

## Jones, William V., EMNRD

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**From:** Jones, William V., EMNRD  
**Sent:** Tuesday, February 02, 2010 3:42 PM  
**To:** 'sjbelt@basspet.com'  
**Cc:** Ezeanyim, Richard, EMNRD; Warnell, Terry G, EMNRD; Macquesten, Gail, EMNRD; Sanchez, Daniel J., EMNRD  
**Subject:** Disposal application from BOPCO, L.P. : 30-015-33859 Brushy Canyon/Avalon

Hello Sandra:

Reviewed your application today and have a couple comments and requests:

- a. Please add an "after conversion" wellbore diagram to your C-108 showing the injection tubing and packer inside the casing.
- b. I can no longer process this application administratively for two reasons:
  - a. BOPCO has 6 inactive wells and is only allowed 5 inactive wells per OCD Rule 5.9. This rule 5.9 prohibits any injection or disposal permit to be granted until the number of inactive wells is reduced. Please work with Daniel Sanchez or Gail MacQuesten of this office to come into compliance with Rule 5.9.
  - b. This is an application to convert a low volume producing well to dispose into a producing interval with active offsetting wells, this type of application must now be handled at an examiner hearing. I believe we have processed some of these PLU SWDs administratively in prior years, but the new policy is to set this type of application to a hearing.

### AFTER THE RULE 5.9 ISSUES ARE RESOLVED

Send a complete C-108 to your attorney and ask them to set this for a hearing docket. Some testimony may be needed from an engineer at the hearing – or possibly engineering affidavit. The hearing officer would likely ask for engineering justification for disposal into a producing interval. A production decline plot from 2005 until present would be helpful as well as fluid parameters and rudimentary water-flood calculations – whomever hears this case may have other or differing questions. If the intent is to sweep oil to offsetting wells, please apply for a waterflood as the type of hearing case.

Regards,

William V. Jones PE  
New Mexico Oil Conservation Division  
1220 South St. Francis  
Santa Fe, NM 87505  
505-476-3448

DATE IN <u>1-6-10</u>	SUSPENSE	ENGINEER <u>Jones</u>	LOGGED IN <u>1-6-10</u>	TYPE <u>SWD</u>	APP NO. <u>PTG-W 100631766</u>
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ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



BoPco, L.P.

2010 JAN -5 P 2:46

**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.

Sandra J. Belt  
 Print or Type Name

Sandra J. Belt  
 Signature

Regulatory Clerk  
 Title

1.5.10  
 Date

sjbelt@basspet.com  
 e-mail Address

**BOPCO, L. P.**  
6 DESTA DRIVE, SUITE 3700 (79705)  
P. O. BOX 2760  
MIDLAND, TEXAS 79702

(432) 683-2277

FAX (432) 687-0329

December 31, 2009

Re: **Notice of Application for Authorization  
to Convert to SWD Well  
Poker Lake Unit #213  
Eddy County, New Mexico  
File: 100-WF: PLU213.C108**

RECEIVED OCD  
2010 JAN 4 P 12:12

Oil Conservation Division  
Attention: William Jones  
1220 S. St. Francis  
Santa Fe, New Mexico 87505

Mr. Jones:

Enclosed please find BOPCO, L.P.'s **Application for Authorization to Convert** for disposal purposes only into the Poker Lake Unit #213, Located in Section 18, T24S, R30E, Eddy County, New Mexico.

If additional information is required, please contact Sandra J. Belt at the letterhead address, phone number or via email at [sjbelt@basspet.com](mailto:sjbelt@basspet.com).

Sincerely,



Sandra J. Belt  
Regulatory Clerk

sjb  
Attachments

CC: BLM

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE : \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance   X   Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? \_\_\_\_\_ Yes \_\_\_\_\_ No
- II. OPERATOR: BOPCO, L.P. (OGRIID)  
ADDRESS : P O Box 2760 Midland Tx 79702  
CONTACT PARTY : Sandra J. Belt ext. 149 PHONE : (432)683-2277
- III. WELL DATA: Complete the data required on the reverse side of this form for each well processed 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 geological data on the injection zone including appropriate lithologic detail, geological 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 source 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: Sandra J. Belt ext. 149 TITLE: Regulatory Clerk  
SIGNATURE: Sandra J. Belt DATE: 12/30/2009  
E-MAIL ADDRESS: sjbelt@basspet.com
- \* If the information required under Sections VI, VII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstance of the earlier submittal: \_\_\_\_\_

### III. Well Data

A. 1) Lease name:

Poker Lake Unit

Well #:

213

Section:

18

Township:

24S

Range:

30E

Footage:

860' FSL & 660' FEL

2) Casing Info:

Casing size	Set depth	Sacks cmt	Hole size	TOC	Method
8-5/8" 32# J-55 ST&C csg	454	860	12-1/4"	Surface	Circulated
5-1/2" 15 & 15.5# N80/L80	7596	845	7-7/8"	Surface	Circulated

3) Tubing to be used (size, lining material, setting depth):

2-7/8" 17# J-55 Seal Tite IPC tbg set @ 7,150'

4) Name, model, and depth of packer to be used:

Lokset Nickel Plated EXT/INT PC Pkr set @ 7,150'

B. 1)

Name of the injection formation and, if applicable, the field or pool name:  
Nash Draw (Delaware/BS Avalon Sand)

2) The injection interval and whether it is perforated or open hole:

The wellbore will be perforated from 7,038' - 7,460'

3) State if the well was drilled for injection or, if not, the original purpose of the well:

Drill & complete Delaware development well.

4) Give the depths of any other perforated intervals and detail on the sacks of cement or BPs used to seal off such perforations:

N/A

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:

Higher: None

Lower: Bone Spring Sand @ approximately 7,450'



LEASE: POKER LAKE UNIT

WELL #: 213

FIELD: NASH DRAW DELAWARE

LOCATION: 860' FSL &amp; 660' FEL, SECTION 18, T24S, R30E

COUNTY: EDDY

ST: NM

API: 30-015-33859

## PROPOSED

KB: 3215'

GL: 3195'

SPUD DATE: 1/13/2005

COMP DATE: 2/22/2005

## SURFACE CASING

SIZE: 8-5/8"  
 WT/GRD: 32# J-55  
 CSA: 454'  
 SX: 100 / 200 PBCZ / PREM+  
 SX: 560 PREM+  
 CIRC: Y W/O RETURNS  
 TOC: SURF TOP OUT  
 HOLE SIZE: 12-1/4" 0-454'

## PRODUCTION CASING

SIZE: 5-1/2" (orig csg cut & replaced)  
 WT/GRD: 15.5# N80 0-5050'  
 WT/GRD: 15.5# L80 5050-7596'  
 CSA: 7596'  
 SX: 2799 sx POZ C 50 sx Class C  
 CIRC: Y  
 TOC: Surface by Top Out  
 HOLE SIZE: 7-7/8" 454-7600'

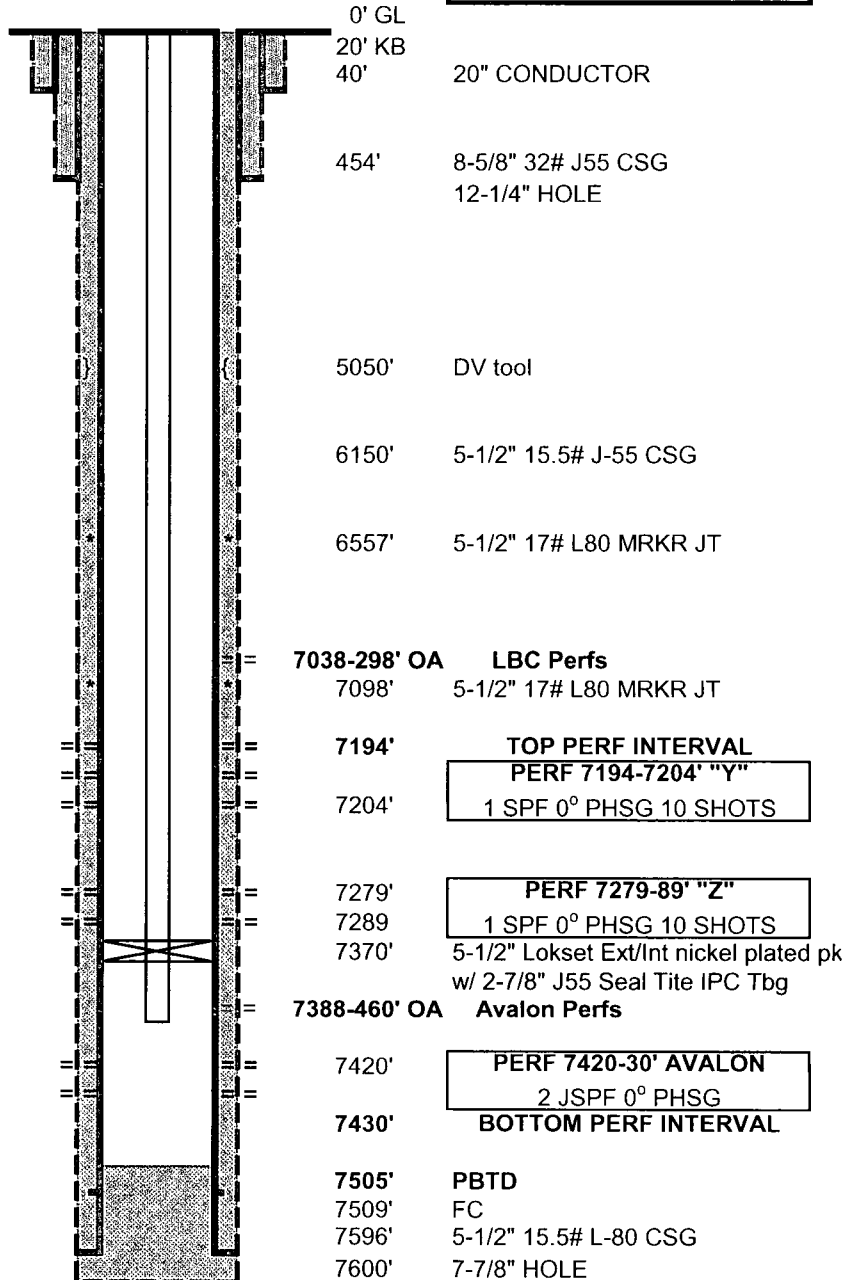
## TUBING DATA

## RODS &amp; PUMP DATA

## PERFORATION DATA

02/05 PERF 7420-30' AVALON LOAD CSG W/  
 16 bbls 2% KCl. BD perfs w/ 870#. Pmp spot  
 acid away w/ 20 bbls 2% KCl @ 4 BPM & 800#.  
 ISIP 750#. F/ 154.7kg PW + 26.7k# 14/30 LITE  
 PROP + 3k# 16/30 SUPER LC. FLUSH W/ 7kg  
 FW. LOST TTL 320 BPW TO PERFS.

03/05 PERF 7279-89 "Z", 7194-7204' "Y"  
 F: 20.7kg PW+73kg Lightning 2500+15.9k#  
 14/30 Lite Prop+185k# 16/30 Ottawa+105k#  
 16/30 Super LC



PBSD: 7505'

TD: 7600'

Updated: 12/30/2009

Author: ezg

Engr: JBB

RECEIVED

DEC 28 2009

**Affidavit of Publication**

**BOPCO WTD PRODUCTION**

State of New Mexico,  
County of Eddy, ss.

**Kathy McCarroll**, being first duly sworn,  
on oath says:

That she is the Classified Supervisor of the Carlsbad Current-Argus, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof on the date as follows, to wit:

December 23 2009

That the cost of publication is **\$56.64** and that payment thereof has been made and will be assessed as court costs.

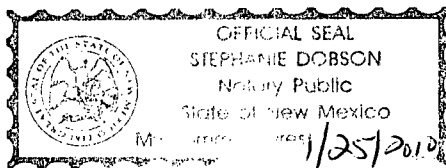
*Kathy McCarroll*

Subscribed and sworn to before me this

23<sup>rd</sup> day of December, 2009  
*Stephanie Dobson*

My commission Expires on 1/25/2010

Notary Public



December 23, 2009

**NOTICE OF APPLICATION FOR SALT WATER DISPOSAL WELL PERMIT**

BOPCO, L.P. has applied to the New Mexico Oil Conservation Division for a permit to dispose of produced salt water or other oil and gas waste into a porous formation productive of oil or gas.

The applicant proposes to dispose of produced water or other oil and gas waste into the Poker Lake Unit #213 (Delaware Formation). The maximum injection pressure will be 1,408 psi and the maximum rate will be 2,500 bbls produced water/day. The proposed disposal well is located 9 miles east of Malaga, New Mexico in Section 18, T24S, R30E, Eddy County, New Mexico. The produced salt water will be disposed at a subsurface depth of 7,038-7,460'.

Any questions concerning this application should be directed to Sandra J. Belt, Regulatory Clerk, BOPCO, L.P., P.O. Box 2760, Midland, Texas 79702-2760, (432) 683-2277 (ext. 149).

Interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 S. St. Francis Dr., Santa Fe, New Mexico 87505 within 15 days.



# Injection Permit Checklist (11/30/09)

Case \_\_\_\_\_ R- \_\_\_\_\_ SWD \_\_\_\_\_ WFX \_\_\_\_\_ PMX \_\_\_\_\_ IPI \_\_\_\_\_ Permit Date \_\_\_\_\_ UIC Qtr \_\_\_\_\_

# Wells 1 Well Name: POKER LAKE UNIT #213

API Num: (30-) 015-33859 Spud Date: 1/13/05 New/Old: N (UIC primacy March 7, 1982)

Footages 860BSL/660FEL Unit P Sec 18 Tsp 245 Rge 30E County EDDY

Operator: Borco, L.P. Contact Sandra J. Balt

OGRID 260737 RULE 5.9 Compliance (Wells) 6/3/07 (Finan Assur) OK

Operator Address: 02 PO BOX 2760, MIDLAND, TX, 79702  
6 DESTA DRIVE, SUITE 3700, MIDLAND, TX 79705

Location and Current Status: Producing

Planned Work to Well: Convert Planned Tubing Size/Depth: 27/8 @ 7150'

	Sizes Hole.....Pipe	Setting Depths	Cement Sx or Cf	Cement Top and Determination Method
Existing <input checked="" type="checkbox"/> Surface	<u>12 1/4 8 5/8</u>	<u>454</u>	<u>860</u>	<u>CIRC</u>
Existing <input type="checkbox"/> Intermediate				
Existing <input checked="" type="checkbox"/> Long String	<u>7 7/8 5 1/2</u>	<u>7596</u>	<u>845</u>	<u>CIRC 3337 TS. OLD</u>

DV Tool 5050 Linear Open Hole Total Depth 7150' CIRC = New

Well File Reviewed ☒

Diagrams: Before Conversion ☒ After Conversion ☒ Elogs in Imaging File: ☒

Intervals:	Depths	Formation	Producing (Yes/No)
Above (Name and Tool)			
Above (Name and Tool)	<u>7033</u>	<u>Top lower Brushy Canyon 8 A</u>	
Injection.....	<u>7038</u>	<u>Del</u>	
Interval TOP:	<u>7038</u>		
Injection.....	<u>7460</u>	<u>Bore SPRING</u>	
Interval BOTTOM:	<u>7460</u>		
Below (Name and Tool)	<u>7318</u>	<u>Top Bore SPRING</u>	

7 mi E. of Malaga

Sensitive Areas: Capitan Reef Cliff House Salt Depths 618'-3288'

..... Potash Area (R-111-P)..... Potash Lessee..... Noticed?.....

Fresh Water: Depths: 7034' Wells No wells Analysis? ✓ Affirmative Statement ✓

Disposal Fluid Sources: Same water Analysis? ✓

Disposal Interval Production Potential/Testing/Analysis Analysis: Production Declined

Notice: Newspaper(Y/N) ☒ Surface Owner BLM Mineral Owner(s) \_\_\_\_\_

RULE 26.7(A) Affected Parties: Borco only

Area of Review: Adequate Map (Y/N) ☒ and Well List (Y/N) ☒

Active Wells 9 Num Repairs 0 Producing in Injection Interval in AOR Yes

..P3A Wells 0 Num Repairs 0 All Wellbore Diagrams Included? Yes

Questions to be Answered:

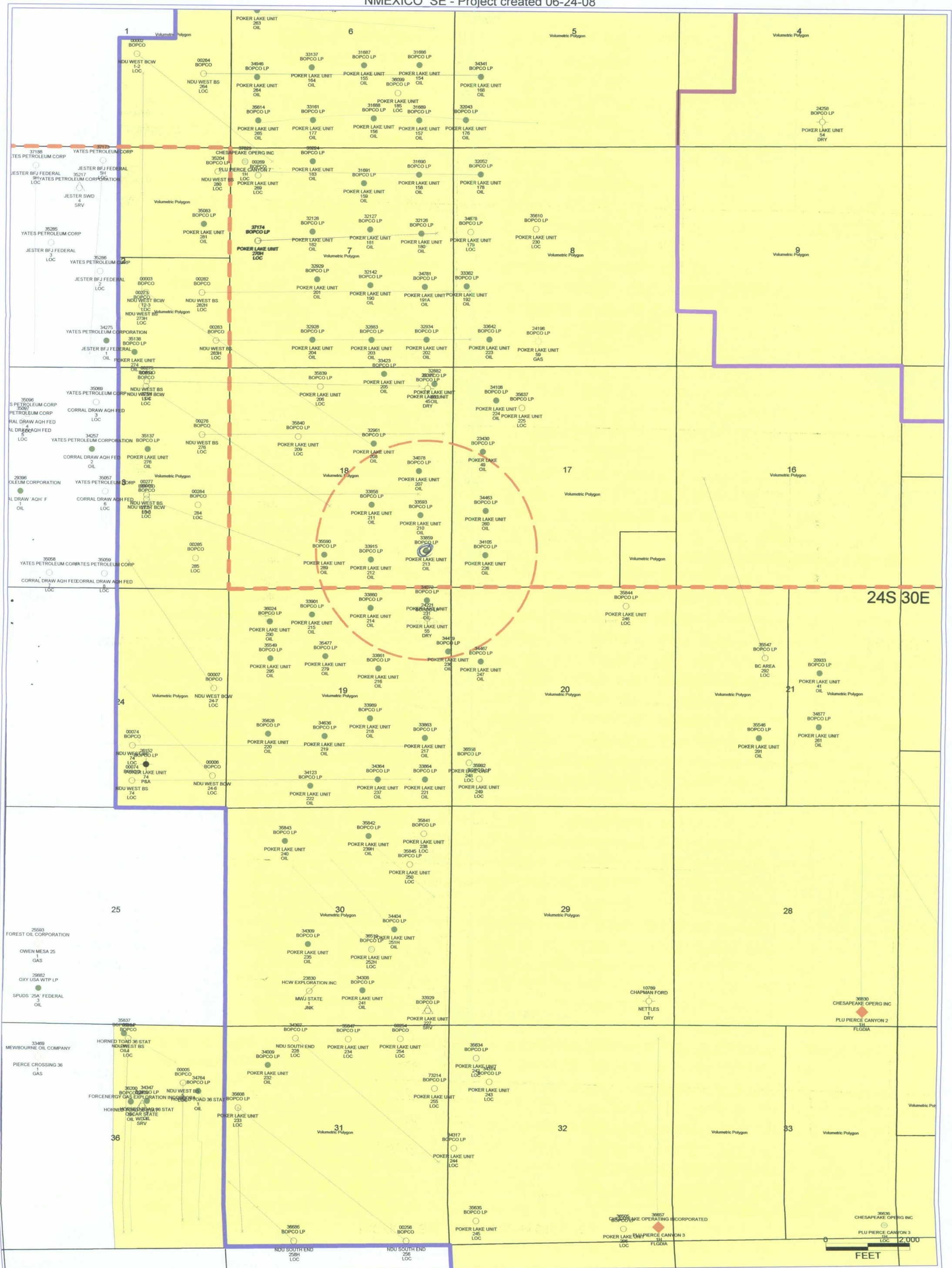
Borco operates P.L.U.  
Send Production Plot. Reason for THIS well.

Required Work on This Well: \_\_\_\_\_ Request Sent \_\_\_\_\_ Reply: \_\_\_\_\_

AOR Repairs Needed: \_\_\_\_\_ Request Sent \_\_\_\_\_ Reply: \_\_\_\_\_

\_\_\_\_\_ Request Sent \_\_\_\_\_ Reply: \_\_\_\_\_

NMEXICO SE - Project created 06-24-08



<b>US Postal Service</b> <b>Certified Mail Receipt</b> <i>Domestic Mail Only</i> <i>No Insurance Coverage Provided</i>	Postage	\$	Postmark Here
	Certified Fee		
	Return Receipt Fee (Endorsement Required)		
	Restricted Delivery Fee (Endorsement Required)		
	Total Postage & Fees	\$	
Sent To: <b>Oil Conservation Division</b> <b>Attn: William Jones</b> <b>1220 S St. Francis</b> <b>Santa Fe New Mexico 87505</b> <b>PLU 213 Dsp App</b> <b>12.31.09</b>			
PS Form 3800, January 2005		US Postal Service	<b>Certified Mail Receipt</b> 2

<b>US Postal Service</b> <b>Certified Mail Receipt</b> <i>Domestic Mail Only</i> <i>No Insurance Coverage Provided</i>	Postage	\$	Postmark Here
	Certified Fee		
	Return Receipt Fee (Endorsement Required)		
	Restricted Delivery Fee (Endorsement Required)		
	Total Postage & Fees	\$	
Sent To: <b>Bureau of Land Management</b> <b>620 E. Greene St.</b> <b>Carlsbad NM 88220-6292</b> <b>PLU #213 Dsp App</b> <b>12-31-09</b>			
PS Form 3800, January 2005		US Postal Service	<b>Certified Mail Receipt</b> 2

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

NMOC

FORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM02860
2. Name of Operator BASS ENTERPRISES PRODUCTION CO		6. If Indian, Allottee or Tribe Name
3a. Address P O BOX 2760 MIDLAND, TX 79702		7. If Unit or CA/Agreement, Name and/or No. NMNM71016X
3b. Phone No. (include area code) Ph: 432-683-2277		8. Well Name and No. POKER LAKE UNIT 213
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 18 T24S R30E SESE 860FSL 660FEL 32.12458 N Lat, 103.54516 W Lon		9. API Well No. 30-015-33859-00-X1
		10. Field and Pool, or Exploratory NASH DRAW-DELAWARE
		11. County or Parish, and State EDDY COUNTY, NM

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

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

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

Spud well @ 4:30 pm on 1/13/05. Drilled 12-1/4" hole to 454'. Ran 11 jts 8-5/8", 32#, J-55, STC casing set @ 454'. Cement with 860 sx Permian Basin Critical Zone + 1/4# Flocele + 10# Gilsonite and Premium Plus + 2% and 3% CaCl cement. Drilled 7-7/8" hole to 7600'. Ran 151 jts 5-1/2" 15.5# J-55, LTC and 55 jts 5-1/2" 15.5# L-80, LTC casing set @ 7596'. Cement w/845 sx of Premium Plus + 2% zonestal. TOC by Temp Survey @ 3337'. Release Rig @ 4:00 pm 1/31/05. Prep for completion.

14. Thereby certify that the foregoing is true and correct. Electronic Submission #53741 verified by the BLM Well Information System For BASS ENTERPRISES PRODUCTION CO, sent to the Carlsbad Committed to AFMSS for processing by LINDA ASKWIG on 02/04/2005 (05LA0325SE)	
Name (Printed/Typed) CINDI GOODMAN	Title AUTHORIZED REPRESENTATIVE
Signature (Electronic Submission)	Date 02/03/2005

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By <b>ACCEPTED</b>	ALEXIS C SWOBODA Title PETROLEUM ENGINEER <i>acs</i>	Date 02/07/2005
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office Carlsbad

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

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***



**EIGHT POINT DRILLING PROGRAM  
BASS ENTERPRISES PRODUCTION CO.**

**NAME OF WELL: Poker Lake Unit #213**

**LEGAL DESCRIPTION - SURFACE: 860' FSL & 660' FEL, Section 18, T-24-S, R-30-E, Eddy County, New Mexico.**

**POINT 1: ESTIMATED FORMATION TOPS**

(See No. 2 Below)

**POINT 2: WATER, OIL, GAS AND/OR MINERAL BEARING FORMATIONS**

Anticipated Formation Tops: KB 3218' (est) GL 3198'

<u>FORMATION</u>	<u>ESTIMATED TOP FROM KB</u>	<u>ESTIMATED SUBSEA TOP</u>	<u>BEARING</u>
T/Rustler	358'	+2860'	Barren
B/Rustler	618'	+2600'	Barren
T/Salt	668'	+2550'	Barren
B/Salt	3288'	-70'	Barren
T/Lamar Lime	3501'	-283'	Barren
T/Ramsey	3527'	-309'	Oil/Gas
T/Lwr Brushy Canyon "8" A	7033'	-3815'	Oil/Gas
T/Bone Spring	7318'	-4100'	Oil/Gas
T/Avalon	7418'	-4200'	Oil/Gas
TD	7700'	-4482'	

**POINT 3: CASING PROGRAM**

<u>TYPE</u>	<u>INTERVALS</u>	<u>PURPOSE</u>	<u>CONDITION</u>
16"	0' - 40'	Conductor	Contractor Discretion
8-5/8", 28#, J-55, ST&C	0' - 610'	Surface	New
5-1/2", 15.5#, J-55, LT&C	0' - 6500'	Production	New
5-1/2", 15.5#, L-80, LT&C	6500' - 7700'	Production	New

**POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)**

A BOP equivalent to Diagram 1 will be nipped up on the surface casing head. The BOP stack choke, kill lines, kelly cocks, inside BOP, etc. will be hydro-tested to 70% of internal yield pressure of casing. In addition to the high pressure test, a low pressure (200 psi) test will be required. These tests will be performed:

- a) Upon installation
- b) After any component changes
- c) Fifteen days after a previous test
- d) As required by well conditions

A function test to insure that the preventers are operating correctly will be performed on each trip.

## DISTRICT I

1825 N. French Dr., Hobbs, NM 88240

## DISTRICT II

811 South First, Artesia, NM 88210

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## DISTRICT IV

2040 South Penasco, Santa Fe, NM 87505

## State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised March 17, 1988

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

## OIL CONSERVATION DIVISION

2040 South Penasco

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 47545	Pool Name NASH DRAW (DELAWARE)
Property Code 001796	Property Name POKER LAKE UNIT	Well Number 213
OGRID No. 001801	Operator Name BASS ENTERPRISES PRODUCTION COMPANY	Elevation 3198'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	18	24 S	30 E		860	SOUTH	660	EAST	EDDY

## Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						
40	N								

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

LOT 1 - 40.80 AC.	40.83 AC.	40.82 AC.	40.83 AC.
LOT 2 - 40.85 AC.	40.81 AC.	40.79 AC.	40.79 AC.
LOT 3 - 40.80 AC.	40.80 AC.	40.77 AC.	40.72 AC.
LOT 4 - 40.84 AC.	40.77 AC.	40.74 AC.	40.69 AC.

LAT - N32°12'45.8"  
LONG - W103°54'51.6"

3183.9' 3202.5'  
3180.5' 3185.5'  
660'

**OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*William R. Dannels*  
Signature  
W.R. DANNELS  
Printed Name  
DIVISION DRILLING SUPT.  
Title  
9/27/2004  
Date

**SURVEYOR CERTIFICATION**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

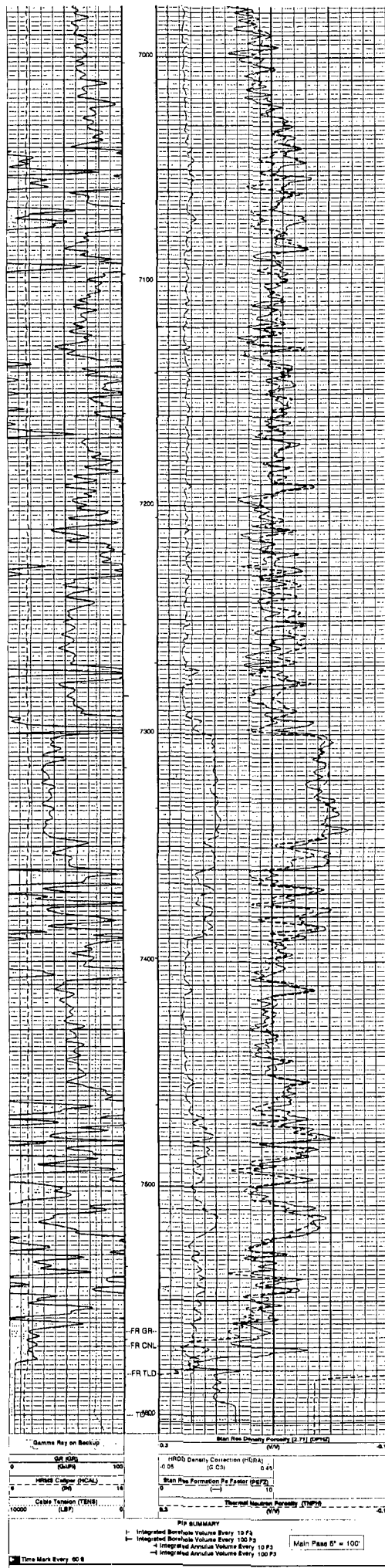
APRIL 13, 2004  
Date Surveyed  
GARY L. JONES  
Signature  
Professional Surveyor  
No. 4140  
Certificate No. 7977

**BASIN SURVEYS**

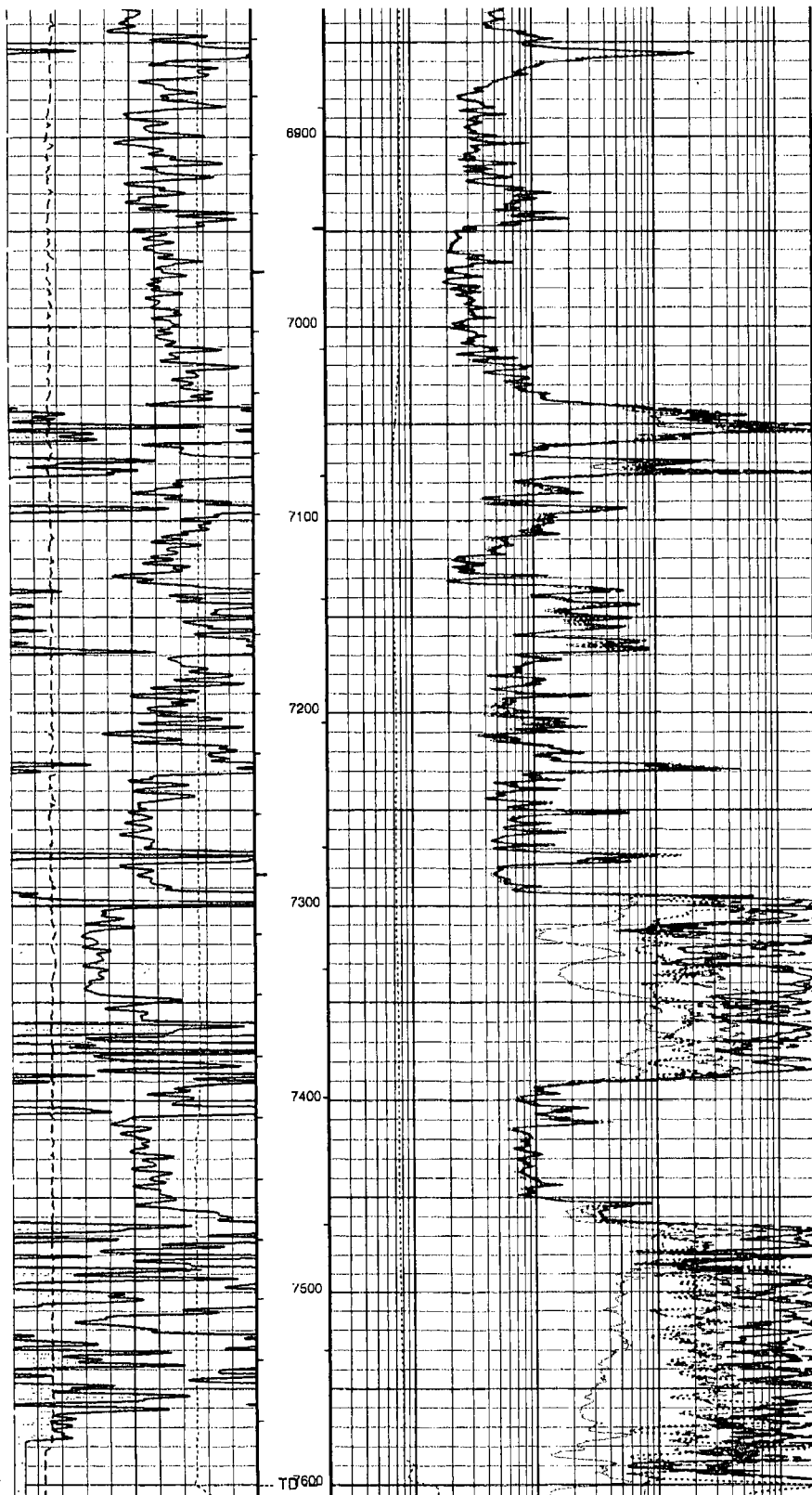
**Additional Operator Remarks:**

Surface casing to be set into Rustler below all fresh water sands.  
Production casing will be cemented using Zone Seal Cement.  
Drilling Procedure, BOP Diagram, Anticiapted tops & surface plans attached.

This well is located inside the Secretary's Potash area and outside the R-111 Potash area.  
There are no potash leases within 1 mile of this location.







Gamma Ray on Backup		
GR (GR)		
0	(GAPI)	100
HRMS Caliper (HCAL)		
6	(IN)	16
Cable Tension (TFNS)		
10000	(LBF)	0

0.2	AIT-H 10 Inch Investigation (AHT10)	2000
	(OHMM)	
0.2	AIT-H 20 Inch Investigation (AHT20)	2000
	(OHMM)	
0.2	AIT-H 30 Inch Investigation (AHT30)	2000
	(OHMM)	
0.2	AIT-H 60 Inch Investigation (AHT60)	2000
	(OHMM)	
0.2	AIT-H 90 Inch Investigation (AHT90)	2000
	(OHMM)	
0.02	AIT-H Mud Full Cal (AHMF)	200
	(OHMM)	

#### PIP SUMMARY

- └ Integrated Borehole Volume Every 10 F3
- └ Integrated Borehole Volume Every 100 F3
- └ Integrated Annulus Volume Every 10 F3
- └ Integrated Annulus Volume Every 100 F3

Main Pass 2' ± 100'

Time Mark Every 60 S

Format: 2\_res Vertical Scale: 2' per 100'

Graphics File Created: 29-Jan-2005 13:14

2. Article Number

7160 9901 9846 3455 0067

3. Service type **CERTIFIED MAIL**

4. Restricted Delivery? (Extra Fee) ☐ Yes

1. Article Addressed to:

Bureau of Land Management  
620 E. Greene Street  
Carlsbad, NM 88220-6292

PS Form 3811, January 2005

Domestic Return Receipt

STICKER AT TOP OF ENVELOPE TO THE RIGHT  
RETURN ADDRESS FOLD AT DOTTED LINE

A. Received by (Please Print Clearly) *See Salcedo*

B. Date of Delivery

C. Signature *[Signature]*

D. Is delivery address different from item 1? ☐ Yes ☒ No  
If YES, enter delivery address below

Agent ☐ Addressee ☐

BEU 154  
PLU 186  
SWD PLU 166  
152  
SRU 104

receipt of delivery to BLM for SWD  
PLU 166 + PLU 152

BOPCO, L.P.  
MCDLAND, TX

Received 28 JAN 2010

**Jones, William V., EMNRD**

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**From:** Warnell, Terry G, EMNRD  
**Sent:** Tuesday, January 19, 2010 10:17 AM  
**To:** Belt, Sandra J.  
**Cc:** Jones, William V., EMNRD  
**Subject:** RE: Poker Lake Unit; #213

Hi Sandra,

Will Jones has the order

It was just logged in on the 6th

Should be done by month's end

---

**From:** Belt, Sandra J. [mailto:SJBelt@BassPet.Com]  
**Sent:** Tuesday, January 19, 2010 7:05 AM  
**To:** Warnell, Terry G, EMNRD  
**Subject:** Poker Lake Unit; #213

Good morning Terry – just checking on the status of the disposal application on the subject well. Please call or e-mail me if there is anything needed to complete this application. You have a good day and thank you.

*Sandra J. Belt*

*Regulatory Clerk*

*BOPCO, L.P.*

*P O Box 2760*

*Midland Tx 79702-2760*

*432.686.2999 ext. 149*

*432.687.0329 (F)*

*[sjbelt@basspet.com](mailto:sjbelt@basspet.com)*

~~~~~

LEASE: POKER LAKE UNIT

WELL #: 213

FIELD: NASH DRAW DELAWARE

LOCATION: 860' FSL &amp; 660' FEL, SECTION 18, T24S, R30E

COUNTY: EDDY

ST: NM

API: 30-015-33859

## PROPOSED

KB: 3215'

GL: 3195'

SPUD DATE: 1/13/2005

COMP DATE: 2/22/2005

**SURFACE CASING**

SIZE: 8-5/8"

WT/GRD: 32# J-55

CSA: 454'

SX: 100 / 200 PBCZ / PREM+

SX: 560 PREM+

CIRC: Y W/O RETURNS

TOC: SURF TOP OUT

HOLE SIZE: 12-1/4" 0-454'

**PRODUCTION CASING**

SIZE: 5-1/2" (orig csg cut & replaced 5050')

WT/GRD: 15.5# J55 0-6150'

WT/GRD: 15.5# L80 6150-7596'

CSA: 7596'

SX: 2799 sx POZ C 50 sx Class C

CIRC: Y

TOC: Surface 500 sx 35/65 Pozby Top Out

HOLE SIZE: 7-7/8" 454-7600'

## TUBING DATA

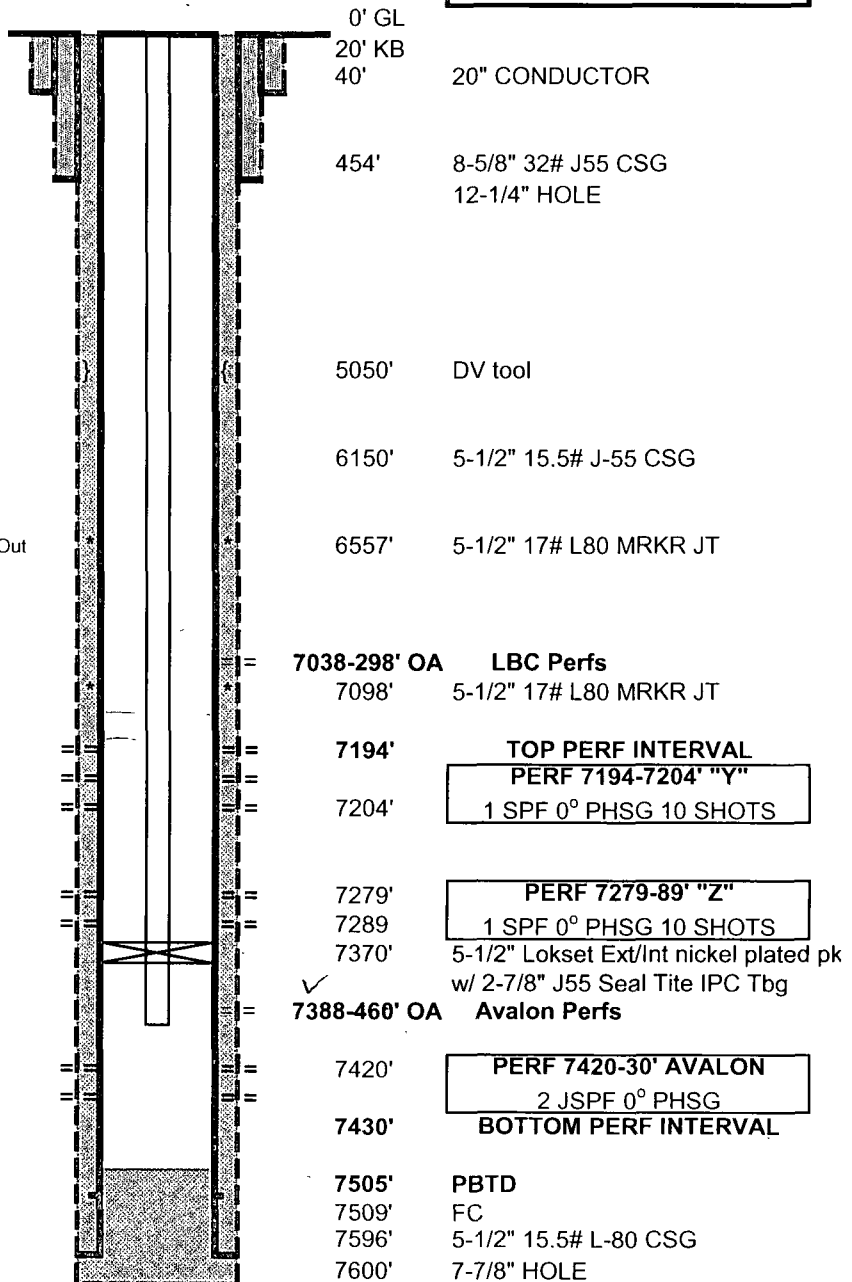
## RODS &amp; PUMP DATA

## PERFORATION DATA

02/05 PERF 7420-30' AVALON LOAD CSG W/ 16 bbls 2% KCl. BD perfs w/ 870#. Pmp spot acid away w/ 20 bbls 2% KCl @ 4 BPM & 800#. ISIP 750#. F/ 154.7kg PW + 26.7k# 14/30 LITE PROP + 3k# 16/30 SUPER LC. FLUSH W/ 7kg FW. LOST TTL 320 BPW TO PERFS.

03/05 PERF 7279-89 "Z", 7194-7204' "Y"

F: 20.7kg PW+73kg Lightning 2500+15.9k# 14/30 Lite Prop+185k# 16/30 Ottawa+105k# 16/30 Super LC



PBTD: 7505'

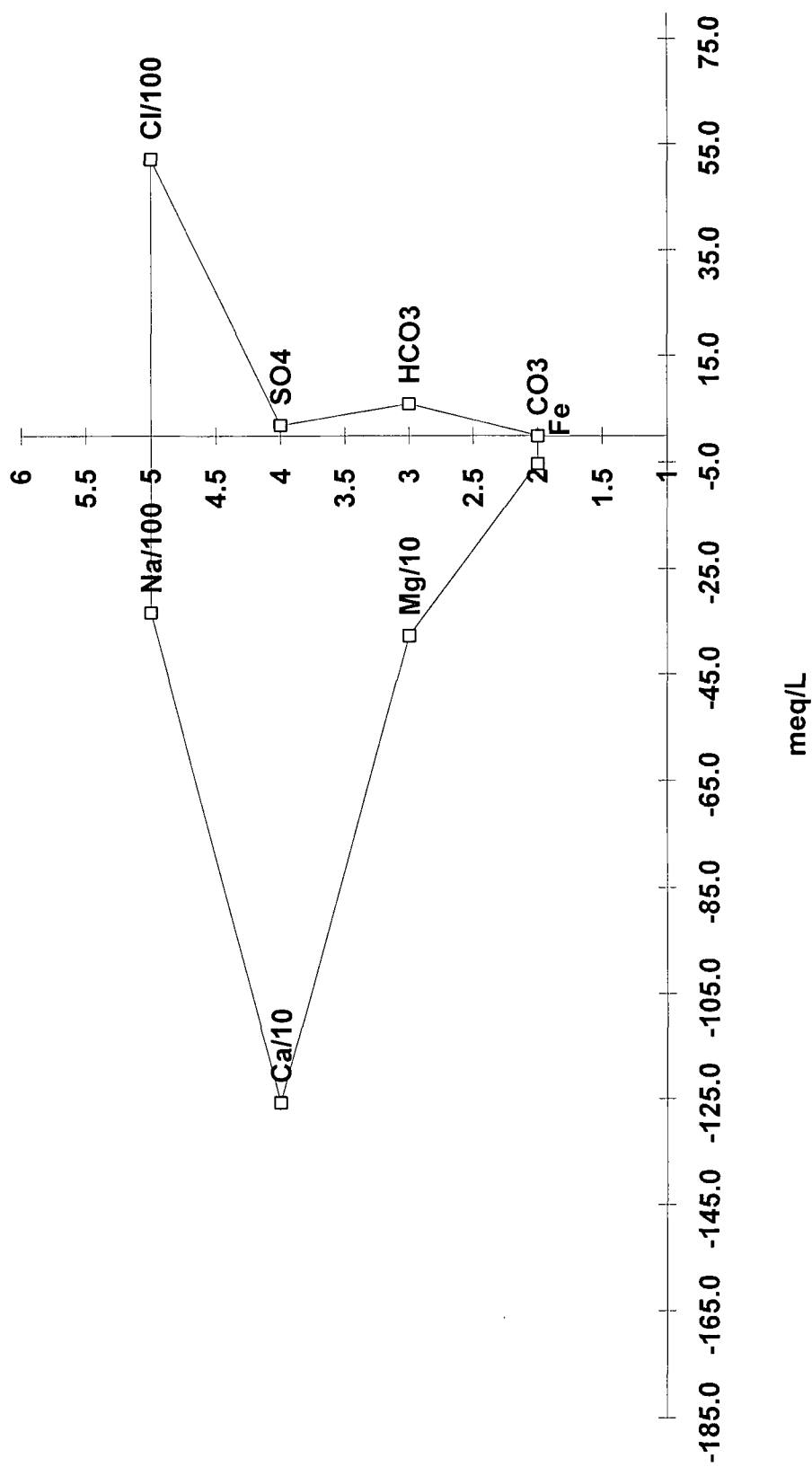
TD: 7600'

Updated: 1/15/2010

Author: eaz

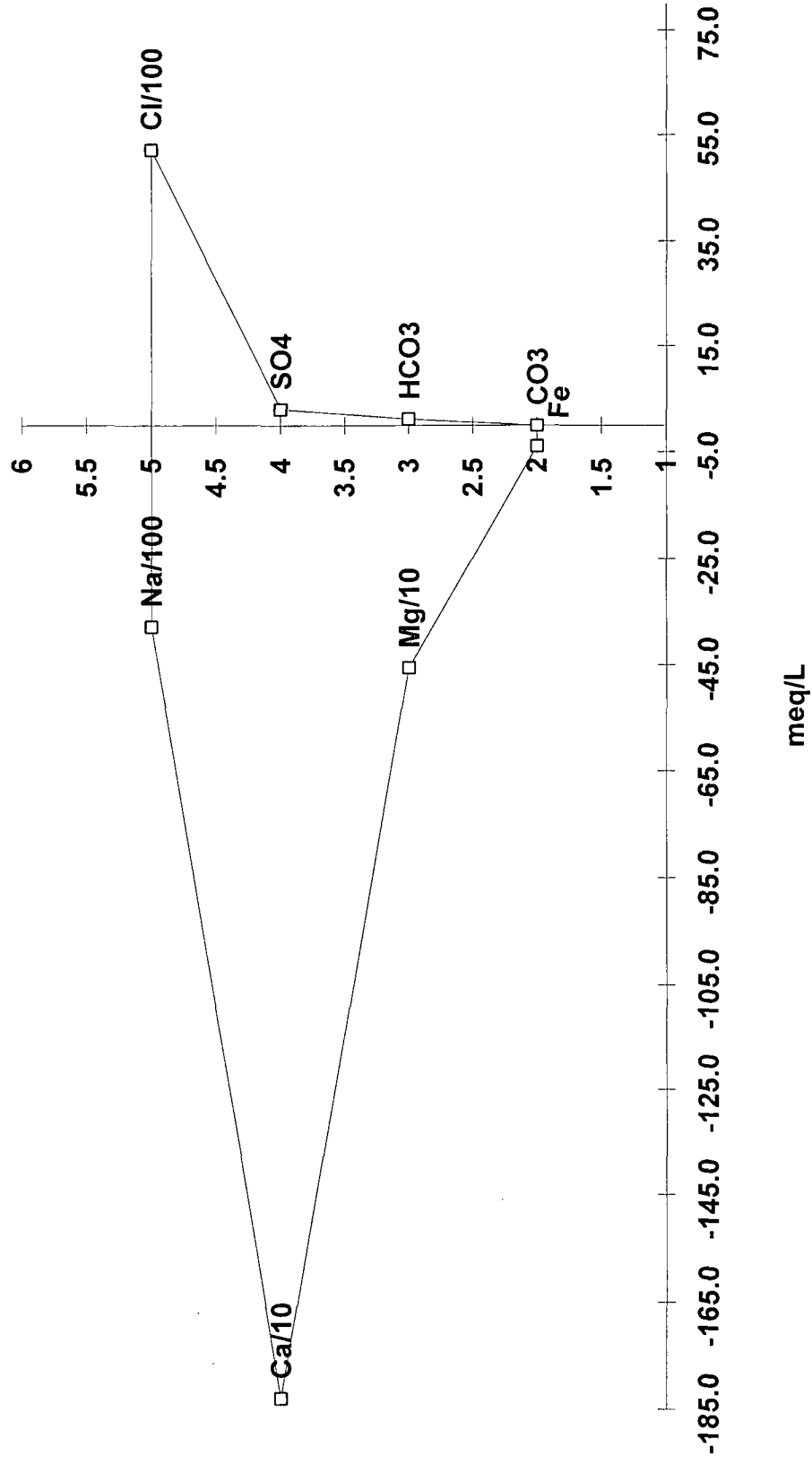
Engr: JBB

PLU 214 ALL ZONES INCL AVALON



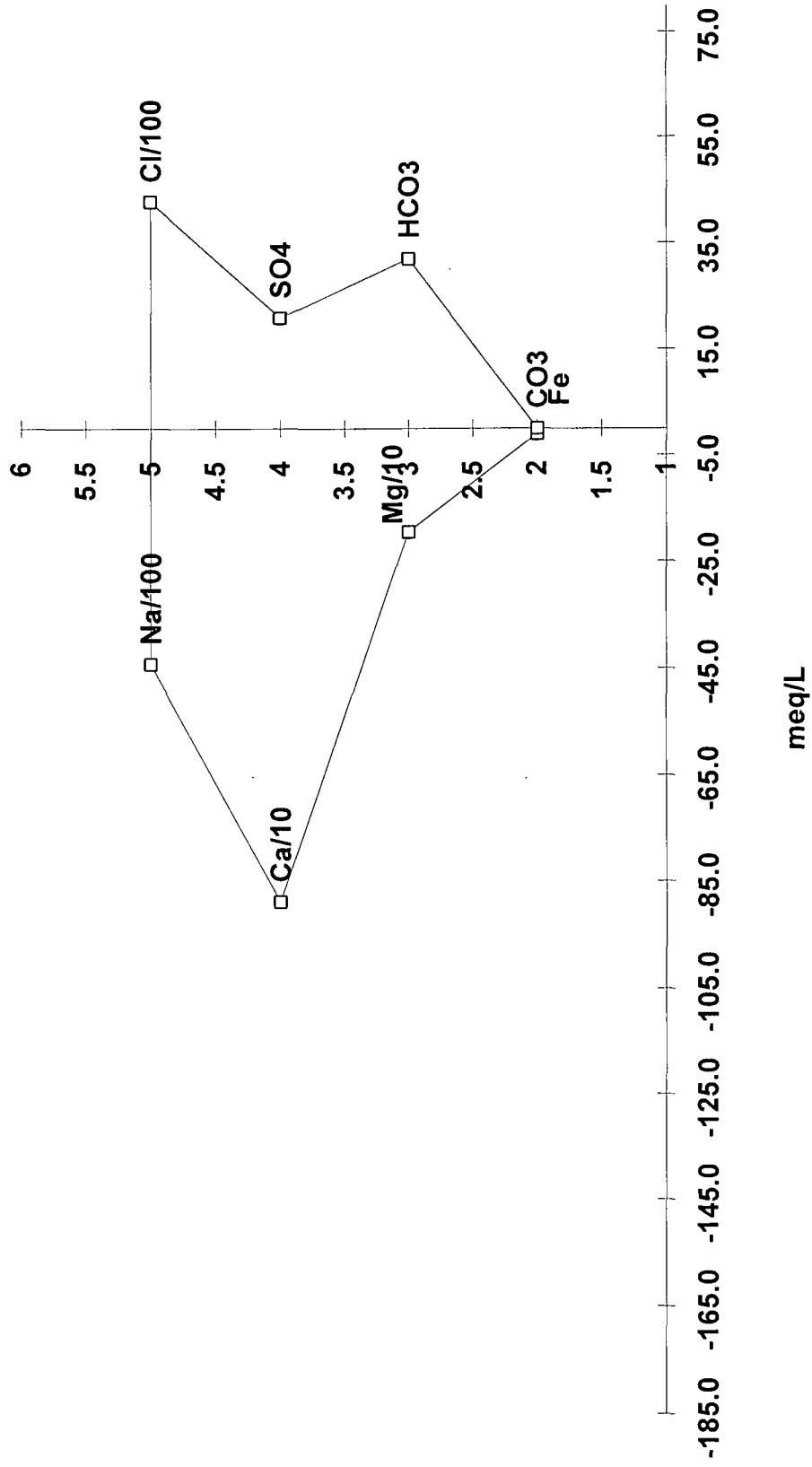
—□— PRODUCED WATER

PLU 214 DELAWARE ONLY



—□— PRODUCED WATER

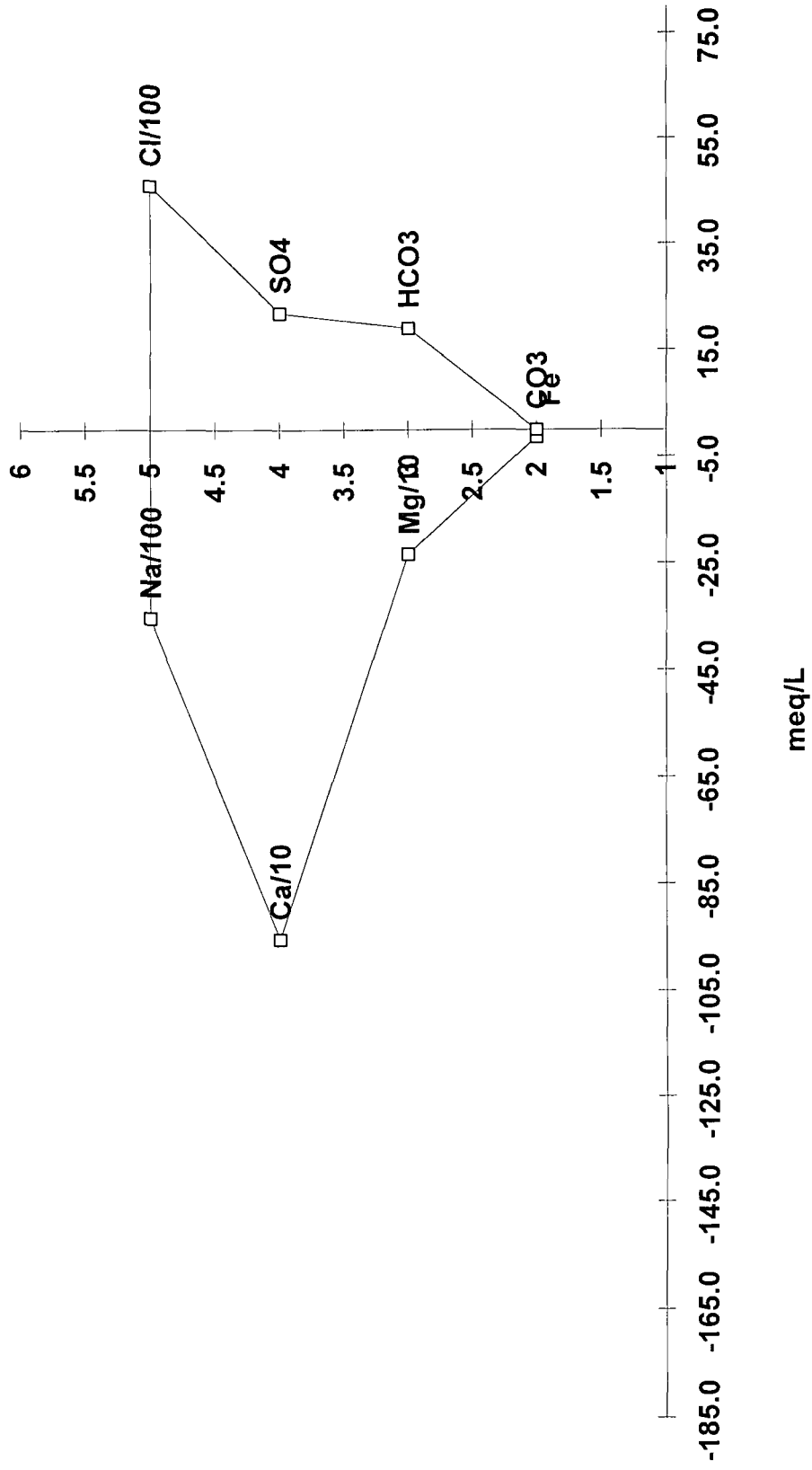
# PLU 260 ALL ZONES INCL AVALON



meq/L

□ PRODUCED WATER

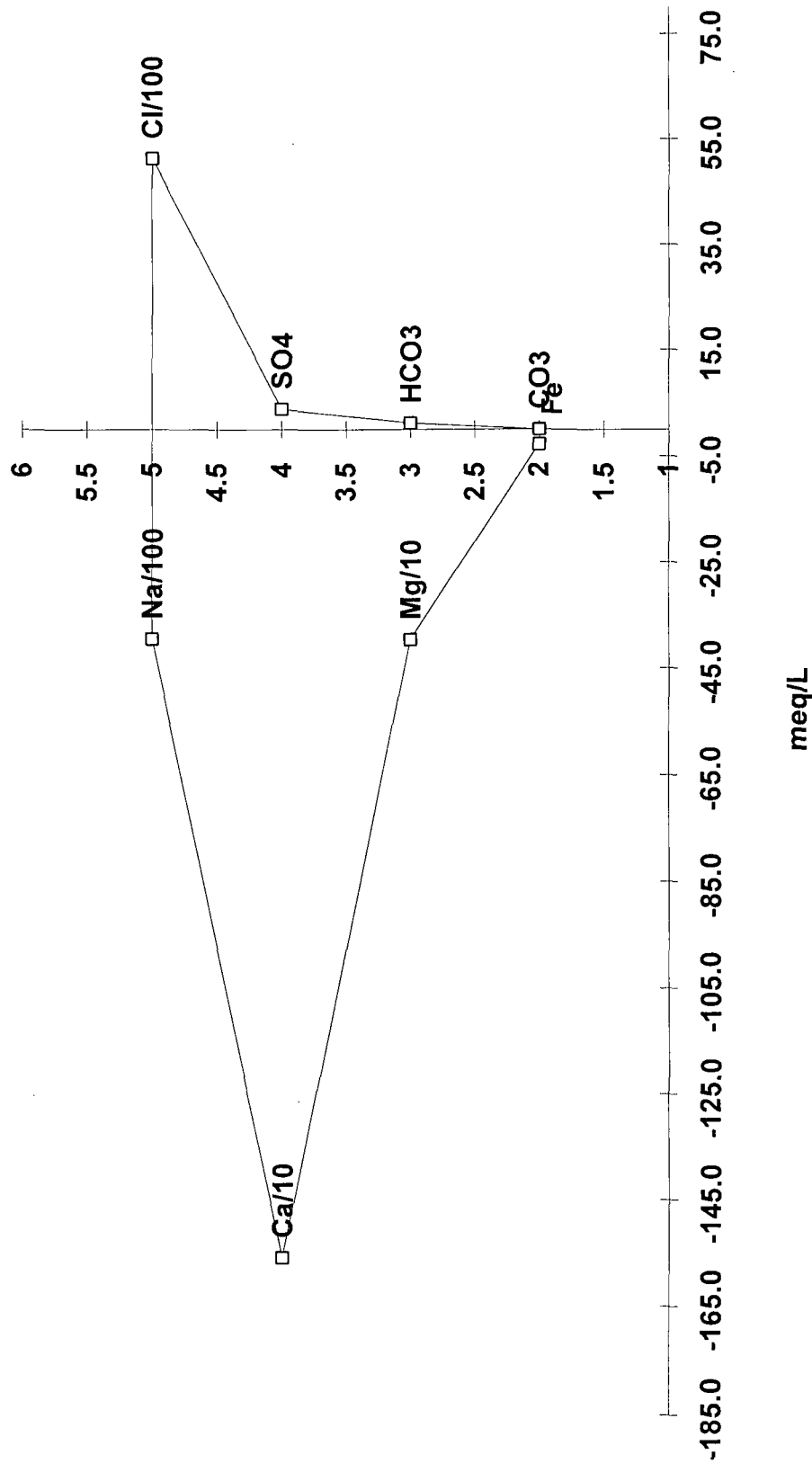
# PLU 210 ALL ZONES INCL AVALON



—□— PRODUCED WATER



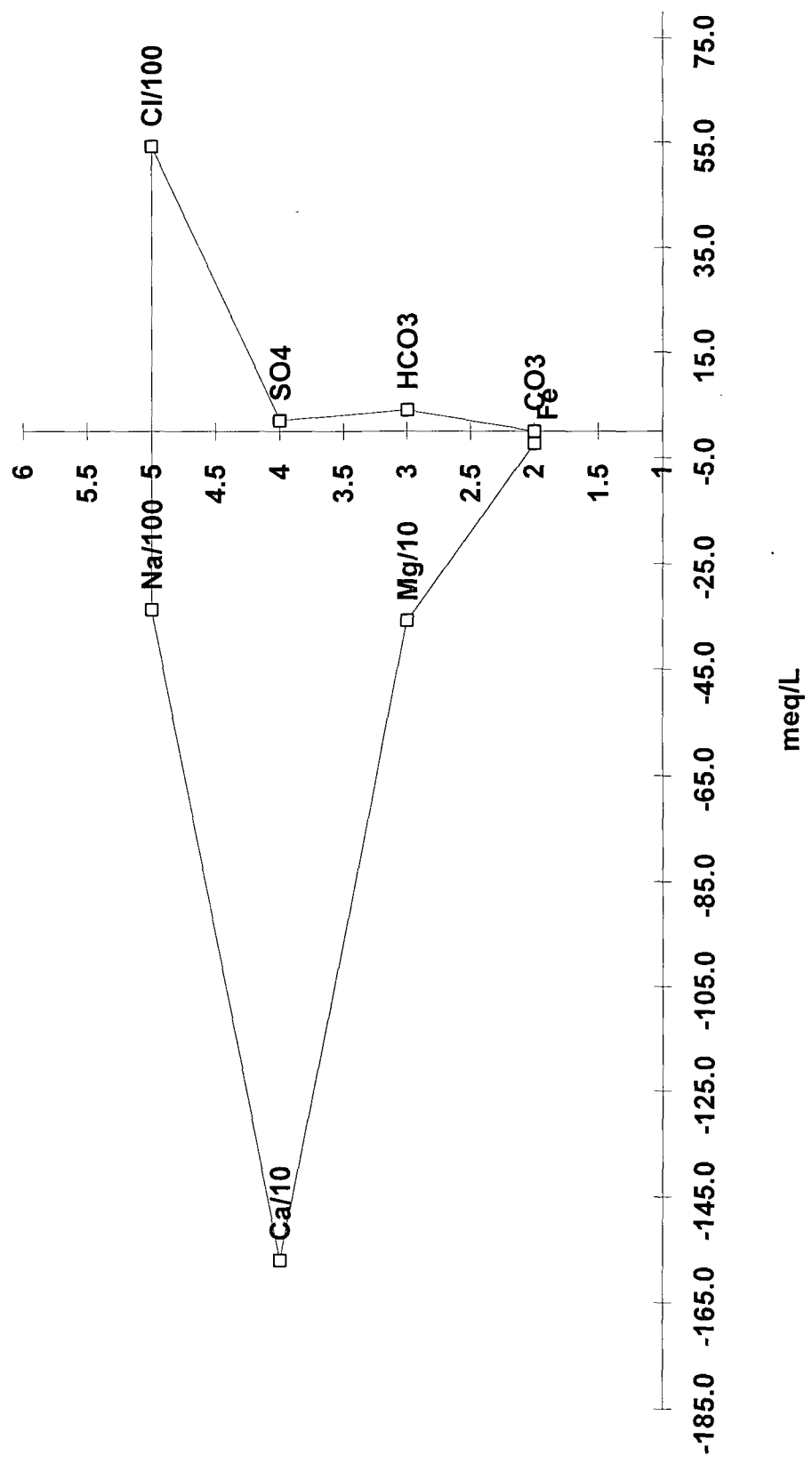
# PLU 210 DELAWARE ONLY



meq/L

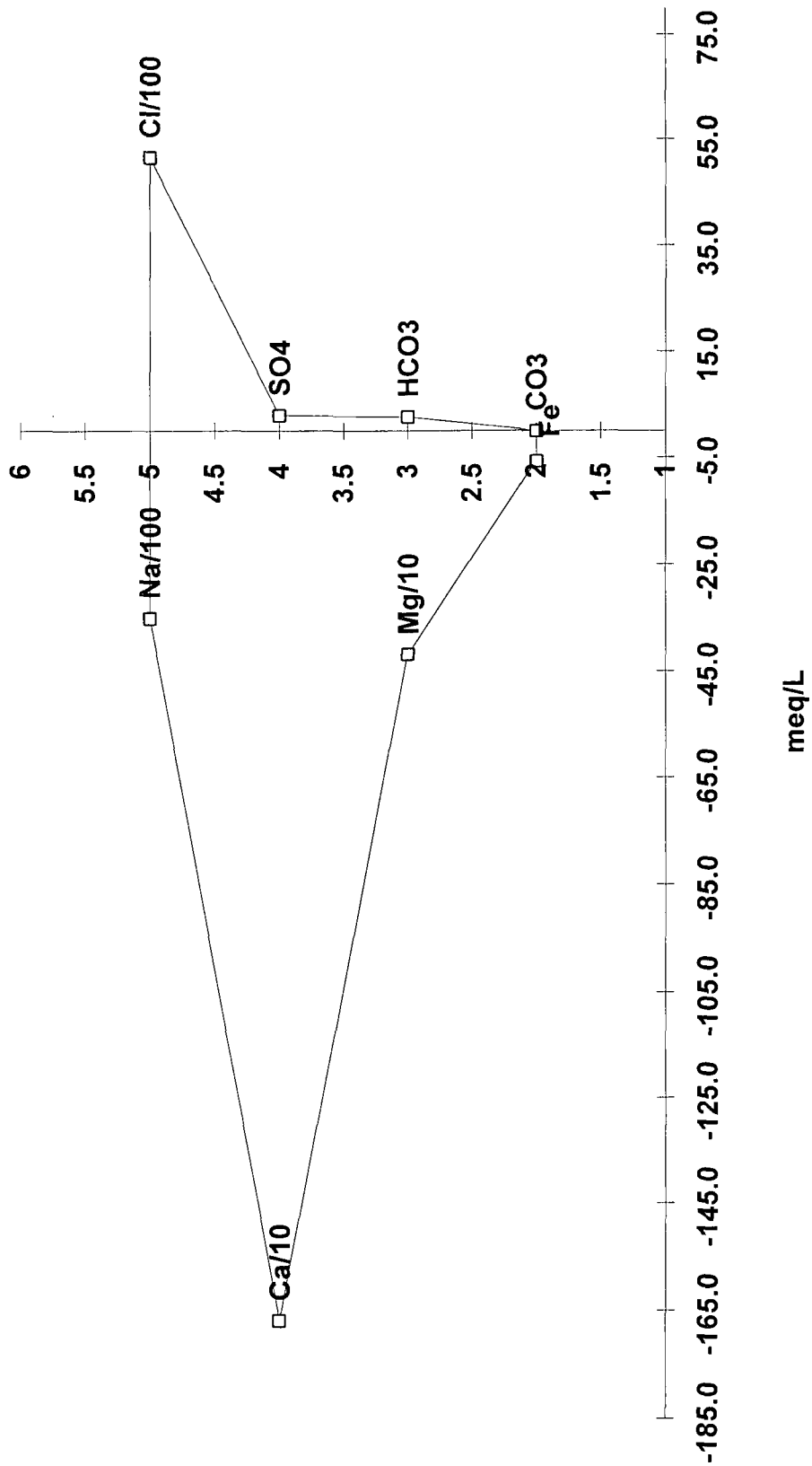
—□— PRODUCED WATER

PLU 212 ALL ZONES INCL AVALON

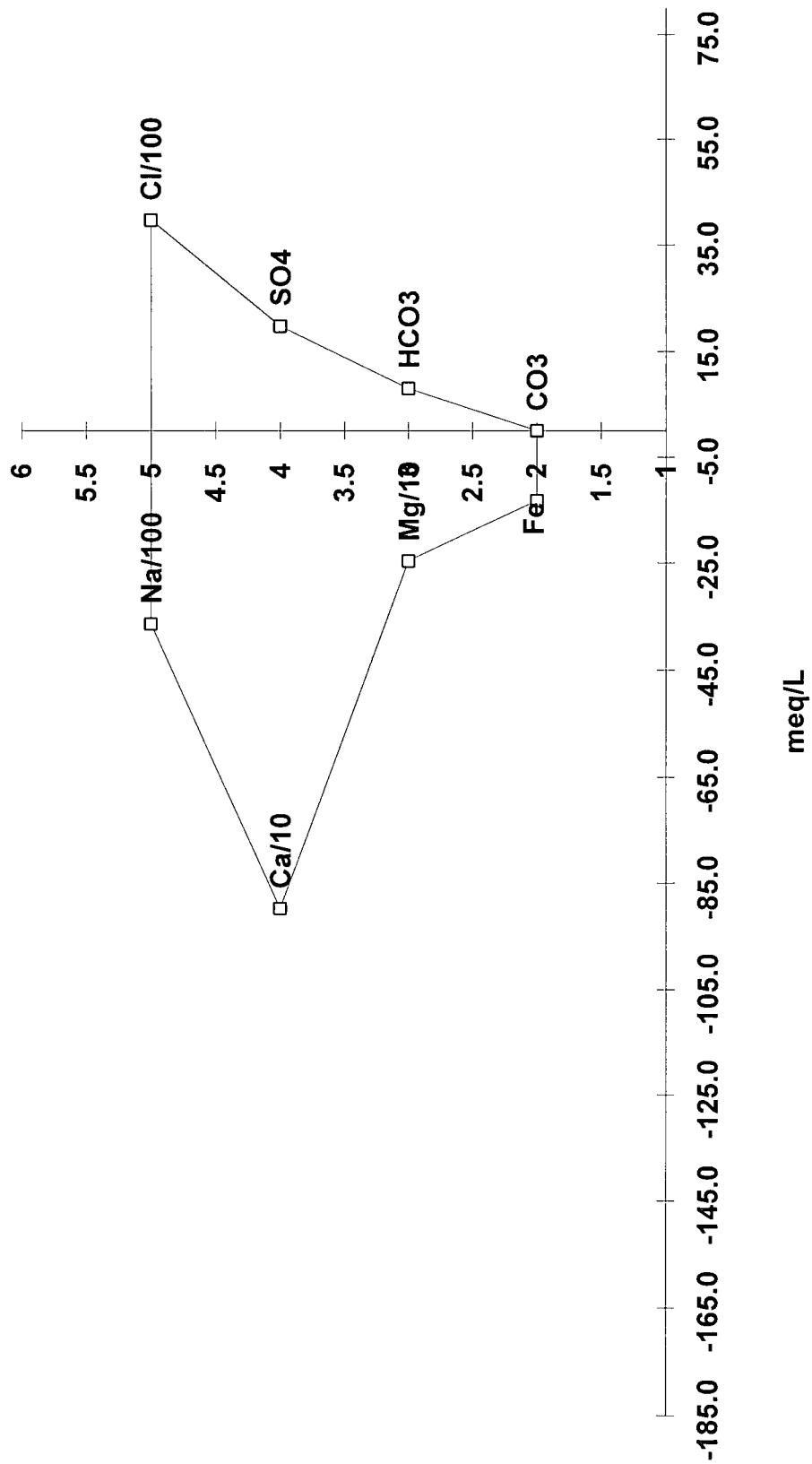


--□-- PRODUCED WATER

# PLU 212 DELAWARE ONLY



# PLU 213 AVALON ONLY



□ PRODUCED WATER

RECEIVED

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OPERATOR'S COPY

MAR 26 2010

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

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

## BOPCO WTD PRODUCTION

- 1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other  
b. Type of Completion ☐ New Well ☐ Work Over ☐ Deepen ☒ Plug Back ☐ Diff. Resvr.,  
Other \_\_\_\_\_

2. Name of Operator  
BOPCO, L P.

3. Address  
P O Box 2760 Midland Tx 79702

3a. Phone No. (Include area code)  
(432)683-2277

4. Location of Well (Report location clearly and in accordance with Federal requirements)

At Surface ULK, 1980' FSL 1980' FWL; Sec. 3, T-25S, R31E

At top prod. interval reported below

At total depth

14. Date Spudded

15. Date T.D. Reached

16. Date Completed  
☐ D & A ☒ Ready to Prod  
02/11/2010

5. Lease Serial No.  
NM 031383

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and no.  
NMNM 71016

8. Lease Name and Well No.

Poker Lake Unit 67

9. API Well No  
30-015-25263

10. Field and Pool, or Exploratory  
Cotton Draw; Atoka, South

11. Sec., T., R., M., on Block and  
Survey or Area 3; T25S, R31E

12. County or Parish  
Eddy

13. State  
NM

17. Elevations (DF, RKB, RT, GL)\*  
3424 GL

18. Total Depth MD 15,610  
TVD

19. Plug Back T.D. MD 14,490  
TVD

20. Depth Bridge Plug Set MD 14,530  
TVD

21. Type of Electric & Other Mechanical Logs Run (Submit copy of each)

22. Was well cored? ☒ No ☐ Yes (Submit analysis)  
Was DST run? ☒ No ☐ Yes (Submit analysis)  
Directional Survey? ☒ No ☐ Yes (Submit copy)

## 23. Casing and Liner Record (Report all strings set in well)

| Hole Size  | Size/Grade | Wt. (#/ft.) | Top (MD) | Bottom (MD) | Stage Cementer Depth | No. of Sk. & Type of Cement | Slurry Vol. (BBL) | Cement Top* | Amount Pulled |
|------------|------------|-------------|----------|-------------|----------------------|-----------------------------|-------------------|-------------|---------------|
| SEE        |            |             |          |             |                      |                             |                   |             |               |
| ATTACHMENT |            |             |          |             |                      |                             |                   |             |               |
|            |            |             |          |             |                      |                             |                   |             |               |
|            |            |             |          |             |                      |                             |                   |             |               |
|            |            |             |          |             |                      |                             |                   |             |               |
|            |            |             |          |             |                      |                             |                   |             |               |
|            |            |             |          |             |                      |                             |                   |             |               |
|            |            |             |          |             |                      |                             |                   |             |               |
|            |            |             |          |             |                      |                             |                   |             |               |

CONFIDENTIAL

## 24. Tubing Record

| Size   | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) |
|--------|----------------|-------------------|------|----------------|-------------------|------|----------------|-------------------|
| 2-3/8" | 14,232         |                   |      |                |                   |      |                |                   |

## 25. Producing Intervals

| Formation | Top    | Bottom | Perforated Interval | Size | No. Holes | Perf. Status        |
|-----------|--------|--------|---------------------|------|-----------|---------------------|
| A) Atoka  | 14,320 | 14,340 | 14,320-14,340       | 0.38 | 6         | Producing           |
| B) Morrow | 14,894 | 14,898 | 14,894 - 14,898     | 0.38 | 6         | Under CIBP @ 14,525 |
| C)        |        |        |                     |      |           |                     |
| D)        |        |        |                     |      |           |                     |

## 27. Acid Fracture, Treatment, Cement Squeeze, Etc.

| Depth Interval | Amount and Type of Material                                                                         |
|----------------|-----------------------------------------------------------------------------------------------------|
| 14,320-14,340  | Acidiz w/ 2,700 gals 10% MCA; Displaced to btm perf w/57 bbls 3% KCL mixed w/HES gas perm & ClaSta. |
| 14,320-14,340  | Frac w/3,738 gals WF30 prepad, 41,268 gals YF130 RGD and 45,495# 20/40 Bauxite                      |

## 28. Production - Interval A

| Date First Produced | Test Date       | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr API | Gas Gravity | Production Method |
|---------------------|-----------------|--------------|-----------------|---------|---------|-----------|----------------------|-------------|-------------------|
| 2/11/10             | 2/11/10         | 24           | →               | 0       | 8479    | 12        |                      | 0.5903      | Flowing           |
| Choke Size          | Tbg. Press Flwg | Csg. Press   | 24 Hr Rate      | Oil BBL | Gas MCF | Water BBL | Gas Oil Ratio        | Well Status |                   |
| 22/64               | SI 2545         | 2340         | →               | 0       | 8479    | 12        |                      | Producing   |                   |

## Production - Interval B

| Date First Produced | Test Date       | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr API | Gas Gravity | Production Method |
|---------------------|-----------------|--------------|-----------------|---------|---------|-----------|----------------------|-------------|-------------------|
|                     |                 |              | →               |         |         |           |                      |             |                   |
| Choke Size          | Tbg. Press Flwg | Csg. Press   | 24 Hr Rate      | Oil BBL | Gas MCF | Water BBL | Gas Oil Ratio        | Well Status |                   |
|                     | SI              |              | →               |         |         |           |                      |             |                   |

(See Instructions and spaces for additional data on page 2)

RECEIVED  
APR - 1 2010  
NMOCD ARTESIAACCEPTED FOR RECORD  
FlowingMAR 23 2010  
/s/ Chris Walls  
BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

## 28b Production - Interval C

| Date First Produced | Test Date          | Hours Tested | Test Production<br>→ | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr API | Gas Gravity | Production Method |
|---------------------|--------------------|--------------|----------------------|---------|---------|-----------|----------------------|-------------|-------------------|
| Choke Size          | Tbg. Press Flwg SI | Csg Press    | 24 Hr. Rate<br>→     | Oil BBL | Gas MCF | Water BBL | Gas : Oil Ratio      | Well Status |                   |

## 28c Production - Interval D

| Date First Produced | Test Date          | Hours Tested | Test Production<br>→ | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr API | Gas Gravity | Production Method |
|---------------------|--------------------|--------------|----------------------|---------|---------|-----------|----------------------|-------------|-------------------|
| Choke Size          | Tbg. Press Flwg SI | Csg Press    | 24 Hr. Rate<br>→     | Oil BBL | Gas MCF | Water BBL | Gas : Oil Ratio      | Well Status |                   |

29 Disposition of Gas (Sold, used for fuel, vented, etc.)

## 30 Summary of Porous Zones (Include Aquifers).

Show all important zones or porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

| Formation | Top | Bottom | Descriptions, Contents, etc | Name | Top         |
|-----------|-----|--------|-----------------------------|------|-------------|
|           |     |        |                             |      | Meas. Depth |
|           |     |        |                             |      |             |

32 Additional remarks (include plugging procedure)

33 Indicate which items have been attached by placing a check in the appropriate boxes:

- ☐ Electrical/Mechanical Logs (1 full set req'd)   
 ☐ Geological Report   
 ☐ DST Report   
 ☐ Directional Survey  
☐ Sundry Notice for plugging and cement verification   
 ☐ Core Analysis   
 ☐ Other

34 I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Name (please print) Sandra J. Belt ext. 149Title Regulatory Clerk

Signature

Sandra J. BeltDate 03/05/2010

Title 18 U.S.C. Section 101 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States and false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

Attachment to Form 3160-4  
 Completion Report  
 Poker Lake Unit #67  
 Item 23  
 3/5/10

CASING:

| Size   | Wl               | Grd                    | Set<br>Depth        | Sxs  | Class          | TOC           | Hole   | Hole<br>Depth |
|--------|------------------|------------------------|---------------------|------|----------------|---------------|--------|---------------|
| 20     | 94               | H-40                   | 718                 | 950  | Lite           | Surf          | 24     | 721           |
| 13 3/8 | 54.5<br>61<br>68 | K-55<br>S-80           | 4263                | 2400 | Lite           | Surf          | 17 1/2 | 4263          |
| 9 5/8  | 40<br>43.5<br>47 | S-95<br>N-80           | 12000               | 700  | H              | 10600<br>Calc | 12 1/4 | 12000         |
| 7      | 32               | S-95<br>P-105<br>LS125 | 11788<br>-<br>14950 | 800  |                | 11788         | 8 1/2  | 14950         |
| 7      | 29               | P-110                  | 8534' -<br>11788    | 952  | Super<br>C Mod | 8534'         | 8 1/2  | 14950         |
| 5      | 18               | P-110                  | 14917-<br>15607     | 100  | H              | 14917         | 6      | 15610         |
|        |                  |                        |                     |      |                |               |        |               |
|        |                  |                        |                     |      |                |               |        |               |

LINER:

LINER TIEBACK: