

# APPLICATION FOR PERMIT TO DRILL OR RE-ENTER

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

## NAME OF COMPANY OR OPERATOR

Kinder Morgan C02 Company L.P

Address

City

State

Phone Number

830 E. Main St. Suite 220, Springerville AZ. 85938

928-333-0100

Drilling Contractor

Aztec Drilling

Address

Farmington N.M

## DESCRIPTION OF WELL AND LEASE

Federal, State or Indian Lease Number, or if fee lease, name of lessor  
Prize Energy

Well number 10-06-31 FEE

Elevation (ground) 7083.6'

Nearest distance from proposed location to property or lease line:

2022 feet

Distance from proposed location to nearest drilling, completed or applied-for well on the same lease:

N/A

feet

Number of acres in lease

640 acres +/-

Number of wells on lease, including this well, completed in or drilling to this reservoir:

N/A

If lease purchased with one or more wells drilled, from whom purchased.

Name

Address

Well location (give footage from section lines)

2022' FWL & 407' FNL

Section - Township - Range or Block and Survey

S. 6, T10NR31E, G&SRM

Dedication per A.A.C. R12-7-104(A)(3)

640

Field and reservoir (if wildcat, so state)

St. Johns Gas Unit

County

APACHE

Distance in miles and direction from nearest town or post office

From Springerville P.O. N41° 02' E 15.41 miles

Proposed depth:

3000' +/-

Rotary or cable tools

Rotary

Approximate date work will start

Feb. 1 2015

Bond status on File

Organization Report

Filing Fee of \$25.00

Amount

On file

Or attached

Attached Mailed

Remarks

API # 02-001-20496

Please see attached well prognosis

**CERTIFICATE:** I, the undersigned, under the penalty of perjury, state that I am the: Operation Supervisor of the Kinder Morgan C02 (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Signature

12/22/2014

Date

Mail completed form to:  
Oil and Gas Program Administrator  
Arizona Geological Survey  
416 W. Congress, #100  
Tucson, AZ 85701-1316

Permit Number: 1197

Approval Date: 1-14-2015

Approved By: SLP

**NOTICE:** Before sending in this form be sure that you have given all information requested. Much unnecessary correspondence will thus be avoided.

Form No. 3

**STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION**

Application to Drill or Re-enter  
File Two Copies

- Operator shall outline on the plat the acreage dedicated to the well in compliance with A.A.C. R12-7-107.
- A registered surveyor shall show on the plat the location of the well and certify this information in the space provided.
- ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.
- Is the operator the only owner in the dedicated acreage outlined on the plat below? YES ☒ NO ☐
- If the answer to question four is no, have the interests of all owners been consolidated by communization agreement or otherwise?  
YES ☐ NO ☐ If answer is yes, give type of consolidation \_\_\_\_\_
- If the answer to question four is no, list all the owners and their respective interests below:

<b>Owner</b> Kinder Morgan Co2	<b>Land Description</b> S. 06 T10NR31E, G&SRM NE1/4
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**CERTIFICATION**

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

*Thomas White*

**Name**  
Thomas White

**Position**  
Ops Sup. C02

**Company**  
Kinder Morgan C02 Company

**Date**  
12/22/2014

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.

*Daniel R. Muth*

**Date Surveyed** 12/11/2014

**Registered Land Surveyor**  
Daniel R. Muth PLS

**Certificate No.** Az RLS No. 31028

**PROPOSED CASING PROGRAM**

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement	Type
See well prognosis							



# KINDER MORGAN

## DRILLING PROGNOSIS

WELL: SJGU 10-6-31

FIELD: St Johns Gas Unit

API # 02-001-xxxxx 20496

SURFACE LOCATION:  
NE ¼, S. 6 T10N R31E, G&SRM  
Apache County, Arizona  
407' FNL & 2022' FWL  
Longitude: W 109° 06' 13.05"  
Latitude: N 34° 17' 57.12"

OBJECTIVE: Precambrian Granitic  
ELEVATION: 7,084 ft

**A FOCUSED EFFORT WILL BE EXPECTED BY ALL PARTIES TO ELIMINATE ANY / ALL ACCIDENTS DURING THE EXECUTION OF THIS DRILLING PROJECT.**

GEOLOGY / FORMATION TOPS

WELL PROGRAM

FORM	DEPTH TVD	CASING PROFILE	HOLE SIZE	CASING SPECS
	80'			Conductor
San Andres	240		17-1/2"	13-3/8" 54.5-ppf J-55 STC
Glorietta/Coconino	500			Adapt to conditions, recommend set at Glorietta
Corduroy/Yeso	692		12-1/4"	9-5/8" 36-ppf J55 STC
Ft. Apache	1660			Set 9-5/8" casing in top of Amos Wash
Big A Butte	1750		8-3/4"	7" 23-ppf J55 STC
Oak Creek	2012			
Amos Wash/Abo	2023			
Fractured Granite	2,443'			
Proposed TD	2,578'		6-1/8"	Open Hole

### DRILLING PROCEDURE:

Drill a 17.5" hole to +/- 500' TVD, set 13-3/8" casing and conventionally cement to surface.

**NOTES:** Drill with spud mud to the top of the Glorietta/Coconino formation. Lost circulation is likely. In the event of full losses, short trip to conductor and switch to air to TD hole section. Casing seat must be located by mud loggers and verified by Kinder Morgan Geologist.

Drill a 12-1/4" hole to +/- 1,750' TVD, set 9-5/8" casing and conventionally cement to surface.

**NOTES:** Drill with native water based mud. Glorietta/Cocinino and Supai may flow water; therefore, mud wt. should be raised accordingly (8.5-9.1 ppg). This section of hole will encounter water entry, lost circulation and formation sand influx that seriously will bridge and stick DP; adjust mud recipe as needed in response to hole conditions. Consult Geologist for casing seat in top of Amos Wash.

Drill a 8-3/4" hole with mud to +/- 2,443' TVD, set 7" casing and conventionally cement in 2 stages to surface.

**NOTES:** Drill with NaCl mud through Big A Butte and Amos Wash. Consult geologist for casing seat in top of Granite.

Drill a 6-1/8" hole with air to +/- 2,578' TVD, log Granite

**NOTES:** Drill with air and stiff foam mixture through Reform managed pressure equipment. Will need to spot 4% NaCl brine as a logging fluid. After logs are ran clean out to TD with air and dry out well bore, monitor for CO2 flow.

### CASING / CEMENTING DETAILS:

Designed TOC for casing strings @ surface

20" Conductor => 0' - 80'  
Cement: Ready Mix to surface  
Circulate to surface

13-3/8" 54.5# J-55 STC => 0' - 500'  
Cement: Conventional => See Detailed Job Recommendation

9-5/8" 36# J-55 LTC => 0' - 1,750'  
Cement: Conventional => See detailed Job Recommendation.

7" 23# J-55 LTC => 0' - 2,443'  
Cement: Conventional => See detailed Job Recommendation  
Centralizers on 1<sup>st</sup> and 3<sup>rd</sup> joint above and below DV Tool/ECP (4)

**Program was prepared using predicted mud weights and properties. It is to serve as a guideline only and should be adjusted based on actual conditions.**