	24.05 SUSPEN	SE ENGINEER S.25.04 TYPE IPI DSEN0414630744
		ABOVE THIS LINE FOR DIVISION USE ONLY
		NEW MEXICO OIL CONSERVATION DIVISION - Engineering Bureau - 1220 South St. Francis Drive, Santa Fe, NM 87505
		ADMINISTRATIVE APPLICATION CHECKLIST
	cation Acronym [NSL-Non-Sta [DHC-Dow	ANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE si andard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication] anhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] bol Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
		lified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]
[1]	TYPE OF AI [A]	PLICATION - Check Those Which Apply for [A]
	Check [B]	One Only for [B] or [C] Commingling - Storage - Measurement DHC CTB PLC PC OLS OLM
	[C]	Injection - Disposal - Pressure Increase - Ephanced Oil Recovery           WFX         PMX         SWD         PII         EOR         PPR
	[D]	Other: Specify
[2]	NOTIFICAT [A]	ION REQUIRED TO: - Check Those Which Apply, or  Does Not Apply Working, Royalty or Overriding Royalty Interest Owners
	[B]	Offset Operators, Leaseholders or Surface Owner
	[C]	Application is One Which Requires Published Legal Notice
	[D]	Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
	<b>[E]</b>	For all of the above, Proof of Notification or Publication is Attached, and/or,
	[F]	Waivers are Attached
[3]		CURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name

Signature

Title

e-mail Address



MAY 24 2004

FORT WORTH, TEXAS 76102

Oil Conservation Division 1220 S. Saint Francis Drive Santa Fe, NM 87505 May 21, 2004

MAY 2.4 2084

RECEIVED

Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87505

Re: Request for Administrative Authority Seely Oil Company, Unit Operator Central EK Queen Unit EK Yates-Seven Rivers-Queen Field Well No. 001 NW/4 NW/4 Section 17-T18S-R-34E

Lea County, New Mexico

Gentlemen:

Enclosed please find a Step Rate Injection Test ran on April 10, 2004 on Central EK Queen Unit No. 001. The current pressure limitations are not sufficient to effectively conduct a successful waterflood in this unit.

Based upon the results of the Step Rate Injection Test, Seely Oil Company requests administrative approval of the New Mexico Oil Conservation Division (NMOCD) to increase the surface injection pressure to 2300 psi maximum.

The conversion of the Central EK Queen Unit No. 001 to water injection in the Queen Sand was approved by NMOCD Administrative Order No. WFX-758.

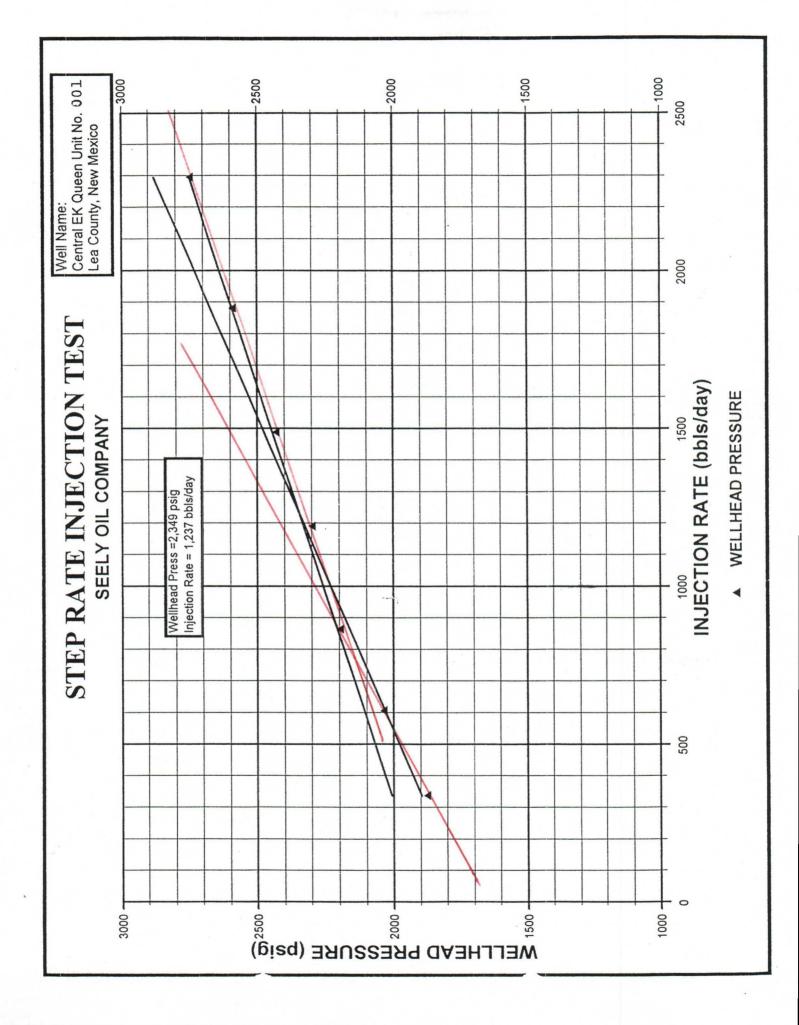
Your consideration and approval of this request at your earliest convenience is needed. Should you have any questions, please contact us at 817-332-1377.

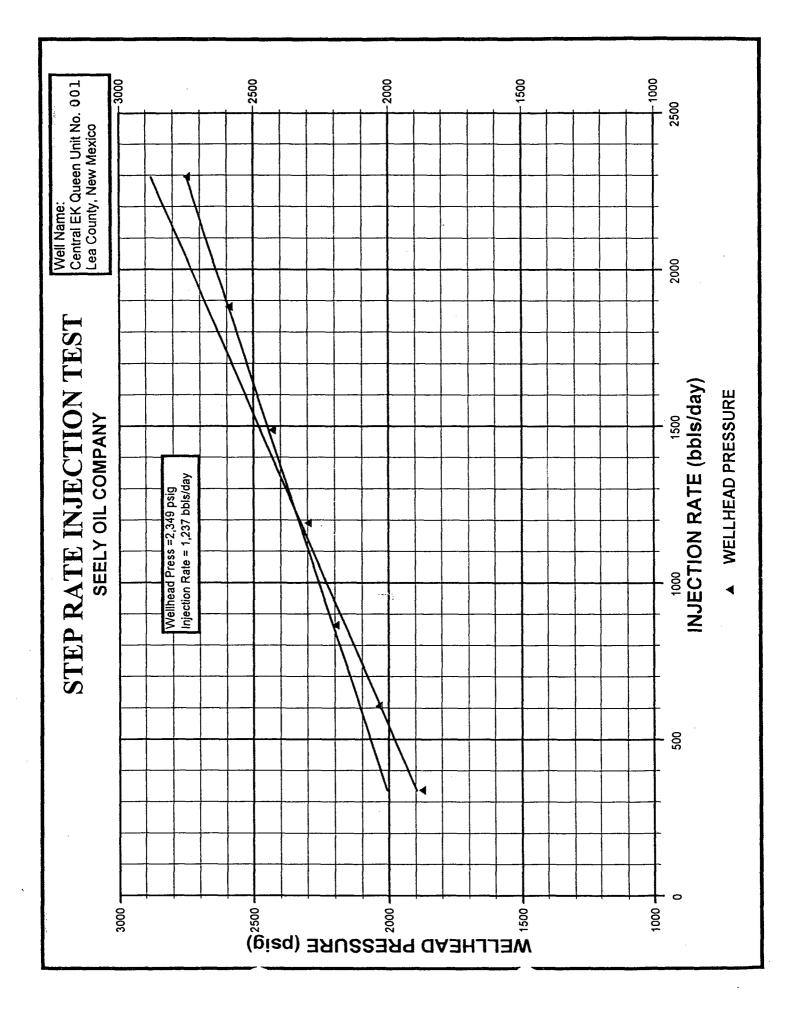
Very truly yours,

Executive Vice President

DLH/td Encls.

State of New Mexico – EMNR Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, NM 87504





# **STEP RATE INJECTION TEST**

WELL NAME: Central EK Queen No. 001

DATE: <u>4/10/04</u>

OPERATOR NAME: <u>Seely Oil Company</u>

Demoria	Time	Tubing	Rate BPD	Total	внр	Tubing Pressure	Rate GPM	Total
Remarks	Time	Pressure		TULAT	DUL	Flessule	Grivi	Total
	11:00	1720.3	240.0		<u></u>	++		<u> </u>
	11:05	1814.1	316.8	1.1		++		
	11:10	1853.4	345.6	2.3				
Rate I	11:15	1878.7	345.6	3.5			·····	<u> </u>
			336.0					
	11:20	1981.4	604.8	5.6			<u> </u>	
	11:25	2009.3	576.0	7.6				
Rate II	11:30	2038.5	633.6	9.8				
			604.8				······	
	11:35	2159.4	864.0	12.8				
	11:40	2170.8	864.0	15.8				 
Rate III	11:45	2198.8	864.0	18.8				
			864.0					
	11:50	2273.9	1180.8	22.9				
	11:55	2287.9	1180.8	27.0				
Rate IV	12:00	2300.6	1209.6	31.2				
			1190.4					
	12:05	2422.7	1468.8	36.3	-			
	12:10	2436.7	1526.4	41.6				
Rate V	12:15	2431.6	1468.8	46.7			······································	ļ.
			1488.0					
······································	12:20	2585.6	1872.0	53.2		-		
	12:25	2586.8	1900.8	59.8	•••••• <u>•</u> •••	1		
Rate VI	12:30	2593.2	1872.0	66.3		1		
			1881.6			1		
	12:35	2756.1	2275.2	74.2		1 1	······	
	12:40	2752.3	2275.2	82.1	<del>.</del>	1	····	
Rate VII	12:45	2749.7	2332.8	90.2		++		
	12.40	2140.1	2294.4			<del> </del> +		
			2237.4					
Falloff	12:46	2240.7			<u> </u>	<u> </u>		
	12:40	2228.0		<del></del>		<u> </u>		
	12:48	2221.6			·····			
	12:49	2216.6				+		
	12:49				<u> </u>	++		
		2211.5						<u> </u>
	12:55	2197.5				<del>  </del>	····	
	1:00	2187.2			·	╡────┤		
						<u> </u>		L

# **STEP RATE INJECTION TEST**

I

WELL NAME: <u>Central EK Queen No. 001</u>

DATE: <u>4/10/04</u>

OPERATOR NAME: Seely Oil Company

Remarks	Time	Tubing Pressure	Rate BPD	Total	BHP	Tubing Pressure	Rate GPM	Total
Remains	11:00	1720.3		TOLAI		T TESSUIC		10001
· · · · · ·	11:05	1814.1	316.8	1.1		++		1
		1853.4	345.6	2.3	· ······	+		
Deta J	11:10	1878.7	345.6	3.5			<u></u>	ļ
Rate I	11:15	10/0./	336.0	3.5	······		<u>-</u>	ļ
	11.20	1091 4		5.6			<u> </u>	
	11:20	1981.4	604.8				·····	
Dete II	11:25	2009.3	576.0	7.6	i			
Rate II	11:30	2038.5	633.6	9.8	· · · · · · · · · · · · · · · · · · ·			
	44.05		604.8	40.0				
	11:35	2159.4	864.0	12.8				
	11:40	2170.8	864.0	15.8				
Rate III	11:45	2198.8	864.0	18.8				ļ
			864.0					
	11:50	2273.9	1180.8	22.9	· · · · · · · · · · · · · · · · · · ·			ļ
	11:55	2287.9	1180.8	27.0				<u> </u>
Rate IV	12:00	2300.6	1209.6	31.2				
			1190.4					ļ
	12:05	2422.7	1468.8	36.3				ļ
	12:10	2436.7	1526.4	41.6			· ·····	
Rate V	12:15	2431.6	1468.8	46.7				
			1488.0	· · · · · ·				
	12:20	2585.6	1872.0	53.2				
	12:25	2586.8	1900.8	59.8				
Rate VI	12:30	2593.2	1872.0	66.3				
			1881.6					
	12:35	2756.1	2275.2	74.2				
	12:40	2752.3	2275.2	82.1	2 1			
Rate VII	12:45	2749.7	2332.8	90.2				
			2294.4		1		· · ·	
						1	**************************************	
Falloff	12:46	2240.7					······	
	12:47	2228.0				1	<u> </u>	
	12:48	2221.6					<u> </u>	
	12:49	2216.6			·······			
	12:50	2211.5				İ		
	12:55	2197.5				†		
	1:00	2187.2						
					· · · · · · · · · · · · · · · · · · ·	++		
						J		l

# **STEP RATE INJECTION TEST**

WELL NAME: Central EK Queen No. 001

DATE: <u>4/10/04</u>

OPERATOR NAME: Seely Oil Company

Remarks	Time	Tubing Pressure	Rate BPD	Total	внр	Tubing Pressure	Rate GPM	Total
I CILIAI NS	11:00	1720.3		10(01		110000.0		
	11:05	1814.1	316.8	1.1		1		
	11:10	1853.4	345.6	2.3				
Rate I	11:15	1878.7	345.6	3.5	<u> </u>		<u></u>	<u> </u>
		1070.7	336.0					
	11:20	1981.4	604.8	5.6				
	11:25		576.0	<u> </u>				
Dete II		2009.5	633.6	9.8		+		
Rate II	11:30	2030.5		9.0		+	<u> </u>	
	14.25	2450 4	604.8	40.0			······································	
	11:35		864.0	12.8				
<b>D</b> ( 111	11:40	2170.8	864.0	15.8				
Rate III	11:45	2198.8	864.0	18.8	<u> </u>			<u> </u>
			864.0					
	11:50	2273.9	1180.8	22.9				· · · · ·
	11:55		1180.8	27.0				
Rate IV	12:00	2300.6	1209.6	31.2			•	· · · · ·
			1190.4				·····	<u> </u>
	12:05	·	1468.8	36.3				
	12:10	2436.7	1526.4	41.6	: 			ļ
Rate V	12:15	2431.6	1468.8	46.7	· · · · · · · · · · · · · · · · · · ·			
			1488.0		: 		<u></u>	<u></u>
	12:20	2585.6	1872.0	53.2	1			
	12:25	2586.8	1900.8	59.8	· · · · · · · · · · · · · · · · · · ·			
Rate VI	12:30	2593.2	1872.0	66.3				
			1881.6		i i			
	12:35	2756.1	2275.2	74.2				
	12:40	2752.3	2275.2	82.1				
Rate VII	12:45	2749.7	2332.8	90.2				
			2294.4					
					í.			
Falloff	12:46	2240.7					·····	
	12:47	2228.0		·····	<u>`</u>	1	<u> </u>	
	12:48	2221.6						<u> </u>
	12:49	2216.6						
	12:50	2211.5				<u> </u>	<u></u>	
	12:55	2197.5						<u> </u>
	1:00	2187.2				++	***	
						1 1	<u> </u>	
					· 	++	<u></u>	
					i			L

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#### ADMINISTRATIVE ORDER NO. WFX-758

## APPLICATION OF SEELY OIL COMPANY TO EXPAND ITS WATERFLOOD PROJECT IN THE EK YATES-SEVEN RIVERS-QUEEN POOL IN LEA COUNTY, NEW MEXICO

### ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-9885-A, Seely Oil Company has made application to the Division on April 14, 2000 for permission to expand its Waterflood Project in the EK Yates-Seven Rivers-Queen Pool in Lea County, New Mexico.

### THE DIVISION DIRECTOR FINDS THAT:

(1) The application has been filed in due form.

(2) Satisfactory information has been provided that all offset operators have been duly notified of the application.

(3) No objection has been received within the waiting period as prescribed by Rule 701(B).

(4) The proposed injection well is eligible for conversion to injection under the terms of Rule 701.

(5) The proposed expansion of the above referenced Waterflood Project will not caus waste nor impair correlative rights.

(7) The application should be approved.

### IT IS THEREFORE ORDERED THAT:

The applicant, Seely Oil Company be and the same is hereby authorized to inject water into the Queen formation at approximately 4,434 feet to approximately 4,446 feet through 2 3/8-inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforations in the following described well for purposes of secondary recovery to wit: Administrative Order WFX-758 Seely Oil Company May 1, 2000 Page 2

### Central EK Queen Unit Tract 11 Well No. 1 API No. 30-025-02328 660 FNL & 661.5 FWL, Unit 'D' Injection Interval: 4,434 feet to 4,446 feet Maximum Injection Pressure: (.2 psi/ft) 887 psig

Located in Section 17, Township 18 South, Range 34 East, Lea County, New Mexico.

#### IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to .2 psi per foot of depth to the uppermost injection perforation.

The Director of the Division may authorize an increase in injection pressure upon a propeshowing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Queen formation. Such proper showing shall consist of a valid step-rate terun in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity tests so the the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject well shall be governed by all provisions of Division Order No. R-9885-A and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

Administrative Order WFX-758 Seely Oil Company May 1, 2000 Page 3

<u>PROVIDED FURTHER THAT</u>, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

DONE at Santa Fe, New Mexico, on this 1<sup>st</sup> day of May, 2000.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

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LORI WROTENBERY Director

SEAL

LW/MWA/kv

cc: Oil Conservation Division - Hobbs Case File No. 10648