



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

April 21, 1998

CF 10648
R-9885-A

Seely Oil Company
815 West Tenth Street
Fort Worth, Texas 76102

Attn: Mr. C.W. Stumhoffer

**RE: Injection Pressure Increase,
Central 'EK' Queen Unit
Lea County, New Mexico**

Dear Mr. Stumhoffer:

Reference is made to your request dated January 27, 1998 to increase the surface injection pressure on the above referenced well. This request is based on a step rate test conducted on January 22, 1998. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on this well is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following well:

<i>Well and Location</i>	<i>Maximum Surface Injection Pressure</i>
Central 'EK' Queen Tract 8 No.3	2336 PSIG
Located in 'A' of Section 18, Township 18 South, Range 34 East, Lea County, New Mexico.	

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,


Lori Wrotenberg,
Director

LW/BES/kv

cc: Oil Conservation Division – Hobbs
Files: Case No.10648; PSI-X 4th QTR98 ✓

PSI-X N/R

SEELY OIL COMPANY

815 WEST TENTH STREET
FORT WORTH, TEXAS 76102

January 24, 1998



State of New Mexico
Energy, Minerals & Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Re: Seely Oil Company, Unit Operator
Central EK Queen Unit (CEKQU)
E-K Yates-Seven Rivers-Queen Field
Lea County, New Mexico
Request for Administrative Authority
to Increase Water Injection Pressure
Tract 8 Well No. 3
NE/4 NE/4 Section 18, T18S, R34E, NMPM

Attention: Mr. David Catanach

Gentlemen:

Previously, your office granted administrative authority to increase surface injection pressure at CEKQU Tract 8 Well No. 3 to 1775 PSIG.

Subsequent to this authority, surface injection pressure has been increased to this level, and water injection rates have again fallen to levels that are not conducive to a successful water flood operation.

A Step Rate Injection Test was run on January 23, 1998 by West-Test, Inc., and the results of this test are attached hereto.

On the basis of this Step Rate Injection Test, Seely Oil Company requests approval of the NMOC Division Director to increase surface injection pressure at this well to a maximum of 2380 PSIG.

Your consideration and approval of this request at your earliest convenience is needed. Should you have any questions, please contact the undersigned at 817/923-2016 or 817/332-1377.

Very truly yours,

SEELY OIL COMPANY

C. W. Stumhoffer

C. W. Stumhoffer

CWS

Enclosure: Step Rate Injection Test
CEKQU Tract 8 Well No. 3

cc: State of New Mexico Oil Conservation Division
Hobbs, New Mexico

R-9885
C#10648

WEST--TEST, INC.

A SUBSIDIARY OF JOHN WEST ENGINEERING COMPANY

Hobbs, New Mexico

STEP RATE INJECTION TEST

CLIENT: SEELY OIL COMPANY

DATE: JANUARY 22, 1998

WELL NAME: CENTRAL EK QUEEN UNIT NO. 8-3
LEA COUNTY, NEW MEXICO

WO#: 98-14-0071

PERFS - 4425 4436

PACKER DEPTH - 4410

BHP GAUGE DEPTH - SURFACE ONLY

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psi)	(5) CORRECTED TUBING PRESS. (psi) (1) - (4)	(6) INJECTION RATE (gpm) (3)/34.2857	(7) MEASURED BHP (psi)
1	8:30	1569.6				1569.6		
	8:35	1754.6	0.8	230.4	2.530	1752.1	6.72	
	8:40	1820.5	1.6	230.4	2.530	1818.0	6.72	
	8:45	1870.0	2.4	230.4	2.530	1867.5	6.72	
				230.4				
2	8:50	2031.0	4.2	518.4	11.339	2019.7	15.12	
	8:55	2084.4	5.9	489.6	10.201	2074.2	14.28	
	9:00	2121.3	7.8	547.2	12.532	2108.8	15.96	
3				518.4				
	9:05	2226.9	10.4	748.8	22.388	2204.5	21.84	
	9:10	2266.3	13.0	748.8	22.388	2243.9	21.84	
	9:15	2290.5	15.7	777.6	24.007	2266.5	22.68	
4				758.4				
	9:20	2370.6	19.4	1065.6	43.003	2327.6	31.08	
	9:25	2392.2	23.2	1094.4	45.177	2347.0	31.92	
	9:30	2402.4	26.9	1065.6	43.003	2359.4	31.08	
5				1075.2				
	9:35	2458.4	31.4	1296.0	61.768	2396.6	37.80	
	9:40	2477.5	36.1	1353.6	66.942	2410.6	39.48	
	9:45	2485.1	40.7	1324.8	64.331	2420.8	38.64	
6				1324.8				
	9:50	2555.1	46.5	1670.4	98.779	2456.3	48.72	
	9:55	2555.1	52.2	1641.6	95.651	2459.4	47.88	
	10:00	2546.2	58.0	1670.4	98.779	2447.4	48.72	
7				1660.8				
	10:05	2618.7	64.9	1987.2	136.205	2482.5	57.96	
	10:10	2622.6	71.7	1958.4	132.575	2490.0	57.12	
	10:15	2622.5	78.6	1987.2	136.205	2486.3	57.96	
				1977.6				

STEP NO. & REMARKS	TIME	(1) SURFACE TUBING PRESS. (psig)	(2) CUMMULATIVE VOL. INJECTED (bbls)	(3) INJECTION RATE (bbls/day)	(4) FRICTION HEAD LOSS (psi)	(5) CORRECTED TUBING PRESS. (psi) (1) - (4)	(6) INJECTION RATE (gpm) (3)/34.2857	(7) MEASURED BHP (psi)
FALLOFF	10:16	2408.7				2408.7		
	10:17	2399.8				2399.8		
	10:18	2394.7				2394.7		
	10:19	2389.6				2389.6		
	10:20	2385.8				2385.8		
	10:25	2370.5				2370.5		
	10:30	2361.6				2361.6		

STEP RATE INJECTION TEST

SEELY OIL COMPANY

Well Name:
Central EK Queen Unit No. 8-3
Lea County, New Mexico

