

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

## b. TYPE OF WELL

OIL  
WELL ☒GAS  
WELL ☐OTHER ☐SINGLE  
ZONE ☒MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

Playa Minerals &amp; Energy, Inc. (281) 931-3800

## 3. ADDRESS AND TELEPHONE NO.

650 N. Sam Houston Pkwy E., Suite 500, Houston, TX, 77060

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

At surface

1145' FNL &amp; 1475' FWL

At proposed prod. zone

Same

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

4.5 air miles N of Waterflow, NM

## 15. DISTANCE FROM PROPOSED\*

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

1,145'

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

700'

## 16. NO. OF ACRES IN LEASE

317.04

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

## 19. PROPOSED DEPTH

2,750'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

5,409' ungraded ground

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

Upon Approval

23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-3/4"	7" (J-55)	20#	320'	≈107 cu ft & to surface
6-1/4"	4-1/2" (J-55)	9.5#	2,750'	≈470 cu ft & to surface

This section is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4.

Drilling and completion operations authorized are:  
50% of the lease area with attached  
production of oil and gas.

Well is 1,145' from closest lease line and 1,633' from closest unit line.



cc: BIA, BLM (&amp; OCD), Jackson

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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

Adam Clat

TITLE

Consultant (505) 466-8120

DATE

9-6-00

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

4/20/01

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

/s/ Joel Farrell

TITLE

DATE

APR 20

\*See Instructions On Reverse Side

HOLD C104 FOR

NSL

DISTRICT II  
P.O. Drawer DD, Artesia, N.M. 88211-0719DISTRICT III  
1000 Rio Brazos Rd., Aztec, N.M. 87410DISTRICT IV  
PO Box 2088, Santa Fe, NM 87504-2088

## OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, NM 87504-2088Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30045-30365		*Pool Code 32870	*Pool Name HORSESHOE GALLUP
*Property Code 016547 25178	*Property Name NEHU		*Well Number 72
*GRID No. 171052	*Operator Name PLAYA MINERALS & ENERGY, INC.		*Elevation 5409'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	14	30-N	16-W		1145	NORTH	1475	WEST	SAN JUAN

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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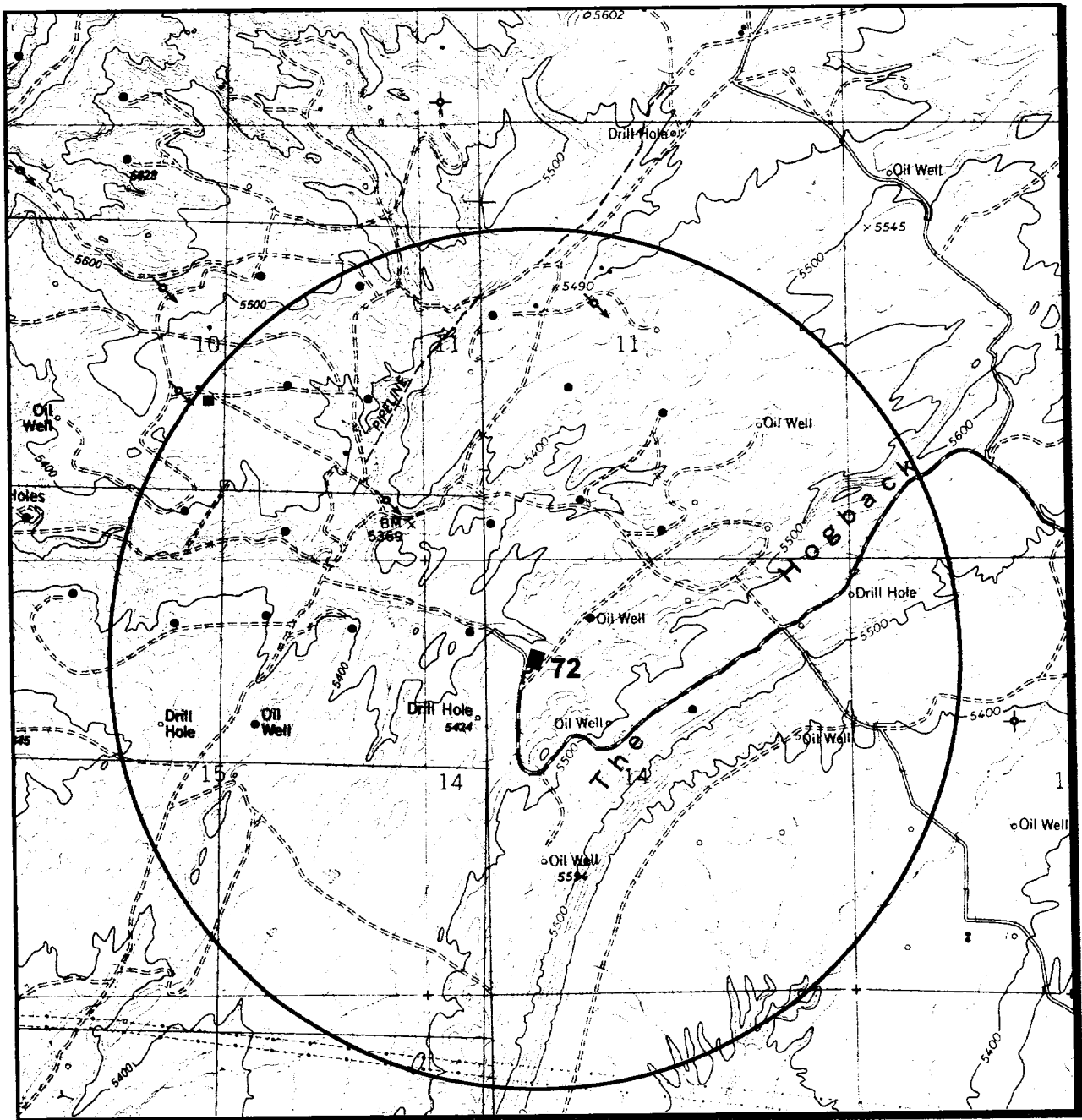
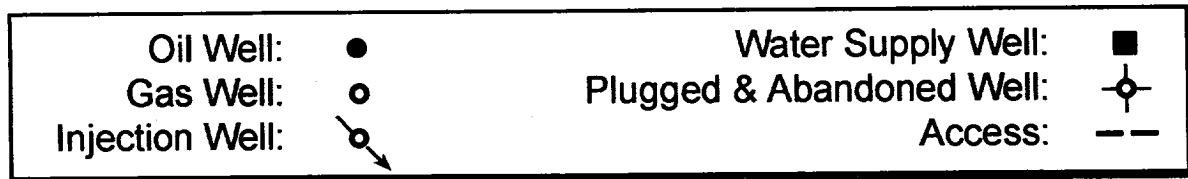
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16 FD. B.C. U.S. G.L.O. 1928	S 89° 51' 11" E 5265.90'	SET 1/2" REBAR W/ 1 1/2" ALUM. CAP	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Adam Croteau Signature ADAM CRATEAU Printed Name CONSULTANT Title 09/07/00 Date	
				18 SURVEYOR CERTIFICATION 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 belief.  5-17-00 Date of Survey Signature and Seal of Registered Professional Land Surveyor 8894 Certificate Number

NSL  
LAT. 35° 49.1' N.  
LONG. 108° 29.9' W.

APR 2001  
RECEIVED  
OIL CON. DIV  
DIST. 3

FD. STONE  
PILE



Playa : NEHU 72		Existing Wells, Access		N
Legal: NE NW Sec 14 T30N R16W	County: San Juan	Prepared by: Permits West	1" = 2000'	

**Playa Minerals & Energy, Inc.**  
**Northeast Hogback Unit 72**  
**San Juan County, NM**

**Drilling Program**

1. Formation Tops

The estimated tops of important geologic markers are:

<u>Formation Name</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Subsea Elevation</u>
Cliffhouse Ss	000'	000'	+5,420'
Pt Lookout	750'	750'	+4,670'
Upper Mancos Shale	1090'	1090'	+4,330'
Upper Gallup Ss	2,420'	2,420'	+3,000'
Lower Gallup	2,530'	2,530'	+2,890'
Lower Mancos	2,600'	2,600'	+2,820'
Total Depth (TD)*	2,750'	2,750'	+2,710'

\* all elevations reflect the ungraded ground level of 5,420'.

2. Notable Zones

<u>Oil &amp; Gas Zones</u>	<u>Water Zones</u>	<u>Minerals Zones</u>
	Cliffhouse (000')	
Upper Gallup (2,420')		
Lower Gallup (2,530')		

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. Pressure Control

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>	<u>Weigh (lb/ft)</u>	<u>Grade</u>	<u>Type</u>	<u>Age</u>	<u>GL Setting Depth</u>
8-3/4"	7"	20	J-55	ST&C	New	320'
6-1/4"	4-1/2"	9.5	J-55	ST&C	New	2,750'

Surface casing will be cemented to the surface as follows:

- Break circulation with water
- Pump  $\approx 90$  sx (107 cu ft) of Class B+ 2%  $\text{CaCl}_2$
- 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  $\approx 10$  bbl of fresh water
- Pump  $\approx 121$  sx ( $\approx 470$  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%  $\text{CaCl}_2$  + 1/4#/sx cellophane flakes.
- Drop rubber cement plug and displace to float collar
- Centralizers will be run on the 1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup>, 9<sup>th</sup> and 11<sup>th</sup> 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. Downhole Conditions

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  $\approx 5$  days to drill and  $\approx 30$  days to complete the well.