilling three wells, Navajo F 147, Navajo F 148 and Navajo G 225. The amount was \$1,585.00. The people holding grazing permits would not agree as to how this amount was to be distributed. A check for this amount was issued to the Navajo Land Administration. Copies of the check, letter and receipt are attached.

I understand they will distribute this money when the permittees reach an agreement.

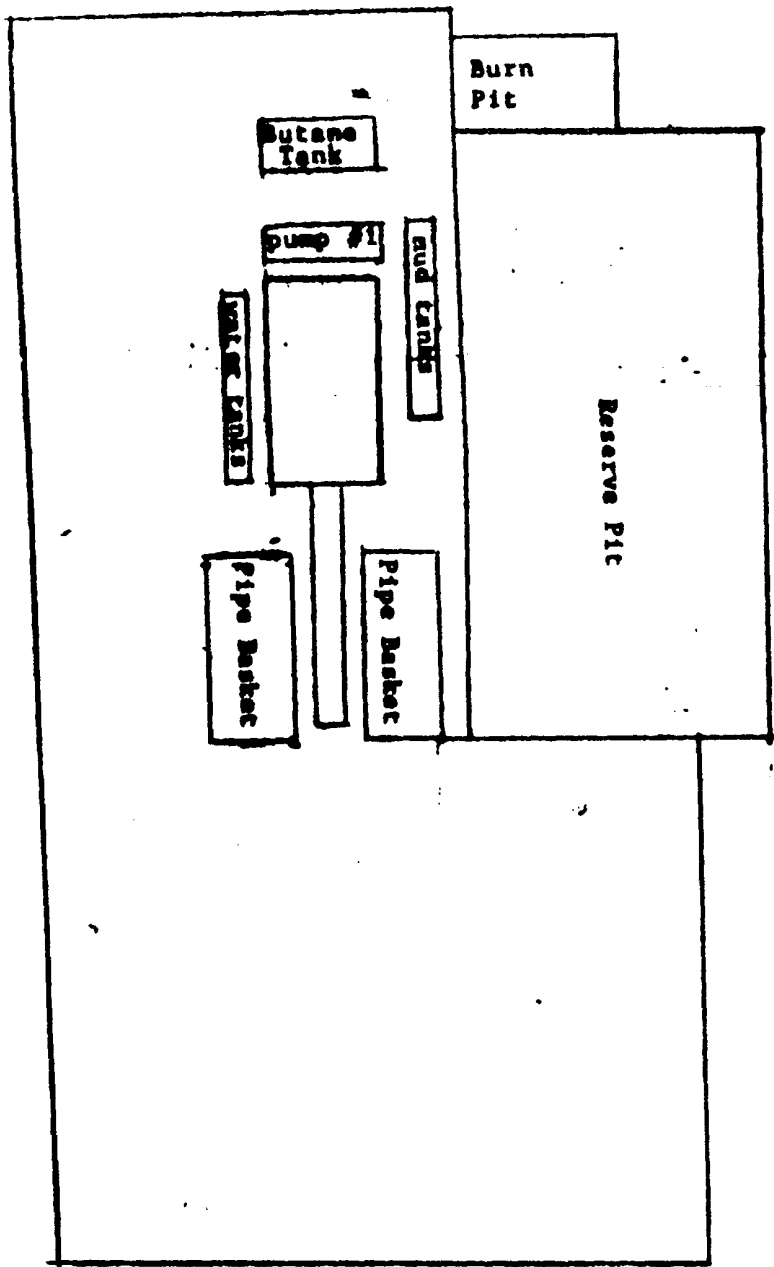
Sincerely,

  
J D Hicks

JDH/11

Enclosures

*Wilson-Phillips  
land - rights*



2

November 20, 1974

MEMORANDUM

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

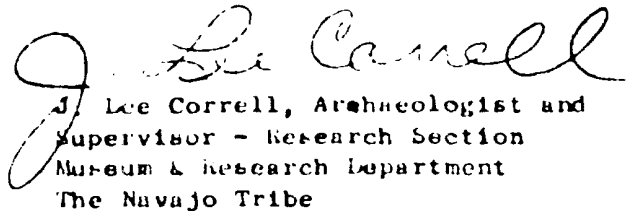
FROM : J. Lee Correll, Archaeologist and Supervisor of Research Section,  
Museum and Research Dept., The Navajo Tribe

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

THORNS END, INC.  
 PAYABLE ACCOUNT  
 2312 BANTAM RD. BOSTON  
 BOSTON, MASS. 02111

First National Bank  
 Federal Reserve Bank and Trust Company  
 1000 Massachusetts Ave. Boston, Mass. 02111

238

November 5, 1979

1022

ONE THOUSAND FIVE HUNDRED EIGHTY FIVE DOLLARS AND NO/100 DOLLARS \$ 1585.00

TO  
 THE  
 ORDER  
 OF

Navajo Land Administration  
 Account #2016-105

~~NOT NEGOTIABLE~~

THORNS END, INC.  
 PAYABLE ACCOUNT  
 BOSTON, MASS.

DELUXE - FORM WVC-3 V-3

DATE	DESCRIPTION	AMOUNT	ACCOUNT NO.	DEBIT
	For damages resulting from drilling of Navajo Wells			
	"F" 147 - 5' S of NL & 2540' E of WL - Sec. 9, T31N R17W			
	"F" 148 - 1200' FSL & 1410' FSL - Sec. 9 T31N - R 17W			
	"G" 225 - 2455' FSL & 1230' FSL - Sec. 1 T31N - R 17W			
	Access Road Sec. 9			

EMPLOYEE

PAYEE	TOTAL EARNINGS	SOCIAL SECURITY TAX	FEDERAL RESERVE TAX	STATE INC. TAX	TOTAL DEDUCTIONS	NET PAY



# United States Department of the Interior

GEOLOGICAL SURVEY  
P.O. Box 959  
Farmington, New Mexico 87401

\_\_\_\_\_  
(DATE)

Company Hicks Enco, Inc.

Well Name Navajo "F" 148  
1200' from North line & 1410' from East line

Location Sec. 9 - T31N - R13W

Lease No. 14-20-603-2034

We, the undersigned, have contacted the following Navajo grazing lessees and/or surface occupants at the above oil and gas well location.

NAME	CENSUS NO.	NAME	CENSUS NO.
Mary Noland	30556	Mary Taylor	31411
Bessie Kuhn Martin	24303	Paul Buck	30421
James Frank	<del>74548</del>	Ruth Lee	<del>30423</del>
Dan Shorthair	29952	Jonah King	31874
David Shorthair	95272	Lula King	30113
John Hay	<del>30559</del>	Lee Sandoval	<del>30111</del>
Jimmy C. Begay	31694	Henry Sandoval	30112
Dan Hayes	30598	Luke Sandoval	30464
Cato Hayes	<del>24076</del>	Harry Sandoval	<del>30475</del>
Susie Ann Phillips	26086	Wilson Phillips	30470

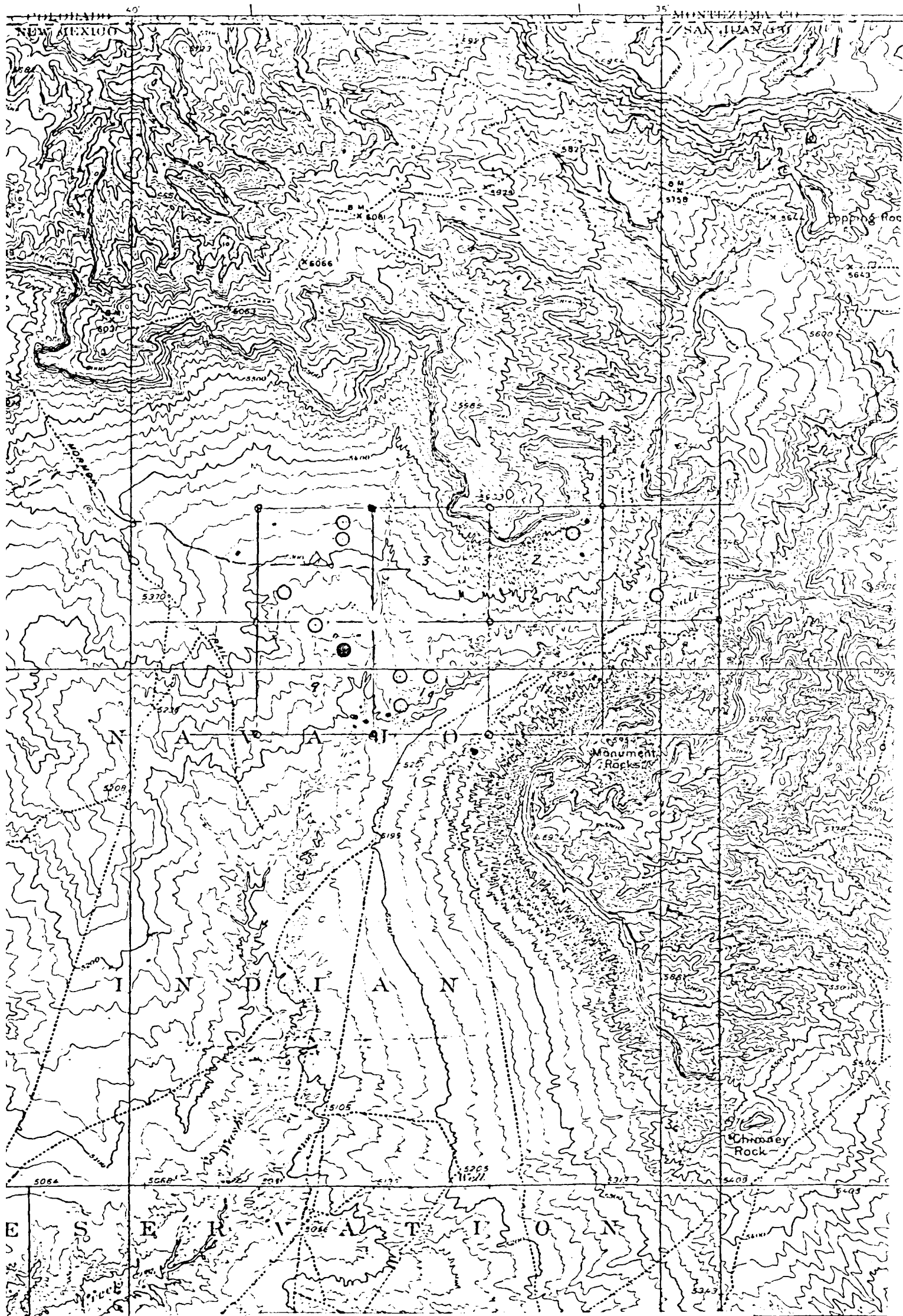
We have determined that no problem exists with the grazing lessee and/or surface occupants at this location.

\_\_\_\_\_  
U. S. Geological Survey

\_\_\_\_\_  
Compliance Officer, Navajo Tribe

\_\_\_\_\_  
President, Hicks Enco, Inc.





Vicinity Map for  
SOLAR PETROLEUM # Navajo "F" Well #148  
1200'FNL 1410'FEL Sec. 9-T31N-R17W  
SAN JUAN COUNTY, NEW MEXICO