

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
1220 South St. Francis Drive, Santa Fe, NM 87505



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2012 DEC 17 A 11:22

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] TYPE OF APPLICATION - Check Those Which Apply for [A]
- [A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD
- Check One Only for [B] or [C]
- [B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR
- [D] Other: Specify _____

CIMAREX E, Co. of Colo.
162683
4792-7136 Perfs
Bell/Cherry
PADDY AILU Federal #1
F/14/255/32E
30-025-31177

- [2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply
- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☒ X Offset Operators, Leaseholders or Surface Owner
- [C] ☒ X Application is One Which Requires Published Legal Notice
- [D] ☒ X Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[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.

Kay Havenor *Kay C Havenor* Consultant 12/8/2012

Print or Type Name Signature Title Date

KHavenor@georesources.com
e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance X Disposal _____ Storage
Application qualifies for administrative approval? X Yes _____ No

II. OPERATOR: Cimarex Energy Co. Of Colorado

ADDRESS: 600 N. Marienfeld St. Ste 600, Midland, TX 79701

CONTACT PARTY: Kay Havenor PHONE: 575-626-4518

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? _____ Yes X No
If yes, give the Division order number authorizing the project: _____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Kay Havenor TITLE: Agent

SIGNATURE: Kay Havenor DATE: 12/6/2012

E-MAIL ADDRESS: KHavenor@georesources.com 575-626-4518

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted.
Please show the date and circumstances of the earlier submittal: _____

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

OPERATOR: Cimarex Energy Co. of ColoradoOGRID 162383WELL NAME & NUMBER: Paduca AIU Federal #130-025-31177WELL LOCATION: 2310' FNL & 1650' FWLF1425S32E

FOOTAGE LOCATION

UNIT LETTER

SECTION

TOWNSHIP

RANGE

WELLBORE SCHEMATIC

See attached well diagram

WELL CONSTRUCTION DATASurface CasingHole Size: 17-1/2"Casing Size: 13-3/8" 54.5#Cemented with: 800 sx. *or* _____ ft³Top of Cement: Surface Method Determined: CirculatedIntermediate CasingHole Size: 11"Casing Size: 8-5/8" 54.5#Cemented with: 1450 sx. *or* _____ ft³Top of Cement: Surface Method Determined: _____Production CasingHole Size: 7-7/8"Casing Size: 5-1/2" 15.5/17#Cemented with: 990 sx. *or* _____ ft³Top of Cement: 3950' Method Determined: OperatorInjection IntervalPerforated 4,970' - 7,136'

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: 3-1/2" 12.8# Integral J-55 Lining Material: Fiberglass coated

Type of Packer: Lok-Set (or equivalent)

Packer Setting Depth: Approx 4,742 ft

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? _____ Yes X No

If no, for what purpose was the well originally drilled? Delaware test

2. Name of the Injection Formation: Delaware Bell Canyon Fm and Cherry Canyon Fm.

3. Name of Field or Pool (if applicable): _____

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. Yes, see pages 7 and 12

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Productive and depleted wells west in overlying Bell Canyon.

Cimarex Energy Co. Paduca AIU Federal #1
2310' FNL & 1650' FWL
Sec. 14, T25S-R32E
Lea County, NM

API 30-025-31177

Plugging diagram of Yates Petroleum Paduca AU Federal #1

Plug and Abandon Diagram

API: 3002531177
Operator: Yates Petroleum Corp.
Lease: Paduca AIU Federal
Location: Sec 14, T25S-R32E Lea Co., NM
Footage: 2310 FNL, 1650 FWL

Well No: 1

KB: 3472
GL: 3454

Surface Csg

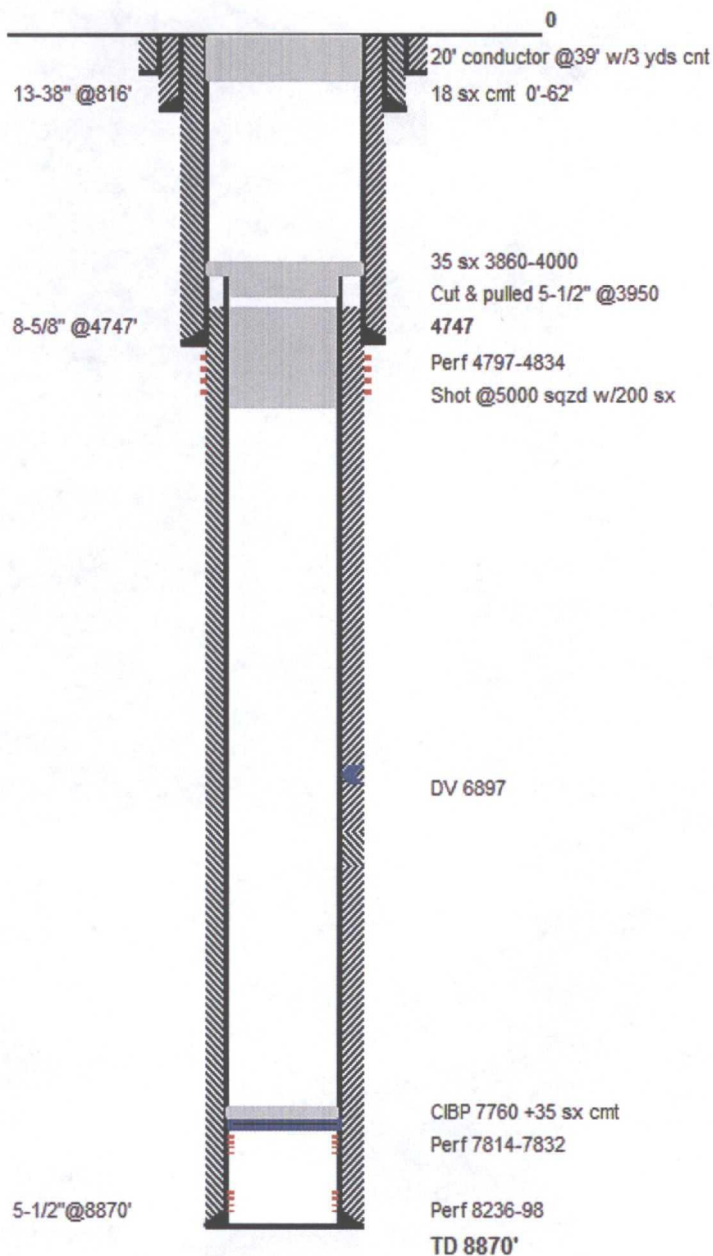
Size: 13-3/8" 54.5# J-55
Set @: 816
Sxs cmt: 800
Circ: Yes
TOC: Surface
Hole Size: 17-1/2"

Intermediate Csg

Size: 8-5/8" 32# J-55/N-80
Set @: 4747
Sxs cmt: 1450
Circ: 75 sx
TOC: Surface
Hole Size: 11"

Production Csg

Size: 5-1/2" 15.5/17# J-55 LTC
Set @: 8870
Sxs cmt: 990
Circ: NR
TOC: 3950 (Operator)
Hole Size: 7-7/8"



Not to Scale

Cimarex Energy Co. Paduca AIU Federal #1
 2310' FNL & 1650' FWL
 Sec. 14, T25S-R32E
 Lea County, NM

API 30-025-31177

Proposed Completion of Cimarex Energy Co. Paduca AU Federal #1

PROPOSED COMPLETION

API: 3002531177
 Operator: Cimarex Energy Co.
 Lease: Paduca AIU Federal
 Location: Sec 14, T25S-R32E Lea Co., NM
 Footage: 2310 FNL, 1650 FWL

Well No: 1

KB: 3472
 GL: 3454

Surface Csg

Size: 13-3/8" 54.5# J-55
 Set @: 816
 Sxs cmt: 800
 Circ: Yes
 TOC: Surface
 Hole Size: 17-1/2"

Intermediate Csg

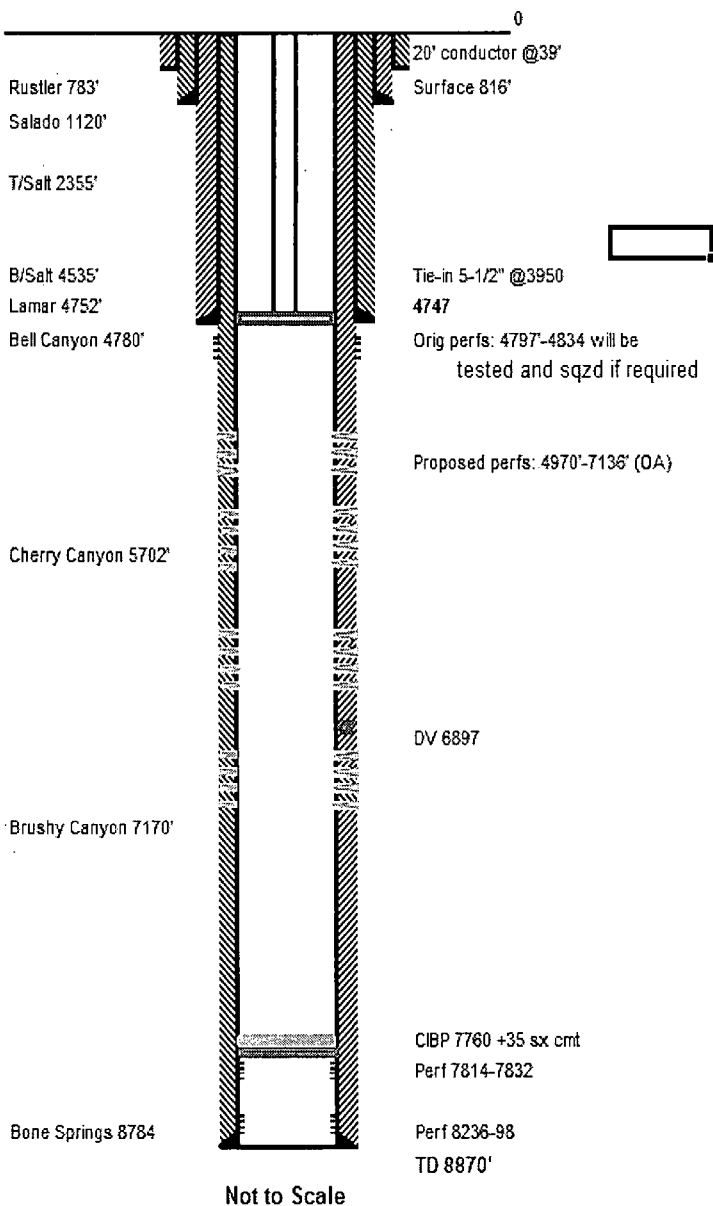
Size: 8-5/8" 32# J-55/N-80
 Set @: 4747
 Sxs cmt: 1450
 Circ: 75 sx
 TOC: Surface
 Hole Size: 11"

Production Csg

Size: 5-1/2" 15.5/17# J-55 LTC
 Set @: 8870
 Sxs cmt: Orig 990 + 700 tie-in
 TOC: Surface
 Hole Size: 7-7/8"

Tubular requirements (made-up):
 4742' 3-1/2" J-55 integral Fiberglass lined
 Lok-Set (or equivalent) Packer set approx 4742'

Acidized selectively
 Load tubing annulus w/corrosion inhibitor
 Complete surface head for disposal



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	5. Lease Designation and Serial No. NM 15680
2. Name of Operator YATES PETROLEUM CORPORATION	6. If Indian, Allottee or Tribe Name N/A
3. Address and Telephone No. 105 South 4th St., Artesia, NM 88210 (505) 748-1471	7. If Unit or CA, Agreement Designation N/A
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 2310' FNL & 1650' FWL, Sec. 14-T25S-R32E	8. Well Name and No. Paduca AIU Federal
	9. API Well No. 30-025-31177
	10. Field and Pool, or Exploratory Area Paduca Delaware
	11. County or Parish, State Lea County, NM

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other Production Csg., Perforate & Treat
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

TD 8870'. Reached TD 5-2-91. Ran 205 joints 15.5# and 17# J-55 casing set at 8870 as follows: 48 jts 17# J-55 LT&C, 123 jts 15.5# J-55 LT&C, 34 jts 17# J-55 LT&C. Float shoe set 8868', ECP 6921' and DV tool set 6897'. Cemented w/440 sx "H" w/5# CSE + .7% CF-14 + 10# Gilsonite (yield 1.46, wt 14.5) followed by 450 sx Super "H" w/3% salt (yield 2.3, wt 11.5). Tailed in w/100 sx "H" Neat (yield 1.18, wt 15.6). PD 10:00 PM 5-2-91. Bumped plug to 2500 psi for 15 mins, float and casing held OK. WOC 18 hrs. Drill out DV tool and ECP and cleanout to float collar w/2% KCL. Perforated 8236-8298' w/22 - .40" holes (1 SPF) as follows: 8236, 41, 45, 48, 51, 56, 58, 70, 72, 79, 81, 83, 84, 86, 88, 89, 90, 92, 93, 94, 96, and 8298'. Acidized perforations 8236-98' w/4000 gals 7 1/2% NEFE acid and 40 ball sealers.

ACCEPTED FOR RECORD

MAY 23 1991

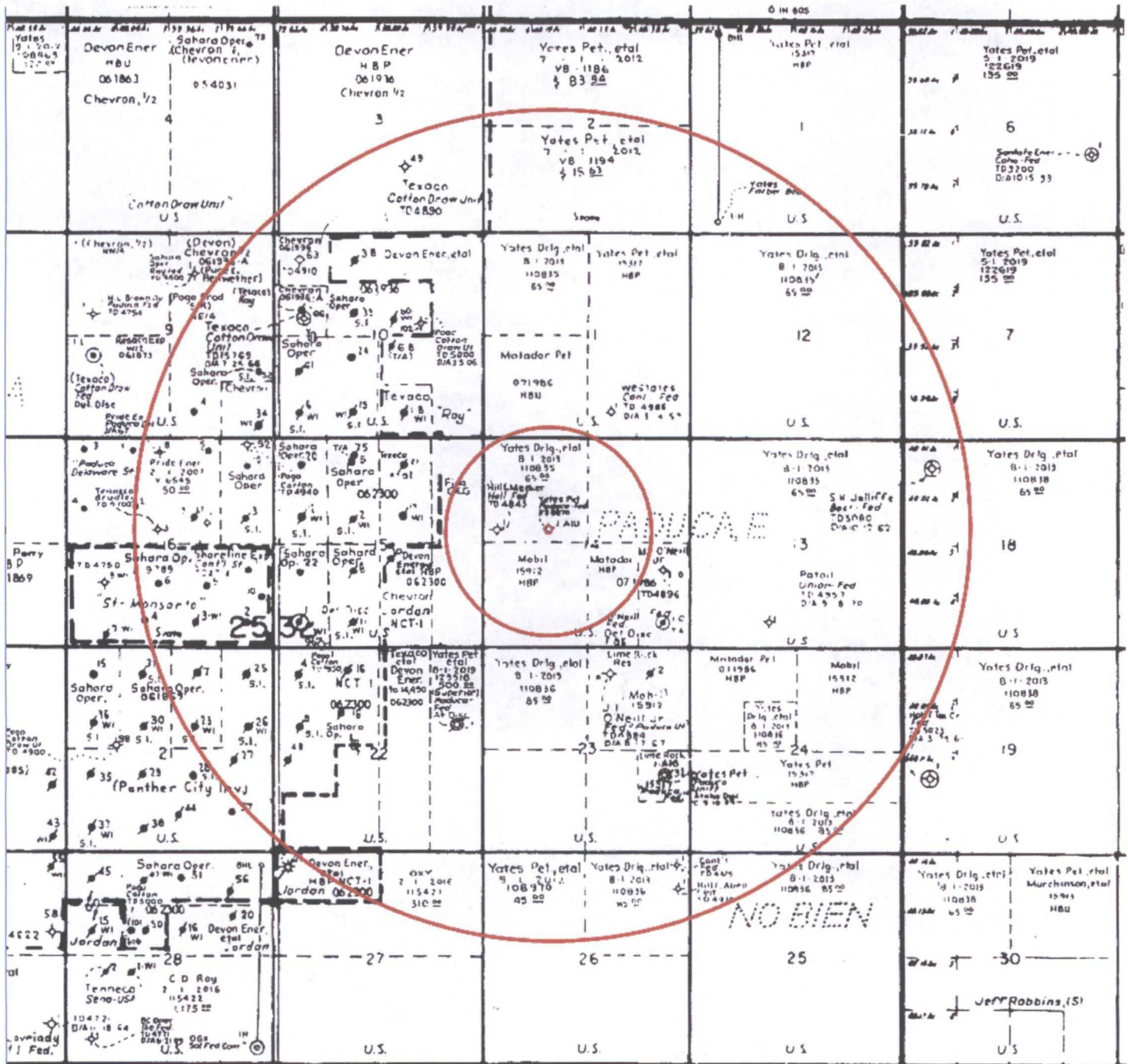
14. I hereby certify that the foregoing is true and correct	
Signature <i>[Signature]</i>	Title Production Supervisor
Date 5-14-91	
(This space for Federal or State office use)	
Approved by Conditions of approval, if any:	Date

Title 18 U.S.C. Section 1001, makes 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.

See Instruction on Reverse Side

Item V:

Area of Review
 ½ Mile AOR and 2 Mile Radius



Cimarex Energy Co. Paduca AIU Federal #1
 2310' FNL & 1650' FWL
 Sec. 14, T25S-R32E
 Lea County, NM

API 30-025-31177

Item VI: Data on wells in AOR.

All wells in AOR that penetrate the proposed disposal interval:

API	WELL_NAME	STATUS	SDIV	SEC	TWN	RANGE	FTG	NS	FTG	EW	OCD	OPERATOR	WELL	LAND	PLUG_DATE	SPUD_DATE	ELEVGL	TVD_DEPTH
3002508181	ORA HILL 14 FEDERAL 001	Plugged	E	14	25.0S	32E	2310 N	330 W	E	HILL & MEEKER			0	F	04-Dec-60	24-Nov-60	3447	4845
3002531177	PADUCA AIU FEDERAL 001	Plugged	F	14	25.0S	32E	2310 N	1650 W	F	YATES PETROLEUM CORP			0	F	30-Sep-91	7-Apr-91	3454	8870

Item VI(a): Construction of wells in the AOR that penetrate the proposed disposal zone and all known wells in AOR:

1. 30-025-31177 Yates Petroleum Corp AIU Federal #1, Unit H-Sec. 14-T25S-R32E GL 3454'. Spudded 4/7/1991. 26" hole set 39' of 20" conductor w/3-½ yds Redi-Mix. 17½" hole set 13¾" 54.5# J-55 @816' w/800 sx circ 83 sx to surface. 11" hole set 8⅝" 32# J-55 @4,747' w/1450 sx, circ 75 sx. 7-⅞" hole set 5-½" 15.5# J-55 @8,870' w/990 sx. TD 8870. Perf 8,236-8,298' w/22 shots 0.40". Acid w/4000 gal. Perf 7814-7,832 (OA) Acid 3000 gal 7.5%. CIBP @7,760' +35' cmt. Perf 4 shots 0.50" @5,000' w/retainer @ 4950' squeezed w/ 200 sx cmt. Perf 4,797-4,834' w/10 shots 0.50". Acid w/2500 gal 7.5%. Swabbed well. No show last 2 runs. 9/25/1991 Plug 4,803-4,449' w/35 sx Class "C". Cut 5-½" @3,950' and pulled. Set 35 sx 3,860-4,000'. Set 18 sx 0-62'. P&A 9/30/1991.
2. 30-025-08181 Hill & Meeker Ora Hill 14 Federal #1, Unit E, Sec. 14-T25S-R32E GL 3447. Spudded 11/24/1960. Set 8⅝" 24# J-55 @354' w/275 sx, circ to surface. Drilled to TD 4845'. Core #1 4750'-73, DST 4753-73' recovered 290' gas cut wtr + 110' very slightly oil cut mud. Core #2 4773-92', DST 4774-92' recovered 250' gas +250' gas & wtr cut mud w/very slight oil cut +50 ft muddy SW. Core #3 4792-4843' No shows to encourage completion. P&A w/25 sx cmt @4760', 20 sx cmt @3480 (T/salt), 20 sx cmt @ 1140' (base of Rustler), 20 sx cmt @ 780' (T/Rustler), 20 sx cmt @360' (base surf csg). 10 sx cmt @ surface. P&A 12/4/1960.

Cimarex Energy Co. Paduca AIU Federal #1
2310' FNL & 1650' FWL
Sec. 14, T25S-R32E
Lea County, NM

API 30-025-31177

Plugging diagram of Hill & Meeker Ora Hill 14 Federal #1

WELL P&A DIAGRAM

API: 3002508181
Operator: Hill & Meeker
Lease: Ora Hall 14 Federal #1 Well No: 1
Location: Sec 14, T25S-R32 Lea Co., NM
Footage: 2310' FNL & 330' FWL

KB: 3455
GL: 3447
Spud date: November 24, 1960
Plugged date: December 4, 1960
MSL of TD: -1390

Surface Csg

Size: 8-5/8" 24# J-55
Set @: 364
Sxs cmt: 275
Circ: Yes
TOC: Surface
Hole Size: NR

0
10 sh @ surface

364
20 sh cmt @ 360'
20 sh cmt @ 780' T/Rusler
20 sh cmt @ 1140' Opr B/Rustler

Intermediate Csg

Size: None
Set @:
Sxs cmt:
Circ:
TOC:
Hole Size:

T/Main Salt 2300'

Production Csg

Size: None
Set @:
Sxs cmt:
Circ:
TOC:
Hole Size: 7-7/8"

Open hole

20 sh cmt @ 4480' B/Salt
25 sh cmt 4760' T/Delaware Sd

4845

Not to scale

Item VII:

1. The maximum injected volume anticipated is 5,000 BWPD. Average anticipated is 3,500 BWPD.
2. Injection will be through a closed system.
3. Maximum injection pressure is expected to be 958 psi.
4. Sources will be produced water. These will be compatible with known waters in the disposal zones.
5. Water sample analysis from the Pogo Cotton Draw Unit No. 24, Unit K, Sec. 10, T25S-R32E, Lea Co., is shown below, TDS 153,651 mg/l (Source: NM WAIDS):

NM WAIDS



Water Samples for Well COTTON DRAW UNIT 024

API = 3002508176

Formation = DEL

Field = PADUCA

Instructions:

- Click For general information about this sample.
- Click For scale calculation pages (Stiff-Davis or Oddo Tomson methods).
- Click To select this water sample for water mixing. It will lead to the main page, and add the sample ID to the mixing table.
- Click 664 Click the hyperlinked sample number to make a .csv for that sample, or select several check boxes and click Submit for multiple samples
- The ions are in (mg/L) units.

	SampleID	T	R	S	SO4	CL	CO3	HCO3	K	Na	Ca	Mg
<input checked="" type="checkbox"/>	4392	25S	32E	10	939	152600	null	112	null	null	null	null
<input type="checkbox"/> SELECT/DESELECT ALL												
<input type="button" value="Submit"/>												



Disposal water into this well will be chemically compatible with those in the proposed disposal interval.

Item VIII:

Disposal will be into the Delaware Mountain Group (Bell Canyon and Cherry Canyon Formations). The Delaware is comprised of predominately sandstones and shales. All the Delaware members are interbedded sandstones and shales with occasional dolomite horizons. The lateral transmissivities of the sandstone beds are highly variable and often form selective barriers to the movement of hydrocarbons while allowing down-gradient movement of water. The transmissivity variations are fundamentally due to 1) the very-fine grained nature of the sands and 2) the local percentage of silt and clay. The Delaware sandstone members are typically overlain and underlain by bounding shale, dolomite, and/or silty shale horizons. The depth to the Castile anhydrite is 4,435', Delaware Mountain Group top of Lamar 4,752', Bell Canyon 4,780, Cherry Canyon 5702, Brushy Canyon Formation 7170'. The base of the Delaware (top of Bone Springs Formation) is at 8,784'.

There are no reported fresh, potable or stock water within a 2-mile radius. Records from the New Mexico Office of the State Engineer on 11/18/2012 show no known water wells within the 2-mile radius of the proposed SWD disposal well.



New Mexico Office of the State Engineer
Wells with Well Log Information

No wells found.

Basin/County Search:

Basin: Lea County

UTMNA83 Radius Search (in meters):

Easting (X): 627470

Northing (Y): 3555590

Radius: 3220

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

11/18/12 8:01 PM

WELLS WITH WELL LOG INFORMATION

The surface geology of the greater area, including the 2-mile radius shown in Item V above, is Quaternary eolian and piedmont deposits of Holocene to middle Pleistocene age. The base of the Quaternary is at 115'. It is underlain by the Triassic Dockum, Permian Dewey Lake, Rustler Formation and Salado Formation evaporites. The base of the Rustler Formation and top of the Salado is 778'. Top of main salt is 2,360', top of Castile 4535' and base of anhydrite/top of Lamar is 4,752'.

Item IX:

Acidize Delaware perforations between ~~4,742'~~^{4,975'} and approximately 7,136' with 15% HCl.

Item X:

Logs were run in open hole and are on file with the OCD.

Item XI:

No water wells located in the 2-mile area surrounding the proposed disposal. Please note Item VIII above.

Item XII:

There is no geological evidence of open faults nor hydrologic connection between the disposal zone and any possible underground sources of protectable water.

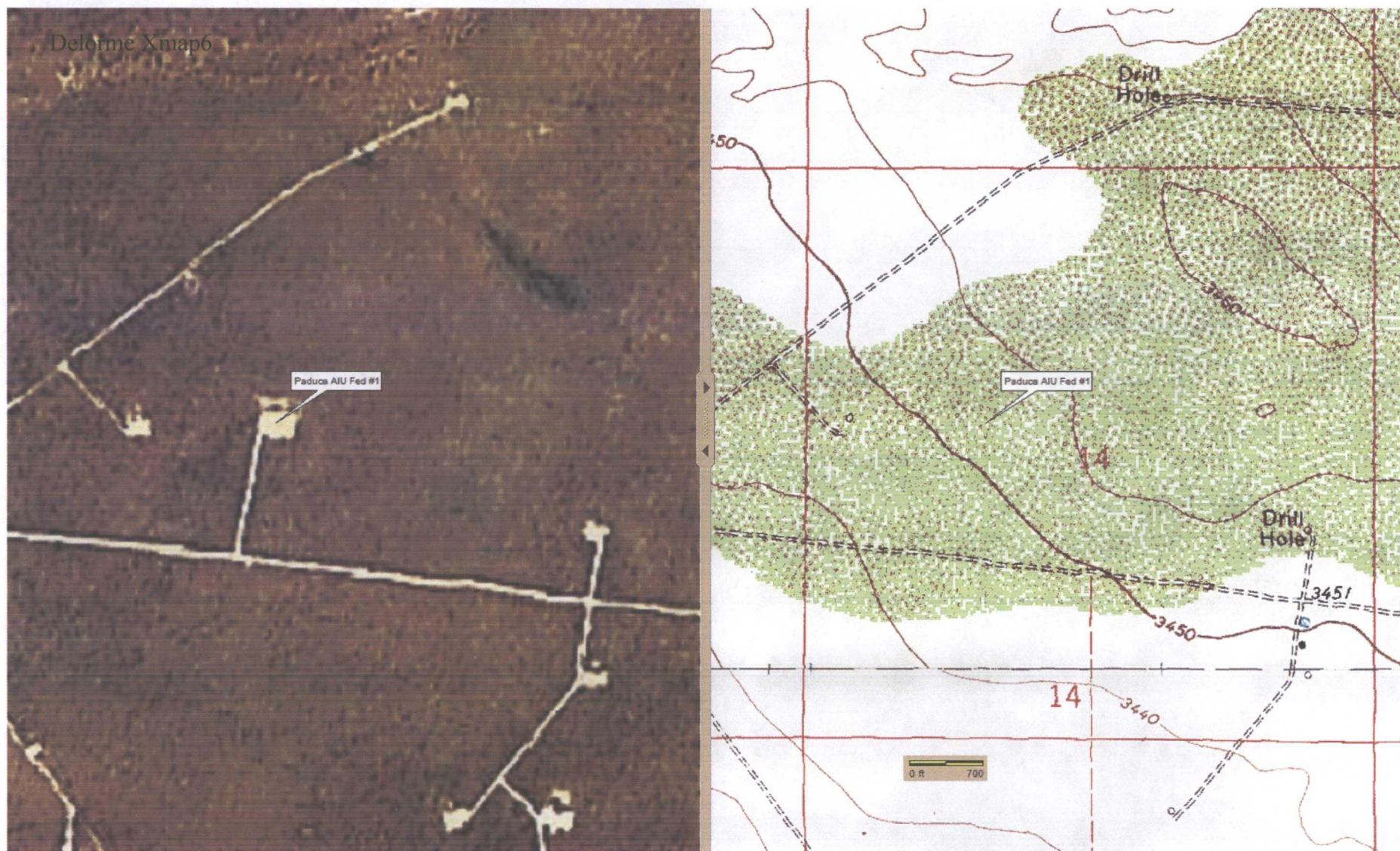
Addendum:

The oil/gas potential in the portion of the Delaware to be used for SWD has been locally tested and logged illustrating the AOR and surrounding acreage lacks commercial hydrocarbon productivity and is water saturated. This is adequately illustrated in core descriptions of the upper Bell Canyon (see detail in Hill & Meeker well file) and by logs and an attempted completion attempt in the target re-entry interval.

Cimarex Energy Co. Paduca AIU Federal #1
2310' FNL & 1650' FWL
Sec. 14, T25S-R32E
Lea County, NM

API 30-025-31177

SPOT10 Satellite and Matching Topographic Map



From the junction of NM-128 and Lea Co. CR-1, Orla Road, south 6 miles then east 1.3 miles to well access road north.
DeLorme Xmap6



Kay C. Havenor, Ph.D

Office: 575-626-4518
e-mail: KHavenor@GeoResources.com
904 Moore Ave
Roswell, New Mexico 88201-1144

RECEIVED OCD

2012 DEC 26 P 1:37

December 24, 2012

Mr. Will Jones
NM OCD Engineering Bureau
1220 So. St Francis Blvd
Santa Fe, NM 87505

Re: Cimarex Paduca AIU C-108
Correction of Notification for ExxonMobil

Mr. Jones:

Attached are the corrected pages 15 and 17 showing proper notification of ExxonMobil that I discussed earlier. Please replace these in the two copies submitted to your office.

Respectfully yours,

Kay Havenor

Kay Havenor



Cimarex Energy Co. Paduca AIU Federal #1
2310' FNL & 1650' FWL
Sec. 14, T25S-R32E
Lea County, NM

API 30-025-31177

Legal Notice Publication

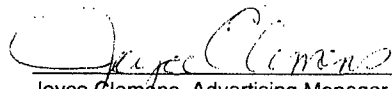
Affidavit of Publication

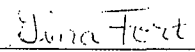
STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

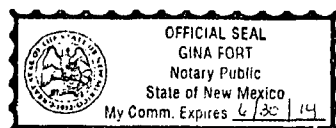
Joyce Clemens being first duly sworn on oath deposes and says that she is Advertising Director of THE LOVINGTON LEADER, a thrice a week newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled Legal Notice was published in a regular and entire issue of THE LOVINGTON LEADER and not in any supplement thereof, for one (1) day(s), beginning with the issue of December 8, 2012 and ending with the issue of December 8, 2012.

And that the cost of publishing said notice is the sum of \$ 32.32 which sum has been (Paid) as Court Costs.


Joyce Clemens, Advertising Manager
Subscribed and sworn to before me this 12th day of December, 2012.


Gina Fort
Notary Public, Lea County, New Mexico
My Commission Expires June 30, 2014



Legal Notice

Cimarex Energy Co. of Colorado, c/o Kay Havenor, 904 Moore Ave, Roswell, NM 88201, (575) 626-4518, email: KHavenor@geosources.com, is seeking approval from the New Mexico Oil Conservation Division to re-enter the Yates Petroleum Corp, Paduca AIU Federal No. 1 well API: 30-025-31177, located 2310 feet from the north line and 1650 feet from the west line of Section 14, T25S, R32E, Lea County, NM, located 27 miles west of Jal, NM off Ora Rd, and re-enter for produced water disposal. The proposed disposal interval is in the

Delaware Mountain Group through 5-1/2" casing perforations ~~4,792~~ 4,792 feet to 7,136 feet (OA). Cimarex Energy plans to dispose of a maximum of 5,000 BWPD at a maximum pressure of 958 psi. Parties with questions regarding this proposal are urged to contact Kay Havenor at the e-mail address or phone number above. Interested parties must file objections or requests for hearing within 15 days to the New Mexico Oil Conservation Division, 1220 S. St. Francis Dr., Santa Fe, NM 87505.

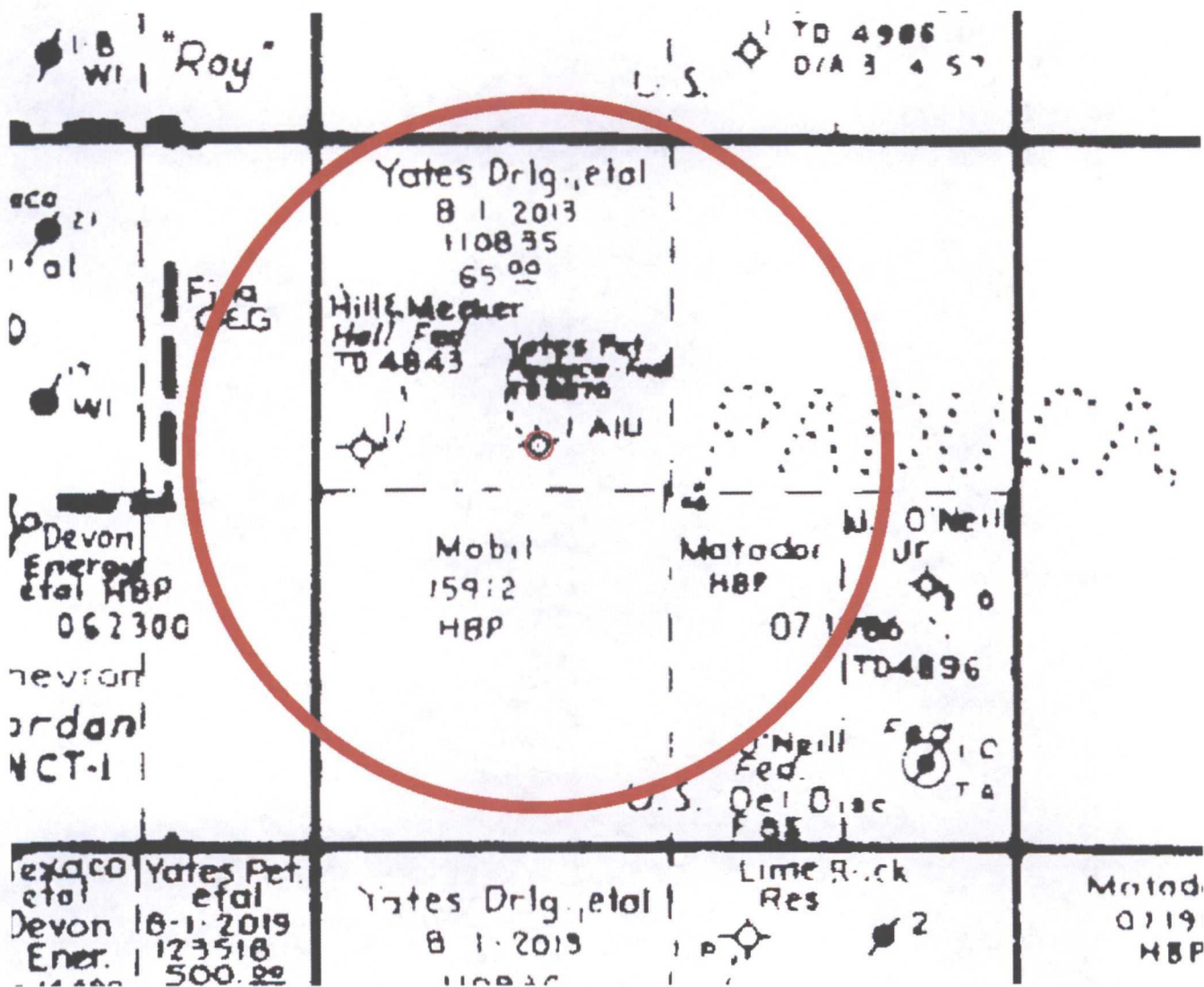
Published in the Lovington Leader December 8, 2012.

Cimarex Energy Co. Paduca AIU Federal #1
2310' FNL & 1650' FWL
Sec. 14, T25S-R32E
Lea County, NM

API 30-025-31177

Enlarged View of AOR
Centered in Unit F Sec. 14, T25S-R32E
Lea Co., NM

Item V(a):



Cimarex Energy Co. Paduca AIU Federal #1
2310' FNL & 1650' FWL
Sec. 14, T25S-R32E
Lea County, NM

API 30-025-31177

Item XIII:

Surface and Minerals Owner:

Bureau of Land Management
c/o Carlsbad Field Office
620 E. Greene Street
Carlsbad, NM 88220

BLM Surface Lessee

Brininstool XL Ranch, LLC
P.O. Box 940
Jal, NM 88252

Operators:

Chevron USA, Inc. ✓
15 Smith Rd.
Midland, TX 79705

Sec 15, E2 E2

Devon Energy Corp. ✓
20 N. Broadway
Oklahoma City, OK 73102

Sec 13, All, Sec 14, NW4, Sec 15, E2 E2

OXY USA, Inc. ✓
P.O. Box 4294
Houston, TX 77210-4294

Sec 14, NW4; Sec 11, SW4 SE4

Matador Petroleum Corp. ✓
8340 Meadow Road, Ste. 150
Dallas, TX 75231-3751

Sec. 11, SW4; Sec. 14, W2 SE4

J. I. O'Neill ✓
P.O. Box 2840
Midland, TX 79702

Sec. 14, E2 SE4

ExxonMobil Corporation ✓
P. O. Box 2024
Houston, TX 77252-2027

Sec. 14, SW4

Cimarex Energy Co. Paduca AIU Federal #1
2310' FNL & 1650' FWL
Sec. 14, T25S-R32E
Lea County, NM

API 30-025-31177

Certified Mail Receipts

7011 1570 0003 3462 1278

U.S. Postal Service	
CERTIFIED MAIL RECEIPT	
(Domestic Mail Only, No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
CARLSBAD, NM 88220	
Postage	\$ 1.50
Certified Fee	\$ 2.95
Return Receipt Fee (Endorsement Required)	\$ 2.35
Restricted Delivery Fee (Endorsement Required)	\$ 0.00
Total Postage & Fees	\$ 6.80
Sent To: Bureau of Land Management	
Street, Apt. No., or PO Box No.: 620 E. Greene St.	
City, State, ZIP+4: Carlsbad, NM 88220	

PS Form 3800, August 2006 See Reverse for Instructions

7011 1570 0003 3462 1285

U.S. Postal Service	
CERTIFIED MAIL RECEIPT	
(Domestic Mail Only, No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
JAL, NM 88252	
Postage	\$ 1.50
Certified Fee	\$ 2.95
Return Receipt Fee (Endorsement Required)	\$ 2.35
Restricted Delivery Fee (Endorsement Required)	\$ 0.00
Total Postage & Fees	\$ 6.80
Sent To: Brininstool XL Ranch, LLC	
Street, Apt. No., or PO Box No.: P.O. Box 940	
City, State, ZIP+4: Jal, NM 88252	

PS Form 3800, August 2006 See Reverse for Instructions

7011 1570 0003 3462 1304

U.S. Postal Service	
CERTIFIED MAIL RECEIPT	
(Domestic Mail Only, No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
OKLAHOMA CITY, OK 73102	
Postage	\$ 1.50
Certified Fee	\$ 2.95
Return Receipt Fee (Endorsement Required)	\$ 2.35
Restricted Delivery Fee (Endorsement Required)	\$ 0.00
Total Postage & Fees	\$ 6.80
Sent To: Devon Energy Corp.	
Street, Apt. No., or PO Box No.: 20 N. Broadway	
City, State, ZIP+4: Oklahoma City, OK 73102	

PS Form 3800, August 2006 See Reverse for Instructions

7011 1570 0003 3462 1292

U.S. Postal Service	
CERTIFIED MAIL RECEIPT	
(Domestic Mail Only, No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
MIDLAND, TX 79705	
Postage	\$ 1.50
Certified Fee	\$ 2.95
Return Receipt Fee (Endorsement Required)	\$ 2.35
Restricted Delivery Fee (Endorsement Required)	\$ 0.00
Total Postage & Fees	\$ 6.80
Sent To: Chevron USA, Inc.	
Street, Apt. No., or PO Box No.: 15 Smith Rd.	
City, State, ZIP+4: Midland, TX 79705	

PS Form 3800, August 2006 See Reverse for Instructions

7010 3090 0000 4830 4122

U.S. Postal Service	
CERTIFIED MAIL RECEIPT	
(Domestic Mail Only, No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
HOUSTON, TX 77252	
Postage	\$ 1.50
Certified Fee	\$ 2.95
Return Receipt Fee (Endorsement Required)	\$ 2.35
Restricted Delivery Fee (Endorsement Required)	\$ 0.00
Total Postage & Fees	\$ 6.80
Sent To: ExxonMobil Corporation	
Street, Apt. No., or PO Box No.: P.O. Box 2024	
City, State, ZIP+4: Houston, TX 77252-2027	

PS Form 3800, August 2006 See Reverse for Instructions

7011 1570 0003 3462 1322

U.S. Postal Service	
CERTIFIED MAIL RECEIPT	
(Domestic Mail Only, No Insurance Coverage Provided)	
For delivery information visit our website at www.usps.com	
DALLAS, TX 75231	
Postage	\$ 1.05
Certified Fee	\$ 2.95
Return Receipt Fee (Endorsement Required)	\$ 2.35
Restricted Delivery Fee (Endorsement Required)	\$ 0.00
Total Postage & Fees	\$ 6.35
Sent To: Matador Petroleum Corp.	
Street, Apt. No., or PO Box No.: 8340 Meadow Road, Ste. 150	
City, State, ZIP+4: Dallas, TX 75231-3751	

PS Form 3800, August 2006 See Reverse for Instructions

Cimarex Energy Co. Paduca AIU Federal #1
2310' FNL & 1650' FWL
Sec. 14, T25S-R32E
Lea County, NM

API 30-025-31177

Certified Mail Receipts

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$ 1.50
Certified Fee	\$2.95
Return Receipt Fee (Endorsement Required)	\$2.35
Restricted Delivery Fee (Endorsement Required)	\$0.00
Total Postage & Fees	\$ 6.80

0602
06 10289 SdSN
Postmark
HOU
8
DEC
12/08/2012

Sent To: J. I. O'Neill
Street, Apt. No., or PO Box No.: P.O. Box 2840
City, State, ZIP+4: Midland, TX 79702

PS Form 3800, August 2006 See Reverse for Instructions

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$ 1.50
Certified Fee	\$2.95
Return Receipt Fee (Endorsement Required)	\$2.35
Restricted Delivery Fee (Endorsement Required)	\$0.00
Total Postage & Fees	\$ 6.80

0602
06 RSWELL, NM
Postmark
HOU
8
DEC
12/08/2012

Sent To: OXY USA, Inc.
Street, Apt. No., or PO Box No.: P.O. Box 4294
City, State, ZIP+4: Houston, TX 77210-4294

PS Form 3800, August 2006 See Reverse for Instructions

Jones, William V., EMNRD

From: Ingram, Wesley <wingram@blm.gov>
Sent: Wednesday, December 19, 2012 4:51 PM.
To: Jones, William V., EMNRD; khavenor@georesources.com
Subject: Paduca AIU Fed 1
Attachments: Paduca AIU Fed 1 SWD 121912.docx

Will and Kay,

I am attaching a document that I will not sign and send if the items can be addressed quickly. Thank you.

Sincerely,
Wesley W. Ingram
Supervisory Petroleum Engineer
Bureau of Land Management
Carlsbad Field Office
620 E. Greene Street
Phone: 575-234-5982
Fax: 575-234-5927

IN REPLY REFER TO:
3162.3-2 (P0220)

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

Re: Paduca AIU Fed 1

The BLM will object to the proposed salt water disposal well for the following reason.

1. The operator has proposed an injection zone from 4,792' to 7,136'. The Federal O #1 has perforations from 4851' to 4855' in the Olds sand member of the Bell Canyon. This well is outside of the area of review, but operator should submit a cross section to clarify that water injected into the proposed zone will not affect this well.
2. The injection well data sheet should be reviewed based on existing documents and corrected.

If you have any questions regarding this objection, please contact Wesley W. Ingram, Supervisory Petroleum Engineer at (575) 234-5982.

Sincerely,

Wesley W. Ingram
Supervisory Petroleum Engineer
Bureau of Land Management
Carlsbad Field Office

cc: Cimarex Energy Co. of Colorado

Jones, William V., EMNRD

From: Kay Havenor <khavenor@georesources.com>
Sent: Thursday, December 20, 2012 3:22 PM
To: Ingram, Wesley; Jones, William V., EMNRD
Subject: Cimarex C-108 Paduca AIU

Wesley,

I have discussed the problem you observed relative to the Federal O well in Sec. 14, T25S-R32E, Lea Co. My recommendation to Cimarex was to lower their top C-108 perf to 4,190' in the Paduca AIU. That would put Cimarex's top perf well below the drilled and cement plunged-back Olds sand and additionally below a good shale separation. That depth would place the top Cimarex perf approx 135' stratigraphically below the Federal O's lowest perf. It would also, in my opinion, adequately protect that Olds zone.

If this is satisfactory I will notify Will Jones to lower the requested top perf to 4,190' as per the Paduca AIU elog.

Thank you,
Kay

Kay C. Havenor, Ph.D., PG. CPG
GeoScience Technologies
904 Moore Ave
Roswell, NM 88201-1144
(575) 626-4518

Jones, William V., EMNRD

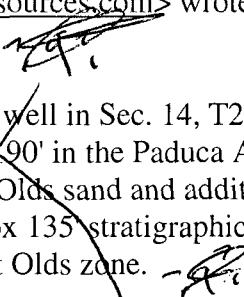
From: Ingram, Wesley <wingram@blm.gov>
Sent: Thursday, December 20, 2012 4:23 PM
To: Kay Havenor
Cc: Jones, William V., EMNRD
Subject: Re: Cimarex C-108 Paduca AIU

Kay,

Your statement to lower the upper perforations to below the Olds Sand is acceptable. Thank you for the quick response.

Sincerely,
Wesley W. Ingram
Supervisory Petroleum Engineer
Bureau of Land Management
Carlsbad Field Office
620 E. Greene Street
Phone: 575-234-5982
Fax: 575-234-5927

On Thu, Dec 20, 2012 at 3:22 PM, Kay Havenor <khavenor@georesources.com> wrote:
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Thank you,
Kay

Kay C. Havenor, Ph.D., PG. CPG
GeoScience Technologies
904 Moore Ave
Roswell, NM 88201-1144
(575) 626-4518

4,190'

Jones, William V., EMNRD

From: Kay Havenor <khavenor@georesources.com>
Sent: Thursday, December 20, 2012 4:35 PM
To: Jones, William V., EMNRD
Subject: Fwd: Re: Cimarex C-108 Paduca AIU

Will,

As below, and part copied to you earlier, Wesly Ingram has indicated that lowering the Cimarex Paduca AIU top perf to 4,190'. This is acceptable to Cimarex.

Kay

4970'

Kay,

Your statement to lower the upper perforations to below the Olds Sand is acceptable. Thank you for the quick response.

Sincerely,
Wesley W. Ingram
Supervisory Petroleum Engineer
Bureau of Land Management
Carlsbad Field Office
620 E. Greene Street
Phone: 575-234-5982
Fax: 575-234-5927

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Kay

Kay C. Havenor, Ph.D., PG. CPG
GeoScience Technologies

4970'

Jones, William V., EMNRD

From: Kay Havenor <khavenor@georesources.com>
Sent: Tuesday, January 08, 2013 4:41 PM
To: Jones, William V., EMNRD
Subject: Re: Proposed disposal from Cimarex Energy Company of Colorado: Paduca AIU Federal #1 (30-025-31177) Bell and Cherry Canyon perforations
Attachments: P-3 C-108 Paduca AIU Fed F-14-25S-32E.pdf; P-13 C-108 Paduca AIU Fed F-14-25S-32E.pdf

Mr. Jones,

The "4191'" figure was my typo. It should have been 4970. The corrected top of perfs as agreed to with BLM is 4970, The attached, Page 3, Injection Well Datasheet shows the 4970 to 7136' interval. Correspondingly, a revised completed well diagram, Page 13, is also attached.

Thank you, and Happy New Year too!

Kay Havenor

At 01:27 PM 1/8/2013, you wrote:

Hello Dr. Havenor,

I am looking this one over and noticed the proposed interval was originally 4792 to 7136 feet and so don't understand the statement below "lowering To 4190". It seems this would be raising the top perf?

If you will send to me an updated "Injection Well Datasheet" and updated Wellbore Diagram, I am hoping it will all be clear.

And I would need those two items anyway.

Happy New Year,

Will Jones

From: Kay Havenor [<mailto:khavenor@georesources.com>]
Sent: Thursday, December 20, 2012 4:35 PM
To: Jones, William V., EMNRD
Subject: Fwd: Re: Cimarex C-108 Paduca AIU

Will,

As below, and part copied to you earlier, Wesly Ingram has indicated that lowering the Cimarex Paduca AIU top perf to 4,190'. This is acceptable to Cimarex.

Kay

Kay,

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Sincerely,
Wesley W. Ingram
Supervisory Petroleum Engineer
Bureau of Land Management
Carlsbad Field Office
620 E. Greene Street
Phone: 575-234-5982
Fax: 575-234-5927

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Thank you,

Kay

Kay C. Havenor, Ph.D., PG. CPG
GeoScience Technologies
904 Moore Ave
Roswell, NM 88201-1144
(575) 626-4518

4970'

Kay C. Havenor, Ph.D., PG. CPG
GeoScience Technologies
904 Moore Ave
Roswell, NM 88201-1144
(575) 626-4518

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	1		<u>Operator, Well, and Contact info:</u>
	2	II	Name of person submitting the application: <u>Kay Havenor</u> Other Contact? _____
	3	II	Did you Include a contact Email in the application? <u>Yes</u> and Mailing Address? <u>Yes</u> and Phone? <u>Yes</u>
	4	II	Operator Name: <u>Cimarex Energy Company of Colorado</u> OGRID Num: <u>162683</u>
	5		RULE 5.9 Compliance...Number of Inactive Wells <u>0</u> vs Total Wells Operated <u>1289</u> Is financial assurance required on any well? <u>Yes-56 wells</u> <u>0</u> wells in violation
	6		Is there any hearing order finding this operator out of compliance with Division Rule 19.15.5.9 NMAC? _____
	7		Are all Rule 5.9 issues OK to allow the Division to issue Disposal Permits? _____
	8	III	Well Name: <u>Paduca AIU Federal #1</u>
	9	III	API Num: <u>30-025-31177</u> Spud Date: <u>4/7/1991</u> I
	10		Have you included API numbers on all wellbore diagrams and well list(s) in this application? <u>Yes</u>
	11	III	Proposed well...Footages <u>2310' FNL & 1650' FWL</u> Unit <u>F</u> Sec <u>14</u> Tsp <u>25S</u> Rge <u>32E</u> County <u>Lea</u>
	12		General Location (i.e. Y miles NW of Z): <u>located 27 miles west of Jal, NM off Orla Rd</u>
	13		Current Well Status: <u>P&A</u>
	14	I	General Summary of Planned Work to Well: <u>Re-enter, tie-in pulled 5-1/2" csg production string, cmt to surface, Perf and acidize.</u>
	15		<u>INTERVAL TOP and BOTTOM:</u>
	16	IIIB.(2)	Proposed disposal Top Depth: <u>4,702' 4970</u> Formation Name: <u>Delaware Bell Canyon</u>
	17	IIIB.(2)	Proposed disposal Bottom Depth: <u>7,136'</u> Formation Name: <u>Delaware Cherry Canyon</u>
	18	IIIB.(2)	Is the disposal interval OpenHole? _____ or Perfed? <u>X</u> or Both? _____
	19	IIIB.(2)	What will be the disposal tubing size OD? <u>3-1/2"</u> Packer Seat, Feet: <u>approx 4,900'</u>

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	20	VII	What max surf inj. psi are you proposing? <u>958' 994</u> If differing from 0.2 psi/ft surf. Grad., is supporting data attached such as a Step Rate Test? _____
	21		<u>FRESH WATERS:</u>
	22	VIII	Depth to bottom of Fresh Waters: _____ est less than 115" _____ Formation Name(s)? _____ Quaternary alluvium _____
	23	XI	Any Fresh Water Wells Within 1 Mile? <u>None reported</u> If so, did you attach an analysis from these Wells? <u>None available</u>
	24		Are all "Fresh" waters isolated with Casing and Cement? <u>Yes</u> ("Fresh" water is defined as less than 10,000 mg/l of TDS)
	25	XII	Included "Affirmative Statement" concerning any Connection from Disposal Depths to existing Fresh Waters? <u>Yes Item XII</u>
	26		<u>WASTE WATERS:</u>
	27	XIV	Will this be a Lease Only disposal well? _____ or only used for the Operator's own waste needs? <u>X</u> or Commercial Disposal? _____
	28	VII	Which formations will supply the waste waters to be disposed into this well... List most common... Bone Springs
	29	VII	Are Waste waters compatible with proposed disposal interval waters? <u>Yes</u> Did you include waste water analysis? <u>Yes (Delaware)</u>
	30		<u>AT PROPOSED WELL....INSITU WATERS AND HYDROCARBON POTENTIAL:</u>
	31		Is a discussion included of the potential for future OIL/GAS recovery from the proposed disposal interval? <u>Yes</u>
	32		If your proposed well for disposal is a depleted producer (within the proposed interval); do you know what was the cumulative oil/gas/water? _____ and did you include a Rate-Time plot of this depleted interval? _____
	33	VII	Insitu water analysis Included? <u>No</u> Is the salinity within the disposal interval more than 10,000 mg/l of TDS? _____ or how will you determine this insitu water salinity? Upon completion of perforations the proposed disposal interval will be swabbed to 1) confirm the absence of commercial hydrocarbons and 2) obtain analysis of formation water.
	34	VIII	Does the application include a list of Formation tops down to and including the bottom of the target formation? <u>Yes</u>
	35		What is the top <u>1120'</u> and bottom <u>4,535'</u> of the Salado Salt reported in this well.
	36	X	Are all existing Logs (including any CBL over the disposal interval) are on the OCD Web Site? <u>Yes</u> If logs not there, please send _____
	37	IIIA.	Are the wellbore diagrams for this well included in the Application.....Before Conversion? <u>Yes</u> and After Conversion? <u>Yes</u>

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	38		Are the top and bottom footage of the proposed disposal interval marked on the "after" diagram? <u>Yes</u>
	39		<u>NOTICE:</u>
	40	XIV	Date of the Newspaper Notice in the County: <u>12/8/2012</u> <u>Lea Co.</u>
	41	V	Within 1/2 mile, did you clearly identify (either on a map or by legal description) all separately owned tracts of lands within the disposal interval? <u>Yes</u>
	42	XIII	Did you identify the owner(s) of each of these separately owned tracts? <u>Yes</u> , in <u> </u> Were they all formally noticed? <u>Yes</u>
	43	XIII	If reentering a P&Aed well, are there depth divisions of ownership within that well? <u>No</u>If so, have you also noticed all the shallower interests of the intent to use the well for disposal?
	44	XIII	Is the proposed well within the R-111-P defined Potash Area or the BLM Secretaries Potash Area? <u>No</u> If so, did you send notice to the nearest Potash lessee?
	45	XIV	Who owns the surface lands at the disposal well site (BLM, SLO, or who)? <u>BLM - Surface leased</u> <u>Yes</u> Was that party formally noticed? <u>Yes</u>
	46		<u>Area of Review:</u>
	47	V	Did you include a map identifying all wells within 2 miles? <u>Yes</u>
	48	VI	Did you include a list of all AOR wells? <u>Yes</u> Is the list available to be emailed (if requested) in spreadsheet format? <u>Yes - Included in Item VI list</u>
	49	VI	Does this list identify all wells penetrating (at least the top of) the disposal interval within 1/2 mile of the proposed well? <u>Yes</u>
	50	VI	Did you include wellbore diagrams for all P&Aed wells that exist within the 1/2 mile AOR that penetrate the disposal interval? <u>Yes</u>
	51	VI	How many wells exist within the 1/2 mile AOR that penetrate the disposal interval? <u>2</u> How many of these are Plugged/Dry and Abandoned? <u>0</u> P&A
	52	VI	Are details included on cement coverage of the proposed disposal interval for all wells penetrating the disposal interval within 1/2 mile of the roposedwell? <u>Yes</u>
	53	VI	Do all reported cement tops describe how that "top" was determined? <u>If Available</u> If you calculated any tops, what fillup efficiency factor did you use?
	54	VI	Did you identify the presence and depth of all Cement Stage Tools (DV) in the subject well and in the AOR wells? <u>Yes, when info was available</u>
	55	VIII	For the target formation, is there significant formation structural depth changes within the 1/2 mile AOR? <u>No</u>
	56	VIII	Is there any Karst or Massive Limestone in this target formation? <u>No</u> ...or in the formations directly above or below? <u>No</u>

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	57		<u>Administrative or Hearing:</u>
	58	VI	How many wells within the 1/2 mile AOR currently are producing (or still have open perforations) within the disposal interval? None is it "gas" or "oil"?
	59	 NOTE: If the proposed disposal interval is a "Gas" interval or if any AOR wells are producing or have open perforations within this interval then this application may not be properly classified as a "disposal". These types of applications must be processed at an examiner hearing.
	60		Any other Issues..?

in 12/12/12

Injection Permit Checklist

First Email Date: 6-4-12Final Reply Date: 1/8/12Final Notice Date: 12/8/12Issued Permit: Type: WFX/PMX/SWD, Number: 1384Permit Date: 1/14/13(Legacy Permit: —)# Wells: 1Well Name(s): PADUCA ATU FEDERAL #1API Num: 30-0 25-31177Spud Date: 4/7/91New/Old: N

(UIC CI II Primacy March 7, 1982)

Footages: 2310 FNL/1650 FWL

Tot

Unit: FSec: 14Tsp: 255Rge: 32ECounty: LEAGeneral Location or Pool Area: 27 mi west of TALOperator: CINARX Energy Co. of COLORADOContact: DR. KAT HAVENOROGRID: 162683RULE 5.9 Compliance (Wells): 6/12/15(Finan Assur): OKIS 5.9 OK? OKWell File Reviewed: ✓Current Status: P&A (9/25/91) Pulled 5 1/2" from 3950'Planned Work to Well: RE-LOG, Turn 5 1/2" CSS/CMT/Ref/ACW/ICEDiagrams: Before Conversion: ✓After Conversion: ✓Are Elogs in Imaging?: yes

Well Details:	Sizes Hole.....Pipe	Setting Depths	Stage Tool	Cement Sx or Ct	Cement Top and Determination Method
Planned ___ or Existing <u>✓</u> Surface	17 1/2" 13 3/8"	816	—	806 SX	CIRC
Planned ___ or Existing <u>✓</u> Interm	11 7/8" 8 5/8"	4747	—	1450 SX	Surf
Planned <u>✓</u> or Existing <u>✓</u> LongSt	7 7/8" 5 1/2"	8870'	6897	990	3950' (Report)
Planned ___ or Existing ___ Liner			↑	5025' @ 500'	
Planned ___ or Existing ___ OpenHole		Possibly NOT USED			

Depths/Formations:

Depths, Ft.

Formation

Tops?

Above

Above

4780

Ball

✓

Proposed Interval TOP:

4780

Ball C.

Max. PSI: 994Open Hole: —Perfs: ✓

Proposed Interval BOTTOM:

7136

Cherry Cr.

Tubing Size: 3 1/2"Packer Depth: 4900'

Below

5702

Cherry Cr.

✓

Below

7170

Brandy Cr.

✓

4797-4834 = Production
Prior to P&A4970
9940Capitan Reef? (in / thru) : Noticed?Potash? Noticed?WIPP? Noticed?Salado Top: 1120'Bot: 4535'Chiff House? —Fresh Water: Max Depth: 115'FW Formation: GALWells: NONEAnalysis: NAAffirmative Statement: ✓Disposal Fluid: Formation Source(s): —On Lease: —Only from Operator: ✓or Commercial: —Disposal Interval: Protectable Waters? —H/C Potential: Log: ✓Mudlog: ✓DST: —Tested: ✓Depleted: —Other: —Notice: Newspaper Post Date: 12/8/12Surface Owner: BLMN. Date: 12/8/12RULE 26.7(A) Identified Tracts? ✓Affected Persons: See LISTN. Date: 12/8/12AOR: Maps? ✓Well List? ✓Producing in Interval? NOFormerly Produced in Interval? NOPenetrating.....No. Active Wells: 0Num Repairs? 0on which well(s)? —Penetrating.....No. P&Aed Wells: 0Num Repairs? 0on which well(s)? —Diagrams? ✓Permit Conditions: Run Survey(Hatched well database and WBO) ✓Issues: —Issues: —Issues: —