

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

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

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 & 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

2630' FNL & 2310' FEL

At proposed prod. zone

Same

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

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)

10'

16. NO. OF ACRES IN LEASE

320.0

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.

893'

19. PROPOSED DEPTH

1,800'

20. ROTARY OR CABLE TOOLS

Rotary

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

5,456' 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#	1,800'	≈409 cu ft & to surface

This casing is subject to mechanical and procedural requirements of 43 CFR 3185.3 and approval pursuant to 43 CFR 3185.4.

DRILLING OPERATIONS AUTHORIZED ARE LIMITED TO THAT WHICH IS AUTHORIZED WITH ATTACHED "PERMIT TO DRILL" DOCUMENTS

Well is 10' from closest lease line and 330' from closest unit line.

Well is 893' from closest lease well and 755' from closest unit well.



cc: BIA, BLM (& 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 Cratz

TITLE

Consultant (505) 466-8120

DATE

9-6-00

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

6/27/01

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:

/s/ Lee Ottent

APPROVED BY

TITLE

DATE

*See Instructions On Reverse Side

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised February 21, 1994

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

Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, NM 87504-2088

DISTRICT IV
PO Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-045-30363		2 Pool Code 32870		3 Pool Name HORSESHOE GALLUP	
4 Property Code 016547 25778		5 Property Name N.E.H.U.			6 Well Number 68
7 OGRID No. 171052		8 Operator Name PLAYA MINERALS & ENERGY, INC.			9 Elevation 5456'

10 Surface Location

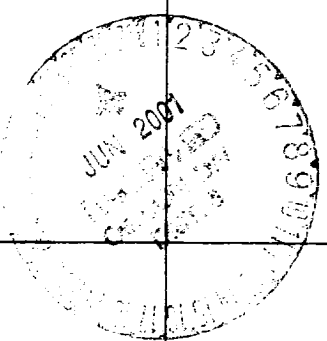
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	10	30-N	16-W		2630'	NORTH	2310'	EAST	SAN JUAN

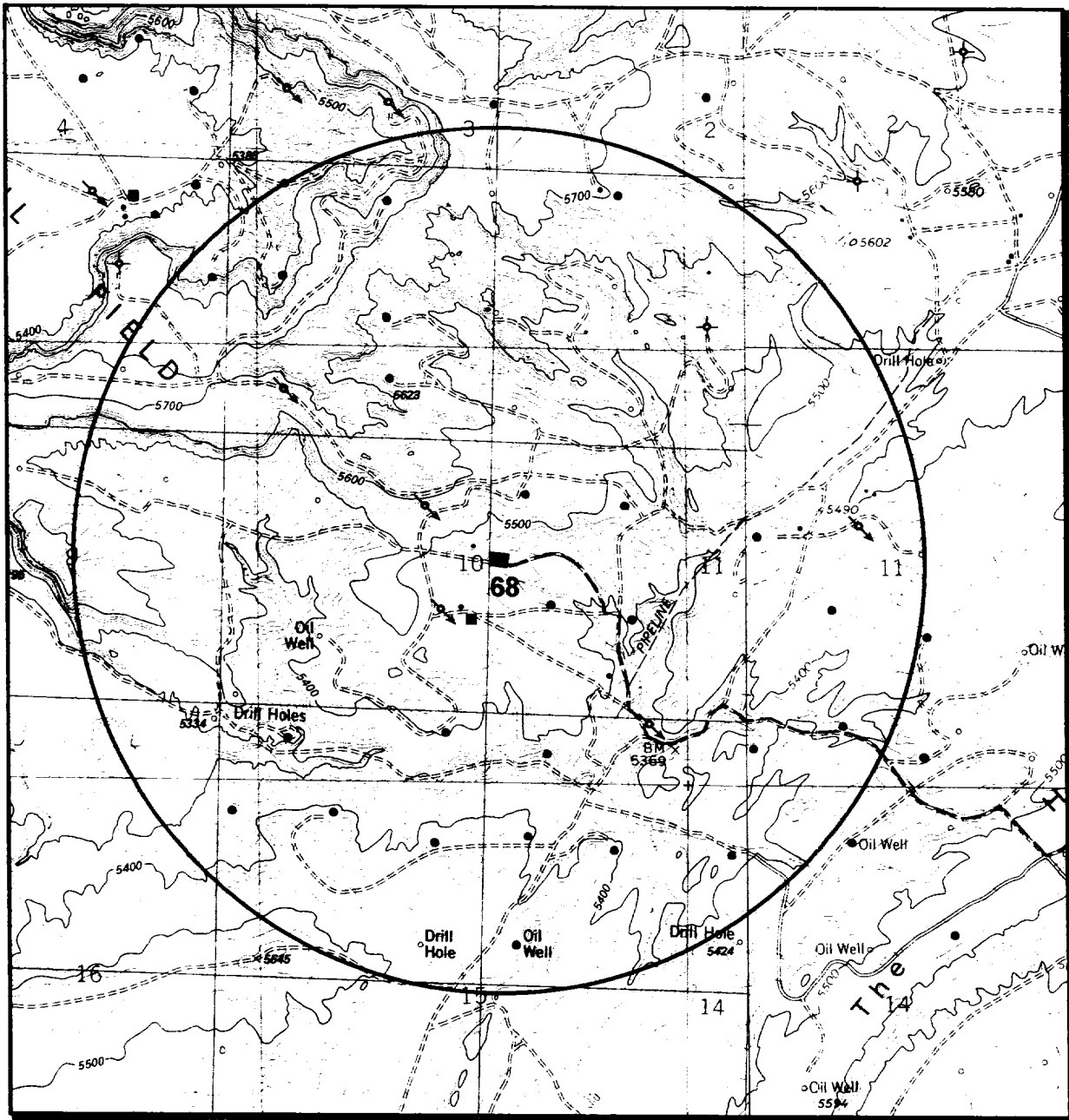
11 Bottom Hole Location If Different From Surface


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

12 Dedicated Acres 40 SW NE		13 Joint or Infill		14 Consolidation Code		15 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 FND 1928 U.S.G.L.O. BC.		N 89-52-33 W 2637.63'		SET 1/2" REBAR W/ 1 1/2" AC. STAMPED 8894		17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature ADAM CRATEAU Printed Name CONSULTANT Title 09/07/00 Date	
		2630'		2310'		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. Date of Survey 5-16-00 Signature and Seal of Professional Surveyor ROY A. RUSH 8894 Certificate Number	
		LAT. 36°49.7'N LONG. 108°30.7'W		S 00-08-29 W 5275.95'			
				FND 1926 U.S.G.L.O. BC.			



Playa : NEHU 68		Existing Wells, Access		
Legal: SW NE Sec 10 T30N R16W	County: San Juan	Prepared by: Permits West	1" = 2000'	

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>
Pt Lookout	000'	000'	+5,460'
Upper Mancos Shale	190'	190'	+5,270'
Upper Gallup Ss	1,460'	1,460'	+4,000'
Lower Gallup	1,570'	1,570'	+3,890'
Lower Mancos	1,640'	1,640'	+3,820'
Total Depth (TD)*	1,800'	1,800'	+3,720'

* all elevations reflect the ungraded ground level of 5,460'.

2. Notable Zones

Oil & Gas Zones

Water Zones

Minerals Zones

Upper Gallup (1,460')
Lower Gallup (1,570')

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		1,800'

Surface casing will be cemented to the surface as follows:

- Break circulation with water
- Pump ≈ 90 sx (107 cu ft) of Class B+ 2% 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 ≈ 10 bbl of fresh water
- Pump ≈ 105 sx (≈ 409 cu ft) Class B cement with 3% chemical extender and 1/4#/sx cellophane flakes followed by ≈ 80 sx (94 cu ft) Class B cement with 2% CaCl_2 + 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. Downhole Conditions

No abnormal temperatures, abnormal pressures, nor hydrogen sulfide are expected. Maximum pressure will be ≈ 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.