STATE OF NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

# Oil Conservation Division 1220 South St. Francis Dr. SANTA FE, NEW MEXICO 87505

Form C-108 Revised June 10, 2003

# APPLICATION FOR AUTHORIZATION TO INJECT

1.	PURPOSE : X Secondary Recovery Pressure Maintenance Application qualifies for administrative approval? Yes	DisposalStorage									
Н.	OPERATOR: BOPCO, L.P.										
	ADDRESS: P O Box 2760 Midland Tx 79702										
	CONTACT PARTY: Sandra J. Belt ext. 149	PHONE : (432)683-2277									
Ш.	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:	Oil Conservation Division Case No. 14552									
	<ol> <li>Proposed average and maximum daily rate and volume of fluids to be injected; Exhibit No.</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pressure;</li> <li>Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and</li> <li>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.).</li> </ol>										
*V[]	I. Attach appropriate geological data on the injection zone including appropriate litholo depth. Give the geologic name, and depth to bottom of all underground sources of dr total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed in known to be immediately underlying the injection interval.	inking water (aquifers containing waters with									
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.										
ХШ	. Applicants must complete the 'Proof of Notice' section on the reverse side of this for	n.									
XIV	/. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowl and belief.										
		ITLE: Sr. Regulatory Clerk									
	SIGNATURE: Sandia J. Belt	DATE: <u>05/18/2010</u>									
*	E-MAIL ADDRESS: sjbelt@basspet.com  If the information required under Sections VI, VHI, X, and XI above has been previplease show the date and circumstance of the earlier submittal:	ously submitted, it need not be resubmitted.									

### 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 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, NM 87505 within 15 days.

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

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

# III. Well Data

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Poker Lake Unit 150 30-01 6 760' FNL 330; FEL 24S 30E Lease name: Fownship: Footage: Range: Section: Well #:

Casing Info: 5

Method	Circulated	TS
700	Surface	3673'
Hole size	1.1.	7-7/8"
Sacks cmt	205	725
Set depth	.009	7,549
Casing size	8-5/8" 24# WC-50 STC/J55	5-1/2" 15.5# J-55;17# L-80

Tubing to be used (size, lining material, setting depth): 2-7/8" 6.5# J-55 Seal Tite IPC tbg set @ 7050'. 3

Name, model, and depth of packer to be used: 5-1/2" Lokset Nickel Plated EXT/INT PC Pkr set @ 7050'. 4

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

 $\dot{\omega}$ 

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

Interval 7082 - 7294'; Perforated 3

State if the well was drilled for injection or, if not, the original purpose of the well: Drill & complete as an oil well in the (Delaware formation), Nash Draw (Delaware)/BS/Avalon Sand Pool  $\widehat{\mathfrak{S}}$ 

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

BP @ 7200' will be removed to open up existing perfs at 7255-7265'

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: Lower: Bone Spring @ 7350' 2

Higher: None

C-108 DATA

VI. Attach a labulation of data on all wells of public record within the area of review which penetrate the proposed injection zone.

Such data shall include a clear injoin of each wells type, construction, date drifted, lecation, depth, record of completion, and a schomatic of any physical well-alternating all physicing detail.

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ž	167	ž	155	1630	152	<b>š</b>	ន	154	SS	ī,	151	119	š	₹
30 015-31990	30,015,31686	30 015-31595	36 615-313 M	30 015-34 180	20.015.25572	30.915-31318	30 015 31647	30-015 31586	30 015-31412	30.015.31415	30 015 31595	30-015-31-016	30-015-31007	A
BOACO, U	BOPCO LP	BOPCO, L▶	BOPCO, LP	POPCO, LP	BOPEO, UP	BOACO FA	BOYCO, LP	8C <del>P</del> CO,LP	BOYCO, UP	BOPCO.UP	BOPCO, UP	BOPCO, LP	BOPCO, UP	Operator
Producer	Producer	Producer	Produce	Prod with	Producer	Producer	Producer	Producer	Foodbage	Producer	Producer	Producer	Catodice	i,
1700 FML & 1850 FEL Sec. 6, 17345, RXXE	1980' FM & 550' FM_ Sec 5, 1745, RDGE	Sec 5, 1715, ROSE	560 FSL & 330 FWL Sec 32, 1735 R308	1980 FM & 2360 FML Sec 6, 7245, R30E	teor FML 1855' FW′⊏ Sec. B, 1245, R308	950 FSL 8 2310 FEL, Sec 21, 7225 \$106	1987 FSL & 1987 FEL, Sec 6, 171W, RODE	550" FEL & 1590" FSL Sec 6, 1745, R308	1830 FML & 1980 FFL, Sec 6, 7245, RJGE	1950 FML 8 560 FEL. Sec 6, 1245, R30E	\$10" FAL & 1990" FEL. Sec 6, 1245, RODE	60/FSL & 2310 FEL, SAC 31; TRIS, ROCE	540 FSL & 910 FEL 540 21, 1235, R306	Leration
8-587 8 827 #559 313, TOC 8 NA Suri	8 5/8" @ 460" CTS, CD05 sx	8-5/8" @ 575" CTS, C/325 5#	960 FSL & 330 FML, Sec 8 581 ® 562 W/300 545; 10C B 37. 1735 R306 Suri	8 5/8" & 800" CTS, C523 51, TOC & Surf	8 5/8" @ 680" #/580 315; TOC @ NA Surf	550" FSL 8 2310" FEL Sec. 8-58" # 518" #/290 533; TOC # 31, T235 RJOE 5ud	8 58° 9 577 CTS, CD40 sx	\$ 5%* @ 575° CTS, C/JJQ 9x	16" @ 625" CTS, C/180 s1	B 58" @ 816" CTS, C/535 sx	8-58" # 575' CTS, C/195 sx	8-5/8* \$ 520 TOC \$ Sud w/275 NA 515	8-54" # 535" CTS, C/220 ss	Surface Casing
W.A	27	NA.	NA	¥.	<i>x</i> >	WA .	2	Ä	10 JAT & 3578 CTS, 02050 sa	NA	3	7 P	R.	Construction Intermediate Casing
5-177" \$ 7470" w/700 sus, TOC \$ 3365" (TS)	5 17" 8 7459", 750 sa, FOC 3378" IS	5 1/7" H 7462", C/630 51, TOC 3679" TS	5.10" @ 7550" #/790 sxs, 70C @ 3475 [TS]	5-12" 8 754", 1095 \$18, TOC 3010" (15)	5-12" 8 7407; 1,790 kts, 10C - 2-7/8" 6 6' Surface 7360'	5-17" # 7370 w/1,092 sxs; TOC 2-778" # # 1530; TS 5,887	\$10" \the 7502', 600 ss. 10C 2977" 15	5-10" 9-610", 205-51, TOC 6100"; 3-10" 9-6415; 40-51; 5 10" 9-7440", 400-51, TOC 3465' TS	7-58" @ 11,450", C/1650 st. TOC 8193"; \$ 107" @ 14,513", C/350 st. TOC 11,127"	5-17" @ 7450", C/570 sx, TOC 3473" TS	\$ 10" @ 7430", C/650 51, TOC 3100"	5-1/2" B 7350" ToC B 3400" calc. w/1,020 ses	5 1/2" @ 7400", C/565 sx, 1S 3165"	Production Casing
2-7/8* <b>9</b> 7314*	2-78° 8	2:7/8° @	2.77 <b>8* 8</b>	2:176° 0 7:04°	2-778° 6	5,867	7 778° 9 7029°	7.778° <del>0</del>	2-7/8" P	2.778° <b>0</b> 7252°	7·7/9° <b>4</b>	7-76° <del>4</del>	2.778° 8 7028′	Tubing
2/15/2000	4/10/7003	5/21/2001	372/7001	3/4/2006	3505/34	97/7001	6/19/2001	847001	127172000	552001	1/20/2001	12/15/2000	4/12/2000	Spud
Jri 3/2003	5712003	6/21/2001	41 3/2001	4707008	478/7008	1011272001	775/7001	7/10/2001	4/12/2001	6/13/2001	7/5/7001	1/1/2001	\$13/2000	Comp
7470	7 <b>350</b>	7465	75597	7535	7410	7374	751 <b>0</b> '	DVSL	11,518	7450	7430	7350	748	io i
7254 7264	5810-779 <b>0</b>	1780:1790	7758 7768	6747: 7385 <sup>-</sup>	6030 7345"	7166-7176	6077-1702	7250:7260	11,515 12,845-14,216	7238'-7248'	775:7736	7205-17210	\$910'-7215'	Perforations Stimutation
750 gash 7:1774. FIRL Invidence HEFE HCL; Frac write Sing Making 2000, 274, Nov 16/20 Ottowa Sand Tour 16/20 CR-4000	Frac of 64,089 gal V-30 + 173,082 F CHiswa Sand + 52,7%; 1620 CR-4000 A frac of 18,571 gal V- 30 + 45,1734 Ottowa + 16,5254 1600 CR-4000	F1xc w/ 52,000 gal V-30 + 165,000# BS + 60,000 CR-4000	S40 gale, 15% HCL acid; Frac wi 71,151 gals Viking 30+701,4004 16/30 Brady sd_65,887 16/30 CR 4000	Frar wi 73,871 gal Lightning 7500 s linked gal. 67,002 s 1690 (Riswa & 119,315 1500 Super IC: 133,119 au 1794 s 1001031 1400 (Lin Prop; 132,339 gal Prii + 0,9564 1420 (Lin Prop	500 gaik 7-1774 MEFE HCL brian 7315 6845'; 500 gaik 7-1774 MEFE HCL beld from 7324 7345	7-1/2">, NE HCL 8D peefs 8 1110±, 30±q Fahrring 7500±2K± 1170 Latyrro+64± 1500 Cflores = 24± 15/30 CR 1000	Fisc of \$5,300 gal Vising 30 + 181,0001 1630 Briefly + 60,000F CR 4000; 31,553 gastl BFire; 304 gal final & \$8,0564 1620 Ottows & 21,077F 1600 Super LC	55,490 gal Mahing 30 + 124,390 1630 85 60 000 1630 CR 4000	2000 and forchick, 1500 gail 7-1722, HCL 8-2200 and 1524 Fertheck	From w/56,000 gall Viking 30 + 175,670 RS + 62,165 CR-4(x0)	750 galls 7-1774 HCl acid; trac w/58,069 galls Viking 30 + 140,458 BS	120 kH/s 374KCL; Fine #160,122 pH Viking-30 A 180,000# 16:30 Rindh+60,000# CR-4000	500 gals 15 N.HCl xeld of additions; Inc. w/ 56,195 gal Yaling 30 + XM.ZNR 1600 Blady + 46,596 i CR 4000	Simulation

**POKER LAKE UNIT** 150 LEASE: WELL #: FIELD: NASH DRAW DELAWARE LOCATION: 760' FNL & 810 FEL, SEC 6, T24S, R30E **COUNTY: EDDY** API: 30-015-31538 ST: NM KB: 3279' **PROPOSED** GL: 3265' SPUD DATE: 4/8/2001 COMP DATE: 5/1/2001 14' GL 0' KB SURFACE CASING SIZE: 8-5/8" 24# WC50 WT/GRD: 0-516' 24# J55 WT/GRD: 516-600' CSA: 600' 205 PERM/PREM+ SX: CIRC: TOC: SURF HOLE SIZE: 11" 600' PRODUCTION CASING SIZE: 5-1/2" 15.5# J55 0-6263' TOC (TS) WT/GRD: 3673' WT/GRD: 17# L80 6263-7549' CSA: 7.549 725 PREM+ SX: CIRC: TOC: 3673' TS 7-7/8" HOLE SIZE: 600-7550' **TUBING DATA** 2-7/8" J-55 Seal Tite IPC tbg set @ 7050' 5-1/2" Lokset Nickel Plated EXT/INT PC Pkr set @ 7050' 7050' - EOT & Packer 7255' INJ PERFS 7255-65' LBC 7265' 20 SHOTS PERFORATION DATA 04/01 PERF LBC 7255-65' F:52.3kg Viking 30+166k# 16/30 Brady sd+55k# 16/30 RCS 7468' PBTD (TAGGED) 7462' FC 7549' 5-1/2" 17# L80 CSG 7550' 7-7/8" HOLE PBTD: 7468' Updated: 4/21/2010 TD: 7550 Author: crm CCC Engr:



Downhole Profile - Vertical Wel.

Well ID: 30-015-31538

Well Config: Verligat - Orginal Hotal 57: 22010 1:39:07 PM

Field: Nash Draw - Delaware

BOPCO, L.P. -Well Name: Poker Lake Unit #150

st Texas

Sect: 6 Town: 24S Rng: 30E County: Eddy State: New Mexico

Surface Location: 760' FNL & 810' FEL

1 94 n. 400 184

7,164

7,165

7 200

7,203

7,255

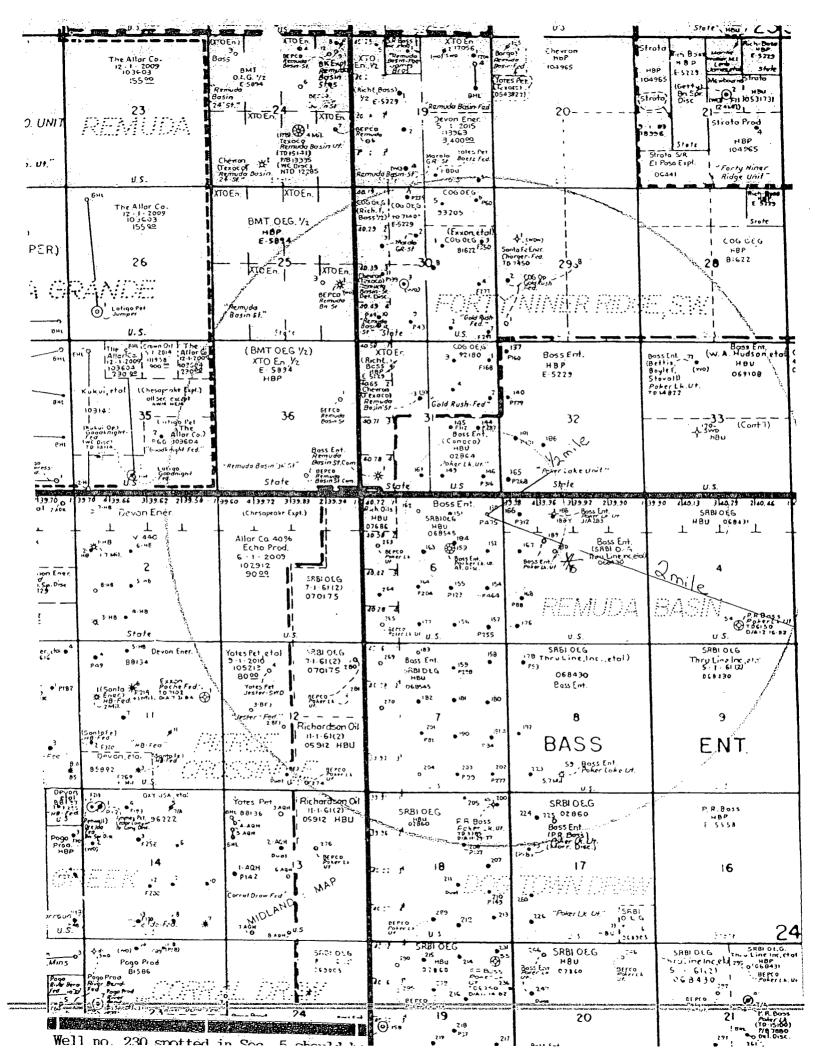
7.755

7,550

(\$ 10m | \$44 mg)

Bridge Plug - Permanent. 7,200 AKB

Well Information Criginal KB Elevation (II 3,279 00 K8-Ground Distance (ft) | Spud Date 14,00 4/8/2001 On Production Date 5/4/2001 3,265.00 Wellbore Name: Original Kick Off Depth (ftKB) Casing Strings
Casing Description
Surface
Production Wellbo Original Hole Original Hole 00 (in) 8 5/8 5 1/2 24.00(J-55 15.50(J-55 7,549.0 | Set Coorn (ft/K5) | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,165.0 | 7,16 Tubing Strings
Tubing Description
Tubing - Production No. 12-1 2-7/8" 5.5 ppt 3-55 8RD Yuping 2-2 2 7/8" Mechanical Seating Nicole Other Downhole Equipment
Run Date | De |
| 3/26/2010 | (Bridge Plug - Permanant Cement Surface Casing Cement, 4/8/2001 String: Surface, 400 offich Stage Number | Stage Too (IKB) | Stage 1 14.0 Cement Evaluation Results:
| Stage Boltom (IIXB) | Cmmi Run (EDI)
| 500.0 10.9 Top Messurement Mathod Volume Calculations Density (lb/gai) Lead 14 80 Production Casing Coment, 4/19/2001 String: Production / \$49.0fix8 Stage Number Stage Top (fix8) Stage 80 Coment Evaluation Results Slage Bottom (IKB) | Cinct Rice (col) op Measurement Method 3,673.0 Fluid 7,550,0 Volume Calculations
Density (ib/gal) Cement Plug, 4/19/2001 String: Production, 7,549 CRKB Slage Number Stage Top (RKB) 7,468.0 Cement Evaluation Results
Stage Bottom (IKB) | Cmnt Rtm (bbl) Top Measurement Method Volume Calculations
Density (Ib/gal)



# Affidavit of Publication

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 supplement thereof on the date as follows, to wit:

April 24

2010

That the cost of publication is \$57.35 and that payment thereof has been made and will be assessed as court costs.

Subscribed and sworn to before me

My commission expires

Notary Public

OFFICIAL SEAL CTEPHANIE DOBSON Nolary Public State of New Mexico My Comin Papiers

April 24, 2010.

NOTICE OF APPLICATION FOR A SECONDARY RECOVERY WELL PERMIT

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

of oil or gas.

The applicant proposes to iniect produced water or other oil and gas waste into the Paker Loke Unit #150 (Delaware Formation). The maximum iniection pressure will be 1416 psi and the maximum at will be 2,500 bols produced water/day. The proposed disposal well is located 7 miles northeast of Malgaa, New Mexica. The produced salt water will be disposed at a subsurface depth of 7,082 -7,349.

Any questions con-cerning this applica-tion should be direct-ed to Sandra Belt, Regulatory Clerk, BOPCO, L.P., P. O. BOX 2760, Midland, Texas 79702-2760, (432) 683-2277.

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

RECEIVED
APR 30 2010 BOPCO WID PRODUCTION