



Kay C. Havenor, Ph.D.

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

RECEIVED OCD

2014 FEB 26 P 2: 51

March 22, 2014

NM OCD Engineering Bureau
1220 S. St. Francis Dr.
Santa Fe, NM 87505

Re: Owl Oil and Gas SWD C-108 application
Sec 9, T27S-R27E, Eddy Co., NM
API 30-015-25126
OCD Case # 15060

Owl Oil and Gas, LLC filed a C-108 for the subject well. It was timely protested and went to Hearing. The OCD Examiner found problems with the application and 1) required a replacement C-108 and 2) set a continuation for March 6th, 2014. The filing with NM Oil Conservation Division is to re-enter the subject P&A located 1978' FSL (originally filed 1980' FSL) and 1980' FWL in Sec. 9 for commercial produced water disposal.

As per OCD requirements copies of the replacement C-108 application are attached. A C-108 Check List is also included to assist processing. As is noted on P. 18 of the C-108, additional parties have been notified in the new C-108 and it has also been duly published.

Should you have questions or concerns regarding this application please contact the undersigned at the above, or by e-mail KHavenor@georesources.com.

Respectfully submitted,

A handwritten signature in black ink that reads "Kay Havenor".

Kay Havenor, PG
Consultant on behalf of Owl Oil and Gase, LLC

Encl: 3 copies C-108 application

APPLICATION FOR AUTHORIZATION TO INJECT

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

II. OPERATOR: Owl Oil and Gas, LLC OGRID 300843

ADDRESS: P.O. Box 116, Hope, NM 88253

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: 2/20/2014

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.

WELL LOCATION: 1978' FSL & 1980' FWL K 9 21S 27E
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

INJECTION WELL DATA SHEET

Tubing Size: 3-1/2" H-40 9.30# Lining Material: Fiberglass lined

Type of Packer: Arrowset or equivalent

Packer Setting Depth: Approx 602 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? Oil/gas

Non-commercial due to original high water content. Well converted to SWD (expired).

2. Name of the Injection Formation: Lower Yates and upper Seven Rivers

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 _____
Completion details listed below in Item VI.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Brushy Canyon and Bone Springs may now be potential

Owl Oil and Gas, LLC
Myrtle Myra SWD #3
1978' FSL & 1980' FWL
Sec. 9, T21S-R27E Eddy Co., NM

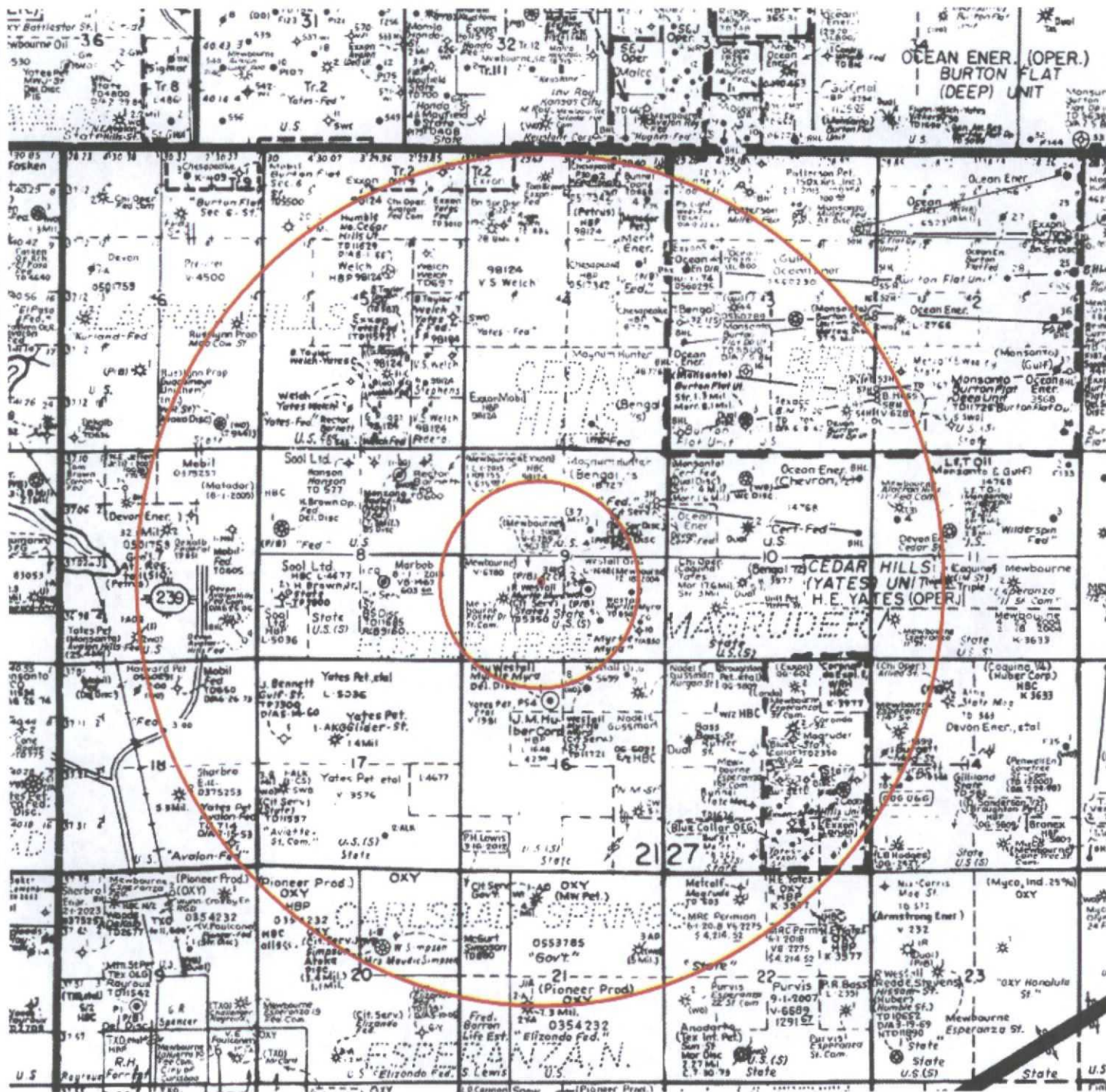
API 30-15-25126

Item V:

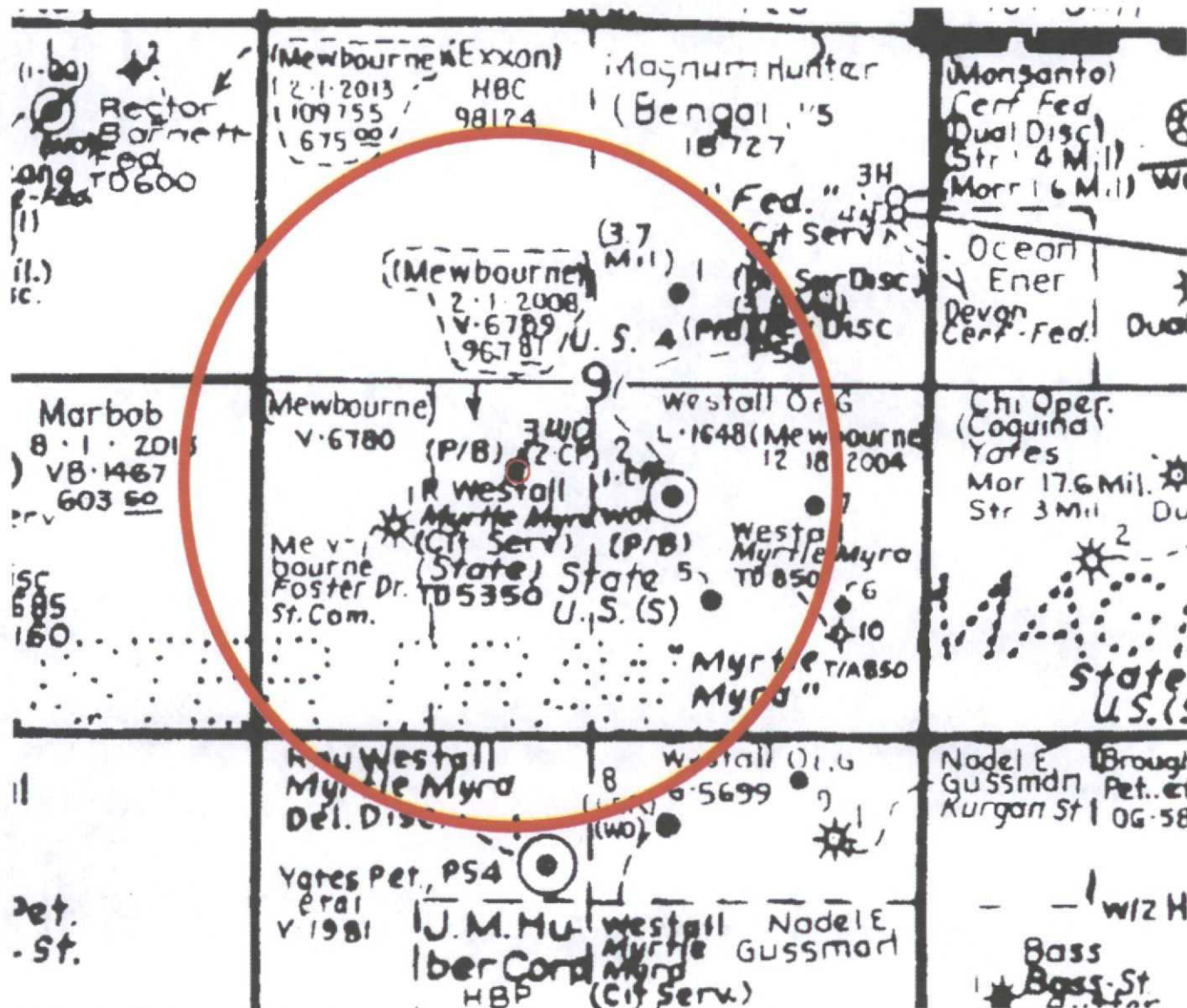
Area of Review

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Item V(a):



Item VI: Data on wells in AOR that penetrate the proposed injection interval:

API	WELL_NAME	STATUS	SDIV	SEC	TWN	RANGE	FTG_NS	NS	FTG	EW	OCD	OPERATOR	WELL	LAND	PLUG_DATE	SPUD	ELEVGL	TVD_DEPTH
3001521390	FEDERAL 9 COM 001	Plugged	G	9	21.0S	27E	1980 N	1980 E	G			CIMAREX ENERGY CO. OF	G	F	21-Feb-11	24-Sep-96	3200	11700
3001527074	MYRTLE MYRA 007	Active	I	9	21.0S	27E	1753 S	853 E	I			ENDURANCE RESOURCES LLC	O	S		05-Oct-92	3224	5150
3001521146	MYRTLE MYRA 002	Plugged	J	9	21.0S	27E	1830 S	1980 E	J			ENDURANCE RESOURCES LLC	O	S	21-Jun-11	29-May-74	3229	11750
3001525126	MYRTLE MYRA SWD 003	Plugged	K	9	21.0S	27E	1978 S	1980 W	K			OWL OIL AND GAS, LLC	S	S	22-Sep-03	15-Dec-84	3237	5350
3001532849	FOSTER DRAW 9 STATE	Active	L	9	21.0S	27E	1580 S	1090 W	L			MEWBOURNE OIL CO	G	S		16-Aug-03	3235	11800
3001526363	MYRTLE MYRA 005	Active	O	9	21.0S	27E	990 S	1650 E	O			ENDURANCE RESOURCES LLC	O	S		24-Apr-92	3235	5125

1. 3001521390 Cimarex Energy Company, Federal 9 Com #1, OCD Unit G, Sec. 9, T21S-R27E, Eddy Co., NM. 1980' FNL & 1980' FEL. GL Elev 3200'. Spud 9/24/1996. 17½" hole set 609' set 13⅜" @609' w/1150 sx w/no circulation ran 1" for cmt to 64'. 12¼" hole to 3,045', set 9⅝" cemented w/1050 sx. Circ 125 sx to surface. 8¾" hole to 11,682', set 5½" csg w/1100 sx cmt. Set CIBP 11,017' + 2 sx cmt. Perf Wolfcamp @9,393'-9,426' OA w/2 SPF, acid 5000 gal 15%. CIBP + cement 5,165'. Perf 5,274'-5,279' w/4 SPF, 20 holes 0.38". Set 5½" CIBP 4,787' +25 sx plug (Opr calc 4,787'-4,587'). 25 sx cmt @4,188' tagged 4,104'. 25 sx plug tagged @3,095' tagged @2,874'. 50 sx plug tagged @2,876'. 75 sx plug tagged @2,772'. 60 sx plug tagged @2,331'. Cut & pulled 5½" @2,000'. 40 sx plug in/out 5½" stub @2,050', tagged @1,950'. 50 sx plug @1,950' tagged @1,873'. 60 sx plug @865' tagged @759'. 75 sx plug @759' tagged @625'. 100 sx plug @625' tagged @529'. 150 sx plug 400' -3'. Dug & cut wellhead @3'. P & A 2/12/2011.

2. 3001527074 Endurance Resources, LLC, Myrtle Myra #7, OCD Unit I, Sec. 9, T21S-27E, 1753' FSL & 853 FEL. Eddy Co., NM. GL Elev 3224'. Spud 10/5/1992. 17½" hole set 453' 13⅜" 54# csg with 350 sx cmt and circulated 100 sx to pit. 12¼" hole to 2,477', set 8⅝" 24# w/2477 sx circ w/200 sx to pit. 7⅞" hole set 5157' 5½ 15.5# csg w/563 sx. Perfs 3,970'-2,984', 4,872'-4,886' and 4,916'-5,078'. Well is presently active.

3. 3001521146 Endurance Resources, LLC, Myrtle Myra #2, OCD Unit J, Sec. 9, T21S-R-27E, Eddy Co., NM. 1830 FSL & 1980' FEL. GL 3249'. Spud 5/29/1974. Set 13⅜" 48# H-40 @585' w/630 sx cmt, TOC 150' filled to surface w/6 yd Redi-Mix. 9⅝" csg set @2,980' w/1575 sx cmt to 1840' CBL, 1" cmt to 1054', 50 sx to 963, and pumped 100 sx to 496', pumped 100 sx to 496', then pumped 100 sx cmt circ to surface. 8¾" hole to 10,155' set 7" 26# N-80 w/300 sx. TOC 8110'. Reported 8½" hole, ran 5" 18# Hydril 9,945'-11,749' w/490 sx cmt. TD 11,750', PB 11,749'. Perf Morrow 11,353'-(continued)

Owl Oil and Gas, LLC
Myrtle Myra SWD #3
1978' FSL & 1980' FWL
Sec. 9, T21S-R27E Eddy Co., NM

API 30-15-25126

Item VI: Data on wells in AOR penetrating the proposed injection interval - Continued:

11,473' (OA) w/42 0.43" shots. CIBP 11,000' +5 sx cmt. PBTD 10,950'. Perf Strawn w/22 SPF 10,529'-10,533'. Acid 15% +1000 SCF N₂/bbl. Jet perf 10,537'-10,458' and 10,248'-10,555'. PB blanking plug 10,539' +10 sx cmt Set 15 sx cmt plug 10,000'-9,889' in/out 5" liner. 25 sx plug 8,870'-8,735' (T/Wolfcamp). Perf 4 sqzd holes 5,475', sqzd w/450 sx cmt. Dumped 10 sx cmt 5,375'-5,310' on retainer. Perf Bone Springs 5,089'-5,284' w/38 holes. Acid 4000 gal 7½% HCl. Frac 36,000 gal SFS30 + 72,000# 20/40 sd + 190,000 SCF N₂. Change Opr to Westall. PB to 5,006'. Perf 4,986'-5,006' perf 10 shots 0.40", 3,506'-3,600', 3,763'-3,988' w/12 shots 0.40", 4,372'-4,375' w/10 shots 0.40", 4,108'-4,014' w/10 0.40 shots. Endurance operator 1/8/2010. Set CIBP 3,395' pumped 361 sx "C" (csg split 3,418'-3,445'). CIBP 3,400'. Set CIBP 3,395' pumped 361 sx to 1,800'. Tagged @ 1,797'. Perf 7" csg @ 1,795'. 553 sx cmt circ to surf in 7"-9⅝" annulus. P&A approved 5/8/2012.

4. 3001525126 Owl Oil and Gas, LLC.

Note: Operator name change to Owl Oil and Gas was due to premature submission of C-101 to Hobbs OCD. Operator at P&A was Ray Westall. Myrtle Myra #3, OCD Unit K, Sec. 9, T21S-R27E, Eddy Co., NM. 1978' FSL (new Owl Oil and Gas survey. Orig 1984 survey = 1980' FSL) & 1980' FWL Sec. 9, T21S-R27 E. GL 3237. Original operator, Cities Service Oil & Gas Corp, named well State C.P. Com #2. Spudded 12/15/1984 w/cable tools, drilled redbeds and sand fill 455'-505'. Rotary tools stuck at 488' running 13⅜" 48# csg. Cemented csg @ 455' w/650 sx cmt. No returns. Shot 4 holes 0.50" @ 370' in 13⅜" csg and cemented annulus w/150 sx. No returns. Pumped 11 yds Redi-Mix in 13⅜" surface annulus w/cmt circ to surface. 12¼" hole set 8⅝" 24/32# @2500' w/700 sx cmt, circ surface. 7⅞" hole set 5350' of 5½" 15.5# J-55 w/500 sx cmt. TOC 2400' (Opr). Well was drilled to TD 5,350'. Cities Service reported extensive perforating, treatment, plug-backs, and casing removal in an extensive 2-page operations and plugging C-103 dated 6/3/1985. This information is summarized below in well diagram. Well re-entered by Ray Westall 1/2/1990 to PBTD 4,980' and completed as Delaware oil well renamed as the Myrtle Myra #3. Westall re-entered 1/2/1990. Cleaned-out to 2,646' and tied onto cut csg w/5½" 14# w/csg patch. Sqzd existing perfs 4,800'-4,982' w/300 sx cmt. Perf 14 holes 4,918'-4,900'. Sqzd perfs 4,803' w/200 sx. Sqzd (unreported perfs) @ 3,874'-4,012' w/ 300 sx. Sand jet perf 4,972', 4,976', 4,980' 0.50" holes,, acidized 750 gal 15%. Set CIBP @4,900' + 40' cmt. NOI to P&A is illegible, but 5½" was to be cut and pulled from or near original Cities Service cut of 2,642'. Westall reported 75 sx cmt plug @2,673' tagged @ 2443'. 25 sx plug @ 932' not tagged. 25 sx plug @497' tagged @397'. 25 sx plug 60' to surface w/2bbbs cmt to pit. Marker installed 9/22/2003.

(continued)

Owl Oil and Gas, LLC
Myrtle Myra SWD #3
1978' FSL & 1980' FWL
Sec. 9, T21S-R27E Eddy Co., NM

API 30-15-25126

Item VI: Data on wells in AOR penetrating the proposed injection interval - Continued

5. 3001532849 Mewbourne Oil Co. Foster Draw 9 State Com. OCD Unit L, Sec. 9, T21S-R27E, Eddy Co., NM. 1580' FSL & 1090' FWL. GL 3135'. Spud 8/16/2003. 17½" hole set 13⅜" 48# @414' w/414 sx cmt, TOC NR. 12¼" hole set 9⅝" csg @2'628' w/900 sx cmt. TOC NR. 8¾" hole set 5½" 17# @11,800' w/2325 sx cmt TOC 2072' (Opr).-Perf 11,326'-11,450' 62 holes 0.24". IP 174 MCFGPD, 0 oil, 1 BWPD. Well is presently active.
6. 3001526363 Endurance Resources, Inc. Myrtle Myra #5. OCD Unit O, Sec. 9, T21S-R27E, Eddy Co., NM 990 FSL & 1650 FEL, GL 3235'. Spud 4/24/1992. 17½" hole set 13⅜" 48# @443' w/450 sx cmt, circ 85 sx to surface.. 12¼ hole set 8⅝" 24# @2,450' w/1135 sx cmt, circ to surface. 7⅞" hole set 5½" 15# @5,125' w/535 sx cmt. Perf 4,952'-5,037' w/ 17 holes 0.40". Acid 1000 gal 15% HCl, 20,000 gel, 45,000# sd. Perf 3,370'-3,438' w/13 holes 0.40". Well is presently active.

Item VII:

1. The maximum injected volume anticipated is 8,500 BWPD. Average anticipated is 4,200 BWPD.
2. Injection will be through a closed system.
3. Maximum injection pressure will be 130 psi, or as adjusted for depth.
4. Sources anticipated to be produced water from the San Andres, Delaware, and Bone Springs .
5. Water sample analyses from Mesquite SWD, Inc wells SE/4 Sec.15, T21S- R27E, Eddy Co., shown below, from Magruder (Yates Formation) oil wells (Source: Cardinal Laboratory water analyses 9/8/2005 courtesy of Mesquite SWD, Inc records). All chlorides are from produced water exceed 10,000 mg/l EPA Capitan Reef protection levels, respectfully noting these warters are all from the back-reef environment. Mesquite SWD, Inc records). All chlorides are from produced water and exceed 10,000 mg/l EPA Capitan Reef protection levels, respectfully noting these warters are all from the back-reef environment.

LAB NUMBER	SAMPLE ID	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(μ S/cm)	(mgCaCO ₃ /L)
ANALYSIS DATE:		09/08/08	09/08/08	09/08/08	09/05/08	09/04/08	09/04/08
H15855-1	EXXON ST #1	27,400	5,450	1,260	1,560	112,000	72
H15855-2	EXXON ST #2	11,800	4,490	972	1,400	110,000	104
H15855-3	EXXON ST #3	9,900	5,450	1,260	1,620	121,000	64
H15855-4	EXXON ST #7	7,940	5,610	1,120	2,000	121,000	64
H15855-5	EXXON ST #8	25,800	3,290	535	2,700	92,000	760
Quality Control		NR	48.1	53.5	2.80	1,407	NR
True Value QC		NR	50.0	50.0	3.00	1,413	NR
% Recovery		NR	98.2	107	93.2	100	NR
Relative Percent Difference		NR	8.0	4.8	2.1	0.1	NR

METHODS:	SM3500-Ca-D	3500-Mg E	8049	120.1	310.1
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		Cl	SO ₄	CO ₃	HCO ₃	pH	TDS
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(s.u.)	(mg/L)
ANALYSIS DATE:		09/05/08	09/05/08	09/04/08	09/04/08	09/04/08	09/05/08
H15855-1	EXXON ST #1	57,000	73	0	88	6.78	98,700
H15855-2	EXXON ST #2	30,000	243	0	127	6.46	98,500
H15855-3	EXXON ST #3	30,000	77	0	78	6.82	114,000
H15855-4	EXXON ST #7	27,200	85	0	78	6.79	114,000
H15855-5	EXXON ST #8	49,000	162	0	927	7.10	79,800
Quality Control		500	43.5	NR	1000	6.99	NR
True Value QC		500	40.0	NR	1000	7.00	NR
% Recovery		100	109	NR	100	99.9	NR
Relative Percent Difference		< 0.1	3.4	NR	1.2	0.3	NR

Item VIII:

Disposal will be into the basal Yates Formation in the known water-wet, non-hydrocarbon interval beneath the Magruder field productive interval, and into the uppermost Seven Rivers Formation that is also recognized as non-commercially productive of hydrocarbons in this greater area. The proposed disposal interval is primarily composed of dolomite and sandy carbonates with some shaley intervals.

OSE records in a 1-mile radius of the proposed re-entry show no known water wells. While the Pecos River is present to the west outside the 2-mile AOR, the eastward dip of the Permian formations beneath the Ogallala precludes upward migration of Yate Formation or Seven Rivers Formation saline waters and therefore also of SWD into those zones.



New Mexico Office of the State Engineer
Wells Without Well Log Information

No wells found.

UTM/NAD83 Radius Search (in meters):

Easting (X): 575500

Northing (Y): 3595420

Radius: 1610

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.

2/9/14 12:20 PM

WELLS WITHOUT WELL LOG INFORMATION

The surface geology of the well site area, including a 1-mile radius of the proposed re-entry is Quaternary eroded remnants of Ogallala Formation.

Item IX:

Acidize casing perforations with 15% HCl. as may be required after completion.

Item X:

No shallow log intervals are on file with the OCD for the proposed re-entry.

Item XI:

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:

Drilling/evaluation of this shallow interval in the immediate area has demonstrated a lack of reasonable potential for commercial hydrocarbon production, also it has previously been used for SWD.

Plugging diagram of Cimarex Federal 9 Com

PLUG AND ABANDON WELL DIAGRAM

API: 3001521390
 Operator: Cimarex Energy Co of Colo
 Lease: Federal 9 Com
 Location: Sec 9, T21S-R27 Eddy Co., NM
 Footage: 1980' FNL & 1980' FEL

Well No: 1

KB: 3217
 GL: 3200
 Spud date: December 22, 1974
 Plugged date: February 21, 2011
 MSL of TD: -8483

Surface Csg

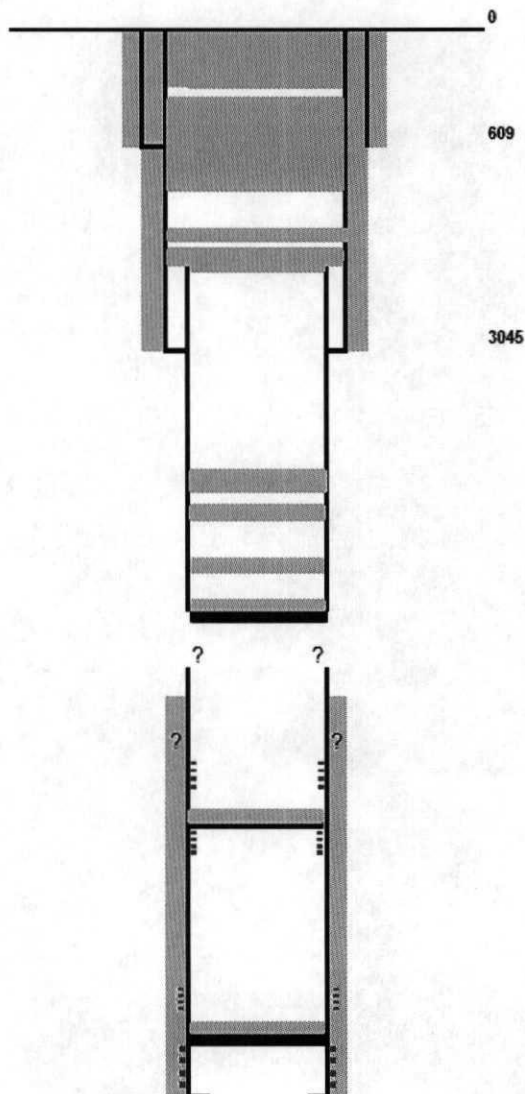
Size: 13-3/8"
 Set @: 609
 Sxs cmt: 1150
 Circ: Yes w/1"
 TOC: Surface
 Hole Size: 17-1/2"

Intermediate Csg

Size: 9-5/8"
 Set @: 3045'
 Sxs cmt: 1050
 Circ: Yes
 TOC: Surface
 Hole Size: 12-1/4"

Production Csg

Size: 5-1/2"
 Set @: 11,682
 Sxs cmt: 1100
 Circ: No
 TOC: 7784 CBL
 Hole Size: 8-3/4"



Dug & cut wellhead @3'
 150 sx 400'-3'

609 100 sx 625' tagged 529
 75 sx 759 tagged 625
 60 sx 865 tagged @759

50 sz 1950 tagged @1873
 Cut & pulled 2000' 5-1/2"
 40 sx 2050 tagged @1950

3045 75 sx tagged 2772
 50 sx 3095 tagged 2876

25 sx tagged 3907
 25 sx 4188 tagged @4101
 CIBP 4787' +25 sx cmt
 Unable to clean-out below 4787'

TOC Not Reported
 Perf 4892-5063' w/106 shots
 CIBP +cnt @5165
 Perf 5274-79 w/20 holes

Perd Wc 9393'-9426'
 CIBP 11071 +2 sx cmt

csg 11682
 11700

Not to scale

Plugging diagram of Endurance Resources Myrtle Myra #2

PLUG AND ABANDON WELL DIAGRAM

API: 3001521146
 Operator: Endurance Resources, LLC
 Lease: Myrtle Myra
 Location: Sec 9, T21S-R27 Eddy Co., NM
 Footage: 1830' FSNL & 1980' FEL

Well No: 2

KB: 3249
 GL: 3227
 Spud date: May 24, 1974
 Plugged date: January 18, 1987
 MSL of TD: -8501

Surface Csg

Size: 13-3/8" 48 # H-40
 Set @: 585
 Sxs cmt: 630
 Circ: Yes--w/6 yds Redi-Mix
 TOC: Surface
 Hole Size: 17-1/2"

Intermediate Csg

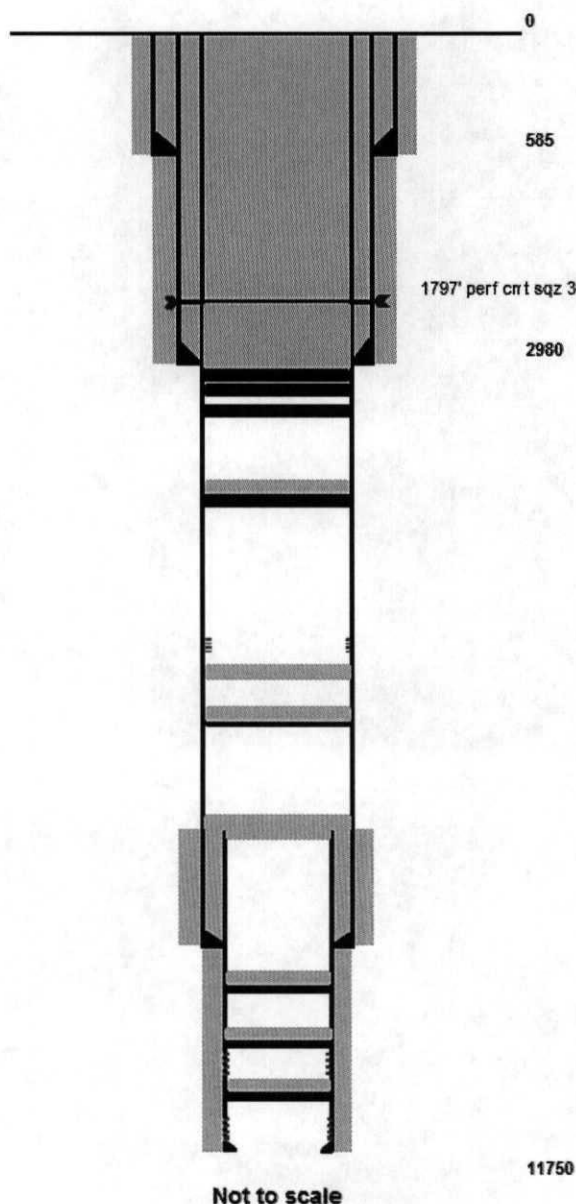
Size: 9-5/8" 28#
 Set @: 2980'
 Sxs cmt: 1175
 Circ: Yes
 TOC: Surface
 Hole Size: 12-1/4"

Production Csg

Size: 7" 26# N-80
 Set @: 10,155
 Hole Size: 8-3/4"

Production Liner

Size: 5" Hydril
 Set @: 9945'-11749'
 Sxs cmt: 490
 Circ: NR
 TOC: 11703
 Hole Size: 8-1/2"



1797' perf cmt sqz 361 sx cmt surface and annulus 7"-9-5/8" P&A 2/6/2011
 CIBP 3395 +361 sx cmt to 1800' tagged 1797'

CIBP 3400 Split csg 3418'-3445' (Endurance)
 CIBP 3540
 Perfs 4986-5006, 4372-75, 4108-14, 3506-3600
 PB 5006 Westal Opr Well name change to Myrtle Myra
 4 holes 5475' sqzd w/450 sx +10 sx 5375'-5310'

Perf BS 5089'-5284holes
 25 sx 8870'-8735' Top Wc
 CIBP 9150 +10 sxs

15 sx plug 9889'-10000' in/out 5" liner

Blanking plug 10439 + 10 sx cmt
 Perf Atoka 10561-64 w/8 shots
 Blanking plug 10434 +10 sx cmt
 Perf Strawn 10529-10523 w/2 SPF
 CIBP 11000 +5 sx cmt PBTD 10950'
 Perf 11383-11473' w/142 shots
 PB 11703

Plugging diagram of Ray Westall Myrtle Myra #3

Plug and Abandon Diagram

API: 3001525126

Operator: Ray Westall

Lease: Myrtle Myra (re-named on re-entry) Well No: 3

KB:3241

Location: Sec 9, T23S-R27E Eddy Co., NM

GL: 3232

Footage: 1980 FSL, 1980 FWL

Surface Csg

Size: 13-3/8" 48#
 Set @: 455
 Sxs cmt: 650
 Circ: Yes
 TOC: Surface
 Hole Size: 17-1/2"

Intermediate Csg

Size: 8-5/8" 24/32#
 Set @: 2500
 Sxs cmt: 700
 Circ: Yes
 TOC: Surface
 Hole Size: 12-1/4"

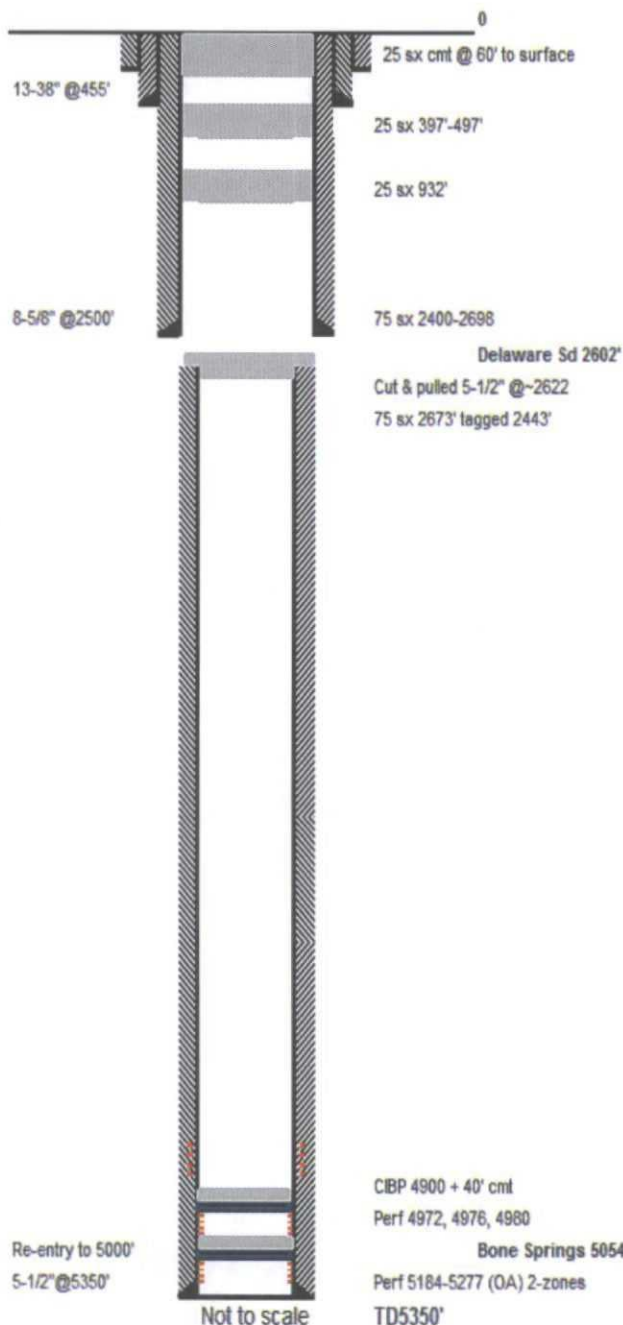
Production Csg

Size: 5-1/2" 14#
 Set @: 5350
 Sxs cmt: 500
 Circ: NR
 TOC: 2400 (Operator)
 Hole Size: 7-7/8"

Re-entered Cities Services State AP #2

Orig P&A 5/28/1985

Tied into cut 5-1/2" 2426' w/csg patch



Original Cities Service perfs/plugs
 below Westall re-entry to 5000'

CIBP 4900+40' cmt
 Perf 4972, 4976, 4980
 Sqz 3874-4012 w/300 sx.
 Sqz 4803-4982 w/200 sx DO cmt
 Perf 4918-4982
 Sqzd old perfs 4800-4960 300 sx
 Cleaned out 5000' CBL 2500-5000

CIBP 4900 + 40' cmt
 Perf 4972, 4976, 4980
 Bone Springs 5054'
 Perf 5184-5277 (OA) 2-zones
 TD5350'

Not to Scale

Owl Oil and Gas, LLC
 Myrtle Myra SWD #3
 1978' FSL & 1980' FWL
 Sec. 9, T21S-R27E Eddy Co., NM

API 30-15-25126

Proposed completion of the Owl Oil and Gas, LLC Mrtle Myra SWD #3

Re-entry/Completion Diagram

API: 3001525126
 Operator: Owl Oil and Gas, LLC
 Lease: Myrtle Myra SWD
 Location: Sec 9, T23S-R27E Eddy Co., NM
 Footage: 1980 FSL, 1980 FWL

Well No: 3

KB:3241
 GL: 3232

Surface Csg

Size: 13-3/8" 48#
 Set @: 455
 Sxs cmt: 650
 Circ: Yes
 TOC: Surface
 Hole Size: 17-1/2"

Intermediate Csg

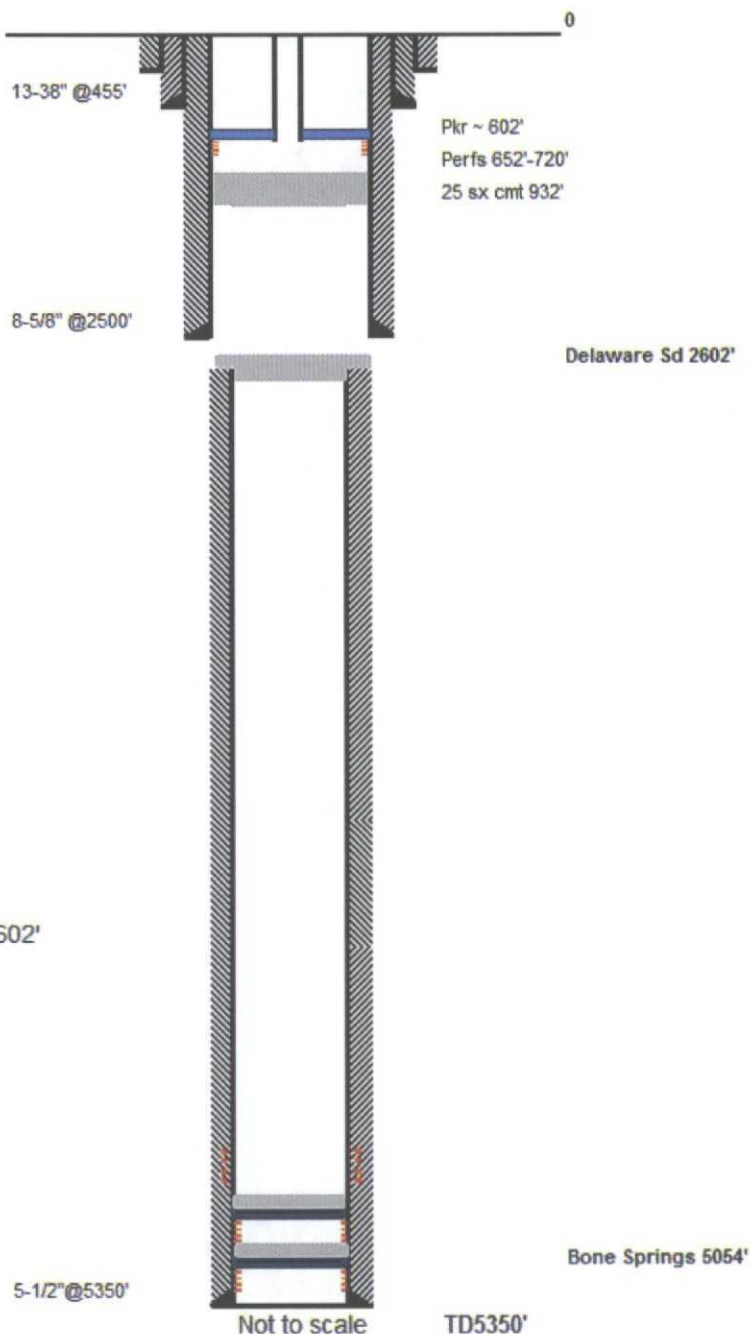
Size: 8-5/8" 24/32#
 Set @: 2500
 Sxs cmt: 700
 Circ: Yes
 TOC: Surface
 Hole Size: 12-1/4"

Production Csg

Size: 5-1/2" 14#
 Set @: 5350
 Sxs cmt: 500
 Circ: NR
 TOC: 2400 (Orig Opr)
 Hole Size: 7-7/8"

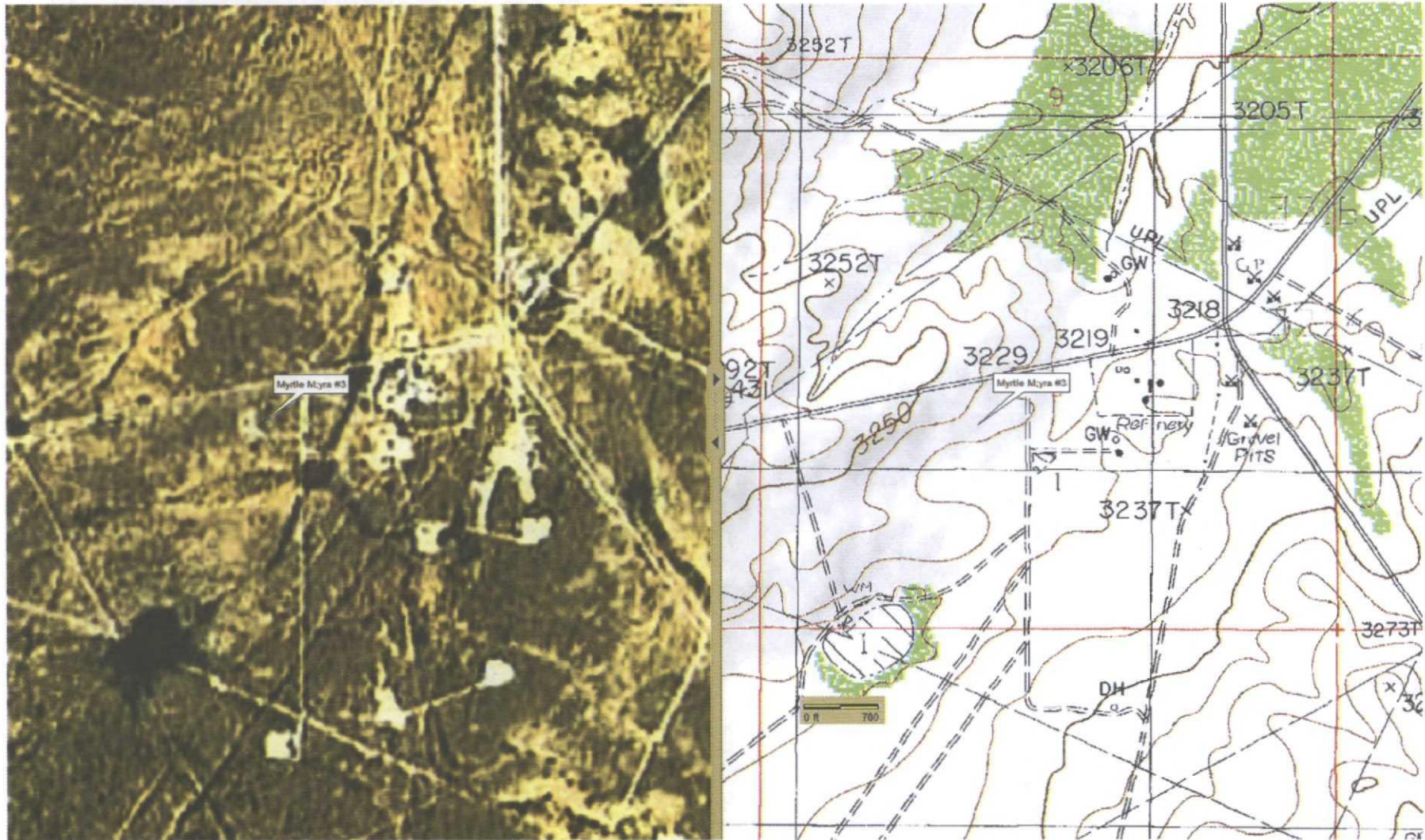
602' 3-1/2" J-55 12.8# Fiberglass coated
 Nickel ArrowSet AX-1 or equiv pkr @ approx 602'

Loaded tubing annulus w/corrosion inhibitor
 Completed surface head for disposal



Owl Oil and Gas, LLC
Myrtle Myra SWD #3
1978' FSL & 1980' FWL
Sec. 9, T21S-R27E Eddy Co., NM

API 30-15-25126



Delorme XMap-6

Approximately 5.7 miles northeast of Carlsbad, NM.

Owl Oil and Gas, LLC
Myrtle Myra SWD #3
1978' FSL & 1980' FWL
Sec. 9, T21S-R27E Eddy Co., NM

API 30-15-25126

Item XIII:

Minerals and Surface Owner:

Commissioner of Public Lands
310 Old Santa Fe Trail
Santa Fe, NM 87501

Operators:

Cimarex Energy Co. of Colorado
600 N. Marienfeld St., Ste 600
Midland, TX 79701

Deep rights
Farm-out NE/4 Sec. 9

COG Operating, LLC
600 W. Illinois Ave
Midland, TX 79701

Deep rights
SE/4 Sec. 9

Endurance Resources, LLC
15455 Dallas Parkway, Ste 600
Addison, TX 75234

Shallow rights
E/2 Sec. 9
N/2 N/2 Sec. 16

Magnum Hunter Production
600 E Colinas Blvd, Ste 1100
Irving, TX 75039

Deep rights
NE/4 Sec. 9

Mewbourne Oil Company
P.O. Box 7698
Tyler, TX 75711

Deep rights
W/3 Sec. 9

Nadel and Gussman Permian, LLC
601 N. Marienfeld St. Ste 508
Midland, TX 79701

Deep rights
NW/4 NE/4 Sec. 16

State of New Mexico
Not leased

E/2 SE/4 Sec. 8

Yates Petroleum Corp
105 S. 4th Street
Artesia, NM 88210

Deep rights
N/2 NW/4 Sec. 16

Item XIII:

Legal Publication

Affidavit of Publication

No. 22870

State of New Mexico

County of Eddy:

Danny Scott

being duly sworn, says that he is the

Publisher

of the Artesia Daily Press, a daily newspaper of General
circulation, published in English at Artesia, said county
and state, and that the hereto attached

Legal Notice

was published in a regular and entire issue of the said
Artesia Daily Press, a daily newspaper duly qualified
for that purpose within the meaning of Chapter 167 of
the 1937 Session Laws of the state of New Mexico for
1 Consecutive weeks/day on the same
day as follows:

First Publication February 20, 2014

Second Publication

Third Publication

Fourth Publication

Fifth Publication

Subscribed and sworn before me this

20th day of February 2014



OFFICIAL SEAL
Latisha Romine
NOTARY PUBLIC-STATE OF NEW MEXICO

My commission expires: 5/12/2015

Latisha Romine

Latisha Romine

Notary Public, Eddy County, New Mexico

Copy of Publication:

LEGAL NOTICE

Owl Oil and Gas, LLC, c/o Kay Havenor, 904 Moore Ave, Roswell, NM 88201-1144, (575) 626-4518, is seeking approval from the New Mexico Oil Conservation Division to re-enter the Ray Westall, Myrtle Myra #3 well API: 30-015-21526, located 1978 feet (re-surveyed from 1980') from the south line and 1980 feet from the west line of Section 9, T21S- R27E, Eddy County, NM, approximately 5.7 miles northeast of Carlsbad, NM, and complete for commercial produced water disposal as the Owl Oil and Gas, LLC, Myrtle Myra SWD #3. The proposed disposal interval is the lower Yates Formation and upper Seven Rivers Formation through casing perforations approximately 680 feet to 780 feet (OA).

Owl Oil and Gas, LLC plans to dispose of a maximum of 8,000 BWPD with a maximum pressure of 132 psi.

Parties with questions regarding this proposal can contact Kay Havenor at the address or phone number above.

Interested parties must file objections or requests for hearing within 15 days of publication to the Oil Conservation Division: 1220 S. St. Francis Dr., Santa Fe, NM 87505.

Published in the Artesia Daily Press, Artesia, N.M., Feb. 20, 2014 Legal No 22870.

Owl Oil and Gas, LLC
Myrtle Myra SWD #3
1978' FSL & 1980' FWL
Sec. 9, T21S-R27E Eddy Co., NM

API 30-15-25126

Item XIII:

Certified Mail Receipts

7012 2920 0002 3248 2365

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 75234 **OFFICIAL USE**

Postage	\$	\$1.61
Certified Fee		\$3.30
Return Receipt Fee (Endorsement Required)		\$2.70
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$7.61

02/20/2014

Sent To: Endurance Resources, LLC
Street, Apt. No.: 15455 Dallas Parkway, Ste 600
or PO Box No.
City, State, ZIP+4: Addison, TX 75234

PS Form 3800, August 2006 See Reverse for Instructions

7012 2920 0002 3248 2059

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

SANTA FE, NM 87501 **OFFICIAL USE**

Postage	\$	\$1.61
Certified Fee		\$3.30
Return Receipt Fee (Endorsement Required)		\$2.70
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$7.61

02/20/2014

Sent To: Commissioner Public Lands
Street, Apt. No.: 310 Old Santa Fe Trail
or PO Box No.
City, State, ZIP+4: Santa Fe, NM 87501

PS Form 3800, August 2006 See Reverse for Instructions

7012 2920 0002 3248 2450

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 79701 **OFFICIAL USE**

Postage	\$	\$1.61
Certified Fee		\$3.30
Return Receipt Fee (Endorsement Required)		\$2.70
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$7.61

02/20/2014

Sent To: COG Operating, LLC
Street, Apt. No.: 550 W. Texas, Ste 100
or PO Box No.
City, State, ZIP+4: Midland, TX 79701

PS Form 3800, August 2006 See Reverse for Instructions

7012 2920 0002 3248 2172

U.S. Postal Service
CERTIFIED MAIL RECEIPT
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For delivery information visit our website at www.usps.com

MIDLAND, TX 79701 **OFFICIAL USE**

Postage	\$	\$1.61
Certified Fee		\$3.30
Return Receipt Fee (Endorsement Required)		\$2.70
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$7.61

02/20/2014

Sent To: Cimarex Energy Co. of Colorado
Street, Apt. No.: 600 N. Marientfeld St., Ste 600
or PO Box No.
City, State, ZIP+4: Midland, TX 79701

PS Form 3800, August 2006 See Reverse for Instructions

Owl Oil and Gas, LLC
Myrtle Myra SWD #3
1978' FSL & 1980' FWL
Sec. 9, T21S-R27E Eddy Co., NM

API 30-15-25126

Item XIII:

Certified Mail Receipts

7012 2920 0002 3248 2080

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

ARTESIA, NM 88210

OFFICIAL USE

Postage	\$	\$1.61
Certified Fee		\$3.30
Return Receipt Fee (Endorsement Required)		\$2.70
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$7.61

02/20/2014

Sent To: Yates Petroleum Corp
Street, Apt. No.: 105 S. 4th Street
or PO Box No.:
City, State, ZIP+4: Artesia, NM 88210

PS Form 3800, August 2006 See Reverse for Instructions

7012 2920 0002 3248 2141

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TYLER, TX 75711

OFFICIAL USE

Postage	\$	\$1.61
Certified Fee		\$3.30
Return Receipt Fee (Endorsement Required)		\$2.70
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$7.61

02/20/2014

Sent To: Mewbourne Oil Company
Street, Apt. No.:
or PO Box No.: P.O. Box 7698
City, State, ZIP+4: Tyler, TX 75711

PS Form 3800, August 2006 See Reverse for Instructions

7012 2920 0002 3248 2158

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For delivery information visit our website at www.usps.com

IRVING, TX 75039

OFFICIAL USE

Postage	\$	\$1.61
Certified Fee		\$3.30
Return Receipt Fee (Endorsement Required)		\$2.70
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$7.61

02/20/2014

Sent To: Magnum Hunter Production
Street, Apt. No.:
or PO Box No.: 600 E. Cintas Blvd. Ste 1100
City, State, ZIP+4: Irving, TX 75039

PS Form 3800, August 2006 See Reverse for Instructions

7012 2920 0002 3248 2028

U.S. Postal ServiceTM
CERTIFIED MAILTM RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)
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MIDLAND, TX 79701

OFFICIAL USE

Postage	\$	\$1.61
Certified Fee		\$3.30
Return Receipt Fee (Endorsement Required)		\$2.70
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$7.61

02/20/2014

Sent To: Nadel and Gussman Permian, LLC
Street, Apt. No.:
or PO Box No.: 601 N. Marienfeld St. Ste 508
City, State, ZIP+4: Midland, TX 79701

PS Form 3800, August 2006 See Reverse for Instructions

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>Owl Oil and Gas, LLC</u> OGRID Num: <u>299027</u>
	5		RULE 5.9 Compliance..... Number of Inactive Wells <u>0</u> vs Total Wells Operated <u>0</u> Is financial assurance required on any well? <u>No wells in Violation</u>
	6		Is there any hearing order finding this operator out of compliance with Division Rule 19.15.5.9 NMAC? <u>No</u>
	7		Are all Rule 5.9 issues OK to allow the Division to issue Disposal Permits? _____
	8	III	Well Name: <u>Myrtie Myra SWD #3</u>
	9	III	API Num: <u>30-015-25126</u> Spud Date: <u>12/15/1984</u>
	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>1978' FSL & 1980' FWL</u> Unit <u>K</u> Sec <u>9</u> Tsp <u>21S</u> Rge <u>27E</u> County <u>Eddy</u>
	12		General Location (i.e. Y miles NW of Z): <u>Approx 5.7 miles NE of Carlsbad, NM.</u>
	13		Current Well Status: <u>P&A</u>
	14	I	General Summary of Planned Work to Well: <u>Re-enter, CO to cmt plug @ 932', Perf 652' - 720'. Acidize. Run 3-1/2" tbg w/packer ~602' and complete.</u>
	15		<u>INTERVAL TOP and BOTTOM:</u>
	16	IIIB.(2)	Proposed disposal Top Depth: <u>652'</u> Formation Name: <u>Yates Formation</u> (include Member Names for Delaware or Mesaverde)
	17	IIIB.(2)	Proposed disposal Bottom Depth: <u>720'</u> Formation Name: <u>Seven Rivers Formation</u>
	18	IIIB.(2)	Is the disposal interval OpenHole? _____ or Perfed? <u>Yes</u>
	19	IIIB.(2)	What will be the disposal tubing size OD? <u>3-1/2"</u> Packer Seat, Feet: <u>approx 602"</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>130</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: <u>None reported in 1-mile radius</u> Formation Name(s)? _____
	23	XI	Any Fresh Water Wells Within 1 Mile? <u>No</u> If so, did you attach an analysis from these Wells? _____
	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? _____ or Commercial Disposal? <u>Yes</u>
	28	VII	Which formations will supply the waste waters to be disposed into this well... List most common...? <u>Bone Springs</u>
	29	VII	Are Waste waters compatible with proposed disposal interval waters? <u>Yes</u> Did you include waste water analysis? <u>Yes - for Yates produced waters to SE</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>Yes but from outside the AOR</u> Is the salinity within the disposal interval more than 10,000 mg/l of TDS? <u>Yes</u> or how will you determine this insitu water salinity? _____
	34	VIII	Does the application include a list of Formation tops down to and including the bottom of the target formation? <u>No T/Yates Fm 480', T/Seven Rivers Fm 697'.</u>
	35		What is the top <u>main salt 303'</u> and bottom <u>354'</u> of the Castile Salt (... If this well is in the Southeast and the Salt is present)
	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>2/20/2014</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> 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>Yes</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>SLO</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>6</u> How many of these are Plugged/Dry and Abandoned? <u>3 P&A</u>
	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 disposal well? <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>

Miss	Row	C-108	C-108 disposal application submittals... CHECKLIST to ensure all items are supplied or considered.
	56	VIII	Is there any Karst or Massive Limestone in this target formation? No ...or in the formations directly above or below? No
	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? 0 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..?