

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

200 SEP 22 PM 3:37

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

170' FNL & 1255' FEL

At proposed prod. zone

Same

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

5.5 air miles N of Waterflow, NM

16. DISTANCE FROM PROPOSED*

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

170'

17. NO. OF ACRES IN LEASE

320.0

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1,784'

19. PROPOSED DEPTH

1,900'

20. ROTARY OR CABLE TOOLS

Rotary

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

5,555' 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#	1,900'	~409 cu ft & to surface -

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

Well is 170' from closest lease line and 170' from the closest unit line.



DRILLING AND CEMENTING ARE
SUBJECT TO THE ATTACHED
GENERAL PERMIT CONDITIONS

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 Crater

TITLE

Consultant (505) 466-8120

DATE

9-22-00

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

7/6/01

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 there on.
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

/s/ Lee Otter

TITLE

DATE

HOLD C104 FOR

NSL

*See Instructions On Reverse Side

K

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

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

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

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

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102
Revised February 21, 1994

Instructions 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 30-045-30384		*Pool Code 32870	*Well Name HORSESHOE GALLUP
*Property Code 016547	*Property Name N.E.H.U.		*Well Number 65
*OGED No. 171052	*Operator Name PLAYA MINERALS & ENERGY, INC.		*Elevation 5555'

¹⁰ Surface Location

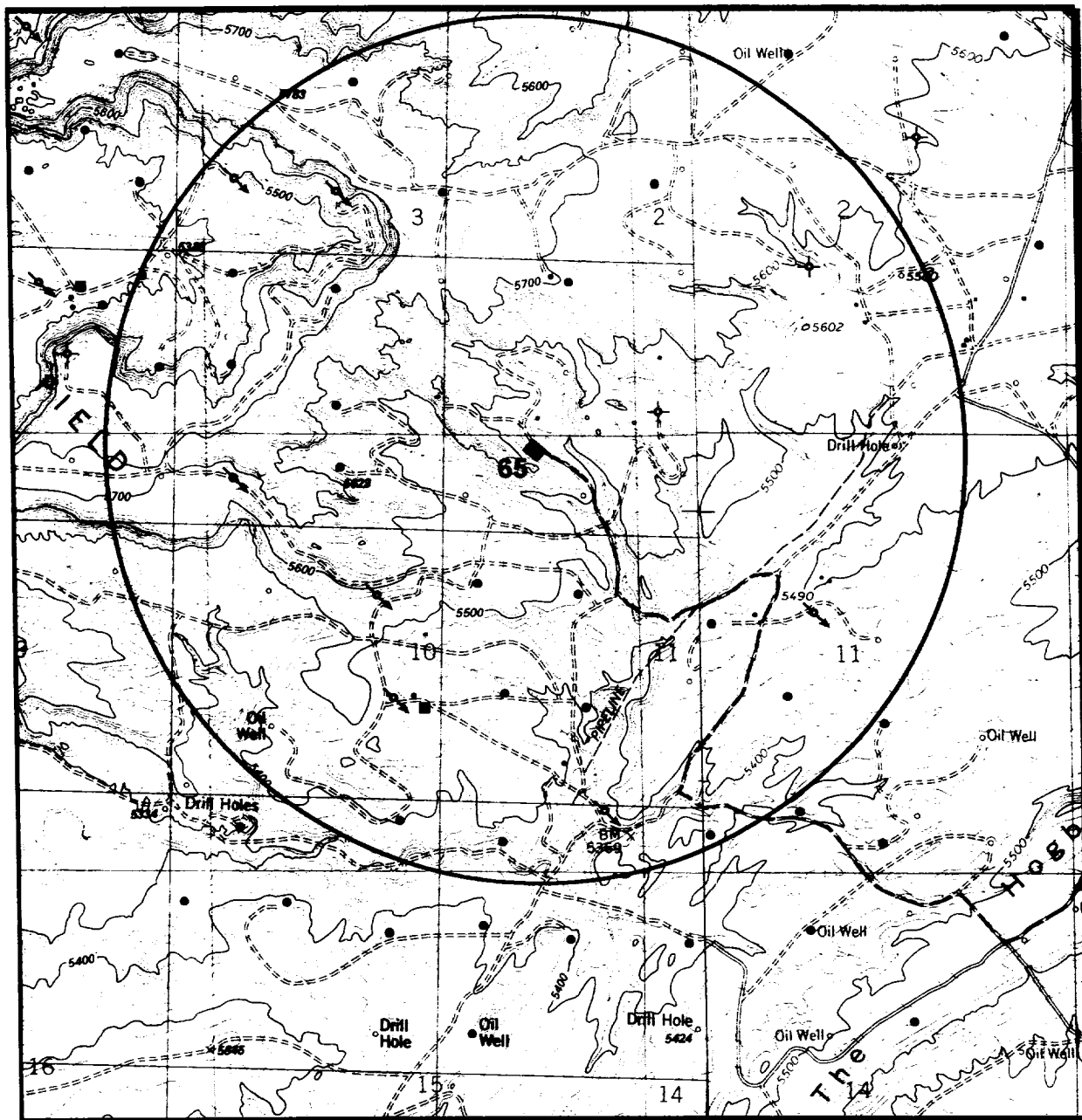
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	10	30 N	16 W		170'	NORTH	1255'	EAST	SAN JUAN

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
*Dedicated Acres 4.0 NENE			*Joint or Infill		*Consolidation Code		*Order No.		

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. U.S.G.L.O. BC. 1928	N 89-52-33 W 2637.63'	LAT: 36° 50.1' N LONG: 106° 30.4' W	1255'	SET 1/2" REBAR W/ PLASTIC CAP STAMPED "LS 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	
<div style="text-align: center;">10 JUL 2001 RECEIVED OIL CON. DIV DIST. 3</div>						Title 09/22/00	
						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 knowledge and belief	
<div style="text-align: center;">7-24-00 ROY A. RUSH NEW MEXICO REGISTERED PROFESSIONAL LAND SURVEYOR 8894</div>						Date of Survey	
						Signature	
						Certificate Number	
						FD. U.S.G.L.O. BC. 1928	



Central/Playa : NEHU 65

Existing Wells, Access

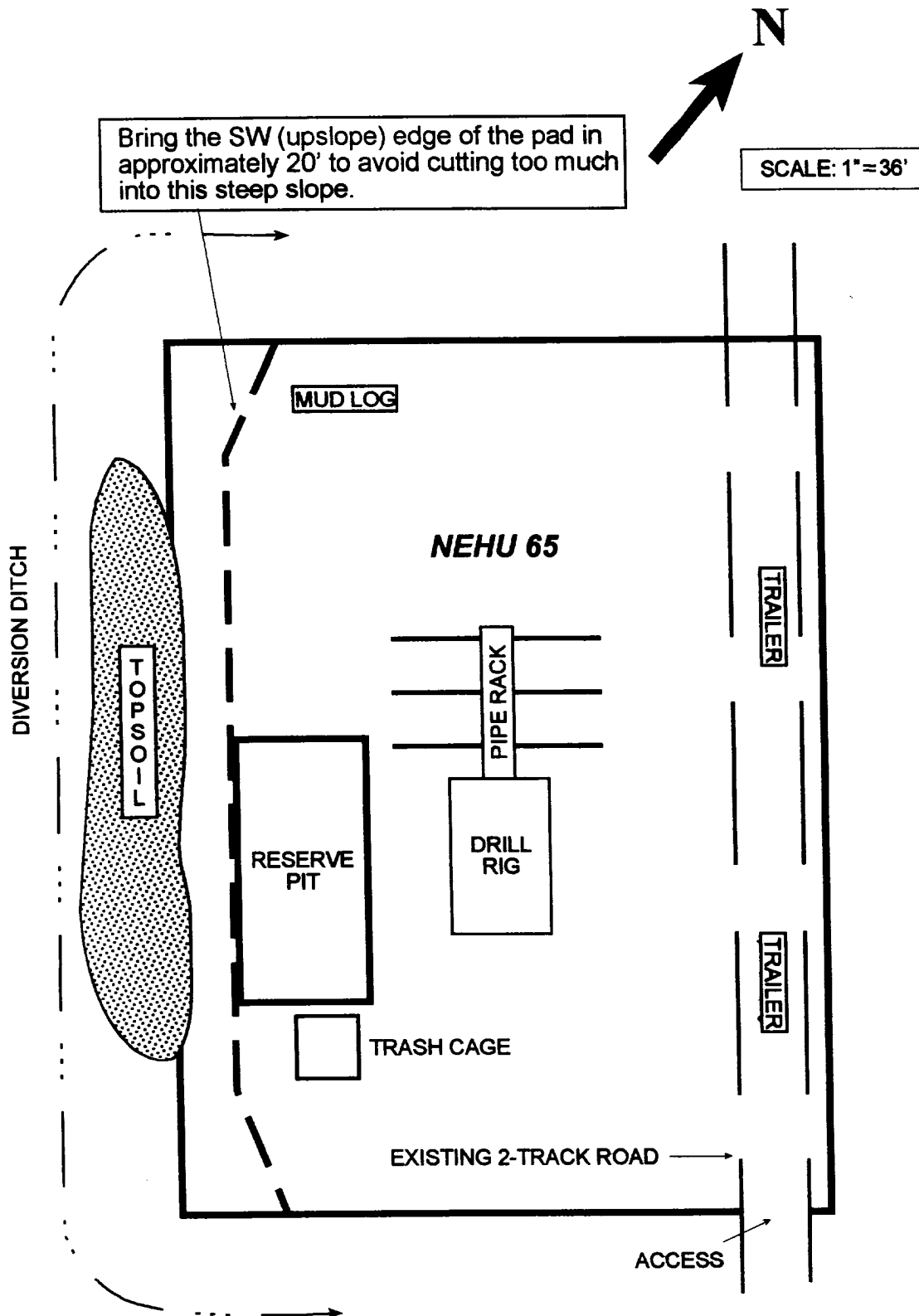


Legal: NE NE Sec 10 T30N R16W

County: San Juan

Prepared by: Permits West

1" = 2000'



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		1,900'

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% 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 105sx (\approx 409 cu ft) Class B cement with 3% chemical extender and 1/4#/sx cellophane flakes followed by \approx 80sx (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 \approx 400psi.

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.

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'	+5,580'
Upper Mancos Shale	260'	260'	+5,320'
Upper Gallup Ss	1,530'	1,530'	+4,050'
Lower Gallup	1,570'	1,570'	+3,940'
Lower Mancos	1,640'	1,640'	+3,940'
Total Depth (TD)*	1,900'	1,900'	+3,800'

* all elevations reflect the ungraded ground level of 5,580'.

2. Notable Zones

Oil & Gas Zones

Water Zones

Minerals Zones

Upper Gallup (1,530')

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.