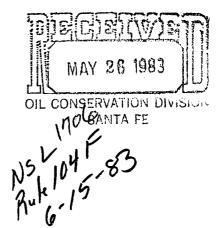


P. O. BOX 2267, MIDLAND, TEXAS 79702 (915) 683-4871

May 20, 1983



New Mexico Oil Conservation Commission Energy & Minerals Department P.O. Box 2088 Santa Fe, New Mexico 87501

Attn: R.L. Stamets

Re: Unorthodox Location (104-F) Vaca 13 Federal #1 660' FNL & 1880' FWL Section 13, T-25-S, R-33-E

Lea County, New Mexico

ded

Mr. Stamets:

HNG Oil Company wishes to apply for an unorthodox location permit on the above-mentioned well. We were advised to move our original location 100' to the West due to five cultural resources discovered in a reconnaissance performed by New Mexico Archaeological Services, Inc. A copy of the report is enclosed.

Sincerely,

HNG OIL COMPANY

more

Cheryl Minces Regulatory Manager

CM/kjh

enclosure

cc: Correspondence File



P. O. BOX 2267. MIDLAND, TEXAS 79702 (915) 683-4871

JUN 20 1983

jana ng sara na

June 15, 1983

New Mexico Oil Conservation Commission Energy & Minerals Department P. O. Box 2088 Santa Fe, NM 87501

Attn: Mr. R. L. Stamets

In Re: Unorthodox Location (140-F)
Vaca 13 Federal, Well No. 1
660' FNL & 1880' FWL
Section 13, T25S, R33E
Lea County, NM

Dear Mr. Stamets:

In addition to our request of May 20, 1983, for the above-unorthodox location, please find enclosed waiver letters from both Amoco Production Company and Phillips Petroleum Company, the only offsets to our lease.

Very truly yours,

HNG OIL COMPANY

the

Betty Gildon Regulatory Analyst

bg

cc: BLM Rośwell, NM



## **Amoco Production Company (USA)**

Houston Region–West 501 WestLake Park Boulevard Post Office Box 3092 Houston, Texas 77253

jun 20 1983 OIL CONSERVATION DIVISION SANTA FE

R. G. Smith Regional Engineering Manager-West

June 8, 1983

#### File: JCA-986.51-2341

Re: Unorthodox Location Vaca 13 Federal Well No. 1 Wildcat Morrow Lea County, New Mexico

New Mexico Energy and Minerals Department Oil Conservation Commission P. O. Box 2088 Santa Fe, NM 87501

Gentlemen:

HNG Oil Company has applied for an unorthodox location to drill the above mentioned well located 660' FNL and 1880' FWL of Section 13, T-25-S, R-33-E.

As an offset operator, Amoco Production Company has no objection to the granting of a permit for this drilling location.

Yours very truly,

K.J. Smi Mlc

MLC/lep 1232/F

cc: HNG Oil Company P. O. Box 2267 Midland, Texas 79702



P. O. BOX 2267, MIDLAND, TEXAS 79702

(915) 683-4871

May 19, 1983

JUN 20 1983 OIL CONSERVATION DIVISION SANTA FE

Amoco Production Company P. O. Box 3092 Houston, Texas 77001 ATTN: Proration Section

Phillips Petroleum Company P. O. Box 1967 Houston, Texas 77001 ATTN: Proration Section

> RE: Waiver-Vaca 13 Federal, Well No. 1 Located in Section 13, T-25-S, R-33-E, Lea County, New Mexico

Gentlemen:

HNG Oil Company has applied for an unorthodox location to drill the above-mentioned well as shown on the attached form 9-331, Application To Drill, with plat.

If you, as an offset operator to this lease, have no objection to the granting of this special permit we would appreciate your signing in the space provided below and returning it to us as soon as possible.

Sincerely,

HNG OIL COMPANY

nuon

Cheryl Minces Regulatory Manager

6/8/83 Date:

Company: Phillips Prik, Co

th-

CM/de

Enc1





R. E. Ogden Regional Engineering Manager

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January 15, 1985

File: JCA-986.51NM-9615

Re: Unorthodox Well Location Vaca 13 Federal Well No. 1 Lea County, New Mexico

New Mexico Oil Conservation Division P. O. Box 2088 Santa Fe, NM 87501

Attention: David Catanach

Gentlemen:

Amoco Production Company has been advised by HNG Oil Company of their intention to drill Vaca 13 Federal Well No. 1 at an unorthodox location, due to topographical conditions at the following location:

> 660' FNL and 1880' FWL, Section 13 T-25-S, R-33-E, Lea County, New Mexico.

As an offset operator, Amoco Production Company has no objection to the subject drilling location.

Yours very truly,

MLC/jlt 0P13D004

HNG 0il Co. cc: P. O. Box 2267 Midland, TX 79702



P. O. BOX 2267, MIDLAND, TEXAS 79702

(915) 683-4871

#### January 7, 1985

Amoco Production Company P. O. Box 3092 Houston, Texas 77001

Phillips Petroleum Company P. O. Box 1967 Houston, Texas 77001

> In Re: Vaca 13 Federal, Well No. 1 located 660' FNL and 1880' FWL, Sec. 13, T25S, R33E, Lea County, NM.

Gentlemen:

Original location for the above-named well was moved 100 feet to the west due to five cultural resources discovered in a reconnaissance performed by New Mexico Archaeological Services, Inc. If you as offset operator have no objection to the amended unorthodox location changing the formation from the Morrow to the Atoka, please sign in the space provided below and return to this office in the envelope provided.

Your early attention is appreciated.

Very truly yours,

HNG OIL COMPANY

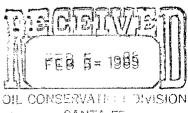
Betty Gildon Regulatory Analyst

bg

enclosures

Date: 1-31-85

COMPANY: Phillips Petroleum NAME: Company



SANTA FE

Release January 28, 184

By D.C.

NSL -RULE-104 FES



P. O. BOX 2267, MIDLAND, TEXAS 79702 (915) 683-4871

OIL

January 4, 1985

CONSERVATION DIVISION SANTA FE

New Mexico Oil Conservation Commission Energy & Minerals Department P. O. Box 2088 Santa Fe, New Mexico 87501

Attn: Mr. R. L. Stamets

In Re: Vaca 13 Federal, Well No. 1 (NM 19623) located in Section 13, Township 25 south, Range 33 east, Lea County, NM.

Dear Mr. Stamets:

The above-named well was drilled to the Morrow at a total depth of 15,948 feet and plugged back to the Atoka. Plug back total depth is 14,595 feet and perforations are 14,495 to 14,509 feet.

Please amend approval of an unorthodox location granted in the Morrow formation on June 15, 1983, to the Atoka. Original location was moved 100 feet to the west due to five cultural resources discovered in a reconnaissance performed by New Mexico Archaeological Services, Inc. Offset operators notified by certified mail are:

Amoco Production Company P. O. Box 3092 Houston, Texas 77001

Phillips Petroleum Company P. O. Box 1967 Houston, Texas 77001

Your early attention is appreciated.

Very truly yours,

HNG OIL COMPANY

Betty Gildon Regulatory Analyst

bg

cc: NMOCC Hobbs, NM

## HNG OIL COMPANY

Prospective formations of interest for our Vaca 13 Federal Well No. 1 located 660' FNL and 1880' FWL, Section 13, T-25-S, R-33-E, Lea County, New Mexico.

 Formation

Depth

Wolfcamp Atoka Lime Morrow Clastics Projected TD

13,950' 14,600' 15,150' 16,200' Morrow NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102 Supersedes C-128 Effective 1-1-65

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HNG OIL COMPAN	Y		VACA 13 FED	ERAT.		Well No. • 1	
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# NMAS New Mexico Archaeological Services, Inc.

P. O. Box 1341 Carlsbad, New Mexico 88220 (505) 887-7646

MAY 26 1983

Reconnaissance Excavation Analysis Explanation Curation

12 May 1983

OIL CONSERVATION DIVISION SANTA FE

Ms. Cheryl Minces Regulatory Manager HNG OIL COMPANY P.O. Box 2267 Midland, Texas 79702

Dear Ms. Minces:

Enclosed please find NMAS' Archaeological Clearance Report for HNG OIL COMPANY's proposed Vaca 13 Federal Well No. 1 and its associated access road in Lea County, One archaeological site (NMAS 5513), and five isolated cultural resources (CR) were recorded during this reconnaissance. NMAS is <u>suggesting</u> clearance for this project <u>provided</u> the archaeological site is <u>avoided</u>. Please consult our report for the <u>suggested</u> mitigation.

If you have any questions pertaining to this report, please call my office. Thank you for asking NMAS to do this reconnaissance.

Yours sincerely,

In

Dr. J. Loring Haskell Principal Investigator

Enclosure

cc: Mr. Thomas Zale, BLM, Carlsbad Mr. Ray Foster, Minerals Management Service, Hobbs Mr. Curtis Schaafsma, Laboratory of Anthropology, Santa Fe Mr. Thomas W. Merlan, SHPO, Santa Fe

as

Archaeological Clearance Report

for

HNG OIL COMPANY

Vaca 13 Federal Well No. 1

Prepared

By

James E. Hunt, MA. and Megan L. Self,MA.

## Submitted

By

Dr. J. Loring Haskell Principal Investigator New Mexico Archaeological Services, Inc. Carlsbad, New Mexico

12 May 1983

Permit No. 82-NM-376

#### ABSTRACT

New Mexico Archaeological Services, Inc., representing HNG OIL COMPANY, Midland, undertook an archaeological reconnaissance of Bureau of Land Management lands scheduled to be impacted by the construction of a drill location and its access road. The proposed work will be situated in Sections 11, 12, and 13, T25S, R33E, NMPM, Lea County, New Mexico. Cultural properties consist of one archaeological site (NMAS 5513), and five isolated cultural resources (CR). NMAS is <u>suggesting</u> clearance for HNG OIL COMPANY's proposed work <u>provided</u> the archaeological site is avoided.

#### Introduction

On 11 May 1983, New Mexico Archaeological Services, Inc., (NMAS), Carlsbad, undertook for HNG OIL COMPANY, Midland, an archaeological reconnaissance of federal lands administered by the Bureau of Land Management in Lea County, New Mexico. Reconnoitered areas will be impacted by the construction of a drill location and its associated access road. This project was advanced by Ms. Cheryl Minces, Regulatory Manager, HNG OIL COMPANY, and administered by Dr. J. Loring Haskell, Principal Investigator, NMAS, Inc. This reconnaissance was undertaken by Mr. James E. Hunt.

## Survey Technique

For this investigation, HNG OIL COMPANY's proposed location was reconnoitered for evidence of man's past activities by walking it in a series of 25 ft wide, close interval (15° or less), zigzag transects. In addition, an added zone extending 20 ft on each side of the staked 400 X 400 ft location, and lying outside the bounds of the proposed work area, was reconnoitered by a similar means. The access road was walked in two 25 ft wide transects. Lathe is considered to be the center of the proposed road. Methodologically, these procedures served to promote optimal conditions for the visual examination of areas be impacted by construction-related activities.

Vaca 13 Federal Well No. 1

## Location

The proposed location will measure 400 X 400 ft (Actual Area Surveyed 4.44 Acres) on federal lands and will be situated 660 ft from the north line and 1980 ft from the west line of:

Section 13, T25S, R33E, NMPM, Lea County, NM

1

Thus it will be situated in the:

NEZNWZ, Section 13, T25S, R33E, NMPM, Lea County, NM

The associated access road will measure approximately 20 X 6500 ft (Actual Area Surveyed 7.46 Acres) and is situated in the:

NE $\pm$ NW $\pm$ , Section 13, T25S, R33E, NMPM, Lea County, NM NW $\pm$ NW $\pm$ , Section 13, T25S, R33E, NMPM, Lea County, NM SW $\pm$ SW $\pm$ , Section 12, T25S, R33E, NMPM, Lea County, NM NW $\pm$ SW $\pm$ , Section 12, T25S, R33E, NMPM, Lea County, NM NE $\pm$ SE $\pm$ , Section 11, T25S, R33E, NMPM, Lea County, NM SE $\pm$ NE $\pm$ , Section 11, T25S, R33E, NMPM, Lea County, NM SW $\pm$ NE $\pm$ , Section 11, T25S, R33E, NMPM, Lea County, NM SW $\pm$ NE $\pm$ , Section 11, T25S, R33E, NMPM, Lea County, NM NW $\pm$ NE $\pm$ , Section 11, T25S, R33E, NMPM, Lea County, NM

Map Reference: USGS BELL LAKE QUADRANGLE, 7.5 Minute Series, 1973. Terrain

HNG OIL COMPANY's proposed location will be situated on a rolling plain located south of Bell Lake and east of Paduca Breaks. Characteristic of this landform's surface are hummocks of up to 1.0 m in height along with associated interconnecting denuded areas. In addition, shallow deflation basins are also present. While drainage is predominantly of the internal type, occasionally, arroyos do cut the landform's surface, thus channelling runoff to the south. Soils belong to the Typic Torripsamment subgroup and are composed of loamy sands and sandy loams which host occasional screes of caliche cobbles and gravels, as well as some cherty inclusions.

#### Floristics

This landform's floral overstory consists of <u>Prosopis</u> juliflora, <u>Yucca glauca</u>, <u>Quercus havardii</u>, and <u>Artemisia filifolia</u>. Attendant forbs include <u>Croton</u> sp., <u>Gutierrezia sarothrae</u>, and <u>Zinnia acerosa</u>. Grasses are represented by <u>Muhlenbergia</u> spp., <u>Sporobolus contractus</u>, and <u>Cenchrus incertus</u>.

#### Cultural Resources

During the course of this reconnaissance, one archaeological site (NMAS 5513) and five isolated cultural resources (CR) were recorded. Isolated Cultural Resources (CR)

CR 1 consists of one sandstone mano located along the proposed access road at a point approximately 1000 ft southeast of the existing Bell Lake Federal 11 Well No. 1. It is situated in the:

NEZNEZSWZNEZ, Section11, T25S, R33E, NMPM, Lea County, NM UTM: Zone 13, N3,557,620; E637,830

Map Reference: USGS BELL LAKE QUADRANGLE, 7.5 Minute Series, 1973.

CR 2 is composed of one fragment of ground sandstone associated with a scatter of burned caliche cobbles located along the proposed access road at a point approximately 1320 ft southeast of the existing Bell Lake Federal 11 Well No. 1. It is situated in the:

SW\2NW\2SE\2NE\2, Section 11, T25S, R33E, NMPM, Lea County, NM UTM: Zone 13, N3,557,530; E637,900

Map Reference: USGS BELL LAKE QUADRANGLE, 7.5 Minute Series, 1973.

CR 3, consisting of one chert scraper, is located along the proposed access road at a point approximately 4000 ft southwest of the existing Bell Lake Federal 11 Well No. 1 . It is situated in the:

Map Reference: USGS BELL LAKE QUADRANGLE, 7.5 Minute Series, 1973.

CR 4 is one chert tertiary decortication flake located on the proposed location, at a point approximately 200 ft north of center. It is situated in the:

SELNWLNELNWL, Section 13, T25S, R33E, NMPM, Lea County, NM

UTM: Zone 13, N3,556,340; E638,830

Map Reference: USGS BELL LAKE QUADRANGLE, 7.5 Minute Series, 1973.

CR 5, comprised of one fragment of a ground sandstone metate, is located on the proposed location at a point approximately 125 ft southeast of center. It is situated in the:

NE<sup>1</sup>/<sub>2</sub>SW<sup>1</sup>/<sub>2</sub>NE<sup>1</sup>/<sub>2</sub>NW<sup>1</sup>/<sub>2</sub>, Section 13, T25S, R33E, NMPM, Lea County, NM UTM: Zone 13, N3,556,230; E638,850

Map Reference: USGS BELL LAKE QUADRANGLE, 7.5 Minute Series, 1973. NMAS 5513

Location: NW\2SE\2NE\2NW\2, Section 13, T25S, R33E, NMPM, Lea County, NM UTM: Zone 13, N3,556,230; E638,900

Map Reference: USGS BELL LAKE QUADRANGLE, 7.5 Minute Series, 1973. Ownership: Bureau of Land Management

Dimension of Resources: 20 X 20 m

Typological Designation: Task Locus

Authorship/Temporality: Unknown

Nature of Cultural Resources: NMAS 5513, a task locus, is situated in an area of low stabilized sand dunes interspersed with shallow deflation basins. The site itself is located in one of these basins, 50 ft northwest of the southeast corner of the proposed pad. Cultural properties for this small task locus consist of a firehearth constructed of caliche cobbles, measuring 1.0 m in diameter; a scatter of burned caliche cobbles and two chert secondary decortication flakes. Although no diagnostic artifacts were recorded as occurring on NMAS 5513, subsurface testing of the feature may produce samples suitable for radiometric dating which would establish

4

the site's cultural and temporal affiliations. This task locus represents an ephemeral campsite.

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## Recommendations

NMAS <u>suggests</u> clearance for HNG OIL COMPANY's proposed location and road <u>provided</u> the archaeological site is <u>avoided</u>. This can be accomplished by shifting the proposed location 100 ft to the west of its presently staked position, i.e., 1880 FWL, 660FNL, Section 13, T25S, R33E, NMPM, Lea County, New Mexico. <u>Men and materiel are</u> to avoid the archaeologically sensitive area. Clearance, of course, is granted by the Bureau of Land Management. If additional cultural resources are encountered during construction, the BLM and NMAS should be notified immediately.

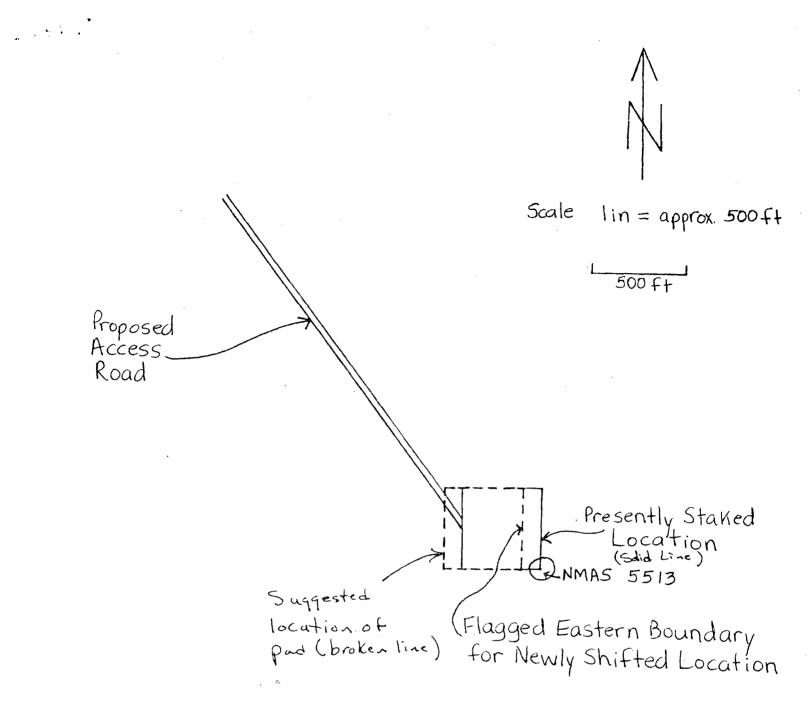
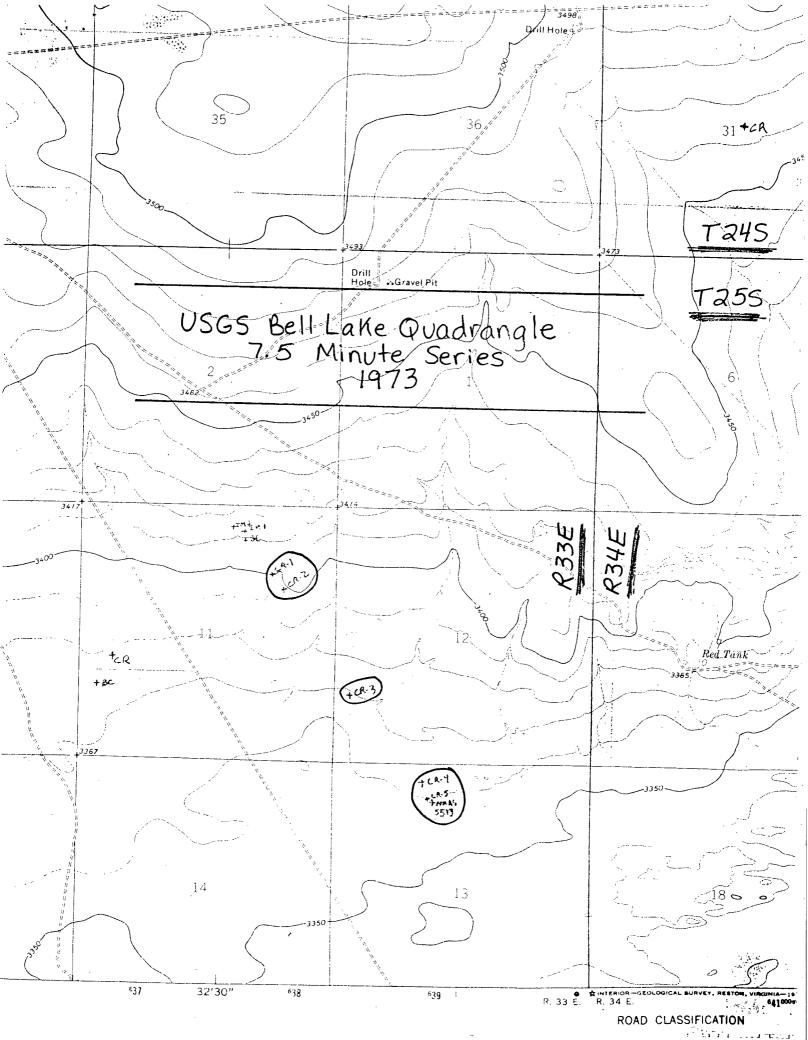
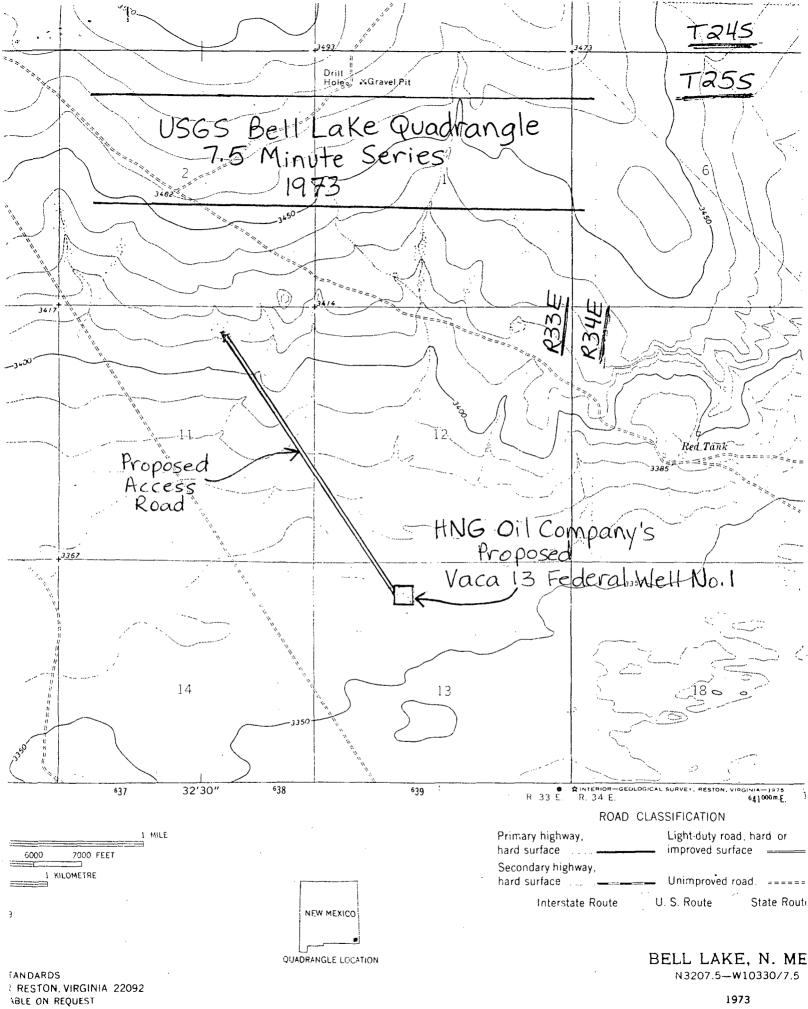


Fig. 1. Schematic representation showing HNG OIL COMPANY's proposed Vcac 13 Federal Well No. 1 vis a vis NMAS 5513 and the proposed location of the pad. NMAS <u>suggests</u> that the location be moved 100 ft to the west from its presently staked position; i.e., 1880 FWL, 660 FNL, Section 13, T25S, R33E.



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AMS 5248 II NE-SERIES V88

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#### Offset Operators

Amoco Production Company P.O. Box 3092 Houston, Texas 77001

Attn: Proration Section

Phillips Petroleum Company P.O. Box 1967 Houston, Texas 77001

Attn: Proration Section

This is to certify that the above-named offset operators have been notified of HNG Oil Company's request for an unorthodox location for the Vaca 13 Federal #1, located in Section 13, T-25S, R-33-E, Lea County, New Mexico.

Cheryl Minces Regulatory Manager

Monday, May 23, 1983 L. B. Whitley ublic Date: Notary Public

**TONY B. WHITLEY-Notary Public** In and for the State of Texas My Commission Expires 6-27-84

#### HNG OIL COMPANY

Prospective formations of interest for our Vaca 13 Federal Well No. 1 located 660' FNL and 1880' FWL, Section 13, T-25-S, R-33-E, Lea County, New Mexico.

Formation	Depth				
Wolfcamp	13,950'				
Atoka Lime	14,600'				
Morrow Clastics	15,150'				
Projected TD	16,200' Morrow				

\*

	Y 26 1983 EDVATION DIVIS SALLIDA FE 13 TUON OF WELL:	NION	t be from the outer boundaries	of the Section	
HNG <sup>OIL</sup> CON Unit Letter C Actual Footage Loca 660 Ground Level Elev.	13		Lease		
Unit Letter C Actual Footage Loca 660 Ground Level Elev.	13		TACA 10 PPD	PD 41	Well No.
Actual Footage Loco 660 Ground Level Elev.		Township	VACA 13 FED	County	
660 Ground Lyvel Elev.	ition of Well:	25 South	33 East	Lea County	
Ground Level Elev.		North	and 1880	feet from the West	
3359.6	feet from the Producing Fo		e and 1880 Pool	feet from the WEST	line Dedicated Acreage:
					Acres
1. Outline the	e acreage dedica	ated to the subje	ct well by colored penci	l or hachure marks on t	he plat below.
2. If more the interest an		dedicated to the	well, outline each and	identify the ownership (	thereof (both as to working
		lifferent ownershi unitization, force-		ll, have the interests o	f all owners been consoli-
Yes	No If a	nswer is "yes," t	pe of consolidation		
this form if	necessary.)	<u> </u>		·	ated. (Use reverse side of
					n approved by the Commis-
					CERTIFICATION
	360'			tained h	certify that the information con- arein is true and complete to the ny knawledge and belief.
	 	+			
	8			Position	
	 . i *			Company	
			ATE ON CER & LAND	shown or notes of under my is true	certify that the well location in this plat was plotted from field actual surveys made by me or csupervision, and that the same and correct to the best of my ge and belief.
	4 1 1 1 1		OHN W. WEST	Date Surve May 12 Registered and/or Lan	, 1983 Professional Engineer
0 330 660 1		80 2310 2640	2000 1500 1000	Bog JOHN W	NG. . WEST NO. 676

Form 9-331 C (May 1963)				SUBMIT IN TR (Other instruc		* Form approved. Budget Bureau No. 42-R1425.
		ED STATES		reverse si	de)	<u>.</u> .
	DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY					5. LEASE DESIGNATION AND SERIAL NO. NM-19623
	APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK					
Ia. TYPE OF WORK						
	LL 🛛	DEEPEN		PLUG BAC	ск 🗆	7. UNIT AGREEMENT NAME
b. TYPE OF WELL OIL WELL GAS WELL X OTHER ZANGE						8. FARM OR LEASE NAME
2. NAME OF OPERATOR				and the second se	~ 111	Vaca 13 Federal
HNG Oil Compa 3. Address of Operator	any			May 26 1983		9. WELL NO.
	7 Middland					10. FIELD AND POOL, OR WILDCAT
P.O. Box 226 4. LOCATION OF WELL (R At surface	eport location clearly and	in accordance wit	$\frac{090}{1000000000000000000000000000000000$		الار وقالا	Wildcat (Morrow)
660' FNL & 18	380' FWL			SANTA FE		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
At proposed prod. zon	e					
Same 14. DISTANCE IN MILES	AND DIRECTION FROM NEAR	EST TOWN OR POS	T OFFICI	g.*		Sec 13, T25S, R33E 12. COUNTY OR PARISH   13. STATE
29 miles West	t of Jal, New Me	ovico				Lea NM
15. DISTANCE FROM PROPU- LOCATION TO NEAREST	SED*		16. NO	O. OF ACRES IN LEASE		DF ACRES ASSIGNED HIS WELL
PROPERTY OR LEARES LINE, FT. (Also to nearest drig. unit line, if any) 660				640'	320	
18. DISTANCE FROM PROP TO NEAREST WELL, P OR APPLIED FOR, ON TH	RILLING, COMPLETED,			COPOSED DEPTH		RY OR CABLE TOOLS
21. ELEVATIONS (Show who		None	10	6,200'	Rota	ary 22. Approx. date work will start*
3360.6 GR	•				••	August, 1983
23.	P	ROPOSED CASH	NG ANI	CEMENTING PROGRA	AM	<b>C</b>
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	00T	SETTING DEPTH	1	QUANTITY OF CEMENT
17-1/2"	13-3/8"	48#		600'	575	sx cmt circ to surf.
12-1/4"	9-5/8"	36#		5,200'		sx cmt circ to surf.
8-1/2" 6-1/8"	7"	26#		13,250'		sx cmt circ to surf.
0-1/8	4-1/2"liner	15.10#		16,200' to 13,000'	325	sx cmt top @ 13,000'
				15,000	,	
	l at 5200' with 11,000# cap. wit					tor. At 13,250'
	OP installation.		preve	entor, will us	e stand	uard surface
					-	
Acreage is de	edicated.					
					•	
		1				
					•	
zone. If proposal is to	drill or deepen directional					uctive zone and proposed new productive d and true vertical depths. Give blowout
preventer program, if an: 24.	y					
Carry	2 Minnin Si		1	Pogulatory Mana	aor	<u>DATE 5-24-83</u>
SIGNED Cheryl	inces	TI1	"LE	Regulatory Mana		DATE
(This space for Fede	ral or State office use)					
PERMIT NO.				APPROVAL DATE		
						· · · · · · · · · · · · · · · · · · ·
APPROVED BY CONDITIONS OF APPROV	AL, IF ANY :	Th	rle			DATE
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\*See Instructions On Reverse Side

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