

Case 14039

DATE IN 9/5/07	SUSPENSE	ENGINEER W. Jones	LOGGED IN 9/7/07	TYPE SWD	APP NO. PTDS0725057853
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ABOVE THIS LINE FOR DIVISION USE ONLY

Cancelled 9/13/07

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



**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 \_\_\_\_\_

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

- [A]  Working, Royalty or Overriding Royalty Interest Owners
- [B]  Offset Operators, Leaseholders or Surface Owner
- [C]  Application is One Which Requires Published Legal Notice
- [D]  Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [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.

Print or Type Name

Signature

Title

Date

e-mail Address



3106 N. Big Spring St. Ste. 100  
Midland, TX 79705  
Tel: (432) 685-9158

September 4, 2007

New Mexico Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, New Mexico

Attention: David Catanach

RE: **Application for Salt Water Disposal**  
Antelope Ridge Unit No. 6  
API No. 30-025-26291  
Delaware Formation  
Unit Letter "G" Section 3 T24S R34E  
Lea County, New Mexico

2007 SEP 5 AM 10:20  
RECEIVED

Bold Energy LP respectfully requests administrative approval for the attached C-108 application on its Antelope Ridge Unit No. 4 well for the purpose of disposing produced fluids in the non-commercial Delaware interval. This work will allow Bold Energy LP to supplement the disposal for the Antelope Ridge Unit and dispose of produced water that is anticipated from work to be performed on wells within the unit. The installation of the proposed disposal well will lower the current economic limit on each well and ultimately allow Bold Energy LP to recover additional reserves that would otherwise be left in place.

Please note that the C-108 package is complete except for the return receipt; after all have been received we will forward them on to you. We respectfully requests that this application be approved administratively at the earliest possible time. This is requested so that the necessary operations can be advanced in a prudent manner. Please understand that Gray Surface Specialties is acting as an Agent for Bold Energy LP, if there are any questions please feel free to contact me at 432.685.9158.

Thank you,

A handwritten signature in black ink, appearing to read 'Dwaine Moore', is written over the typed name and title.

Dwaine Moore  
Agent for Bold Energy LP.

Attachments



### 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.

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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.

BOLD ENERGY, LP  
Antelope Ridge Unit #6 – SWD  
Items for form C-108

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- III. Well data form complete and attached.
- V. A map of the area surrounding the Antelope Ridge Unit #6 (proposed salt water disposal well) is attached. The map shows all wells within a 2 mile radius and those wells within a ½ mile radius of the proposed SWD well (area of review).
- VI. To date, no wells exist on record within a ½ mile radius of the proposed SWD well.
- VII. Proposed Operation:

Squeeze work will be performed to ensure that zonal isolation exists immediately above and below the proposed injection interval. Results will be evaluated by CBL and submitted to the Division.

1. Based on current field production the anticipated average daily injection rate is 0.69 bbls/minute for a total daily volume of 1,000 bbls. Based on future anticipated field production the maximum anticipated daily injection rate is 1.39 bbls/minute for a maximum daily volume of 2,000 bbls.
2. The injection system proposed for this well is open.
3. The maximum injection pressure will not exceed 1,034 psi (0.2 psi/ft OCD allowable rate) until a step rate test is performed to establish a higher limit.
4. Attached is a water analysis for the Antelope Ridge Unit facility which will be the point from which produced water will be sent to the proposed disposal well.
5. Attached is existing literature describing the chemical properties of produced water from the proposed Delaware injection zone.

**BOLD ENERGY, LP**  
**Antelope Ridge Unit #6 – SWD**  
**Items for form C-108**

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- VIII. The proposed injection zones are Bell Canyon and Cherry Canyon formation sandstones of the Delaware Mountain Group, . The top of the Delaware Mountain Group is the Bell Canyon formation at 5170 feet. The Bell Canyon formation is 865 feet thick. The top of the underlying Cherry Canyon formation is present at 6035 feet. Attached is a section of the log of this well showing the tops and proposed perforations. There is no fresh water aquifers below the injection zone. The closest fresh water well produces water from an aquifer in the Triassic sandstone present at 475 feet measured depth.
- IX. Stimulation Program: After perforating all intervals, an acid treatment consisting of 19,000 gallons of 15% HCL acid will be pumped down the casing.
- X. The following logs have been filed with the Division and are available on-line:
- Schlumberger Compensated Neutron-Formation Density  
Schlumberger Dual Lateral Log  
Schlumberger Borehole Compensated Sonic Log
- XI. It was determined that one fresh water well exists within a one-mile radius of the proposed disposal well (identified on map). A water analysis from this well is attached.
- XII. Bold Energy, LP finds no evidence of any hydrologic connection, fault or other mechanism by which there will be any hydrologic connection between the disposal zone and underground sources of drinking water.
- XIII. Surface Owner: The Madera Family Trust B Trust  
c/o Bert Madera  
130 Madera Road  
Jal, NM 88251  
\*Proof of notice attached.

**BOLD ENERGY, LP**  
**Antelope Ridge Unit #6 – SWD**  
**Items for form C-108**

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XIII. Leasehold Operators:

See attached list

\*Proof of notice attached.

OPERATOR: Bold Energy, LP

WELL NAME & NUMBER: Antelope Ridge Unit #6

WELL LOCATION: 1980' FNL & 1980' FEL  
FOOTAGE LOCATION

Unit Letter "G"  
UNIT LETTER

Section 3  
SECTION

T24S  
TOWNSHIP

R34E  
RANGE

WELLBORE SCHEMATIC

Schematic attached

WELL CONSTRUCTION DATA  
Surface Casing

Hole Size: 20" Casing Size: 16"

Cemented with: 200 sx. or ft<sup>3</sup>

Top of Cement: Surface Method Determined: Circulated

Intermediate Casing

Hole Size: 14-3/4" Casing Size: 10-3/4"

Cemented with: 1200 + 800 sx. or ft<sup>3</sup>

Top of Cement: 2<sup>nd</sup> Stage to Surface Method Determined: Circulated

Production Casing

Hole Size: 9-1/2" Casing Size: 7-5/8"

Cemented with: 800 sx. or ft<sup>3</sup>

Top of Cement: 7,000' Method Determined: Calculated

Total Depth: 7-5/8" to 11,990' ; 5-1/2" Liner 11,776' – 13,758'

Injection Interval

5,227' feet to 6,290'

(Perforated or Open Hole; indicate which)

Perforations:
5,227' – 5,232'
5,245' – 5,250'
5,259' – 5,264'
5,279' – 5,289'
5,308' – 5,318'
5,640' – 5,645'
5,672' – 5,682'
5,714' – 5,724'
5,737' – 5,747'
5,780' – 5,785'
5,805' – 5,810'
5,837' – 5,842'
5,986' – 5,996'
6,042' – 6,052'
6,071' – 6,076'
6,086' – 6,091'
6,113' – 6,118'
6,148' – 6,158'
6,232' – 6,242'
6,280' – 6,290'

INJECTION WELL DATA SHEET

Tubing Size: 2-7/8" 6.5 lb/ft J-55 Lining Material: TK70 (salt water service internal coating)

Type of Packer: 7-5/8" Retrievable w/ L316 o/o tool and stainless 2.310" profile (Nickel Plated and Plastic Coated ID)

Packer Setting Depth: 5,200'

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

Additional Data

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

If no, for what purpose was the well originally drilled? Producing Gas Well

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

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

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.     

**Morrow (13,634' – 13,643') CIBP at 13,536' w/14' sand; Morrow (13,216' – 13,416') CIBP at 13,150' w/ 20' CMT Morrow (12,945' – 13,055') CIBP at 12,887' w/ 35' CMT; Atoka (12,401' – 12,865') CIBP at 12,360'**

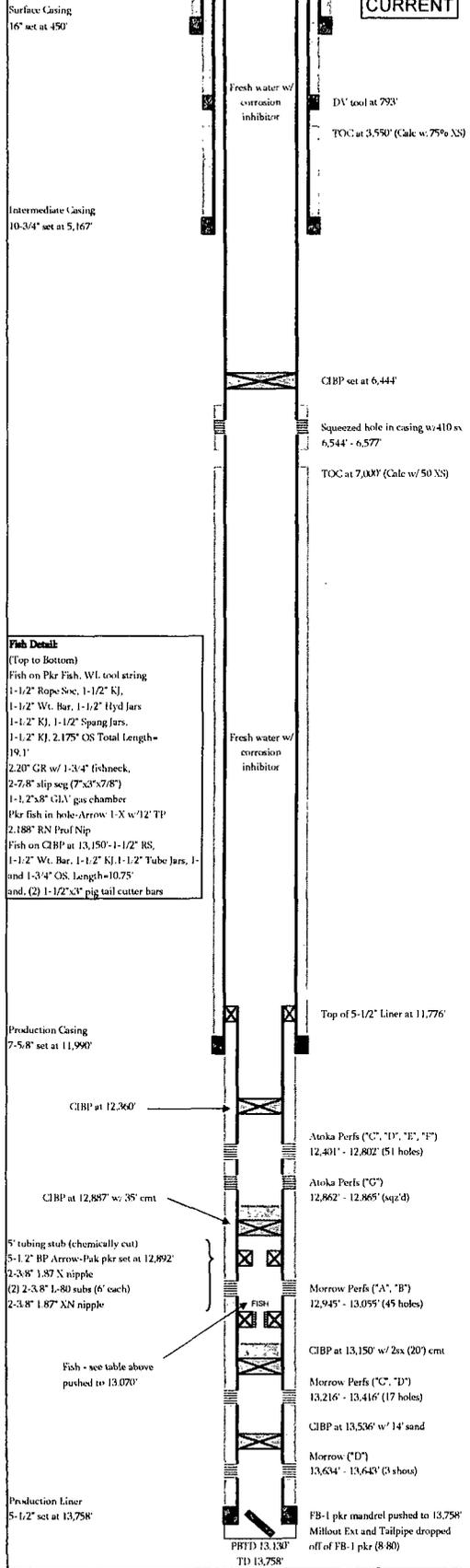
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:     

**Tops - Delaware: 5,145'; Bone Spring: 8,705'; Wolfcamp: 11,205'; Pennsylvanian: 11,903'**

**Tops - Des Moines: 11,875'; Atoka: 12,095'; Morrow: 12,965'**

Well TA'd on 4-21-07

CURRENT



**Fish Detail**  
 (Top to Bottom)  
 Fish on Pkr Fish, WL tool string  
 1-1/2" Rope Soc, 1-1/2" KJ,  
 1-1/2" Wt. Bar, 1-1/2" Hyd Jars  
 1-1/2" KJ, 1-1/2" Spang Jars,  
 1-1/2" KJ, 2.175" OS Total Length=  
 19.1'  
 2.20" GR w/ 1-3/4" fishneck,  
 2-7/8" slip seq (7"x5.75")  
 1-1.25" GLV gas chamber  
 Pkr fish in hole Arrow 1-X w/12" TP  
 2.188" RN Proof Nip  
 Fish on CIBP at 13,150'-1-1/2" RS,  
 1-1/2" Wt. Bar, 1-1/2" KJ, 1-1/2" Tube Jars, 1-  
 and 1-3/4" OS, Length=10.75'  
 and, (2) 1-1/2"x3" pig tail cutter bars

**BOLD ENERGY, LP**

**Antelope Ridge Unit #6**

WL 50.0%  
 Elevations: 3,499  
 KR 26'  
 Meas. TD: 13,758'  
 TVD: 13,758'  
 FBD: 13,130'  
 Zone: Morrow

NRI: 42.5%  
 API: 30-025-26291  
 Surface Location: 1980' FNL & 1960' FEL  
 Legal Description: Section 3 - T24S - R34E  
 Field: Antelope Ridge  
 County: Lea County  
 State: New Mexico

Casing	Hole	Weight	Grade	Depth	Burst	80% Burst	TOC
Conductor - (no record of conductor casing in well file)							
16"	20"	65#	H-40	450'	1,640	1,312	Surface (circ.)
10-3/4"	14-3/4"	40.5#	K-55	2,700'	3,130	2,504	Surface (circ.)
10-3/4"	14-3/4"	40.5#	S-80	3,800'	4,560	3,648	Surface (circ.)
10-3/4"	14-3/4"	45.5#	S-80	5,180'	5,210	4,168	Surface (circ.)
7-5/8"	9-1/2"	23.7#	P-110	11,990'	10,860	8,688	7,000' (calc)
5-1/2"	6-1/2"	23#	N-80	13,665'	10,560	8,448	TOC

**Data**

3/14/1979 Spud  
 TD at 13,758'

8/17/1979  
 RHH set pkr at 13,100' Perforated grss Morrow w/2" OD thru the guns and no breakdown  
 Morrow "C": 13,216', -217', -218', -233', -234', -235', -316', -317' (8 shots)  
 Morrow "D": 13,382', -383', -406', -407', -409', -410', -414', -415', -416', -634', -635', -643' (12 shots)  
 Pressure came up to 2,100 psi after perforation. Open to pit on 32.64" choke  
 SITP = 5,160 psi (translates to 6,838 psi assuming gas gradient.) No stimulation reported  
 Tested at 5,500 MCFD thru 48.64" choke. FTP 750 psi (Wid test perf Morrow "A" 12,960' - 12,976')  
 CAOF = 7,000 MCFD

10/2/1979  
 RHH w/ spinner. Determine that 90% gas from 13,406'-13,416' and 10% gas from 13,316'-13,320'  
 RHH set Lak-Set pkr at 12,014' to dual Morrow & Atoka  
 Perforated Atoka w. 2" OD de-centralized guns  
 Atoka "C": 12,401', -402', -417', -418', -419', -490', -491', -495', -496', -497' (10 shots)  
 Atoka "D": 12,508', -509', -510', -512', -514', -516', -518', -564', -565', -566', -610', -611', -612' (13 shots)  
 Atoka "E": 12,640', -642', -646', -647', -652', -654', -687', -688', -689' (9 shots)  
 Atoka "F": 12,772', -774', -776', -778', -779', -792', -793', -794', -796', -798', -799', -801', -802' (13 shots)  
 Overall Atoka = 51 shots over 401 ft gross interval.  
 Pressure came up to 4,500 psi after perforation. Open well to pit, bled to 50 psi and 25 BW  
 Tested at 500 MCFD at 100 psi FTP, 32.64" choke.

11/2/1979  
 Acidized w/ 10,000 gal 15% MSR and NZ at 3.5 BPM Tested at 1,800 MCFD at 300 psi FTP,  
 48.64" choke with 130 BCFD and 60 BWPD  
 RHH spinner determine majority of gas from 12,417'-12,419'.

12/14/1979  
 Ran dual string completion with blast jets across Atoka. (Atoka initial BHP = 7,683 psi)  
 Left Morrow SI and produced Atoka with initial rate of 1,100 MCFD at 700 psi FTP  
 Lost wireline tool strings resulting in Atoka production problems.  
 Performed PBU analysis indicated positive skin of 46 determined by Shell

8/4/1980  
 Begin WO to open Morrow to production  
 SS in LT collapsed and failed. Killed well with 14.5# CaBr2. POOH with LT  
 RHH LT and dual pkr. Dual pkr leaking

9/18/1980  
 Flwd Morrow at 5,000 MCFD, 150 BCFD, 10 BWPD. CP dropped from 2,100 psi to 1,500 psi  
 Killed well with 12.4" CaBr2 water. POOH with LT and dual pkr.

10/6/1980  
 Finished WO efforts to dual Morrow and Atoka

12/7/1988  
 Morrow died. RHH swab unit. JFL at 2,900' well KO after 2 swab runs

2/21/1990  
 Begin WO to remove dual string and place well on PLGR lift.  
 Sand line parted while swabbing to recover fluid. Started fishing operations  
 RHH pkr set at 12,885' (below Atoka perf) Swabbed Morrow recovered fluid.  
 RHH pkr set at 13,354' (below Morrow "C") Swabbed Morrow "D"  
 Recovered fluid from Morrow "D" with a gas blow. (Morrow "D" drowned by CaBr2 water)

6/19/1990  
 Straddled Morrow from 13,406' - 416'. Acidized with 1,000 gal Acetic. Swabbed w/ gas shows.  
 RU HES frac Morrow "D" (13,406' - 416') with HB Alcoform: 37,100 lbs 20-40 Norton ISP  
 Well cleaned up to 100 MCFD, 105 psi FTP

7/21/1990  
 Ran BHP survey. FTP = 190 psi, BHP = 1,820 psi mid perf. 0.306 psi ft gradient  
 Morrow put on production with Atoka behind pkr  
 By July 1993 well cum'd 2,50 BCF, 34.3 MBO, and 62.2 MBW  
 DCA EUR = 5.0 BCF, PZ EUR = 5.0 BCF. AOI = 438 acres from 11' of primary pay. RF=50%

7/23/1993  
 POOH w/ tbg and pkr. RHH w/ CIBP set at 13,150'. Left multiple W/L fish on top of CIBP

8/25/1993  
 RHH w/ tool suite (temp, press, gradiometer, and diverter flowmeter). FL +/- 3,500'.  
 SIBHP = 5,840 psi. Open to tank on 13/64". Gas from 12,400'-518". No flow below 12,518'

9/1/1993  
 RHH CIBP set at 12,545' w/ 1 sk cmv over Atoka "E" & "F". new PBTD = 12,535'.  
 ND BOP, NU tree, Swab Upper Atoka recovering fluid and small volume of gas  
 Produced Atoka "C" and "D" lobes until June-94

6/21/1994  
 POOH w/ tbg. DO CIBP at 12,545'

8/9/1994  
 Pkr set at 12,298 RHH w/ tbg and GLV's. Place Atoka on GL recovering 150 BW-200 net MCFD  
 RU Basin Acidizing. Acidize Atoka w/ 4,000 gal of 15% HCl at 5 BPM.  
 Return well to GL initially recovering 400 MCFD and 350 BWPD  
 Atoka production negligible as of 4-96 due to GLV open near surface cycling gas only.

5/1997  
 POOH tbg, repaired GLV's. Atoka returned to production at 304 MCFD

10/20/2004  
 Citation submits proposal to recomplate Atoka and Morrow

1/2005  
 Commence operations w/ PU. Atoka producing +/- 10 MCFD  
 POOH w/ tbg and GLV's, tbg parted with top of fish at 7,740'. 35 day fishing job.  
 Sq'd csg leaks from 6,544'-6,577' Spent 20 more days fishing  
 Pushed all lost tools in hole to 13,070'. sq'd Atoka "G" from 12,862'-12,865'  
 Ran TCP guns and perforated:  
 Morrow "A" and "B" perfs from 12,945'-13,055'. 45 shots OA  
 Swab Morrow "A" and "B" perfs. fluid entry scattered and less than 10 BWPD  
 Set packers to straddle Atoka perfs. Producing from Morrow A & B only.

3/29/2005  
 Surface build up to 520 psi after 791 hrs, opened well to tank, pressure bled to 0 in 12 minutes  
 Left well open to tank, started flowing +/- 3 MCFD

4/6/2005  
 RU swab unit, recovered 34 BW w/ FFL = 6,200' and FFL = 11,500' RD swab unit  
 Flwg well to tank at 3 MCFD at 30 psi FTP

6/16/2005  
 RU CTU and treated Morrow perfs w/ 2,500 gal of ClaySafe and 16 tons of CX2  
 Making 4 MCFD and 0 BWPD.

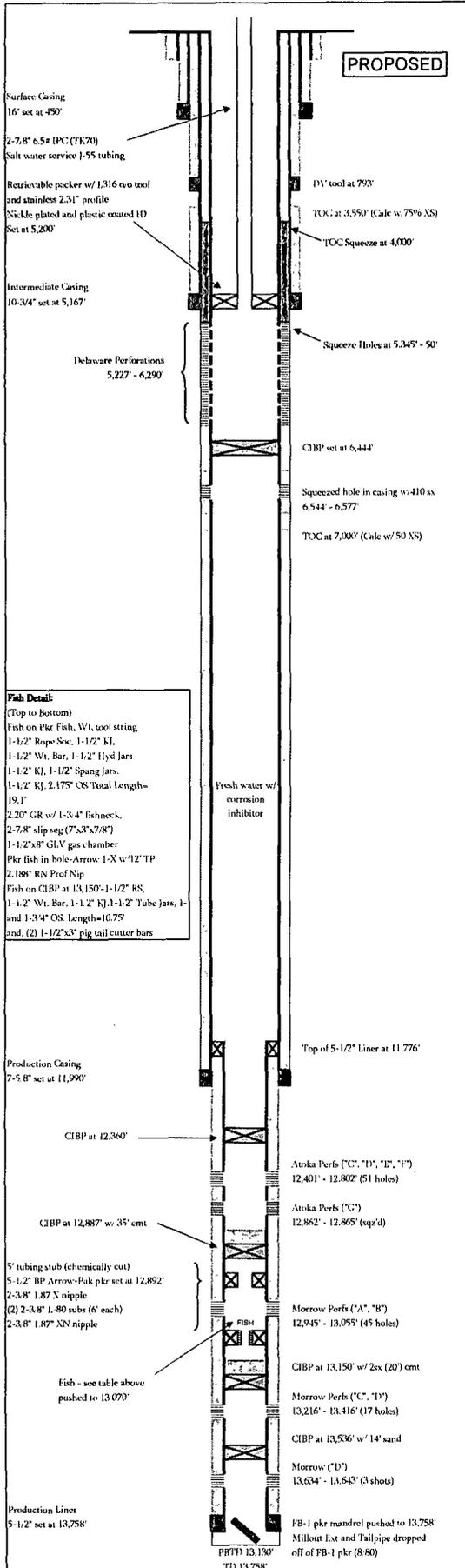
6/28/2005  
 Dropped from report. Well making no gas.

4/17/2007  
 Commence operations to TA well. Pull existing tubing & pkr. Set CIBP's as shown.

4/21/2007  
 Perform MIT.

**BOLD ENERGY, LP**

**Antelope Ridge Unit #6**



<b>WT:</b> 50.0%	<b>NRI:</b> 42.5%
<b>Elevation:</b> 3,499	<b>API:</b> 30-025-26291
<b>KB:</b> 26'	<b>Surface Location:</b> 1980' ENL & 1980' EST
<b>Meas. TD:</b> 13,758'	<b>Legal Description:</b> Section 3 - T24S - R34E
<b>TVDS:</b> 13,758'	<b>Field:</b> Antelope Ridge
<b>FBD:</b> 13,130'	<b>County:</b> Lea County
<b>Zone:</b> Morrow	<b>State:</b> New Mexico

Casing	Hole	Weight	Grade	Depth	Burst	80% Burst	TOC
(no record of conductor casing in well file)							
16"	20"	65#	H-40	450'	1,640	1,312	Surface (circ.)
10-3/4"	14-3/4"	40.5#	K-55	2,700'	3,130	2,504	Surface (circ.)
10-3/4"	14-3/4"	40.5#	S-80	3,800'	4,560	3,648	Surface (circ.)
10-3/4"	14-3/4"	45.5#	S-80	5,180'	5,210	4,168	Surface (circ.)
7-5/8"	9-1/2"	33.7#	P-110	11,990'	10,860	8,688	7,000' (calc)
5-1/2"	6-1/2"	23#	N-80	13,665'	10,560	8,448	TOC

Date	Event
3/14/1979	Spud
8/17/1979	TD at 13,758'
9/19/1979	RHH set pkr at 13,100' Perforated gross Morrow w/ 2" O.D. thru bkg guns and no breakdown Morrow 'C': 13,216', -217', -218', -233', -234', -235', -316', -317' (8 shots) Morrow 'D': 13,282', -383', -406', -407', -409', -410', -414', -415', -416', -634', -635', -643' (12 shots) Pressure came up to 2,100 psi after perforation. Open to pit on 32,64' choke SITP = 5,160 psi (translates to 6,838 psi assuming gas gradient.) No stimulation reported Tested at 5,500 MCFD thru 48.64' choke. FTP 750 psi (Did not perf Morrow 'A' 12,960' - 12,976') CAOF = 7,000 MCFD
10/2/1979	RHH w/ spinner. Determine that 90% gas from 13,406'-13,416', and 10% gas from 13,316'-13,320' RHH set Lak Set pkr at 12,014' to dual Morrow & Atoka Perforated Atoka w/ 2" O.D. centralized guns Atoka 'C': 12,401', -402', -417', -418', -419', -490', -491', -495', -496', -497' (10 shots) Atoka 'D': 12,508', -509', -510', -512', -514', -516', -518', -564', -565', -566', -610', -611', -612' (13 shots) Atoka 'E': 12,640', -642', -646', -647', -652', -654', -687', -688', -689' (9 shots) Atoka 'F': 12,772', -774', -776', -778', -779', -792', -793', -794', -796', -798', -799', -801', -802' (13 shots) Overall Atoka = 51 shots over 401 ft gross interval. Pressure came up to 4,500 psi after perforation. Open well to pit, bled to 50 psi and 25 BW Tested at 500 MCFD at 100 psi FTP. 32,64' choke.
11/2/1979	Acidized w/ 10,000 gal 15% MSR and N2 at 3.5 BPM Tested at 1,800 MCFD at 300 psi FTP. 48.64' choke with 130 BCPD and 60 BWPD RHH spinner determine majority of gas from 12,417'-12,419'.
12/14/1979	Ran dual string completion with blast jets across Atoka. (Atoka initial BHP = 7,685 psi) Left Morrow SI and produced Atoka with initial rate of 1,100 MCFD at 700 psi FTP Lost wireline tool strings resulting in Atoka production problems. Performed FBU analysis indicated positive skin of 46 determined by Shell
8/4/1980	Begin WO to open Morrow to production SS in LT collapsed and failed. Killed well with 14.5# CaBr2. POOH with LT RHH LT and dual pkr. Dual pkr leaking
9/18/1980	Flow Morrow at 5,000 MCFD, 150 BCPD, 10 BWPD. CP dropped from 2,100 psi to 1,500 psi Killed well with 12.4# CaBr2 water. POOH with LT and dual pkr.
10/6/1980	Finished WO efforts to dual Morrow and Atoka
12/7/1988	Morrow died. RU swab unit. IFL at 2,900' well KO after 2 swab runs
2/21/1990	Begin WO to remove dual string and place well on PLGR lift. Sand line parted while twibling to recover fluid. Started fishing operations RHH pkr set at 12,885' (below Atoka perf) Swabbed Morrow recovered fluid. RHH pkr set at 13,354' (below Morrow 'C') Swabbed Morrow 'D' Recovered fluid from Morrow 'D' with a gas blow. (Morrow 'D' drowned by CaBr2 water)
6/19/1990	Straddled Morrow from 13,406' - 416'. Acidized with 1,000 gal Acetic. Swabbed w/ gas shows. RU HES true Morrow 'D' (13,406' - 416') with HR Alcolfoam: 37,100 lbs 20 40 Norton ISP Well cleaned up to 100 MCFD, 105 psi FTP
7/21/1990	Ran BHP survey. FTP = 190 psi, BHP = 1,820 psi mid perf. 0.306 psi ft gradient Morrow put on production with Atoka behind pkr By July 1993 well cum'd 2.50 BCF, 34.3 MBO, and 62.2 MBW DCA EUR = 5.0 BCF, P.Z. EUR = 5.0 BCF. AOI = 438 acres from 11' of primary pay. RT=50%
7/23/1993	POOH w/ tbg and pkr. RHH w/ CIBP set at 13,150'. Left multiple W/L fish on top of CIBP
8/25/1993	RHH w/ tool suite (temp, press, gradiometer, and diverter flowmeter). FL = 3,500'. SIBHP = 5,840 psi. Open to tank on 13/64". Gas from 12,400'-518". No flow below 12,518'
9/1/1993	RHH CIBP set at 12,545' w/ 1 sk cmt over Atoka 'E' & 'F', new PBTD = 12,535'. ND BOP, NU tree, Swab Upper Atoka recovering fluid and small volume of gas Produced Atoka 'C' and 'D' lobes until June-94
6/21/1994	POOH w/ tbg. DO CIBP at 12,545'
8/9/1994	Pkr set at 12,298' RHH w/ tbg and GLV's. Place Atoka on GL recovering 150 BW-200 net MCFD RU Basin Acidizing. Acidize Atoka w/ 4,000 gal of 15% HCl at 5 BPM. Return well to GL initially recovering 400 MCFD and 350 BWPD Atoka production negligible as of 4/86 due to GLV open near surface cycling gas only.
5/1997	POOH tbg, repaired GLV's. Atoka returned to production at 304 MCFD
10/20/2004	Clarton submits proposal to recomplete Atoka and Morrow
1/2005	Commence operations w/ PU. Atoka producing ~ 10 MCFD POOH w/ tbg and GLV's tbg parted with top of fish at 7,740'. 35 day fishing job. Sp'd eng leaks from 6,544'-6,577' Spent 20 more days fishing. Pushed all lost tools in hole to 13,070'. sp'd Atoka 'C' from 12,862'-12,865'
	Ran TCP guns and perforated: Morrow 'A' and 'B' perfs from 12,945'-13,055', 45 shots OA Swab Morrow 'A' and 'B' perfs. Fluid entry scattered and less than 10 BWPD
3/29/2005	Set packers to straddle Atoka perfs. Producing from Morrow A & B only.
4/6/2005	Surface build-up to 520 psi after 791 hrs, opened well to tank, pressure bled to 0 in 12 minutes Left well open to tank, started flowing ~ 3 MCFD
6/9/2005	RU swab unit, recovered 34 BW w/ IFL = 6,300' and FFL = 11,500' RD swab unit Flwg well to tank at 3 MCFD at 30 psi FTP
6/16/2005	RU CTU and treated Morrow perfs w/ 2,500 gal of ClaySafe and 16 tons of CO2 Making 6 MCFD and 0 BWPD.
6/28/2005	Dropped from report. Well making no gas.
4/17/2007	Commence operations to TA well. Pull existing tubing & pkr. Set CIBP's as shown.
4/21/2007	Perform MIT.

**Fish Detail:**  
 (Top to Bottom)  
 Fish on Pkr Fish, WL tool string,  
 1-1/2" Rope Soc, 1-1/2" KJ,  
 1-1/2" Wt. Bar, 1-1/2" Hyd Jars  
 1-1/2" KJ, 1-1/2" Spung Jars,  
 1-1/2" KJ, 2.175" OS Total Length= 19.1'  
 2.20" GR w/ 1-3/4" fishneck,  
 2-7/8" slip seq (7"x3"x7/8")  
 1-1/2"x8" GLV gas chamber  
 Pkr fish in hole- Arrow 1-X w/ 1/2" TP  
 2.188" RN Prof Nip  
 Fish on CIBP at 13,150'-1-1/2" RS,  
 1-1/2" Wt. Bar, 1-1/2" KJ, 1-1/2" Tube Jars, 1- and 1-3/4" OS. Length=10.75' and, (2) 1-1/2"x3" pig tail cutter bars

Production Casing  
 7-5/8" set at 11,990'

CIBP at 12,360'

CIBP at 12,887' w/ 35' cmt

5' tubing stub (chemically cut)  
 5-1/2" BP Arrow-Pak pkr set at 12,892'  
 2-3/8" 1.87 N nipple  
 (2) 2-3/8" 1.80 subs (6' each)  
 2-3/8" 1.87 NX nipple

Fish - see table above pushed to 13,070'

Production Liner  
 5-1/2" set at 13,758'

PBTD 13,130'  
 TD 13,758'

# BOLD ENERGY, LP

Antelope Ridge Unit #6  
1980' FNL & 1980' FEL, Sec 3-T24S-R34E  
Antelope Ridge Field  
Lea County, New Mexico

**See Attached Wellbore Schematic**

**Well Status:** Drilled in 1979 and completed as a Morrow / Atoka dual. Well was TA'd by Bold Energy in April of 2007 with a CIBP set at 6,444' in the 7-5-8" casing due to lack of production.

**Scope:** Perform squeeze cement work above Delaware interval to isolate for SWD injection. Perforate and stimulate Delaware intervals. Perform state injection test. Lay line to ARU facility and begin injection.

**Directions:** From Eunice, NM go south to Delaware Basin Road. Go approximately 22 miles West to Antelope Road. Turn South and go approximately 4 miles to Shell road. Continue south past CG to the first lease road on right and follow to location.

## **PROCEDURE TO CONVERT TO SWD IN DELAWARE FORMATION**

1. Procure the following prior to beginning workover:
  - o Baker 7-5/8" retrievable packer w/ L316 o/o tool and stainless 2.313" profile nickel plated and plastic coated ID.
  - o 2-7/8" 6.5# J-55 Internally Coated (TK70) Tubing
2. Clear location and install or test rig anchors as required.
3. All fluids used will be contained in steel pits or test tanks. Avoid any spills. Immediately report all spills to Donny Money at 432-661-8803.
4. MIT performed on 4/21/07.
5. MIRU pulling unit, reverse unit and steel pit.
6. ND WH. NU 5K psi BOP.
7. Test casing to 5,000 psi.
8. Move in +/- 6,500 ft of 2-7/8" 6.5# L80 work string from Bold Energy stock.
9. MIRU **Gray Wireline** WL unit with lubricator and packoff. RIH with 3-1/8" casing guns and perforate squeeze holes from 5,345' – 5,350' 4 spf 20 holes 0.42" EHD.
10. POOH with guns and STBY WL unit.
11. MIRU **Schlumberger** squeeze cement crew including 500 gallons of 7-1/2% HCL acid, 10 bbls CW7 and 200 sks Class C + 1% D174 + 0.15% D167 + 0.5% D65 + 0.2% D46. See attached Schlumberger squeeze procedure.
12. Establish circulation by pumping down 7-5/8" casing and taking returns up 7-5/8" x 10-3/4" annulus.

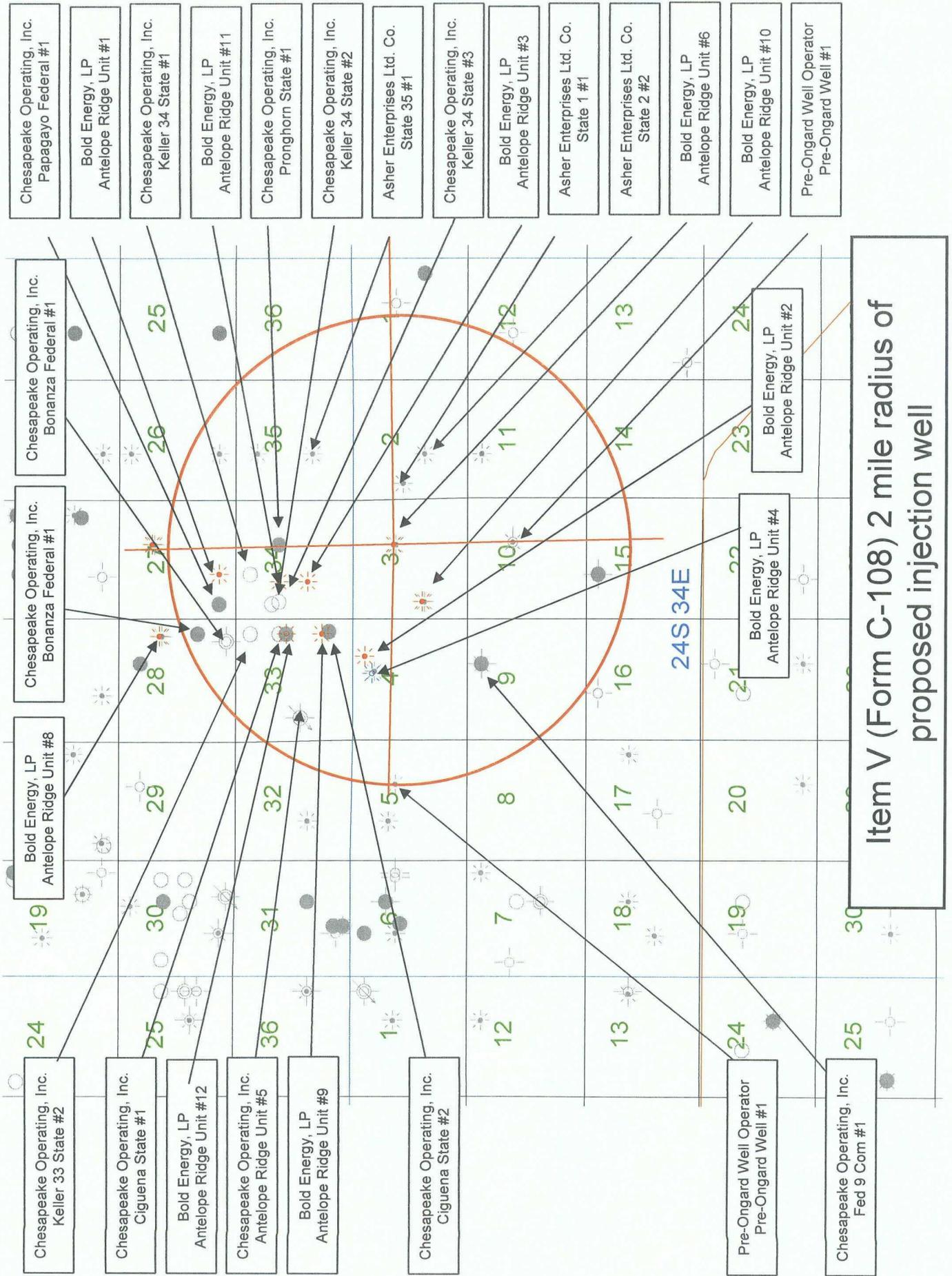
13. RIH with cement retainer on 2-7/8" tubing. Set retainer at 5,325'.
  14. Establish injection rate down tubing using fresh water. If an acceptable injection rate is not achieved, sting out of retainer, circulate acid to EOT, sting into retainer, displace acid and establish new injection rate while taking returns up 7-5/8" x 10-3/4" annulus.
  15. Once acceptable injection is established, pump 10 bbls FW and 10 bbls CW7 Chemical Wash ahead.
  16. Mix up and pump cement slurry – 200 sks Class C at 14.8 ppg (30.8 bbls) per SLB recommendation.
  17. Displace one bbl short of EOT with fresh water at 3 – 5 bpm.
  18. Sting out of the retainer and reverse out to completely clear the tubing string.
  19. POOH with tubing.
  20. The following morning RIH with bit on 2-7/8" tubing to drillout the squeeze cement and retainer. Clean out to CIBP at 6,444'. Circulate hole to fresh water. Test squeeze to 500 psi.
  21. RU **Gray Wireline** WL unit and run CBL from PBSD to TOC.
  22. Contact engineering with results of CBL. If cement squeeze work has provided sufficient isolation above injection zone, release pulling unit and prepare to perforate.
- NOTE: if isolation is not sufficient (minimum of 100' above and below 10-3/4" shoe) additional squeeze work will be required.
23. RU **Gray Wireline** WL unit, lubricator and packoff. Correlate to Schlumberger Borehole Compensated Sonic Log dated 6-24-79. Perforate Delaware as follows with Expendable Casing Guns loaded 6 spf, 120° phasing with 38 gm charges (or equivalent) to achieve a minimum 0.50" EHD and 10" formation penetration in 7-5/8" casing.

Delaware Perforation Schedule								
1	5227	to	5232	6 spf	120° Phasing	30 Shots	over	5 feet
2	5245	to	5250	6 spf	120° Phasing	30 Shots	over	5 feet
3	5259	to	5264	6 spf	120° Phasing	30 Shots	over	5 feet
4	5279	to	5289	6 spf	120° Phasing	60 Shots	over	10 feet
5	5308	to	5318	6 spf	120° Phasing	60 Shots	over	10 feet
6	5640	to	5645	6 spf	120° Phasing	30 Shots	over	5 feet
7	5672	to	5682	6 spf	120° Phasing	60 Shots	over	10 feet
8	5714	to	5724	6 spf	120° Phasing	60 Shots	over	10 feet
9	5737	to	5747	6 spf	120° Phasing	60 Shots	over	10 feet
10	5780	to	5785	6 spf	120° Phasing	30 Shots	over	5 feet
11	5805	to	5810	6 spf	120° Phasing	30 Shots	over	5 feet
12	5837	to	5842	6 spf	120° Phasing	30 Shots	over	5 feet
13	5986	to	5996	6 spf	120° Phasing	60 Shots	over	10 feet
14	6042	to	6052	6 spf	120° Phasing	60 Shots	over	10 feet
15	6071	to	6076	6 spf	120° Phasing	30 Shots	over	5 feet
16	6086	to	6091	6 spf	120° Phasing	30 Shots	over	5 feet
17	6113	to	6118	6 spf	120° Phasing	30 Shots	over	5 feet
18	6148	to	6158	6 spf	120° Phasing	60 Shots	over	10 feet
19	6232	to	6242	6 spf	120° Phasing	60 Shots	over	10 feet
20	6280	to	6290	6 spf	120° Phasing	60 Shots	over	10 feet
						Total	900 Shots	150 feet

24. RDMO WL unit.
25. ND BOPE. NU 5K psi frac valve.
26. Spot 1 frac tank with fresh water. Spot 1 lined frac tank and have **Weatherford** load with 15,000 gallons 15% HCL acid + 2 gpt surfactant + 1 gpt friction reducer + corrosion inhibitor for 130° F.
27. RU **Weatherford** acid equipment including computer monitoring equipment and HHP capable of achieving 30 bpm at 4,000 psi. Pressure test lines to 5,000 psi. Pump all 357 bbls of 15% HCL acid at 30 bpm (or maximum rate below 5,000 psi). Displace acid with exactly 400 bbls of fresh water (includes over-displacement volume). RDMO breakdown equipment.
28. Download pressure and rate data in 1-second intervals from all three treatments and e-mail to [shannon.klier@boldenergy.com](mailto:shannon.klier@boldenergy.com).
29. ND frac valve. NU BOPE.
30. TIH w/ 2-7/8" work string and SN to 5,200'. Commence swabbing to recover load. Once load + 100 bbls has been produced, obtain water samples for analysis.
31. POOH laying down work string.
32. PU and TIH with Nickel Plated Baker Retrievable Packer with Plastic Coated ID w/ L316 o/o tool and Stainless 2.313" profile on 2-7/8" 6.5# Internally Coated J-55 tubing.
33. Set packer at 5,200'. Release from o/o tool and circulate in packer fluid. Space out for 12K lbs compression and latch on to o/o tool. NU 5K psi wellhead.
34. Leave well shut in overnight.
35. RU **ProWireline** slickline unit. RIH with tandem pressure gauges to mid perf at 5,733'. Leave gauges on bottom for 1 hour. Pull gauge and download data. Email pressure data to [shannon.klier@boldenergy.com](mailto:shannon.klier@boldenergy.com).
36. MIRU 2 transports each containing 120 bbls of ARU lease production water and **Weatherford** pump truck and computer van for performing step rate injection test. Pump truck must be capable of maintaining rates from 0.25 to 3.0 bpm.
37. Perform injection test per the following schedule:

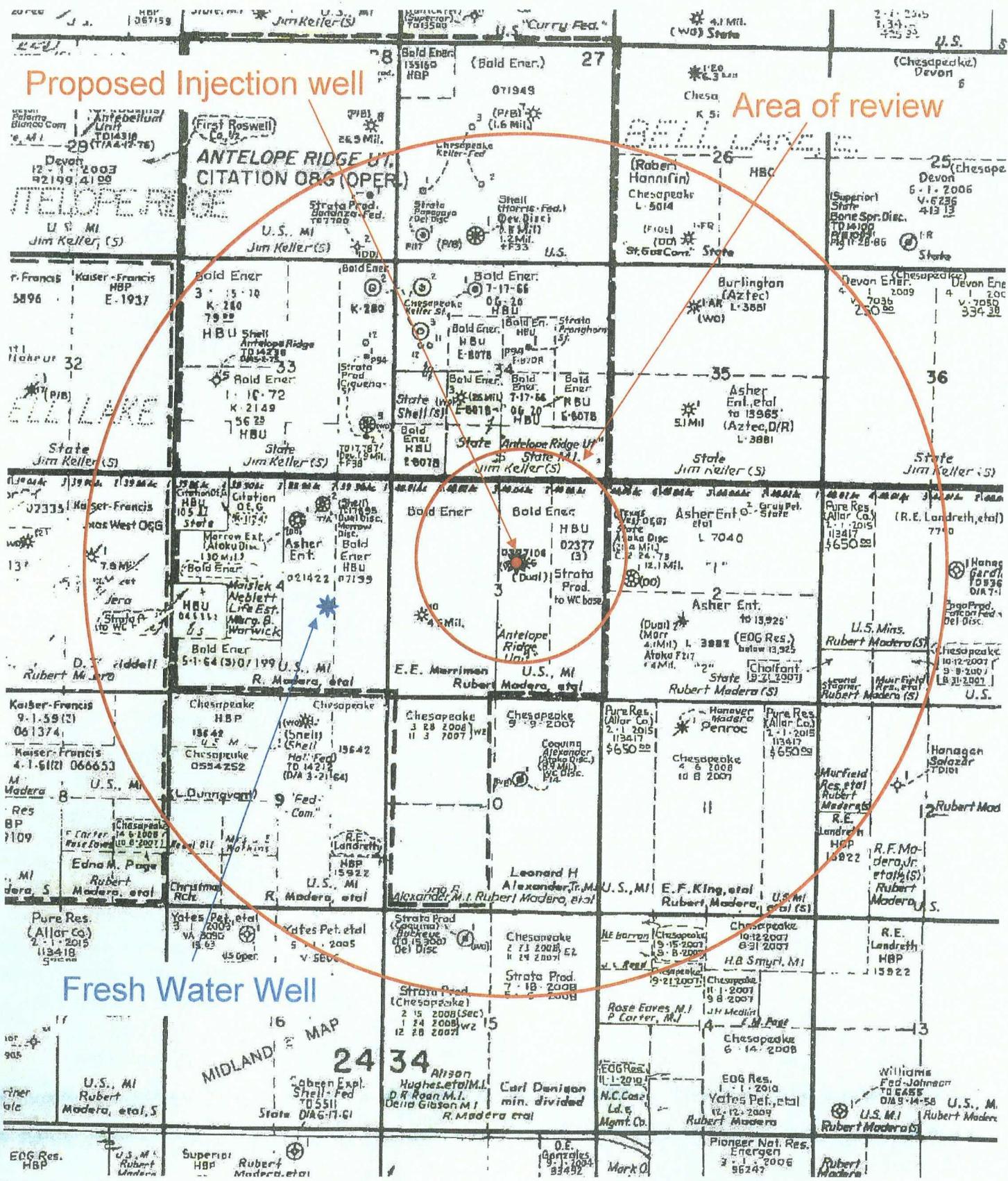
Injection Test						
	Rate (bpm)	Time (min)	Cumm. Time (min)	Volume (bbls)	Cumm. Vol (bbls)	Equivalent Rate (bpd)
Load Tubing	5.00	6	6	30.0	30	
Step Up 1	0.25	5	11	1.3	31	360
Step Up 2	0.50	5	16	2.5	34	720
Step Up 3	1.00	5	21	5.0	39	1440
Step Up 4	1.50	5	26	7.5	46	2160
Step Up 5	2.00	5	31	10.0	56	2880
Step Up 6	2.50	5	36	12.5	69	3600
Step Up 7	3.00	5	41	15.0	84	4320
Step Down 1	2.50	5	46	12.5	96	3600
Step Down 2	2.00	5	51	10.0	106	2880
Step Down 3	1.50	5	56	7.5	114	2160
Step Down 4	1.00	5	61	5.0	119	1440
Step Down 5	0.50	5	66	2.5	121	720
Step Down 6	0.25	5	71	1.3	123	360

38. Download pressure and rate data in 1-second intervals and e-mail to [shannon.klier@boldenergy.com](mailto:shannon.klier@boldenergy.com).
39. RDMO pump truck and transports.
40. Contact NMOCD and perform packer leakage test. Send NMOCD signed pressure chart to Midland office.
41. Turn well over to Donny Money for installation of flowline.



Item V (Form C-108) 2 mile radius of proposed injection well

# Antelope Ridge Unit #6 – ½ mile and 2 mile radius

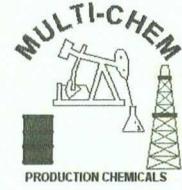


# C108 – Item VII (4)

## Water Analysis

The following analysis is calculated using the following water analyses in the indicated proportions:

Analysis #	Percent	Field	Lease	Well #
8380	5		Curry Federal # 2	
8382	95		Bold Energy ARU #11	



THE GAS ENHANCEMENT COMPANY

### DISSOLVED SOLIDS

CATIONS	mg/l	meq/l
Sodium, Na (calc)	18,153.05	789.26
Calcium, Ca	2,360.00	117.41
Magnesium, Mg	1,215.00	99.59
Barium, Ba	16.79	0.24
Iron, Fe	0.00	0.00

ANIONS	mg/l	meq/l
Hydroxyl, OH	0.00	0.00
Carbonate, CO3	0.00	0.00
Bicarbonate, HCO3	197.64	3.23
Sulfate, SO4	592.00	12.14
Chloride, Cl	31,650.00	891.55
Sulfide, S	0.00	0.00

### OTHER PROPERTIES

pH	6.8
Specific Gravity	1.0406
Dissolved Oxygen, (mg/l)	0.00
Dissolved Carbon Dioxide	109.41
Sulfide as H2S, (ppm)	7.75

Total Dissolved Solids (mg/l)	54,184.48
Total Ionic Strength	1.07
Maximum CaSO4, (calc.)	852
Maximum BaSO4, (calc.)	29

	mg/l	meq/l
Total Hardness	10,850.00	217.00

## Multi-Chem Scale Trak

### ESTIMATED MINERAL CONTENT AT SAMPLE TEMPERATURE

	meq/l	mg/l	lbs/kbbbl
CaCO3	0.00	0	0
CaSO4	12.52	852	299
BaSO4	0.25	29	10

#### Note:

Since scale forming molecules can exist in solution, refer to the CaCO3 saturation index for CaCO3, or the solubilities for CaSO4 and BaSO4, and compare with the calculated amounts above to determine if precipitated scale may be possible.

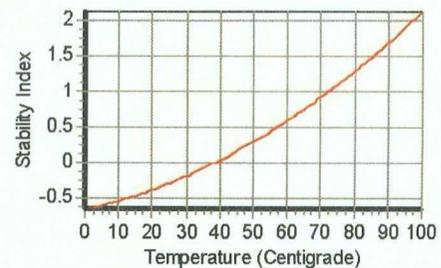
### Conclusion:

Calcium Carbonate scaling index is positive above 39 degrees Centigrade.  
Calcium Sulfate scale is indicated above 87 degrees Centigrade.  
Barium Sulfate scale is indicated at all temperatures.

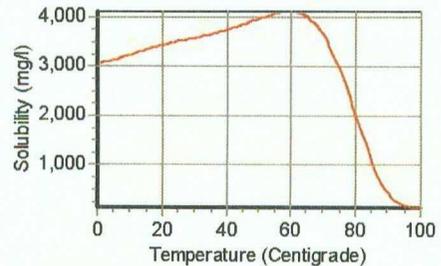
### Remarks:

### Scaling Indices vs. Temperature

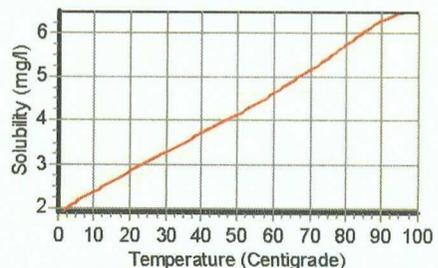
#### Calcium Carbonate Saturation Index



#### Calcium Sulfate Solubility



#### Barium Sulfate Solubility





Item # VII 5 (Form C-108)  
 Disposal Zone (Delaware) Formation Water Analysis

Water Samples for Well BELL LAKE UNIT 002  
 API = 3002508489  
 Formation = DEL  
 Field = SWD  
Current Water Production Information

**Instructions:**  
 Click For general information about this sample.  
 Click For scale calculation pages (Stiff Davis or Odde Tomson methods).  
 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 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.

Section 30 T23S R34E  
 660' FSL and 3300' FEL

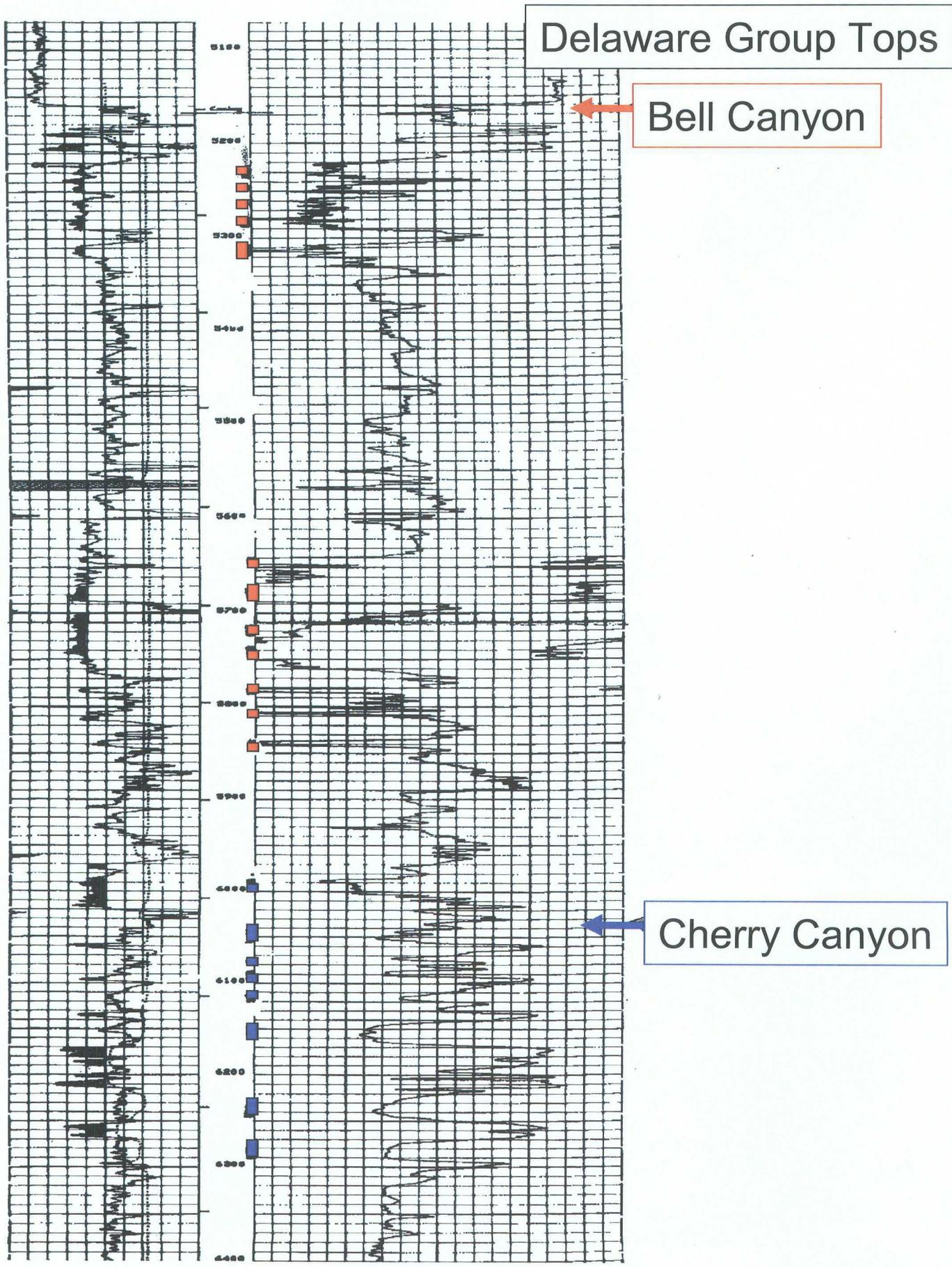
SampleID	T	R	S	SO4	CL	CO3	HCO3	Na	Ca	Mg		
4296	<input type="checkbox"/>	<input checked="" type="checkbox"/>	23S	34E	30	529	32200	null	451	null	null	null
<input type="checkbox"/> SELECT/DESELECT ALL <input type="button" value="Submit"/>												

Water Samples for Well BELL LAKE UNIT 007  
 API = 3002508367  
 Formation = DEL  
 Field = SWD  
Current Water Production Information

**Instructions:**  
 Click For general information about this sample.  
 Click For scale calculation pages (Stiff Davis or Odde Tomson methods).  
 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 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.

Section 1 T24S R33E  
 660' FNL and 660' FEL

SampleID	T	R	S	SO4	CL	CO3	HCO3	Na	Ca	Mg	
4347	<input type="checkbox"/>	<input checked="" type="checkbox"/>	24S	33E	01	749	53920	null	391	null	null
<input type="checkbox"/> SELECT/DESELECT ALL <input type="button" value="Submit"/>											



Delaware Group Tops

Bell Canyon

Cherry Canyon



# C108 - Item XI

Sep 15 06 03:09p

SUE HERDY

505-394-0056

p.2

09/15/2006 FRI 13:33 FAX 1 432 687 2607 OMEGA TREATING CHEMICALS →→ JOHN

001/002

DATE: 9/13/2006

OMEGA TREATING CHEMICALS, INC.  
2605 GARDEN CITY HWY.  
MIDLAND, TEXAS 79701

## WATER ANALYSIS REPORT

COMPANY NAME: BOLD ENERGY

LEASE NAME: MADERA FRESH WATER STA

WELL#\SAMPLE POINT: #1

1. WELLHEAD pH	6.98
2. H2S (QUALITATIVE)	0.00 PPM
3. CALCIUM (Ca)	160.00 Mg/L
4. MAGNESIUM (Mg)	24.30 Mg/L
5. IRON (Fe)	0.05 PPM
6. SODIUM	-39.67 Mg/L
7. CHLORIDE (Cl)	177.50 Mg/L
8. BICARBONATE (HCO3)	195.20 Mg/L
9. SULFATE (SO4)	3.2 Mg/L
10. TOTAL HARDNESS	500.00 Mg/L
11. TOTAL DISSOLVED SOLIDS	520.59 Mg/L
12. RESISTIVITY	9.35
13. CARBONATE SCALING TENDENCY	0.04
14. SULFATE SCALING TENDENCY	-21.18

BOPD \_\_\_\_\_

BWPD \_\_\_\_\_

REMARKS: \_\_\_\_\_

COPIES TO: JOHN NOGELMEIER, BILLY HOBBS

# C108 - Item XI

Sep 15 06 03:09p  
09/15/2006 FRI 13:33

SUE HERDY

505-394-0056

P.2

FAX 1 432 687 2607 OMEGA TREATING CHEMICALS ↔ JOHN

001/002

DATE: 9/13/2006

OMEGA TREATING CHEMICALS, INC.  
2605 GARDEN CITY HYW.  
MIDLAND, TEXAS 79701

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BOPD \_\_\_\_\_

BWPD \_\_\_\_\_

REMARKS: \_\_\_\_\_

COPIES TO: JOHN NOGELMEIER, BILLY HOBBS

## ARU #6 - Surrounding Leasehold Operators

<u>Operator</u>	<u>Address</u>	<u>Contact / Name</u>	<u>e-mail</u>	<u>Phone #</u>
<b>1/2 Mile Radius</b>				
Chesapeake Operating	6100 N. Western Ave., Oklahoma City, OK 73154-0496	Jarvis A. Hensley, District Mgr. Permian	jensley@chkenergy.com	405 848 8000

<b>2 Mile Radius</b>				
Chesapeake Operating, Inc.	6100 N. Western Ave., Oklahoma City, OK 73154-0496	Jarvis A. Hensley, District Mgr. Permian	jensley@chkenergy.com	405 848 8000
Asher Enterprises, Ltd. Co.	1903 Savannah Drive, Artesia, NM 88210	Kevin Jones		
Cimarex Energy Company	508 W. Wall, Suite 600, Midland, TX 79701	Jeff Gotcher	jgotcher@cimarex.com	432 571 7823
Burlington Resources Oil and Gas Company	P.O. Box 51810, Midland, TX 79710-1810	Steve Burke	sburke@br-inc.com	432 688 6038
Concho Resources	550 W. Texas, Suite 1300, Midland, TX 79701	Robert Ready	rready@conchoresources.com	432 685 4345
Allar Company	P.O. Box 1567, Graham, TX 76450	Jack Graham	allar@allarcompany.com	940 549 0077
BLM	P.O. Box 27115, Santa Fe, NM 87502-0115	Linda Rundell		505 438-7502
State of NM	P.O. BOX 1148 Santa Fe, NM 87504-1148	Patrick H. Lyons		505 827 5760
Chevron U.S.A. Inc.	15 Smith Rd., Midland, TX 79705	Denise Beckham	dkbe@chevrontexaco.com	432 687 7235
Kaiser Francis	P.O. Box 21468, Tulsa, OK	Wayne Fields	WayneF@ktoc.net	918 494 0000



3106 N. Big Spring St. Ste. 100  
Midland, TX 79705  
Tel: (432) 685-9158

August 22, 2007

Lovington Daily Leader  
P.O. box 1717  
Lovington, NM 88260-1717

RE: Legal Publications

Enclosed herewith please find Legal Notice to be published (1) time only in your newspaper at the earliest possible date.

Please forward an Affidavit of Publication along with your invoice to:

Gray Surface Specialties  
ATTN: Dwaine Moore  
3106 North Big Spring St. Ste. 100  
Midland, TX 79705

Should you have any questions regarding this matter please contact this office. Thank you for your cooperation.

Sincerely,

Dwaine Moore  
Gray Surface Specialties,  
432-685-9158

9199 9886 2000 0660 5002

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City, State, ZIP+4			
Lovington, NM 88260-1717			
PS Form 3800, June 2002 See Reverse for Instructions			



3106 N. Big Spring St. Ste. 100  
Midland, TX 79705  
Tel: (432) 685-9158

August 23, 2007

Bureau of Land Management  
PO Box 27115  
Santa Fe, NM 87502-0115

RE: Antelope Ridge Unit #6  
Unit Letter "G", Section 3, T24S, R34E  
1980' FNL & 1980' FEL  
Lea County, NM

To Whom It May Concern:

In accordance with the Rules and Regulations of the Oil Conservation Division of the State of New Mexico, you are being provided a copy of the C-108 Application for Authorization to Inject into the above captioned well.

Any questions about the permit can be directed to Dwaine Moore at 432-685-9158. Any objections or request for hearing must be files with the Oil Conservation Division within fifteen (15) days from the date received. The OCD address is 1220 S. Saint Francis Drive, Santa Fe, NM 87504, 505-476-3440.

Sincerely,

Dwaine Moore  
Regulatory Specialist  
Gray Surface Specialties,  
Agent for Bold Energy, LP  
432-685-9158

0899 9896 2000 0650 7005 0390 0002 9888 6830

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3106 N. Big Spring St. Ste. 100  
Midland, TX 79705  
Tel: (432) 685-9158

August 23, 2007

Chesapeake Operating  
6100 N. Western Ave.,  
Oklahoma City, OK 73154-0496

RE: Antelope Ridge Unit #6  
Unit Letter "G", Section 3, T24S, R34E  
1980' FNL & 1980' FEL  
Lea County, NM

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City, State, ZIP+4 0klahoma City, OK 73154	
PS Form 3800, June 2002 See Reverse for Instructions	



3106 N. Big Spring St. Ste. 100  
Midland, TX 79705  
Tel: (432) 685-9158

August 23, 2007

Rubert Madera Trust  
c/o Bert madders  
Box 1224  
Jal, NM 88252

RE: Antelope Ridge Unit #6  
Unit Letter "G", Section 3, T24S, R34E  
1980' FNL & 1980' FEL  
Lea County, NM

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Regulatory Specialist  
Gray Surface Specialties,  
Agent for Bold Energy, LP  
432-685-9158

7005 0390 0002 9888 6823

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Street, Apt. No., or PO Box No.	Box 1224
City, State, ZIP+4	Jal, NM 88250
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**SURFACE OWNER, GRAZING LEASSEE, LEASE OWNER  
AND OFFSET OPERATORS**

Antelope Ridge Unit No. 4  
1980' FNL & 1980' FEL  
Unit Letter "G", Section 3, T24S, R34E  
Lea County, NM

**Surface Owner of Well Site**

Rubert Madera Trust  
c/o Bert Madera  
130 Madera Road  
Jal, NM 88251

**Mineral Owner, Ditches, and Canals**

Bureau of Land Management  
1474 E. Rodeo Road  
Santa Fe, NM 87505

**Operators of Record**

Cheaspeake Operating  
6100 N. Western Ave.  
Oklahoma City, OK 73154-0496

**GRAY**

*Surface Specialties*

RECEIVED

SEP 19 AM 11 53

3106 N. Big Spring St. Ste. 100  
Midland, TX 79705  
Tel: (432) 685-9158

September 17, 2007

New Mexico Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, New Mexico

Attention: William Jones

RE: **Application for Salt Water Disposal**  
Antelope Ridge Unit No. 6  
API No. 30-025-26291  
Delaware Formation  
Unit Letter "G" Section 3 T24S R34E  
Lea County, New Mexico

Mr. Jones,

Per our phone conversation on September 17, 2007, I am enclosing the return receipt and the affidavit of publication for the above referenced well.

We respectfully request that this application be approved administratively at the earliest possible time, in order for the such operation to move forward. Please understand that Gray Surface Specialties is acting as an Agent for Bold Energy LP, if there are any questions please feel free to contact me at 432.685.9158.

Thank you,



Heather Richardson  
Agent for Bold Energy LP.

Attachments

# 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 daily 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, beginning with the issue of August 30, 2007 and ending with the issue of August 30, 2007.

And that the cost of publishing said notice is the sum of \$ 41.80 which sum has been (Paid) as Court Costs.

Joyce Clemens

Subscribed and sworn to before me this 12<sup>th</sup> day of September 2007.

Debbie Schilling

Debbie Schilling  
Notary Public, Lea County, New Mexico  
My Commission Expires June 22, 2010

## LEGAL NOTICE APPLICATION FOR WATER DISPOSAL

Bold Energy LP, 415 W. Wall Suite 500, Midland, Texas 79701, (Contact: Shannon Klier 432-686-1100) has filed application with the Oil Conservation Division, Energy, Minerals and Natural Resources Department, State of New Mexico, for Administrative Approval and authority to inject salt water into the Antelope Ridge Unit No. 6 well located 1980' FNL and 1980' FEL of Section 3, Township 24 South, Range 34 East, Lea County, New Mexico.

The purpose of the water injection well is to dispose of salt water produced from the Antelope Ridge Atoka field as currently designated by the Oil Conservation Division.

Water to be disposed will be injected into the Delaware formation at an interval between 5,227 feet and 6,290' from surface.

The minimum injection rate is expected to be 500 barrels of water per day. The maximum injection rate is expected to be 2000 barrels of water per day.

The minimum injection pressure is expected to be 100 psi. The maximum injection pressure is expected to be 1034 psi.

Any interested party may file an objection to the Application or may request a public hearing. Any objection or request for hearing must be filed with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505 within 15 days from the date of publication.

Bold Energy, LP

By:  
Shannon L. Klier  
415 W. Wall,  
Suite 500  
Midland, Texas  
79701

Telephone 432-686-1100  
Published in the  
Lovington Leader August  
30, 2007.



3106 N. Big Spring St. Ste. 100  
 Midland, TX 79705  
 Tel: (432) 685-9158

August 23, 2007

Chesapeake Operating  
 6100 N. Western Ave.,  
 Oklahoma City, OK 73154-0496

RE: Antelope Ridge Unit #6  
 Unit Letter "G", Section 3, T24S, R34E  
 1980' FNL & 1980' FEL  
 Lea County, NM

To Whom It May Concern:

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Sincerely,

Dwaine Moore  
 Regulatory Specialist  
 Gray Surface Specialties,  
 Agent for Bold Energy, LP  
 432-685-9158

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1. Article Addressed to:

Chesapeake Operating  
 6100 N. Western Ave.  
 Oklahoma City, OK 73154  
 Attn: Jarvis A. Hershey

2. Article Number

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  
 Addressee

*Mr. Hershey*

B. Received by (Printed Name) C. Date of Delivery

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 If YES, enter delivery address below:  No



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 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

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August 23, 2007

Rubert Madera Trust  
 c/o Bert madders  
 Box 1224  
 Jal, NM 88252

RE: Antelope Ridge Unit #6  
 Unit Letter "G", Section 3, T24S, R34E  
 1980' FNL & 1980' FEL  
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<p>1. Article Addressed to:        Rubert Madera Trust        c/o Bert Madera        Box 1224        Jal, NM [redacted] 88252</p>	<p>3. Service Type  <input type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
2. Article Number _____	

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August 22, 2007

Lovington Daily Leader  
 P.O. box 1717  
 Lovington, NM 88260-1717

RE: Legal Publications

Enclosed herewith please find Legal Notice to be published (1) time only in your newspaper at the earliest possible date.

Please forward an Affidavit of Publication along with your invoice to:

Gray Surface Specialties  
 ATTN: Dwaine Moore  
 3106 North Big Spring St. Ste. 100  
 Midland, TX 79705

Should you have any questions regarding this matter please contact this office. Thank you for your cooperation.

Sincerely,

Dwaine Moore  
 Gray Surface Specialties,  
 432-685-9158

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 Lovington, NM 88260-1717  
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<p>1. Article Addressed to:            The Lovington Daily Leader            P.O. Box 1717            Lovington, NM 88260-1717</p>	<p>3. Service Type  <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number            (Transfer from service label)</p>	<p>7005 0390 0002 9888 6816</p> <p>Domestic Return Receipt</p>



3106 N. Big Spring St. Ste. 100  
Midland, TX 79705  
Tel: (432) 685-9158

August 23, 2007

Bureau of Land Management  
PO Box 27115  
Santa Fe, NM 87502-0115

RE: Antelope Ridge Unit #6  
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<p>1. Article Addressed to: <u>Bureau of Land Management P.O. Box 27115 Santa Fe, NM 87502</u></p> <p>Attn: <u>Linda Rundell</u></p>	<p>3. Service Type  <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p>
<p>2. Article Number (Transfer from service label)</p>	<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
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