

Brooks, David K., EMNRD

From: Brooks, David K., EMNRD
Sent: Monday, November 29, 2010 11:49 AM
To: 'jamesbruc@aol.com'
Cc: 'drcatanach@netscape.com'
Subject: Case No. 14505; Application of Delero Energy II LP to Expand a Waterflood Project, etc.

Dear Jim

I received from David Catanach a request to modify the order in this case. This request was by email dated November 17, and shows a copy to you.

In order to process this request, I need to look at the application in Case 14505. I cannot locate that document in OCD's file. (I found your cover letter and proposed advertisement, but not the application itself.) I would therefore greatly appreciate your furnishing me a copy of that application.

Thanks

David

BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

**APPLICATION OF CELERO ENERGY II, LP
TO EXPAND THE WATERLOOD PROJECT
AND INSTITUTE A TERTIARY RECOVERY
PROJECT FOR THE ROCK QUEEN UNIT,
AND TO QUALIFY THE PROJECT FOR THE
RECOVERED OIL TAX RATE, CHAVES AND
LEA COUNTIES, NEW MEXICO.**

Case No. _____

APPLICATION

Celero Energy II, LP, whose address is Suite 2100, 301 Commerce Street, Fort Worth, Texas 76102, applies for an order approving the expansion of the waterflood project in the Rock Queen Unit (the "Unit Area"), approving a tertiary recovery for the Unit Area, and qualifying the project for the recovered oil tax rate. In support thereof, applicant states:

1. Applicant is the operator of the Unit Area, which covers the lands located in Chaves and Lea Counties, New Mexico described below:

Township 13 South, Range 31 East, N.M.P.M.

Section 22: E $\frac{1}{2}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$, and E $\frac{1}{2}$ SW $\frac{1}{4}$
Section 23: W $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, and S $\frac{1}{2}$
Section 24: SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$
Section 25: All
Section 26: All
Section 27: E $\frac{1}{2}$ and E $\frac{1}{2}$ NW $\frac{1}{4}$
Section 34: NE $\frac{1}{4}$ and S $\frac{1}{2}$ NW $\frac{1}{4}$
Section 35: N $\frac{1}{2}$ NW $\frac{1}{4}$
Section 36: All

Township 13 South, Range 32 East, N.M.P.M.

Section 19: Lot 4, SW $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, and SE $\frac{1}{4}$
Section 30: Lots 1-4, NE $\frac{1}{4}$, E $\frac{1}{2}$ W $\frac{1}{2}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, and SW $\frac{1}{4}$ SE $\frac{1}{4}$
Section 31: Lot 1

Containing 4939.77 acres, more or less, of federal, state, and fee lands.

2. The unitized interval is the Queen formation, as further described below:

That heretofore established underground reservoir, referred to as the "Queen Sand", being a member of the Queen Formation of the Guadalupe Series, a part of the Permian System, the top of which is found at 3,050 feet, and the base of which is found at 3,066 feet, on the Gamma Ray Neutron Log of the Gulf Oil Corporation, State of New Mexico 'BMC' No. 1 Well, located in the SE/4SE/4 of Section 23, Township 13 South, Range 31 East, N.M.P.M., insofar as same lies within the Unit Area.

3. Under Division regulations, the Queen formation is developed on statewide rules, with 40 acre well spacing, and wells to be located no closer than 330 feet to a quarter-quarter section line.

4. A waterflood project was previously approved for the Unit Area, as described in Commission Order No. R-1541. Applicant seeks approval to expand the waterflood project in the Unit Area, and to institute a tertiary recovery project, on the above-described lands by injecting water and carbon dioxide into the unitized Queen formation from approximately 42 existing or proposed wells located on the above-described lands. The initial project area will comprise the above-described lands. A plat outlining the project area is attached hereto as Exhibit A.

5. Applicant requests that additional injection wells be approved administratively.

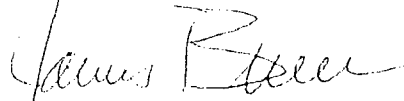
6. Applicant further requests that the Rock Queen Unit Enhanced Recovery Project be qualified for the recovered oil tax rate, pursuant to the Enhanced Oil Recovery Act (L. 1992, ch. 38) and Division regulations. Project data is set forth on Exhibit B attached hereto.

7. The Form C-108 for the project is attached hereto as Exhibit C.

8. Approval of this application will prevent waste and protect correlative rights.

WHEREFORE, applicant requests that, after notice and hearing, the Division enter its order approving the injection application.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "James Bruce", written over a horizontal line.

James Bruce
Post Office Box 1056
Santa Fe, New Mexico 87504
(505) 982-2043

Attorney for Celero Energy II, LP

T 13 S - R 32 E Lea County

T13S-R31E Chaves County

Exhibit "A"
Rock Queen Unit
Track Number
Unit Boundary

0 2.50
FEET

EXHIBIT

A

Federal Lands	720.00 Acres
State Lands	3,659.77 Acres
Fee Lands	<u>560.00 Acres</u>
Total	4,939.77 Acres

CELERO ENERGY - ROCK QUEEN UNIT PLAN OF DEVELOPMENT

EXHIBIT B

Lease Location: All or portions of Sec. 22 through 27, 34 through 36, T13S, R31E, Chaves County, NM, and all or portions of Sec. 19, 30, and 31, T13S, R32E, Lea County, NM.

Operator: Celero Energy II, LP (Purchased Unit and took over operations June, 2007)

Development History:

- 124 wells were drilled on this lease primarily on 40-acre spacing in the mid to late 1950's.
- Rock Queen Unit unitized 10-01-59 (4940 acres).
- The Oil Conservation Commission of the State of New Mexico approved Great Western Drilling Company's application for an order authorizing a water flood project on 11-30-1959, Case No. 1798, and Order No. R-1541. This order approved the injection of water into six wells, Rock Queen Unit No's 22L (P&A'd), 22N (P&A'd), 22J (P&A'd), and 28 in Sec. 22, and No's 27F (P&A'd) and 27B (P&A'd) in Sec. 27.
- The Rock Queen Unit waterflood was developed in the early 1960's as an 80-acre 5-spot pattern waterflood. Peak oil response was 5,300 BOPD in 1963 and peak water production was in 1967 at 13,500 BWPD. The waterflood response was pretty much over by the early 1970's and pretty much limped along over the past 35 years +/-.
- Twenty-one wells have been P&A'd primarily from the mid-1970's to the mid-1980's. Five additional wells were P&A'd by Celero in 2008 and 2009.

Reservoir Performance:

- Based on work that was done by a consultant in the mid 1990's, the OOIP for the Rock Queen Unit is estimated to be 66.3 MMBO. Estimated oil production to date is 17.9 MMBO. The estimated oil recovery to date is 27%. Estimated primary recovery is 8% yielding a waterflood to primary ratio of 2.4.
- The 27% estimated oil recovery through waterflood is relatively good based on the typical waterflood performance of reservoirs of this type.
- Assuming that there is a potential target of 10% to 15% of the OOIP that could still be recoverable, this provides Celero Energy with a 6.6 MMBO to 9.9 MMBO target that would justify reactivating the Rock Queen Unit.

Plan of Development:

- 2007 to 2009: Reactivate existing TA'd and shut-in wells and re-enter or re-drill plugged and abandoned wells in Sections 25, 26, 30, and 36 (1920 acre area) as an 80-acre waterflood.

Prepare this same area for a planned CO2 pilot flood to be implemented by the 1st Quarter 2010. Injection wells surrounding this CO2 pilot area will be reactivated, re-entered, or re-drilled to provide a water curtain for the CO2 pilot area. Producers offsetting the CO2 pilot area will also be reactivated.

Attached are two maps that reflect the proposed CO2 pilot boundary in the Rock Queen Unit. The first map shows the active producers and water injectors at the end of 2008. The second map shows the planned active producers, CO2 injectors, and water curtain injectors at the end of 2009. The active well count by year since Celero purchased the Rock Queen Unit is also attached.

Celero plans to spend approximately \$23.4 MM on well reactivations, re-entries, and re-drills plus approximately \$9.9 MM for new facilities including tank batteries, flowlines, injection facilities and lines. Celero plans to spend approximately \$5 MM for a CO2 supply pipeline and \$16.4 MM on the purchase of CO2. \$2.2MM will also be spent on environmental cleanup work. Refer to the attached Estimate of Project Cost and Potential Value for additional project information.

Also attached is the historical production plot and Celero's Production/Injection Forecast for the Rock Queen Unit CO2 Pilot Area.

- 2010 to 2012: Monitor and evaluate the Rock Queen Unit CO2 pilot flood performance.
- 2013 & 2014: Reactivate, re-enter or re-drill wells in the remainder of the Rock Queen Unit as well as any additional facilities and lines needed to support the new wells. Expand the CO2 flood to the remainder of the Unit.
- As Celero Energy implements this plan of development, there will likely be significant changes to the basic 80-acre waterflood redevelopment plan based on additional reservoir and geologic studies and actual operational performance as we progress this plan of development. Celero plans to keep the NMOCD apprised of the changes as we plan to implement them.
- Potential development changes may include such things as increased density drilling, changing waterflood patterns and orientations, not reactivating portions of the lease or shutting in portions of the lease due to poor performance, poor economics, and/or significant oil price softening.

Submission of Information for the Application for Authorization to Inject:

Celero Energy acquired ownership and operatorship of this lease in June of 2007. This lease is an old lease that was for the most part an inactive lease that had approximately 17% of its wells that were P&A'd. There were limited well files or well logs that came with the lease so the information that Celero has put together on the wells on this lease was supplemented with data from the NMOCD's web site. Celero, at this point in time, does not plan to submit any logs with this application, and the well information that we submit will reflect the information that we currently have on the wells which may or may not reflect current reality for the subject wells.

But Celero does plan to provide the NMOCD with updated well information and new logs through the sundry process as we begin the process of reactivating, re-entering, or re-drilling the wells on the Rock Queen Unit. Celero hopes that this is a manageable solution to providing the NMOCD with the information they require on an as timely basis as Celero can generate and provide it.

T13S-R31E

Celero Energy

Rock Queen Unit

Status as of 31 December 2008

Chaves and Lea Counties, NM

Ratio Scale = 1:24,000

FEET

WELL SYMBOLS

- Oil Well
- Gas Well
- Dry Hole
- Inactive Well
- Service Well
- Abandoned Well
- Dry Hole With Some Oil
- Inactive TAG at Surface
- Oil Well
- Plugged Oil Well
- Active Oil Well
- Inactive Oil Well
- Oil Well Plugged and Abandoned
- Water Injection Well
- Inactive Water Injection Well
- Plugged and Abandoned Water Injection Well

Legend

- CO2 Pilot Boundary
- 1/2 Mile Boundary
- Flood Design
- Rock Queen
- Active Injectors
- Active Producers

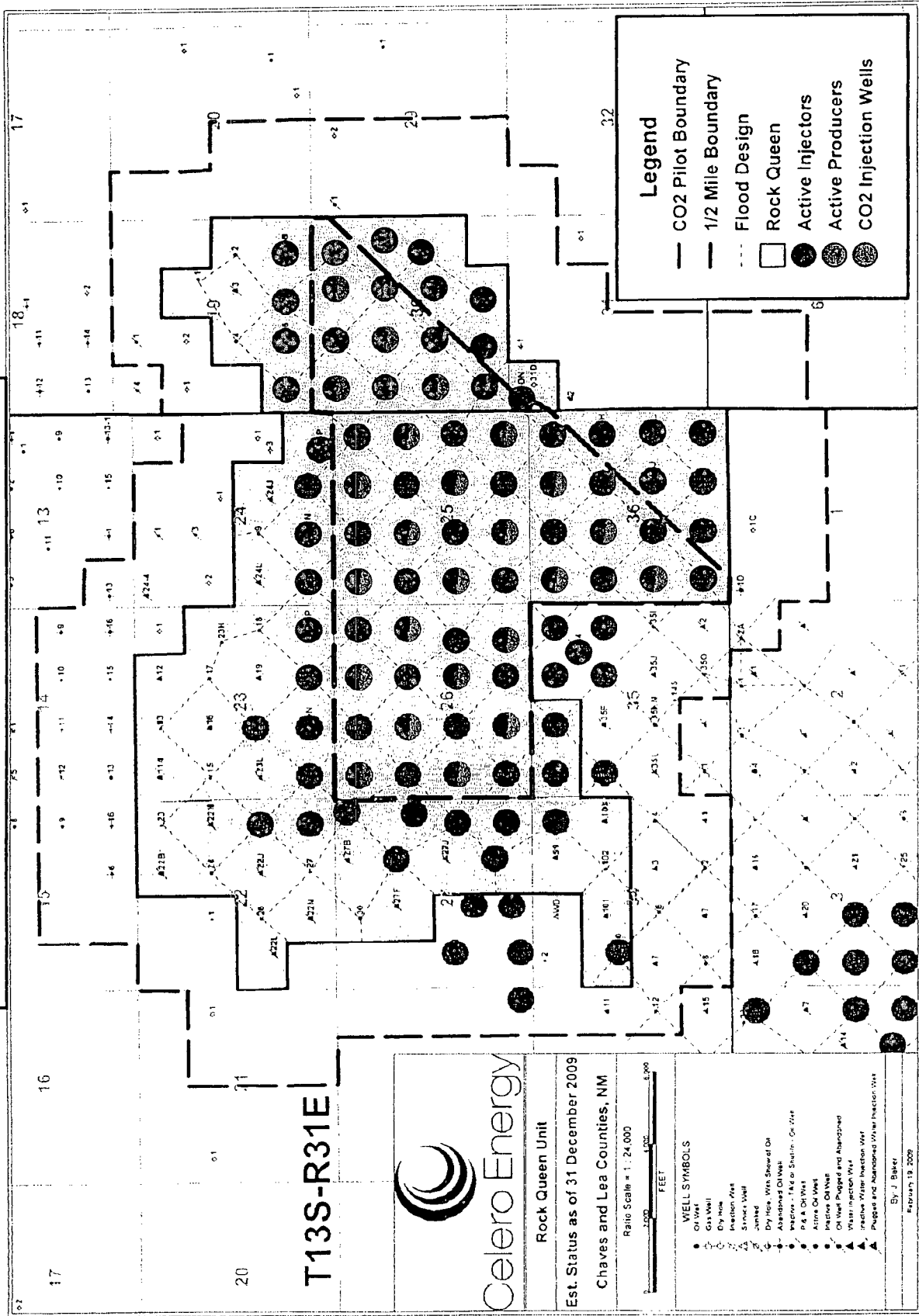
STOBHUS TEAM

- | Well ID | Well Type | Well Status | Well Description |
|---------|--|-------------|--|
| 1 | Oil Well | ● | Oil Well |
| 2 | Gas Well | ○ | Gas Well |
| 3 | Dry Hole | ○ | Dry Hole |
| 4 | Injection Well | ○ | Injection Well |
| 5 | Service Well | ○ | Service Well |
| 6 | Unrated | ○ | Unrated |
| 7 | Dry Hole, With Snow or Drift | ○ | Dry Hole, With Snow or Drift |
| 8 | Abandoned Oil Well | ○ | Abandoned Oil Well |
| 9 | Injection Well, Shut in Oil Well | ○ | Injection Well, Shut in Oil Well |
| 10 | Oil Well | ○ | Oil Well |
| 11 | Active Oil Well | ○ | Active Oil Well |
| 12 | Inactive Oil Well | ○ | Inactive Oil Well |
| 13 | Oil Well Plugged and Abandoned | ○ | Oil Well Plugged and Abandoned |
| 14 | Water Injection Well | ○ | Water Injection Well |
| 15 | Inactive Water Injection Well | ○ | Inactive Water Injection Well |
| 16 | Plugged and Abandoned Water Injection Well | ○ | Plugged and Abandoned Water Injection Well |

By J. Baker

February 19, 2009

Rock Queen Unit - Est. Well Status YE 2009



Celero Energy - Rock Queen Unit CO2 Pilot **Active Well Count**

	June 2007	2007 YE	2008 YE	Est. 2009 YE
Rock Queen Unit:				
Producers (CO2 Pilot)	13	16	28	28
Injectors (CO2 Pilot)	4	15	18	24
Producers (Water Curtain)	2	2	3	10
Injectors (Water Curtain)	1	2	6	17
Producers (Other)	1	2	2	9
Injectors (Other)	0	1	1	1
Total:	21	38	58	89

Celero Energy - Rock Queen Unit CO2 Pilot Estimate of Project Cost and Potential Value

Estimated Project Cost:	Total (\$MM)	Spent YE 2008 (\$MM)	2009 Target (\$MM)
Workovers/Reactivations/Re-entries	16.4	11.5	4.9
New Drills	5.4	0.0	5.4
Wellheads/Tubing	1.6	0.0	1.6
Facilities	9.9	4.4	5.5
Pipeline	5.0	0.0	5.0
Environmental	2.2	1.2	1.0
Total Capital:	40.5	17.1	23.4
CO2 Purchase	16.4	0.0	0.0
Total:	56.9	17.1	23.4

Estimated CO2 Injection Start Date is 1st Quarter 2010

Value of Potential Incremental Production (\$MM)

Incremental Oil (MMBO):	3.1	(No gas/liquids are projected)
Oil Value @ \$53.54/BO (\$MM):	132.4	
Less Severance & Ad Valorem (\$MM):	(12.3)	(\$3.93/BOE)
Less Operating Cost including Recycled CO2 Costs (\$MM):	(14.0)	(\$4.47/BOE)
Less CO2 Purchased (\$MM):	(16.4)	(\$5.24/BOE)
Less Capital Investment (\$MM):	(40.5)	(\$12.94/BOE)
Total Potential Incremental Value (\$MM):	49.2	

Estimated Reserve Information:

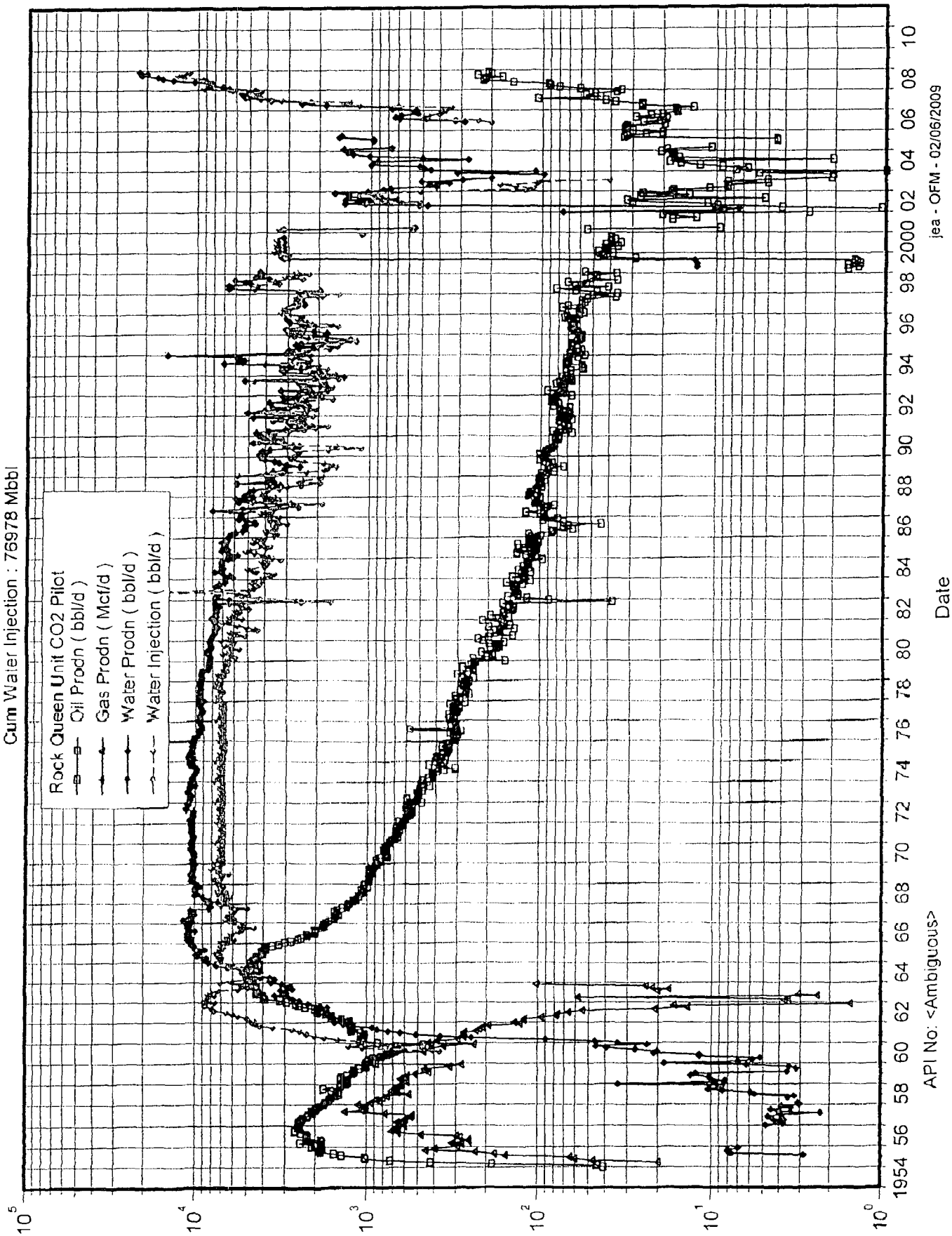
Est. OOIP (MMBO):	28.2		
Est. Cum Oil Prodn (MMBO):	13.7	R.E.:	48.6%
Est. Primary Recovery (MMBO):	4.1	R.E.:	14.4%
Est. Secondary Recovery (MMBO):	9.7	R.E.:	34.2%
Est. Secondary/Primary Ratio:	2.4		
Est. Tertiary Recovery (MMBO):	3.1	R.E.:	11.1%

CELERO ENERGY - CAPROCK FIELD

No. <Ambiguous> Rock Queen Unit CO2 Pilot

Cum Oil Prodn : 13736.797 Mbbl Cum Gas Prodn : 1324 MMcf Cum Water Prodn : 101121 Mbbl

Cum Water Injection : 76978 Mbbl



Celero Energy - Caprock Field Rock Queen Unit CO2 Pilot Production/Injection Forecast

