SUBMIT IN TRIPLICATE.

(Other instructions on reverse side)

FORM APPROVED OMB NO. 1004-0136 Expires: February 28, 1995

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO.

	CATION FOR P	ERMIT TO DRIL	L OR DEEPEN	Navajo (Surface Only)
1a. TYPE OF WORK DR		DEEPEN [Northeast Högback
	AS		SINGLE MULTIP	35718
2. NAME OF OPERATOR	OTHER		ZONE V ZONE	Northeast Högback Unit
3. ADDRESS AND TELEPHONE NO.	s & Energy, I	1C. (281) 931-380	00	8. API WELL NO. 61 30362
650 N. Sam Hot	uston Pkwy E., S	uite 500, Hous	ton, TX, 7706	O Horseshoe Gallup
4. LOCATION OF WELL (R At surface	eport location clearly and			
2675' FNL & 1370' FEL At proposed prod. zone Same				T AND SURVEY OF AREA 10-30n-16w NMPM
	AND DIRECTION FROM NEAR		CE.	12. COUNTY OR PARISH 13. STATE
5 air miles N	of Waterflow,			San Juan NM
PROPERTY OF LEASE L (Also to nearest drig 18. DISTANCE FROM PROP	INE, FT. LUBIC line, if any)	35'	160.0	17. NO. OF ACRES ASSIGNED TO THIS WELL. 40 MW SF4
TO NEAREST WELL, DO OR APPLIED FOR, ON THE	RILLING, COMPLETED.	551'	1,700'_	20. ROTARY OR CABLE TOOLS ROTARY
21. ELEVATIONS (Show who		,421' ungrade		Upon Approval
23.		PROPOSED CASING AN	ID CEMENTING PROGRAM	1
SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-3/4" 6-1/4"	7" (J-55) 4-1/2" (J-55)	20# 9.5#	320'	≈107 cu ft & to surface ≈409 cu ft & to surface
and abbeen breaking			from closest un	it line. The special control of the Atthornized Are special control when Attached agreed according to the Attached agreed according to the control of the c
I ABOVE SPACE DESCRIBE	PROPOSED PROGRAM: IF	2001 11111		cc: BIA, BLM (& OCD), Jackson
deepen directionally, give pertin	nent data on subsurface locations	and measured and true varie	rachepins. Give blowout preven	
SIGNED All	an Clate	Con	isultant (505) 4	9-6-00
(This space for Feder				6/27/01
Application approval does no CONDITIONS OF APPROVAL		cant holds legal or equitable ti	itle to those rights in the subject le	ase which would entitle the applicant to conduct operations thereon
APPROVED BY	s/ Lee Otteni	тпе		DATE

— ПŢLE __

*See Instructions On Reverse Side

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DISTRICT I P.O. Box 1960, Hobbs, N.M. 88241-1980

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised February 21, 1994 Instructions on back

Submit to Appropriate District Office

DISTRICT II P.O. Drawer DD, Artesia, N.M. 88211-0719

DISTRICT III 1000 Rio Brazos Rd., Aztec, N.M. 87410 OIL CONSERVATION DIVISION P.O. Box 2088

State Lease - 4 Copies

Fee Lease - 3 Copies Santa Fe, NM 87504-2088 DISTRICT IV PO Box 2088, Santa Pe, NM 87504-2088 ☐ AMENDED REPORT WELL LOCATION AND ACREAGE DEDICATION PLAT *Pool Code 32870 HORSESHOE GALLUP Property Name Well Number 016547 N.E.H.U. 61 OGRID No. *Operator Name Elevation 171052 PLAYA MINERALS and ENERGY, INC. 5421'-10 Surface Location UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County 10 30-N 16-W 2675 **NORTH** 1370 **EAST** SAN JUAN ¹¹ Bottom Hole Location If Different From Surface UL or lot no. Section Township Lot Idn Feet from the North/South line Feet from the Bast/West line County Dedicated Acres B Joint or Infill "Consolidation Code 10 Order No. 40 NW/4 NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION FD. U.S.G.L.O. BC. 1928 N 89-52-33 W SET 1/2" REBAR w/ 2637.63 17 OPERATOR CERTIFICATION AL. CAP STAMPED "LS 8894" ADAM CRATEAU CONSULTANT 5275.95 09/07/00 1370 Date LAT. 36'49.7 LAT. 36'49.7' N LONG. 108'30.5' W ₹ SURVEYOR CERTIFICATION 00-08-29 8894 FD. U.S.G.LO. BC. 1926 Certificate

Oil Well:

Gas Well:

Injection Well:

Oil Well:

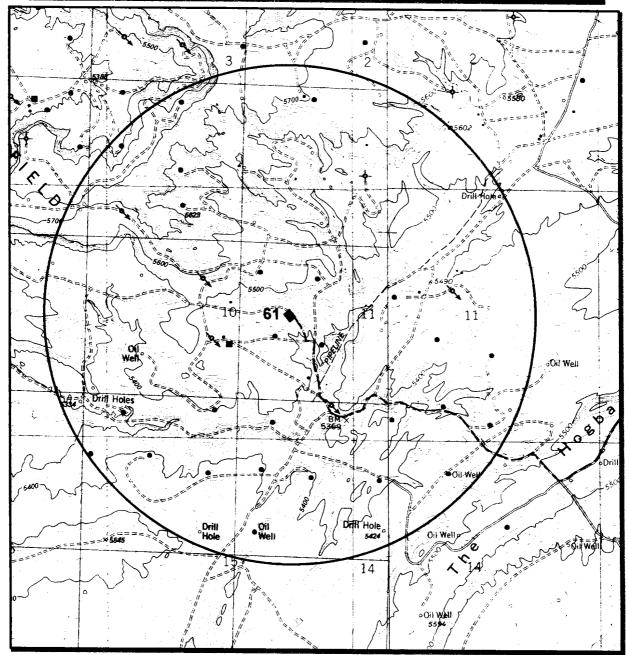
Plugged & Abandoned Well:

Access:

Oil Well:

Plugged & Abandoned Well:

Access:



Central/Playa: NEHU 61

Existing Wells, Access

Legal: SE NE Sec 10 T30N R16W County: San Juan

Prepared by: Permits West

1" = 2000'





Playa Minerals & Energy, Inc. Northeast Hogback Unit 61 San Juan County, NM

Drilling Program

1. Formation Tops

The estimated tops of important geologic markers are:

Formation Name	GL Depth	KB Depth	Subsea Elevation
Pt Lookout	000'	000'	+5,420'
Upper Mancos Shale	50'	50'	+5,370'
Upper Gallup Ss	1,320'	1,320'	+4,100'
Lower Gallup	1,430'	1,430'	+3,990'
Lower Mancos	1,500'	1,500'	+3,920'
Total Depth (TD)*	1,700'	1.700'	+3 760'
* all elevations reflect	the ungraded gro	and level of 5.420	1

2. Notable Zones

Oil & Gas Zones	Water Zones	Minerals Zones
Upper Gallup (1,320')		

Lower Gallup (1,430')

Water Zone will be protected with casing, cement, and weighted mud. Fresh water encountered during drilling will be recorded by depth, cased, and cemented. Oil and gas shows will be tested for commercial potential based on the well site geologist's recommendations.

3. <u>Pressure Control</u>

BOP systems will follow Onshore Order No. 2 and API RP 53. The drilling contract have not been yet awarded, thus the exact BOP model to be used is not yet known. A typical model is on page 3. Maximum expected pressure is 400 psi. BOP controls will be installed before drilling the surface casing plug and remain in use until the well is completed or abandoned. Once out from under the surface casing, a minimum 2,000 psi BOP and choke manifold system will be used.

All BOP mechanical and pressure tests will be recorded on the driller's log. BOP's will be inspected and operated at least daily to assure good mechanical working order. Inspections will be recorded on the daily drilling report. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place.



4. Casing & Cement

<u>Hole size</u>	<u>O.D.</u>	Weigh (lb/ft)	<u>Grade</u>	Type	Age	GL Setting Depth
8-3/4" 6-1/4"	7" 4-1/2"			ST&C ST&C		-

Surface casing will be cemented to the surface as follows:

- -Break circulation with water
- -Pump ≈ 90 sx (107 cu ft) of Class B+ 2% CaCl₂
- -Drop cement wiper plug and displace to 30' above guide shoe
- -WOC 12 hours

Production casing will be cemented to the surface as follows:

- -Break circulation with water
- -Pump ≈ 10 bbl of fresh water
- -Pump $\approx 105 sx$ (≈ 409 cu ft) Class B cement with 3% chemical extender and 1/4#/sx cellophane flakes followed by $\approx 80 sx$ (94 cu ft) Class B cement with 2% CaCl₂ +1/4#/sx cellophane flakes.
- -Drop rubber cement plug and displace to float collar
- -Centralizers will be run on the 1st, 3rd, 5th, 9th and 11th joints.

5. Mud Program

Surface hole will be drilled with Aquagel/lime slurry spud mud mixed to 45-50 sec/qt viscosity.

Production hole will drilled with an air mist system, and foamer as needed.

6. Coring, Testing & Logging

No cores or DST's are planned. Compensated Density-Neutron logs will be run from TD to 7" casing. CCL and cement bond logs will be run if needed.

7. <u>Downhole Conditions</u>

No abnormal temperatures, abnormal pressures, nor hydrogen sulfide are expected. Maximum pressure will be $\approx 400 psi$.

8. Other Information

The anticipated spud date is November 1, 2000. It is expected it will take ≈ 5 days to drill and ≈ 30 days to complete the well.

