

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator **LYSTER OIL COMPANY, INC**

3a. Address
701 COUNTY ROAD 105

3b. Phone No. (include area code)
970-824-6854

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
NWSF SECTION 30, 5N 98W, 6TH PM

5. Lease Serial No.
COC20278

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
COC47622X

8. Well Name and No.
ELK SPRINGS 4

9. API Well No.
05-081-06837

10. Field and Pool, or Exploratory Area
ELK SPRINGS

11. County or Parish, State
MOFFAT COUNTY

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input checked="" type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

LYSTER OIL HAS THE INTENT TO TURN THE #4 (API 05-081-06837) INTO AN INJECTION WELL. WE WILL BE INJECTING PRODUCTION WATER FROM THE #3 (API 05-081-06472). WE BELIEVE THAT THE INJECTION RATE WILL BE BETWEEN 400 -600 BARRELS OF WATER PER DAY. FORM 31 AND FORM 33 ARE IN THE PROCESS OF BEING APPROVED WITH THE STATE.

WE WILL BE SQUEEZING THE MOENKOPI PERFS AND THE HORIZONTAL LATERAL. OUR INJECTION POINT WILL BE 6170' INTO THE PHOSPHORIA.

ALL SURFACE OPERATIONS ON THE #3 WILL REMAIN THE SAME.

SURFACE CHANGES TO THE #4:

ONCE THE INJECTION WELL IS COMPLETE, THE PUMP JACK WILL BE REMOVED. WE WILL BE INSTALLING A 2" POLY PIPELINE TO TRANSFER THE WATER FROM THE #3 TO THE #4.

() REALTY S. Burke
 () PAT
 () PESS 5/18/17 COAs + supporting documents from operator are attached.
 () PET
 () HYDRO
 () NRS
 AFM IN / OUT

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) **LARRY L YSTER** Title **PRESIDENT**

Signature  Date **03/30/2017**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

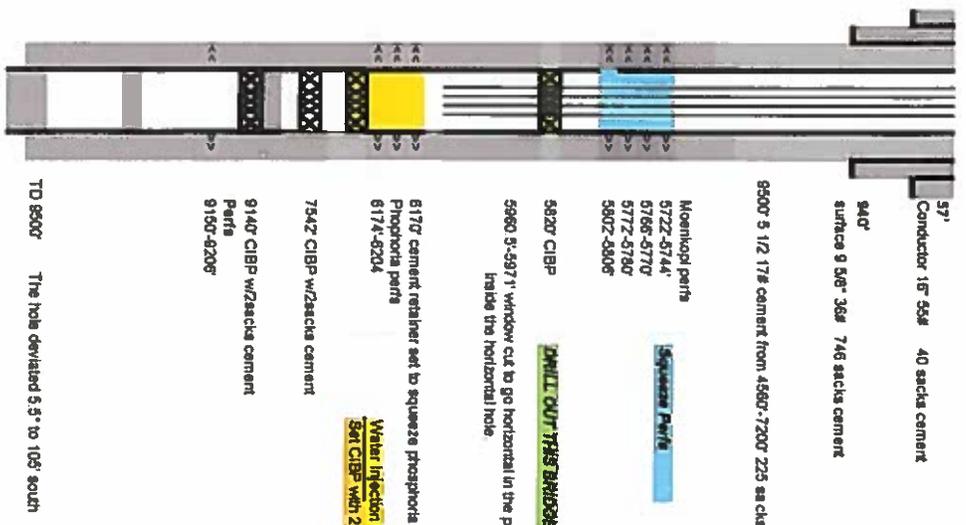
Approved by  Title **Acting FM** Date **5/22/17**

Conditions of approval, if any, are attached. Approval of this notice 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 thereon.

Office **WRFO**

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

WELLBORE DIAGRAM
 Prepared
 by: Lyster Oil Company Inc.
 Elk Springs #4
 NW/4 SE/4 section 30 T5N
 Moffat County, CO
 09-081-08537



57'
 Conductor 1 5/8" 40 sacks cement
 940'
 surface 9 5/8" 36# 746 sacks cement

8500' 5 1/2 17# cement from 4580'-7200' 225 sacks cement and from 7400'-9500' 280 sacks of cement (it was set in two stages)

Moentkopi parts
 5722-5744'
 5768-5770'
 5772-5780'
 5802-5806'

Squeeze Points

5820' CIBP **PULL OUT THE SANDSHOE PLUG**

5960 8'-5971' window cut to go horizontal in the phosphoria. The hole was drilled to 6945' at 228' 2 7/8 liner set at 6912' joints were from 6244'-6410' Shot off 2 7/8 liner at 5779' inside the horizontal hole

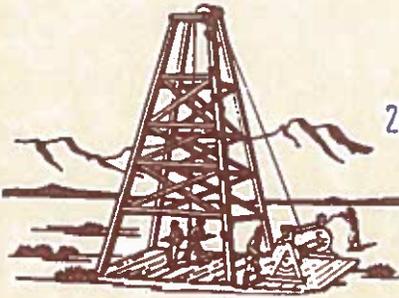
6170' cement retainer set to squeeze phosphoria parts. Bond log ran up to 5700' to confirm good bond and location top of retainer destroyed with a notched collar
 Phosphoria parts
 6174-6204 **Water Injection Point**
Set CIBP with 2 sacks concrete

7542' CIBP w/2sacks cement

9140' CIBP w/2sacks cement
 Parts
 9150'-9206'

TD 8900' The hole deviated 5.5° to 10° south

COLLEGE OF SOUTHERN
 ENGINEERING



Lyster Oil Company, Inc.

2017 APR 27 AM 11:34

RECEIVED
DOI BLM CO 110
MEEKER, CO 81641

701 County Road 105
Craig, Colorado 81625
(970) 824-6854 Office
(970) 326-8869 Cell
(970) 824-8145 Fax

April 10, 2017

**RE: Notification of Underground Injection Control Well Application
Elk Springs Unit 4
NWSW Section 30, T5N R98W (1961' FSL, 2150' FEL)
Moffat County, Colorado**

To Whom It May Concern:

Lyster Oil Company, Inc. (Lyster) has filed an application with the State of Colorado Oil and Gas Conservation Commission (COGCC) requesting approval for a Class II Underground Injection Control Well. Notice to all surface and mineral owners within $\frac{1}{4}$ - mile of a proposed location for a disposal application is required under the COGCC Rule 325.l. Lyster intends to recomplate the Elk Springs Unit 4 (05-081-06837) oil production well for injection of produced water from other area oil wells. The primary injection zone will be the Phosphoria zone at approximately 6174'.

Persons directly and adversely affected or aggrieved by this authorization of the underground disposal into the proposed injection zone may file, within 15-days of notification, a written request for a public hearing before the COGCC, provided such request meets the protest requirements specified in Rule 325.m. If you have no objection to this proposed water disposal well, no response is necessary.

A copy of the COGCC Rule 325.l, 325.m, and contact information for the COGCC and Lyster is attached hereto as Attachment #1. Also, attached hereto is a map of the $\frac{1}{4}$ - mile area around the proposed Underground Injection Control Well (Attachment #2) and a pertinent Information page describing the proposed wellbore (Attachment #3). Additional information on the operation of this proposed disposal well may be obtained from the COGCC.

Please contact me with any questions at 970-326-8869.

Sincerely,

Larry L. Lyster
President

ATTACHMENT #1 - Surface and Mineral Owner Notice

PROPOSED: Elk Springs Unit 4

NWSW Section 30, T5N R98W, 6th PM Moffat County, Colorado

COGCC Rule 325.I, 325.m, and Contact information

325.I. Notice of application requirements. The notice shall briefly describe the disposal application and include legal location, proposed injection zone, depth of injection, and other relevant information. The notice shall state that any person who would be directly and adversely affected or aggrieved by the authorization of the underground disposal into the proposed injection zone may file, within 15 days of notification, a written request for a public hearing before the Commission, provided such request meets the protest requirements specified in subparagraph m. of this rule. The notice shall also state that additional information on the operation of the proposed disposal well may be obtained at the Commission office.

325.m. Evaluation of written requests for public hearing. Written requests for public hearing before the Commission by a person, notified in accordance with subparagraphs i. and j. of this rule, who may be directly and adversely affected or aggrieved by the authorization of the underground disposal into the proposed injection zone, shall be reviewed and evaluated by the Director in consultation with the applicant. Written protests shall specifically provide information on:

- (1) Possible conflicts between the injection zone's proposed disposal use and present or future use as a source of drinking water or present or future use as a source of hydrocarbons, or
- (2) Operations at the well site which may affect potential and current sources of drinking water.

Contact information for COGCC:

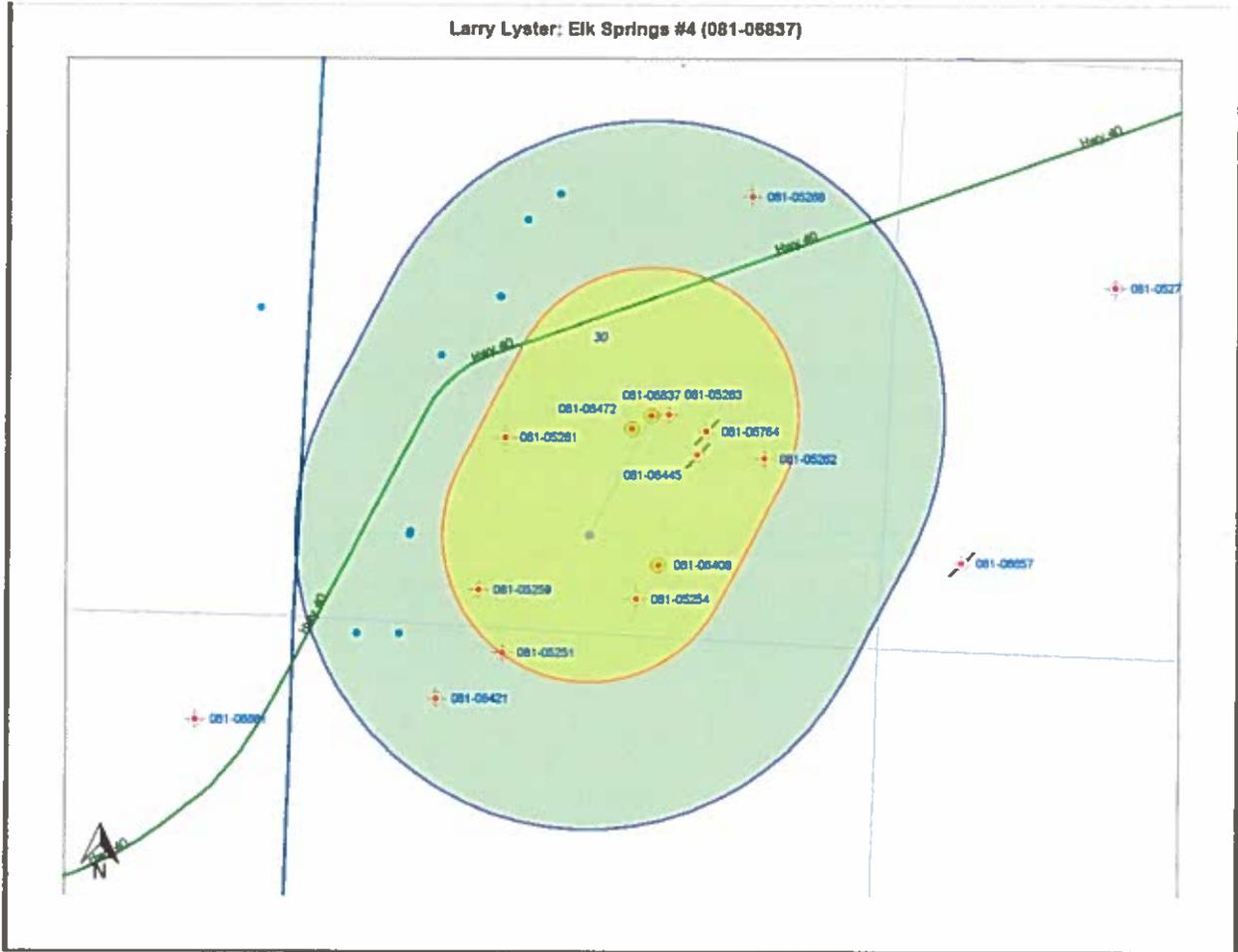
Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, CO 80203
Attn: UIC Permitting
COGCC contact: Bob Koehler, UIC Lead - Geologic Advisor
Phone: 303-894-2100 x-5147
Website: <http://cogcc.state.co.us/>

CONTACT INFORMATION FOR OPERATOR

Lyster Oil Company, Inc.
Attn: Larry L. Lyster, President
701 CR 105
Craig, CO 81625
970-326-8869

Attachment #2

Larry Lyster: Elk Springs #4 (081-06837)



ATTACHMENT #3 - NOTICE TO SURFACE AND MINERAL OWNERS

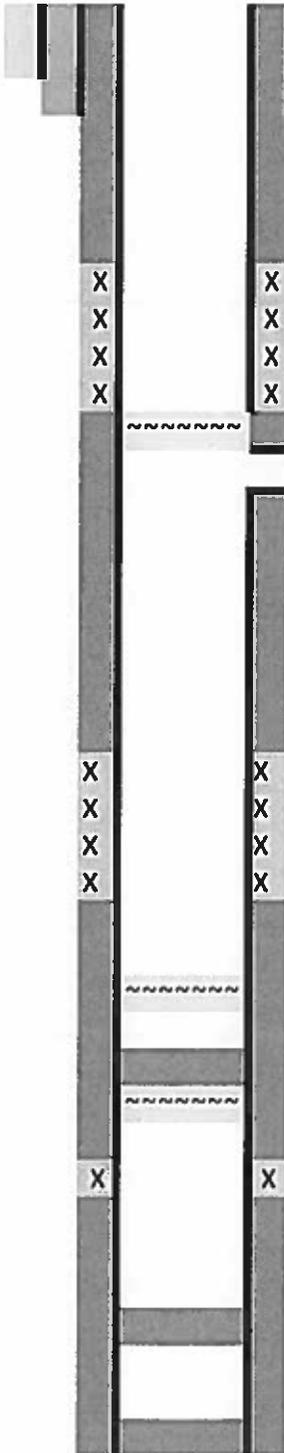
**PROPOSED ELK SPRINGS UNIT 4
UNDERGROUND INJECTION CONTROL WELL APPLICATION
API NUMBER: 05-081-06837**

PERTINENT INFORMATION

Legal Location:	NWSW Section 30, T5N R98W, 6th PM Moffat County, Colorado
Field Name:	Elk Springs
Injection Formation:	Phosphoria - Primary zone
Approximate Depth of Injection:	6150'
Expected Injection Volume:	400 to 600 barrels of water per day
TDS of Produced Water:	Unknown until zones are perforated

Lyster Oil Company Inc
 Elk Springs #4
 NWSE 30 T5N
 Moffat County, Colorado
 05-081-06837

Current Wellbore

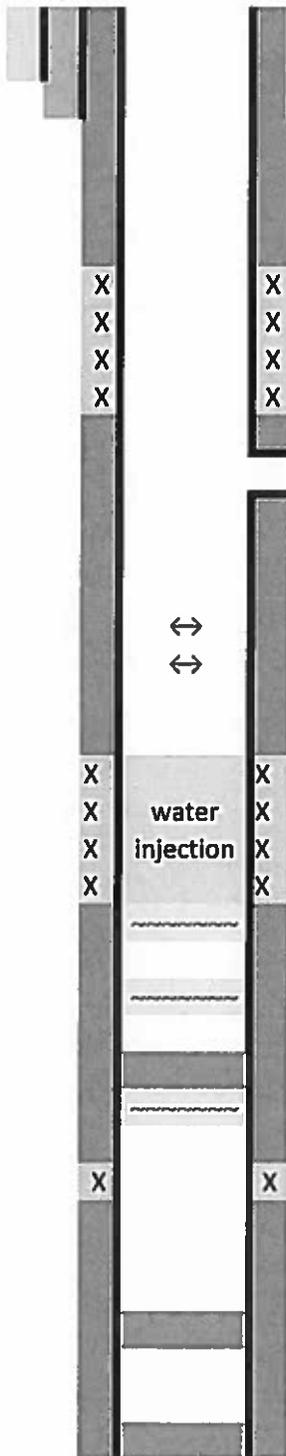


57'
 Conductor 16" 55# 40 sacks cement
 940'
 Surface 9 5/8" 17# cement
 From 4560' - 7200' / 225 sacks cement.
 From 7400' - 95' 280 sacks cement. Set in 2 stages
 Moenkopi perforations: (estimating 200 - 250 sacks of cement, total)
 5722' - 5744'
 5766' - 5770'
 5772' - 5780'
 5802' - 5806'
 5820' CIBP
 5960.5' - 5971' window cut to run horizontal in Phosphoria
 6846' drilled at 228°
 2 7/8" liner set at 6512'
 perforations from 6244' - 6410'
 6164' end of tubing
 6169' packer
 shot off 2 7/8" liner at 5779' inside the horizontal hole
 lateral 100-150 sacks cement squeezed
 6174' - 6204' Phosphoria perforations
 Set CIBP with 2 sacks cement
 7542' CIBP with 2 sacks cement
 9140' CIBP with 2 sacks cement
 Perforations:
 9150' - 9206'
 9500' TD
 Hole deviated 5.5°, to 105' south

prepared by:
 Sheryl M. Little-Myers
 4/26/2017

Lyster Oil Company Inc
 Elk Springs #4
 NWSE 30 T5N
 Moffat County, Colorado
 05-081-06837

Proposed Wellbore



57'
 Conductor 16" 55# 40 sacks cement
 940'
 Surface 9 5/8" 17# cement
 From 4560' - 7200' / 225 sacks cement.
 From 7400' - 95' 280 sacks cement. Set in 2 stages
 Moenkopi perforations: (estimating 200 - 250 sacks of cement, total)
 5722' - 5744'
 5766' - 5770'
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 5802' - 5806'

5960.5' - 5971' window cut to run horizontal in Phosphoria
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 2 7/8" liner set at 6512'
 perforations from 6244' - 6410'

↔
 ↔

6164' end of tubing
 6169' packer
 shot off 2 7/8" liner at 5779' inside the horizontal hole
 lateral 100-150 sacks cement squeezed

X
 X
 X
 X
 water
 injection
 X
 X
 X
 X

6174' - 6204' Phosphoria perforations
 Set CIBP with 2 sacks cement

7542' CIBP with 2 sacks cement

9140' CIBP with 2 sacks cement

Perforations:
 9150' - 9206'

X
 X

prepared by:
 Sheryl M. Little-Myers
 4/26/2017

9500' TD

Hole deviated 5.5°, to 105° south

Lyster Oil Company, Inc

Recompletion Procedure for the Elk Springs #4 API (05-081-06837)

- Safety meeting-discuss all steps of the project
 - Safety meetings will be held each morning and at the start of a new process. All persons on location will be required to attend.
- Rig up and trip rods out of the hole. Trip the tubing out to 5715' +/- 5'. Rig up for injection test on perms to determine how much cement will be used.
- Rig up to pump a balance plug to squeeze the moenkopi perms. Pump class g 15.8# cement using the CIBP at 5820' as a cement retainer. Pump 100 sacks cement +/- 50 sacks. Let cement set over night.
- Safety meeting- discuss drilling procedure for the day.
- Rig up power swivel and drill out cement. Rig up pump to pressure test the moenkopi squeeze. Pressure up to 300# and let set ten minutes. If the cement holds go down to drill out CIBP at 5820'. If cement fails rig back up and repump cement.
- After the CIBP is drilled out rig up to set cement retainer at 5972'. Set a packer at 5959' for injection test on window to determine amount of cement needed. Pump class g 15.8# cement to squeeze the phosphoria window, 150 sacks +/- 100 sacks. Let set overnight.
- Safety meeting- discuss perforating procedure.
- Rig up power swivel to drill out cement. Drill out and pressure test to 300# and let set 10 minutes. If not holding repump cement, if holding trip the tubing and rig up to set CIBP at 6250' with 2 sacks cement on it. Rig up to perforate injection zone 6174'-6204'.
- Trip tubing back in and set packer at 6169'. Set up to perform step rate test to determine maximum pressure on injection.

Elk Springs Unit #4

Offset Well API #	Offset Well Name	Offset Well Operator	Offset Well Status	Depth of Base of Aquifer	Offset Well Surface Casing Setting Depth	Offset Well Completed Formation Top	Offset Well Top of Production Casing Cement	Abandoned Wells		Active Wells		Comment (Optional)
								To be Replugged (yes or no?)	Requires Casing Repair (yes or no?)	To be Plugged (yes or no?)		
05-081-05288	M V Smith #5	Canoco Phillips	DA	220	301	6855	NA	No				DA 12/20/1994: No P/R Setting. TD @ 7028. Plugging 66 sx 7028-6804, 114 sx 4830-4345, 159x / 20 @ 301-271, 10 sx 23 @ surface. Plugging OK-also old-Marcos to 4120. Browns Park @ surface foot = Marcos.
05-081-06408	Elk Springs Unit #1	Lyster Oil Co Inc	PR	220	201	3732	2654	No	No	No		TD 3910. TOC Calc. Perfs Dakota 3747-3834. Surface casing in Marcos.
05-081-06472	Elk Springs Unit #3	Lyster Oil Co Inc	PR	220	315	6265	3278	No	No	No		TD 6335. TOC Calc. Perfs Weber 6263-6265 Open Hole 6265-6335
05-081-06445	Elk Springs Unit #3	Petro Quest Inc	AL	220								
05-081-06764	Elk Springs Unit #3-30	Casbah O&G Production	AL	220				no				DA 02/18/1994
05-081-06837	Elk Springs Unit #4	Lyster Oil Co Inc	PR	220	940	5722	4560	No	No	No		TOC Calc. TD 8500. Perfs=Leadville-AB 9150-8206, Minium-PA 7552-7730, Phosphoria-SI 6244-6410, Moenkopi-PR 5722-5906
05-081-05251	Morgan #1	Union Oil Co of California	PA	220	805	3633		No				Spud 6/8/25. Completed 7/21/28. Casing record is sil: 15-1/2" to 68", 12-1/2" to 805', 10" to 2668', 8-1/4" to 3371', 6-1/4" to 3568', 4-3/4" to 3803', TD @ 3973. Marcos to 3660.
05-081-08421	Elk Springs Unit #2	Archdioceses Resources	PA	220	214	3612	2720	No	no			TOC Calc. 6/5/1992 - Plugging 20 sx 3500-3850, 9 sx / 50 in 4-1/2" @ surface, 25 sx in 4-1/2" to 8-5/8" annulus @ surface. Surface casing in Marcos.

Wells outside .25 mile radius, include .50 mile

Deep (100-220 ft) water wells to north in Browns Park or Bishop Conglomerate. O&G wells with shallow (<225 ft) Surfaces casing set in Marcos to south. Browns Park and Bishop Conglomerate not present to south.

CONDITIONS OF APPROVAL FOR CONVERSION TO INJECTION

**A COPY OF THESE CONDITIONS SHOULD BE FURNISHED TO YOUR
FIELD REPRESENTATIVE TO ENSURE COMPLIANCE**

Failure to comply with the following conditions of approval may result in a Notice of Incident of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. All operations shall be conducted per OO#2 and 43 CFR 3160.
2. Approval for this conversion must also be obtained from the Colorado Oil and Gas Conservation Commission. Submit proof of the approval to the BLM via Sundry (Form 3160-5) and include, at a minimum, approved Forms 2, 26, 31, and 33.
3. This BLM office should be notified sufficiently in advance (48 hour minimum) of actual conversion work, so that a representative may have an opportunity to witness the operation.
4. All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and shall be removed and deposited in an approved landfill.
5. The conversion procedure shall be modified as follows:
 - Plugging cement shall be **15.8 PPG CLASS G (1.15 YIELD)**
 - Pressure test the casing after setting the CIBP @ 6,250' but prior to perforating – notify the BLM if the test fails
 - o The well must have mechanical integrity before the BLM considers it suitable for conversion to an injection well, so leaks will need to be remedied
6. This approval is based upon the assumption that wellbore conditions are as presented in the Notice of Intent. If unexpected wellbore conditions occur, this procedure may require modification to meet our regulations. This will be done on a case-by-case basis with consultations with the BLM and your personnel.
7. Within **30 days** after the conversion is completed, a Subsequent Report Sundry (Form 3160-5) must be filed with the BLM WRFO showing the dates of the conversion operations, location of squeezes, amount of cement in each squeeze, the type and depth of casing and tubing left in the hole, depth of injection perforations, depth of packers, results of pressure tests, and an overall summary of the operations that took place. The Sundry should have a written report containing this information and a final wellbore diagram, at a minimum.
8. You shall monitor the annulus between the 5.5” production casing and the 9.625” surface casing on a monthly basis at a minimum. Notify the BLM WRFO immediately if pressure exceeds 200 psi.
9. You must obtain BLM approval prior to recompleting or permanently abandoning the well.

Lyster Elk Springs Unit #4 Conversion to Injection Well COAs

The Bureau of Land Management, White River Field Office address is:
220 E. Market St.
Meeker, CO 81641
(970) 878-3800

CONTACTS:

Petroleum Engineers:

Sean Simpson	Work Phone	(970) 878-3846
	Cell Phone	(303) 956-8091

Supervisory Petroleum Engineering Technician:

Bud Thompson	Work Phone	(970) 878-3828
	Cell Phone	(970) 942-7040